International Handbooks of Quality-of-Life

Wolfgang Glatzer
and
Laura Camfield
Valerie Møller
Mariano Rojas *Editors*

Global Handbook of Quality of Life

Exploration of Well-Being of Nations and Continents

Springer

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Editor
Wolfgang Glatzer
Goethe-University
Frankfurt am Main, Germany

Co-editors
Laura Camfield
University of East Anglia
Norfolk, United Kingdom

Valerie Møller
Rhodes University
Grahamstown, South Africa

Mariano Rojas
FLACSO-México and UPAEP
Mexico City, Mexico

Editorial Assistance
Jennifer Gulyas
Goethe-University
Frankfurt am Main, Germany

Ruth Hasberg
Goethe-University
Frankfurt am Main, Germany

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Foreword

This is an extra-ordinary collection of papers designed to be comprehensive with respect to topics covered and methodologies employed by scholars across the whole globe with diverse disciplinary backgrounds. The editors are well-known productive academics who promise a great deal and deliver the goods as promised.

Since the middle 1960s an enormous amount of research has been accumulated on quality of life and/or wellbeing. So some overviews of accomplishments of the work of the past 50 years or so have been needed. There have been a few overviews of the field, including most recently the *Handbook of Social Indicators and Quality of Life Research* edited by Land, Michalos and Sirgy (2012, Springer). While there is some overlap with the Land, Michalos and Sirgy collection, this collection goes beyond the earlier handbook in its worldwide scope of topics, including, for example, discussions of demographic and health development, the spread of democracy, global economic accounting, multi-item measurement of perceived satisfaction and expert-assessed quality of life (i.e., subjective and objective measures of wellbeing), wellbeing of children, women and poor people, wellbeing in North and Sub-Saharan Africa, Asia, South America, Eastern and Western Europe, worries, pains, hopes and fears of people around the world.

For anyone requiring a comprehensive historical account of the field in a single volume, this volume would be an excellent resource. For a much longer and even more comprehensive view, the *Encyclopedia of Quality of Life and Wellbeing Research* (2014, Springer) would be the place to go. The American sociologist Robert K. Merton said that if he was able to see farther than anyone before it was because he stood on the shoulders of giants. Regardless of the path taken, handbooks, encyclopedia or both, researchers over the next 50 years will have robust, if not gigantic, shoulders to stand on.

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Writing a book about global quality of life is a task that requires the participation of many colleagues; it is a collective effort of specialists and generalists in social sciences working cooperatively together. The realization of the Global Handbook rests on many studies on quality of life and wellbeing which are available worldwide and which – taken together – constitute the framework of the Global Handbook. Thanks are owed to many colleagues for contributing to research on social indicators, social reporting, social monitoring, quality of life and wellbeing. The main support came from the 63 authors from about 20 countries who freely contributed their chapters. It is an encouraging experience both to receive so much support from the networks of quality of life and wellbeing research and to solve scientific tasks collectively. It would have been impossible to produce such a handbook without this generosity of many colleagues and friends. Of profound significance has been the varying support which we received from supranational organizations. It seems to be the first time that social reporting of supranational and international organizations has been presented in a broader context.

The main editorial work for this handbook was carried out by the editor and three co-editors who shared the task of peer reviewing all the chapters. Of tremendous help in the production process was the competent editorial assistance of Jennifer Gulyas and Ruth Hasberg. They performed all the tasks from organizing the procedures, editing incoming chapters and writing articles as authors. For special chapters we got help for proof reading from Richard Hauser (Frankfurt) and Jürgen Kohl (Heidelberg).

The Goethe University Frankfurt am Main, where the project was anchored, provided tangible and intangible support. Particular thanks are owed to the Goethe University, its President and the Vice President, the Dean of the Department for Social Sciences (Gesellschaftswissenschaften) and the "Freunde und Förderer der Goethe Universität" for giving us a home and social and financial assistance. The Executive Council of the International Society for Quality of Life Studies recognized the value of a comprehensive publication and gave its formal support. We received formal votes in favor of our project from the Executive Council of ISQOLS, from the Board of Directors and the ISQOLS president. We are grateful for the trust placed in our performance to carry out our ambitious project.

March 2014 Wolfgang Glatzer

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Monitoring and Analyzing Quality of Life – An Introduction

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Wolfgang Glatzer

The First Measured Century

In ancient times, the shape of the earth was conceived as a disc; later, after revolutionary rethinking, it was transformed to a globe and still later, in a process of fine tuning, it has been corrected to an oblate spheroid. We cannot exclude the possibility that something similar could happen when social sciences start to measure global quality of life (QoL), which is obviously rather complex; and increasing experience in measurement could cause a change in the results. Our question is: what is the shape of quality of life of humankind or, similarly, what is the shape of human wellbeing on earth? We will concentrate on the recent centuries and we do not expect to find immediate consensus on a satisfactory answer to this question. But, if we do not begin to explore this question – insufficient as the results may be – we will never answer the question about the shape of global quality of life. There are many pieces which must be put together in order to construct a complete picture of global quality of life. The difficulties are unsolved; basic questions of conceptualization, operationalization and measurement among social scientists have not been agreed on. However, the available number of theoretical insights and empirical findings – brought together in this Global Handbook – will lead to a better, more comprehensive picture of global quality of life and wellbeing than we had before. This introduction is concerned with concepts and procedures which we use to describe global quality of life.

This handbook aims to present the main results of global quality of life and wellbeing research. Various topics are presented in the main research fields mainly by the senior leading authors form all continents. In addition, as an intergenerational recruitment is going on, there are already younger authors who are standing on the shoulders of the older ones. They stand for the future of quality of life research. Strong emphasis was placed on contributions from supranational organizations (for example, UN, OECD, WHO, ILO, EU, EC) and in most cases the cooperation was successful. We think that the worldwide success of quality of life and wellbeing research would increase if the different groups of researchers in local and supranational contexts would intensify their cooperation.

New Emerging Goals: Quality of Life and Wellbeing

We refer to the concepts of "quality of life" and "wellbeing" to focus our attention on the structures of the evolving world society. Both terms are often used interchangeably in the literature: quality of life in the sense of wellbeing,

W. Glatzer (✉)
Goethe-University, Frankfurt am Main, Germany
e-mail: glatzer@soz.uni-frankfurt.de

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and wellbeing in the sense of quality of life.[1] Developed in the last century, they are significant goals in and for the ongoing century. The economist Pigou (1920) was the first who spoke of the "qualit de vie" (Pigou 1920) and it seems that the OECD (1972), especially, laid great emphasis on the concept of "social wellbeing". The basic idea is much older and gained public and political awareness in certain circumstances: for example, the Prussian Emperor Frederick the Great claimed cheerfulness and happiness for his people. Today there is a variety of definitions for both, either in terms of societal goals and models or in measurement devices and criteria, some of which are shown in the procedures for QoL-research. The political significance of quality of life and wellbeing is to define a new direction for mankind's long-term struggle for progress; since the beginning of human existence, people have striven to improve their living conditions and to develop their life styles. In past centuries, the struggles focused mainly on health (to prolong life), on wealth (to overcome poverty) and more recently on democracy (to secure human rights). Not least, health was defined as "a state of complete physical, mental and social wellbeing, not merely the absence of disease or infirmity"[2] as the WHO had already stated in 1948. Now there are many comprehensive concepts of quality of life and wellbeing, and in consequence, many empirical transformations of different models. Quality of life and wellbeing have become part of public debate as goals for people, and they are often included in the schedule of political thinking and planning. This Global Handbook provides a global perspective on the concepts and monitoring of quality of life and wellbeing.

[1] The mixture of terms was introduced at the beginning of this research direction in the US. One of the first main studies spoke of "Quality of Life" (Campbell et al. 1976) and the other of "Wellbeing " and "Life quality" (Andrews and Withey 1976); "Wellbeing" was used later by Campbell (1981).

[2] Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, New York, 19–22 June, 1946; signed on 22 July 1946 by the representatives of 61 States (Official Records of the World Health Organization, no. 2, p. 100); came into force on 7 April 1948.

Components of Quality of Life: Positive Wellbeing, Negative Wellbeing and Future Expectations

The idea behind the quality of life-concept is to concentrate social research on the positive side of being and it is often used as an own standing approach. Quality of life is broad differentiated and has as many components as the language offers. It is not the first time in the history of science something like this has happened, but the emphasis given to the positive side of wellbeing, previously a neglected approach, is rather new and has found many followers. However, the negative side of wellbeing cannot be overlooked as it was introduced in traditional health research as the three d's: death, disease and disability. The early studies from the US on QoL and Wellbeing showed that, although positive and negative wellbeing are somewhat positively correlated, they are largely independent. Wellbeing and illbeing vary independently, and increasing wellbeing is not the same as reducing illbeing. Moreover, there are dozens of concepts not only for describing positive concepts of wellbeing but also many for negative wellbeing. Another measure of contrast, which is sometimes but not very often heeded, are future expectations like hopes and fears, or the related concepts of optimism and pessimism. A bad living situation accompanied by hope is something very different from a bad situation without the presence of hope (Gulyas 2013). A good living situation which is connected with fears for the future is not at all full wellbeing; it can, in fact, be a severe burden. Hopes and fears should not be neglected when the basic components of "wellbeing" are considered.

Positive and Negative Evaluations – Praise and Criticism

Quality of life research is closely related to evaluations, which are sometimes regarded with skepticism in the social sciences. Scientific approaches prefer often to be kept "value free" as far as possible. The quality of life approach

wants to contribute to enlightenment and betterment of quality of life. Thus, it is often impossible to avoid evaluations when somebody is concerned with important questions about human beings. Sometimes it seems that the value basis of a quality of life approach is not taken seriously enough. The evaluations implicit in the research process have to be carefully laid bare; a debate should be carried about the adequate values within the research community. As is obvious, quality of life research is embedded in a highly consensual goal scenario and criteria such as 'better' or 'worse' are components of all the approaches. Historically, social scientists were concerned with negative features of society like disease, poverty and oppression with the aim of reducing these evils. On the other hand, positive goals like health, progress, democracy and wellbeing were developed and these goals are inevitable when people like knowing where to go in their future. Quality of life and wellbeing, when they emphasize positive models of society, need to elaborate a value basis for the "good society".

Objective and Subjective Views on Wellbeing

In the broad literature on social reporting we find usually terms like subjective and objective approaches, dimensions and indicators. "Subjective" is a very clear term and concerns attitudes, opinions and values of people. "Subjective wellbeing" refers to all the various types of evaluations, both positive and negative, that people make of their lives. It includes reflective cognitive evaluations, such as life satisfaction and work satisfaction, interest and engagement, as well as affective reactions to life events, such as joy and sadness. Thus subjective wellbeing is an umbrella term for the different valuations people make regarding their lives, the events happening to them, their bodies and minds, and the circumstances in which they live. Accordingly, wellbeing and illbeing are "subjective" in the sense that they occur within a person. The term "subjective" expresses what comes out of the heads of the people who are monitored in a survey. "Even though the existing measures of subjective wellbeing are imperfect, useful conclusions can be drawn from them. All scientific measurement includes error. Thus, users of the measures should understand the biases and artifacts that are inherent in the measures, and, when possible, take steps to correct for them" (Diener 2006).

There are very few attempts to define "objective" in the sense of quality of life research but, as an inspection of the relevant literature shows, "objective" refers to those aspects of reality which are defined and recognized by scientific experts who have special competence for a certain problem scenario. Regularly the meaning of "objective" is in the sense what scientific experts approve. This is especially important for cases, where ordinary people, have difficulties to become aware of a problematic situation. Examples are the shrinking ozone-sphere, the atomic radiation after atomic accidents, the long-term increase in temperature, and so on. Usually experts with special skills and equipment define and monitor these dangers. Often people do not recognize these dangers even though they can have a profound hidden impact on their lives. Sometimes objective and subjective reality may coincide, sometimes they may differ in varying measures and there are many transfers and influences between them. But what is true in the world of scientific experts is often different from the world of non-scientists and what they believe.

Monitoring and Analyzing

In social sciences most colleagues do not like to repeat scientific measurement; they prefer to invent something new. At the same time, many colleagues claim to explore social change which is only possible if there is more than one measurement which uses the same procedure. Quality of life and wellbeing measurement took societal change and improvement as a primary goal. Time series not merely one-shot designs constitute the genuine program of quality of life research. The Global Handbook is concerned with monitoring quality of life, which needs

time intervals, repeated measures and multiple indicators. In regard to analyzing data there is a tension between two claims: one is to use elaborate statistical methods to attain very sophisticated results, the other is to present intelligible indicators for a broad, educated public. This should help to explore, to give interpretations and explanations for their society. The idea of this handbook project is to bring together the different pieces of knowledge about the world society and to give as much room as possible to understandability but as much as necessary for the truth to complex methods.

Single Events and Social Structures

The information we receive each day are related mainly to events; these are the topics we hear about every day in different media. To regard structures and structural change is a more scientific view on reality and is related to persistent patterns of living. Of course, events and structures influence each other. Usually the question on information about events is posed in the media as: "What were the most significant events in the last fifty years?" The following list shows examples of good and bad events. However, these examples are not what we imagine as quality of life and wellbeing though they touch on it.

In the modern information society all events on the globe can be communicated easily, nevertheless some events are followed by overwhelming enthusiasm, others are more disputed.

- 20 July 1969: The first landing of people on the moon
- 9 November 1989: The Fall of the Berlin Wall and the End of the Cold War
- 1 November 1993 European Union according to the treatment of Maastricht

There seem to be many more events in the minds of the people that were followed by disappointment and sadness:

- 22 November 1963: The assassination of John F. Kennedy in Dallas, Texas
- 1975: Banquiao Dam failure, where 23,100 people died from flood and disease
- 26 April 1986: Nuclear catastrophe of Chernobyl with many deaths
- 26 April 1989: Daulatpur-Salturia tornado which killed 1,300 people
- July 1995: Srebrenica massacre where 8,000 Bosnian Muslims died
- 11 September 2001: The four airplane attacks on the World Trade Center, New York
- 26 December 2004: Indian Ocean tsunami which killed 240,000 people in 14 countries
- 11 March 2011: Fukushima Daiichi Nuclear Disaster
- 23 July 2011: Worst peacetime mass killing: 89 young people were shot in Norway
- May 2012: Hunger crisis in Yemen, famine for 10,000,000 people

These events could also provide an answer to the question "What constitutes the quality of our societies?" On one hand they made many people happy, like the landing on the moon. On the other hand, they made most people unhappy and depressed, like the assassination of John F. Kennedy in Dallas. But these events are not in the focus of the quality of life approach. There is a strong preference for representative numbers of people evaluating their lives, not for evaluating single events, even though they may influence the evaluation process. Following the fundamental postulate of democracy, each person should count just "one" in this process of evaluating life, wise philosophers the same as influential politicians. No authority is allowed to dominate the individual's opinions and attitudes. In quality of life analysis the adequate sample of individual is the final arbiter of individual and collective circumstances.

Nations and Continents in the Global Society

Quality of life research focuses in the first place on individuals and their surroundings. But there is no hesitation in summing up quality of life in indicators for regions, nations and the world. These measurements are not in any sense metric measurements, but they give indications about

the position a nation or a continent takes in the world context. There are so many biases in the national accounts and their public understanding that we are not allowed to see the needle in the eyes of one side without seeing the beam in the eyes of the other side. Nations and continents are of interest for quality of life measurement because they are political actors and have the chance to influence and improve bad conditions. The far-reaching fragmentation of the world in past centuries changed into the interdependence of nations and continents in the new century. In a certain sense, the world has grown together. We need to monitor quality of life on the whole globe because of the dependence between the areas. (Footnote: The huge migrations problems between North Africa and Europe and also Mexico and the US are examples for the social consequences of big QoL-biases).

The preceding century was once described in the US as the "The first measured century" (Ted Caplow), but this seems true for large parts of the world. Examples of comprehensive worldwide approaches are well-known handbooks which originate, on the one hand, from supranational organizations (e.g. the Diversity and Inequality World Economic and Social Survey from the United Nations) and on the other hand, from scientific research institutions (e.g. the Global Handbook on International Poverty Research). There are moreover, specialized worldwide approaches on society and economy using various terms for the quality of societies. "Measures of wellbeing and illbeing should be seen as part of the democratic process, in which citizens and their leaders are given information that can be useful in policy debates. Measures of subjective wellbeing and illbeing do not override other sources of information, but serve as one potentially useful type of knowledge that can be used to create better policies" (Diener 2006).

Diversity and Inequality

Quality of Life in the World is different, but "difference" can have very different significance. Diversity is related to the fact that nearly nothing is equal and many differences are perceived as acceptable and legitimate. Inequality is related to the fact that many differences among human beings are not justified and not tolerable for the same species. Inequalities are a highly influential source of conflicts within and between nations. That the Inuit's live differently from people in Hong Kong is normal diversity. That the newborn children in the world have very different life expectations is a question of non-acceptable inequality. Often the difference between diversity and inequality is difficult to define, but in the final instance there is no objective difference; only what people decide is important. If people think that their homeland is unsatisfactory, they often try to leave it. Leaving on the one hand or protesting on the other are possible ways of reacting to inequality. They are far more evident in the countries where people are dissatisfied than in the countries where people are satisfied.

The main sections of the handbook are the following:

Long-Term Trends of World Social Development: Health, Wealth, Democracy (Part I)

Today, quality of life research can be characterized as an "explicit" term, concerned with the improvement of living conditions and perceived quality of life. In mankind's history we often found an "implicit" interest in quality of life. This is true for a long tradition of improving health and increasing life expectation, of improving nutrition and upgrading the standard of living, as well as for the spreading of democracy and the establishment of political participation. In the chapter, **"Demographic and Health Development in the Long Run"** (Chap. 2) by Frank Swiaczny, some of the main demographic topics of global long-term research are shown. The improvement of nutrition and the partial overcoming of poverty contributed to people's health and longevity. There were components of increasing living standards in the course of industrialization investigated by Herman de Jong who considered **"Living Standards in a**

Modernizing World – A Long-Run Perspective on Material Wellbeing and Human Development" (Chap. 3). The main disturbances of human development were related to conflicts and wars, which have to be under control before people can begin to think about realizing quality of life. Mathias Boes and Hinrich Rosenbrock give an overview of these pre-conditions for quality of life in their article, **"Wars and Violence Through the Centuries"** (Chap. 4). Progress has been made insofar as wars and conflicts are under better control nowadays but they are still serious challenges for world politics. Beyond these ever-during burdens, the continual struggle of mankind for democracy and participation is seen as a step to improving the human lot. Quality of life – in the eyes of the people – can only be acceptable if democratic conditions exist where people can make up their minds about quality of life without pressure. Robert K. Schaeffer studies the **"The Worldwide Spread of Democracy"** (Chap. 5), which is a pre-condition for monitoring quality of life from the people's view. Before quality of life became a manifest societal goal there were partial goals such as a long and healthy life, or living peacefully in decent economic conditions. These components improved human development in the long run but the chapters show that there was no smooth upgrading and times of regression, crisis and war in varying amounts accompanied the development of mankind. This is the background for the modern quest for quality of life.

Monitoring Global Wellbeing: Objective and Subjective Measurement (Part II)

Once the goal of quality of life has been articulated, usually the next step is to measure and monitor wellbeing. Old approaches are analyzed critically and new, more or less different approaches are developed. Traditional approaches used measures based on national accounts like Gross National Income (GNI) or Gross Domestic Product (GDP). National economies are presented competitively in the media and an increase of 1 % of the GNI is often regarded as a success. However, this approach does not measure the welfare of people at all, especially because it does not reflect the devastation of tsunamis, tornados, earthquakes, floods, climate change and nuclear catastrophes people had to deal with in the last decade. The significance of the conventional national accounts are described in the chapter **"Global Economic Accounting and its Critics"** (Chap. 6) by Jürgen Faik.

With regard to alternative approaches, the difference between objective and subjective approaches is fundamental and relies on the difference between people's awareness and expert evaluations. For a long time, the Human Development Index, which is an objective indicator, has been used as the main index in UN publications. This is an official approach which gives substantial weight to educational performance but also includes components of economic accounts as Kenneth C. Land describes in his chapter on **"The Human Development Index"** (Chap. 7) (HDI). Included in this chapter is a statement of the United Nations (UN) about their social reporting activities concerning human development.[3] An important difference between objective indicators is the number of components, which they include. An example with a broad battery of indicators is **"The Index of Social Progress"** (Chap. 8), which is presented in the chapter by its inventor, Richard J. Estes. This weighted index of social progress is built on 20 sub-indices. As this shows, objective indicators can be incorporated in very different approaches.

Subjective indicators are again fundamentally different, depending on the question of whether there is one indicator, like satisfaction with life, as presented in the chapter **"The Overall Satisfaction With Life"** (Chap. 9) by Ruut Veenhoven. Often the measurement is an 11-point scale with steps between 0 and 10. But

[3] Jolly, Richard/Emmerij, Louis/Weiss, Thomas G./Hall, Jonathan: Human Development Reporting and the United Nations. See section of these authors in Chap. 7.

the one-dimensional measurement is sometimes criticized and multi-dimensional measurement is preferred, as discussed in the chapter by Robert A. Cummins and Melissa K. Weinberg, **"Multi-Item Measurement of Subjective Wellbeing"** (Chap. 10). Multidimensional measurement of satisfaction can be more or less differentiated. Another type of subjective approach is the "affect balance scale" insofar as the measurement space includes explicit positive and negative items. **"The Affect Balance Scale"** (Chap. 11), where the items run from plus 5 to minus 5, is explained by its inventor, Norman Bradburn. We have no consensual measures for satisfaction, affect and quality of life but there are a number of approaches in the scientific literature – many more as are presented here. The course of time and the scientific debate will decide which one will survive successfully.

Socio-economic Structures of Wellbeing (Part III)

Though the concepts of quality of life and wellbeing have been developed in contrast to economic concepts, the relationship has never been broken. Socio-economic aspects of wellbeing show that quality of life has a firm foothold in the economy and that it would be a mistake to separate these principles in total. A notable global structural problem is the question whether economic growth improves people's quality of life. The answer seems to look backward at the long history of humanity, but in recent decades it has become a critical debate. This question has been tested in respect of the different conditions in developed and developing countries. This key question is still debated and Richard A. Easterlin's review, presented in his article **"Happiness and Economic Growth"** (Chap. 12) seriously doubts that economic growth is always producing happiness. Closely related is the question of **"Wellbeing and Sustainable Consumption"** (Chap. 13) from Monica Guillen and Harold Langford Wilhite because sustainability is threatened by economic growth. Despite far-reaching economic growth, the persistent burden of mankind remains severe poverty. Mariano Rojas points this out in his chapter, **"Poverty and People's Wellbeing"** (Chap. 14). Mankind has made steps forward in fighting poverty but the problem has not been solved at all. Another connection between questions of economic success and quality of life exists in the area of employment. Employment is significant for people's wellbeing as the International Labour Office states in the chapter **"Wellbeing and the Labor Market from a Global View – It's not Just the Money"** (Chap. 15). "Decent work" functions in this area as an ILO-concept in the context of quality of life welfare. A similar problem is examined in the chapter on unpaid labor which, worldwide, is an important means of quality of life. Maria-Angeles Duran analyzes this in **"The Contribution of Unpaid Work to Global Wellbeing"** (Chap. 16). It is a very limited view that regards the market as the only model for the production of goods and services. If the market is seen as the production model for goods and services, it would be a great mistake to neglect the production of private households (household production), or of the intermediate associations and the state (collective goods). Michael Dauderstädt demonstrates this in his chapter on "**Welfare Production and Quality of Life"** (Chap. 17). It is rather irritating how often social scientists define the market as the productive institution par excellence. At the same time they neglect the immense performance of households with their private goods and intermediate organizations and the state with their collective goods.

Social Structures of Wellbeing (Part IV)

National and continental populations are constituted of social structures in the sense of different population groups characterized by typical constellations of greater or lesser quality of life. Only some of these are considered in the following part on social structures of wellbeing. In contemporary societies, a growing number of

people are living alone though it is agreed that human beings are basically collective beings. What is the meaning of quality of life for such people? This is the topic of Liz Eckermann's chapter **"Living Alone and Living Together – Their Significance for Wellbeing"** (Chap. 18). Another fundamental division of life is between young and old people. Their quality of life is investigated in two contributions: First, **"World-wide View of Child Wellbeing"** (Chap. 19) by Vicki C. Lamb and Kenneth C. Land and second, **"Global Perspective on Quality in Later Life"** (Chap. 20) by Fermina Rojo-Perez, Gloria Fernandez-Mayoralas and Vicente Rodriguez-Rodriguez. Another important group are the migrants who leave their home country and need to be integrated in a host society. This category is considered by David Bartram in his article, **"Migration and Quality of Life in the Global Context"** (Chap. 21).

Wellbeing in Nations and Continents (Part V)

People in history have divided the world into continents on the basis of geographic-geological criteria, but continents and their nations go far beyond these criteria. Nations are built according to historical and political characteristics and they are associated with many typical components of living conditions and perceived quality of life. Nations and continents incorporate their own type of quality of life and have their individual features. Social reporting of continents and nations has to be built on the selective pattern of each region.

Africa is the continent where conflicts are most virulent and massive migration processes are going on. This is due to deficits in quality of life, as Habib Tiliouine shows in his chapter on North Africa, **"Quality of Life and Wellbeing in North Africa – Algeria, Egypt, Libya, Morocco and Tunisia"** (Chap. 22). The south of Africa is comprehensively covered in the article on the sub-Sahara, **"Shadow of the Sun – The Distribution of Wellbeing in Sub-Saharan Africa"** (Chap. 23) by Benjamin J. Roberts, Steven L. Gordon, Valerie Møller and Jar Struwig. Both chapters make it clear that Africa is the most problematic continent with a difficult path to peace, with poor standards of living and troubled conditions of democratic participation.

Alphabetically, America is the next continent and shows deep divisions between north, middle and south. The north is fully represented by the chapter from Simon Langlois on **"Wellbeing in Canada"** (Chap. 24) and Rhonda Philips on **"Quality of Life in the United States"** (Chap. 25). The United States can look back on the longest tradition of QoL-research. Latin America is represented by just one country. Martin Tetaz, Pablo Schiaffino and Miguel Braun contributed the article: **"Argentina's Economic Development and Life Satisfaction Revisited – 1984–2012"** (Chap. 26), but social reporting in Latin America is increasing and more information will be available soon. That life satisfaction is – compared to the worldwide level – quite high, is surprising because of the bad living conditions. The modes of measuring QoL on different continents are always peculiar and often unique.

The huge sub-continent of Asia is represented by Takashi Inoguchi's chapter, **"Multiple Modes of Wellbeing in Asia"** (Chap. 27). It will be clear to the reader that the style of monitoring wellbeing leads to unknown and unconventional views of a continent. Unfortunately, although 22 countries of Asia are included, a large number is missing.

"The Distribution of Quality of Life in Australia" (Chap. 28) is analyzed along the lines used in USA and Europe by Melissa K. Weinberg and Robert A. Cummins. Due to the special multifaceted conditions in Oceania this area is not regarded.

In addition, many social reports on Europe are provided, often restricted to the European Union. Here we find the comprehensive article, **"An Overview of Quality of Life in Europe"** (Chap. 29), written by Daphne Ahrendt, Hans Dubois and Erika Mezger. After this overview about the quality of life in Europe, two further examples present more detailed information about the extremes at the top and the bottom: **"Wellbeing in Slovakia"** (Chap. 30) from Josef

Džuka covers a poorer country as opposed to one of the richer countries in the article, **"From Dissonance to Wellbeing and Adaption? Quality of Life in Switzerland Over the Past Decades"** (Chap. 31) by Christian Suter, Katja Iglesias and Jehane Moussa. These articles show the kind of discrepancies that exist within a continent and between continents, as well the social consequences of these discrepancies.

Finally we add the Arctic as an example of the difficulties, which are inherent in a uniform concept of quality of life. This region is covered in the article **"Living Conditions and Perceived Quality of Life Among Indigenous Peoples in the Arctic"** (Chap. 32) by Birger Poppel. Most interesting is that the Arctic attracts people despite an extreme lack of comfort. Hence satisfaction with life does not necessarily come with congenial living conditions.

Thus, the Global Handbook provides comprehensive reports for nearly the whole continents (Australia, Asia, Europe); one continent has been divided in two parts (Africa) and the American continent is represented by three countries: Canada, USA, Argentina. A multi-continental study on the Arctic region is also included.

Of course, quality of life and wellbeing is monitored in many countries. The Global Handbook contains a small number of selected countries which are of special significance as models for rich and poor examples of the continent. The number of potential countries for quality of life and wellbeing research is fairly high and will be the subject of varying approaches of social monitoring.

Social Reporting on Wellbeing in Supranational Organizations (Part VI)

Supranational and international organizations play a special role in social reporting on a global, continental, supranational and national level. It is a central aspect of globalization that global actors are engaged in shaping the world's order and influencing the world's living conditions and perceived quality of life. In consequence, the need to measure and monitor societal features has emerged. Social scientific divisions in the supranational organizations developed, influencing the international discussion, though the cooperation between supranational institutions and university research was not very deep.

Most influence on the international debates came from the OECD who has organized and published wellbeing-research since the 1970s. Romina Boarini belonging to the scientists at the OECD, describes in her contribution **"Wellbeing and Quality of Life Reporting at the OECD"** (Chap. 33). Similar significance was achieved by the United Nations and its sub-organizations. A short statement of the UN-scientists is presented in the chapter on the Human Development Index. As a specialized agency of the UN, the World Health Organization focused its activities on health-related measures and acted as a proponent of the health-related interests of people. In "**The World Health Organization – The Case for Measuring Wellbeing in Europa**" (Chap. 34), Claudia Stein and Ritu Sadana explain this approach. On each continent there has been a certain degree of joint endeavor to monitor societies on the continent, often in a comparative approach. Especially in the Europe Union there has been a far-reaching response to social reporting for the public as shown in **"Social Reporting of the European Union – Description of the Organization"** (Chap. 35) by Marleen de Smedt. Another European Organization, the European Council, which contains many more countries than the EU, also worked wellbeing concepts, as Gilda Farell reports in **"Wellbeing for All – The Aim of Social Cohesion – Developing the Approach at the Council of Europe"** (Chap. 36). Supranational Organizations were also present in sections of special perspectives: the International Labour Office is concerned with employment and decent work and the tripartite agency of the EU, Eurofound gives an overview of quality of life in Europe.

Basic Dimensions of Global Wellbeing (Part VII)

The final part of this Global Handbook is related to fundamental questions of conceptualization, measurement, monitoring and analyzing

wellbeing and quality of life. First there is the methodological problem of measuring and assessing wellbeing and quality of life of nations which is postulated step by step by Filomena Maggino in her chapter **"Assessing the Subjective Wellbeing of Nations"** (Chap. 37). Rules are defined but many researchers choose their own ways. Yukiko Uchida, Yuji Ogihara and Shintaro Fukushima investigate the cultural share in defining and analyzing wellbeing and quality of life from a Japanese point of view in the chapter **"Cultural Construal of Wellbeing – Theories and Empirical Evidence"** (Chap. 38).

Authors from the different cultures in this Global Handbook demonstrate that research questions and research procedures have their cultural accent which needs some effort to understand each other. Towards the end of the Global Handbook, fundamental dimensions of perceived quality of life are considered. As we know from the first great investigations on quality of life and wellbeing, positive and negative wellbeing are not the same dimension; they are partially independent. **"Satisfaction and Happiness – The Bright Side of Quality of Life"** (Chap. 39) is considered through the lenses of positive psychology from Louis Tay, Lauren Kuykendall and Ed Diener. On the other side, **"Worries and Pains – The Dark Side of Quality of Life"** (Chap. 40) is Wolfgang Glatzer's investigation into human suffering. Happiness and pain are present among many people at the same time, but positive and negative wellbeing together does not provide the full state of wellbeing. In addition, hopes and fears are dimensions which have to be considered for people's wellbeing. Jennifer Gulyas explores this in her article **"Hopes and Fears – Future Views of Quality of Life"** (Chap. 41). People with hope and those without are of different subjective wellbeing, given all other components of wellbeing are equal. Whether people look optimistically or pessimistically into the future is part of their wellbeing and hence a crucial component for their future wellbeing. If wellbeing and quality of life is regarded comprehensively, then positive and negative components as well as hopes and fears are inevitable.

The philosophy behind this handbook is the desire to balance wellbeing and quality of life in a world view based on a long-term perspective. At the core, various approaches of wellbeing are presented with regard to the objective measurements of experts and the subjective perceptions of the world's people. The hope is to attain two kinds of outcomes: negative statements and criticism should produce activities to reduce misery and pain. But quality of life points out that we need positive concepts of wellbeing and the experience of them to know where to go. Obviously the northern European welfare states are relatively successful examples of a good quality of life, but they are also confronted with catastrophes. We consider a broad selection of nations and continents. We try to give a global view of the main perspectives of people's wellbeing: on the one side, satisfaction and happiness; on the other side, worries and pain, and on the third, their modification by hopes and fears.

Astonishingly it seems evident that the world population of about seven million people is overwhelmingly satisfied. Many people doubt this because there is so much evidence of misery and pain. Of course satisfaction exists despite a lot of illbeing. A serious problem emerges because dissatisfied and suffering people are concentrated in certain parts of the globe. This leads to tensions and often conflicts. The question is if the wealthy part of mankind tries to react with solidarity or if they choose an exclusion strategy.

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Part I

Long Term Trends of World Social Development: Health, Wealth, Democracy

Demographic and Health Development in the Long Run

2

Frank Swiaczny

Introduction

The World population already surpassed the 7th billion thresholds in 2011, and an additional billion will be added to the world population within the next 13 years, according to the recent medium variant projection of the UN World Population Prospects (UN 2010). The assumptions underlying the medium variant projections predict a convergence of the different country fertility rates at a replacement level of about 2.1 births per woman around the end of the century. Alternative projections with a slightly higher or lower target level of fertility and a slower or faster adaptation to this level produce highly diverging projection results. Global population trends, with an accelerating growth or a population maximum at around mid-century followed by a long-term decline (Reher 2007), describe the extent of potential outcomes of the demographic transition currently taking place. Nevertheless, annual population growth rates have been continually decreasing since their all time high in the 1970s, and it is most likely that the decline will continue over the next decades. The theoretical explanation of the current global population development is closely related to the model of the demographic transition (cf. Notestein 1950, 1952; see Caldwell 2004; Weeks 2008: 89–96), which describes a causal link between declining levels of mortality and fertility and associated changes of the population growth and structure (see Bongaarts 2003, 2009; Canning 2011; Population Reference Bureau 2004 for an introduction to demographic concepts). Early empirical evidence of demographic transition processes at work was gathered when industrialised countries, since the beginning of the eighteenth century, experienced distinctive changes in their mortality trends for the first time. The usually high and highly variable mortality levels year after year, beginning with the infant and child mortality rates, began to fall due to improved nutrition, better hygiene, enhanced medical services followed by the availability of vaccinations and new treatments. With a time lag, often of approximately one generation or more, the decline in the formerly also high and erratic fertility rates followed soon after (cf. Woods 1982). Meanwhile, the population growth rates started to increase and reached unprecedentedly high levels. The respective changes in population development are depicted in Fig. 2.1 which covers the secular trend and projection of population growth over the time span 400 BCE to 2300. Europe's increased health and wellbeing and related pace of population growth since the start of industrialisation lead to a growing share in the world population until the first half of the twentieth century (Caldwell and Schindlmayr 2002; Gould 2009: 22f; Klein Goldewijk 2005; Kremer 1993; Maddison 2001; McEvedy and Jones 1978). As in the developed

F. Swiaczny (✉)
Federal Institute for Population Research, Wiesbaden, Germany
e-mail: frank.swiaczny@bib.bund.de

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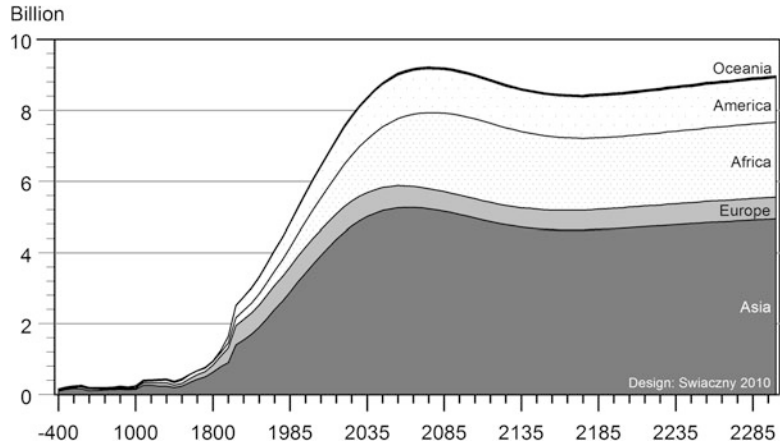


Fig. 2.1 World population by region, UN-estimates and projections 400 BC to 2300 (Source: UN Population Division 2004a, b; McEvedy and Jones 1978, translated from Swiaczny 2010: 40)

regions the demographic transition continued, and the gap between mortality and fertility rates finally narrowed, the growth rates returned to their previously low levels. By the mid-twentieth century, most developing countries had also followed the demographic transition process and had already improved their mortality conditions with rising growth rates as a result. Following this, Fig. 2.1 shows that in recent decades, the global growth is concentrated in the less developed regions of the world – with Africa as a late comer in the demographic transition – and is expected to continue to grow beyond the twenty-first century. As predicted, according to the model of the demographic transition theory, the decline in fertility showed a time lag in the developing regions, too. Currently, in almost all developing countries, a decline in fertility has at least set in. However, the fertility decline did not progress as fast as expected, based on past experiences, in all developing countries, and some countries even show a stagnation of fertility reduction above the replacement level (Bongaarts 2008; Moultrie et al. 2012; Schoumaker 2009).

While low fertility is a precondition for limiting global population growth under conditions of low mortality, it also results in smaller birth cohorts, which add to the ageing of the population from the bottom of the age distribution. In addition to that, the increasing life expectancy triggered by lower mortality – in itself an indicator of improving physical health conditions at all ages – also contributes to ageing at the top of the age distribution, as it comprises lower mortality at higher ages as well. The characteristic succession of declining mortality and fertility rates and the inverse u-shaped trajectory of the population growth rate during the demographic transition causes a long-term change of the age distribution of a population. The median age of the population continually grows, and the initially young population with a large share of children goes through a process, where first, the share of the working age group grows, before finally, the share of the population in the older age groups rises. Sub-replacement fertility below about 2.1 children per women, prevailing in most industrialised countries today, increases the speed of population ageing and in the long run leads to a continuous natural population decline.

The aforementioned demographic transition theory clearly establishes the causal relationship between core demographic processes and the physical health conditions of a population (cf. Olshansky and Ault 1986). Increasing physical health conditions of a population directly affect the ageing of a population through lower mortality and rising life expectancy. Low mortality and especially infant and child mortality rates, which increase the chance that children survive into adulthood, are thought to indirectly

influence the reproductive decisions made by individuals (cf. Weeks 2008: 99). In this regard, better health is a precondition for limited procreation. Fewer births per woman are sufficient to secure the intended number of children, if survival conditions improve. Not at least sexual and reproductive health and rights (SRHR) exercise an impact on demographic processes, because without access to family planning measures limiting fertility cannot be accomplished (cf. UN 1995, 2011a). In addition, older populations are generally more prone to health risks, such as chronic or degenerative diseases. Thus, ageing is one of the main demographic trends which affects the physical health conditions of a population and requests an adaptation of the health system (cf. Frenk et al. 1991). The shift of the main causes of death from communicable to chronic or degenerative diseases and the delay of such diseases to higher ages during the epidemiological transition shapes the relationship between physical health and wellbeing in the path of the development process (cf. Olshansky and Ault 1986; Omran 1971, 1998; Salomon and Murray 2002).

The main part of the chapter comprises two key sections. The first describes global population change with a focus on the ageing of the population, based on the estimates and projections of the recent revision of the UN World Population Prospects and introduces related concepts in demography. The second section depicts the development of global health concentrating on selected indicators of the Millennium Development Goals (MDGs) as measures and draws on the UN Millennium Development Goal Report, as well as the UNAIDS Report on the Global AIDS Epidemic. A short summary on the health impacts of the epidemiological transition in the Global Burden of Disease (GBD) is based on the The Global Burden of Diseases, Injuries, and Risk Factors Study 2010. The final section aims to summarise the development of global health conditions in the light of the targets set by the MDGs and to assess the past and projected increase of life expectancy at birth on a global scale as an important indicator of wellbeing.

Data Sources and Population Projections

The data used for the analysis of global population trends in this chapter are derived from the United Nations World Population Prospects 2010 Revision (UN 2010, see also O'Neill et al. 2001; O'Neill and Balk 2001). The estimates and projections are biennially published by the UN Population Division and cover all countries of the world as well as major regions and groups of countries according to their level of development. Industrialised countries comprise Europe, Northern America, Australia, New Zealand and Japan (more developed region). All other (developing) countries belong to the less developed region. Among them, 48 countries are defined by the UN as least developed countries, based on a set of development indicators, 33 in Africa, 9 in Asia, 5 in Oceania plus one in Latin America and the Caribbean. Data from the United Nations World Population Prospects given in this chapter exclude the 48 least developed countries from the aggregate data for the less developed region. Data from the MDG-Reports include the least developed countries in the aggregate for developing regions, i.e. less developed regions. The estimates are population figures collected by the UN Population Division and adjusted for the consistency of time series. Projections are based on assumptions on the future development of mortality, fertility and migration (UN Population Division 2011c). The assumptions on the future of country specific fertility trajectories are derived from past time series of fertility decline using a probabilistic method that combines a double-logistic function as a model of fertility decline with a random term based on the variation in time series of past fertility declines. Once a country reaches the replacement level of a Total Fertility Rate (TFR) of 2.1 or below, a time series model is used to let the future fertility trajectory oscillate around this level. Sub-replacement countries are expected to converge to replacement fertility in the long run (cf. Goldstein et al. 2009). For each country 100,000 random trajectories are generated and

the median of this distribution is used as the medium variant fertility assumption. High and low variants are 0.5 children above or below the medium variant. Assumptions for the development of the life expectancy are based on the analysis of past increases in longevity, which is expected as a general trend for all countries, and take decreasing additional gains in life expectancy into account once a country proceeds towards low age specific mortality rates (Büttner and Zlotnik 2005; Oeppen and Vaupel 2002). For countries with a high HIV prevalence, different assumptions for the transformation of future mortality levels are made, which reflect the increased general mortality risk and predict a slower increase in life expectancy. For 48 countries with a HIV prevalence of more than 2 % between 1980 and 2009, a loss of more than 2 years of life expectancy or with more than 700,000 people living infected with HIV, the specific impacts of HIV are included in the population projection model with individual country assumptions for the future spread of the infection and the development of the survival rates. The assumptions for the patterns of international migration are set with regard to the migration policies declared by sending and receiving countries and reflect existing net migration flows as the most likely trajectory, while in general the level of net migration is expected to gradually decrease until the end of the century. Detailed description of data sources, projections methods and alternative variants are available online from http://esa.un.org/unpd/wpp/index.htm. Additional data, divided into urban and rural populations as well as major agglomerations, are provided by the biennially World Urbanization Prospects online at http://esa.un.org/unpd/wup/index.htm. Data from this source are congruent with the World Population Prospects and the corresponding methods and assumptions.

The physical health indicators in this chapter are derived from the UN Millennium Development Goals Report (UN 2011b, see also UN 2013). In 2000, the UN adopted eight development goals in their millennium declaration, of which six are directly related to the health dimension and affect population processes either directly, due to impacts on fertility (through education, gender equality and access to sexual and reproductive health), or indirectly through improved living conditions and reduced mortality and thus increasing life expectancy:

- Goal 1: Eradicate extreme poverty and hunger
- Goal 2: Achieve universal primary education
- Goal 3: Promote gender equality and empower women
- Goal 4: Reduce child mortality
- Goal 5: Improve maternal health
- Goal 6: Combat HIV/AIDS, malaria and other diseases

The last two development goals are related to aspects of the sustainability of development and international development cooperation and are therefore not dealt with any further in this chapter. The MDGs are monitored, using a set of more than 60 statistical indicators and progress reports indicating the gains of developing countries in implementing the targets. MDG data is published annually online at http://www.devinfo.info/mdginfo/. There, information on data sources and methodical aspects of data collection are documented as well.

The section on HIV/AIDS additionally draws on the UNAIDS Report on the Global AIDS Epidemic (UNAIDS 2010) with epidemiological data on the pandemic collected by UNAIDS and WHO. HIV prevalence is estimated using statistical models with confidence ranges depending on the reliability of the epidemiological data available for each country. Larger confidence ranges are associated with uncertainty resulting from insufficient data quality, especially the lack of representative population based surveys of HIV testing. In this publication only the mid points of the prevalence ranges are depicted for reason of clarity. UNAIDS data with additional indicators are available online at http://www.aidsinfoonline.org.

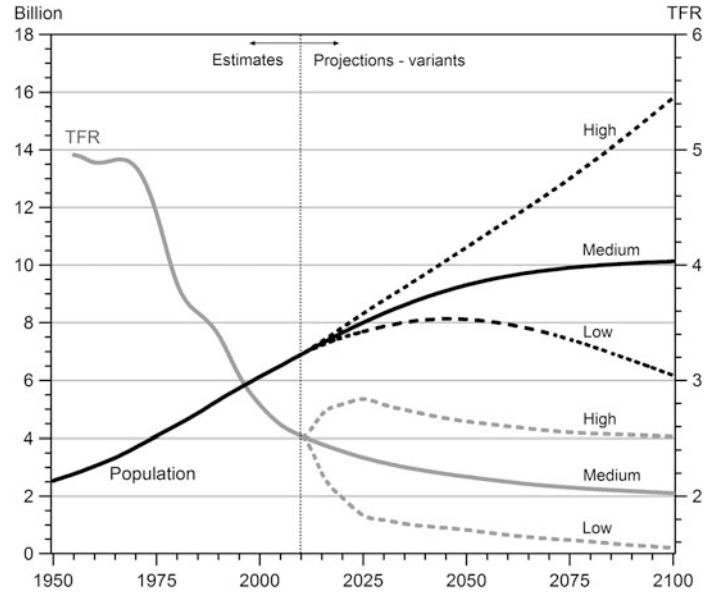
Data on additional indicators of the change of the Global Burden of Disease (GBD) and causes of death during the epidemiological transition (cf. WHO 2008, 2009; Institute for Health Metrics and Evaluation 2012) are available from WHO. GBD data are published at

http://www.who.int/research/en/ and the GBD 2010 at http://www.healtmetricsandevaluation.org/ghdx/gbd-2010-data-downloads. The GBD is calculated in years of healthy life lost by disability-adjusted life years (DALY), a measure which combines the years lost due to premature mortality (YLL) and years lived with disability (YLD). The health adjusted life expectancy (HALE) represents the actual life expectancy less the YLD. The GBD and mortality is differentiated by three major groups of causes: communicable (contagious) diseases (including maternal, neonatal, and nutritional disorders), non-communicable diseases (chronic or degenerative and man-made diseases), and injuries, including accidents, homicides, and suicides (Institute for Health Metrics and Evaluation 2012).

Global Demographic Trends

Population Growth and Demographic Change

In 1950, the first year for which consistent data from the UN World Population Prospects time series are available, the world population was roughly 2.5 billion and the Total Fertility Rate (TFR) 5 children per women (Fig. 2.2). At the beginning of the 1950s, the population was growing at an average of 48 million or an equivalent



			TFR			
High			2,8	2,6	2,5	2,5
Medium	5,0	4,5	2,8	2,3	2,2	2,1	2,0
Low				1,8	1,7	1,6	1,5
			Population			
High				8,3	10,6	13,0	15,8
Medium	2,5	4,1	6,1	7,7	9,3	9,9	10,1
Low				8,0	8,1	7,4	6,1

Fig. 2.2 World population and total fertility rate (TFR) 1950–2100 (Source: UN World Population Prospects 2010 Revision, translated from Swiaczny and Henning 2011: 56)

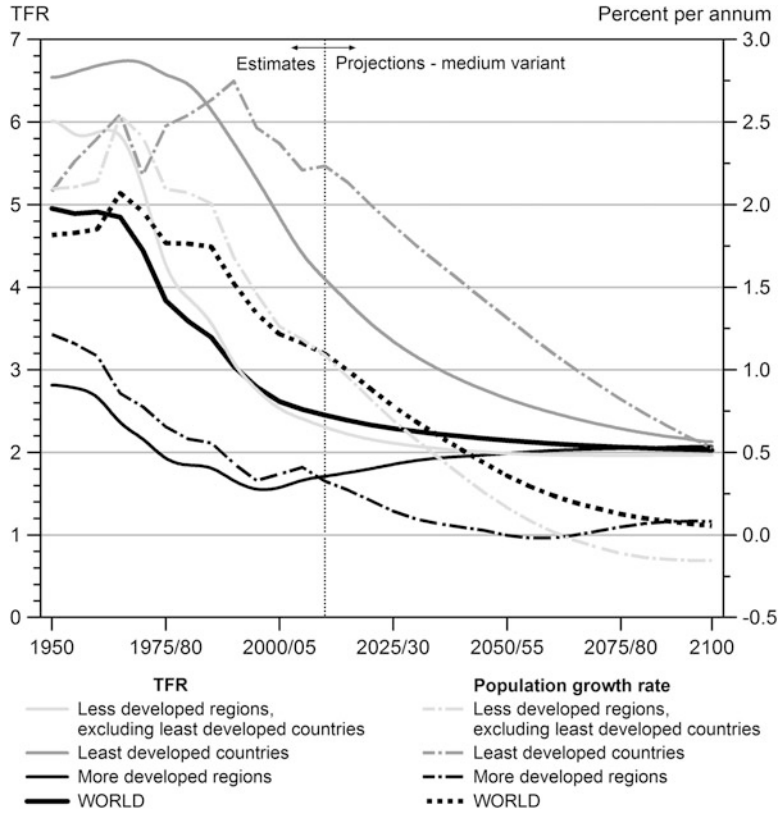


Fig. 2.3 Total fertility rate and population growth rate by level of development (Source: UN World Population Prospects 2010 Revision, Medium Variant, translated from Swiaczny and Grünheid 2012: 49)

of 1.8 % per year on average between 1950 und 1955 (Fig. 2.3). Following this, estimates of the global population recorded an accelerating growth, with the 3rd billion registered in 1959, the 4th in 1974 und the 5th in 1987. The time interval for an additional billion declined from 15 years for the 4th to 13 years for the 5th billion, and the annual population growth reached, unprecedented in world history, a maximum level of 2 % per year around 1970. At the end of the 1980s, population growth reached its all time high in absolute numbers with an average annual increase of 89 million people per year during the period of 1985/90. The 6th billion consequently came in 1999 after only 12 years, and population growth was again placed on the political agenda, returning to previous perceptions of "over-population" as a threat for quality of life, development, and – as a new aspect – sustainability (Pearce 2010). In most contemporary analyses, the anti-natalist notion of population growth and fertility as being too high prevailed. The idea that high growth rates or soaring population densities are, in general, detrimental to the generation of economic wealth and wellbeing is often being blamed as the underlying cause for shortcomings in development efforts, despite the fact that the causal linkage is still contested in research (cf. Dyson 2010; Gould 2009). Nevertheless, growth was the most imminent population trend in the second half of the twentieth century.

However, when the population growth started to take up pace, fertility had already started to decline at that time, too (Bongaarts 2003, 2008). During the second half of the 1980s, the fertility was less than 3.5 children per woman and today, the global figure is down to around 2.5. The secular trend, in accordance with the demographic transition model introduced in the preceding section, shows that efforts to promote the limitation of family size and to give access to

family planning measures were successful. However, it is now thought that population policies in certain countries have put undue pressure on individuals and their right to decide freely and without coercion on timing and spacing as well as the desired number of children (cf. Pearce 2010: 53–65). Meanwhile, in many industrialised countries, the fertility has fallen below the replacement level of 2.1 (Fig. 2.3), in general due to the modernisation of (western) societies, which improved the position of women, in particular their higher education attainments, labour market participation and gender equality. This Second Demographic Transition (SDT) to sub-replacement fertility (van de Kaa 1987) has recently spread to a number of developing countries as well and is an indicator for the prospect that the decline of the global fertility level will continue, as assumed by the UN population projections' medium variant. Only the group of the least developed countries retains high fertility levels and shows only limited progress in lowering the family size, with recent stagnation in fertility decline recorded in some Sub-Saharan African countries (Bongaarts 2008; Moultrie et al. 2012; Schoumaker 2009). As a consequence, growth rates in the least developed countries belong to the highest in the world and will supposedly remain high for the next decades. Also there is no causal relationship between population growth and development with both, high and low growth countries among the best performing developing countries, high growth is posing an additional challenge to development efforts towards the quality of life and wellbeing. As a consequence the least developed high fertility countries will increase their share in the world population, and as most of the least developed countries are in Sub-Saharan Africa, this region will increase its weight compared to other regions.

Given that global fertility will have levelled off at 2.1 by the end of the century, the future population growth will slow down and begin to stabilise slightly above 10 billion. According to the medium variant projection in Fig. 2.2, the time interval until the next additional billion of the world population will increase from 13 years for the 7th billion, reached in 2011, to 14 and 18 years for the 8th and 9th billion respectively, expected in 2025 and 2043. The growth rate, currently at about 1 % per year, will be close to zero growth at the end of the century, and the 10th billion will finally be reached after 40 years in 2083 (UN Population Division 1999, 2011a).

The growth path of the world population until the end of the century, as projected by the UN, depends primarily on the development of fertility as its core impact factor. A trajectory of 0.5 children per woman above or below the medium variant will result in completely different global population trends (Fig. 2.2). A slower fertility reduction in high fertility countries, which would mean a slightly increasing global TFR levelling off at 2.6 at the end of the century, would result in a much slower reduction of the population growth rate, with still 0.8 % per year at the end of the century. Due to the demographic momentum (Blue and Espenshade 2011; Bongaarts 1994, see below) of the age composition, the average annual growth will increase to 119 million at the end of the century in this scenario and continue to grow for some time beyond the turn of the century. Under such conditions, population would be close to 16 billion in 2100 and still growing further. A faster decline of fertility and a level continually below replacement from 2020 onwards, reaching 1.6 at the end of the century, will result in an increasingly declining population growth rate that will turn negative at mid-century with a culmination of the world population slightly above eight billion at this time. In the light of this population projection results and the impact that fertility shows thereon, unmet needs for family planning (i.e. SRHR) gain additional significance for global development.

As set out in the introductory section, the decline of fertility during the demographic transition is not only related to population growth, but also associated with the ageing of the population (cf. Haupt and Kane 2004; McFalls 2003). A reduced fertility rate in births per woman initially triggers smaller birth cohorts. A smaller number of children born immediately reduces the annual increment added to the existing

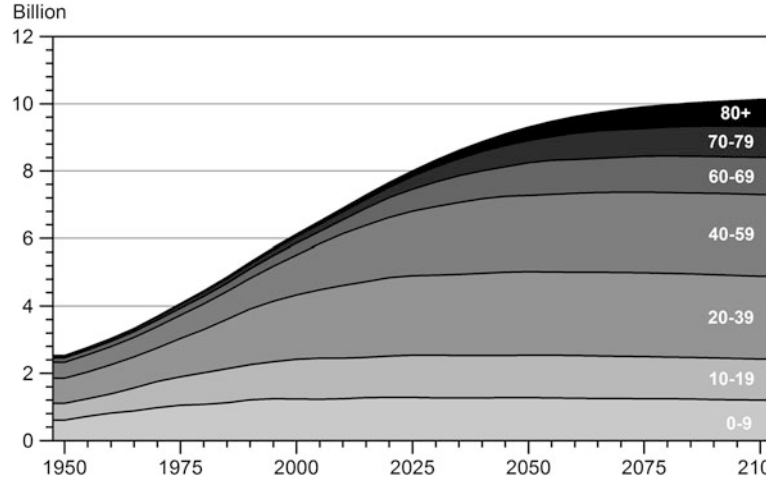


Fig. 2.4 World population by age group 1950–2100 (Source: UN World Population Prospects 2010 Revision, Medium Variant, translated from Swiaczny and Grünheid 2012: 49)

population and therefore has a negative effect on the growth rate at that time. It also reduces the share of the younger age group within a population, as a smaller birth cohort replaces a somewhat larger cohort born the year before. This means, if compared to the population in the working age group, a shift in the dependency ratio or, related to the age of the population, a higher median age. An additional secondary effect of reduced fertility is, however, delayed by the demographic momentum of the age structure. While smaller cohorts are already being born, in young populations large and sometimes (depending on the age structure) even growing cohorts will continue to enter the reproductive age and increase the number of potential mothers for some time to come. Only when the smaller cohorts are at last and with a time lag entering the reproductive age, they will finally start to decrease the number of births and subsequently population growth. As long as the number of potential mothers is still growing, owing to the demographic momentum of the age structure of a young population, high growth rates and annual growth in absolute numbers of a population will prevail, while the number of children on the individual level (TFR) has already started shrinking (Fig. 2.3). A fast and intense fertility decline generally has strong secondary effects on the birth level and consequently increases the pace and extent of the ageing process in the long run. The effect of the aforementioned demographic momentum on the change of the age structure during the demographic transition will be analysed in the following section.

Population Ageing and Age Structure

The age structure of the world population is changing due to reduced fertility, as described in the section above, and shown in Fig. 2.4 (cf. Rowland 2012). In 1950, the population share of the younger age groups below 15 years was 34.3 % and the share of 65 years and older only 5.2 %. By 2010, the share of the younger age group had declined to 26.8 % and the older age group was still small with 7.6 %. The share of the working age group between 15 and 64 years increased its share from 60.5 % to 65.6 % in this period respectively, and it will only slightly decrease over the next decades. In 2100, the world population will show an inverted age structure. The younger age group with 17.9 % will then be less numerous than the group of 65 plus with 22.3 % (7.8 % for the group 80 years and older), while working age population with 60 % will still be only slightly below its 1950-share.

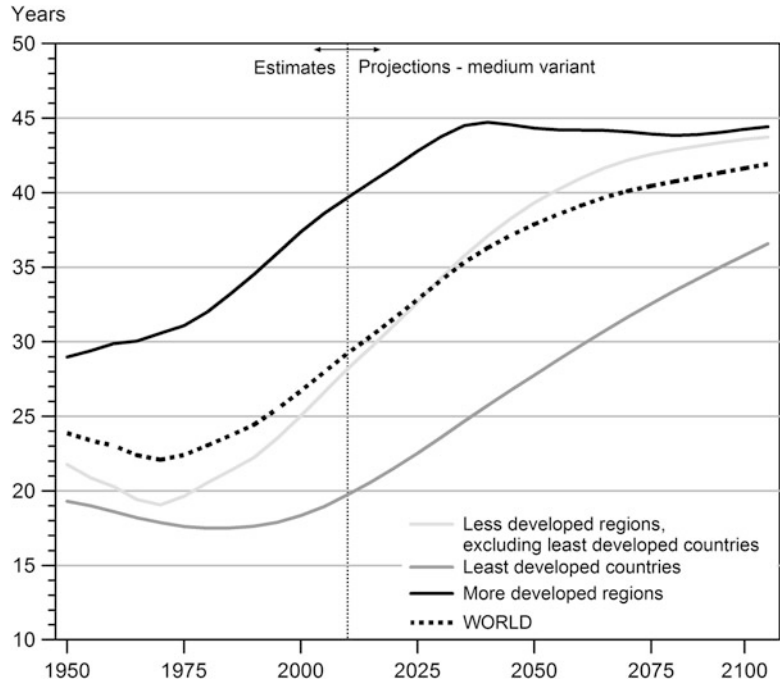


Fig. 2.5 Median age by level of development 1950–2100 (Source: UN World Population Prospects 2010 Revision, Medium Variant)

The increasing share of the working age population emerging during the demographic transition is associated with a "demographic dividend" (Bloom et al. 2003). While a large share of working age population prevails, the dependency ratio on national levels, necessary to support the declining younger cohorts and a still small group in the pension age, reaches historically low levels. The dependency ratio is measured by the number of youth 14 and younger plus seniors 65 and older per 100 persons in the working age of 15–64 years. Demographic change thus allows investment in development, and the economy can profit from a growing labour force, given that conditions allow profitable investment and gainful employment. Due to further ageing, i.e. larger cohorts entering the pension age, when demographic transition continues, the phase of demographic dividend comes to an end and the "window of opportunity" closes. On a global scale, this will be the case around 2045. In many industrialised countries, the demographic dividend is already fading out and some of the larger developing countries, for example China, will catch up soon. The dependency ration in China was approximately 77 between 1960 and 1975. At that time the TFR declined from around 6 children per woman before the 1970s to 2.6 during the 1980s as a result of the so called one-child policy. The dependency ratio improved as a result to 38 per 100 working age population between 2010 and 2015. With a sub replacement fertility of less than 2.1 since the second half of the 1990s the dependency ratio is projected to rise to more than 70 in 2055 and approximately 80 from 2065 onwards. According to the UN Population Division the "window of opportunity" of China will last from 1990 until 2025, compared to a much longer period in India lasting from 2010 to 2050 as a result of the later onset and slower decline of the TFR (Swiaczny and Henning 2011; UN Population Division 2004b: 75).

Taking the median age as a measure, the age which divides a population into two equal halves, Fig. 2.5 shows the global population ageing process with continually increasing median ages across the globe. The industrialised countries were the forerunners, but less

developed countries are catching up fast and projections predict a closing of the ageing gap within the coming decades. On a global scale, the median age increased from 22.1 years in 1970 to 29.2 years in 2010, and in 2035, the median age will surpass the 35-year threshold, if current trends in fertility decline and improving mortality conditions continue. The gap between industrialised countries and the less developed region was 7.2 years in 1950 and has now increased to 11.5 years in 2010, due to the rapid ageing in the developed world. Nevertheless, a future convergence is inherent in the demographic transition process with a gap of only 5 years remaining at mid-century and further declining. A special situation has to be conceded for the least developed countries. They are currently considerably younger than the world average, and the increase in median age will be rather limited during the next decades, a development correlating to the slow reduction of fertility and the high growth rates, as described in the previous section. Nevertheless, in 2010 a considerable number of developing countries showed median ages of less than 20 years and almost all developing countries were below 30 years, while at the same time the group of industrialised countries had a median age higher than 35 years. In 2060, only a few remaining developing countries, mostly least developed countries in Sub-Saharan Africa, will remain below a median age of 35 years (Fig. 2.6).

The ageing process can be followed best in detail using population pyramids to analyse the age structure differentiated by birth cohort and sex, as depicted in Fig. 2.7 for the population of industrialised, developing and least developed countries as well as for the world for the years 2010, 2060 and 2100. The population diagrams presented here have been standardised for population size, so that the age structure of the different populations for the three development categories can be directly compared. The age structures depicted by the different diagrams represent different stages of the ageing process, as related to the demographic transition. The least developed countries, which in 2010 are still in the earliest stage of the transition, show the typical shape of a pyramid (bottom line left). The population is young and expanding. In 2060, the dynamic of the expansion will have started to reduce, the youngest cohorts will be only slightly broader than the previously born (bottom line middle). The population is on the brink of a reversal that follows and leads to a population structure in 2100 that shows first signs of contraction at the stem of the population pyramid (bottom line right). The less developed countries are a stage ahead in 2010, with an age structure similar to that of the least developed countries in 2060. In 2060, their age structure will have entered into a phase of contraction. The smaller younger age groups at the bottom are a sign that fertility decline and ageing will have been persisting for some time. In 2100, the further advancement of ageing will have reshaped the population pyramid in direction of an even broader top and smaller stem. The age structure will be characterised by a dominance of the middle cohorts of working age (second line). The age structure of the industrialised countries is again one stage ahead in the transformation and ageing process. In 2010, the broader top of the age group 65 plus is an indicator of the low mortality and high survival rates at higher ages that are achieved in the industrialised countries today (third line). In the long run, the population in the industrialised countries will transform into a *stable population* where the shape of the age pyramid is no longer changing, as the comparison between 2060 and 2100 shows. A *stable population* always emerges when fertility and mortality levels are kept stable over a long time, as it is the case in the assumptions of the population projections used for the population diagrams in the figure (cf. Woods 1982: 46–85). Under such conditions, the shape of the population pyramid remains constant and the population growth or decline is determined by the relationship between births and deaths only. The long-term trend of population ageing, according to the UN population projection, is determined by the assumption that the increase of the life expectancy (i.e. reduced mortality levels) will level out

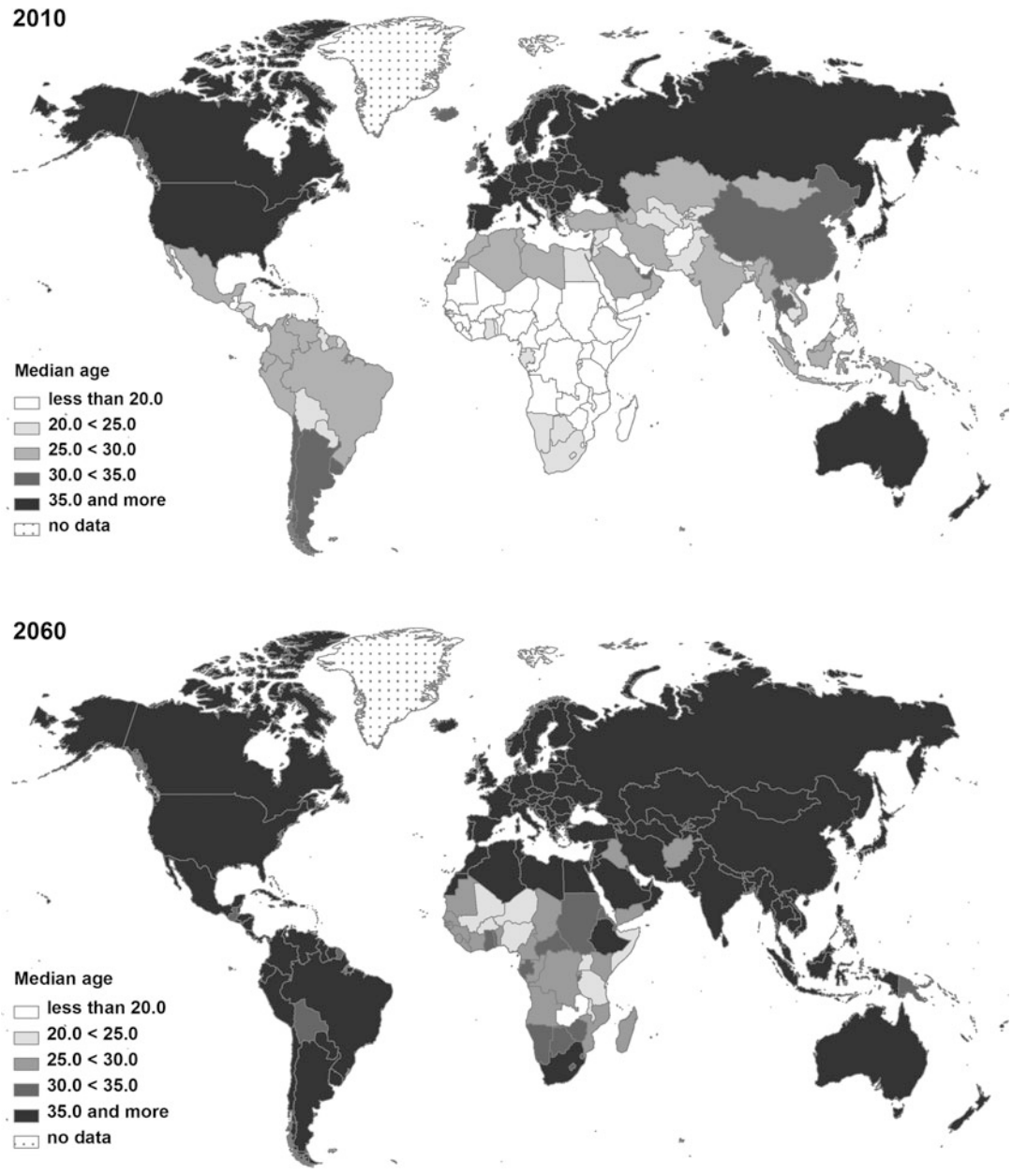


Fig. 2.6 Median age 2010 and 2060 (Source: UN World Population Prospects 2010 Revision, Medium Variant, Map: ESRI, Cartography: F. Swiaczny/N. Ahmed, translated from Swiaczny and Henning 2011: 58)

as it reaches high values and that fertility will in the long run converge to replacement level. Thus, the world population, when all countries have passed through the demographic transition, will take on a shape quite similar to the one presented for the industrialised countries in 2100 (top line right). The long-term global population structure will resemble not only a *stable population* with low mortality and high life expectancy, but in fact a *stationary population* with zero growth due to the assumption of a fertility converging at replacement level.

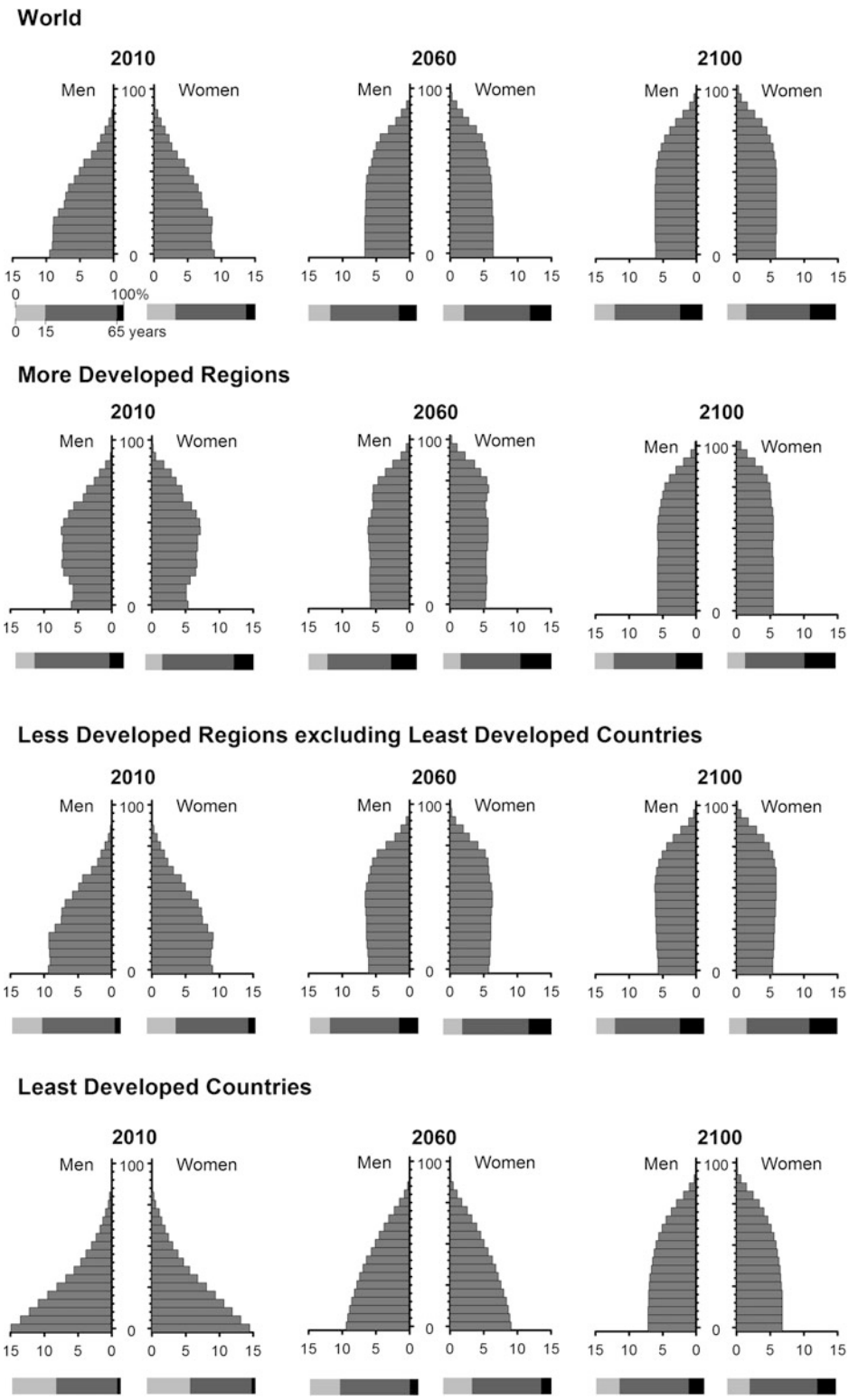


Fig. 2.7 Population by age group and population structure by level of development 2010, 2060 and 2100 (Source: UN World Population Prospects 2010 Revision, Medium Variant)

Development of Health Indicators

The following sub-sections present a selection of indicators from the MDG: child mortality, maternal mortality, family planning and HIV/AIDS. The priority of these targets set by the MDGs and followed here to illustrate the development of global health conditions concern a very core aspect of human wellbeing and quality of life, namely the ability to live a life free of the risk of a premature death due to preventable causes (UN 2012b; UN Population Division 2011b). Longevity (life expectancy), through means of good physical health, is thus a major impact factor as well as an indicator of the wellbeing of a person (Sen and Nußbaum 1993; Streeten et al. 1981; UN Population Division 2012). However, wellbeing is not confined to physical health and comprises, among others, an economic, social, as well as psychological and emotional dimension too (Camfield and Skevington 2008; Strack et al. 1991; UNDP 1994; WHO 2004, see Veenhoven 1996: 1–4 for a review and appraisal of quality of life indicators). Moreover, the concept of health, as adopted by WHO in 1946, embraces a broad definition, not restricting health to the "absence of disease and infirmity" only, but includes the notion of "complete physical, mental and social wellbeing" as the basic definition (UN 1948).

The four indicators selected here represent different aspects of the health condition of a population and their respective impacts on the age specific mortality and fertility: mortality at a young age, mortality at the reproductive age of women, quality of care related to birth and morbidity and mortality of mother and child, control of one's fertility through contraception, and finally the societal challenge of sexually transmitted diseases and their health impact and excess mortality. These indicators are specially targeted to mirror the morbidity and mortality conditions of developing countries at an early stage of epidemiological transition and are also relevant to different aspects of the health system. All four indicators relate to the issue of sexual and reproductive health and rights (SRHR), as defined by the International Conference on Population and Development (ICPD) in Cairo 1994: "Reproductive health is a state of complete physical, mental and social wellbeing and not merely the absence of disease of infirmity, in all matters related to the reproductive system and to its functions and processes. Reproductive health therefore implies that people are able to have a satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when and how often to do so" (UN 1995: 40). According to the Program of Action of the ICPD, adopted at the conference, this includes and is not limited to the access to family planning and the care of sexually transmitted diseases in order to enhance "life and personal relations" (sexual health) (UN 1995: 40).

The linkages between physical health, population development and wellbeing are complex and manifold (De Souza et al. 2003; Frenk et al. 1991; WHO 2009). Even small development efforts in poverty reduction or hygiene and basic health care provision have significant impacts on child mortality (UN Population Division 2011b). Improvement of maternal mortality, instead, requires a higher investment in the health care system, e.g. to provide nationwide qualified assistance at birth and after care. This requires, beside the physical infrastructure, a developed education system to train the highly qualified medical staff needed for the purpose. The improvement of sexual health by making family planning available through measures of contraception does not only require the universal provision of modern contraceptives especially to vulnerable groups, but also education on sexuality as well as societal changes which allow contraceptive practices to be considered as an option by individuals in need of family planning (by public health programs). Finally, sexually transmitted diseases such as HIV/AIDS pose a new challenge to public health in order to control the spread of the disease and to cope with a wide range of consequences of the infection. At the same time, the extremely costly treatment of the disease with anti retroviral drugs (ART) puts an additional strain on the limited capacities of the health care systems in developing

countries and competes with resources needed e.g. for family planning or to fight other communicable diseases, such as malaria, tuberculosis or the group of neglected tropical diseases (Hotez 2011). In countries highly affected by HIV/AIDS, the excess mortality due to the pandemic has a direct demographic impact on development too, as young and often economically active people are dying of the disease and leave large numbers of orphans behind.

The following sub-section covers the impact of the epidemiological transition (Omran 1971, 1998) from communicable (infectious) to non-communicable chronic or degenerative diseases, such as cardiovascular diseases or cancer, on the change in the burden of disease of a population. The change of the main causes of death from famine and pandemics to man-made diseases is at a later stage also accompanied by a delay of morbidity and mortality. On average, ill health and death occurs later in life (cf. Olshansky and Ault 1986; Salomon and Murray 2002). The Global Burden of Disease (GBD) is assessed by WHO using disability-adjusted life years (DALY) and health adjusted life expectancy (HALE) as a measure (WHO 2009: 5, see section "Data sources and population projections"). This transition in health conditions which parallels the demographic transition and gains in importance for ageing populations, especially in more developed regions (see UN 2012a and UN Population Division 2012 for further reading). Nevertheless, the rising prevalence of chronic or degenerative diseases is not only a phenomenon of industrialised countries but affects more and more developing countries too (Gaziano 2011; Institute for Health Metrics and Evaluation 2013). This development is often attributed as a "double burden", as the health systems are often not yet fit to deal with the common contagious diseases when at the same time the upcoming chronic or degenerative diseases are imposing new challenges (WHO 2009: V). Behavioural related diseases (Vallin and Mesl 2004), as for example obesity, associated with diabetes (Shetty and Schmidhuber 2011), or tobacco smoking which causes cardiovascular conditions and cancer, are on the rise in a number of developing countries due to changes in life style (WHO 2009: 3), despite the fact that malnutrition may prevail simultaneously in the respective countries (Mendez et al. 2005).

Alternative measures of quality of life are distributed along two dimensions: input (e.g. access to services or wealth as a condition for a happy life) versus output (e.g. life expectancy) measures as well as objective (e.g. DALY/HALE) versus subjective (e.g. self-reported happiness) measures. Veenhoven (2005: 61–63) argues against input based indicators firstly because they are not based on a "sound theory about human needs" and secondly because a "more" does not necessarily improve the quality of life for all indicators (e.g. income). His alternative to DALY uses self-reported subjective quality of life (compared to observable behavior) instead of the objective medical diagnosis applied for DALYs. The proposed happy life years (HLY, formerly Happy Life Expectancy) is based on the life expectancy at birth adjusted by a happiness index on a 0–10 scale derived from the World Database on Happiness (WDH) (Veenhoven 2005, see also Glatzer 1991 on objective versus subjective measurement).

In general longevity measured as life expectancy at birth is not a good indicator for the quality of life, as a long life does not necessarily mean a healthy and happy life (see Veenhoven 2005: 65). However, in this chapter life expectancy is used as a central indicator because it links a central measure for the analysis of population processes with an essential component of most quality of life indicators and it is available for all countries allowing global comparisons. Furthermore, as Veenhoven concedes, "... happiness and longevity tend to go together..." (2005: 79). This is especially true for regions with high life expectancy (UN 2012b). But the correlation is not always straight forward, there are countries with a short life expectancy and high happiness rates (e.g. in some developing countries) or vice versa.

Consequently the final sub-section is dedicated to the development of life expectancy at birth. The life expectancy at birth is a key demographic measure, which provides a synthesis of

the mortality conditions of a population through the life course at a given time (i.e. a period measure). Age specific death rates (the risk to die at a specific age) are collected for all age cohorts based on the deaths in a population occurring over a time period and collected in a "life table" (see Preston et al. 2001; Rowland 2006 for the method). The life expectancy at birth indicates the hypothetical average length of life, if a newborn faces the risk to die at a certain age throughout her further life which resembles the current age specific death rates of the base year or years. As long as mortality levels are declining (i.e. life expectancy is increasing) the life expectancy at birth of a cohort will be lower than the actual average age of death of that cohort (a cohort measure, to be calculated only after the complete cohort is dead). From a life table additional information can be obtained, e.g. the probability to survive from one age to another and the life expectancy at any age. As the age specific mortality rates are used to calculate the measure, the life expectancy at birth is a good indicator for the overall health conditions and physical wellbeing of a population. Deteriorating health conditions after the collapse of the former Soviet Union, for example, were expressed by an immediate contraction of the life expectancy in Russia (e.g. from 69 years 1985/90 to 65 years 2000/05). The same applies to those countries most affected by HIV/AIDS, they too show a declining or stagnating life expectancy, after the death toll started to rise due to the infection (e.g. in South Africa from 61 years 1990/95 to 51 years 2005/2010).

Life Expectancy at birth is also a key indicator of the Human Development Index (HDI), together with education and per capita income. A number of other indicators are derived from the HDI and include additional aspects of development. The Inequality-Adjusted HDI is adjusted for inequality in development outcomes, the Gender Inequality Index uses a combination of maternal mortality and adolescent fertility instead of life expectancy, and the Multidimensional Poverty Index uses child mortality and nutrition instead of life expectancy (see UNDP 2011: 167–173 for details on the computation). For a predecessor of the HDI see also the Physical Quality of Life Indicator by Morris (1979), using infant mortality, life expectancy and basic literacy. As an alternative to those output oriented indicators the World Bank proposes an input based Human Opportunity Indicator which measures equal access to a minimum standard set of services (see Molinas et al. 2009, 2010).

Child Mortality

Infant mortality within the first year after birth and mortality under the age of 5 years per 1,000 live births are two indicators that represent the earliest stage in the demographic transition process and the change in health conditions of a population (Fig. 2.8). Once health conditions improve, through reduced poverty or better health care provision, the mortality of younger age groups is usually declining first. Child mortality is furthermore closely connected to maternal mortality (see section "Maternal mortality") and family planning (see section "Family Planning"). Better survival conditions of the mother and better medical management of pregnancy and child birth have crucial influence on the mortality risk in childhood as does timing and spacing of births (UN Population Division 2011b). In the industrialised countries the infant mortality rate was still at a relatively high level at the beginning of the 1950s, with 60 deaths per 1,000 live births or slightly less than the rate of the least developed countries today. Infant mortality was declining fast after World War II in the industrialised world to 15 at the beginning of the 1980s and 2010/15 it reached a very low level of 6 per 1,000 live births, leaving little room for further improvement. The under-five mortality (data available from 1980/85 in Fig. 2.8) declined accordingly. Mortality between the age of 1 and 5 years has been shrinking from only 3 per 1,000 in 1980/85 to 2 in 2010/15. Infant mortality in the less and least developed countries was extremely high in the beginning of the 1950s with 145 and 192 per 1,000. In 1980/85 the rate was still at 70 and 125.

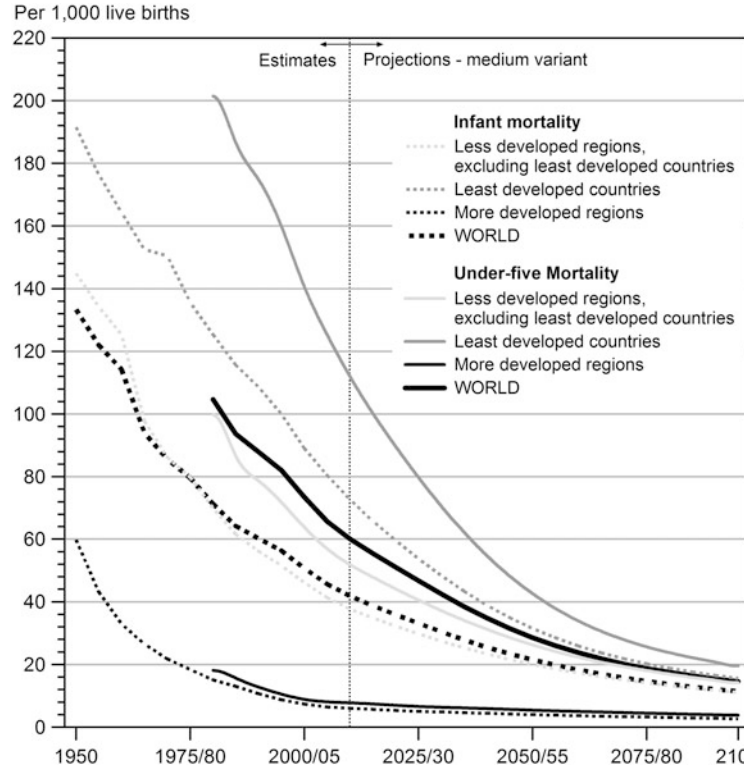


Fig. 2.8 Infant and under-five mortality by level of development 1950–2100 per 1,000 live births (Source: UN World Population Prospects 2010 Revision, Medium Variant. Figures for under-five mortality include infant mortality)

Today the mortality is at 38 and 73 which is equivalent to the infant mortality in the industrialised countries before WW II and around 1960. The mortality between 1 and 5 years was still high in the beginning of the 1980s, 30 and 76 per 1,000; this represents 43 and 61 % of the infant mortality. The mortality between 1 and 5 years has been declining faster in the past decades than the infant mortality and is now down to a rate of 14 and 40 respectively, or 36 and 54 % of the infant mortality level. The UN Population Division expects in their assumptions a further global convergence so that in 2100 both country groups will roughly equal the infant und under-five mortality levels of the industrialised countries as of the beginning of the 1980s. Figure 2.9 shows the spatial pattern of the child mortality with high rates for both variables prevailing mostly in Sub-Saharan-Africa and Southern Asia. A comparison of both maps stresses again the precarious health conditions in most countries of Sub-Saharan-Africa, where not only the infant mortality belongs to the highest levels globally recorded but also the under-five mortality remains still in excess of 100 deaths per 1,000 live births.

Maternal Mortality

The mortality of women during pregnancy or related to birth within 42 days after the termination of a pregnancy is an important aspect of health as it is, together with HIV/AIDS, one of the most important causes of death in women at the reproductive age in developing countries (Institute for Health Metrics and Evaluation 2012). The risk for mother – and child (see section "Child mortality") – increases in general with short inter-pregnancy intervals and the number of children born and is even higher for adolescents or at higher ages of the mother (UN 2011a). Reducing maternal mortality and improving the health conditions of mother and child plays an important role in the Millennium Development strategies and are regarded as a

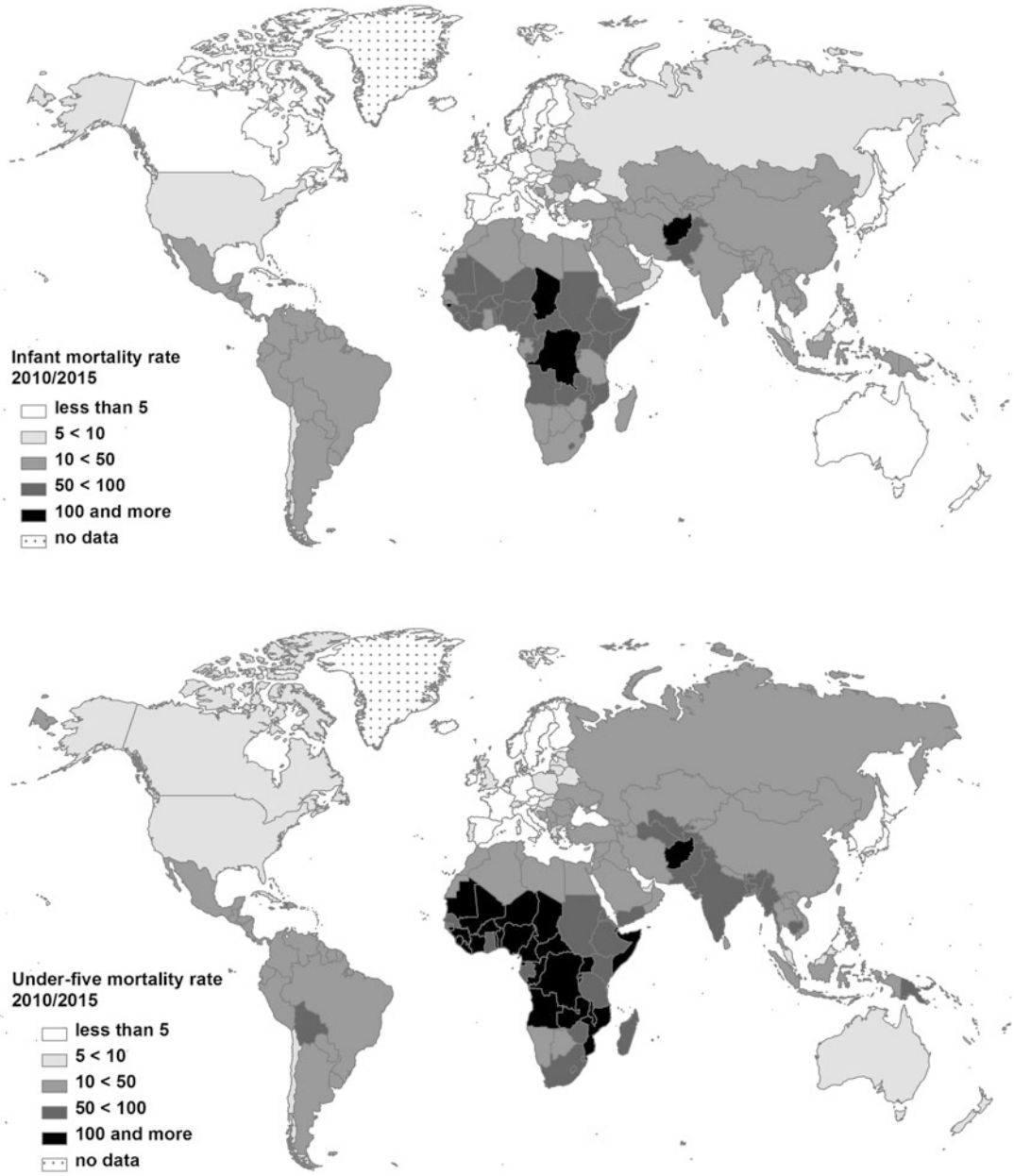


Fig. 2.9 Infant and under-five mortality 2010/15 per 1,000 live births (Source: UN World Population Prospects 2010 Revision, Medium Variant, Map: ESRI, Cartography: F. Swiaczny and N. Ahmed. Figures for under-five mortality include infant mortality)

major contribution to development. Maternal mortality is closely related to reproductive health. Attended delivery and emergency obstetric care could prevent a large part of the current maternal mortality in developing countries and preventing unplanned and unwanted pregnancies would also contribute to the elimination of 20 up to 40 % of the maternal deaths in developing countries (UN 2009). A comparison with the maternal mortality of the developed region with 26 per 100,000 live births in 1990 and only 17 in 2000 and beyond shows the large gap still

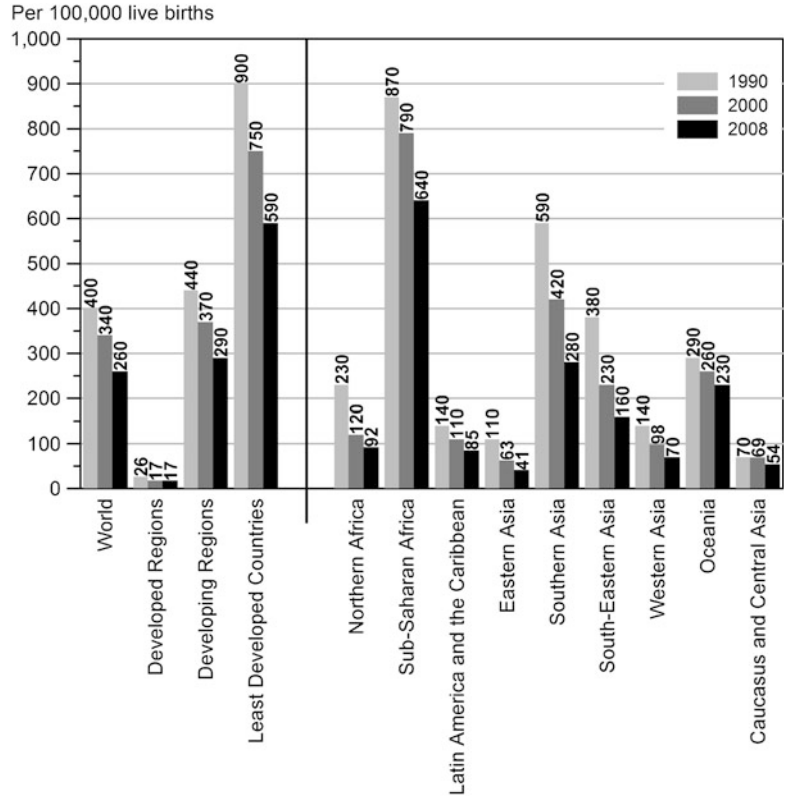


Fig. 2.10 Maternal deaths per 100,000 live births by region 1990, 2000, 2008 (Source: MDG-Report 2011: 28 and Annex)

existing in the developing parts of the world (Fig. 2.10; WHO et al. 2012). In the two, in terms of maternal mortality, most advanced developing regions, Eastern Asia and Caucasus and Central Asia, maternal mortality is more than two or three times more prevalent than in the industrialised countries. In the least developed countries the prevalence of maternal mortality was 900 deaths per 100,000 live births in 1990 and up to 2008 the figure declined only by 35 % to 590. The target set by the MDG to reduce maternal mortality by three quarters between 1990 and 2015 is thus still far ahead. Comparing the two regions with the highest prevalence, Sub-Saharan-Africa and Southern Asia, exemplifies the different pace in reaching the goal. While in Sub-Saharan-Africa the rate fell from 870 to 640 only between 1990 and 2008, or roughly one quarter, Southern Asia was more successful in reducing the rate from 590 to 280 during the same period of time at a double pace by one half. This resembles the different efforts made by the two depicted regions in improving the share of deliveries attended by skilled health personnel during the period of 1990–2009 (Fig. 2.11). While the share increased in Southern Asia from 32 to 50 %, the improvement in Sub-Saharan-Africa is more limited and increased only by 4 percentage points to 46 % in 2009. Although many regions improved the access to skilled attendance at birth, the goal of universal access by 2015 is still not in sight in all the developing regions, with access of only 65 % in 2009, up by 10 percentage points from 55 % in 1990.

Family Planning

Unmet need for family planning of women, who have the desire to delay or avoid pregnancy, but are not using any form of contraception, is one of the most imminent obstacles in securing sexual health and meeting the targets set by the

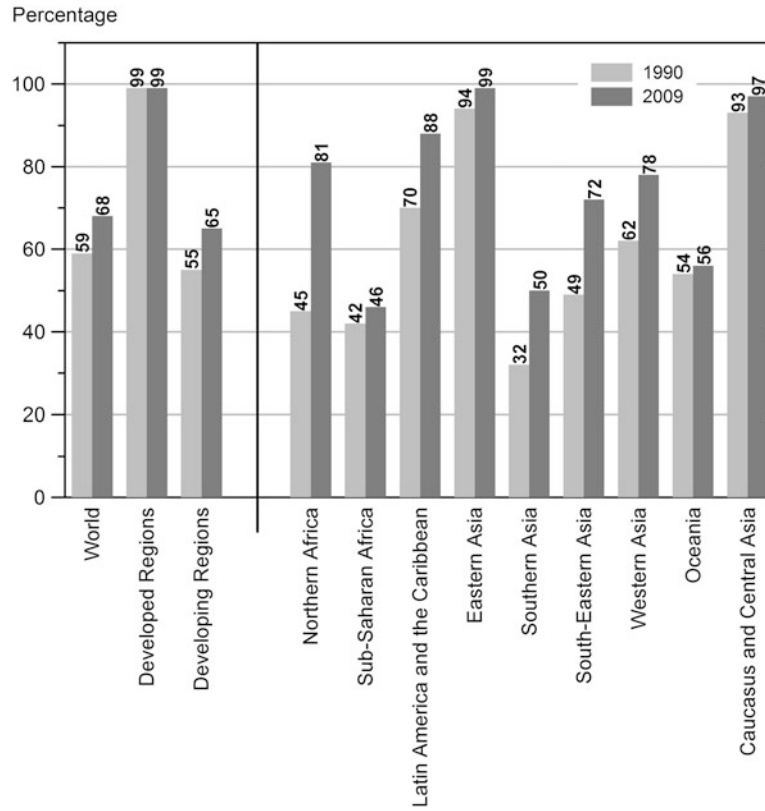


Fig. 2.11 Deliveries attended by skilled health personnel in percentage by region around 1990 and 2009 (Source: MDG-Report 2011: 29)

MDGs. According to the UNFPA in 2012 more than 220 million women aged 15–49 years lack access to safe and effective contraception (Singh and Darroch 2012). As Fig. 2.12 illustrates, the unmet need for family planning has been reduced in a number of regions, with figures close to 10 % in 2008. In Eastern Asia, unmet need is even close to zero. Other regions, with an unmet need of roughly between 20 and 25 %, i.e. Sub-Saharan-Africa, the Caribbean and South Asia, show different trajectories. While in Southern Asia the percentage of the unmet need declined from 20 to 15 % between 1990 and 2008, there is no progress in Sub-Saharan-Africa. Sub-Saharan-Africa is also the region with the lowest percentage of use of any method of contraception, with 22 % in 2008. At that time, the average for all developing regions had increased to 61 %, compared to 72 % in the developed regions. Furthermore, this correlates to the number of births per 1,000 adolescents aged 15–19 years, which is 122 in 2008 in Sub-Sahara Africa, more than twice the average figure for all developing regions (UN 2011b). As described before, the unmet need plays a role in the impairment of the health of mothers and children, especially for vulnerable groups as adolescents, and plays a role in high fertility and population growth rates. For those regions with large unmet needs and little improvement over the last two decades, the stress on development efforts will increase in future due to the young age structures and the large number of people growing into the reproductive age (demographic momentum, see section "Population growth and demographic change"). Even to keep the current levels of service provision the efforts must be increased to meet the increasing needs of the growing cohorts in the reproductive age. At the same time, the additional official development assistance to developing countries that is available for family planning has fallen

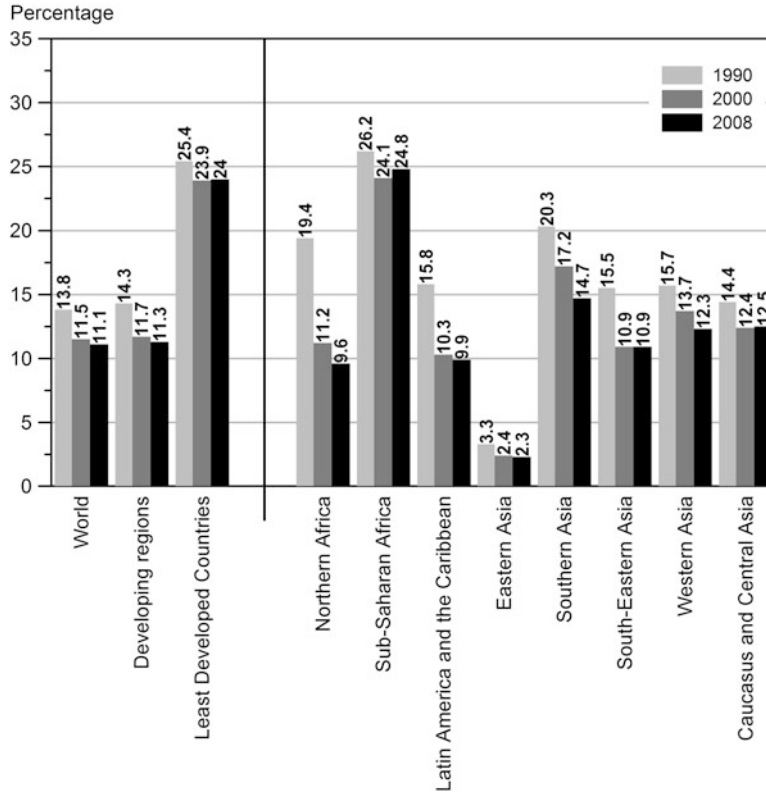


Fig. 2.12 Unmet need for family planning in percent of women 15–49 years, married or in a union by region 1990, 2000, 2008 (Source: MDG-Report 2011: 33)

behind the strongly increasing amount that is now spent to fight infectious diseases such as HIV/AIDS. In 2009 the share of the official development assistance to health available for family planning has fallen to 2.6 % from 8.2 % in 2000. The per capita assistance for family planning has declined in almost all receiving countries (UN 2011b: 35).

HIV/AIDS

In many developing countries, HIV/AIDS is one of the most substantial threats to health and development (Institute for Health Metrics and Evaluation 2012; UNAIDS 2010). The impact of HIV/AIDS related mortality on the life expectancy at birth exceeds in some cases even 10 years, as of 2005/10 it is the case in Botswana, Lesotho, Malawi, South Africa, Swaziland, and Zimbabwe (UN Population Division 2011b). As Fig. 2.13 shows, the highest prevalence rates of HIV/AIDS are located in one of the poorest parts of the world, Sub-Saharan Africa, as well as in Russia, with a prevalence rate of more than 5 or even 10 % of the population between 15 and 49 years old. The global pandemic has lead to 33.3 million people living with HIV/AIDS in 2009, which equals a prevalence rate of 0.8 % of the total population. The number increased from 26.2 million in 1999, despite the fact that the incidence of new infections decreased by 19 % between 1999 and 2009, from annually 3.1 million new infections in 1999 to 2.6 million in 2009. Since the peak of new infections in 1997, with an annual 3.2 million incidences, the number of new infections decreased by 21 %. The rise in people living with HIV/AIDS, even though success in the reduction of new infections has been reached in recent years, is due to the fact that better care and access to antiretroviral treatment has improved the survival of people living with HIV/AIDS. In 2009, the global number of deaths due to HIV/AIDS was 1.8 million, down

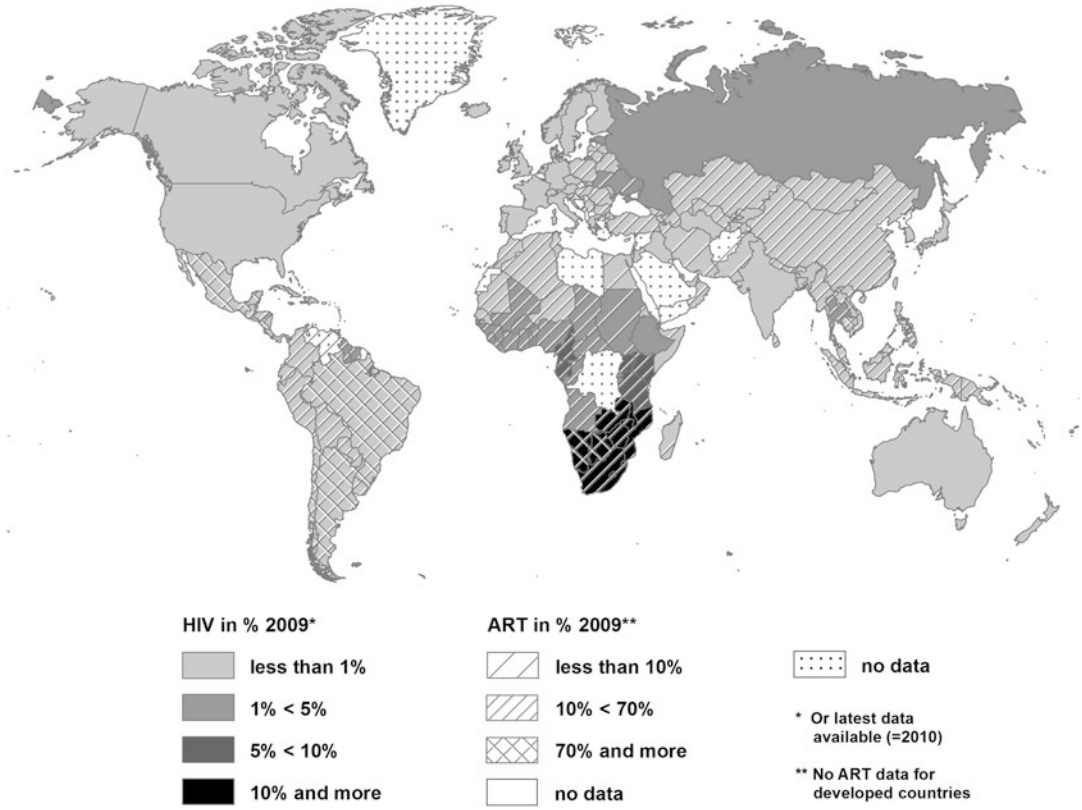


Fig. 2.13 HIV prevalence, 15–49 years, and antiretroviral treatment (ART), CD4<350, in percentage 2009 (Source: UNAIDS and WHO. http://www.aidsinfoonline.org. Accessed 3 July 2012, Map: ESRI, Cartography: F. Swiaczny and N. Ahmed)

from 2.1 million during the peak year of 2004. However, although the trend in the number of HIV/AIDS related deaths has been reversed, the number of orphans due to the excess mortality of HIV/AIDS has mounted to more than 16 million in 2009, increasing from roughly 8 million in 1999 (UN 2011b: 36–42). The care for orphans is only one indirect effect of HIV/AIDS imposed on the development efforts in the most heavily affected countries. Others, e.g., relate to the parental investment in education, which is undermined by premature death in the prime working age due to HIV/AIDS. Between 2005 and 2010, an estimate for high HIV countries reveals that more than 85 % of all death from HIV/AIDS affects those between 15 and 59 years which undermines the livelihoods of affected families and respectively their ability to invest in health and education of children (UN Population Division 2011b: 21).

Globally, a total of 33 countries have seen a decrease of the incidence of HIV/AIDS infections by at least 25 % between 2001 and 2009. Twenty-two of these countries are in Sub-Saharan Africa, where the number of new infections decreased from 2.2 million in 2001 to 1.8 million in 2009, while the number living with the disease increased from 20.3 million to 22.5 million respectively (UN 2011b: 36–42). At the same time Armenia, Bangladesh, Georgia, Kazakhstan, Kyrgyzstan, the Philippines, and Tajikistan showed an increase of the incidence of more than 25 % between 2001 and 2009 (UNAIDS 2010: 61).

In 2009, Sub-Saharan Africa bore 68 % of the global HIV/AIDS prevalence, but the region is also an example for the success of antiretroviral

treatment. From 2004 onwards, the time when the expansion of antiretroviral treatment in Sub-Saharan Africa started (Fig. 2.13), the number of deaths decreased by 310.000 or 20 % over a 5 year period. Despite the fast pace with which antiretroviral treatment was made available in recent years and the large share of development aid assigned for the task, the target of universal access by 2010 is not met (UN 2011b: 41). Beside HIV/AIDS, the treatment of other communicable diseases, such as malaria and tuberculosis, has also gained major advances (UN 2011b: 42–47).

Changes in the Global Burden of Disease

The aforementioned indicators of the MDGs are mainly targeting the health related aspects of the quality of live in the less and least developed regions. As they are still in the first stages of the epidemiological transition (cf. Olshansky and Ault 1986; Omran 1971, 1998; Salomon and Murray 2002), their global burden of disease of morbidity and mortality is determined by high disability-adjusted life years (DALY, see section "Data sources and population projections") levels mostly due to a large impact of communicable diseases, such as infections and sexually transmitted diseases and conditions rising from maternal, neonatal, and nutritional disorders. Non-communicable, chronic or degenerative diseases and injuries (including accidents, homicides and suicides) are less frequent causes of ill health and death. With increasing levels of development the DALY level in general is shrinking and the share of the latter causes is increasing. In the more developed regions the major causes of morbidity and mortality are dominated by non-communicable diseases, mainly cardiovascular diseases and cancer. A final stage of the epidemiological transition comprises the delay of the prevalence of such diseases into higher ages, increasing the health adjusted life expectancy (HALE, see section "Data sources and population projections"). Ageing populations are also more prone to the development of a set of diseases such as dementia or Alzheimer's disease with high prevalence in older ages only. Figure 2.14 compares the development of the burden of disease measured according to the top 25 major causes of death for selected regions in developed and developing regions according to the results of the GBD 2010 (Institute for Health Metrics and Evaluation 2012). The selected regions encompass three regions with the highest incomes and three regions representing the lowest level of human development. While in the high income regions roughly 20 of the top 25 causes of death are both, in 1990 and 2010 related to non-communicable chronic and degenerative diseases the situation in the regions with lower human development shows a decrease of communicable and an increase in non-communicable diseases as major causes of death. In Central Sub-Saharan Africa, communicable disease represented 15 causes versus 6 non-communicable causes in 1990, in 2010 the situation changed in favour of the non-communicable diseases with 9 and communicable diseases with 12 of the top 25 causes of death. Nevertheless, in both years the top 5 causes of death were all due to infectious diseases. In Southeast Asia and Central Latin America the epidemiological change works in the same direction, but to a lesser degree, as in these regions the share of non-communicable diseases was already considerably higher in 1990. In these regions, all communicable causes of death within the top 25 ranking lost rank places between 1990 and 2010, except for HIV/AIDS which increased from rank 58 to 14 in Southeast Asia and from rank 26 to 11 in Central Latin America (Institute for Health Metrics and Evaluation 2012).

Globally, the distribution of the causes of death between non-communicable and communicable diseases is more or less stable. Among the top 25 causes of death 13 belonged to the group of non-communicable diseases each in 1990 and 2010. However, a shift took place which lead to a loss of ranks of all communicable diseases among the top 25 causes of death, except for HIV/AIDS, which rose from rank 35 to 6 between 1990 and 2010. Measured in

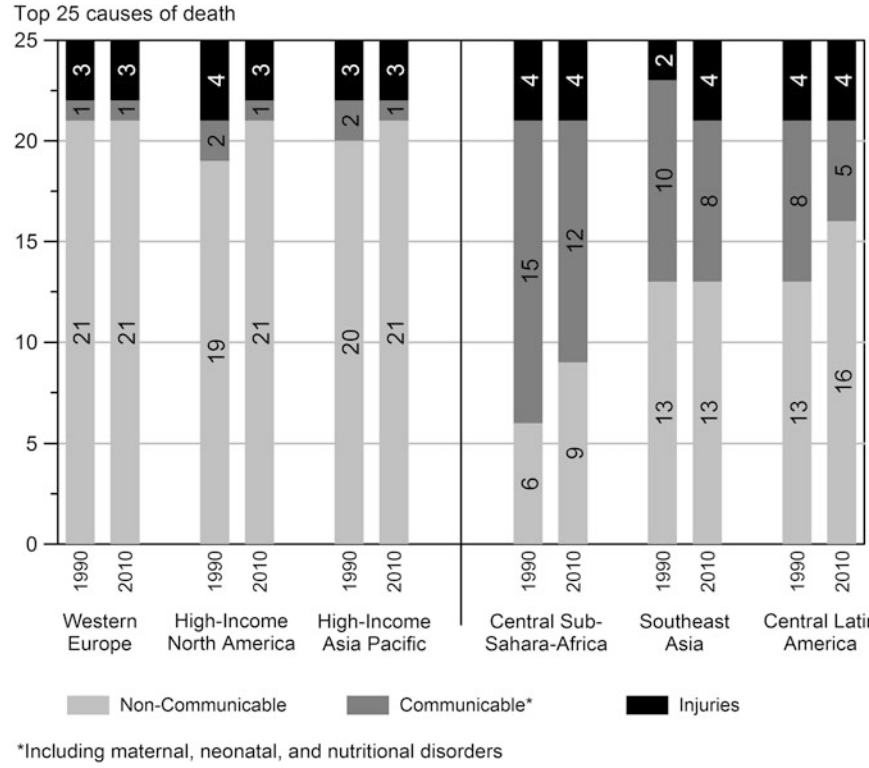


Fig. 2.14 Top 25 causes of death, both sexes by selected region 1990, 2010 (Source: Institute for Health Metrics and Evaluation 2012: GBD 2010 Database. Accessed 21 January 2012)

DALYs the global burden of disease also changed only slightly between 1990 and 2010, per capita the DALYs decreased by about 24 %. In both years, 11 communicable causes were among the top 25 and 10 non-communicable in 1990 and 11 in 2010. Again all communicable causes lost ranks between 1990 and 2010, except HIV/AIDS, which increased from rank 33 to 5 and neonatal sepsis which increased by one rank. On the top lower respiratory infections, diarrheal diseases and preterm birth complication were replaced by ischemic heart disease, lower respiratory infections and stroke. Other non-communicable diseases which gained importance are low back pain (rank 11 to 6), major depressive disorder (15 to 11) and diabetes (21 to 14). The global HALE increased from 54.4 years for males and 57.8 years for females in 1990 to 58.3 and 61.8, respectively, in 2010. The increase took place in 19 of the 21 regions investigated by the GBD 2010 study. The exceptions were Sub-Saharan Africa, because of the impact of HIV/AIDS, and the Caribbean, due to the recent earthquake in Haiti. Compared to the life expectancy at birth, which increased by 4.7 years for males and 5.1 years for women between 1990 and 2010, the HALE at birth increased only by 3.9 years and 4.0 years, respectively. Some of the increased life expectancy at birth is consequently lost to periods spent in ill health (Institute for Health Metrics and Evaluation 2012, 2013; Salomon et al. 2012).

The change in the GBD along with the ageing of the population poses challenges to the health system as well as to family support networks. As more and more people in developing countries suffer from chronic degenerative diseases health systems have to prepare for additional and increasing costs of treatment. Families may face rising and lasting contributions to health costs (out of pocket spending) and an increasing need to care for family members in old age will

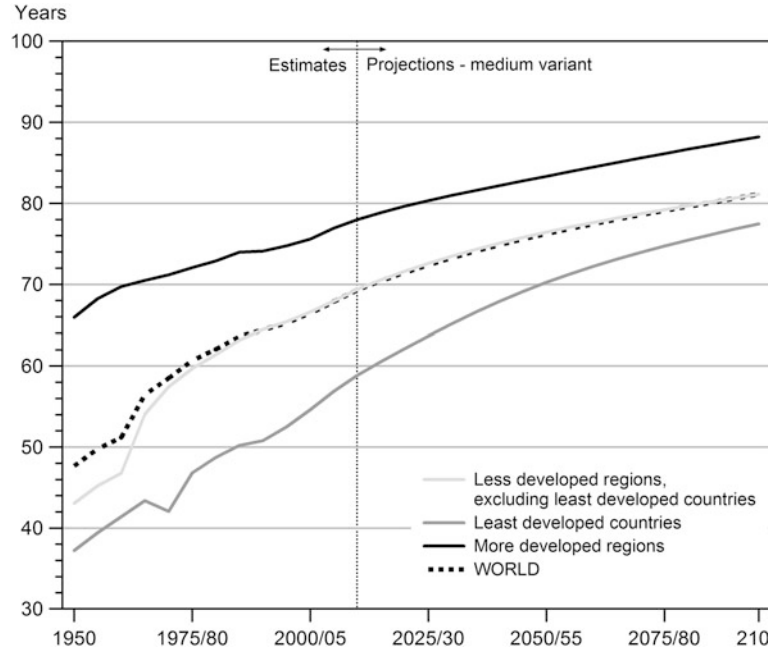


Fig. 2.15 Life expectancy at birth, both sexes by level of development 1950–2100 (Source: UN World Population Prospects 2010 Revision, Medium Variant)

become a reality with an ageing population prone to e.g. dementia or Alzheimer's disease. As a consequence of rural to urban migration in many developing countries (urbanization) and smaller families, traditional familial support networks for those in ill health and old age are in need to be supplemented by other forms of support and care. Finally health systems in developing countries have to deal with the increasing impact of life-style risk factors like e.g. smoking, unhealthy diet, physical inactivity and the harmful use of alcohol (Frenk et al. 1991; UN 2011c: 22–26, 2012a; Vallin and Mesl 2004).

Life Expectancy at Birth

The long-term global trend in life expectancy at birth reflects an increase in physical health and its contribution to wellbeing through the general decrease of mortality over the life cycle (UN Population Division 2012). From 1950/55 to 2010/15, the life expectancy improved from 47.7 to 69.3 years. This equals a growth of 21.6 years or an increased life expectancy of 4.3 months every year during this period. The subsequent period of the decades up to 2060/65 will see an additional gain in life expectancy of 8.2 years to an average of 77.5 years or a growth of 1.9 months per year, according to the assumptions of the UN World Population Prospects. The further development up to 2100 shown in Fig. 2.15 follows the general convergence paradigm underlying the UN Population Divisions projection assumptions (Bongaarts and Feeney 2002). When less and least developed countries will be reaching higher life expectancies at birth in the future, the further increase will level out, and as these regions gain more weight in the world population, they will more and more determine the growth path, with a life expectancy of the world population of more than 80 years in 2100. The difference in life expectancy between the less developed regions as well as the least developed countries compared to the leading more developed industrialised countries decreased from 22.9 to 28.7 years in 1950/55 to 8.4 and 19.1 years in 2010/15 and if the trend continues, it is expected to decrease further. By 2060/65 the difference will be only 5.4 and 12.2 years. Catching up the gap in life expectancy, the least

developed countries are expected to exceed 70 years around mid-century and the less developed regions will surpass today's life expectancy of the developed regions during the last quarter of the century.

The fastest growth in life expectancy since 1950/55 took place in Asia, while Africa also improved its life expectancy up to the 1980s, when further development was increasingly affected by HIV/AIDS related growth in mortality. The effect can be analysed using the difference in life expectancy between the less developed regions and the least developed countries. The latter include most countries with a high HIV/AIDS prevalence. The difference was at a moderate level of 5.8 years in the beginning of the 1950s and developed to 10.5 years 2010/15. Over the next 50 years the difference is expected to shrink and fall below the 1950s level with 5.4 years in 2060/65.

The spatial patterns of the increase in life expectancy depicted in Fig. 2.16 resemble the image gathered from analysing the indicators presented in the previous sub-sections. Living conditions, health and therefore life expectancy at birth will increase in most parts of the world. Developed regions are expected to reach a life expectancy of more than 80 years by 2060/65. The same is true for most parts of Latin America, Northern Africa and the Near East as well as for China. Other parts of the developing world are improving too, and reaching values of more than 70 years, such as India, which will develop at a pace with the trend expected for the countries of the former Soviet Union. An exception of the positive general outlook is Sub-Saharan Africa. Here, different trajectories have to be considered, reflecting the prevalence of armed conflicts and HIV/AIDS. Those countries with a high prevalence of HIV/AIDS and thus a low life expectancy today are assumed to profit most from the anticipated future success in fighting mortality from HIV/AIDS (see section "HIV/AIDS").

Despite the shortcomings in reaching major health related development targets such as extreme poverty and malnutrition, set by the Millennium Development Goals, the general improvement of health conditions and development on a global scale has led to an unprecedented level of life expectancy. Even in Sub-Saharan Africa, which saw the least improvement of life expectancy among all regions since 1950/55, the life expectancy increased from 37.1 years in 1950/55 by 17.9 years to 55 years in 2010/15, which is equal to the level of Turkey at the end of the 1970s.

Summary

In this chapter, the world's population processes and their correlation with health indicators is investigated based on recent data and projections. Global population developments are in general determined by decreasing levels of fertility and increasing life expectancy due to shrinking levels of mortality. Both processes are related to the patterns of demographic change predicted by the model of demographic transition. They are also essentially linked to the positive development of the worldwide quality of life, which has been reported for a long time. During the demographic transition the world population is undergoing structural changes, too. The age distributions are shifting towards older cohorts and the median age is also increasing with relevant implications for the health conditions of such ageing populations. The population growth rate is currently declining and if fertility levels are continuing to decline as expected, based on current trends, the replacement fertility will lead to a stabilisation of the world population around the turn of the twenty-first century. If this future becomes true even the currently still fast growing least developed countries will face a "Demographic Dividend" which can contribute to development and higher quality of life in the poorest regions.

Improving health indicators are contributing to this development by reducing mortality, which is the cause for the rise in global life expectancy. A large share of the improvement of global health conditions is based on the reduction of a limited number of major causes: infant mortality, maternal health, the unmet need for family

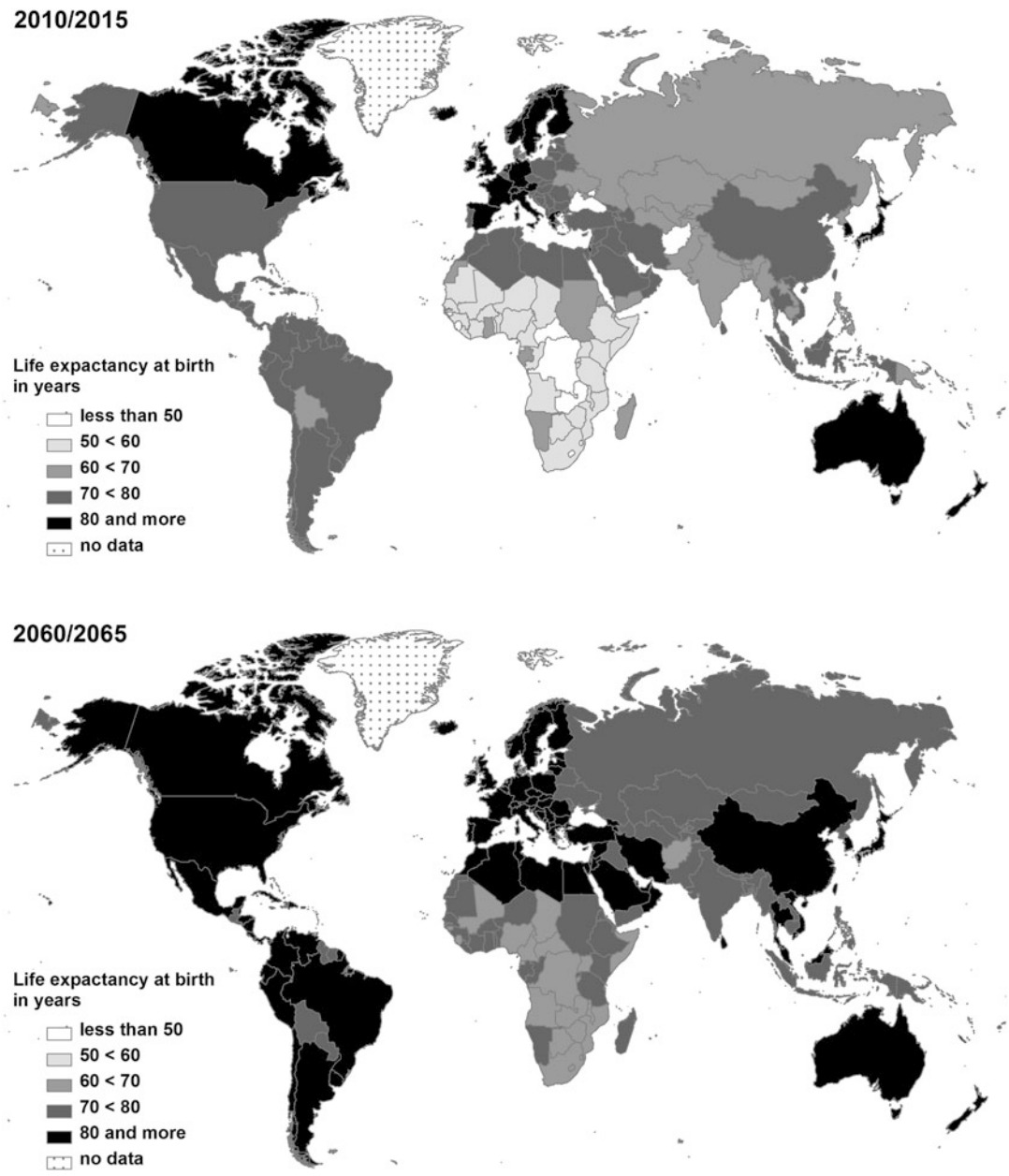


Fig. 2.16 Life expectancy at birth, both sexes 2010/15 and 2060/65 (Source: UN World Population Prospects 2010 Revision, Medium Variant, Map: ESRI, Cartography: F. Swiaczny and N. Ahmed)

planning and the prevalence of communicable diseases (among others HIV/AIDS). Together, they contribute significantly to the reduction of the mortality in the developing regions and especially the least developed countries and are causal to the reduction of the still existing gap in life expectancy and gender disparity compared to the developed regions. Consequently these issues are core targets of the UN MDGs. Ageing on a global scale is a result of this demographic change, and ageing societies are also experiencing shifts in the health conditions because

older populations are more prone to risks of chronic or degenerative diseases. They gain in significance, as with rising development the epidemiological transition leads to a shift in the causes of the burden of disease and death. Moreover, hand in hand with socioeconomic and societal development, improving survival conditions of children has a limiting effect on the desired fertility too, and the access to family planning methods provides the means to reduce the number of children.

In this chapter, it could be shown that the nexus between the growth of a population, its ageing and the related human development is not a limiting condition to the improvement of global health. Life expectancy at birth as a reliable indicator of physical health has reached an unprecedented level, and regional disparities are in general declining steadily. That population growth is, at least overall, not a limiting factor for health improvements is supported by the example of the poorest least developed countries in Sub-Saharan Africa. Despite the high growth rates and low human development there, efforts to fight communicable diseases (e.g. HIV/AIDS) have been proven successful in reducing mortality and increasing the life expectancy (again). Nevertheless, targets set by the MDGs are not yet fully met, and there is a need for further improvement in development on a global scale. While physical health conditions are improving in many countries and life expectancy is reaching ever higher levels, future development targets will have to shift the focus to broader dimensions of health. The definition proposed by WHO, which was a milestone on the way to improve quality of life and wellbeing, stated that health is more than the absence of disease and infirmity. Many developed countries, ahead in the epidemiological transition, have already shifted their implementation to a broader definition of health. Developing regions are expected to follow this example in order to reduce their burden of disease further and allow their population the "enjoyment of the highest attainable standard of physical and mental health" (article 12 of the International Covenant on Economic, Social and Cultural Rights).

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Living Standards in a Modernizing World – A Long-Run Perspective on Material Wellbeing and Human Development

3

Herman de Jong

Exploring the Change in Real Incomes and the Standard of Living

> The amenities of life that almost all of us take for granted today-including electricity, indoor plumbing, safe public water and sewage systems, instant mass communications, access to technologically sophisticated medical care, a remarkable variety of fresh and ingeniously packaged foods from around the nation and the world, free public education, low infant mortality, and long life expectancy- were all virtually absent a century ago. (Baumol, Blackman, and Wolff 1989, 29)
>
> The heart of the matter is 16. Real income per head nowadays exceeds that around 1700 or 1800 in, say, Britain and in other countries that have experienced modern economic growth by such a large factor as 16, at least. (McCloskey 2011, 48)

The Rule of Sixteen

Since the spread of industrialization, which began in England in the second half of the eighteenth century, many countries took off on a development path leading to economic structures that were no longer dominated by agriculture but by mining, manufacturing, and services. This process of modernization resulted in a 16-fold increase in the standard of living of the average world citizen in less than 10 generations. Per person we enjoy 16 times more goods, services, and housing. In the same period world population increased from less than one billion to more than six billion. But not every part of the globe experienced a 16-fold increase; in some countries it was more and in some countries it was less. And some countries experienced a reversal of fortune.

Modern economic growth is a concept that broadly covers the long-term processes of technological development and industrialization and the changes in economic structure and in the physical environment that came with it, such as urbanization. Industrialization started in England, which like other North Sea regions such as Holland, already had a relatively modern economy, with well-developed sectors outside agriculture, such as trade, finance and industry. But even around 1760, still more than 35 % of employment was active in agriculture and thus attached to the land (Broadberry et al. 2013). Technical progress in mining and in cotton and iron manufacturing started a process of industrialization and urbanization. Modernization spread across the Continent, North America and other European offshoots, then Japan and Latin America and only after WWII in the rest of Asia and parts of Africa.[1] Productivity growth and structural change, however, was characterized by uneven development, within and across nations.

H. de Jong (✉)
Faculty of Economics and Business, University of Groningen, P.O. Box 800, 9700 AV Groningen, The Netherlands
e-mail: h.j.de.jong@rug.nl

[1] For a recent overview of industrialization in the 'periphery' see Bénétrix et al. (2012).

W. Glatzer et al. (eds.), *Global Handbook of Quality of Life*, International Handbooks of Quality-of-Life,
DOI 10.1007/978-94-017-9178-6_3,

Table 3.1 Gross domestic product per capita in 1800, 1913, and 2010 (in 1990 international dollars) and ratio to 1800 (=1)

	Argentina	China	Germany	India	Japan	South Africa	United Kingdom	United States	World
1800	931	600[a]	986	648	641	959	2,097	1,296	712[a]
1913	3,797	552	3,648	673	1,387	1,157[b]	4,921	5,301	1,543
2010	10,256	8,032	20,661	3,372	21,935	5,080	23,777	30,491	7,814
R.1913	4.1	0.9	3.7	1.0	2.2	1.2	2.3	4.1	2.2
R.2010	11.0	13.4	21.0	5.2	34.2	5.3	11.3	23.5	11.0

Source: Maddison project database. http://www.ggdc.net/maddison/maddison-project/home.htm
Notes: [a]=1820, [b]=average of 1910 and 1918

Table 3.1 shows income per capita levels for selected countries between 1800 and 2010 in constant prices, so adjusted for inflation.

In 1800 the United Kingdom had the highest material standard of living, measured by GDP per capita. Two centuries later it was still one of the richest countries in the world, but surpassed by the United States. Because of its high income level in 1800 the calculated productivity multiple of the U.K. in 2010 is just over 11. Following this definition Britons became 11 times as rich compared to their ancestors in 1800. Inhabitants of the U.S. experienced a factor of 23.5 %, a number that was by and large also reached by Germany. In 1800 both countries had lower levels of income than the U.K. Initial values for Asia were quite low, suggesting that the Great Divergence between East and West has a longer history than only the 200 years since industrialization (Allen et al. 2011). Japan was the first Asian country to industrialize, after the Meiji Restoration of 1868. The country was extremely successful; its ratio of 2010 to 1800 was over 30. Argentina is an example of reversal of fortune; around the turn of the twentieth century its economy belonged to the richest in the world, but in the last century it fell behind in relative terms. Note that, except for Argentina, growth rates during the twentieth century were much higher than in the nineteenth century. In particular the period of 1945–1973 stands out as an exceptional era of worldwide growth, due to WW II reconstruction, the mobilization of the interwar backlog of opportunities, and catch-up growth for industrial newcomers. Material improvements in countries such as Japan, South Korea, and Taiwan were rapid and took less time to mature than in the early industrializing nations of the nineteenth century. This 'golden age' was a one-off growth spurt in world history (Maddison 2006). But even if we look at the world as a whole and include also those areas where economic modernization is still in an early phase, we find a level of GDP per capita in 2010 that is 11 times as high as the average level around 1800. "The scientific fact established over the past 50 years by the labor of economists and economic historians is that modern economic growth has been astounding, unprecedented, unexpected, the greatest surprise in economic history" (McCloskey 2011, 49).

The Measurement of Price Change

Within countries the increase in availability of goods and services, even for the poor, has been enormous, and could be acquired at much lower costs. A simple comparison of goods being available now as well as in the past may give an idea how much more an average worker can acquire now compared to 100 years ago. Bradford DeLong, an American economist, approached this issue by comparing the prices of similar durable goods in 1895 and 2000. He calculated the number of hours an American worker would have to work to obtain these goods in both years. What you need is a wage rate of an average worker and the price of the commodity, which can be expressed as a multiple of an hourly wage rate. The 1895 data were taken from the catalogue of Montgomery Ward, at the time the largest mail-order retailer in the U.S. that brought products of modern industry to small town

America (See Table 3.2). When we express both multiples as a ratio we get a productivity ratio. It is the combined effect of lower prices through productivity improvements and higher money wages of workers.[2]

Let's take bicycles. Paraphrasing DeLong we see that back in 1895 it took about 260 h of work to buy a bicycle. In the year 1895 a bicycle would cost circa $65. In the year 2000 bicycles were more expensive, on average $130. However, because wage rates have risen much more, it takes only the earnings of around 7 h of work, less than a working day, to buy a bicycle. In terms of bicycles the average American worker has become 36 times richer than a worker back in 1895. Taking the Encyclopedia Britannica as an example the ratio is much less, only 4. But one might also conclude that a household that substitutes the Encyclopedia for one that is freely available on the internet has become infinitely richer, because one hardly has to pay anymore for this kind of information. The example shows that comparisons may easily understate increases in the material standard of living. It also illustrates the difficulties in comparing the services of goods over a very long stretch of time; do their prices contain all the welfare information? And how to apply an appropriate set of weights when we want to aggregate individual expenditure into total national income and consumption?[3]

These issues are all part of the so-called "index number problem", confronting scholars with the question of the interaction of changing volumes, prices and qualities of commodities in composite price indexes. In collecting and using money wages to measure the standard of living we want to know whether movements in prices of goods consumed have allowed workers to keep their level of living. The 'real wage' is the ratio of the money wage to the consumer price index. Consumers buy many things, and the prices of goods and services in their consumption basket inflate at different speed. Comparing the standard of living of today with some period in the past depends on the set of commodities that one views as important. In that sense the weights of the commodities in the basket can vary a lot according to everyone's own preferences. Although statistical offices apply a single official index of consumer prices or a cost-of-living index to adjust money wages and estimate real incomes it still remains difficult to calculate precisely the amount of income growth for an individual or a family.

How to Account for New Goods

Another important problem in measuring real incomes over time is how we include new goods and services in the basket. If we want to measure the development of income properly we cannot just stick to bicycles and we need to include entirely new goods and services like air travel, antibiotics, hip replacement, or the internet. Just consider the following example: Table 3.1 shows that the level of GDP per capita in the U.S. in 1913 was $5,301 at the prices of 1990. In 2010 it was $30,491. This implies that the material standard of living in 1913 was what could be obtained in 2010 with 5,301 dollars spent on goods and services already available in 1913 (such as in the list in Table 3.2) and compares it to the value of the average income of 2010: 30,491. But expenditures in 2010 include smartphones, radios, computers, aspirin, and cardiovascular surgery, which were not available at any price in 1913. New goods of better quality have most certainly held down the true costs of living, and therefore our material standard of living has increased more than the conventional measures indicate.[4] Or, to put it in a

[2] See for a similar but less detailed description Fourastié 1960, 88 and 124–134, pointing at changes in relative prices of products and the differential effects on real comes for the rich and poor.

[3] Of course the same analysis can be made across countries for one particular year as is being done in the various rounds of the International Comparisons Project for the post-WW II period, see Kravis and Lipsey 1991.

[4] See also Crafts on the measurement of the cost of living with new goods: Crafts 2007, 13–14.

Table 3.2 Time needed for an average American worker to earn the purchase price of various commodities

Commodity	Time-to-earn in 1895 (hours)	Time-to-earn in 2000 (hours)	Productivity multiple
Six novels by Horatio Alger	21	0.6	35.0
One-speed bicycle	260	7.2	36.1
Cushioned office chair	24	2.0	12.0
100-piece dinner set	44	3.6	12.2
Hair brush	16	2.0	8.0
Cane rocking chair	8	1.6	5.0
Solid gold locket	28	6.0	4.7
Encyclopedia Britannica	140	33.8	4.1
Steinway piano	2,400	1,107	2.2
Sterling silver teaspoon	26	34.0	0.8

Source: DeLong (2000, 5)

different way: an income of $5,301 today that can only be spent on commodities that were around at the beginning of the twentieth century would in fact be worth a lot less than $5,301.

According to Nordhaus the inaccuracy of price indexes can be high in periods of fast technological change or economic transformations, when it is extremely difficult for e.g. statistical agencies to capture the impact of new technologies and new goods on living standards. This was especially so in the period before WW II. He also produces a list with important inventions from aeronautics to the zipper which have only been partly taken up in price indexes (Nordhaus 1996, 56–57). Although the last century witnessed large changes in e.g. transportation, entertainment, indoor plumbing, health care, electronics, lighting, and communications, etc., these are only poorly taken up in the price index. Take the example of the introduction of the cellular telephone in the U.S. in 1984. It took 15 years before it was included in the consumer price index of the Bureau of Labor Statistics. The inclusion of this consumer product had hardly any effect on the index because its price changed only little. In fact, a large part of the price decline already had happened in the previous 15 years, before the cell phone was taken up in the index. Characteristic for new products is that their prices fall rapidly shortly after the introduction. Quality improvements in cell phones were likewise not taken up in the index either. Because of this failure to adjust for these characteristics telecommunications-service prices did not increase at the 'official' rate of 1.1 % per year, but in fact decreased at about .8 % per year in the U.S. in the 1990s. There might have been a further upward bias because the index does not calculate the gains in consumer welfare from new products and services. Consumers do not have a static choice set, which means that new products do not simply substitute for existing products (Hausman 1999, 189). The growth of living standards in the U.S. using the official consumer price index difference is six fold between 1913 and 2010. The Boskin Commission's guesstimate is that unmeasured improvements in quality and new goods have understated growth by 1 % per year. This implies in fact that material welfare has increased not six fold but at least 14 fold since 1913. Six is thus a lower bound estimate (DeLong 2000, 26).

Greater Variety of Goods and Services

New goods can also increase the variety of commodities for consumers which they may value higher than low variety. This is not always visible in measures like real wages. Hersh and Voth (2009) have analyzed the value of variety in the pre-modern period by looking at the impact of sugar and other new colonial goods on living standards in Europe. The problem is that many studies of living standards in the pre-modern and

modern period focus on an unchanging basket of goods. So any change in the actual pattern of consumption and welfare will not show up in real income estimates. The point is that despite the slow movement in measured per capita income in Europe before the Industrial Revolution, Europeans have seen their living standards rise through the gains in the variety of goods that came in as a result of food crops exchange between the New and the Old World. These radical transformations of consumption patterns have been overlooked in the consumption baskets in existing studies. The 'Columbian Exchange' made life for Europeans better through the imports of tea, sugar, coffee, tobacco, and chocolate.[5] Using a variety of methods Hersh and Voth have estimated English gains in welfare from these New World goods of between 10 and 20 % by 1800. The distribution of the new colonial goods among the British public was wide. The average working class household in the 1790s spent 7 % of household income and 10 % of its food budget on tea, coffee, sugar and golden syrup. Starting as luxury goods they became familiar goods for the masses. Overseas expansion thus impacted on European living standards through the arrival of new goods. The downside of these improvements in standard of living was the worsening of the position of African slaves working on the plantations (Nunn and Qian 2010, 181).

This point brings us to a final remark on the effect of higher productivity and variety on real income growth. The benign effects of higher production efficiency, new goods or bigger variety are not always distributed equally within and across countries. National income estimations attach the same weight to a unit of income received by a poor person as to a unit received by a rich person. But if we look at growth the increase of one dollar in income for the poor adds more to total welfare than an increase of one dollar for the rich (Beckerman 1980, 51). For those near the bottom of the income distribution growth looks much less impressive because many of the new commodities invented are of no use if you cannot afford them. Consumers in Bangladesh also face the worldwide lowering of costs of manufactured products such as bicycles and smartphones (as a result of a long term process that started with the Industrial Revolution), but they cannot buy the same amount as an average Norwegian can because incomes in Bangladesh are lower. The Industrial Revolution brought a wave of new products, processes and gadgets and has continuously changed our consumption patterns (Baumol et al. 1989, 45–50). But one of the important results is that this process also brought on bigger differences in the production and consumption of goods and services, within and across nations. How well have the benefits of structural change and industrialization been distributed? Nobel laureate Simon Kuznets has argued that initially inequality has a tendency to increase when economies modernize because of structural change and increasing income gaps. In the second phase of the much discussed "Kuznets curve" a tendency of convergence of incomes and decreasing inequality can be observed (Kuznets 1955). But there have been and still are important lags between the fruits of efficient production by producers on the one hand and higher real incomes for consumers on the other. These issues are central in the study of economic history and more in particular the study of the standard of living, wellbeing, and inequality through time.

[5] The Columbian Exchange has been used as a broader concept including the transmission of diseases, ideas and populations (Nunn and Qian 2010, 167).

Concepts of Living Standards

> Each method for appraising welfare has strengths and shortcomings...While single measures have the advantage that comparisons are easily made over time and across countries, they also have the liability of excluding or failing to incorporate fully some aspects important to the quality of life. Among these, per capita income is the most comprehensive, but it is not always available in the past and it may fail to capture the value of health, education, and other important dimensions of living standards...In particular, it may be difficult to estimate the extent to which expenditures on health are already included in GNP. (Steckel and Floud 1997, 13–14)

Real Wages

The traditional approach among economists and economic historians to measure the changing state of human welfare has been through the measurement of real wages. Already since the 1890s the development of the working-class standard of living was being studied by comparing real wages through time and across countries (Scholliers 1996). Despite criticism (it does not measure non-market activities, incomes of households depend also on unemployment, earnings of family members are disregarded) the real wage approach has always had strong defenders. For example, declining real wages will result in decreasing material standards of living. To be able to acquire the same amount of goods and services an individual or a family has to supply more labor. Wages are therefore an important 'exogenous' input into the decision making process of the household, whereas anthropometric and demographic data can be viewed as an output, reflecting how households have adapted to relative prices (Scholliers 1996, 311–312; van Zanden 1999, 178–179). Real-wage studies focus on average wages for a large socio-economic group in society like the working class. It precludes any possibility that measurement of living standards is distorted by changes in income distribution (Feinstein 1998, 627). Alternative estimators like GDP involve much reconstruction and assumptions, in particular for the pre-1900 period (Allen 2003, 406). Real wage estimates can be used for many other purposes which may lead to consistent estimates of consumption, output and productivity (Margo 1992, 174–176; Broadberry and Burhop 2010, 402; Ashenfelter 2012, 2). Real wages are still the most important ingredient in the long-standing debate on the British standard of living during industrialization that has been going on for many decades. It is most of all characterized by controversies over different vintages of cost of living indexes. Being an optimist or a pessimist depends on the price series that one wishes to accept.

Gross Domestic Product

The second indicator to measure wellbeing in the long run is the concept of Gross Domestic Product and the underlying relations within the so-called System of National Accounts which measure economic welfare. The primary goal of the SNA was to apply an efficient measure of cyclical changes in the economy. It was developed during the 1930s and 1940s to study the magnitude of the Great Depression to determine appropriate policies and to plan for war time production. During the 1950s and 1960s it became a normative welfare measure for economic and social performance (Engerman 1997; Offer 2000). But ever since the first systematic construction efforts by Kuznets there have been concerns that such accounts were incomplete and that GDP is a measure only of economic activity that passes through the market. Already in the early 1970s Nordhaus and Tobin questioned the central position of GDP and introduced an experimental "measure of economic welfare" (MEW), making imputations for leisure, non-market and household activities and urban disamenities to arrive at a "sustainable MEW" (Kuznets 1952, 63–69; Nordhaus and Tobin 1973). Attention shifted to the costs of affluence, material improvement did not always go hand in hand with similar growth in wellbeing. Human welfare was being viewed more and more as a multidimensional phenomenon, of which income is only one aspect. Moreover, there was critique on the micro-economic foundations of SNA and the implicit assumption that the society which GDP measures is viewed as a unitary actor (Stiglitz et al. 2009). However, the measure of GDP is still defended as an indicator of human welfare, but on pragmatic grounds because movements in GDP correlate to a certain degree with social indicators like health, education, and life expectancy (Offer 2000, 6). It is also a compelling concept for international comparisons. The work of Angus Maddison has been praised for giving a consistent quantitative overview of comparative historical GDP estimates for almost all

countries in the world. After his death in 2010 his work has been continued in the so-called "Maddison Project" which aims to improve and update historical GDP comparisons (Bolt and van Zanden 2014).

Extended accounts ("augmented GDP"), like in the work of Nordhaus and Tobin try to measure welfare, by adjusting the SNA. Similar methodologies have also been applied in long-term welfare analysis. This has not always been without problems. The imputed values for leisure using a so-called willingness-to-pay approach (e.g. to take account of reductions in work hours, or improvements in life expectancy) and non-market activities exceed the value of GDP, dominate the index, and change only slowly, which makes it difficult to analyze growth and cycles in a meaningful way (Usher 1980; Crafts 2007). Various analyses of health improvements in the first part of the twentieth century have shown big effects when this willingness-to-pay approach is applied. Crafts estimated on this basis an imputation for longer life expectancy for a set of OECD countries of 0.8 percentage points extra growth on top of the GDP per capita growth of 1.2 % per year for the period 1913–1950.[6] Hickson calculated for Japan a mortality imputation of about two per cent per year on top of the Japanese GDP per capita growth rate between 1900 and 2000.[7] A related problem is that imputations for increased life expectancy cannot be totally exogenous; if measured consumption also includes investments in health, than there will be double counting (Williamson 1982).[8]

Social Indicators and HDI

Next to "augmented GDP" another approach as an alternative to measurement of general welfare is the "social indicators" movement (Land 1983; Noll and Zapf 1994). It is based on the idea that real welfare is not represented by the SNA indicators but by goods like housing, health, nutrition, life expectation, and poverty levels etc. (Liu 1975).[9] Although this statistical movement was only short-lived in the official statistical agencies and bureaus it became very popular in the field of economic and social history. Anthropometrics proved to be a very valuable source of analysis for periods and countries where historical income and price data were not available. Alternative approaches entered the scene with the study of food intake, literacy, health and longevity and in particular the measurement of human height (Floud et al. 1990; Engerman 1997, 34–38; Crafts 2007, 17–18, 23–25). Recently an OECD study has been published that covers a large number of historical indicators of economic development and wellbeing worldwide (van Zanden et al. 2014).

Anthropometric historians look upon heights as closely correlated with income. On average the poorer strata of a population are shorter than the wealthier. So, when in a low-level economy income rises it will raise average height. It will also increase when the distribution of income

[6] Crafts 1997, 317. For the period 1870–1913 it was 0.5 %, for 1950–1973 0.4 % and for 1973–1992 0.5 %.

[7] Hickson 2009a, 498. A study on tuberculosis in England and Wales by the same author finds that the decline and virtual elimination of tuberculosis in England and Wales represents one of the most important and valuable health gains during the twentieth century (Hickson 2009a, b, 1061).

[8] Daly and Cobb (1989) included in their Index of Sustainable Economic Welfare inequality and depletion of non-renewables. This has a negative effect on the index because from the 1970s inequality and environmental depletion has increased in a lot of western countries. Recently Jones and Klenow have proposed an alternative to GDP by defining a nation's flow of welfare as a consumption equivalent. Their welfare indicator combines data on consumption, inequality, leisure, and mortality in an expected utility framework. These approaches all share the general notion of diminishing returns to economic growth (Jones and Klenow 2010).

[9] The Physical Quality of Life Index introduced by Morris (1979) is a weighted index of infant mortality, literacy rates and life expectation at age one (infant survival rate). Such estimates are necessarily rough and have foremost a diagnostic value, but they can be extremely helpful for periods and countries when other indicators are not available. For a historical PQLI on Victorian Britain see Jordan (1993), see Ostroot and Snyder (1996) for a historical index on France.

changes in favor of the lower income strata. On the other hand, in the case inequality increases, it might lead to a decrease in average height, even if GDP per capita is rising (Steckel 1995). But there is no simple association between height and income (Easterlin 2000). Changes in height reflect uncompensated shifts in nutritional status during childhood. Indexes of height thus are no substitutes for national income statistics, they report the nutritional status of human life (Gallman and Wallis 1992, 13). Steckel and Floud have documented the long tradition of using human stature to assess the health aspects of human welfare. Already in the 1820s human growth studies were executed, inspired by the idea those environmental conditions influenced stature. "Height at a particular age reflects an individual's history of net nutrition, or diet minus claims on the diet made by maintenance, work (or physical activity), and disease" (Steckel and Floud 1997, 4). There is an important interaction component, because poor nourishment that may lead to reduced growth may be an effect of a poor diet and medical care, but also of work intensity and variations in labor organization (Fogel 1994). Indeed, human stature can be viewed as a net rather than a gross measure of nutrition. It depends on the nutrition available for physical growth after the claims made by body maintenance needs, illness, and intensity of work performed. There is a whole basket of components underlying these claims, like the disease environment, the state of public health, urban disamenities, the role of transportation and trade spreading diseases, and the distribution of income (Nicholas and Steckel 1991, 940). The mechanisms behind these relationships are complex and may differ across countries. Using anthropometric analysis may reveal the specific national relationships between industrialization, living standards and health aspects. Nevertheless, many studies have found height-income relationships for the late nineteenth and twenty century that are quite strong. They also show cycles, with even loss of stature for certain periods, triggering big debates on the nature of the causality with economic changes like the transportation revolution, the movement of people from rural to urban areas, and the role of relative prices for food (see the next sections). "Given that a nonlinear relationship between height and income has been found in the past century and that the height-income relationship could shift over time, we conclude that heights and income measure different but related aspects of the quality of life" (Steckel and Floud 1997, 9).

Arguably the most successful alternative indicator for GDP per capita has been the Human Development Index (HDI). Building on Morris's Physical Quality of Life Index this index evolved out of the United Nations multiple indicator approach to the standard of living. The HDI consists of three components: income per head, life expectancy and education and is influenced by Sen's capabilities approach. Sen stressed that underdevelopment has to be seen as the lack of basic capabilities rather than the lack of income per se (Sen 1985). Human wellbeing then can be defined as people having the capabilities to achieve valuable 'functioning's'. The HDI tries to measure the escape from poverty, and the process of expanding people's choices. Income is assumed to have an effect on this primarily at low levels of material wellbeing, but, above a certain threshold level, it is making a diminishing contribution. Because all three dimensions were seen as indispensable they were assigned equal weights. This concept had a large impact in policy making, most of all because of its emphasis on components of wellbeing other than income.

But the HDI has also been criticized. The HDI measures relative progress on a scale of minimal measures, it distinguishes most of all among levels of deprivation, or basic needs, and less on gradations of wealth. Furthermore it is difficult to put a price tag on the components of life expectancy and education. Life expectancy as an indicator has asymptotic limits, reflecting physical and biological maxima, so identical changes in absolute terms result in lower increases as the starting level is higher. Therefore, it gives more weight to saving the life of younger over older people. If these indicators reach progressively higher limits, incremental improvements require much more resources, than from a lower base.

Historical applications of the HDI by Crafts (1997, 2002), Costa and Steckel (1997) and Floud and Harris (1997) have shown the importance of life expectancy in overall wellbeing within and across nations.

Studies have revealed that both in cross sections and over time there is a weak linear relation between wellbeing (measured by social indicators) and income per head (Liu 1975, 11; Easterlin 2000, 24; Offer 2000, 17). In general there is a relation that can be fitted with a logarithmic curve: at lower levels of real GDP per capita there is a strong correlation with social indicators, at higher levels it diminishes: additional growth in real GDP does not lead to a same amount of welfare growth. Offer sees the diminishing returns of additional growth in simple welfare measures over time as problematic: "It could be argued that the simple development indices are misleading, in that the measures used are exhausted under affluence. Measures like HDI and PQLI are oriented strongly towards the priorities of indigence" (Offer 2000, 17).

A recently presented Historical Index of Human Development by Prados de la Escosura produces a new vintage of HDI that adjusts for the asymptotic limits of the non-income dimensions of the index, life expectancy and education. This index adjusts in such a way that, in cases where a social indicator reaches higher levels, its increase represents higher achievements than had the same increase taken place at a lower level (Prados de la Escosura 2013, 10–11). Some results of this will be treated in the final section of this chapter.

Subjective Wellbeing

Psychological approaches try to measure the human experience of welfare. There is a curvilinear correlation between measures of subjective wellbeing (SWB) and levels of GDP, with a strong effect at lower incomes; however, above a certain level of income there is no increase in SWB. This effect is stronger in cross-section comparisons than over time. The influence of the level of absolute incomes is not very large, but relative incomes do matter. Consumption norms adapt very easily to higher incomes.[10] One of the mechanisms is the so-called "hedonic treadmill" suggesting that to sustain a certain level of satisfaction, income has to rise permanently.

The important message to take away from the curvilinear relationship between income and welfare is that they are historically contingent; incomes grow and produce welfare and later on GDP goods and services deliver welfare returns that are diminishing. Why? We can point to some historical examples like the co-movement of rising incomes and urbanization. Economic production and growth may cause urban disamenities. Although these can be overcome through e.g. 'benign' public policies and/or institutions, additional growth will create new demand for services that take away negative effects like congestion or pollution. The affluent economy produces more than it can absorb, both in terms of ecology and in terms of psychology (Offer 2000, 27–28).[11] Because of this historical 'cyclicality' it is extremely difficult to make long-term analyses of welfare growth based on social indicators. Offer therefore proposes to shift the focus on measuring unhappiness instead of happiness, but that brings us close to the HDI indicator that is based on a scale of minimal measures. It may well bring us back to the issue whether to choose for a broad (wellbeing, happiness) or a narrow definition of the standard of living (economic welfare). For long-term analysis we should start from the basic assumption that changes in the ability to acquire goods and services are key to analyze changes in people's welfare and general wellbeing (Scholliers 1996, 311). We will focus on Western Europe and its major offshoot the U.S., because these

[10] As incomes increase over time the impact of happiness is offset by an increase in material aspirations (Easterlin 1974; Easterlin 2001; Crafts 2007, 17), this is also known as the "Easterlin paradox".

[11] This argument is not the same as the much repeated claim that GDP is a bad metaphor of wellbeing for the reason that it also reflects spending on negative externalities, to avoid damage caused elsewhere in the economy.

regions have the most complete historical records to study the precise timing and underlying mechanisms of economic growth and human welfare.

Welfare Growth Before Industrialization

> There are essentially two measures of economic wellbeing for which we have long time series extending well before the nineteenth century: the real wage and GDP per capita. Each can lay claim to a long history of scholarly effort and important improvements in their methodologies over time, and surprisingly, each of them shows a very different trend over the pre-industrial period. (Angeles 2008, 148)

GDP Per Capita Before 1800

Less than 40 years ago there was a consensus among scholars that the early modern economy of Europe was stagnant in the long run (like e.g. in the publications of the French Annales school). But new research has revealed that countries in Northwest Europe showed dynamic growth long before the classic period of the British Industrial Revolution starting in the second half of the eighteenth century. According to new reconstructions of economic development in England income per capita started to increase in the second half of the seventeenth century (Broadberry et al. 2013). The rise in income was caused by a long-term process of labor moving out of the agricultural sector into industry and services. As production and income levels per capita in agriculture were lower than in services and industry such a shift causes total per capita income to rise. Calculations reveal that average labor productivity (output divided by the total labor input) increased with 0.15 % per year between 1381 and 1700 (Broadberry et al. 2013, 23). This structural transformation of the labor force was accompanied by urbanization and a disproportionate growth of the city of London acting as an engine of pre-industrial growth. Early growth was also visible across the North Sea in Holland, the most urbanized part of the Netherlands (de Vries and van der Woude 1997). New estimates show that the structural transformation of the Dutch economy since the second half of the fourteenth century after the Black Death has led to a long-term increase in income per capita. The agricultural sector switched to more market–oriented activities, at the same time its share in the economy declined, and people moved to cities. The net effect being a growth of income per capita of almost 0.2 % per year between 1347 and 1807, leading to a doubling of per capita income in 450 years (van Zanden and van Leeuwen 2012, 123). Although these rates are low by present standards, it indicates that European countries have witnessed rising living standards before the period of industrialization through a mechanism of structural change of the labor force. Growth however, was volatile, due to an inherent instability of the economy that was very vulnerable to exogenous shocks. The acceleration of technological change, starting with the British Industrial Revolution would change the character of growth; it became modern, with new drivers, like efficiency, human capital and larger stocks of physical capital and machines.

These views have not remained undisputed. Clark has argued that the economy of England between 1200 and 1800 can be characterized by a Malthusian equilibrium (Clark 2013, 4). England in 1800 was not much richer than in 1200. This long-run Malthusian equilibrium is in fact a pessimistic view on the possibilities for economic development in pre-modern society. It has been mainly based on estimates of national income series for England and assumes that a much larger part of the population was attached to the agricultural (low-productive) sector. However, working back from the present with the assumption of no trend growth results in an implied level of living during the middle ages in England which is at least twice as high as the recent estimates made by Broadberry et al. (2013). It is clear from the new estimates that around the year 1450 the level of GDP per capita in prices of today would amount to circa $1,100, which is far above the absolute subsistence minimum of $400 per capita. Many pieces of qualitative evidence, however, point in the

direction of increasing levels of living, or even a "consumer revolution", characterized by improvement in the variety and quality of household items (Allen 2001, 411). The "pessimist" standpoint is thus not one of low levels, but of low growth, where incomes and thus standards of living did not trend upwards until the Industrial Revolution.

Real Wages and International Welfare Ratios

The differences in findings can also be ascribed to differences in methodology. Comparing these aggregate income per capita estimates with information on real wages – the other measure for which we have long time series – has revealed that for specific periods these different measures of economic wellbeing do not present the same picture and therefore tell different stories about pre-industrial economies. The recently produced income reconstructions of the English and Dutch economies are based on a systematic measurement of output and labor input by sector and estimations of average productivity and income levels of workers and other professions. These reconstructions are based on the system of national accounts, described in the previous section. The big advantage of this method is that it tries to make a consistent and logical framework of national aggregates that need to fit together. But this is also one of its weaknesses (besides those already mentioned) because it involves making assumptions about variables that are not always well documented in historical records.

For many European countries real-wage series show hardly any positive trend between the late middle-ages to the early nineteenth century, which contradicts the evidence of the reconstructions of national income (van Zanden 1999; Allen 2001; Angeles 2008). For this reason researchers have criticized the use of real wage information. It not only should give a too simplistic and narrow view of economic developments but it is also too static and not representative for the total population (de Vries 1994). But let's have a closer look at the evidence from a comparative viewpoint.

In Allen (2001) real wages have been put in a standardized international perspective. He used the wages of one category of workers, building craftsmen and laborers, in about twenty European cities. Standardization comes at a cost. There is no absolute certainty whether such an historical indicator is representative for the standard of living measured over a year, or whether city size has an effect on wages, or whether wages of building workers are representative for labor income for workers in general. The results, however, are extremely informative for the long-term development of economic wellbeing since 1500. Nominal wages converted into grams of silver per day (the so-called silver wage) reveal a pattern of increasing divergence between the north and the south of Europe since the second half of the sixteenth century. Wages in South Europe dropped to very low levels, while in North Europe wages remained constant. English wages were exceptional, however, and rose to very high levels, indicating that Britain was transforming into a high wage economy.

To calculate real wages in terms of purchasing power Allen introduced the concept of so-called welfare ratios. The nominal wage is divided by the costs of a standard basket of goods representing subsistence: the "bare bones" minimum for survival. Because the prices of these consumption goods differ per region the exercise gives country specific price developments. The welfare ratio is defined as the average annual earnings of a worker divided by the cost of a poverty line consumption bundle for a family. The poverty line is defined by a minimum level of caloric intake (Allen 2001, 425). When the welfare ratio is greater than one the worker has an income above the poverty line and there is room for expenditures on 'luxury' goods like higher-quality food and durable consumption goods. When it is less than one the family is in poverty and living below what is socially en biologically acceptable. In that case the basket of goods can only be consumed if the male breadwinner's income is supplemented by labor income of other family members. The intra-European pattern of welfare ratios is similar to the pattern of silver wages. Building workers

in Northwest Europe had incomes well above the poverty line, but in South Europe the welfare ratio fell below the poverty line after 1550 to reach a low around 1800. Families could only survive by shifting their diet to bread, the cheapest source of calories. The logical implication is that large parts of Europe were in a situation of deprivation, characterized by bad nutrition, and high mortality. This is backed by evidence of anthropometrical indicators like heights.

During the late eighteenth century the British were the tallest people of Europe. People in France, Spain, Italy, Austria and Hungary were shorter. Low real wages stunted growth (Allen 2001, 431). His study suggests that the widening of the north-south gap was already there before the Industrial Revolution, and must be ascribed to divergent economic and structural developments in the seventeenth and eighteenth century.[12] An important implication of this is that South Europe was still caught in a Malthusian regime. Only from the second half of the nineteenth century, when industrialization sets in, do we find rising living standards. The second important implication is that the high wage economy in England, being a reflection of growing productivity, remained in place despite a sevenfold increase in its population. It preceded the Industrial Revolution and maybe even was its cause. But as we shall see the real break in levels of living standards is only visible after 1850–1870. Only then can we find a trend that is really breaking away from the cyclical pattern that characterized British real wages since 1300 (Allen 2001, 435). It took a long time before average Britons could reap the benefits of economic change.

In Allen et al. (2011), the real wage analysis has been broadened to Asia and in particular China. Contrary to the revisionist view that the advanced parts of China, like the Yangzi Delta, had similar welfare levels than the European core around 1800 (Pomeranz 2000), this study presents a different picture from comparative real wage estimates. Real wages in Suzhou, Beijing, or Canton, and India and Japan were much lower than in the advanced parts of West Europe in the eighteenth century. Standards of living in the major cities of China and Japan resembled more the lagging parts of South Europe. Wages measured in grams of silver were already much lower in India and China than in Britain around the late sixteenth century. Measured in kg wheat or rice the Asian levels were closer to British levels (ca. 80 %), but falling behind (to 30–40 % of the British level) in the nineteenth century (Gupta and Ma 2010, 268). One of the main reasons for this relative decline is technological stagnation. Although Asia had cultivation methods that were characterized by relatively high land productivity, the traditional technology of e.g. wet-rice cultivation was labor intensive, holding labor in the agricultural sector. In Northwest Europe labor-productivity growth in agriculture made it possible for labor to move into industry and services. A comparison of real wages based on a broader basket of products than only grain or silver would be more meaningful. But it is very difficult to make reliable comparisons of consumption baskets of average workers for the pre-1800 period. Not only is it hard to compare the quality of housing between both continents, it is likewise not easy to deal with differences in factors like climate and cultural preferences. Allen et al. estimated a consumption basket in North China that was circa 15 % lower in costs than in Europe. Deflating nominal wages with the consumption basket reveals that welfare ratios in Asia were far behind Northwest Europe (circa 30–40 % during the eighteenth century). Welfare ratios, although increasing during the latter half

[12] Özmucur and Pamuk (2002) found a long-term upward trend in Ottoman real wages since 1600 of 0.3 % per year, pointing at a modest trend for productivity increases, ascribed to learning-by-doing and diffusion of new technology from West Europe. Nevertheless, also Ottoman wages were in the same league as South Europe, that is, lower than 50 % of Northwest Europe. Cvrcek calculated levels of welfare ratios for the Habsburg Empire 1827–1910. Living standards only started to rise in the second half of the nineteenth century and remained at much lower levels than those of British farm workers, let alone London construction workers (Cvrcek 2013).

of the nineteenth century, even fell relatively vis-à-vis Northwest Europe. Until 1900 China had on average the same welfare levels as the non-industrializing countries in Central and South Europe (Allen et al. 2011, 30).[13]

Explaining Conflicting Evidence from GDP Per Capita and Real Wages

Only in England real wages maintained their high levels. There is conflicting evidence of the development of wellbeing when analyzed from the perspective of GDP per capita on the one hand and the concept of real wages on the other. Real wages and GDP per capita are not the same. Firstly, there may be variations in the labor supply of individuals and households, responding to changes in wage rates. A second factor is the development of relative prices in different markets of the economy, e.g. price differentials across product markets and the housing, capital, and labor markets. Thirdly, from this follows that wages are only a part of national income, there is also income from e.g. ownership of property or other productive capital. Income per capita may not be a good indicator of the standard of living of the working population when the income distribution changes rapidly. In fact, this is the central argument of the Kuznets curve (see next section).

In the British case the first factor has been of great importance for the pre-industrial period. Angeles estimated that in eighteenth century England the increase in the number of hours worked (labour supply per capita) accounted for three quarters of the difference between the real wage level and the level of GDP per capita. Although the trend in wage levels did hardly change, income per capita increased because of higher labor input. Increasing labor input per person has been documented by Voth, who found that in the last 40 years of the eighteenth century the average Briton was putting in 25 % more working hours per year than before, from 2,576 h annually in 1760 to 3,328 in 1800 (Voth 2001, 1078). Labour intensification was mainly due to a rise in the number of days worked. People raised their income by working more hours; productivity gains did not lead to higher real wages in this initial phase of industrialization (Angeles 2008, 158). Whether this intensification was a result of the spread of factory production (supply) or the result of a change in workers' attitudes (demand) is still a question. Jan de Vries has tried to explain stagnant or declining real wages and rising incomes from changes in the pre-industrial household. New consumer goods became available and may have changed the preferences of households leading to an increase of work effort. The amount of time devoted to leisure was reduced and the activities for the market increased. This "industrious revolution" explains not only the intensification of proto-industry, child labor, and female labor but also agricultural specialization. De Vries finds proof of this in the increasing volume of material wealth and the number of durable consumer goods in British households (de Vries 1994, 254–256). A more pessimistic story would tell that the labor supply of families can be described by a backward sloping supply curve: there was more supply of labor to compensate for lower wages. Intensification of work and suppression of leisure went hand in hand with the exploitation of family members and a neglect of education. The elimination of holy days and of "Saint Monday" increased the length of the working year by 25–39 % (Voth 1998, 40). This must obviously have had a negative impact on the standard of living, despite increasing GDP per capita. Voth estimated that the rise in annual labor input per person over the half century between 1750 and 1800 (between 585 and 738 h) was roughly as large as the reduction in working hours between 1870 and 1938

[13] See Baten et al. (2010) for an integrative narrative of living standards and human capital in China in the eighteenth to twentieth centuries. Human capital in China and Japan measured by literacy rates were comparatively high (Gupta and Ma 2010, 275). For a study of prices and wages in Spanish Latin America between the Conquest and Independence see Arroyo Abad et al. (2012). New evidence from real wages in British Africa between 1880 and 1965 is given by Frankema and van Waijenburg (2012).

(717 h on average). British output growth in this period was driven by more labor input, to overcome the effects of rapid population growth. Improvements in the standard of living became only visible after the middle of the nineteenth century, when British industrialization was already underway for almost 100 years.[14]

The second important explanation for the discrepancy between real wage estimates and GDP per capita can be found in relative price changes. Hoffman et al. have argued that relative price movements favored higher-income groups and increased income inequality in West Europe from 1500 to 1800. The mechanism that they describe is simple: "The rich, the poor, and the middle-income ranks consume very different bundles of goods and services. By definition, staples bulk large in the consumption of the poor, whereas luxury goods and services comprise a bigger share of what the rich consume, generation after generation. Any strong historical trend that makes staples more expensive relative to luxuries should widen the inequalities in real living standards" (Hoffman et al. 2002, 322). So there may have been an important effect on domestic inequality. At the same time it may also be an explanatory factor in the Great Divergence debate, because real purchasing power must have increased faster in countries where consumption patterns favored the goods that showed a fall in relative price level (Hoffman et al. 2002, 350; Broadberry and Gupta 2006). Not taking into account other prices than food prices (luxuries became relatively much cheaper) results in an underestimation of the relative purchasing power of West European countries. Changing relative prices resulted in higher real income gains for richer nations and within the countries itself for a greater gain for the richer classes.

[14] See also Clark and van der Werff who find no proof of intensification of work input per capita and therefore question the idea of an "industrious revolution" (1998, 830).

The Early Growth Paradox

> Very few questions in economic history have been the focus of such prominent and persistent attention as the controversy about the impact of early industrialization and capitalism on the standard of living of the British working class. From contemporary discussions of the "condition of England" in the 1830s to the modern writing of economic and social historians, the issues have been vigorously contested, stimulating both fuller clarification of the economic and philosophical concepts and greater ingenuity in the search for new sources of information. But a consensus still remains elusive. (Feinstein 1998, 625)

The British Standard of Living Debate

Ever since the days of Toynbee, Marx, and Engels the consequences of the British Industrial Revolution (and associated urbanization) for the health and wellbeing of the mass of the population have been intensively debated. The core question of the "early growth paradox" is whether the standard of living of the working classes have stagnated or even worsened between 1750 and 1850, when national income per head was growing, first slowly, and after 1830 more rapidly (Pamuk and van Zanden 2010). The measurement of real wages has been central in this debate, which got a new twist when Lindert and Williamson (1983) for the first time derived an economy wide nominal wage index together with a cost of living index based on worker's budget shares and prices. Their view was optimistic, with almost a doubling of real wages after the end of the Napoleonic Wars. Later revisions by Feinstein revealed a more pessimistic picture with a stagnation of real wages between 1780 and 1830 and only a 30 % increase in the longer period 1780–1850. Later on these estimates were revised by Clark (2001) and Allen (2007), who used different price series. Although the evidence is still "a medley of conflicting verdicts", it is clear, also from the latest revisions, that real wage increase was only half of the output per worker increase (62 %)

during this phase of industrialization (Feinstein 1998, 626).[15] Substantial gains in welfare became visible after the post-1870 downturn in food prices with the imports of cheap cereals and livestock products from across the Atlantic.

Slow welfare growth seems to be reflected in anthropometrical sources. Floud, Wachter, and Gregory (1990) used military records to measure average heights of conscripts, as an indicator of nutritional status. They found that the mean height of British recruits fell during the second quarter of the nineteenth century and recovered only slowly during the second half. Their explanation for this decline in stature is the unhealthy disease environment of cities in Britain; urban-born men were shorter than rural-born men (Floud et al. 1990, 326). Furthermore there is ample evidence of a decline in nutritional status since 1740, lasting for at least 100 years (Nicholas and Steckel 1991, 937). A reconstructed historical human development index by Floud and Harris (1997) shows that improvements in the HDI arrested a bit during the second quarter of the nineteenth century. However, there is no decline visible, as with the heights of recruits. Since the 1850s a dramatic improvement in the standard of human welfare became visible (Crafts 1997).

The international dimension of recent research puts this 'growth puzzle' of declining standards of living during British industrialization into a new perspective. We have already seen that British levels of living were not low by international standards. In fact, the British industrial revolution took place in a high wage economy.[16] Expensive labor and cheap fuel (indigenous coals) paved the way for the well-known British inventions in the coal mines, the textiles industry and in engineering. The reason for lower stature in England can be explained as an effect of structural change in the economy that impacted on the pattern of relative prices and the personal income distribution, creating winners and losers. Mechanization may have led to technological unemployment and lower wages for those who remained in the declining sectors, like handicraft (Allen 2013, 8). The decline in heights can therefore partly be explained by the social deterioration of workers in the declining cottage industry (Brown 1990, 594; Cinnirella 2008, 350).

There was a critical change in relative prices of food and housing. And working class families were confronted with this in the early phase of industrialization. Rents of housing rose dramatically, being bid up by increasing numbers of workers entering cities. Prices of manufactured goods like clothing and textiles fell (because of mechanization and productivity growth) in comparison with prices of nutrients. This led to a relative drop in food consumption; consumers shifted their expenditures from nutrients to clothing, resulting in a decline in per capita calorie consumption and a decline in stature. Worker's families experienced no increase in food consumption, longevity or better housing. Decreasing health indicators also match evidence of rising infant mortality in the industrial North of England (Huck 1995, 535).[17]

We might hypothesize that British society was facing big lags in the timing of economic and social modernization: the growth process during industrialization was characterized by technical progress that increased the demand for capital, raising the profit share and leading to higher inequality. But the important investments in capital outlays in the initial stages of industrialization 'squeezed' consumption (Weir 1997, 162).

[15] See Crafts and Mills (1994) for an econometric analysis of trends in British real wages between 1750 and 1913.

[16] See Humphries (2013) for a recent critique on the high wage interpretation of British industrialization.

[17] Huck stresses also that outcomes are sensitive to distribution of resources in a society. For families that are on the bare bones minimum, losing a portion of their resources will lead to a worsening of their health status that is not exactly mirrored by the groups who gain. So, the effect of income on biological results/outcomes is not linear, and the movement in the mean outcome of the distribution may not be representative for what really is happening (Huck 1995). See also Mokyr (1988, 87) who uses a proxy implied by consumption of some key commodities like sugar, tea, tobacco, and coffee. The proxy variable remains practically unchanged before the late 1840s.

In the second half of the nineteenth century, however, wages could rise in line with labor productivity, once levels of capital were in accordance with the level of technology. This reminds us of the Kuznets curve. It also puts forward the question what would have happened in Britain if technical progress and capital accumulation would not have taken place. Probably the economy of the U.K. would have fallen back to the welfare levels in South Europe and China at the time (Allen 2001, 433, 2009, 429).

The Antebellum Puzzle in the U.S.

Industrialization in the U.S. was later than in Great Britain. But economic historians have also debated on the biological effects of fast structural change and modernization for workers in nineteenth century America. This is the so-called "antebellum puzzle".[18] During the early stages of growth the economic standard of living for workers developed faster than their biological standard of living. The puzzle in this debate is not so much an issue of optimism or pessimism, but about the exogenous or endogenous nature of this discrepancy. The American rate of growth of real per capita income was at least as fast as in the U.K., and accelerated in the last two decades before the Civil War. The transformation of the economy resulted in a big relative decline in agricultural employment already before 1860. There was a shift of population from rural to urban areas, albeit slower than in the U.K. The real surge in city growth took place with the large-scale immigration from Europe after the Civil War. But pre-war industrialization brought on a longer working week, with more intense, insecure, and monotonous work. Therefore income and wage data may overstate the true gains in living standards achieved by economic growth in the decades before 1860 (Gallman and Wallis 1992, 9). There is ample information that the health status of workers began to decline, while income continued to rise around 1830. Average heights declined after 1830, reaching a low point in 1890. Research by Nobel laureate Robert Fogel pointed at rising prevalence rates for chronic conditions of men born since 1840–1849. The impact of chronic disease on labor productivity may have been substantial (Costa and Steckel 1997, 59).[19] The timing of height decline was close to the U.K. pattern. But more importantly, in the U.S. height decline also took place in the country side. Bad working conditions in factories, higher risk of exposure to infectious diseases in overcrowded cities therefore cannot be the only cause. An important endogenous explanation of health decline has been given by Komlos (1987), who stressed the deterioration in the diet of Americans. The sectorial shift in production during industrialization led to an expansion of the labor force in more urbanized centers. At the same time agricultural productivity and the labor force in agriculture grew only slowly. This resulted in a decline in food production and a decline in per capita consumption of meat; the American population substituted carbohydrates for proteins. This could lead to maternal malnutrition and anemia and to fetal malnutrition resulting in shrinking Americans (Costa and Steckel 1997, 66).

Welfare Effects of Industrialization Elsewhere

Evidence of similar mechanisms on the European continent is mixed. Ewert reports a German growth puzzle with declining biological standards of living in Wuertemberg and Saxony.[20] Bekaert concluded that emerging

[18] For an extensive overview of this debate see Komlos (2012).

[19] A similar point about the decline on the quality of Britain's work force and a poor productivity performance in the late nineteenth century has been made by Allen (2013, 9).

[20] Ewert combined height trends from Bavaria (Baten 1999) with new estimates of Wuertemberg and Saxony and found declining heights for birth cohorts 1770–1849 during early industrialization in Germany. The biological standard of living declined, the reason for this being a mix of relatively bad climatic conditions, rising food prices (partly because of population pressure) and falling real incomes leading to a nutritional crisis, in particular in Saxony where there was less self-sufficiency because of urbanization (Ewert 2006, 82).

industrialization in Belgium may have aggravated the nutritional constraint by making income and caloric distribution more unequal and the poverty problem more acute (Bekaert 1991, 653). France had a later start of industrialization than the U.K., with lower levels of real wages and with less demographic growth (because of low fertility) and a slower rate of urbanization. No proof has been found of a decline of the standard of living during industrialization, it is also not visible in anthropometric evidence like heights and life expectancy (Weir 1997). A nationwide survey in 1852 revealed that average French families spent more than 60 % of their budget on food items. The poorest among the farm laborers lived well above subsistence (Postel-Vinay and Robin 1992). Sweden was also a late industrializing nation and showed a late urbanization at a point that public health measures already were more effective. During the nineteenth century the historical HDI has been increasing continuously (Sandberg and Steckel 1997, 156). A study based on a micro dataset of Italian household-level data for the years 1874–1906 finds that in the early phase of Italian industrialization the level of nutrition went up for the bulk of the population. This includes the poorest among the poor who lived on average on 2,466 cal per head per day, exceeding the threshold defined by nutritionists. This information is in line with macro information of the national accounts statistics revealing clear proof of economic growth. The Italian industrial revolution coincided, unlike e.g. Belgium, with more efficiency and more equity (Vecchi and Coppola 2006, 441).

In Japan, also a latecomer, welfare growth was characterized by a specific segmented development between the industrial and the agricultural and traditional sector. Higher productivity growth in the manufacturing sector resulted in higher real wages for industrial workers, whereas the other sectors showed much slower wage growth. This was also reflected in gaps in health indicators like nutritional status, mortality and fertility. On top of that public health investments in the early twentieth century remained quite low because of heavy investments in military expansion. This explains the failure of Japanese life expectancy to keep up with that of European countries (Honda 1997).

Economic growth as measured by GDP per capita and material living standards (including health) diverged in the early industrializing nations in the nineteenth century. There were important differences in the timing of economic growth and human development, caused by forces of structural change, relative price change and urbanization. The next section will focus on the mechanisms of early urbanization on welfare levels.

Urban Disamenities, Health, and Public Policies

> Economic growth is not always benign, however. Industrialization was generally associated with increasing urbanization, crowded factories and tenements, and the pacing of the workers by machines. Economic growth might therefore lead to deterioration in health. (Costa and Steckel 1997, 47)

Do the traditional measures of standard of living reflect or incorporate the value of health status? It does, when people spend additional income on clean water and better diets. Health benefits will be reflected in higher GDP per capita. But it is difficult to establish such a relation for the nineteenth century. In contrast, if we look at the twentieth century we see that the normal living standard indicators are overshadowed by the consumer surplus of increasing health expenditure. In the nineteenth century however, declining health was independent of total consumer expenditures; it occurred despite income growth.

The quality of life has played a central role in the living standard debate. Already during the 1830s and 1840s social reformers like Frederick Engels looked at migration of rural labor to the British industrial centers as "social murder." William Blake's Dark Satanic Mills form the symbol of the human hardships and urban disamenities associated with the Industrial Revolution. Jeffrey Williamson tried to find a way to estimate these disamenities. According to the

approach of Nordhaus and Tobin, some portion of higher earnings can be viewed as a compensation for the urban penalty. Williamson combined a proxy for disamenities, the infant mortality rate, with levels of pay, and estimated how much compensation workers wanted for city life. "It does indeed appear that urban disamenities- at least in the form of high infant mortality rates- did require a pecuniary bribe to induce the low-wage working class family to locate in cities with the lowest quality of life" (Williamson 1982, 221–224). The premium during the 1830s and 1840s, however, was only 7 to 13 %. Williamson concluded that it was not industrialization that created the disamenities, but rather urbanization. Brown was more pessimistic about the costs of inadequate public health and the deleterious effects of poor housing in the British cities: "High living costs and poor sanitation in the cities prompted compensation that approached one-third of adult weavers' earnings" … "Urbanization of the industry dampened the growth in living standards most strongly during the two decades following the end of the Napoleonic Wars" (Brown 1990, 606, 609).

Szreter (1997) showed that the poor demographic record can be ascribed to lack of investment in social overhead capital, which clearly did not increase with urban growth. According to Szreter and Mooney (1998) only from the 1870s onwards sustained improvement in British urban life expectancy can be found, with a complex pattern of alternating periods of deterioration and recovery between 1820 and 1870. They conclude that the second and third quarter of the nineteenth century was a key period of discontinuity and stresses in general patterns of the standard of living for the working population (1998, 109). So, this revision views the 1830s and 1840s not as an end of pessimistic levels of living standards, but as a the beginning of a serious deterioration in the standard of living of the British working class through the impact of the Industrial Revolution and urbanization, despite probable rises in the male real wage rates. Huck's conclusion is also pessimistic. Infant mortality is a reliable indicator of public health and sanitation standards and often reflects differences in income across social classes and countries. Infant mortality in English worker's families rose during first part of nineteenth century (Huck 1995, 529, 545). A large part of the burden of fast urbanization was carried by infants.

Oxley used the rate of infection of smallpox as a proxy for urban overcrowding. The more faces there are per square kilometer, the greater the risk of contracting smallpox. There is a potential link with economic wellbeing in the commercial and industrial cites of England. Rapid urbanization created a crisis in accommodation (Oxley 2003, 647). The association of people being infected by smallpox and stunting may in fact be an effect of the worst disamenities of urban life. Public health movements and investments in public health between 1870 and 1930, such as the cleaning of water supply, sewage facilities, cleaning of milk supply, the setting of housing standards and the clearing of slums have led to declining rates of mortality and rising levels of life expectancy that only became visible in the first decades of the twentieth century (Costa and Steckel 1997; Leonard and Ljungberg 2010).

Ferrie and Troesken (2008) found that clean water has been extremely important for the mortality transition in the nineteenth century. They estimated that one-third or one-half of mortality declines that occurred in Chicago between 1870 and 1925 were related to water purification. Water intakes were moved far from sewage outflows. Pure water had diffuse health effects; it not only reduced typhoid, but also the diseases that the typical typhoid survivor would later succumb to, like tuberculosis or kidney or heart failure (Ferrie and Troesken 2008, 15).

Mokyr and Stein have observed that better health was produced within the household and that it was essentially technological: There was growing knowledge about the effects of cleanliness, giving recipes to the household regarding food, hygiene, and personal and medical care. There was more understanding of diseases, especially with the emergence of the germ theory.

"How did households learn about what makes them sick and how to stay well? The most dramatic change in medical history occurred in the half century before 1914: the understanding and gradual extinction of infectious disease from Western society. This transition was not complete by 1914, but had made enormous progress – decades before the development of effective antibiotics" (Mokyr and Stein 1996, 145–146).

Household Consumption and Child and Female Labor

> Much as the comforts and conveniences of life can contribute to enjoyment, something more than material possessions is necessary if people are to feel that life is really worth living. One is sometimes tempted to believe that at the same time their standard of living was rising and the amount of their leisure increasing the Americans were becoming a less happy people. If this is true, it does not mean that we should return to 'the good old days'. It does mean that it is fully as important for us to learn how to use what we have as it is to get more. (Edgar W. Martin commenting on American subjective wellbeing in 1860: Martin 1942, 404)

During the nineteenth century the family household accumulated many new products that increased their standard of living. There is evidence of growth of consumption of non-essentials even in working-class families. Church reports increasing ownership among British miners' families of harmoniums, pianos and other consumer durables like sewing machines and watches in the second half of the nineteenth century (Church 2000, 637). Soltow calculated the value of dwellings in nineteenth century America: "The family's wellbeing, in housing, was enhanced materially in terms of flooring, ceilings, fireplaces, windows, and doors" (Soltow 1992, 133). The average value of a dwelling increased tenfold between 1798 and 1875. In a study of antebellum America between 1770 and 1840 Walsh mentions how higher living standards impacted on different groups in society. From studies of probate inventories it becomes clear that there were higher standards of comfort for the wealthy and middle classes who had access to hired or bound labor, as measured by the quantity and variety of household equipment (Walsh 1992, 218). For the well-to-do there was improved lighting, more vehicles, more furniture etc. There is also proof of a more refined middle class culture and a larger role for women in the household through reallocation of labor time. On the other hand, working conditions of ordinary farm men and women, laborers, and slaves showed no evidence of major improvements (Walsh 1992, 228, 252).

Industrialization transformed women's status within the family and economy. It is a much debated issue whether it improved or worsened women's living standards in the United Kingdom. An important proof of this transformation can be found in qualitative evidence e.g. from parliamentary papers, and studies of household accounts. Labor market segmentation increased during industrialization and women's position in the labor market worsened. Between 1795 and the mid-nineteenth century there was a decline in the participation of married women in the labor force, and the proportion of working-age females fell rapidly between the 1820s and the 1890s. Aside from the rise of the patriarchal family and the ideology that women need not work, it also had effects on women's standard of living, because female wage rates declined. There is evidence that the nutritional status of working-class women was deteriorating after 1825. Mortality data show a female excess mortality gap (Johnson and Nicholas 1997, 204–205, 215–216). Nicholas and Oxley (1993) found that around 1800 English rural female heights were falling more rapidly than urban female heights and rural-born male heights. Obviously women did not share household resources equally with men. This may point to gender-based nutrient inequality which reflects unequal labor-market opportunities between men and women. Women were segmented into unskilled work with low pay. This was also visible in the agricultural sector where there were big changes from livestock production into grain with the application of new technologies which intensified gender specialization. With the enclosures women lost their role as the primary

exploiters of the commons (Nicholas and Oxley 1993, 736–738, 746).[21]

Horrell and Humphries (1992, 872) have extended these changing roles to the discussion of family budgets by stressing that one should not look only to the income of the male-breadwinner. Real family incomes grew less than male earnings, so one has to be careful to measure living standards movements only from the perspective of male wages. In fact, women's and children's earnings were less able to contribute to family income, especially during crises.

Child labor in early nineteenth century was widespread. Cunningham mentions percentages between 20 and 30 of children under age of 16, not only in England but also in early industrializing Belgium. Juveniles were employed in a broad range of manufacturing industries, but also in coalmining and cokes production. Juvenile labor was not just a transitional phase in industrialization that would later on disappear through technological advance; the type of labor was significant for many reasons, it was cheap and it had perceived skills (Cunningham 2000, 412).[22] But during the late nineteenth and early twentieth centuries child labor had declined strongly, not only in the early industrializing economies, but in many countries. Children had been excluded from sectors such as mining and textiles or glass manufacture. The explanation for this lies in a variety of factors, like the decision making within families, state action (child labor and schooling laws and laws raising the school leaving age), technological innovation, and cultural change and cultural values. Another reason was the sanctification of childhood. After WW I children gradually came to be valued not for what they could contribute to the family economy but for the emotional gratification they brought to adults. Parents worked in order to provide a better life and opportunities for their children. So children have seen their standards of living raised by far more than adults (Cunningham 2000, 417, 424).[23] But we have to remember that early industrialization and urbanization had lowered children's living standards as indicated by high mortality in the industrial cities.

Working Hours and Leisure

> Clearly, the modern preoccupation with recreation and leisure activities such as sports, cultural events, vacationing and vacation travel, television viewing, and the like is a vast change from life in the nineteenth century…It was also virtually unknown in the nineteenth century for members of the laboring population to enjoy a period of retirement in their later years; people literally worked themselves into the grave. (Baumol, Blackman, and Wolff 1989, 48)

Higher productivity and incomes have increased the amount of leisure time. The long term decline in working hours that took place in the first half of the twentieth century reflects an income-elastic demand for leisure and is a reflection of technological change in the sense that the purchasing power of an hour of work has risen substantially. Clearly a considerable part of the increase in the real hourly wage was used to reduce hours at work which points at a negatively sloped long-run labor supply function (Crafts 2007, 14). The reason is that workers then had little opportunity to shift leisure over time and therefore took lower hours instead of more days off or a shorter work life (Huberman 2004). The strongest reductions in work hours took place in the twentieth century. Estimated hours of work for 1870–1913 were on average 10–12 h per day during six days a week in most sectors and most countries. However, trends in weekly work hours varied a lot across nations. Around 1870 it varied

[21] See also Clark (2001) and Cinnirella (2008).

[22] See Logan (2006) for an elaboration of the differences in child labor between British and American families. Child labor in the United States was less extensive than on the Continent during the nineteenth century. See also the analysis of Nardinelli (1990), which is based on the new household economics.

[23] Likewise Gratton has found that American industrialization has not impoverished the elderly. On average the elderly fared relatively well by contemporary standards, and their standard of living improved fast during the early twentieth century (Gratton 1996, 57).

between 2,755 in Great Britain to almost 3,500 h in Belgium (Huberman 2004, 982). Around 1913 annual work hours in European countries and the New World were between 2,200 and 2,950 h. Shortly after WW I, around 1919, the 8-h working day or 48-h working week was introduced in many countries. It was the largest reduction ever in industrial working hours in such a short time span. In many countries the reduction in work time was accompanied by holding on to the existing weekly money wages of workers, which implied a rise in time or piece rates. Given the positive complementarities in the enjoyment of leisure, workers faced a social multiplier- the marginal productivity of leisure increasing with the number of people having access to it – and increasing returns to the provision of leisure infrastructure.[24] Without taking into account this social multiplier we probably would underestimate the gains from reductions in market work time.[25] During the twentieth century hours declined further to a range between 1300 and 1900. Workers have used their increasing incomes to buy more and better products, but most was spent on purchasing leisure.

Higher productivity and mechanization potentially reduced the non-market work time within households. Joel Mokyr has tried to answer the puzzle raised by Ruth Cowan, why (female) homemakers worked longer hours in their homes after 1870, while growing mechanization of household activities would suggest otherwise (Cowan 1983). Labor saving technical progress made American housewives in 1950 to produce the same amount of services as three to four servants a century before, a number that could be attained by only few Americans in 1850.[26] Besides the 'normal' explanations for the paradox, such as offsetting labor saving effects or a shift from market purchases toward home-production, Mokyr comes with the alternative explanation that the perceived marginal product of housework increased sharply in the last third of the nineteenth century. The reason is that the economic significance of housework was growing. It was seen as a way of improving living standards. Specialization in the household thus can be seen as a conscious choice, driven by the perceived benefits of clean homes and better nutrition for repressing disease and improving health of the family members. The germ theory, the sanitary movement etc. increased knowledge about cleanliness and propagated good household practices (Mokyr 2000). This answer is also consistent with the decline in infant mortality and with the initial divergence of infant mortality between middle class and working class families at the turn of the twentieth century. Middle classes adopted these new practices first, but gradually these habits worked their way down the social ladder (Leonard and Ljungberg 2010).

Closely connected to increasing non-market time is the diffusion of domestic appliances. Bowden and Offer (1994) have studied time-saving and time-using technology for households. Domestic appliances only take a small fraction of disposable income, increasing from 0.5 % in 1920 to about 2 % in 1980 in the U.S. But it has changed the activities and life styles of families. Significant differences occurred in the diffusion of on the one hand entertainment appliances like radio and television, and household and kitchen machines on the other. Bowden and Offer defined appliances as time-saving when they reduce the time to complete a certain household task (e.g. the

[24] Scott and Spadavecchia (2011, 1271), Crafts (1997, 315).

[25] Beckerman makes a distinction between time not spent in the market measured as natural hours versus effective hours. Effective hours allows for productivity increases in the enjoyment of leisure or performance of non-market work (Beckerman 1980, 47). This problem was already mentioned by Nordhaus and Tobin (1973, 554): "...One conceptual issue is how to count leisure in estimating the absolute increments of total consumption between two dates. The contribution of leisure is obviously greater if technical progress is assumed to have augmented leisure time than if an hour of leisure is assumed always to be the same hour".

[26] Not only new durable products were labor saving, but also better provisions like central water supply. This saved probably more household labor than the washing machine (Leonard and Ljungberg 2010, 123).

washing machine or the vacuum cleaner) and potentially increase the quantity of discretionary time. Time-using goods require the use of discretionary time in conjunction with the product and enhance its perceived quality. Both classes of goods had diffusion patterns that differed. Items like the washing machine, the vacuum cleaner and the refrigerator were introduced around WW I, and it took several decades before they reached a penetration level of 50–75 % in the U.S. Time-using appliances like the radio and television, introduced in respectively 1923 and 1948, took less than 10 years to reach a penetration level of 50 %. Because U.K. incomes lagged about 30 years behind the U.S. the mass diffusion of household appliances occurred circa 30 years later than in the U.S. The authors conclude that "...consumers have apparently given greater priority to enhancing the quality of discretionary time than to increasing its quantity" (Bowden and Offer 1994, 732). Substantial amounts of discretionary time have been taken over by entertainment appliances. Household appliances did hardly change the time spent on housework, due to rising standards of house care. Although they may have been substituted for the services by servants or other household members, many tasks devolved back to the housewife; cloths were washed more often, floors were cleaned more frequently. "Technology has not saved women's time because it has not been accompanied by any substantial rearrangement of the gender division of labor at home". A study of time-budget diaries in the U.K. has shown that a decline in housework time only began in the early 1960s (Bowden and Offer 1994, 725–734).

Aguiar and Hurst have documented on the basis of time-use surveys between 1965 and 2003 that leisure for (non-retired) men has increased by between six to nine hours per week within the U.S. For women it amounted to four to eight hours despite growing participation in market working hours. The decline was mainly driven by decreasing home production work hours of more than ten hours per week. The increase in leisure was economically large. The gain between 1965 and 2003 was an increase of between 15 and 27 % of the average core market work week in 1965 depending on the precise measure of leisure. On the basis of a 40–hour work week it would be an equivalent of roughly 6–10 additional weeks of vacation per year. This is probably an underestimation because individuals are living longer and retiring earlier. The increase in lifetime leisure has therefore been much larger (Aguiar and Hurst 2007, 987–988).

Long Term Inequality and Comparative Standards of Living in the Twentieth Century

> Overall, viewing the twentieth century through the lens of the HDI rather than on a national accounts basis gives a distinctly more optimistic picture of the experience of economic development in the third world. Improvements in life expectancy were a major achievement worth a great deal to the average person and should be given much more prominence by economic historians. (Crafts 2002, 404)

In the preceding sections it has become clear that there is not a straightforward relation between rising inequality on the one hand and industrialization and movements in standards of living on the other. Hoffman et al. (2002) have demonstrated that rising inequality has not been a special characteristic only of the nineteenth century with its fast structural changes. There was large inequality within European countries already before the period of industrialization. The concept of real income inequality, e.g. inequality adjusted for movements in relative prices of the consumption basket and different consumption styles across different social groups is important here. Engel's law defines the inverse correlation between level of income and the share of income spent on food products. The poor spend more of their budget on food than the rich.

We have seen that in the very period that Northwest Europe really took the lead over other countries there was a disappointing

performance of the working class. In the period before 1815 inequality within and between European countries was larger than perceived until now. One of the reasons is that between 1500 and 1815 prices of staples rose much more than the prices of luxury goods. In the course of the nineteenth century the opposite happened. Real wages increased and the relative price of grains started to decline, making the lower classes better off, but not everywhere. There were protective grain duties in countries like Italy, France and Germany during the last quarter of the nineteenth century that denied large groups of society the benefits of cheap grain (Hoffman et al. 2002, 348). After 1914 trends in income inequality remained relatively unaltered, because the effect of relative price movements on bundles of goods and services between the rich and the poor were less pronounced.

Nevertheless, Bourguignon and Morrisson have stated that the inequality among world citizens has increased dramatically since 1820 until after WW II. Only after 1950 there seems to be a turning point towards less inequality. An important stylized fact in their quantitative analysis, however, is that the driver of inequality was most of all the increasing divergence in national economic growth rates between "the West and the rest". Within countries there were forces of equalization of income during the first half of the twentieth century (Bourguignon and Morrisson 2002, 737–738, 742). Recent work of Thomas Piketty reveals a long wave of rising income and wealth inequality within countries during the nineteenth century. In the first decades of the twentieth century wealth and income distributions within countries contracted because of war efforts and government policies to redistribute incomes. After 1970 inequality within countries rose again. The author perceives this as an effect of an inbuilt tendency in capitalist systems for income from capital to grow faster than income from labor (Piketty 2014).

Observations made for the pre-WW I period are only partly in line with the Kuznets curve, which presumes increasing inequality during early industrialization and a resurgence of a more equal income distribution in a maturing industrial society.[27] But for this era the open economy forces and globalization and de-globalization tendencies must also be taken into account. E.g. for some countries emigration may have contributed to increasing income equality and may have pushed up wages.[28] The First World War itself seems to stand out as a period with fast leveling in earnings, compressing skill differentials and lowering the skill premium between workers and employees. The combination of union wage-bargaining strategies together with developments in the war-time labor market resulted in a system where increases in pay mainly occurred through the granting of flat-rate bonuses for both skilled and unskilled workers. It was also the period where we find a dramatic increase in the role of social spending, redistributive transfers and public policies towards better insurance and housing (Lindert 1994). Nineteenth century investments in public health and better practices in households began to pay off in the first half of the twentieth century. Ironically, this coincided with a long depression in Europe between 1914 and 1945, with disappointing economic performance.[29] But we can also observe that Europeans became healthier, taller, and older. Historical research into the human condition and level of living has revealed high growth trends in the general biological standard of living of European citizens. For those who survived the atrocities of the World Wars, health status, such as infant mortality and life expectancy, but also literacy- and education levels

[27] See also Nafziger and Lindert on Russian inequality before the revolution. They show that in the early twentieth century Russia was not exceptionally unequal. Presently Brazil, China, the United States, and Russia itself are more unequal than Tsarist Russia. (2012, 25).

[28] In Italy there is no evidence of an increase in inequality during the first phase of industrialization between 1896 and 1913. An important reason for this is the emigration of laborers from the South to the North and to the Americas (Rossi et al. 2001, 922).

[29] Between 1900 and 1950 growth per capita was about 1.0 %, against a long term rate of 1.7 between 1870 and 2000. See Maddison 2006.

improved rapidly. The rate of improvement during the interwar period was much faster than during the period 1870–1913. Between 1913 and 1945 there was a steep decline in birth- as well as death rates. By the late 1940s many European countries had a rate of 9–14 deaths per 1000 of population, coming down from 16 to 27 in 1900. Infant mortality decreased from 90 per 1,000 births to 25 in 1945. Life expectancy at birth rose from around 50 to 65 in the majority of European regions. In 1950 men were on average 5.8 cm taller than in 1900 (Millward and Baten 2010, 234–242). At the same time, as we have seen, average annual working hours decreased by more than 500 h, expanding leisure time for the majority of European workers significantly.

How do these experiences compare with other regions in the world? Recently new estimates of long term HDI have been published that give new insights in the driving forces of relative standards of living across nations and regions. If one compares HDI levels of the early industrializing nations in the nineteenth century with developing countries now it becomes clear that the latter have higher living standards or human-development levels. Today's values of less-developed countries are higher than the HDI of West Europe in 1870. This is mainly an effect of much higher life expectancy of developing countries now than in the rich countries in the nineteenth century. Furthermore there has been a large convergence of HDI worldwide. Gaps between leading economies and Africa and Asia were reduced between 1913 and 1999. However, the gap in real GDP per capita between the poorest and the richest countries has widened (Crafts 2002, 403).

Concluding Comments: Human Development and Health Care Expenditures

> Public policy should not be aimed at suppressing the demand for health care. Expenditures on health care are driven by demand, which is spurred by income and by advances in biotechnology that make health interventions increasingly effective. Just as electricity and manufacturing were the industries that stimulated the growth of the rest of the economy at the beginning of the twentieth century, health care is the growth industry of the twenty-first century. (Fogel 2004, 95)

In a recent study Leandro Prados de la Escosura has presented an adjusted Historical Index of Human Development. This index consists of the familiar components: an income index, a life expectancy index, and an education index based on literacy and enrolment rates. The HIHD has different ingredients based on achievement functions that take away the problems related to the asymptotic limits, and calculate a geometric average of the three components. The most important conclusions are the following: Between 1870 and 2007 levels of HIHD moved from 0.175 to 0.809 in the richest (OECD) area and from 0.027 to 0.220 in the poorest area being sub-Saharan Africa. Figure 3.1 shows that since 1870 (the first year of the index) all areas face major improvements in human development. In the early phase of nineteenth-century development there has been a discrepancy between income (which was increasing) and schooling and longevity rates, which remained underdeveloped because of the impact of urbanization and lack of public policies on education and health. This pattern has turned around in the period 1920–1950; during the globalization backlash the underlying indexes (not shown here) reveal low growth of GDP per capita, but at the same time substantial gains in longevity and education.

In contrast to the traditional HDI, however, the gap between OECD countries and the rest became wider in absolute terms. First, there was an incomplete catching up of non-OECD countries between 1913 and 1970. Second, during the last four decades there has been a deceleration in human development in non-OECD countries, resulting in a widening gap between the OECD and the rest. This can be illustrated by the experiences of Latin America in the twentieth century. Social indicators like literacy and life expectancy improved at high rates during the middle decades of the century. Two major transitions of increasing expenditures in health

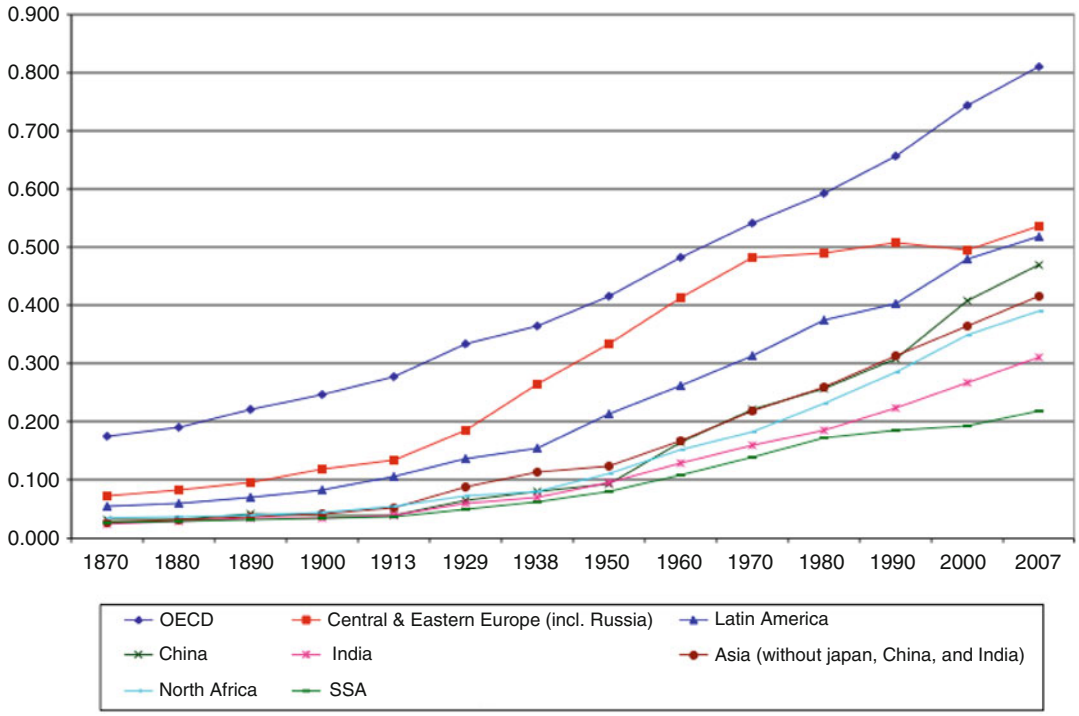

Fig. 3.1 HIHD across world regions, 1870–2007 (*Source*: Prados de la Escosura 2013, 51)

and the process of rapid urbanization (which offered a better social infrastructure for the population) explain this catching up. Note the difference with the nineteenth-century urbanization experience of the European countries. It also shows that progress in health and education has been largely independent of economic growth, which in fact was disappointing, in particular after 1970 (Astorga et al. 2005, 772, 784).

Around 2007 human development levels in Central and Eastern Europe and Latin America matched those of the OECD in the late 1960s; in 2007 China and India had achieved levels of OECD in respectively 1960 and 1929. Some regions fell behind after 1970, like Central and Eastern Europe and Sub-Saharan Africa. The main reason for this is that life expectancy at birth in the OECD area increased faster than in other areas. OECD countries experienced the so-called second health transition, characterized by a falling rate of mortality among the elderly as a result of better treatment and better general health and nutrition circumstances, and gains in healthy life years. Although there was educational expansion and recovery of income growth at the end of the twentieth century in many areas in the world, the non-OECD areas failed to catch up because of lagging life expectancy. Many non-OECD areas are either still in the first epidemiological transition or waiting for the second health transition which probably is more dependent on higher income levels. The new health technology and knowledge was introduced in the rich part of the world (Prados de la Escosura 2013, 23). It may be the case that improved health of the elderly in society has become an income-elastic good. The same is happening to higher education. If these social indicators are becoming more dependent on income growth and less on public policies, like it was in the early twentieth century, this may lead to higher inequality of welfare levels across nations in the future.

But this is not the whole story, because it will depend on the nature of the lag. Indeed, annual per capita expenditures on health vary

enormously across countries, from around 40 dollar per capita (in Ethiopia, Nepal, and Haiti) to more than 3,700 dollar (in the U.S.) in the beginning of the twenty-first century (Fogel 2004, 98). Health care per capita spending in the U.S. is about three times higher than in the U.K., which is not reflected in differences in life expectancy. Probably the saving of lives is still mainly an effect of (past) public health measures, better nutrition, access to education and less the result of clinical medicine and interventions. Distribution of drugs and vaccines in the developing world and impoverished nations to combat tuberculosis, malaria, measles, and all kinds of infections will have positive effects on life expectancy at modest costs. Minimizing the exposure to environmental insults during infancy will increase longevity. This is a historical process; it takes time, but it will finally show up in the health statistics. At the same time we find that the increasing demand for more health care to make our longer life more bearable ('healthy ageing') reflects higher real incomes. Like in the past it faces societies with the question how these services need to be distributed, resulting in many national variations in the mix of private and public components of health care. But it reveals most of all the unprecedented economic and social progress enjoyed by the majority of world population.

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Wars and Violence Through the Centuries 4

Mathias Bös and Hinrich Rosenbrock

Introduction[1]

> I had never experienced anything like it before. When the line wheeled and charged across the clearing, the enemy bullets whining past them, wheeled and charged almost with drill-field precision, an ache as profound as the ache of orgasm passed through me. And perhaps that is why some officers make careers of the infantry, why they endure the petty regulations, the discomforts and degradations, the dull years of peacetime duty in dreary posts: just to experience a single moment when a group of soldiers under your command and in the extreme stress of combat do exactly what you want them to do, as if they are extensions of yourself. (Caputo 1977: 254)

In the situation described in the memoir "A Rumor of War," U.S. Marine Philip Caputo experienced what psychologists of wellbeing call "combat flow" (Harari 2008): a state of subjective wellbeing experienced by a soldier in a combat situation. Other positive consequences of war can be documented on the collective level as well. Imagine how Europe would look today if the USA had not intervened during World War II. Or consider the positive influence of profits for the armaments industry in some Western countries; between 1998 and 2006, the volume of arms exports in the world increased from 44 to 46 billion US$ (at constant 2006 prices, SIPRI 2008).

To highlight these positive effects is by no means intended to deny the destruction or suffering and death of civilians and soldiers in wars. But it shows that even in very violent conflict situations—like wars—people may experience certain kinds of wellbeing or profit due to the wartime environment. It might seem strange that some people start and even perpetuate warlike, violent situations, but this is because there are always people in a conflict system that either experience wellbeing within the situation or expect an increase of their wellbeing after the situation.

The relationship between wellbeing and violent conflicts, then, is a complicated one. While it is often assumed that violence in general, especially during war, reduces the happiness, health, and prosperity of a group or of an individual. Closer inspection reveals that the correlation between violence and war on the one hand and wellbeing on the other hand is not as clear as it seems. In the following we will explore the "principle of diversification" for the effects of war on wellbeing formulated by Pitrim A. Sorokin: "Before undertaking an analysis of how calamities [wars, revolutions, famines and pestilence] modify our emotional and affective

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M. Bös (✉)
Institute for Sociology, Leibniz University Hanover, Hanover, Germany
e-mail: m.boes@ish.uni-hannover.de

H. Rosenbrock
Department of Sociology, Philipps-University Marburg, Marburg, Germany
e-mail: hinrich.rosenbrock@staff.uni-marburg.de

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experience, I would stress the general principle of the diversification and polarization of these effects in different parts of the population. By this principle is meant that the effects of a given calamity are not identical – indeed, often are opposite – for different individuals and groups of a society concerned, [. . .]" (Sorokin 2010 [1942]: 14).

There is no coherent body of research on the relationship between war, violence, and wellbeing from a historical perspective. There is, however, a rich literature on the sociology and history of war and revolutions, and some research on the sociology of violence and the sociology of gender and the body. Scholars have only recently started to examine the connections between wellbeing and violence and wellbeing and wars (e.g. Frey 2011, 2012; Jayawickreme et al. 2009; Sagi-Schwartz 2008).

In the following we explore the complexities of the association between violence, war, and wellbeing from a historical perspective, starting generally by combining broad theoretical and methodological considerations with examples from ancient and pre ancient history. Then we move on to the origins of the modern world starting at 1000 CE, and afterward we explore the age of imperialism up to the twenty-first century. The chapter ends with a summary and some afterthoughts on the relationship between wellbeing and war.

The Archaeology of War, Violence, and Wellbeing

"Historical knowledge is the understanding of the present time enriched with the dimension of evolution, it captures *being as becoming*" (Furrer 2011: 89, translation by the authors). To reconstruct the history of violence and wars and their relation to wellbeing through the centuries in a proper and balanced way is a notoriously difficult, if not impossible task. The relationships between them are too complex and dissimilar in their regional and historical contexts to reconstruct their development in simple and clear lines.

The problems start with the question of the origins of war. In anthropology there is the "myth of the peaceful savage" and the "myth of the warlike savage" (Otterbein 2000). These opposing images are related to problems of historical research but also to the definition of war. It is thus difficult to create an accurate definition suitable for all human societies through the centuries. Besides, we do not think that linguistic distinctions—for example, between raids, feuds, and wars—will help clarify problems related to the topic of this article (Thorpe 2003: 146). Therefore, we will use the term war for all violent conflicts between armed enemies where at least one was an organized group and which caused some direct or indirect deaths. Furthermore, while the oldest evidence of weapons in northern Europe dates back to around 8500 BCE (Thorpe 2003: 155), and the oldest known fortifications are the ones of Jericho (Tell es-Sultan, about 7000 BCE) (Cioffi-Revilla and Lai 1995: 467f), this article – with its oldest source dating back to 1792 BCE – will only explore episodes in human history in which war definitely already existed.

There are some general trends in the evolution of war: increasing mechanization, growing superregional impacts, and, related to both of these, the growing number of war related injuries and deaths (e.g. Tilly 1992; Wright 1942). Long term time series of figures on war related deaths, such as given by William Eckhardt (1991), are difficult to calculate, but it is obvious that the number of deaths, even in relation to the population, has been growing through the centuries. Yet such broad trends do not reveal much about the relations between violence, wars, and wellbeing, and therefore we will give more palpable examples from different periods and regions in history. These aspects require further research, but an analysis of the relations between violence, wars, and wellbeing from the perspective of historical sociology is a first step.

Some Methodological Remarks

Before we start with our historical survey, a few more words are in order on the severe methodological challenges all historically minded endeavors face (Appelby et al. 1994). One general problem is that often there are no written records, which would be needed to analyze processes and relations rigorously. Non written sources may promote only superficial understanding because they narrowly provide information about an event and its circumstances (Henning 2012: 13). For example, research in archaeology on the "Biological Standard of Living." One indicator for food consumption and environmental conditions, and therefore for wellbeing, is body height (Komlos 2000: 358). But if we have corpses with a small height or other indicators of dearth, together with marks of war caused injuries, we could not determine if war has caused famine or famine a war. Besides the lack of written sources, we face another problem. We tried to write a global history, but the historical sciences have a Eurocentric focus and there are many sources in languages that the authors do not speak. So while there may be written sources in many cases, historical scholarship has only made a small selection available.

Even if there are written sources, it is not easy to interpret them properly. Most sources that are of interest for our subject are historiographies or biographies of "great men." They are often written a long time after the event took place and/or have strong normative inclinations (Gehrke and Schneider 2010; Clauss 2010: 143). To acknowledge this problem can help generate new insights, however; since these sources do not merely describe what happened, they also tell us important things about the observers and their constraints, for example what was think- and speakable for them at the time. In Foucault's sense, we can characterize the functioning of discourses (Sarasin 2010: 53). If, for example, Plutarch intended his narrative of fighting Germanic women to depreciate Rome's Germanic enemies, we do not know if the fact of fighting women is actually accurate (Märtin 2009: 19). What we can glean from this is that fighting women were – at least for a part of the Roman population – a disreputable idea. And we may safely assume that Romans did know tales about fighting women because Plutarch had used this scenario. So the text indicates a negative relation between women and war and at the same refers to myths or examples of a positive relation.

This approach is applicable to other historical methods we use, including imagination and counter factional thinking. Historical truth is only available in an imperfect and incomplete state (Müller 2010: 175), so historians need imagination to try to fill gaps in the material (Davis 2010: 107). To strengthen their arguments, historians need the logical tool of counter factional thinking, such as considering what would have happened if something else had happened in another way (Menger 2010). If Romans had accepted fighting women, why should they use this image to denigrate their Germanic enemies? The last methodological point is also connected to the topic of gender. The main perspective in historical sciences is a male one, especially if the issue is war. The success of "women's history" has not yet changed this significantly. In other words, the involvement of women in warfare and therefore the impact of war on the wellbeing of women is not analyzed to the same extent as for men.

A Discursive Approach on War and Wellbeing in Ancient Times

After all these words about what we cannot say, let us see what can be said: "Then Anu and Bel called by name me, Hammurabi, the exalted prince, who feared God, to bring about the rule of righteousness in the land, to destroy the wicked and the evildoers; so that the strong should not harm the weak; so that I should rule over the black headed people like Shamash, and enlighten the land, to further the wellbeing of mankind" (Avalon Project 2008).

Hammurabi was the ruler of the Babylonian empire from 1792 BCE to 1750 BCE. In the

introduction to his famous codex, he legitimized his ruling not only by impressive gods who gave him the right to rule but by the aim to "further the wellbeing of mankind." It looks as if a reference to wellbeing is a common pattern of the legitimization of political processes of any kind in history. Looking at world history in the last 2,000 years, three main structural processes can be distinguished (Osterhammel and Peterson 2012): the rise and fall of different kinds of empires, the shifting borders of religious systems, and changing trade systems around the globe. Maybe with the notable exception of some phases in the history of China, these three systems were not congruent, but all three processes—political, religious, and economic developments—are obviously related to the wellbeing of many people.

How did violence and war interact with these processes and therefore with wellbeing? In the following we discuss aspects of negative and positive relations between them both. Starting with a more theoretical aspect of the perception of peace, we continue with legitimizations of war and the impact of both on soldiers and on society.

The definition of wellbeing is contested. We consider wellbeing as a state of being happy, healthy and prosperous. Here is not the place to discuss all methodological problems of wellbeing research (Glatzer 2008). Wellbeing is obviously not a single thing, and there are qualitatively different types of wellbeing. Sometimes it can be a feeling like pleasure or a more rational evaluation of a situation like the satisfaction of life; it could also be a way to see the world, like happiness, or just a way of being active (Nussbaum 2008: 582).

Nearly all known societies, whether ancient or modern, assume a positive relationship between peace and wellbeing. In ancient Greece Eirene was the goddess of peace, and the Greeks believed that during her reign "wellbeing and prosperity" would thrive (Dietrich et al. 2011: 44). The word shalom in the Old Testament has the double meaning of peace and prosperity (Dietrich et al. 2011: 46). The Roman word pax stands for a peace treaty, which ensures the end of war and its suffering. Furthermore, it implies the chance to lead an ordinary life and ensure "the wellbeing of future generations" (Dietrich et al. 2011: 48). In the Qur'an, salam (peace) has at least two meanings: internal peace (mainly individual and religious) and social/external peace (inner- and inter group relations). Internal peace indicates "tranquility, wellbeing, and harmony"; external peace primarily means pacts to regulate existing conflicts (Dietrich et al. 2011: 50). In traditional Hebrew, shalom (peace) is the opposite of mahloket, which means quarrel. Shalom describes the messianic time tikkun olam, the struggle to overcome divisiveness and mahloket (Dietrich et al. 2011: 89). During the Chinese "Era of Warring States" (the period before the victory of the state of Qin in 221 BCE), peace was seen as a premise for humanity and wellbeing (Tzu 2008: 15). We know little about the Viking Age (800 CE to 1050 CE) because Viking culture was mainly based on oral narrated stories. According to what is known, it seems that peace in the Nordic cult means "love" and/or "friendly relations," and it was represented in fertility, harmony, and lovemaking (Dietrich et al. 2011: 69). In the Tibetan Vajrayana Buddhism, the term "shi de" is the most used for peace. It means peace (shi) and happiness (de) and refers to "a personal, communal, national or international level" (Dietrich et al. 2011: 229).

This fragmentary overview shows that many societies equate peace with a state of wellbeing and war with endangering wellbeing. But caution is required: wellbeing is a modern and western concept, and its meaning differs across centuries and regions. Furthermore, the term peace has to be handled with care. In a European tradition drawing on Greco Roman and Judeo Christian roots, "peace" mostly refers to conditions within a community but does not necessarily say anything about relations to other groups. For example, the Pax Romana was only meant for Roman citizens. Slaves and enemies outside the borders of the empire had to expect violence from Romans.

Another indicator for the negative relationship between war and wellbeing is that war had to be legitimated in almost all societies. It is difficult to

decide how common war really was, but in ancient times war was seen as a part of everyday life. For example, the image of ancient Greece is colored with the concept of war "as an ever present idea" (Manicas 1982: 673). But a closer look shows that only a few of the 1,500 autonomous poleis were actually involved in armed conflicts. The largest battles had only about 12,000 participating soldiers; wars were restricted to the summer months to ensure the possibility of successful plantings and harvests, and "war was seen to be such a clear departure from the ordinary that it was so fully articulated in ceremony" (Manicas 1982: 677f).

As the example of Hammurabi shows, he had to legitimate his reign but also his violence against the "the wicked and the evil doers." This includes wars. Cicero gave the term Bellum Iustum a new, moral meaning. Wars had to be legitimate (Botermann 1987). Sun Tzu, a Chinese military strategist who probably lived in the "Age of Warring States" (476–221 BCE), gave the following four arguments to legitimate war: to gain or hold political power; to satisfy personal interests, especially revenge; to destroy cruel or inhuman authority; and to overcome unbearable situations like famine (Tzu 2008: 8f). But in all cases, war should be the last resort (Tzu 2008: 11; Dietrich et al. 2011: 247f). Legitimating war in ancient Egypt, as in other cultures of the Middle East, followed a regulated scheme. The enemy was blamed for a border violation, and the following war was seen as a sanction in the name of the gods (Gnirs 2009: 78). We see that there are very different strategies of legitimating war, some of which may appear strange to our idea of morality, but their very existence is instructive.

Gender and War

Membership in a military group is often tied to gender, so a few words on the relationship between gender and violence in ancient times are in order. As far as we know, most soldiers in history were men. In the Roman Empire, for example, women usually played no direct role within warfare. But the military system surely needed their cooperation as they had to support the people of Rome with patriotism and with, particularly, their wealth. On the personal level, they had to let go of their husbands and sons for long periods, oftentimes forever. In these times, Roman women could gain more influence because they had to fulfill the duties of their men, but this also meant that they had to manage an overwhelming workload. In a few cases this influence was accompanied by a military role because some (noble) women had to defend their property. Although this behavior was mostly regarded as extreme, we know for sure that women sometimes fought as gladiators in Roman arenas (Wiedemann 2001: 20, 119). Yet "decent" Roman women should only act as "vital peacemakers who, with intelligence and courage, intervene to save" their families (Jestice 2008b: 493f).

Nearly the same can be said about Spartan women. They were not directly involved in military actions, but were "running estates and homes in their husbands' absence, producing future warriors of the highest possible quality, and reinforcing an ethic that preferred death to cowardice" (Jestice 2008c: 561). Popular legends about fighting women, the Amazons, had the purpose "to reinforce Greek ideas of gender" (Jestice 2008a: 13). Some sources, though, tell us about women who fought in war. For example, Ahhotep was the first known Egyptian queen who actively took over military responsibilities (Gnirs 2009: 99). For a Scythian tribe (called the "Sauromatians" by Herodotus), there is archaeological evidence of women fighting alongside their men (Jestice 2008a: 12; Gilchrist 2003: 4f).

In sum, societies with a binary male/female gender structure mostly restricted soldiering to men. For these societies we can also assume that a connection between the right to kill or bear arms and masculinity gave men a higher status. But this is only a rough tendency. It would be wrong to say that the more masculine a militarized society is, the more women are oppressed in it. For example, Spartan women received the same intellectual and physical basic education as men (Jestice 2008c: 561f;

Günther 2001: 46). The construction of violent masculinity seems to be very popular. We know that being a battle hero improved the chances for Egyptian men to have amorous experiences (Gnirs 2009: 95). The perceived sexual attractiveness of successful gladiators is well known, too (Wiedemann 2001: 40). Nevertheless, the historical association between masculinity and war has yet to be fully understood.

Negative Impacts of War on Soldiers and Civilians

What are the negative consequences for soldiers in war? Generally speaking, war causes a whole set of deep problems, including traumatic events like experiences of torture and other traumata; war related general issues such as economic deprivation, lack of basic needs, social and family problems, like the loss of a friend or relative, and physical problems, such as the risk of dying or being crippled, illnesses from the exposure to natural elements and diseases; war related psychological and behavioral problems, such as near death experiences or seeing others die, moral issues because of the necessity to kill or harm others, and feelings of helplessness (Jayawickreme et al. 2009: 213; Laufer et al. 1984: 66).

Given that we only have rough estimates on the number of war related deaths (Eckhardt 1991) and very little information about war related injuries, for example in ancient Egypt (Gnirs 2009: 110ff), we can only imagine how soldiers' lives looked like during war. Being trained as a soldier had advantages and disadvantages. On the one hand, trained soldiers had a better chance to survive a battle and handle the problems afterwards, while on the other hand, they often sustained wounds in training, which was sometimes deadly as well (Gnirs and Loprieno 2009: 288f).

War had and still has many negative consequences for civilians. We do not know much about the destruction in battle regions in ancient times. For example, many ancient Egyptian towns were destroyed by fires, though it is not clear who or what caused them. On the other hand, the existence of city walls shows that some towns saw the need for this kind of protection. This suggests that the destructions of other towns had taken place (Seidlmayer 2009: 158f). This is supported in a song of victory, where it is mentioned that soldiers plundered the enemies, destroyed their agriculture, and burned their homes (Gnirs and Loprieno 2009: 245).

The siege of Masada (73 CE) at the end of the First Jewish–Roman War is a prominent example of the destruction of a fortress and the cruelties of war. The extent to which this is a myth is debated, but it seems as if all Jewish inhabitants committed suicide (Ben-Yehuda 2002). Another famous example from antiquity is Alaric's third siege of Rome (408410 CE), which led to the plundering of Rome for 3 days (Meier and Patzold 2010). The cruelty of war and destruction has always caused some to take flight. Refugees were a common sight in ancient Egypt during episodes of war and it is reported that the population supported them and gave them shelter (Gnirs 2009: 102f). Maybe one of the best known mass expulsions is the exodus of the Jewish people after the destruction of the temple in Jerusalem in 79 CE.

Some indirect consequences of war were and still are poverty, famine, and diseases. Famine and diseases frequently coincide, and wars regularly caused famines (Eckhardt 1989: 94). During wartime, armies on both sides of the conflict took what they needed from local populations and enemy armies also habitually destroyed the farmland after having looted it. Furthermore, citizens had to pay war taxes in the form of natural products. During a siege, dearth was one of the main weapons against the besieged. War related famines often weakened the population, causing diseases to spread. In besieged towns where nobody could flee, this often cost many lives. The movement of armies also spread local diseases to other regions or brought them back home from the front.

All this shows that, in many ways, wars during ancient times were negatively related to the wellbeing of soldiers and civilians. Interestingly, negative consequences of war were easier to

bear for belligerent societies. If the population believed in the legitimacy of the war, the solidarity between the people could help to reduce the terrors of war—by giving shelter to refugees, for example (Gnirs 2009: 102f). Recent research shows that strong belief systems and feelings of identity and pride can moderate the psychological cost of war related trauma, functioning as a coping strategy (Sagi-Schwartz 2008: 325; Jayawickreme et al. 2009: 206).

Positive Impacts on Civilians and Soldiers

As previously described, the relationship between war and wellbeing depends on the groups' position in the system of conflict. We can assume that wars had some positive impacts on people within empires such as Rome or Persia. They belonged to a class that, apart from their time in military service, lived in peace. Normally, they profited from wars because they got new and sometimes precious goods. One has to keep in mind that ancient societies were slaveholding societies, which not only concerned empires but smaller groups, too. In the history of war we find so called communities of violence (Gewaltgemeinschaften). These small groups often existed in larger military forces. These communities were constituted through their practices of violence and looting (Carl and Bömelburg 2011: 23). During Late Antiquity groups of outlaws commonly merged to survive. Their income was based on robbery and looting, which were imitations of military behavior in the name of kings or emperors (Carl and Bömelburg 2011: 134).

Scholarship is less ambivalent about rebellions and revolutions. By these terms we do not mean struggles in a ruling class involving soldiers but rather a movement of people to better their living conditions. Famous examples are the Servile Wars, especially the Third Servile War (73 71 BCE) during which Spartacus led an insurrection of slaves and gladiators (Shaw 2001). If these rebellions had been successful, we can assume that they would have had a positive impact on the wellbeing of the former slaves. We find similar ideas in the thought system of ancient China, which, during the fourth and third century BCE, legitimized "tyrannicide and justified revolution" (Tzu 2008: 9f). Unfortunately, however, we do not know much about successful revolutions in ancient times.

Wars can also have a positive impact on technological development and infrastructure, depending mainly on the historical context. One of the most famous examples of the development of infrastructure in ancient times on the military's behalf were the Roman roads which connected all border regions with the metropole, allowing for fast travel for military forces, merchants, messengers, and civilians. For an example of technological development, let us look to the field of medicine. Injuries caused by weapons were an important source of anatomic knowledge. For example, Galen or Pliny the Elder received some of their medical knowledge by treating the wounds of gladiators (Wiedemann 2001: 123f).

Another positive connection between war and wellbeing is that wars can create a sense of unity among different groups. In ancient Egypt, only the king was legitimated to kill. That means that victories were completely bound to him, and he could strengthen his power with military victories and give stability and a feeling of belonging to his people (Gnirs 2009: 78). In the Roman Empire the gladiator games had the function, besides serving the personal aims of the patron, of improving the virtues (courage, fighting skills, and warlike masculinity) of all Roman men. Furthermore, they improved the sense of community throughout the whole empire because the common experience of the men was to be part of the military system symbolized by the games. Tellingly, nearly all towns in the empire contended with each other for the organization of games (Wiedemann 2001: 53–56).

Public violence can also stabilize societies. During ancient public executions or punishments the inflicted pain did not serve primarily as an opportunity for the audience to satisfy their voyeurism but was instead seen as an adequate

compensation for wrongdoing (Wiedemann 2001: 80f, 143). In ancient Rome, the arena was the place to restore public order. Wild animals and criminals were killed to show the power of the ruling class over these dangerous elements. Because of their crimes, criminals were no longer seen as humans, they were already dead to the society before they were killed (Wiedemann 2001: 99f). In short, the symbolic and public visibility of war and violence can improve the feeling of unity of different groups in one society, thus helping to stabilize the ruling order. This could improve the wellbeing of members of this society.

We began this section by discussing possible negative impacts of wars on soldiers, and we will end it by examining positive ones. Warriors could gain riches through battle, and in a belligerent society they could improve their social status – the gains of sexual attractiveness of Egypt soldiers and Roman gladiators has been already mentioned. In ancient Sparta there were different social groups. The members of the ruling class were called Spartiates. The young boys had to go through a rough and militarized education system, the agog. After they passed this they became members of the Syssition, a male brotherhood that was distinguished from the rest of society in an elitist way (Berggold 2011: 3f; Günther 2001: 263). In other words, a militarized education allowed boys from the ruling class to stay in the ruling class. But there were also cases of social mobility caused by military failures or successes. During the fifth century BCE, parts of the non-free population, the Helotes, were needed as soldiers. Some of them were freed and received a small plot of land because of their military service. They built a new social group, the Neodamodeis. And in the year 425 BCE, some Spartiates lost their social standing and temporarily their rights because they had laid down their arms (Berggold 2011: 5f). In the Roman Empire, it was expected that citizens could bear to watch the cruel arena games. If they could not, they were regarded as children (Wiedemann 2001: 141). And if gladiators showed enough virtues, they could become free men (Wiedemann 2001: 48f).

In "Germania", Tacitus writes about the Chatti, which he regarded as the highest most feared and most disciplined Germanic military group. In particular, he described their men who did not shave or cut their hair. Only after a victory were they allowed sacrificing their hair and beards so that everybody could then see that they had proven themselves brave men (Andreocci 2008: 148f). For Gothic war groups in the fifth century CE we know that the art of war was an important aspect of social life, and military conflicts were a chance to become rich. The socialization as a warrior was seen as the only option for male Goths. That means that in this period, war was not only seen as a chance for a participant to survive but also as a part of their identity (Carl and Bömelburg 2011: 138–141).

During a battle, soldiers could get into the state of combat flow. We do not know much about combat flow in ancient times because it is a modern concept and we do not know much about the feelings of people in ancient times (Harari 2008: 259). But we do have a few hints. Frey (2012: 6) argues that the Greek philosopher Epicurus had written about something similar to combat flow, a pleasure during battles and criticized these sadistic feelings. Aristotle depicted the warrior who happily fights and accepts death because he knows that his sacrifice is justified for the good cause, e.g. to protect his poleis (Nussbaum 2008). In Roman literate sources we also find indications of free men who willingly became gladiators and therefore give up their freedom just because they enjoyed the fighting (Wiedemann 2001: 116). Maybe another example for combat flows are the so called berserkers, mystic Nordic warriors who were depicted as invulnerable and fighting in kind of frenzy. It is not clear which phenomenon different authors wanted to describe with this term, but it can be understood as an ecstatic condition of warriors during battle (Höfler 1976: 303f). In some cases, this might be related to combat flow.

In short, under ordinary conditions and if we look at all participating actors, war in ancient times had a far more negative than positive impact on wellbeing. The only likely exceptions,

perhaps, were successful revolutions. Nevertheless, for some groups and actors, starting a war was a possibility to improve their wellbeing, and others joined them in the hope of a better future for themselves or as an exit strategy out of their normal lives.

The Origins of the Modern World (1000 CE 1750 CE)

"In the fighting itself every man sought to prevent his own death with the cutting down of the nearest that encountered him: and the terrible noise of the guns, the rattle of the harness, the crash of the pikes, and the cries both of the wounded and the attackers made up, together with the trumpets, drums and fifes, a horrible music. There could one see nothing but thick smoke and dust, which seemed as it would conceal the fearful sight of the wounded and dead . . . The earth, whose custom it is to cover the dead, was there itself covered with them, and those variously distinguished: for here lay heads that had lost their natural owners, and their bodies that lacked their heads. . ." (von Grimmelshausen 1912 [1669]: 174–175) This is how Simplicissimus[2] describes the Battle of Wittstock (1632), a battle between Protestant Swedish and Catholic Saxionian troops during the Thirty Years' War (16181648), a war that epitomizes the cruelties and the devastating consequences of war in Europe (Schormann 2004: 55).

Sources on war abound in the historiography of the European Middle Ages. Wars were seen as important because their outcomes often legitimized the rule of a noble or a king over a territory and its people. The very right to wage war was seen as located in the power of a ruler (Clauss 2010: 38). Waging war was depicted as a heroic effort; to win the war was the proof of this heroism. A lost battle confirmed the unjust or unchristian behavior of the enemy. Often the sources are rich in details regarding the size of the troops and the deaths in the battle, and we find detailed lists of "important participants" like famous knights or counselors of the King. But one has to keep in mind that the reasoning for such descriptions runs contrary to our modern way of thinking: neither the many deaths nor the important participants makes a battle significant, but because the medieval noble or historiographer considered a battle to be significant, he tries to mention extraordinarily high numbers of deaths or long lists of participating nobles (Clauss 2010: 84). Accurate figures and facts were secondary to the main effort to depict accurately the work of God in history (Clauss 2010: 110–115, 313). "On medieval battlefields much more angst, misery, and cowardice prevailed than we learn from the sources [here: historiographies]. [. . .] Despite efforts at psychologizing we realize that we do not ultimately know exactly how a medieval battle developed. [. . .] If the fighters aligned their actions with the heroic ideal [effective exercise of deadly force] of their time, then the battles of the Middle Ages were primarily one thing: bloody and cruel" (Clauss 2010: 312, translation by the authors).

War and the Political and Economic Setting in the Middle Ages

Around 1000 CE, the world was agricultural. The world population of about 300 million people more than doubled until 1750 to over 700 million people.[3] As Marks (2007: 24) points out, most people lived as peasants (up to 90 %) in about 15 highly developed civilizations, such as Japan, Korea, China, Indonesia, Indochina, India, the Islamic West Asia, Europe, Aztec, and Inka. 70 % of the world population was concentrated

[2] The book "The adventurous Simplicissimus – Being the description of the life of a strange vagabond named Melchior Sternfels von Fuchshaim" by Hans Jacob Christoph von Grimmelshausen (1912 [1669]) is the first German adventure novel. The book attempts to capture the events and horrors of personal lives during the Thirty Years' War.

[3] These population figures are based on the summary table of the United States Census Bureau (2012). For a discussion that figures especially before 1650 are unreliable, see Caldwell and Schindlmayr (2002).

on the Eurasian landmass, especially in Europe, India, and China. During this era the most dominant political form was the empire; at least until eighteenth century, when war mongering nation states start to emerge in Europe (and North America).

It is fair to say that much of the time, most of the people on the globe lived in peace or at least in the absence of war (Koppe 2001: 30ff.). War was an exceptional event in most societies of this time, though violence surely was not. The concentration of weapons and means of coercion in the hand of the state slowly evolved between 1000 and 1750. Parallel to this process, the incidents of interpersonal violence presumably had decreased. For England, Stone (1983) estimates that incidents of homicide were about five times lower in 1750 than in 1200. A study of early modern Germany showed many instances of "uncontrolled angry violence" (Lacour 2001: 663) in many situations during work and leisure usually not associated with a criminal background. In general, one can assume that violence was seen as more acceptable in everyday life than we see it today. Therefore the impact of violence on the personal wellbeing of the doer and the victim is difficult to evaluate in the Middle Ages.

Constant sources of ill being for people in an agricultural world were natural disasters like earthquakes, floods, and drought. An example of the interaction between the environment and human beings are epidemic plagues. One major drawback for the prospering world system in the fourteenth century was the Black Death, which killed tens of millions of people on the Eurasian continent. The social and biological factors which contributed to the spread of the bubonic plagues were rather complex (Marks 2007: 36–38). Presumably the plague broke out in China in 1331, and campaigning Mongolian troops carried infectious flies or an infected rodent into the more populated parts of China. The Mongolian troops carried the bacillus to the other side of the Mongolian Empire, to Europe. About the end of 1346, the plague had reached Caffa (today Feodosiya). Because of the dense trade routes within Europe, at the end of 1350 the disease had reached Sweden and Moscow. One third of the European population (about 25 millions) died until 1353, contributing to a serious loss of productivity in this already poor corner of the earth. The social impact was huge as well: the Black Death led to the persecution of Jews all over Europe, especially in areas which became later France and Germany.

One of the most common threats to wellbeing in this agricultural world was famine. Usually famine was the result of a combination of natural and social causes. Peasant families had to give up, even in a good year, as much as half of their harvest to landlords or state bureaucracies. The family experienced dearth if the authorities did not reduce this share of the harvest in a bad year. Famines were thus often associated with serfdom. In feudalistic systems, peasants were often required to work on the lands of a lord, who in turn was obliged to protect the peasants and lend them some fields within the manor for their subsistence. Some forms of serfdom were very close to slavery; serfdom, slavery, and the restrictions on personal freedoms are an important feature of structural violence in the medieval society, at least from today's point of view.

In Africa, the prosperous empires of Ghana and Mali structured trade and exchange. Outside of these empires, Africa was highly politically fragmented. "Because land was not owned privately and hence was not a source of wealth and power, elite Africans (political heads and merchants mostly) owned labor, that is, slaves. This absence of private property in land made slavery pervasive in Africa." (Marks 2007: 57) All in all, Africa was an important part of the trading world system, supplying gold and other metals, agricultural production, and slaves. Slavery was a common feature of nearly all societies discussed up to now. It was surely a feature of European societies. The word slave stems from the Vikings who used to capture and sell "Slavs". That, of course, did not stop the Slavs, especially the Celts, to raid Swedish cities and take Vikings as slaves as well (Patterson 1982: 156). African and European societies may play a prominent role in the history of slavery, but they are by no means unique. "It [slavery] has existed from

before the dawn of human history right down to the twentieth century, in the most primitive of human societies and in the most civilized. There is no region on earth that has not at some time harbored the institution. Probably there is no group of people whose ancestors were not at one time slaves or slaveholders" (Patterson 1982: vii).

The Origins of Modern Colonialism

The political landscape of Europe in 1400 was highly diverse: city states, kingdoms, bishoprics, or duchies formed a conglomerate incomparable in population, wealth, and political unity to China at that time. In the constant struggle over the limited wealth in the far northwest of the world system, Europeans increasingly imagined what direct access to Asia and the Indian Ocean might contribute to their wealth. In 1492 Columbus "discovered" something far in the West that might have been a part of Asia and the Portuguese succeeded with Vasco da Gama in 1495 to find their own way to India's West Coast. These two new links of the Europeans, on the one hand to Asia and on the other hand to lands later called the Americas, shifted the dynamic of the world system.

This has begun a process of increasing interconnectedness which led later on to a single world system. In Eurasia, five empires expanded dramatically within the following centuries. From the west to the east, these were the Ottoman Empire, Russia, the Safavid Iran, Mughdal India, and China. By 1750 they had most of Eurasia under their control, except the comparatively poor far west of Eurasia. In general, empires were indirectly ruled by an emperor, usually encompassing many different language groups. War making in empires was an enormous logistic enterprise. The Ottoman Empire was presumably one of the best working logistical war apparatuses in its time (Tilly 2011: 185). The logistics of war always put the civilian population under pressure because the civilian economy had to provide the means to sustain the logistics of war.

In the pre Columbian Americas, the Aztecs and the Incas formed important empires as well. By the beginning of the 1500s the Aztecs ruled over about 25 million people in a tributary system with regular internal wars and sacrifices of captives from the subjected people. According to their own accounts, sacrifices of prisoners were often done by the thousands. Contrary to the Aztecs, the Inca did not have a written language; they nevertheless managed to sustain a large empire by directly governing the incorporated people. With or without a written language, to win a battle or a war is often a way that a people establishes itself as a unit in history. For example, the Shuar people "appear" in western history after they drove the Inca back in the fifteenth century. They could also withstand the European colonist. As late as in twentieth century there was enough contact to this group to learn about their habits. Before this time, the Shuar people had a "non-history" that could be called "myth" (Rubenstein 2002: 24–27).

The conquest of the Americas was initiated by a relatively small number of Spanish military under Hernan Cortz and Francisco Pizzaro. A combination of superior weapons, brutal fighting strategies, and the spread of diseases started the "Great Dying": "[. . .] in the century after European contact with the New World, vast regions were depopulated, losing 90 % of their pre 1,500 numbers, even if we do not know with certainty what the precontact population of the Americas was. Nonetheless, it does seem certain that tens of millions of people across the Americas had vanished" (Marks 2007: 77). The approach of the Spaniards to the New World was aptly called by Marks the "Great Plundering"; they simply looted gold and silver, already collected in the depopulated large towns of the Aztecs and the Incas. But soon the mode of exploitation changed, exemplified in the silver mines of Potosí. "Huge amounts of silver flowed out of the New World, half of it coming from Potosi alone: from 1503 to 1660, over 32 million pounds of silver and 360,000 lb of gold were exported" (Marks 2007: 78). Despite the huge amount of wealth flowing in from the New World, Spain was not able to establish a stable

Empire within Europe. Dutch arms merchants especially exported tons of silver to China. Between 1500 and 1800 about three quarters of the New World silver production was used to sustain the growing economy of China.

The growing exploitation of the Americas was one of the cornerstones of the emerging new world economy. For about 300 years, European slave traders took about nine million people from Africa to the New World where they were forced to produce sugar and, later on, tobacco and cotton. The emerging colonial system is an example of the highly differentiating impact wars and violence have on the wellbeing of people: the wellbeing of the colonized people is often reduced in the extreme case by death, whereas the wellbeing of the colonizers often rises in the long run. Again, we see that it is frequently not very useful to use a society or a nation state as the unit to measure wellbeing: it is the position of the group within society and/or within the conflict system that determines wellbeing.

This is also the answer to the question, "Why did war occur after all?" Tilly answers this question straightforwardly: "The central, tragic fact is simple: coercion *works*; those who applied substantial force to fellows get compliance, and from that compliance draw the multiple advantages of money, goods, deference, access to pleasures denied to less powerful people. Europeans followed a standard war provoking logic: everyone who controlled substantial coercive means tried to maintain and secure area within which he could enjoy the returns from coercion [. . .]" (Tilly 1992:70). So the key to explaining war was not the wellbeing of the people but the wellbeing of the king or the ruling class of a state that was in many cases enhanced when a war was won. In some instances, war helped the ruling class to get rid of disliked and – for them – dangerous groups. For example, the British Empire used Scottish Highland warriors in their wars because of their force and undemanding nature but also to reduce the danger of a Scottish rebellion against the English crown (Monro 1995).

War and Violence in Europe

Besides the general trend of slightly increasing economic wellbeing in Europe, there were different phases of stronger economic growth, such as in the years before 1525 when the efforts to impose new restrictions on peasants led to the Great Peasants' Revolt (1524–1525) in the German speaking parts of central Europe (Desai and Eckstein 1990: 447). This was presumably the largest revolt during that age until the French Revolution. This revolt shows a strange aspect of the relation between wellbeing and political violence, sometimes called the "Tocqueville Paradox" (Oberschall 1970: 66) because it is especially well described in Tocqueville's analysis of the French Revolution. In the time before the Great Peasants' Revolt, people experienced some rise in economic wellbeing and enjoyed some new opportunities because they were able to get higher prices for their products and labor. Of course, the turbulent time of reformation contributed to the fact that the peasantry tried to resist the various attempts of nobles to restrict their new freedom. The revolt failed dramatically, but it is an instance of the mechanism that the threat to (newly) acquired wellbeing can motivate people to resist by political violence. So happy people may not engage in revolutions, but a threat to their happiness is more likely to lead to a revolt than sheer unhappiness.

Civilians often face severe decline of their wellbeing in times of war. Alternately, in wartime being a soldier can be a quite profitable way of earning your living. When the newlywed Simplicissimus had to decide which profession to take up to "maintain his household," he was given the following advice: "This being a brisk young soldier, it were great folly that in the present wars he should think to follow any but the soldier's trade: for 'tis far better to stable one's horse in another man's stall than to feed another's nag in one's own" (von Grimmelshausen 1912 [1669]: 175). This is a scene Grimmelshausen imagined in the middle of the Thirty Years' War (1618–1648). In the

text, it is only en passant noticed that the new "employer" was now Catholic, and as long as he paid as much as the Protestants Simplicissimus did not mind. In the Thirty Years' War, being a Protestant or a Catholic was not only an important component of the social identity of parts of the population, but it was surely a war about ideologies driven by the outrage against the "disbelief" in God (Benedict et al. 2007: 1434).

The compensation of mercenaries in Germany in the sixteenth century was relatively high. But prices increased during conflicts and in order to maintain the arms in good condition, looting was an important way to increase the income of warriors (Carl and Bömelburg 2011: 150). The use of violence in looting is normally not spontaneous but rather a strategy to get more (hidden) goods. Mercenaries during the Thirty Years' War had a very low social status, and violence was a means to partly counteract this kind of exclusion (Carl and Bömelburg 2011:25). The habit of raiding and looting during wartime was not restricted to soldiers, though. Civilians could plunder, and the civilians often looted the enemies' territory if it was close by and unguarded, as did the people from Gemünden in the sixteenth century (Carl and Bömelburg 2011: 150).

In some cases, a few communities based their whole lifestyle on mercenary activities. The Cossacks of the seventeenth and eighteenth centuries formed such communities of violence. These groups were based on heterogeneous social, ethnic, and religious unions of border warriors. Their families lived in so called frontier settlements in the Dnieper Region. To survive in this steppe prairie climate, they often used violence to plunder. There are three known ways of organizing this way of living: as "free" Cossacks, who plunder on their own; as temporary mercenary groups; and as constant part of the military forces of Poland Lithuania (Carl and Bömelburg 2011: 170–172). The violent Cossack culture is based on the everyday practice of violence in the frontier region, and the practice of looting could be seen as purposive rational (violent) action (Carl and Bömelburg 2011: 175).

The relation between wellbeing and violence or war between 1000 and 1750 was complex, with often contradicting mechanisms. To sum up the impact of war on wellbeing in general, one might say that war at least did not stop a secular trend in the increase of material wellbeing. The growth of material wealth was slow and roughly parallel to population growth (Maddison 2001: 27). Waging wars was an integral part of life, although most of the time most people did not live in war situations.

Imperialism: The Wealth of (Some) Nations and the Long Century of Wars (1750–2010)

"I met Josef Mengele, the German physician known for his barbaric and torturous medical experiments performed on Jews in concentration camps. It was an afternoon in Lager C in Birkenau, my home from May to November, 1944 when Mengele strode in to inspect the living conditions of the 800 prisoners housed there. He looked like a movie star in his high boots, white gloves and impeccable SS uniform. "Good afternoon, ladies. How are you? Are you comfortable," he asked us politely. No one said a word. [. . .] We were immobilized with fear; afraid that the penalty for daring to speak to this terrifying figure would be death. [. . .] We looked like animals in a cage with our shaved heads and the ripped rags wrapped around our emaciated bodies. "When will I see my mother?" one woman finally asked in a very low voice, almost like a whisper. "In a few weeks, don't worry," Mengele answered politely and pleasantly. [. . .] We almost believed him. He looked so elegant and civilized compared to us that we felt like we were looking at God. Of course he meant that we'd see our loved ones in a few weeks when we joined them in heaven after going up in smoke from the crematorium" (Safran 1978).

This description of life in a German concentration camp reflects some of the different developments that have occurred in the last centuries. First, more and more people, especially civilians, are negatively affected by violence and war. This is connected to the rise of racist and anti Semitic ideologies but also by the

growing technologization of warfare. Furthermore, there is a connection between colonial genocides and the Holocaust, and the outbreak of World War II can be seen as different forms of internal and external imperialism.

In some sense, World War II was the culmination of the developments in war and violence that began in the eighteenth century (Arendt 2011 [1955]). The Industrial Revolution and its consequences mark the beginning of the time between 1750 and 2000. The population virtually exploded from 700 million in 1750 to about 6,100 million in the year 2000. This explosion was accompanied by an unprecedented increase in both wealth and inequality all over the globe. Populous and prosperous as this era was, it was also an era of an unimaginable increase in violence and war. A new global system emerged that not only simultaneously impacted the wellbeing (positive and negative) of the population on the globe but which itself defined the social background before which the very notion of wellbeing, as we use it today, was defined. On a political level, the beginning of this era was characterized by the rise of nation states, the manifestation of an imperialistic system, and the institutionalization of racism and equivalent ideologies.

Emerging Nations States and Imperialism

In North America and Western Europe, processes of state formation included wars and violence (Münkler 2003: 18), with the French Revolution (1789–1799) arguably being the most famous example. On the one hand, there were the Revolutionary Wars which began in 1792, while on the other hand, the radicalization of the revolution culminated in the Reign of Terror (1793–1794), which brought tens of thousands of deaths (Doyle 2002). Violence towards enemies inside and outside the state was an important factor in forging the idea of a homogenous group of people as the basis for the nation state. Another example is the American Civil War (1861–1865). This is of special interest for us because it may also serve as an example of a war that caused the increasing wellbeing of a large group: independent of the causes of war, it helped to abolish slavery in the USA (Holt 2004).

Imperialism, and the cruel violence it entails, is historically related to the modern formation of the nation state within the world system. As a symbol for the global power structure that is shaping the world to today, we may refer to the Berlin West Africa Conference (1884–1885) that concluded with the General Act of the Berlin Conference. This was one of several efforts of imperialist forces to divide the world to their likeness (Bley 2005). The violence with which the claim of the superiority was enforced on the world could be seen in slavery but also in genocides, like the genocide on the Herero and Namaqua (1904–1907) in so called German South West Africa (today Namibia) during the Herero Wars (Olusoga and Erichsen 2010). Widely discussed at that time were the exploitation and atrocities of King Leopold II of Belgium in the Congo.

From the Rise of Racism to the Long Century of War

To explain this violence as a part of (Western) history, it is not enough to look solely at economic processes. To understand colonialism, we need to look at the rise of racism in society and science. To understand how deeply racism is ingrained in different worldviews until today, let us take a look at the great thinkers of philosophy. For example, the philosopher Hegel argued that humanity is divided into different races with varying moral and intellectual characters (Hegel 1927: 234f). For him, every nation (Volk) is at a different level of development and has its own "Volksgeist" (spirit of the people) (Hegel 1927: 297, 1942: 141). For him, these ideas of different nations are highly interwoven with wars. He argued that through war, "The moral health of peoples is preserved in their indifference to the consolidation of their finite faith, like the movement of the winds preserves the sea of the rot, in which it would have a lasting tranquility, like the

people who would have a permanent or even eternal peace" (Hegel 1995: 278–281, translation by the authors). In other words, Hegel argued on a racist basis that wars are necessary for the wellbeing of nations and therefore for all people. With the emergence of the nation state, racism became a central part of the social construction of national homogeneity. This is expressed most clearly in the work of Arthur de Gobineau (1816–1882; de Gobineau 1915 [1856]), who combined the idea of essential differences between human "races" with the legitimization of the political subordination in order to legitimize the slaveholder system of the colonial plantations in the Caribbean (Bös 2011).

All these developments led to the long century of wars. Never before were so many people killed by war and violence as during World War I, World War II, and the Holocaust. There are only rough estimates on the total numbers, but we can assume that World War I caused almost nine million military deaths. Including civilians, the number goes up to 16.5 million war related casualties, while 20 million more soldiers were injured (Sondhaus 2011: 488; Kramer 2007: 251). World War II resulted in around 55 million war related deaths. In addition, approximately 13 million people died because of German mass murder, including around 6.3 million Jews killed in the concentration camps (Müller et al. 2008: 802). This raised the tally to over 80 million dead.

It is important to note that nation states, especially nondemocratic ones, can sometimes be a threat to their own citizens, as Rummel (1994) points out: "In total, during the first 88 years of this century [20st], almost 170,000,000 men, women, and children have been shot, beaten, tortured, knifed, burned, starved, frozen, crushed, or worked to death; or buried alive, drowned, hanged, bombed, or killed in any other of the myriad ways regimes have inflicted death on unarmed, helpless citizens or foreigners" (Rummel 1994: 4–5). So it is not the monopolization of the means of coercion within the hand of the state that makes a society less violent. Only when this process is accompanied by a democratic political system with its checks and balances is a state likely to be a safe place for most of its citizens.

Until today, there is no adequate way of measuring the relationship of wellbeing and war related deaths. One way would be to "subtract" the hypothetical future happiness of a person killed in war from the wellbeing index. To calculate such a hypothetical level of happiness is very difficult, especially because the soldiers killed are often very young. One convergence on this calculation of the future happiness is Ruut Veenhoven's concept of happy life years. He argues that for international comparisons of happiness it is not only necessary to look on how happy people are but also how long they live and how much time they live in happiness. With this data it could be possible to get an approximate valuation of the happiness lost through early (war related) deaths (Veenhoven 2007: 15f). Another way would be to look just at the survivors. But if the index of wellbeing is only aggregated by the living, other problems occur. For the bereaved, the difference between 0 and 1 death is infinite. On the other hand, during war it might be the case that the loss has lesser emotional costs because people might think the dead died for a good thing, e.g. the nation, or is a martyr. There is also the problem that people get used to the horrors of war (Frey 2012: 3–5). In other words, it is not possible for us to relate the amount of killed people with wellbeing in clear quantities. Nevertheless, it is obvious that there are no positive effects of war which could in any way compensate for the deaths, injuries, and losses.

Positive Effects of Modern Warfare

Let us turn to potential positive effects of war. In an era of total wars – the mobilization of all resources and the whole population of a state – there are extremely complex relations between warfare and welfare. One may look at the unprecedented increase of the size of the welfare state in Germany during World War I. A growing number of people depended on the state: in the last years of the war, up to 50 % of the urban population. The expanding welfare state was seen as a

means to facilitate the mobilization of the whole population. If larger parts of society felt excluded, they would not be willing to sacrifice themselves (Frohman 2008: 206ff). This war related evolution of the welfare state could be seen as a positive impact of war because it outlasted the end of the war. But the extent to which the welfare state prevailed may as well be contributed to the German Revolution of 1918/19 ("Novemberrevolution"). The relationship between wars and the expansion of the welfare state is not unique to Germany; the pattern applies to the USA as well (Skocpol 1995).

Another potential impact is the change in gender relations. Most men had to leave their families to fight in WWI, and many women had to work in the war industry. Yet these changes of gender relations had no real lasting positive outcomes for women (Sondhaus 2011: 189–194). Propaganda used the images of cruel enemies who want to kill and rape the women of one's own society nearly everywhere. Without arguing which cruelties actually happened against noncombatants (especially sexual violence against women), this picture strengthened the stereotype of male protectors and helpless women. Combined with the ideal of women as mothers of the nation, this prevented most enduring changes in gender relations (Kramer 2007: 244ff).

From the economic perspective, a "Phoenix effect" is sometimes suggested. This refers to the speedy recovery of the economic system after a war (Frey 2011: 227). Taking into account the resources that are spent during wars like the World War I, it is obvious that every society might be better off using resources for developing their wealth instead of spending them in war. In respect to World War II, we may find a positive relationship between warfare and wellbeing. In December, 1941 the USA entered the war against Japan, Italian, and Germany. There is a huge debate about the impetus for taking this step (e.g. Pauwels 2001), but nevertheless it could be said that without the help of the USA, the war against Nazi Germany would at least have lasted much longer and many more people would have died. One can assume that the entrance of the USA into the war is one of the extremely rare examples where war had a positive impact on wellbeing. In general, it looks as if these effects only took place in situations where there is already a high level of violence, like in revolutions and the American Civil War. So there might be cases where more violence in the short term can help to end violent systems. Nevertheless, one has to be very cautious in these cases because humanitarian causes are often used to legitimate wars that are often motivated by other goals with other aims, and the outcome of these interventions is often very unsure.

The Technologization of Warfare

On the other hand, one has to recognize that the entrance of the USA contributed to an increasing level of violence in World War II by the use of atomic bombs. US officials described the bombings as follows: "On August 6th, 1945, at 8:15 A.M., Japanese time, a B29 heavy bomber flying at high altitude dropped the first atomic bomb on Hiroshima. More than 4 mile^2 of the city were instantly and completely devastated. 66,000 people were killed, and 69,000 injured. On August 9th, 3 days later, at 11:02 A.M., another B-29 dropped the second bomb on the industrial section of the city of Nagasaki, totally destroying 1 1/2 mile^2 of the city, killing 39,000 persons, and injuring 25,000 more" (Groves et al. 1946). With these instances, warfare had reached another level in the means of destruction that humans invented and used.

We can observe an increasing technologization of warfare during the twentieth century in general. Another trend is that the increasing use of technology leads to an aggravation of the impact of warfare on nature. A case in point is contamination by radioactivity. The atomic bomb tests, the actual use of atomic bombs, and, to a lesser extent, the use of depleted uranium as armor piercing projectiles (e.g. by NATO forces during the Kosovo War) (Rosenbrock 2013: 23) led to an increase in contamination. Other examples are Operation Ranch Hand during the Vietnam War (1961–1971),

referring to the use of Agent Orange to deprive the Viet Cong of food and vegetation cover. All these acts contaminated the environment for generations.

There are other effects of the use of high technology weapons, though. Due to the low weight and easy handling of modern fire arms and the cruelty of new wars, there are more and more child soldiers. According to UN estimates there are about 300,000 of them worldwide (Münkler 2003: 36). On a positive note, one may argue that this weakens gender stereotypes. When warfare requires less physical power, the connection between war and masculinity lessens, which we see in Israel where women, for several reasons, take part in the military service.

New technologies, especially atomic bombs, have also had an impact on other trends. After the two World Wars, an era of peace among Western countries began. This is related to the European idea of peace, which often only means peace for the privileged insider like Europeans and North Americans but not for the rest of the globe. This era of peace was accompanied by the institutionalization of proxy wars. The Spanish Civil War (1936–1939) might be described as the first modern proxy war, but with the increasing danger of an atomic war during the Cold War, this idea spread through the world. Proxy wars were fought, for example, in Afghanistan, Angola, Korea, Vietnam, the Middle East, and Latin America (Loveman 2002).

Different Kinds of War in a Modern World

In parallel to these historical trends, archaic warfare survived. The headhunting raids of the Shuar people (we already mentioned as the people who drove back the Inca in the fifteenth century), reported until the 1950s, are an example of this. A war raid normally consists of up to 40 people from different communities. The participants are volunteers, and the preparation for such a headhunting raid could last several months. The feast where the power of the tsantsa (shrunken heads) is used usually takes place 1–3 years after the raid. The head-hunter has to feast all guests – about 125–150 persons – for 6 days to gain prestige. The social function of the feast is to "acquire prestige, friendship, and obligations through being recognized as an accomplished warrior and, through the feasting, by being a generous host to as many neighbors as possible," and last but not least to show the masculinity of the head taker (Harner 1972: 181–192). It is interesting to see that the gain in wellbeing, which in this case means the gain of status for the head hunter, is separated by a large time span and, most of all, by the extreme efforts for the feast (accumulation of large quantities of food, the construction of new houses) from the actual head hunting raid, as if the feast should not be overly colored by the preceding violence.

Besides the survival of old types of war and violence, we recognize as well the emergence of new wars (Kaldor 1999). The majority of wars in the last decades developed at the borders and breaking points of the old colonial empires. For example, almost all wars in Southeast Asia or Sub Saharan Africa took place in regions which before were parts of the European colonial empires (Münkler 2003: 15). These wars are mostly new wars. They are related to a complex mix of personal aspiration to power, ideologies, ethnic and cultural differences, greed, and corruption. Cultural differences and the construction of ethnic groups are widely used to legitimate these wars, but in most cases the differences are a result of the dynamic of the conflict system and not the original cause of the conflict. Nevertheless, the ethnization of a conflict usually amplifies the conflict (Münkler 2003: 15f; Stepanova 2008: 44). Contrary to old wars where war making is an integral part of state formation (Tilly 1992), new wars are usually influenced by the interests of other (richer and more powerful) nations and economic players (Münkler 2003: 18f).

The direct warring parties are warlords, (sometimes Western) mercenaries, and child soldiers. With the deployment of child soldiers, the brutality and cruelty of wars often increases. Wild adolescent masculine sexuality often increases the level of sexual barbarity (Münkler

2003: 39f). So called "ethnic cleansing," the physical destruction of whole groups of people, is often part of the new wars. These killings are often accompanied by strategic mass rape and mutilation. These wars often also cause famine and disease (Münkler 2003: 29–34).

Asymmetric warfare, sometimes related to proxy wars and new wars, are a further aspect of warfare after the World Wars. In asymmetric warfare one side has the military and technological superiority. The other side could use the tactics of guerilla war (e.g. decolonization wars, Vietnam war), terrorism (e.g. 9/11), and/or the power of pictures in the media (e.g. intifada). Guerilla war is a strategy to slow down hostilities and to survive; terrorism speeds up wars and brings the violence into the peaceful center of the dominant civilization (Münkler 2003: 49–55; Stepanova 2008: 2f). With these tendencies, the era of peace in the Western world may have come to an end—not at the level of the World Wars, but on a lower and more symbolic level. For example, the terrorist attacks against the World Trade Center and other targets did not cost nearly as many lives as an actual war would have cost. But nearly 3,000 people died because of these attacks, and the feeling of safety decreased throughout the whole Western world.

The Positive and Negative Impacts of War

On the level of large groups or societies, we generally see no positive impacts of war on wellbeing that are equivalent to the negative impacts. On the personal level, this holds true for the majority of soldiers but not for all. In the eighteenth century, the life and the perception of war by the soldier changed dramatically. On the one hand, military life was increasingly characterized by drills and exercises. On the other hand, the new idea that personal experience is an important part of life became more common. In his study on the perception of combat situations by soldiers, Harari (2008) introduced the concept of "combat flow" as an experience of flow – a state of mind during an activity as focused and energized and of full involvement and enjoyment often found in sports, gaming, or religious activities. "In a survey of about 150 military memoirs from the period of 1450–1750, hardly any descriptions of combat flow were found [. . .] Significantly, these texts contain very few descriptions of any subjective combat experiences and focus instead on objective events. In contrast, from around 1750 onward, descriptions of combat flow (and of other subjective combat experiences) became increasingly common in military memoirs" (Harari 2008: 259).

But what does that mean for the majority of soldiers? The mobilization for a total war during World War I shows an interesting aspect in respect to the shift in attitudes toward war. Near the end of the war more and more soldiers were against war, while the people at home mostly remained committed to war: "Notwithstanding the best efforts of pacifists on the home fronts, by 1918 there were, arguably, more proponents of peace in uniform than in civilian dress. Indeed, military personnel on visits home frequently remarked that hatred of the enemy ran much deeper there than in the trenches." (Sondhaus 2011: 362) This is remarkable because it shows that the suffering of most soldiers was so huge that it easily overcame all positive outcomes like combat flow, the opportunity of looting, or of experiencing solidarity in a male brotherhood.

This outcome can be confirmed by the increasing number of research studies on Post-traumatic Stress Disorder (PTSD) during the last decades (e.g. Araya et al. 2011; Jayawickreme et al. 2009; Korinek and Teerawichitchainan 2012; Laufer et al. 1984; Orcutt et al. 2003; Sagi-Schwartz 2008). Interestingly enough, even here racism seems to play a significant role. In some cases soldiers who experienced racist discrimination suffer more from PTSD than soldiers who have not experienced this. One explanation for this is that because of their own experience, these soldiers do not believe quite as much as others in racist propaganda which helps the soldiers to kill or torture enemies (Laufer et al. 1984: 78). PTSD not only impacts negatively on the person affected but also

influences their social environment. It seems "that the veteran's background, including his trauma history and PTSD symptomatology, increases the risk of perpetrating violence against his partner" (Orcutt et al. 2003: 387). As said, there might be soldiers whose personal wellbeing increases in relation to war, but for the majority of the surviving soldiers, not to mention those killed, we assume that war has a negative impact on their personal wellbeing.

Final Thoughts on the Relation Between Wellbeing and Wars

War has devastating effects on the wellbeing of people, and most often this negative impact outweighs the positive one. One of the main arguments of this chapter is that these positive effects of war and violence are important, too. These effects at least partly explain why wars occur, be it because of the egocentric king who seeks his personal wellbeing in pursuing a war or a community in which making war is the essential part of their lifestyle. All these may be reasons to wage wars.

In the following, we want to summarize the main results of our historical overview and then discuss general implications for wellbeing research. In the history of humankind, the relations between war, violence, and wellbeing were rather complex. This is partly related to the multifaceted dynamics of conflict systems. Parties or actors in the system are often not fixed. We discussed this, for example, in relation to the ethnization of actors. In general, the rise and fall of different kinds of empires, the shifting borders of religious systems, and changing trade systems around the globe were constantly part of the dynamic of different conflict systems in history. Furthermore, the objectives of a conflict is often unclear or changing; in our case, it is often a mix of material and idealistic interests. These reasons are often different from the event or historical episode that triggers the conflict. Especially in the case of war, the trajectory of the conflict is not very clear, and constellations of actors in the conflict system are shifting as the conflict evolves. The trajectory of a war is often prolonged by the mechanism that each side feels the need to react to an act of violence in war: one act of violence serves as the reason for the next one, something that can go on until the resources of both sides are exhausted. Last not least, war also implies that – at least at the end – the conflict is being regulated. This usually does not mean that there are no conflicting interests anymore, but that the interests of an actor or of a group of actors prevail, or that a treaty tries to balance these diverging interests. How all this relates to wellbeing depends on the actors' position in the conflict system, the applied norms and values to evaluate your situation and historical circumstances (Bös 2010).

The Principle of Diversification

Our overview on the history of war, violence, and wellbeing has shown that Sorokin's "principle of diversification" holds true, which means that the effects of war on different societal groups are highly differentiated, and we have to distinguish between the consequences, e.g. for soldiers, civilians, and whole societies. Yet even reporting on these complex situations is difficult because many of our sources have a Eurocentric and "male centric" bias. The exclusion of often marginal perspectives is especially problematic since the principle of diversification implies that the connection between war and wellbeing varies between groups. During the centuries there were two main impacts of war for the majority of people or civilians: first, the destruction of people and land in regions where battles took place; and second, often more significantly, indirect consequences of war, such as famines and the imposition of dues and war taxes (Dietrich et al. 2011: 39). A Eurocentric understanding of the term "peace" was nearly always used to legitimate violence or oppression against out groups around the globe. Examples in the Middle Ages are the Crusades, and in modern times colonialism, proxy wars during the Cold War, and racist

violence (Diallo 2011). So if we talk about peace, we have to look very carefully at whose peace we are referring to and which power relations and ideologies are involved.

There are some cases where wars have a positive impact on the wellbeing of a larger number of people, e.g. successful revolutions, the American Civil War, or the intervention of the USA in WW II. But this was only the case because these conflicts resulted in the destruction of structures with a high level of open or structural violence (Galtung 1969). In this perspective, we can only say that if there was (structural) violence, then maybe more violence (war or revolution) can have a positive impact on wellbeing, at least in the long run. In nearly every war there is a group – or sometimes even a whole nation – that profits from the war, but the number of people suffering from wars and/or violence is larger most of the time. Generally speaking, all the historical trends we observed, such as the changing trajectories of state formation, colonization, the monopolization and sometimes de-monopolization of power, and the means of violence, show no simple connection between violence, war, and wellbeing.

Ethical Implications on the Relation Between Wellbeing and War

Wellbeing and war or violence do not easily fit together. To assume that something bad and destructive like war may cause wellbeing contradicts our moral impulse, and rightly so. A general argument here is surely that just because the situation has positive consequences does not mean that this situation is desirable or good (Hondrich 1992). If, because of an accidental gas explosion in your heating system, your house blew up and you had the chance to rebuild with an up to date solar energy heating system, you may consider this a positive consequence of the accident. Nevertheless, it would be far-fetched to assume that because of this you may advise all people to blow up their houses with gas heating systems.

These kinds of problems in the concept of wellbeing are most clearly discussed in Martha Nussbaum's (2008: 582) work on the "problem of the happy warrior." The problem can be formulated in two different versions. The original Aristotelian formulation describes the warrior who happily fights and endangers his life because he knows that his sacrifice is justified for a good cause, for example to protect his community. The second (modern) formulation is found within psychology. Psychologists find indicators that a soldier can experience times of pleasure and happiness (combat flow) within a violent and destructive combat situation. We can find wellbeing in doing bad things for a good cause or simply in doing bad things regardless of the cause. Or to say this in Nussbaum's words:

> But there is an even greater problem: pleasure is simply not normatively reliable, for reasons that we have already anticipated in talking about positive and negative emotions. Some pleasures are bad, namely, those that are closely associated with bad activities. Rich people have pleasure in being ever richer and lording it over others, but this hardly shows that redistributive taxation is incorrect. Racists have pleasure in their racism, sexists in their sexism. In general, bad people have pleasure in their bad behavior. (Nussbaum 2008: 596)

The problem is that the source of wellbeing colors wellbeing itself. Wellbeing is a kind of awareness of an act or a feeling that is intrinsically connected to that act. There are two ways to react to this ambivalent situation: either you say that wellbeing based on bad acts should not count as wellbeing (Frey 2012), or you accept that human wellbeing can occur in bad or undesirable situations. We adopted the latter point of view in this piece, and by doing so we reject the Benthamian position that the extent of wellbeing is always an indicator of a good society. The extent of wellbeing can only be used as an indicator for a good society or a healthy or good person if social research on human wellbeing carefully analyzes how wellbeing is produced. Or to put it another way, you cannot judge a society or a person as good or bad by just referring to the level of wellbeing.

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The Worldwide Spread of Democracy

5

Robert K. Schaeffer

During the last 200 years, three related developments made it possible for a majority of people, in a majority of states around the world, to claim the benefits associated with citizenship and suffrage and practice democracy (Schaeffer 2013). First, social movements in the United States and France created constitutional governments based on popular sovereignty in independent republics at the end of the eighteenth century. Inspired by the promise of "liberty, equality, and fraternity," other people fought to establish republics around the world. Today, a majority of the 193 states that belong to the United Nations identify themselves as republics (Coll 2011, 51). The rise of the republics made it *possible* for people to practice democracy in these states. Unfortunately, factions established dictatorships in many post-colonial republics and deprived people of the opportunity to practice meaningful democracy. During the late twentieth century, people in these dictatorships fought to (re)claim democratic rights, which eventually led to the democratization of many republics around the world (Schaeffer 1997).

When the republics were first established, citizenship and suffrage was extended only to a minority of residents, typically adult men with property. But other residents—men with few means, women, ethnic minorities, and youth—fought to obtain citizenship and suffrage. Their struggles led to a third development: the expansion of citizenries within the republics. Today, a majority of people, in most of the republics, can exercise the rights and responsibilities associated with citizenship and suffrage and practice and enjoy the benefits of democracy.

However, the global spread of democracy was a difficult and protracted process, and democracy is by no means ubiquitous. Many people still live in dynastic states, like Saudi Arabia, which do not identify themselves as republics and treat resident populations as "subjects" not "citizens." Many people still live in dictatorships, like China, which claim to be republics but in fact deprive their citizens of meaningful participation in government. And many of the people who live in democratic, republican states, are still denied citizenship and suffrage. As a result of these developments, the spread of democracy has been accompanied by persistent and durable social and political *in*equalities. This chapter will examine how the rise of the republics, the democratization of the republics, and the expansion of citizenries within the republics contributed to the spread of democracy, describe some of the consequences of these developments, and identify some of the social movements that shaped global social and political change during the last 200 years.

R.K. Schaeffer (✉)
Global Sociology, California Polytechnic University,
San Luis Obispo, CA 93407, USA
e-mail: Roberts@k-state.edu

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The Rise of the Republics

During the long sixteenth century (1450–1650), capitalists and state officials in Western Europe created a capitalist world-economy based in Europe and the Americas (Wallerstein 1974). Dynastic rulers in European states fought bitterly to control the wealth of the emerging capitalist world-economy and make it their own, but failed to do so. In 1648, the warring dynastic states agreed in the Treaty of Westphalia to recognize each other as sovereign and independent states (Wallerstein 1996, 56–7). As a result, the capitalist world-economy, a singular economic entity, would be controlled by *many* states, not just one. The creation of a capitalist world-economy and an interstate system composed of multiple dynastic states were the two "central institutional achievements of historical capitalism" in the early modern period, according to Immanuel Wallerstein (1996, 48). There would soon be a third institutional innovation: the creation of republics, first in the United States and then in France and Haiti, which eventually replaced dynastic states as the modular form of government, a development that transformed the political character of the interstate system [See Chart 5.1].

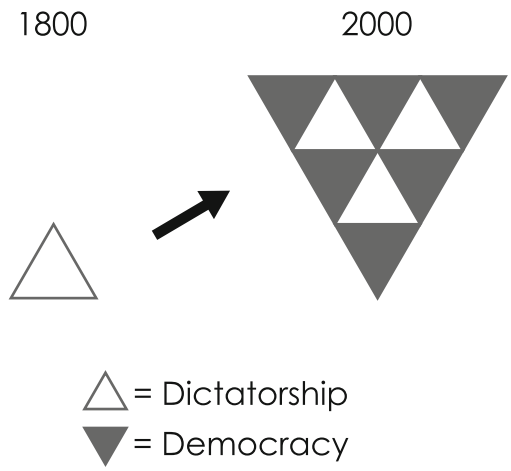

Chart 5.1 The rise and democratization of the republics

In dynastic states, people were the subjects of the king. The king could arbitrarily deprive them of their life, liberty, and property, and as subjects, they had no effective, legal recourse or say in dynastic government policy. As an alternative, philosophers like Jean-Jaques Rousseau and John Lock suggested that elite subjects create a new "social contract" between the "people" and the "state" (Sellers 2003, 64). They argued that the people possessed sovereign authority, not the king, and that they could use this authority to create a series of binding, contractual agreements that specified relations between the people and the government. Rousseau argued that the rights of the people should be legally protected by a set of contractual or "constitutional" agreements and that they be given access to state power through representative or "democratic" institutions (Wood 1992, 169; Sellers 2003, 21). The idea of creating contractual or "constitutional" and representative or "democratic" government based on popular sovereignty in an independent state or "republic" took root first in the United States (1776), France (1789), and Haiti (1804). However, the French republic was dissolved by Napoleon in 1799 and the republic in Haiti was seized by a series of dictators, leaving the United States the only democratic republic in the early years of the nineteenth century, which demonstrates that the spread of the republics and democratization was not inevitable but subject to reverse.

The idea of creating democratic republics that promoted "liberty, equality, and fraternity" proved contagious. In the Americas, European settlers joined with African slaves and Native Americans to fight for independence from dynastic rulers in Spain and Portugal and establish republic in post-colonial states. "By the middle of the nineteenth century, virtually all of the [colonies in South and Central America] had been transformed into independent, sovereign states" (Wallerstein 1989, 193).

In Europe, republican insurgents organized a series of revolts in dynastic states in 1848, what historians have called "the Springtime of Nations." As one German revolutionary put it, "We want a republic and nothing else" (Billias

2009, 184). But dynastic rulers soon recovered from shock, crushed the revolts, and reasserted their authority. The King of Prussia boasted, "The [republican] assembly wished to take from me my Divine Right [to rule]. . . . No power on earth is strong enough to do that" (Stearns 1974, 155).

But while the republican revolt receded in Europe, it did not disappear. Republicans organized mass-based "nationalist" movements (Sinn Fein in Ireland, the Indian National Congress in India) and "socialist" movements (the German Social Democratic Party in Germany, the Bolsheviks in Russia) in Europe and their colonies and mounted protracted political campaigns to overthrow dynastic rulers and create new republics in post-colonial states.

Of course, dynastic rulers resisted republican demands for independence or democracy, though they sometimes introduced reforms and granted political concessions to co-opt or deter them. But their efforts were undone by fierce economic competition and inter-imperial rivalries that led in 1914 to the outbreak of world war. Republicans took advantage of the weakened condition of dynastic states to launch a nationalist rebellion in Ireland (1916) and a socialist revolution in Russia (1917), which led eventually to the creation of independent republics in both states (Schaeffer 1997, 58).

World war destroyed other dynastic states in Germany, Austria-Hungary, and the Ottoman Empire, which resulted in the creation of new republics, new dynastic states, and new colonial assignments. As Billias (2009, 250) observed, "The Allied victory resulted in a burst of democracy not seen in Europe since 1848. . . . Before World War One, there had been 19 monarchies and three republics [in Europe], but after 1922, there were 14 republics, 13 monarchies, and two regencies."

Although republican fortunes advanced after World War One, they receded during the 1920s and 1930s, when anti-republican fascists seized power in Portugal, Italy, Germany, and Spain. "We are anti-parliamentarians, anti-democrats, anti-liberals," Dr. Antonio de Oliveira Salazar, the dictator in Portugal proclaimed, and, like his fascist peers, ridiculed the principles of "democracy, individual liberty, and the rule of law as 'unfortunate' and 'doctrinaire'" (Schaeffer 1997, 58).

Anti-republicans in Germany and Italy then waged war against dynastic states and republics to expand their empires. Attacks on the Soviet Union and the United States by Axis forces in Europe and Japan triggered a world war that eventually destroyed anti-republican states and, importantly, also crippled dynastic European empires. After the war, U.S. and Soviet leaders blamed the war on "the colonial system" and created a new interstate system based on independent republics, not dynastic states and their colonies (Schaeffer 1990, 75). They moved quickly to decolonize Axis empires and establish republics in Germany, Italy, and Japan, and then promoted the decolonization of European empires around the world. In West Germany, U.S. occupation authorities worked to re-create durable republican institutions and in Japan to build them from scratch, a process that was remarkable successful in both cases. This kind of "democratization from above" proved to be a more difficult task during the U.S. occupations of Iraq and Afghanistan (see below).

After the war, the superpowers pressured European states to withdraw from the colonies, while republican independence movements in the colonies fought to expel them. Although European states violently resisted decolonization in Malaysia, Indonesia, Indochina, Kenya, Palestine, Algeria, Congo, Angola, Mozambique, and Guinea Bissau, they were eventually forced to withdraw. Decolonization proceeded rapidly during the late 1950s and early 1960s, and then continued at a slower pace. The number of states in the interstate system grew from 50 in 1945 to 100 in 1960, to 150 in 1990, and then to 193 in 2012 (Schaeffer 1999a, 17). The great majority of these new, post-colonial states identified themselves as republics. Of course, some republics emphasized their religious character—the Islamic Republic of Pakistan—while others emphasized their economic character—the Republic of China (capitalist) and the People's Republic of China (communist). But whatever

adjective they used, they all claimed a shared identity as *republics*.

The demise of dynastic empires and the rise of the republics increased the number of states in the interstate system, changed its political character, and made it possible for people in many countries to gain their independence and exercise democracy. Unfortunately, military leaders and political parties seized power and established dictatorships in many of the new, post-colonial republics. But in the last twentieth century, people around the world forced dictators from power and (re)established civilian, democratic governments in dozens of republics. Let us now turn to the democratization of the republics.

The Democratization of the Republics

In many republics, political factions led by small groups of men or by mass-based political parties seized power and established dictatorships that throttled democracy. Although the architects of constitutional government in the United States and elsewhere designed government institutions to prevent capture by minority factions or by popular majorities, factions were often able to seize power nonetheless. In Latin America, where the founders adopted constitutions that gave extraordinary powers to the executive, presidents used their power to rewrite the constitution, emasculate the judiciary, subdue the legislature, and strip citizens of any meaningful say in government policy. "Built into almost all Latin American constitutions are provisions that permit democracy *and* dictatorship," Keith Rosenn (1991, 24–5) observed. Between 1811 and 1989, "Latin American countries produced a total of 253 constitutions. . .or 12.6 per country on average, compared with two in the United States during the same period. . .. Latin American constitutions were notoriously easy to change" (Billias 2009, 112).

In republics where central government authorities or civilian leaders were weak or indecisive, military leaders used the army, which was often the only effective or well-organized bureaucracy in government, to stage coups and seize power. Military officers often "waited for, and took advantage of, moments of government weakness to overthrow the ruling group," Frank Stafford (1985, 350) observed. And because military dictators were often willing to use terror and violence to obtain and retain power, they could silence political elites and subdue civilian masses.

During the late nineteenth and early twentieth centuries, political factions also organized mass-based, nationalist or socialist parties and, sometimes, irregular guerrilla armies to seize power and establish one-party dictatorships in the republics. They then used their access to public wealth and power and to informers, the secret police, and the gulag to enhance their collective wealth and power (Schaeffer 2012, 159–69).

Great powers encouraged, installed, and supported dictatorships to promote their economic interests and defend their political spheres of interest. After World War Two, the United States and Soviet Union supported dictators in other republics around the world, providing them with arms and economic aid (Schaeffer 1997, 52).

When they seized power, dictators typically adopted republican conventions and norms. They revised constitutions, which often provided for regular but rigged elections, and elected family members, friends and cronies to captive legislatures, which stripped citizens of their rights and made dictators into "presidents for life" (Schaeffer 1997, 50). They might have dispensed with republic conventions, as fascist leaders did, but they did not. Instead, they swore oaths to protect "constitutional government" because it promoted the "legitimacy" of the regime both for domestic populations and for other states. This enabled them to participate in the interstate system as members (not pariahs) and gave them access to arms and economic aid. Perhaps it was good that they preserved "constitutional government," even as a fig leaf. When dictators fell from power, civilians revived moribund constitutions and rusty institutions and used then to manage relatively peaceful transitions to democracy.

After World War Two, people established stable, democratic republics in Western Europe,

India, Japan, Colombia, Costa Rica, and some islands in the Caribbean. But most of the post-war republics in Eastern Europe, Asia, Africa, and the Middle East, and many of the republics in South America, which dated from the early nineteenth century, were controlled by dictators, though civilian governments sometimes took power for short periods of time, as they did in Pakistan and Chile (Schaeffer 1997, 32–56).

But this pattern changed in the late twentieth century, when dictators in countries around the world fell from power. Samuel Huntington (1991, xiii) observed that the "transition of some 30 countries from non-democratic to democratic political systems between 1974 and 1990. . .was perhaps the most important political development in the late 20th century." Moreover, the democratization of the republics has been an ongoing process since then, leading to the democratization of some post-Soviet republics, South Africa, Indonesia, Iraq, Afghanistan, Burma, and Tunisia, Libya, and Egypt during the "Arab Spring." Although China, the world's largest republic, remains a dictatorship, a majority of people around the world now live in democratic republics.

Several developments contributed to the democratization of capitalist and communist republics around the world since 1974, when the contemporary process began in Portugal.

First, U.S. President Richard Nixon's decision to recognize communist China in 1972 transformed Cold War politics, which were based on U.S. and Soviet efforts to divide the world into capitalist and communist spheres of influence (Schaeffer 1997, 44). With communist China as its new ally, the United States no longer needed to support dictatorships in Asia that could act as a bulwark against communist China (Schaeffer 1997, 55). As sphere-of-influence politics collapsed, U.S. and Soviet leaders no longer needed to support client dictators everywhere, though they continued to do so for a while, on an ad hoc basis. As a result, dictators learned that they could no longer count on automatic or reflexive superpower support in the event of economic or political crises, which soon appeared.

Second, a series of global economic developments created regional economic crises for groups of dictators around the world. In the early 1970s, rising oil prices triggered global inflation and a recession in Europe, which led to trade deficits and rising unemployment for capitalist dictatorships in Portugal, Spain, and Greece (Schaeffer 1997). Then in the 1980s, U.S. efforts to combat inflation triggered a debt crisis for heavily indebted dictatorships across Latin America and in the Philippines, which forced them to adopt painful austerity programs that undercut their legitimacy and exposed them to public wrath (Schaeffer 2009, 153–4). In Asia, the U.S. decision to recognize China and invest in its economy undercut political support for, and investment in, South Korea and Taiwan, which threatened continued economic growth for regimes in both countries. One South Korean official warned that unless they adopted political and economic reforms, "Our country will collapse like some of the Latin America [republics]" (Schaeffer 2009, 161).

Inflation, debt, and economic stagnation during the 1970s and 1980s also took a heavy economic toll on communist regimes in Eastern Europe and the Soviet Union. When Mikhail Gorbachev took office in 1985, he found the Soviet Union "in a state of severe crisis which has embraced all spheres of life" (Schaeffer 2009, 162). He blamed heavy military spending and the high cost of war in Afghanistan for the crisis, saying they had "exhausted our economy" (Schaeffer 2009, 164).

Third, capitalist and communist dictatorship in Southern Europe, Latin America, East Asia, Eastern Europe, and the Soviet Union encountered political problems, some of their own making that helped force them from power and contributed to democratization in each region. Regimes in Portugal, Greece, Argentina, and the Soviet Union all undertook military adventures that ended in disaster. Portugal's military defeats in its' African colonies, Greece's support for a coup in Cyprus, which invited war with Turkey, Argentina's invasion of the Falkland Islands and its subsequent defeat by British forces there, and the Soviet Union's

disastrous invasion of Afghanistan wrecked the political-military legitimacy of these regimes. In other countries, such as the Philippines and Chile, dictators called elections to bolster their political legitimacy, but then found that they could not easily defraud electorates, who demanded that they retire. Dictators in many Latin American countries reassessed their political situation and concluded that they could negotiate a peaceful transfer to power (and immunity from prosecution for crimes they committed during their "dirty wars" against domestic dissidents) *before* angry mobs gathered in front of the presidential mansion. And leaders in some regimes—South Korea, Taiwan, and the Soviet Union—introduced political reforms designed both to democratize political life *and* retain political power, a task that proved extremely difficult to manage. Leaders in South Korea and Taiwan were more successful, and for longer, than leaders in the Soviet Union, though their efforts to keep their political parties in power all ended in failure.

Gorbachev introduced economic and political reforms, cut military spending, withdrew from Afghanistan, and pursued dtente with the United States and China (Schaeffer 2009, 164–5). In October 1989, he also renounced Soviet support for client regimes in Eastern Europe (Schaeffer 2009, 166). Without Soviet political and military support, dictators across Eastern Europe quickly retreated as opposition movement gathered, and they were swept from power by the end of the year.

In the Soviet Union, a coup in 1992 failed to restore fading communist-party rule and led to the division of the Soviet Union into numerous independent republics (Schaeffer 1997, 194–201). As the Soviet Union divided, some of the successor republics democratized, some were seized by factions that established post-Soviet dictatorships, and some of these were subsequently democratized during the "Color Revolutions" of the early twenty-first century. Division also accompanied democratization in Czechoslovakia, which split into two successor republics, and Yugoslavia, which split, after a series of multi-sided conflicts, into a number of successor states (Schaeffer 1997, 189–94).

During the 1990s and 2000s, democratization continued, but at a slower pace, in different parts of the world. In South Africa, where the white-minority government excluded the black, mixed-race and Indian/Asian majority from citizenship under a strict system of apartheid, Frederik de Klerk announced in 1990 that he would legalize the banned National African Congress, free its leader, Nelson Mandela, and open negotiations to dismantle apartheid, expand the citizenry, and create constitutional government based on majority rule. "The wellbeing of all in this country is linked inextricably to the ability of leaders to come to terms with one another on a new dispensation," de Klerk declared. "The aim is a totally new and just constitutional dispensation in which every inhabitant will enjoy equal rights, treatment, and opportunity in every sphere of endeavor—constitutional, social, and economic" (Schaeffer 1997, 212).

Although the process of negotiation terms and rewriting the constitution took 4 years, and was marred by ongoing violence, primarily between rival black African political parties, it resulted in 1993 in the adoption of an interim constitution and the country's first non-racial general election, which in 1994 brought the ANC to power and made Nelson Mandela the country's first black president. When he was inaugurated in 1994, joyous black crowds chanted, "Amandla! Nguwethu! (Power! It is Ours!)".

In Asia, Indonesia democratized in 1997, after an economic crisis triggered protests across the country that forced General Suharto from power (Hadiwinata and Schuck 2007, 9). Military and political elites then obtained economic assistance from the International Monetary Fund, which demanded that the government adopt strict austerity measures, and moved to democratize the political process, both in response to public demands for an end to dictatorship and corruption and to create a government with the political legitimacy necessary to pursue the painful economic restructuring required by the IMF. Democratization led to elections, the departure of military representatives from parliament, declining levels of public corruption, and, after some years, to renewed economic growth

(Hadiwinata and Schuck 2007, 9). It also led to the withdrawal of Indonesian forces from East Timor, a former Portuguese colony that was annexed by the Suharto regime in 1975, a development that triggered an armed insurgency by people in the occupied region (Hadiwinata and Schuck 2007, 18). The departure of Indonesian forces led to the creation of a new republic in East Timor.

In Burma/Myanmar, the military dictatorship that took power in 1962 plundered the country's rich natural resources, adopted insular political and economic policies, impoverished the population, crushed secular and religious anti-government protests, and tried to suppress, without much success, armed insurgencies by minority groups in the country's interior (Steinberg 1999, 42–5). In 2001, Than Shwe, the leader of the junta, chose General Thun Sein as his successor. In a surprise move, Gen. Sein in 2011 called for an end to corruption and ongoing civil wars, released political prisoners, rewrote the constitution, and organized elections in which opposition parties, including one led by Aung San Suu Ky, a long-incarcerated activist who won the Nobel Peace Price in 1991, participated (Osnos 2012, 56–7). Observers suggested that Gen. Sein democratized because he wanted to persuade foreign governments to lift trade embargoes and political sanctions and encourage investment in Burma, which might then create the conditions for economic growth.

During the postwar period, most of the countries in the Middle East and North Africa were ruled by dynastic states or authoritarian regimes. But this began to change after the U.S. invasions of Iraq and Afghanistan, which toppled Saddam Hussein's Baathist regime in Iraq and the Taliban dictatorship in Afghanistan. U.S. forces then established provisional, U.S.-run occupation authorities in both countries, which created a set of republic institutions and then transferred power, more or less, to indigenous civilian authorities, pending the withdrawal of U.S. military forces (the United States withdrew the bulk of its forces from Iraq in 2011; some U.S. troops remain in Afghanistan) (Pollack 2011, 94; Baker 2012). The top-down U.S. approach to constitutional government and democratization was modeled after the U.S. military occupations of Germany and Japan after World War Two. But in Iraq and Afghanistan, the creation of new republics and transfer of power to indigenous political parties occurred during violent, multi-sided wars, which were waged by indigenous and external groups. Although constitutional governments have been established in both countries, it is unclear whether indigenous governments can end the violence, expand citizenries to include groups that had been excluded from the government—women and members of different ethnic groups—and resist capture by factions determined to seize power and establish a dictatorship and/or divide power and create dictatorships in separate states.

In 2011, the rapid fall of dictators in Tunisia, Egypt, and Libya, led to democratization in all three Arab republics. The protestors who gathered in Tunis and Cairo (and in many other Arab states) and the rebels who took up arms against Qaddafi in Libya all objected to their government's economic policies and political constraints. During the 1980s and 1990s, dictators in Tunisia and Libya used oil revenues to generate modest economic growth, while the Mubarak regime relied on income from tourists and overseas workers who sent money home (Noueihed and Warren 2012, 33). But corrupt family members and elites captured most of the wealth and the dictatorships did little to provide employment for young, educated, domestic workers, the "hittiste" (young men who lean against a wall waiting for work) who could not find meaningful employment or earn enough to move away from their parents, establish independent households, marry, and raise families of their own (Noueihed and Warren 2012, 3, 27–31; Goldstone 2011, 336; Amin 2012, 54–7).

The global recession that began in 2008 reduced these regimes' sources of incomes, and the price of wheat and bread rose sharply, which reduced living standards for a majority of people living in the region (Noueihed and Warren 2012, 25, 34–5). These developments created a shared economic crisis. Meanwhile, the behavior of

political elites—their determination to enrich family, friends, and tribes from the public coffers and establish "republarchies" (republican monarchies)—antagonized secular opponents of the regime, who believed that economic and political advancement should be based on merit, not privilege, while their campaigns against Islamic dissidents antagonized poor people who clung to conservative religious traditions (Noueihed and Warren 2012, 12; Goldstone 2011, 335; Amin 2012, 42–3). Popular anger at these regimes' economic and political policies erupted first in Tunisia.

On December 17, 2010, Mohammed Bouazizi set himself on fire to protest his mistreatment by police (Noueihed and Warren 2012, 74). His self-destructive act—he later died from his burns—ignited large-scale protests across the country. The police killed 23 protestors during the first few weeks, but demonstrations still grew. President Zine al-Abidine ordered the army to crush the protests. But army leaders refused. Protestors called for a general strike, and the president and his family fled the country on January 14, 2011 (Noueihed and Warren 2012, 76–7). After he left, leaders of the army, the regime, and dissident groups formed a transition government, which rewrote the constitution and held elections that brought a secular, civilian government to power (Hamid 2011a, 112).

Events in Tunisia galvanized young Egyptian activists, who gathered in Tahrir Square, in the heart of Cairo, to demand change (Noueihed and Warren 2012, 107–8). President Hosni Mubarak ordered a crackdown, but the army balked, and protestors in the square chanted, "Al-shaab wal-gayscheed wahdah!" ("The people and the army are one!") (Trager 2011, 81). The demonstrations grew in size, the army withdrew its support for the regime, and Mobarak retired from office. The military then organized an interim government that rewrote the constitution and held elections that brought a leader of the Moslem Brotherhood to power as president, though the military later overthrew the government and seized power (Hamid 2011b, 102–4).

When similar protests erupted in Benghazi, Libyian dictator Muammar Gaddafi did not equivocate. He launched an all-out military assault on his opponents across the country. They took up arms to defend themselves, and civil war ensued. For a time, Gaddafi's forces routed their poorly armed, amateur opponents. But attacks on the regime by U.S. and NATO forces blunted the attack and contributed to rebel success on the ground. The six month civil war killed between 30,000 and 50,000 people, most of them civilians (Doyle 2011, 263). It ended when Gadaffi was captured and killed (Noueihed and Warren 2012, 187).

In general, where economic and political crises were joined in authoritarian republics, dictators fell and democracy advanced, though it advanced farther in some places than in others (Schaeffer 1997, 218–6). In Southern Europe, the fall of fascist regimes led to the election of socialist governments in Spain, Portugal, and Greece, and their entry into the European Union. In this context, democratization led to significant political and economic change (Schaeffer 1997, 236–8). Change was not so dramatic in Latin America, where the conservative political parties that ruled before dictators took charge generally returned to power, in countries still burdened by debts that had been run up by dictators. In East Asia, dictatorships transformed themselves from military regimes to civilian political parties and retained power for many years before dissident political parties won power. The abrupt fall of communist regimes in Eastern and then the Soviet Union initially brought dissident political parties to power, though former communist parties retained power in some of the post-Soviet republics. In Eastern Europe, former communist parties now compete with other conservative, nationalist, and religious parties for power, and dissident parties have retreated. In some of the post-Soviet republics, dissident movements dislodged former communists from power in Georgia, Azerbaijan, Ukraine, during various "color revolutions" (a "rose" revolution in

Georgia, a "tulip" revolution in Kyrgyzstan, and "orange" revolution in Ukraine), and promoted democratization, though battles between former communists and dissident groups is ongoing. However, in other post-Soviet republics, former communist political parties have, like Voldemort (J.K. Rowling's fictional character in the Harry Potter series), "returned to power" and established conservative governments, as Putin has done in Russia. Although democratization was a significant development, its meaning has been limited, restricted, and constrained in many republics.

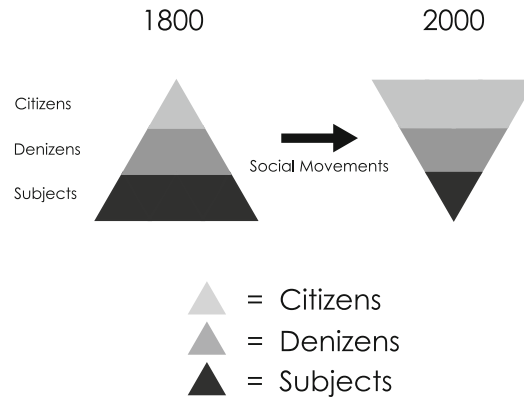

Chart 5.2 Social change and social movements

The Expansion of Citizenries

The spread of constitutional governments and the democratization of republics around the world made it possible for citizens in the republics to practice democracy. But it is important to remember that when republics were first created, the number of people who could claim citizenship and suffrage was small, as it was in the republics of ancient Greece and Rome. In the United States, the adult, white, Protestant men of property who could claim citizenship and vote made up only 10 % of the population (Piven 2006, 7; Keyssar 2009, 22). The large majority of people were assigned to two subordinate categories that did not possess the right to vote. Adult white men without property, adult women, children, and immigrants possessed some rights as "denizens" of the republic. Indentured servants, orphans, convicts, sailors, and slaves were treated as "subjects" by public and private authorities (Schaeffer 1990, 93, 97). The architects of constitutional government argued that denizens and subjects were incapable of exercising the rights and responsibilities associated with citizenship and suffrage and worried that the extension of suffrage to these groups would pose a threat to their own liberty, which consisted in part of their dominion over others. As a result, the early republics developed a pyramid-shaped civil society, divided horizontally into three separate tiers [See Chart 5.2].

During the next 200 years, denizens and subjects fought to obtain citizenship and suffrage. Their successful efforts to gain admission slowly expanded citizenries in the republics. Today, a majority of the people in democratic republics can vote and participate in democratic institutions. Still, it is important to recognize that a large minority of people remain as denizens (minors and immigrants) and subjects (convicts, trafficked women), even in the most democratic of republics. So while the expansion of citizenries inverted the pyramid and changed the *shape* of civil society, the three-tier *structure* of civil society has remained *intact* (Schaeffer 1999b, 11–12).

The expansion of citizenries within the republics widened the meaning of democracy and changed the social and political character of republican states. Citizens exercised their rights to obtain economic and social benefits from government, which greatly improved the well-being of citizens in democratic republics.

In democratic republics, citizenries expanded slowly. During the nineteenth century, adult males slowly obtained the right to vote, what was then called "universal suffrage." Adult male citizens called it "universal" because they could not imagine that other groups (women, minors, slaves) might be capable of exercising the right to vote. In the United States, state legislatures gradually extended suffrage to adult white men, and by 1855, "there were few formal

or explicit economic barriers" for adult white men (Keyssar 2009, 24). They did not, however, extend suffrage to adult black men, most of whom were slaves. It was only after the emancipation of slaves and the end of the Civil War that suffrage was extended to adult black males, though legislatures in southern states then took steps to revoke it.

Women obtained citizenship and suffrage in the early twentieth century, after a very long struggle, though a few state legislatures allowed women to vote in the 1880s and 1990s (Keyssar 2009, 155, 166; Smith 1961, 159–60). Although suffrage was extended to adult women in 1920, adult black women, and men, were denied the right to vote in the American South. The extension of suffrage to women significantly expanded citizenries in the United States and in other republics around the world, and, for the first time, citizens made up a majority of the inhabitants in democratic republics (Kerber 1998).

The extension of citizenship and suffrage to youth—18–21 years of age—occurred at different times in different countries. In the United States, 25 million youths obtained the right to vote in 1971, compared to 28 million women in 1920 (Zon 1972, 170, 174).

But while suffrage has been extended to a majority of people living in the republics, large groups of people remain in subordinate categories. Minors and immigrants are still treated as denizens. In many countries, it is extremely difficult for immigrants to obtain citizenship and suffrage, even if they were born in the country. Some republics, like Germany, base citizenship on "blood" not "soil," which means that ethnic Germans from other countries may become citizens, while ethnic Turks may not automatically claim citizenship, even if they were born in Germany or lived there for many years (Schaeffer 1999b, 11).

Most republics treat convicts and illegal immigrants as the subjects of public authorities. In some republics, convicts can regain citizenship and suffrage after they have completed their sentences and paroles, though in the United States, convicts are denied suffrage if they committed felonies or "infamous crimes," a practice described by social scientists as "felon disenfranchisement" (Manza and Uggen 2008, 49–51, 57–8). Today, about 5.3 million of the 16 million Americans who have been convicted of a felony, jailed, and subsequently released, have been disenfranchised (Manza and Uggen 2008, 73, 75–8).

Moreover, *citizens* in many republics have been deprived of their rights and driven downward into denizen and subject populations because public officials viewed them as a threat to public safety or health. In the United States, public authorities revoked the citizenship of royalists, confederates, political dissidents (anarchists, socialists, and communists), and Japanese Americans because they viewed them as a threat to public safety, particularly during time of war. During World War One, the U.S. Supreme Court upheld the convictions of anarchist and socialist leaders because they posed "a clear and present danger" to the public safety and security of the state (Murray 1955, 25–6). And during World War Two, government officials imprisoned 120,000 Japanese Americans, many of them citizens, for much of the war (Daniels 1975, 57, 113–14; Daniels 1993, 46, 59–62).

State officials also deprived people with contagious diseases (tuberculosis, typhoid, leprosy) or mental disabilities (people regarded as insane or mentally incompetent) of their liberty, even if they were citizens, and made them the subjects of public or private authorities, because officials viewed them as threats to public health (Leavitt 1996, 8, 246).

Today, officials in democratic republics can deprive citizens of their rights, seize and imprison them, sometimes indefinitely, (even kill them if they are identified as terrorists) if they are seen as a threat to public safety or to public health (people infected with bird flu, plague; people with insanity or dementia).

As a result of these developments, citizenries have expanded in the republics during the last 200 years. But social inequalities remain. Large groups of people remain as denizens and subjects, even in democratic republics.

Declining Violence, Improving Wellbeing

The rise of the republics, the democratization of the republics, and the expansion of citizenries within the republics curbed violence in the interstate system, reduced violence within states, and restricted the violence committed by state officials and non-state actors. Declining levels of violence enhanced the wellbeing of people around the world. These developments reduced violence for several reasons.

First, the rise of the republics resulted in the demise of dynastic empires. This brought an end to the violence used by European empires to control people in their colonies and brought an end to the murderous rivalries among dynastic states for control of colonies and their resources, a competition that led to recurrent world wars and caused the death of millions of soldiers in battle and the deaths of tens of millions of civilians from disease, famine, and genocide.

Second, the democratization of the republics substantially reduced violence within and between states. Dictators used violence to seize and maintain power, stifle dissents, and combat insurgents. They also waged wars on their neighbors to enhance their power, as Saddam Hussein did in successive wars with Iran and Kuwait. The democratization of republics around the world eliminated informers, secret police, and gulags in many countries, which substantially improved the wellbeing of civilian populations who were subjected to their terrors.

Third, the expansion of citizenries reduced the *legal* violence used by state officials and, importantly, by private non-state actors against citizens, denizens, and subjects. As citizenries expanded, they slowly curbed the kind of violence that state officials could legally deploy. In most republics, for example, state officials may no longer beat, shoot, and kill peaceful demonstrators, flog convicted criminals in public squares, or impose the death penalty on people for major or minor crimes, as they once did. Citizenries have abolished the death penalty in most democratic republics, and its use has declined in states that still permit it.

Moreover, the expansion of citizenries has curbed legal violence by non-state actors. In 1800, private citizens in the republics could routinely use violence on their own authority, without fear of legal sanction. Husbands could beat their wives, parents their children, teachers their students, captains their sailors, and masters their slaves. The men who inflicted most of this violence were given a free hand to assault their inferiors and subordinates. Legal statutes and state officials did not stay their hands. If they exceeded the bounds of law and custom, judges and juries of male-citizen peers rarely punished them for their crimes (Scott 1974, 75).

But during the last 200 years, citizens and denizens, particularly women, fought successfully to curb private violence by male, non-state actors. Today, in most republics, it is illegal for husbands to assault wives, parents to abuse their children, teachers to cane their students, and masters to abuse their animals. The decline of socially acceptable legal violence by private non-state actors has improved the physical and mental wellbeing of citizens, denizens, and subjects in democratic republics around the world.

In the U.S. Declaration of Independence, the architects of the republic argued that life, liberty, and the pursuit of happiness were inalienable rights. The spread of democracy in the republics and the expansion of citizenship within them contributed to the happiness and wellbeing of citizenries around the world. As Ruut Veenhoven (2012) observed, happiness is higher in democratic countries than in dictatorships and is positively associated with civil rights and the rule of law, with the economic, political and personal liberties given to citizens in democratic states.

As a practical matter, the expansion of citizenries improved the economic and social wellbeing of citizens. As citizenries expanded, new entrants used the franchise to obtain economic and social benefits from the state. In the United States, male electorates in the early nineteenth century obtained free land and veteran's pensions from the state. After women

secured the right to vote, they used it to obtain government benefits for the poor and unemployed, women and children, and retirement benefits for the vast majority of working people, even though the economy was then in the grip of the Great Depression. Although some feminists have argued that women made poor use of their newly acquired right to vote, it is difficult, if not impossible, to imagine the passage of New Deal legislation in the United States or the creation of post-war "welfare states" in Western Europe *without* female suffrage (Davis 1991). The provision of economic and social benefits to citizens and sometimes denizens (minors) has improved their economic and social wellbeing, though it has not always done so for denizen (immigrant) and subject populations (convicts).

Democracy and Social Movements

The rise of the republics, the democratization of the republics, and the expansion of citizenries within the republics transformed the interstate system and spread democracy during the last 200 years. These developments curbed violence between and within states and improved the wellbeing of citizens around the world. Why did these global changes occur? They occurred because diverse social movements struggled to create constitutional government in colonial and post-dynastic settings, because social movements fought to democratize the republics, and because social movements labored to expand citizenries, curb violence, and improve the condition of their fellow citizens. Of course, they were not always successful. Social and political inequalities endure. Still, these movements promoted significant global social change.

In retrospect, three types of social movements shaped global social change, which resulted in the spread of democracy. "Aspiring" social movements *advanced* change (and promoted "liberty, equality, and fraternity"), "altruistic" movements *assisted* change, and "restrictionist" movements *resisted* change [See Chart 5.3].

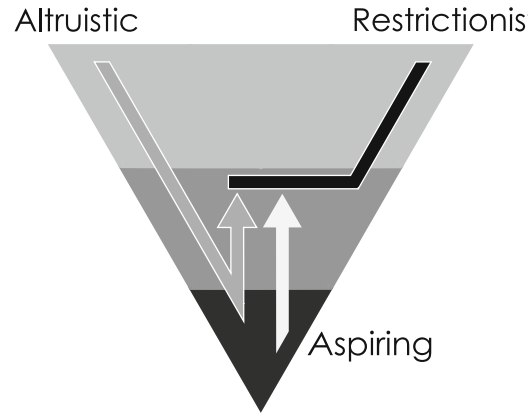

Chart 5.3 Types of social movements

At bottom, change was driven forward by the multitude, which lived as subjects in dynastic states and the colonies and by denizens and subjects in the new republics. They fought to claim what French republicans called "the rights of man," or what we might call "human rights," and exercise popular sovereignty in the republics.

Colonists in America, slaves in Haiti, Sinn Fein and the Indian National Congress, the German Social Democratic Party and the Communist Party of China organized "aspiring" social movements to create independent republics. Other aspiring movements—Solidarity in Poland, the Mothers of the Plaza in Argentina, and the masses who gathered in public squares across North Africa during the Arab Spring—fought to democratize the republics. The people who campaigned for women's suffrage, black civil rights, and disenfranchised youth fought to expand citizenries within the republics.

Of course, aspiring movements did not always act alone. Altruistic social movements often organized on behalf of subaltern groups and assisted their efforts to advance change. Altruistic movements assisted subaltern groups because denizens and subjects could not act legally on their own behalf and because they did not possess the economic and political resources

they needed to act effectively. Altruistic movements provided resources to aspiring movements and worked to curb the violence inflicted on denizens and subjects by state officials and non-state actors. Although aspiring movements were usually the driving force for social change, altruistic movements made it possible for them to advance change, more often than not.

Altruistic abolitionists fought to end the slave trade and abolish slavery in the republics, and helped runaway slaves escape to freedom. Amnesty International and the Joint Mobil Group in Chechnya monitored humans rights violations by governments and their proxies; student anti-trafficking organizations assisted the victims of trafficking; Margaret Sanger and the American Birth Control League fought to help poor women and mothers obtain contraceptives and abortions at a time when these activities were illegal.

By contrast, restrictionist movements fought to resist and reverse social change. They opposed the creation of constitutional government in the republics, installed dictatorships, and resisted the extension of citizenship and suffrage to women, youth, immigrants, and minorities. They viewed these developments as a threat to their own liberty, which consisted, in part, of dominion over subordinates. Restrictionist movements have routinely used violence to protect their own liberty and deny it to others. Many social scientists exclude restrictionists, what the sociologist Sidney Tarrow (1998, 8) called "the ugly movements," from the study of social movements, arguing that they are "rooted in ethnic and nationalist claims, religious fanaticism, and racism." Other scholars defined social movements as "anti-authoritarian," a practice that allows them to exclude "pro-authoritarian" movements from their research. But restrictionist movements should be included because they altered the direction and slowed the pace of global social change. They fought to suppress colonial revolutions and slave revolts, mounted coups and installed dictatorships in the new republics, and fought tooth and nail to deny suffrage to women, minorities, and youth. They used state power to assault, imprison, and murder their opponents and, when that failed, organized lynch mobs and death squads to attack opponents on their own authority. Their efforts slowed the spread of democracy, kept minors, immigrants, and convicts in a subordinate social status, and, as a result, kept the three-tier *structure* of social inequality intact.

During the last 200 years, democracy spread around the world. But the spread of liberty was accompanied by persistent and durable social inequality. The spread of democracy has been a slow, partial, and complex process. It has been, for long periods of time, in many places, reversed or deterred. Still, as Martin Luther King Jr. (1958) observed, "We have come to see that the arc of the moral universe is long, but it bends toward justice."

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Part II

Monitoring Global Wellbeing: Objective and Subjective Measurement

Global Economic Accounting and Its Critics: Objective Approaches (1)

6

Jürgen Faik

Circular Flows of Economic Activity

The basis for meaningful information on economic activities is the fact that such activities are embedded in circular acts of exchange. More generally, an economic cycle is defined as a system which is self-contained and which exhibits the exchange relationships between the several economic units (persons, households, or countries). It may be compared to the human blood circulation system, so perhaps it was not by chance that, in 1758, a physician, François Quesnay, developed the first detailed model for circular flows of economic activities – the *tableau conomique*.

In his model, three classes interact with each other: the class of landlords, the "productive", and the "sterile" class. Quesnay – as a representative of the so-called physiocrats – postulated dominance of nature's exploitation for generating gross value added. In this sense, the farmers are the "productive class", and they have to hand over their surplus to the landlords, the owners of the land. However, Quesnay called the bourgeoisie (craftsmen, manufacturers, merchants) a "sterile class" since, in his eyes, this group was unproductive.

In the *tableau conomique* system, the farmers produce food and primary materials of a certain worth, say: five million monetary units (MU) per year. A part of this total value (say, two million MU), the farmers consume themselves for their own purposes, and, they use a further one million MU, for example, in order to buy goods provided by the "sterile class". Thus, the surplus in this example amounts to two million MU which the farmers have to hand over to the owners of the land, the landlords. The landlords take a portion of their income, say, one million MU, for purchasing food from the farmers, and the other part of the income the landlords have obtained (in this example, another one million MU) is used to buy goods from the "sterile class" (for an illustration of the *tableau conomique* see Faik 2010: 105–107).

In modern accounting systems, such assumed hierarchical relationships between groups of people do not exist; the economic activities of the several economic units are considered of equal importance. An important feature of illustrations of the economic cycle is that groups of persons – more technically speaking: poles – are connected with each other by certain economic transactions ("flows"). In a monetized economy, those flows are differentiated into money and into goods flows. Typically, economic accounting systems refer to the money flows.

In a market economy, at least four major poles can be distinguished:

- private households (characterized by household members' joint consumption of goods and services),

J. Faik (✉)
FaSo, Nikolausstrasse 10, Frankfurt am Main, Germany
e-mail: faik@faso-ffm.de

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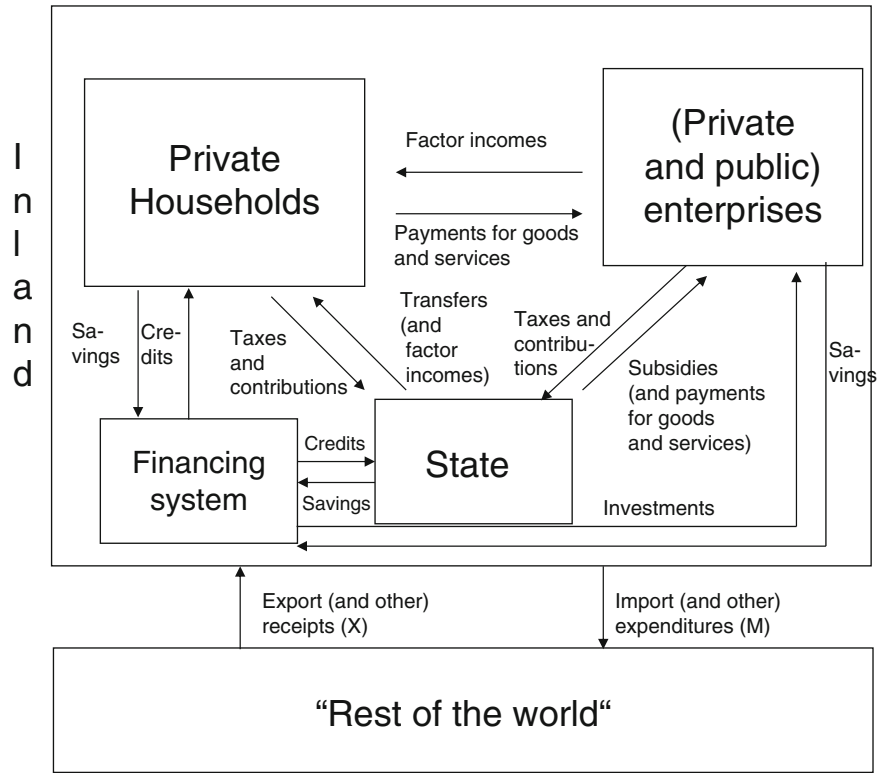

Fig. 6.1 The economic cycle (mixed market economy) – simplified illustration (Source: Present author's own illustration based on Faik 2010: 84 & 95)

- enterprises (the main productive units of an economy, divided into private versus public enterprises),
- the state (typically including social security systems), and
- foreign country ("rest of the world").

Often, the financing system is additionally considered so that, illustrated simply, the following exchange relationships exist between the several poles (see Fig. 6.1): The private households receive factor incomes from enterprises and – as civil servants and the like – from the state and, additionally, governmental transfers, also from the state. After paying taxes and contributions, the corresponding private households' incomes are used for buying goods and services (provided by enterprises) as well as for savings (which are deposited in the financing system of the economy, for example in banks). Another flow to the financing system, also called "savings", stems from the pole "enterprises"; these savings are accumulated profits. A third source of savings is those made by the state.

In turn, the financing system deals in credits, primarily with the enterprises to finance investments (in real capital) and, to a lesser extent, with the private households to enable them to buy goods and services (consumer credits). National debt is based on credits from the financing system to the state. Such credits are offset with deletions and interest payments as reverse arrows; for reasons of simplicity, the latter arrows are omitted in Fig. 6.1. Similarly, interest payments from the financing system to the poles which have deposited money into the financing system (savings) are not shown in the following figure (also in order to reduce the complexity of the numerous economic activities within the economic cycle). The state uses credits and other revenues (taxes and contributions paid by private households and by enterprises, and factor incomes resulting from its property rights; the

latter revenues are not shown in the following, simplified figure) to remunerate its civil servants (e.g. teachers), to support private households by transfers, and enterprises by subsidies, and to buy goods and services from enterprises. By definition, the latter are consumed by the public – that is to say, by the state itself – in the sense of "consuming" publicly provided streets, internal and external security, etc., and therefore, this kind of consumption is located within the pole "state". For reasons of simplicity, transactions within the several poles are not depicted, so consumption within the poles does not form part of Fig. 6.1. Another example of transactions excluded from the diagram is trade within the pole "enterprises". Figure 6.1 is intended as a simplified illustration of the economic cycle in a mixed market economy.

In the real world, countries also deal with each other: The inland receives money for exports and factor incomes residents in the inland receive from foreign countries (X) on one side, and it has to pay for imports and for factor services in favor of persons not living in the inland (M) on the other. In Fig. 6.1, it is assumed that X equals M. In the alternative case of $(X - M) > 0$, an additional arrow from inland to "rest of the world" must be drawn, and vice versa in the case of $(X - M) < 0$ to indicate the corresponding value-related difference.

In addition to exports, imports, and factor incomes, interactions with the financing systems of both the inland and the "rest of the world" would be shown in a more sophisticated model of the economic cycle than the one assumed in Fig. 6.1 (for instance, in terms of savings in both directions: from inland to "rest of the world" and vice versa).

The National Accounting System (NAS): Technical Aspects

Economic accounting systems have been developed based on the circular flows of economic activity. Those accounting systems offer economic researchers as well as policymakers valuable information on a macroeconomic scale about the area of production in an economy, the aggregated income, the consumption levels of a society, etc.

In principle, approaches which are mainly concerned with economic stock variables (like wealth) can be differentiated from systems which primarily refer to economic flow variables (like income or consumption; see Fig. 6.2). Examples of economic stock variable systems are wealth-related accounting systems; while input-output systems (especially), the balance of payments, and national accountings (defined in a broader sense; systematically including the input-output and balance of payments systems mentioned above) belong to the latter group of accounting systems. The considerations which follow focus on the latter accounting systems.

Only a few words need to be said concerning the more specialized input-output systems and the balance of payments: input-output systems are constructed to reflect an economy's production sphere differentiated by (sub-)sectors, typically by the agricultural, the manufacturing, and the service sectors. In terms of a matrix, the production relationships within and between the different sectors is analyzed separating intermediate consumption from end products.

The other accounting system, only briefly described here, is the balance of payments which is divided into current and capital accounts. This accounting system records all monetary transactions between a country and the rest of the world during a single period. Based on the principles of double-entry accounting, the sum of the balances of both current and capital accounts principally add up to zero (apart from statistical measurement errors and the like; Faik 2010: 330–332).

Globally, the most important economic accounting system is the widely used National Account System (NAS; sometimes abbreviated as "SNA"– for "System of National Accounts"), especially its income-related component which consists of three connected subsystems used to calculate macroeconomic, aggregated income values from the perspectives of (1) production, (2) consumption, and (3) distribution. Like the balance of payments, the NAS relies on double-entry accounting.

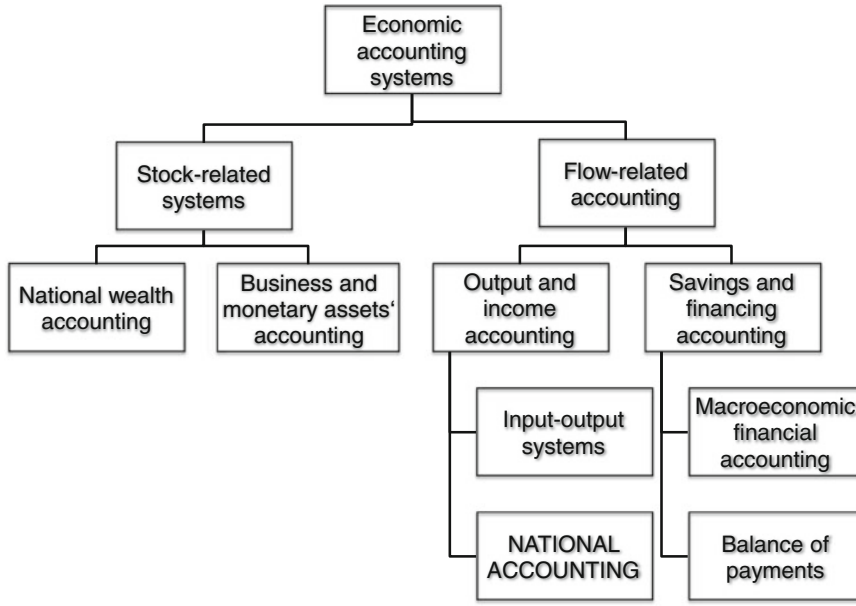

Fig. 6.2 Economic accounting systems – typology (Source: Faik 2010: 329)

National accounting was first developed in the wake of the Great Depression at the end of the 1920s in the context of the Keynesian "macroeconomic revolution" in order to provide reliable data for stabilizing policy measures. The first steps for developing a National Account System came from Colin Clark and Simon Kuznets. At the beginning of the 1950s, the United Nations published rules for internationally standardized National Accounting Systems which have been refined over the years and which are documented in the United Nations System of National Accounts. This worldwide accounting system has been adopted in Europe in the so-called European System of Accounts (ESA). The UN System of National Accounts as well as the ESA reflect output, expenditure, and income activities in a country or in an economic region during a specified time period (typically a year or a quarter of a year). They are compiled from a number of statistics (surveys, administrative data, census data, etc.) which causes problems insofar as the underlying data may contain inaccuracies and as it may be difficult to standardize the different data sources on the basis of the NAS rules (Speich 2011).

According to the current System of National Accounts, there are five different poles: (1) households, (2) non-profit institutions serving households, (3) non-financial corporations, (4) financial corporations, and (5) general government. As with the terminology used in Fig. 6.1, the pole "households" comprises private households as well as unincorporated household enterprises (OECD 2002: 24).

Within subsystem (1) "production", the first step is to calculate the value of all commodities and services produced in all economic sectors, giving Gross Production. By subtracting intermediate consumption from Gross Production, one obtains Gross Value Added (GVA). The extension of GVA by the difference between goods-specific taxes and subsidies leads to the well-known variable Gross Domestic Product (GDP). GDP reflects the market value of all final goods and services produced in-country (i.e. within a country's geographic borders) during a specific period of time (e.g. quarter of a year, or a year), and it differs from Gross National Income (GNI) by adding the incomes that residents receive in foreign countries and by subtracting incomes non-residents receive in-country (Faik 2010: 335–340).

In this context, the gap between potential GDP and actual GDP is sometimes calculated as an indicator for evaluating macroeconomic policy measures especially aimed at reducing unemployment. Potential GDP is defined as "the long-run productive capacity of the economy, or the maximum amount the economy can produce while maintaining stable prices" (Samuelson and Nordhaus 1995: 385). A large GDP gap indicates the economic downturn of an economy (ibid: 386).

Subsystem (2) "consumption", splits GDP into Private Consumption (of private households), Gross Investment (primarily of enterprises – with the important exception of the building of houses (and the like) performed by private households but defined as investments), Government Expenditures, and Net Export (i.e. the difference between export receipts and import expenditures; Faik 2010: 340–343; Fig. 6.1 above).

For instance, in 2011, the following GDP shares for selected countries were calculated (GDP based on market prices and assessed in current currency units, in the following cases: in U.S. dollars, in yen, and in euros): United States: private consumption: 71 %, government expenditure: 17 %, investment: 16 %, and net export: −4 %; Japan: private consumption: 61 %, government expenditure: 20 %, investment: 20 %, and net export: −1 %; Euro area: private consumption: 57 %, government expenditure: 22 %, investment: 20 %, and net export: 1 % (OECD 2013a: 70, 75, & 80; author's own calculations).

The relevant income variable regarding subsystem (3) "distribution", is Net National Income (NNI) based on factor costs where depreciation on capital is subtracted from, and the difference between goods-specific taxes and subsidies is added to GNI, where the latter is based on market prices. On this basis, NNI, based on factor costs, is divided into labor and capital income in order to consider the shares of the production factors, labor and capital, on total production in monetary terms. The corresponding relationships are called wage share and profit share; both ratios add up to 100 %. Their relationship is called functional income distribution.

It is relatively easy to break down the wage rate into the ratio between average real wages and mean labor productivity:

$$\frac{W}{Y} = \frac{w \cdot E}{P \cdot Y_R} \quad or \quad \frac{W}{Y} = \frac{\frac{w}{P}}{\frac{Y_R}{E}} \qquad (6.1)$$

[W/Y: wage share; W: sum of individual wages; Y: Net National Income based on factor costs; E: number of employed persons weighted (multiplied) by the number of hours they work; w: mean wage; Y_R: real Net National Income based on factor costs; P: price level].

If the mean real wage level w/P is greater than the average labor productivity Y_R/E, the wage share W/Y will rise, and vice versa (Atkinson 1983: 200–220).

In a recent empirical analysis, Stockhammer's findings (2013: 33–34), amongst others, showed that globalization had negative effects on the wage share (measured as a share of GDP in the corresponding study) in developed as well as in developing countries. This result ran counter to theoretical expectations according to which, in the wake of the process of globalization, the wage share in developed countries should decline, whereas the wage share in developing countries should increase since the factor labor would become less important in the developed countries in favor of increased significance of this production factor in developing countries (ibid: 6–7). Overall, in the course of the last three decades, according to the Stockhammer's study, wage share decreased in all OECD countries from about three-quarters to almost two-thirds between 1980 and 2007, and in most of the developing and emerging countries (where the underlying and largely unreliable) data suggest a decline in the wage share from about 60 % or about two-thirds at the beginning of the 1980s to values around 55 % in the first decade of the twenty-first century for alternative groups of developing and emerging countries (ibid: 1–3 & 43).

Overview 6.1 From gross production to private consumption

Gross production – Intermediate consumption
= *Gross Value Added (GVA)* + Goods-specific taxes – Subsidies
= *Gross Domestic Product (GDP; market prices)* + Incomes of residents (inland) from foreign countries – Incomes of non-residents (regarding inland) in-country
= *Gross National Income (GNI; market prices)* – Depreciation (on capital)
= *Net National Income (NNI; market prices)* – Goods-specific taxes + Subsidies
= *Net National Income (NNI; factor costs)*[a] – Direct taxes (and social security's contributions) + Transfers
= *Disposable income of an economy* – Retained profits
= *Disposable income of private households* – Private savings
= *Private consumption*

Source: Faik (2010: 338–339, 344, & 349)

[a]An alternative calculation of the aggregated net income may refer to GDP (and not to GNI)

Principally, all three subsystems sketched above result in the same aggregated income values, for example, in 2011 nominal GDP for the Euro area was US$11.8 trillion, for the United States about US$15.0 trillion, and for OECD – Total US$43.5 trillion (OECD 2013b: 17). The corresponding values can be calculated as nominal values (as previously was the case) or as real values (calculated by removing the effects of inflation on total values).

Overview 6.1 defines the relevant variables and reveals their relationships.

Empirical Evidence

In order to obtain a first empirical impression on the subject discussed here, Fig. 6.3 shows the international structure of GDP for OECD – Total (in nominal terms: US$43.5 trillion, as mentioned above) based on current exchange rates as well as on current purchasing power parities in 2011. In the framework of both definitions, it becomes obvious that the United States' GDP encompasses about a third of the GDP of the OECD as a whole, followed by Japan (13 % or 10 %) and Germany (8 % or 7 %).

Typically, to measure economic growth, the rates of change of GDP (or GNI) over a specified time period are used in real, per-capita terms. The reason for the latter operationalization is that economic wellbeing (or more generally, economic performance) requires such normalizations since it is characterized by the control over economic resources (i.e. goods and services) which must not be biased by pure price variation. Furthermore, the

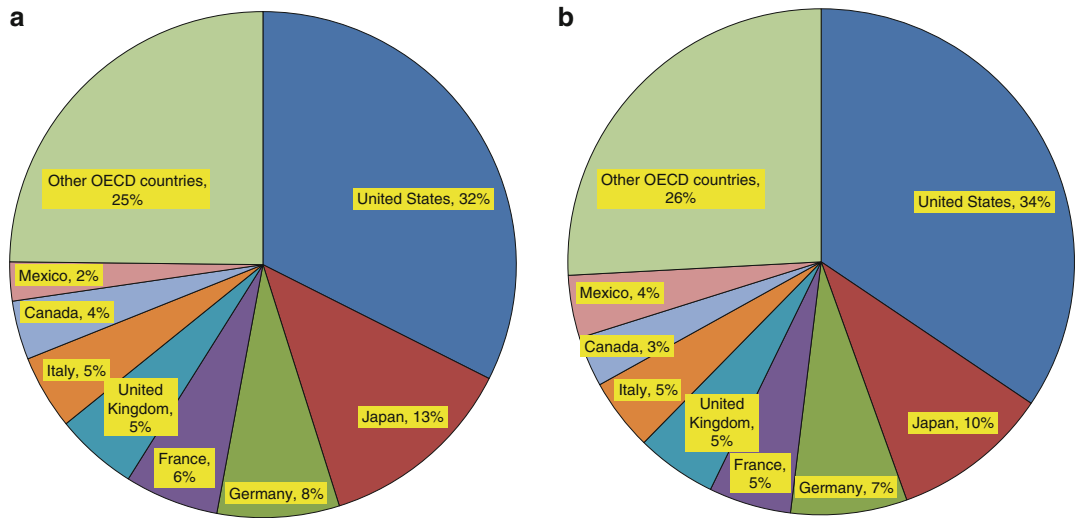

Fig. 6.3 International structure of GDP (OECD – Total) in 2011. (**a**) Current exchange rate. (**b**) Current purchasing power parities (Source: OECD 2013b: 17)

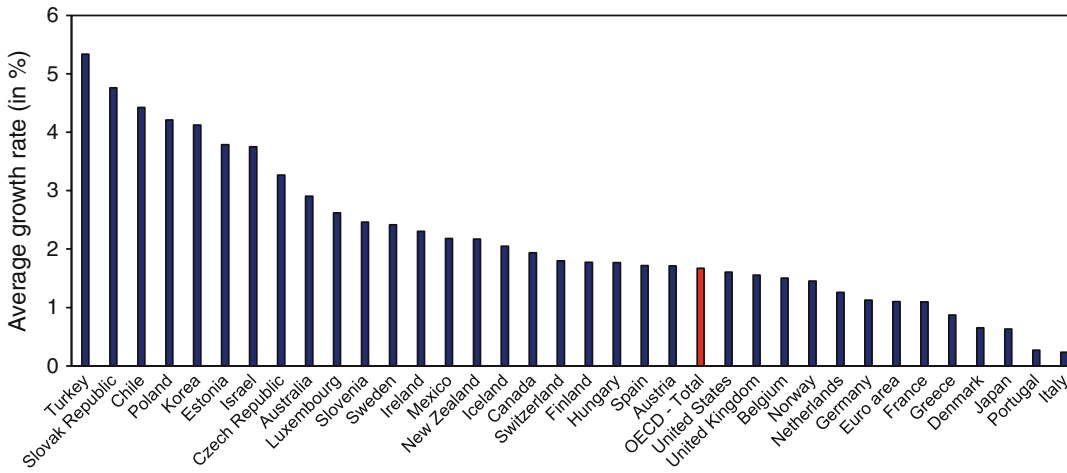

Fig. 6.4 Real GDP per capita growth rates in the OECD countries between 2001 and 2011 (Source: OECD 2013b: 19)

reference to per-capita values is indicated because otherwise the economic performance of regions with very different population sizes (or changes in population size for a certain country over time) cannot be genuinely compared (Faik 2010: 447). Incidentally, alternative standardizations of GDP may be divisions of real GDP by the hours worked or by the number of persons employed (BLS 2012: 9–11).

Figure 6.4 reveals the growth rates of real GDP per capita for the OECD countries between 2001 and 2011. It must be stressed that the amount of economic growth is influenced by the GDP level in the base period. Broadly speaking, it is much easier to double US$1 than US$1 trillion. This leveling effect has to be kept in mind when interpreting Fig. 6.4. For the OECD as a whole, Fig. 6.4 shows an economic (GDP) growth rate of 1.7 % which is approximately 1.5 times the corresponding growth rate in the Euro area (1.1 %) and a little bit more than in the United States (1.6 %) from 2001 to 2011.

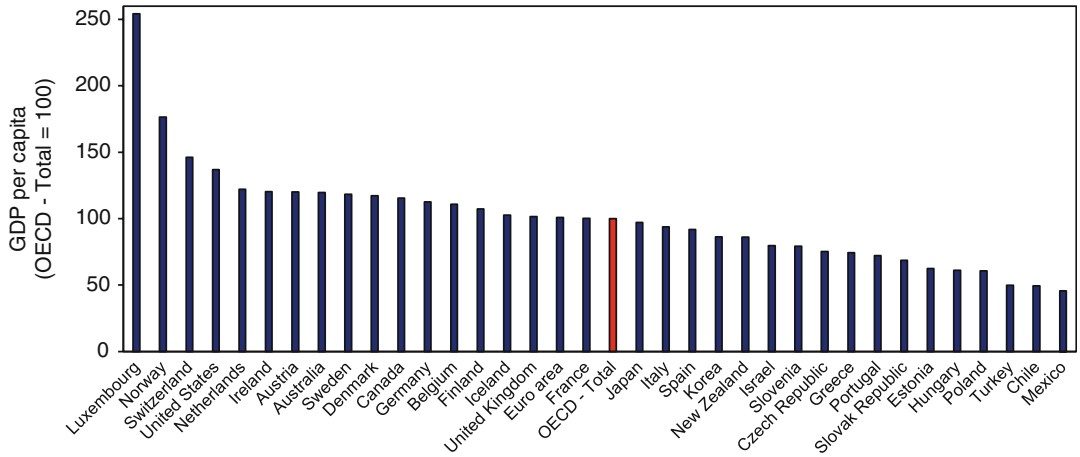

Fig. 6.5 Current GDP per capita in 2011 (OECD – Total = 100) (Source: OECD 2013b: 21)

Figure 6.5 gives an international overview of GDP per capita (derived from current price data) for the OECD countries in 2011 (with GDP per capita in OECD – Total = 100). This figure confirms, at least partly, the "leveling effect" outlined above since the high growth rates in Poland, Chile, the Slovak Republic, and Turkey in Fig. 6.4 correspond to relatively low absolute GDP levels in these countries (as is illustrated in Fig. 6.5). The highest values of GDP per capita are assigned to Luxembourg (remarkably 2.54 times the OECD – Total value), Norway, and Switzerland.

Differentiating the annual growth of real GDP per capita (based on constant local currencies) by selected regions, as the World Bank did, results in the following ranking for 2011–2012 (estimated) and for 2012–2013 (forecast): East Asia & Pacific: 7.5 and 7.9 %, South Asia: 5.4 and 5.7 %, Sub-Saharan Africa: 4.6 and 4.9 %, Europe & Central Asia: 3.0 and 3.6 %, Latin America & Caribbean: 3.0 and 3.6 %, Middle East & North Africa: 0.2 and 2.4 %, and Euro area: −0.4 and −0.1 %. By way of comparison: World as a whole: 2.3 and 2.4 % (World Bank 2013: 72).

Again, it must be stressed that growth rates must be interpreted against the background of absolute GDP (per capita) levels. For instance, in its "2013 world view" (there in Table 1.1), the World Bank gives the following information on aggregated annual NAS income in 2011, and for the afore-mentioned regions mentioned above (in this case: on GNI per capita; regions listed in descending GNI per capita order; in U.S. dollars, conversion based on exchange rates): Euro area: US$38,661; World as a whole: US$9,514; Latin America & Caribbean: US$8,574; Europe & Central Asia: US$7,734; East Asia & Pacific: US$4,248; Middle East & North Africa: US$3,866; South Asia: US$1,313; Sub-Saharan Africa: US$1,258 (ibid: 24).

Not unexpectedly, the correlation between growth rates and absolute levels for the several regions is negative and not extremely close. Measured by Spearman's rank correlation coefficient, it amounts to only approximately -0.5 (author's own calculation). A higher growth rate tends to correspond with a relatively low absolute GDP per capita level.

Another, partly historical ranking is shown in Fig. 6.6 where for some selected countries (real) GDP per capita is calculated over the period 1960–2011. The ranking in 1960 correlates with the one in 2011 by about +0.6, measured using Spearman's rank correlation coefficient once more (author's own calculation). There is, thus, a tendency that the higher a country was ranked in 1960, the higher it was also ranked in 2011. However, there have been some remarkable movements: Singapore, for example, was only ranked 15 in 1960, and in 2011 it was the number

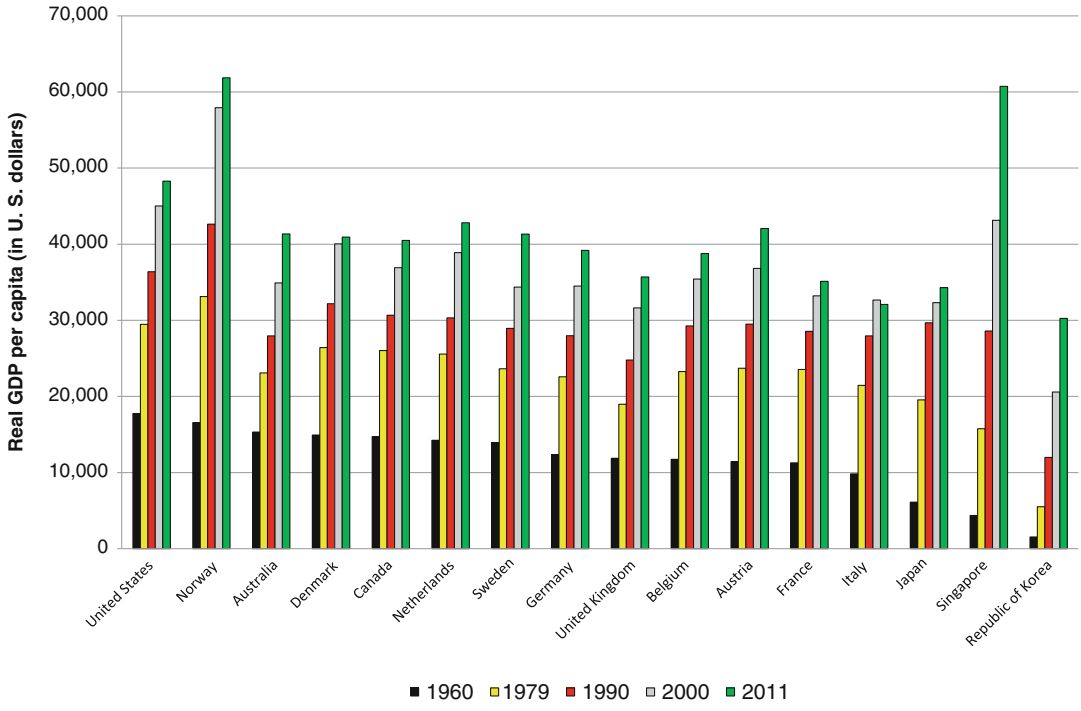

Fig. 6.6 Real GDP per capita for selected countries (in U.S. dollars, purchasing power parities), 1960–2011 (Source: Author's illustration based on BLS 2012: 9)

two of the countries covered. The United States, to give another example, was number one in 1960, but subsequently it lost its lead: in 2011 it was ranked in third place behind Singapore and the new "leader", Norway. There were other noteworthy movements between 1960 and 2011: Canada moved downwards from 5 to 9, and Austria moved up from 11 to 5, illustrating that, over time, quite considerable mobility exists in such GDP rankings.

Another finding is striking: while the relation between the values of GDP per capita between the highest ranked country in Fig. 6.6 (1960: United States, thereafter: Norway) and the lowest ranked country (in each year: Republic of Korea) amounted to 11.5 in 1960, it was only 2.0 in 2011. This indicates that, relatively, the value-related range of GDP per capita decreased over time at least for the countries covered in Fig. 6.6, which is in line with the above finding of a negative correlation between growth rates and absolute income levels for the regions listed in the World Bank's "2013 world view". Broadly speaking, from a relativistic perspective, it seems that the differences between developed and developing countries regarding GDP per capita have diminished in the era of globalization. The extension of foreign direct investments in developing countries, among other reasons, may be the cause of this development.

The cited BLS (2012) report provides additional information on real GDP per employed person and per hour worked. Table 6.1 shows the corresponding values and rankings. I obtained the following Spearman's rank correlation coefficients regarding the several operationalization's: for the correlation between real GDP per capita and real GDP per employed person: +0.79; for the correlation between real GDP per capita and real GDP per hour worked: +0.50; and for the correlation between real GDP per employed person and real GDP per hour worked: +0.69 (Author's own calculations). These values indicate that, in all cases compared, positive correlations exist. In this context, the correlation between real GDP per capita and

Table 6.1 Real GDP per capita, per employed person, and per hour worked for selected countries (in U.S. dollars, purchasing power parities) in 2011 (in *parentheses*: country's position in each *column*)

Country	Per capita	Per employed person	Per hour worked
Norway	61,869 (1)	116,251 (1)	81.47 (1)
Singapore	60,742 (2)	99,415 (3)	41.27 (14)
United States	48,282 (3)	106,541 (2)	60.59 (2)
Netherlands	42,824 (4)	85,437 (6)	59.49 (4)
Austria	42,066 (5)	85,816 (5)	51.45 (9)
Australia	41,340 (6)	80,330 (11)	46.84 (10)
Sweden	41,316 (7)	84,816 (8)	51.61 (8)
Denmark	40,930 (8)	82,378 (9)	53.20 (7)
Canada	40,489 (9)	80,357 (10)	46.61 (12)
Germany	39,186 (10)	77,978 (13)	55.26 (6)
Belgium	38,767 (11)	93,317 (4)	60.17 (3)
United Kingdom	35,688 (12)	76,638 (14)	46.82 (11)
France	35,133 (13)	85,152 (7)	57.70 (5)
Japan	34,294 (14)	68,537 (15)	39.70 (15)
Italy	32,100 (15)	78,813 (12)	44.43 (13)
Republic of Korea	30,254 (16)	62,119 (16)	27.14 (16)

Source: BLS (2012): 9–11

real GDP per hour worked is the weakest one. Whereas real GDP per capita can be roughly interpreted as an indicator of a country's wellbeing, real GDP per hour worked is an indicator of a country's productivity (BLS 2012: 2). For instance, Singapore, which scored second-best regarding real GDP per capita, reveals a relatively low level of real GDP per hour worked (ranked only 14) due to a very high average value for annual hours worked per employed person and for the ratio between employment and population size (ibid: 5). Thus, in this case, a relative high "wellbeing" level is caused by a relatively low productivity level. On the other hand, Norway has the highest real GDP per capita, per employed person and per hour worked out of the countries covered, and the Republic of Korea was ranked in the last place for all GDP normalizations used in Table 6.1.

However, such international comparisons are problematic for several reasons (Brümmerhoff 2002: 238–244):

- The exchange rates or the purchasing power parities may not reflect the "economic power" of the compared countries. For instance, purchasing power parities represent the value of a given basket of goods expressed in a country's currency divided by the monetary value of this basket of goods expressed in the currency of the base country (BLS 2012: 2). Thus, this operationalization presents the problem of selecting an adequate basket of goods for both countries being compared. In the case of the reference to exchange rates, there may be biased relations since currency speculations or the like may lead to an over- or an undervaluation compared with the "true" economic activity in the countries considered (ibid: 19).
- The relation between market-based and "home-made" production may vary between countries. In this context, the importance of informal sectors, which are more relevant for developing than for developed countries, becomes obvious. The share of the informal sector for North Africa and Latin America is estimated at almost or more than a third of total GDP; recent corresponding estimates for Sub-Saharan Africa point to a share of more than half of total GDP, and for Asia (as well as for the Caribbean and for some transition countries like Azerbaijan, Belarus, Bulgaria,

Estonia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, and Moldova) this share amounts to approximately a quarter of total GDP (Charmes 2006: 13–17). The OECD (2002) makes further attempts to measure the influence of informal sectors in general, and it provides measurements of the "underground economy".

- In some countries, some goods are primarily private goods – assessed by market prices (expenditure on health or education in the U.S.), while they are public goods – typically assessed by factor costs – in other countries (for example, in Germany where the social health system pays for most health goods and services and where many educational services are provided and financed by the state).
- The quality of NAS data is very different between countries. This may be due to different national methodologies (BLS 2012: 21). For instance, the World Bank has indicated a widespread range between 1954 and 1974 as the base year for national accounts (Puerto Rico, Barbados) and 2010/11 as the corresponding base year (Tonga) in its data documentation within its "2013 world view" (World Bank 2013: 108–115) where the "base year is the base or pricing period for constant price calculations in the country's national accounts" (ibid: 116). The base year, therefore, is important for calculations of the real GDP or of the real GNI values. This example clearly shows the difficulties in harmonizing national statistics at an international level.

NAS Extensions

Since the 1980s especially, some extensions of the NAS have taken place, for example, more comprehensive coverage of economic activities/effects of the social security systems or of environmental assets.

In several countries, corresponding satellite systems have been established (in the sense of a kind of social indicator system), specifically to analyze additional economic/social activities (Schenau 2009, for the elaborated Dutch environmental accounts). One example is the environmental satellite system SEEA of the UN (SEEA = System of Integrated Environmental and Economic Accounts; UN, 2000) illustrated in Fig. 6.7.

The target of SEEA is to calculate an Eco Domestic Product (EDP) including, beyond GDP, environmental wealth. In this context, the EDP is defined as a net-value variable where, beyond depreciation of capital, depreciation of the environmental assets is taken into account. In concrete terms, this depreciation of the environment is expressed as quantitative reductions (concerning the stocks of plants and animals, etc.) as well as a qualitative deterioration of the

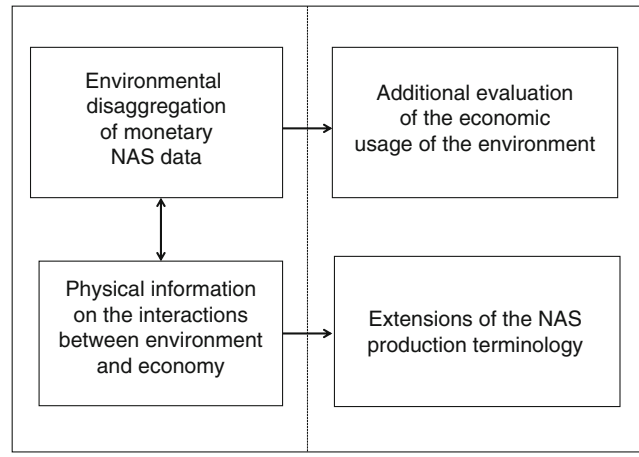

Fig. 6.7 The four elements of the System of Integrated Environmental and Economic Accounts (SEEA) (Source: Brümmerhoff 2002: 230)

natural environment through changes in the use of the land and through the emission of contaminants, etc. – both of which are valued in monetary units.

The EDP calculation is very difficult, and thus, more practically conceptualized environmental satellite systems have been proposed. The latter involves the calculation of capital investment or actual expenditure for purposes of environment protection or similar (Brümmerhoff 2002: 231–233).

Other satellite systems refer to household production. Such systems include domestic or similar work (ibid: 233–236).

Further application examples for satellite systems are (Office for National Statistics 2008: 3):

- the relevance of tourism for a national economy,
- the costs and financing of health care,
- the role of research and development as well as of human capital for a national economy, and
- detailed information on income and expenditure of households and on the distribution of income and expenditure.

Critics of NAS

Often GDP, GNI, etc. are interpreted as wellbeing indicators more or less uncritically, but some *de facto* restrictions exist concerning such an interpretation:

The macroeconomic variables (income, consumption), typically consider only market activities and not, for example, domestic work or "underground economy" activities; a critique which goes back to the famous work of Pigou (1920). For instance, for the OECD countries, average values for the "shadow economy" were estimated at between about 11 % and 15 % of GDP; for transition countries, estimated mean values were between almost 18 % and approximately a third of GDP; the corresponding values for developing countries were even higher (Schneider and Enste 2000: 7 & 10–11). These values illustrate the importance of such omitted activities.

- The NAS variables do not necessarily reflect the societal utility connected with the underlying activities by neglecting, for example, the utility of leisure time. An indication that the GDP may only reflect "utility" to a minor degree can be seen in the "Easterlin paradox" (Easterlin 1995) which finds only a weak positive correlation between "utility" in the sense of "happiness" or of "life satisfaction" on one hand, and GDP on the other hand (Pfaff and Harata 2013).
- It is debatable whether environmental recovery measures should indicate a higher societal wellbeing level as is currently the case (via higher values, for example, of GDP). It sounds paradoxical: natural disasters like tsunamis, earthquakes, floods, tornados or the like promote flow-based GDP growth rather than diminishing it because rebuilding measures affect GDP positively whereas damage caused by natural disasters influence (current and future) GDP values "only" by reducing the productivity capacities of the economy. For instance, Horwich (2000) has shown that in the context of the Kobe earthquake in Japan in 1995, rebuilding measures *ceteris paribus* caused economic (GDP) growth and overcompensated economic losses so that, in total, Japanese GDP in 1995 grew at a higher rate than in 1994.
  In the wake of a natural disaster, to some degree, resources are allocated to production or to recovery measures in a different way than would have been the case otherwise. For instance, instead of building new houses or new streets, the government uses the underlying resources (workers, machines, etc.) to cope with the destruction caused by the natural disaster. This pure substitution effect does not generate a significantly higher GDP, assuming similar prices for the alternatively produced goods. However, the government, typically, spends *additional* money for

recovery measures. Through the governmental expenditure multiplier, the GDP is increased in this case, since each additional dollar the government spends causes a chain of productive activities, increasing GDP in the amount by more than one dollar (Faik 2010: 400–403, or Samuelson and Nordhaus 1995: 464–465).

- Another critique is that government expenditure (for example, expenditure on teachers) is continuously assessed by factor costs and not by market prices. This is an inconsistency compared to the principle of market-reference otherwise valid in the National Account Systems (Faik 2010: 350–352).
- Overall, a very strong, more general criticism is that "GDP represents the excessive materialism of a society devoted to endless production of useless goods" (Samuelson and Nordhaus 1995: 416). The latter refers to the consideration of goods and services within the concept of GDP, independent of their societal relevance or, more strongly, independent of moral standards. For example inhumane goods, like bombs, produced for act of wars are ranked equally with goods and services like the care of old people, services which, from a moral perspective, have a high societal relevance. Thus, a criticism of the concept of GDP is that it does not consider the quality of life in such cases.

Such deficiencies of the traditional National Accounting Systems have led to alternative concepts, especially to multidimensional (aggregated) wellbeing indicators. The OECD (2008) describes the construction of such composite indicators. Employing these indicators, net economic welfare is used as a basis for a meaningful measure of national output (Samuelson and Nordhaus 1995: 417–418). On this basis, Nordhaus and Tobin (1973) corrected the GDP for most of the limitations described above within the framework of their MEW indicator (MEW = Measure of Economic Welfare), or the United Nations proposed the Human Development Index (HDI) in the 1990s which combines GDP with measures regarding health and educational achievements (Oltmanns et al. 2012: 4). Other approaches pointing in a similar direction are the LIMEW indicator (LIMEW = Levy Institute Measure of Economic Wellbeing), which consists of base income (defined as gross money income minus governmental cash transfers and minus property income), income from wealth (including an annuity from non-home wealth), net government expenditure (defined as transfers plus public consumption and minus taxes), and household production (Sharpe et al. 2011; Wolff et al. 2011), or the indicator "IEWB" (IEWB = Index of Economic Wellbeing) which includes per-capita consumption, per-capita wealth, economic inequality, and economic security (Osberg and Sharpe 2009).

Another notable corresponding indicator is the Index of Sustainable Economic Welfare (ISEW; Daly and Cobb 1989). This indicator is characterized by several extensions beyond the concepts of GDP or GNI; it captures personal income inequality as well as considers the value of leisure time, the costs of environment, expenditure for maintaining the environment, expenditure for education, etc. However, the weighting of these ISEW elements is very difficult insofar as the selection of the weighting scheme is a highly normative decision (Faik 2010: 352 for a description and an evaluation of ISEW).

The report of the Stiglitz et al. Commission (2009) points in the same direction and argues in favor of a wellbeing measurement beyond GDP (for a corresponding European initiative, see Commission of the European Communities 2009), for example, by taking into account subjective wellbeing categories like happiness. It brought many of the well-known theoretical and methodical arguments into the political discussion, more or less for the first time – at least in such an extensive manner (García Díez 2012: 2).

The 12 proposals of the Stiglitz-Sen-Fitoussi Commission belong to three main categories: economic indicators, the quality of life, and

sustainability/environment (Stiglitz et al. 2009; Braakmann 2010: 609–613).

Five proposals are concerned with "Economic Indicators":

(a) to concentrate on income and consumption by referring to a net income concept; by taking into account terms-of-trade effects; by using hedonistic price deflators (for considering qualitative differences between the several goods and services), and by ignoring expenditure which only maintains the overall consumption level;
(b) to stress the perspective of private households;
(c) to deal with wealth data to a greater extent than hitherto;
(d) to consider the personal distribution of income, of consumption, and of wealth, and
(e) to integrate household production.

Five proposals have also been made concerning "Quality of Life":

(a) Quality of life should be regarded as multi-dimensional with seven dimensions: (1) health, (2) education, (3) personal activities, (4) political voice and governance, (5) social connections, (6) environmental conditions, and (7) personal and economic insecurity (see also the corresponding listing in Oltmanns et al. 2012: 5).
(b) The inequality levels of the several dimensions of the quality of life should be calculated.
(c) The interactions between the several dimensions should be considered.
(d) The several dimensions should be aggregated into a composite indicator.
(e) Subjective (beyond "objective" indicators) indicators should be taken into account.

Last but not least, "Sustainability" proposes

(a) a stock-based approach to measure the physical as well as the monetary values of nature, social wealth, business assets, and wealth relating to human capital, and
(b) to bring together the corresponding selected physical indicators within a self-contained dataset.

Unlike the suggestions of the Stiglitz-Sen-Fitoussi Commission, Eurostat does not consider wealth or consumption within its proposal of an EU-wide wellbeing indicator set (Eurostat 2010), and the same holds true for the OECD measurement of social wellbeing (OECD 2011).

Globalization and NAS

In addition to the critique above, the effects of globalization challenge the NAS per se.

Corresponding challenges exist concerning the allocation of value added (and income) in national economies and regarding the specialization of supply chains. These challenges are due to the lowering of trade barriers, the accessibility and cheapness of foreign travel, the more rapid conduct of business abroad via internet, and the increased ability of companies and people to operate abroad.

In the era of globalization, production functions spread across national borders as a result of the rise in multinational entrepreneurship ("multinationals"). Such multinationals often shift their economic activities (sometimes virtually rather than physically) abroad in order to minimize their overall liability and their tax burden. This causes problems in calculating Gross Value Added on a national scale. The same holds for intra-company flows concerning research and development (R&D) services or for large cross-border financial transactions within multinationals, typically in the sense of financing vehicles for non-resident mother companies (UN 2011: 1–7). For example, in the United States, "firms that either own foreign affiliates or are majority-owned by foreign direct investors account for nearly 30 per cent of value added, 60 per cent of exports, and over 50 per cent of imports" (ibid: 13).

Overview 6.2 summarizes the UN compilation concerning most of the globalization effects on NAS. The UN established a working group to examine the impact of globalization on

Overview 6.2 The relationships between globalization and NAS

Global phenomenon	National accounts items most affected
Arrangement within multinational enterprises, including transfer pricing	Allocation of Gross Value Added (GVA) and GDP across countries; international trade in goods and services; investment income and financial flows
Foreign direct investment	Investment income and financial flows; international investment position
Special purpose entities	GDP in relation to GNI, international trade in services; investment income and financial flows; international investment position
Goods sent abroad for processing	GVA and GDP; international trade in goods and services
Merchanting	International trade in goods (and possibly services)
International investment positions	GVA and GDP; capital formation; international trade in assets and related services
Quasi-transit trade	GVA and GDP; international trade in goods
International labormovement and remittances	GDP; GNI; Gross National Disposable Income; international transfers
Ownership ofpropertyabroad	International trade in services; investment income and financial flows; international investment position
Internet trading	International trade in goods and services; household consumption

Source: UN (2011: 2)

National Accounts (UN 2013), specifically the aspects stated in Overview 6.2.

Concluding Remarks

The article described and evaluated the internationally harmonized System of National Accounting. It became obvious that the calculated aggregated incomes are valuable for comparing different regions with each other or for comparing regions over time regarding their material living standards. However, the results of these accounting systems have a number of deficiencies so that they should only be considered with caution as wellbeing measures.

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The Human Development Index: Objective Approaches (2)

7

Kenneth C. Land

Introduction

The **Human Development Index (HDI)** is a composite social indicator/wellbeing index based on life expectancy, education, and income statistics at the country or national level. Its intellectual/disciplinary roots lie in welfare economics, development economics, and the social indicators movement of the 1960s and 1970s. The objective of the HDI is to rank countries on a scale of human development.

The HDI has been produced and updated yearly since 1990 by the **United Nations Human Development Programme (UNDP;** http://www.undp.org/content/undp/en/home.html). The UNDP is the global development network of the United Nations, operating in 2013 in 177 countries and working with them on their own solutions to global and national development challenges. As countries develop local capacity, they can draw on the expertise and help of the people of the UNDP and its array of partners. The UNDP is an executive board within the United Nations General Assembly, and its Administrator is the third highest-ranking official of the United Nations after the Secretary-General and Deputy Secretary-General. The UNDP works in four main areas: poverty reduction and achieving the **Millennium Development Goals (MDGs)**; democratic governance; crisis prevention and recovery; environment and sustainable development. The MDGs include eight goals for the year 2015:

1. eradicate extreme poverty and hunger;
2. achieve universal primary education;
3. promote gender equality and empower women;
4. reduce child mortality;
5. improve maternal health;
6. combat HIV/AIDS, malaria, and other diseases;
7. ensure environmental sustainability; and
8. develop a global partnership for development.

With the institutional sponsorship and consistent support of the UNDP and the efforts of the HDI project team to update and improve the index, the HDI has become one of the most well-known composite social indicators. This chapter describes the development and evolution of the HDI, the data and methods used in its calculation, its contributions to the assessment of global wellbeing, and the extent to which it relates to these MDGs.

The chapter is organized as follows. This introduction is followed by a section on the intellectual and institutional roots of the HDI. Next is a section describing the World Wide Web site for the HDI and the many documents on the HDI available in electronic or print form from this Website. Then the HDI methodology, including the data used as input to the HDI and the statistical methodology used for its

K.C. Land (✉)
Center for Population Health and Aging, Duke University, 90088, Durham, NC 27708-0088, USA
e-mail: kland@soc.duke.edu

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calculation, is described. A section on indices that have been developed by the UNDP to supplement the HDI follows. Next are sections on some empirical findings from empirical calculation and studies using the HDI and findings on trends in human development. A section on criticisms and an assessment of the HDI concludes the chapter.

Intellectual and Institutional Roots of the Human Development Index

Utility, Welfare Economics, and the Capabilities Approach

A first intellectual touchstone of the HDI is the neo-classical economics concept of utility and its use in the development of welfare economics. As articulated in Bentham's (1789) classical statement, the philosophy of Utilitarianism describes human behavior as motivated by individuals' assessments of their personal pleasure and pain – with the net balance being *utility*. From this, society's welfare could be described as the sum of these utilities. It follows that optimal policies are those that lead to "the greatest happiness for the greatest number." In this classical statement, utility theoretically could be summed across individuals to determine "social welfare." Bentham's statement also included a version of what would come to be known as *diminishing marginal utility* – each new unit of goods, income, or wealth adds to an individual's utility a little bit less than the last one.

In the two centuries subsequent to Bentham (1789), utilitarianism ebbed and flowed in various schools of economic thought. Surviving to today's neo-classical economics, however, are mathematical formalizations of the proposition that the goal of individuals is to maximize utility and of Bentham's idea that utility is concave or diminishing on the margins (Stanton 2007). Through the middle of the twentieth century, these ideas formed the basis of welfare economics with welfare identified with income. More recently, economists have come to recognize welfare and wellbeing as distinct concepts:

> *Welfare* is the evaluation assigned by the individual to income or, more generally, to the contribution to his wellbeing from those goods and services that he can buy with money. Next to material resources, other aspects determine the quality of our life. We can think of our health, the relationship with our partner and family and friends, the quality of our work (job satisfaction), our political freedom, our physical environment and so on. We shall call this comprehensive concept *wellbeing* or *quality of life*. (van Praag and Frijters 2002, p. 127)

The work of Amartya Sen (Professor of Economics, Harvard University, Nobel Laureate in Economics, 1998) and Martha Nussbaum (Ernst Freund Distinguished Service Professor of Law and Ethics at the University of Chicago) is credited with articulating this distinction (Nussbaum and Sen 1992; Sen 1987), which has been studied more formally by others (e.g., van Praag and Frijters 2002).

Specifically, Sen and Nussbaum developed the *capabilities approach to human wellbeing*, which focused attention on what human beings can do and be, instead of on what they have. By moving the welfare economics discussion away from utility and towards capabilities, Sen and Nussbaum could distinguish means (e.g., money) from ends (e.g., wellbeing or freedom). Sen and Nussbaum defined *capabilities* as the abilities, the power of individuals to do certain things, to obtain what they desire, to achieve desired states of being, to utilize the resources they have in the way they desire and to be who they want to be (Stanton 2007, p. 9). By comparison, *goods* are the things that individuals possess. Capabilities facilitate using goods in ways that are meaningful to individuals. Sen uses the term *functionings* for the capabilities that individuals actually uses or participates in, while the more comprehensive capabilities term refers to the full set of functionings that are feasible or can be used by a given individual or group of individuals. For example, with an

individual's capabilities set, a fish-based diet may be the only choice; with another set, fish may be one of many dietary choices. Capabilities also can have intrinsic value by adding worthwhile options or positive freedoms to individual's lives (Sen 1999; Crocker 1992, 1995). In his various publications, Sen did not identify a list of capabilities or functionings, opting instead for the use of a democratic process to determine such a list. Nussbaum (2000), however, proposed a list of ten capabilities: (1) life; (2) bodily health; (3) bodily integrity; (4) senses, imagination, and thought; (5) emotions; (6) practical reason; (7) affiliation; (8) other species; (9) play; and (10) control over one's environment.

The Social Indicators Concept and Movement

While the capabilities approach draws upon a long tradition of economic and philosophical thought on utility and welfare economic, it did not lead to the development of the HDI in isolation. *A second intellectual root of the HDI is what came to be called the social indicators movement of the 1960s and 1970s*. The term *social indicators* was born and given its initial meaning in an attempt, undertaken in the early 1960s by the American Academy of Arts and Sciences for the National Aeronautics and Space Administration, to detect and anticipate the nature and magnitude of the second-order consequences of the space program for American society (Land 1983, p. 2; Noll and Zapf 1994, p. 1). Frustrated by the lack of sufficient data to detect such effects and the absence of a systematic conceptual framework and methodology for analysis, some of those involved in the Academy project attempted to develop a system of social indicators – statistics, statistical series, and other forms of evidence – with which to detect and anticipate social change as well as to evaluate specific programs and determine their impact. The results of this part of the Academy project were published in a volume (Bauer 1966) bearing the name *Social Indicators*.

The appearance of the Bauer (1966) volume was not an isolated event. Indeed, at the end of the 1960s, the enthusiasm for the development of a broad array of social indicators was sufficiently strong and broad-based for Duncan (1969, p. 1) to write of the existence of a social indicators movement. In the early 1970s, this led to numerous developments, including the publication of several major efforts to define and develop a methodology for the measurement of indicators of subjective wellbeing (Campbell and Converse 1972; Andrews and Withey 1976; Campbell et al. 1976); the commencement of various national government series of comprehensive social indicators books of charts, tables, and limited analyses (e.g., U.S. Department of Commerce 1974, 1978, 1980); the initiation of several continuing data series based on periodic sample surveys of the national population (e.g., the annual National Opinion Research Center's U.S. General Social Survey); the publication in 1974 of the first volume of the international journal *Social Indicators Research*; and the spread of social indicators/social reporting to numerous other nations and international agencies, such as the United Nations and the Organization for Economic Cooperation and Development (1977).

The social indicators movement was motivated by three principles:

- First, it is important to monitor changes over time in a broad range of social phenomena that extend beyond traditional economic indicators and include indicators of quality of life (Andrews 1989, p. 401; Noll and Zapf 1994, p. 5).
- A second principle that was part of the social indicators movement from the outset is that a critically important role of social indicators in contemporary democratic societies is public enlightenment through social reporting both to the general public as well as policy makers (Bell 1969; Biderman 1970; Land 1996).
- A third principle is that it also is important to document the consequences that are

reasonably attributable to changes in a series. This includes the systematic use of social indicators to forecast trends in social conditions and/or turning points therein (Land 1983, p. 21). To be sure, projections and forecasts are filled with uncertainties. Techniques range from the naïve extrapolation of recent trends to futuristic scenario construction to complicated model-building with regression, time series, or stochastic process techniques. Moreover, there appear to be intrinsic limits to the accuracy of forecasts in large-scale natural and social systems (Land and Schneider 1987). But demands for the anticipation of the future (at a minimum, for the description of "what will happen if present trends continue"), for foresight and forward thinking in the public and private sectors, and for the assessment of critical trends appear to be an intrinsic part of many contemporary societies.

Three major categories of social indicators have been identified (Land 2000). First, based on the premise that social indicators should relate directly to social policymaking considerations, an early definition by economist Mancur Olson, the principal author of *Toward a Social Report*, characterized a social indicator as a "...statistic of direct normative interest which facilitates concise, comprehensive and balance judgments about the condition of major aspects of a society" (U.S. Department of Health, Education, and Welfare 1969, p. 97). Olson went on to state that such an indicator is, in all cases, a direct measure of welfare and is subject to the interpretation that if it changes in the "right" direction, while other things remain equal, things have gotten better, or people are better off. Accordingly, by this definition, statistics on the number of doctors or police officers could not be social indicators, whereas figures on health or crime rates could be. In the language of policy analysis (Fox 1974, pp. 120–123), social indicators are "target" or "output" or "outcome" or "end-value" variables, toward changes in which some public policy (program, project) is directed. Such a use of social indicators requires (Land 1983, p. 4) that (a) members of a society agree about what needs improving; (b) it is possible to decide unambiguously what "getting better" means; and (c) it is meaningful to aggregate the indicators to the level of aggregation at which the policy is defined. In recognition of the fact that various other meanings have been attached to the term social indicators, the tendency among recent authors is to use a somewhat different terminology for the class of indicators identified by Olson. For instance, Land (1983, p. 4) termed this the class of *normative welfare indicators*. Building on the Olson approach, MacRae (1985, p. 5) defined *policy indicators* as "measures of those variables that are to be included in a broadly policy-relevant system of public statistics."

A second class of social indicators has its roots in the work of Angus Campbell and Philip E. Converse in the early 1970s. In *The Human Meaning of Social Change* (1972), they argued that the direct monitoring of key social-psychological states (attitudes, expectations, feelings, aspirations, and values) in the population is necessary for an understanding of social change and the quality of life. In this approach, social indicators seek to measure psychological satisfaction, happiness, and life fulfillment by using survey research instruments that ascertain the subjective reality in which people live. The result may aptly be termed *life satisfaction, happiness*, or, more generally, *subjective wellbeing indicators*. The Campbell-Converse approach led to two major methodological studies in the 1970s (Andrews and Withey 1976; Campbell et al. 1976) and a subsequent edited volume (Andrews 1986) exploring the utility of various survey and analytic techniques for mapping individuals' feelings of satisfaction with numbers aspects ("domains") of their experiences. These studies examined domains ranging from the highly specific (house, family, etc.) to the global (life-as-a-whole). A large number of other studies and applications of these concepts and techniques have appeared over the past four decades (for reviews, see Diener 1994; Diener et al. 1999; or Veenhoven 1996) and continue to appear – one or more studies of

subjective wellbeing indicators can be found in almost any issue of the journal *Social Indicators Research* and in the *Journal of Happiness Studies*, which began publication in the year 2000. Research on the related concept of happiness as an index of wellbeing was surveyed by Veenhoven (1984); see also Sirgy (2011) for a review of research on subjective wellbeing social indicators and conceptualization thereof.

The principle that the link between objective conditions and subjective wellbeing (defined in terms of response to sample survey or interview questions about happiness or satisfaction with life-as-a-whole) is sometimes paradoxical and therefore that subjective as well objective states should be monitored is well established in the social indicators literature. However, numerous studies of the measurement and psychodynamics of subjective wellbeing over the past three decades have led to a better understanding of this construct (see, e.g., Cummins 1995, 1998). While research continues and it would be incorrect to say that the debates have been settled, it appears that this construct may have both *traitlike* (i.e., a durable psychological condition that differs among individuals and contributes to stability over time and consistency across situations) and *statelike* (i.e., a condition that is reactive to situational differences) *properties* (see, e.g., Stones et al. 1995; Veenhoven 1994, 1998). The connection of subjective wellbeing to income levels has been a particularly intriguing problem for social indicators researchers ever since Easterlin's (1973) finding that income differences between nations predicted national differences in happiness but that the association of happiness with income within countries was much weaker (for a review of this research literature, see Ahuvia and Friedman 1998).

A third approach to social indicators focuses on social measurements and analyses designed to improve our understanding of what the main features of society are, how they interrelate, and how these features and their relationships change (Sheldon and Parke 1975, p. 696). This produces *descriptive social indictors* – indices of the state of society and changes taking place therein. Although descriptive social indicators may be more or less directly (causally) related to the wellbeing goals of public policies or programs and thus include policy or criterion indicators, they are not limited to such uses. For instance, in the area of health, descriptive indictors might include preventive indicators such as the percent of the population that does not smoke cigarettes, as well as criterion indicators such as the number of days of activity limitations in the past month or an index of self-reported satisfaction with health. Ferriss (1990) gave a compilation of descriptive indicators for the United States at the end of the 1980s; regularly published national social indicator compilations for other nations similarly contain numerous examples.

The various statistical forms that descriptive social indicators can take were described by Land (1983, p. 6). These can be ordered by degree of abstraction from those that require only one or two data series and little processing (e.g., an age-specific death rate) to those that involve more complicated processing into a single composite or summary index (e.g., years of life-expectancy at age x, years of active or disability-free life expectancy at age x). Descriptive social indicators can be formulated at any of these levels of abstraction. Moreover, as described in Juster and Land (1981), these indicators can, at least in principle, be organized into demographic- or time-budget-based systems of social accounts.

The social indicators movement led in the 1970s to the construction of various *composite wellbeing/quality of life (QOL) indicators*, e.g., Liu's (1976) list of quality of life indicators and the associated composite quality of life (QOL) index ranking of U.S. metropolitan areas. As will be described next, this line of analysis quickly diffused into development economics.

Development Economics and the United Nations Human Development Programme

In brief, the ferment of concepts of social indicators and their various social reporting and

social policy functions in the 1960s and 1970s together with the long tradition of economic and philosophical thought on utility and welfare economics provided a fertile background for the development of the capabilities approach to wellbeing and the initiation of the HDI. *A third conceptual and institutional cornerstone is development economics*. This took two forms. The first was conceptual and relates to the question of how to measure human wellbeing at the national level. Since the middle of the twentieth century, the most common measure of average human wellbeing at the country or national level is national income, usually expressed as per capita gross national product (GNP) or per capita gross domestic product (GDP).

The objective of measures of national income is to add up the monetary value all of the goods and services exchanged in a particular country in a given year. GNP, which sums the monetary value of all consumption, investment, and government spending by a country's citizens whether within the national territory or not, is the most comprehensive national income measure. GDP is more restrictive, measuring all consumption, investment, and government spending within a country, plus exports minus imports, regardless of the citizenship of the consumers or investors. A number of conceptual problems have been identified with regard to using GDP or GNP as a measure of human wellbeing. As Stanton (2007, p. 11) notes, these statistics: "(1) only register monetary exchanges; (2) equate goods with commodities that are not 'goods' but 'bads,' like nuclear weapons, the production of which tends to lower social welfare; (3) count both addictions and cures, or 'anti-bads,' like the costs of cleaning up petroleum spills; (4) treat natural resources as free and limitless; (5) place no value on leisure-time; (6) ignore freedom and human rights; and (7) ignore the distribution of income within the society (Hicks and Steeten 1979; UNDP 1990)."

A key point is that, in development economics in the decades immediately following World War II (the 1950s and 1960s), economic growth, as measured by changes in GDP, was the principal criterion or metric of development or progress. With the emergence of the social indicators movement in the 1960s and 1970s and its objectives of creating more salubrious measures of wellbeing and the quality of life than the GNP, this use of the GNP began to be questioned (Hicks and Steeten 1979).

At this point, a second form by which development economics was instrumental in the development of the HDI was institutional, in the form of organizations the mission of which is to monitor and promote economic development and wellbeing. A leader in this development was a United Nations-Economic Committee and Social Council, Committee for Development Planning (1975) report that ranked 140 countries by adding the ranks together for seven indicators: two social (literacy and life expectancy) and five economic (energy, the manufacturing share of GDP, the manufacturing share of exports, employment outside of agriculture, and number of telephones). This was followed by Morris's (1979) Physical Quality of Life Index (PQLI), the objective of which was to measure whether a minimum set of human needs was being met by the world's poorest people. The PQLI combined infant mortality, life expectancy at age 1 year, and basic literacy, transforming each indicator into an index by comparing the level to a fixed range of possible levels, and then taking the average of the three components. According to Morris (1979, p. 49), "The extremes that define each index affect the placing of countries on that particular index as well as on the composite index." Where data permitted, the PQLI also presented sub-national measures by gender and by region.

The Human Development Index at the Confluence of Developments in Welfare Economics, Social Indicators, and Development Economics

Given this background – Sen and Nussbaum's conceptual innovations in welfare economics, the general thrust of the social indicators movement towards the development of better indices of human wellbeing and the quality of life, and

the questioning of the use of GNP and GNP-related measures as the principal criterion for measuring development – Mahbub ul Haq (1934–1998) directed the "human development project" of the UNDP in the late-1980s. This project sought to develop a new conceptualization of human wellbeing that went beyond national income and measures such as GDP and to make available measures of wellbeing based on the new definition. The project produced its first *Human Development Report (HDR 1990)* in 1990. It contains (UNDP 1990, p. 9) the following articulation of the critiques of national income-based measures summarized above:

> First, national income figures, useful though they are for many purposes, do not reveal the composition of income or the real beneficiaries. Second, people often value achievements that do not show up at all, or not immediately, in higher measured income or growth figures: better nutrition and health services, greater access to knowledge, more secure livelihoods, better working conditions, security against crime and physical violence, satisfying leisure hours, and a sense of participating in the economic, cultural and political activities of their communities. Of course, people also want higher incomes as one of their options. But income is not the sum total of human life.

HDR 1990 adopted the Sen-Nussbaum capabilities approach to wellbeing by stating that the human development process is one of enlarging people's choices. It then focused on three essential capabilities: a long and healthy life, knowledge, and "access to resources needed for a decent standard of living" because, "If these essential choices are not available, many other opportunities remain inaccessible" (UNDP 1990). *HDR 1990* then described the HDI, the data and methods by which it was constructed, and the numerical results of its calculation for some 130 countries. As a consultant on *HDR 1990*, Sen reportedly (Stanton 2007, p. 14) wrote that at first he did not see the point of a crude composite index like the HDI, especially against the backdrop of the wealth of information that the UNDP was planning to include in the report to which Haq replied, "We need a measure of the same level of vulgarity as GNP – just one number – but a measure that is not as blind to social aspects of human lives as GNP is."

The *Human Development Reports* and the HDI

Originally, in the 1990s, the *Human Development Reports* (*HDRs*; the *HDRs* were published annually from 1990 to 2011 and then 2013; a separate report was not issued for 2012) were published as printed volumes. More recently, with the development of the World Wide Web, the *HDRs* are available both in printed volumes and electronically on the UNDP website. The general website for the *Human Development Reports* is: http://hdr.undp.org/en/, from which electronic files of all of the *HDRs* can be accessed and printed and/or ordered in printed and bound form. Since the Website will be the source of the *HDRs* most readily accessible to readers, selections from the Website will be drawn upon in this and the remaining sections of this chapter.

The Human Development tab of the general *HDRs* Website leads to an About Human Development Webpage which states:

> The first *Human Development Report* in 1990 opened with the simply stated premise that has guided all subsequent Reports: "People are the real wealth of a nation." By backing up this assertion with an abundance of empirical data and a new way of thinking about and measuring development, the *Human Development Report* has had a profound impact on policies around the world.

It then contains the following quotes from Amartya Sen:

> Human development, as an approach, is concerned with what I take to be the basic development idea: namely, advancing the richness of human life, rather than the richness of the economy in which human beings live, which is only a part of it.

and from Helen Clark, Administrator, UNDP:

> That was the original vision and remains the great achievement of the creators of the *Human Development Reports*, Mahbub ul-Haq of Pakistan and

> his close friend and collaborator, Amartya Sen of India, working with other leading development thinkers. Their concept has guided more than 20 years of global *Human Development Reports*, more than 600 *National Human Development Reports* – all researched, written and published in their respective countries – as well as the many provocative regionally

The *Human Development Reports* Main Page has several other tabs for linked Webpages:

- REPORTS (1990–2013)
- INDICES AND DATA
- COUNTRIES
- EVENTS
- MEDIA
- ABOUT US
- SEARCH

Each of these tabs leads to other Webpages with many more details on their various subjects.

The *Human Development Reports* Main Page highlights some features of the *2013 Human Development Report* (a separate report was not prepared for 2012), the theme of which is "The Rise of the South: Human Progress in a Diverse World", stating:

> China has already overtaken Japan as the world's second biggest economy while lifting hundreds of millions of its people out of poverty. India is reshaping its future with new entrepreneurial creativity and social policy innovation. Brazil is lifting its living standards through expanding international relationships and antipoverty programs that are emulated worldwide. But the "Rise of the South" analyzed in the Report is a much larger phenomenon: Turkey, Mexico, Thailand, South Africa, Indonesia and many other developing nations are also becoming leading actors on the world stage

The REPORTS tab on the *Human Development Report*s Main Page leads to a page that describes 24 years of *Human Development Reports* (1990–2011 and 2013) and has Webpage links to descriptions of the reports, PDFs of the texts of the global and regional reports, and thematic maps on various topics. Printed copies of the Annual Report also can be ordered in any of the official United Nations languages.

The theme of the *Human Development Report 2011* is *Sustainability and Equity: A Better Future for All*, with the description:

> The *2011 Human Development Report* argues that the urgent global challenges of sustainability and equity must be addressed together – and identifies policies on the national and global level that could spur mutually reinforcing progress towards these interlinked goals. Bold action is needed on both fronts, the Report contends, if the recent human development progress for most of the world's poor majority is to be sustained, for the benefit of future generations as well as for those living today. Past Reports have shown that living standards in most countries have been rising – and converging – for several decades now. Yet the 2011 Report projects a disturbing reversal of those trends if environmental deterioration and social inequalities continue to intensify, with the least developed countries diverging downwards from global patterns of progress by 2050.
>
> The Report shows further how the world's most disadvantaged people suffer the most from environmental degradation, including in their immediate personal environment, and disproportionately lack political power, making it all the harder for the world community to reach agreement on needed global policy changes. The Report also outlines great potential for positive synergies in the quest for greater equality and sustainability, especially at the national level. The Report further emphasizes the human right to a healthy environment, the importance of integrating social equity into environmental policies, and the critical importance of public participation and official accountability. The 2011 Report concludes with a call for bold new approaches to global development financing and environmental controls, arguing that these measures are both essential and feasible.

The HDI Methodology

The HDI and Its Revisions

Before describing some of the substantive findings from the 2011, 2013, and prior *HDRs*, it is important to describe the changes in the methodology of the HDI introduced in 2010. The Indices and Data page of the Website states:

The first *Human Development Report* introduced a new way of measuring development by combining indicators of life expectancy, educational attainment and income into a composite human development index, the HDI. The breakthrough for the HDI was the creation of a single statistic which was to serve as a frame of reference for both social and economic development. The HDI sets a minimum and a maximum for each dimension, called goalposts, and then shows where each country stands in relation to these goalposts, expressed as a value between 0 and 1.

This is followed by the graphic:
and the descriptions (italics added):

The *education component of the HDI* is now measured by *mean of years of schooling for adults aged 25 years* and *expected years of schooling for children of school entering age*. Mean years of schooling is estimated based on educational attainment data from censuses and surveys available in the United Nations Educational, Scientific, and Cultural Organization Institute for Statistics database and Barro and Lee (2010) methodology. Expected years of schooling estimates are based on enrolment by age at all levels of education and population of official school age for each level of education. Expected years of schooling is capped at 18 years. The indicators are normalized using a minimum value of zero and maximum values are set to the actual observed maximum value of mean years of schooling from the countries in the time series, 1980–2010, that is 13.1 years estimated for Czech Republic in 2005. Expected years of schooling is maximized by its cap at 18 years. The education index is the geometric mean of two indices.

The *life expectancy at birth component* of the HDI is calculated using a minimum value of 20 years [in the original HDI formula given below, a minimum of 25 years was used] and maximum value of 83.4 years. This is the observed maximum value of the indicators from the countries in the time series, 1980–2010. Thus, the longevity component for a country where life expectancy birth is 55 years would be 0.552.

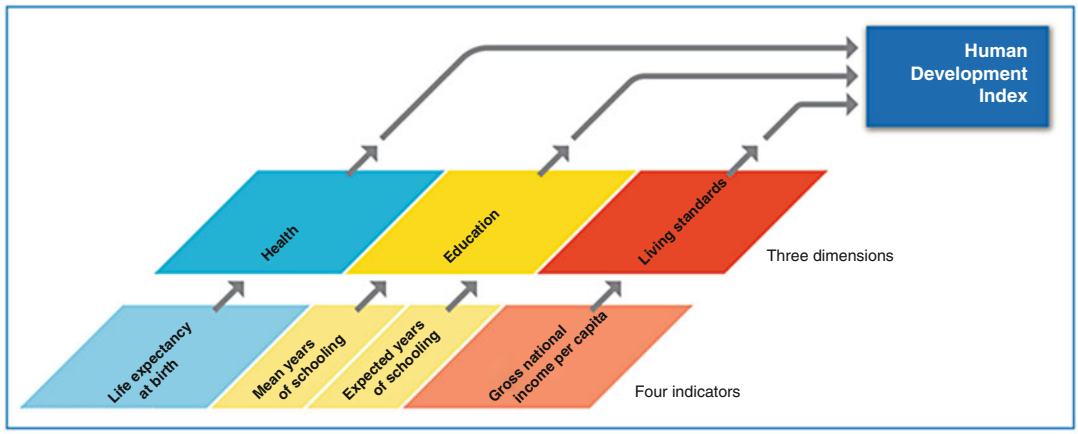
For the *wealth component*, the goalpost for minimum income is $100 (PPP) and the maximum is $107,721 (PPP), both estimated during the same period, 1980–2011.

The *decent standard of living component* is measured by GNI per capita (PPP$) instead of GDP per capita (PPP$) The HDI uses the logarithm of income, to reflect the diminishing importance of income with increasing GNI. The scores for the three HDI dimension indices are then aggregated into a composite index using geometric mean.

As noted above in the section on the intellectual and institutional roots of the HDI, it was Sen and Nussbaum's conceptual work on human capabilities and functionings for a productive

Components of the Human Development Index

The HDI—three dimensions and four indicators



Note: The indicators presented in this figure follow the new methodology, as defined in box 1.2.
Source: HDRO.

and healthy life that provided the underlying conceptual framework of the HDI. The capabilities approach focuses on positive freedom, a person's actual ability to be or do something, rather than on negative freedom approaches, which are common in economics and simply focuses on non-interference. Haq's objective was to construct a simple composite measure of human development was needed in order to convince the public, academics, and policy-makers that they can and should evaluate development not only by economic advances but also improvements in human wellbeing. After initial opposition, Sen went on to advise Haq's project on the development of the HDI. Thus, as indicated in the graphic above, statistical measures for each of the four components are combined in to the single number HDI.

Again, however, it is important to note the changes in the education and economic standard of living indicators with the *HDR 2010*. Prior to that Report, the HDI combined statistical measures of three dimensions for each country:

- Life expectancy at birth (LE), as an index of population health and longevity
- Knowledge and education, as measured by the adult literacy rate (ALR, with two-thirds weighting) and the combined primary, secondary, and tertiary gross enrollment ratio (CGER, with one-third weighting).
- Standard of living, as indicated by the natural logarithm of gross domestic product per capita (GDP_{pc}) at purchasing power parity

The HDI is based on transformations of statistics for these measures to unit-free indices. Consider one of these measures, say x. To transform it into a unit-free index scaled between 0 and 1 (in order to allow the different indices to be added together), apply the following formula:

$$x - index = \frac{x - \min(x)}{\max(x) - \min(x)}$$

where min(x) and max(x) are the lowest and highest values the x statistic can attain, respectively.

The *original formula for the HDI* then applied a uniformly weighted sum of 1/3 contributed by each of following four Life Expectancy, Education, and GDP indexed statistics:

$$\text{Life Expectancy Index (LEI)} = \frac{LE - 25}{85 - 25}$$

$$\text{Education Index (EI)} = \frac{2}{3} \times ALI + \frac{1}{3} \times GEI$$

$$\text{where Adult Literacy Index (ALI)} = \frac{ALR - 0}{100 - 0}$$

$$\text{and Gross Enrollment Index (GEI)} = \frac{CGER - 0}{100 - 0}$$

[note that the subtractions of the zeroes in the ALI and GEI formulas are not mathematically necessary; rather, this was included in the algebraic representations for consistency with the general formula given above for scaling the dimensional indices]

$$\text{GDPI} = \frac{\log\left(GDP_{pc}\right) - \log(100)}{\log(40000) - \log(100)}$$

so that the *Original HDI*

$$= \left(\frac{1}{3} \times LE\right) + \left(\frac{1}{3} \times EI\right) + \left(\frac{1}{3} \times GDPI\right)$$

Because the numerical values produced by this original additive equal weights formula were not sensitive to divergences in country performance on any one of the three dimensions, that is, because poor performance on any one dimension in a country could be compensated for by high performance in any other dimension, and in order to improve its measures of the education and income components of the capabilities concept, beginning with the 2010 HDI Report, the HDI combines the following statistical measures of the three dimensions:

- A long and healthy life: Life expectancy at birth (LE)
- Education index: Mean years of schooling (MYS) and Expected years of schooling (EYS)
- A decent standard of living: Gross National Income per capita (GNI_{pc}) in purchasing power parity with the United States dollar (PPP US$)

These are the dimensions and indicators currently used in the revised HDI as described

above under the Components of the Human Development Index graphic.

The *revised formula for the HDI* introduced in the *HDR 2010* is (with numerical values for the minimum and maximum values of the scales to be set at natural zeros and as observed over the period since 1980, respectively, and with the specific numerical values below as reported in the *HDR 2013*):

$$\text{Life Expectancy Index (LEI)} = \frac{LE - 20}{83.6 - 20},$$

where *LE* is the years of life expected at birth for the country for which the HDI is to be calculated, 83.6 years is the maximum observed national life expectancy (Japan, 2012), and the minimum *LE* is set at 20 years,

$$\text{Education Index (EI)} = \frac{\sqrt{MYSI \cdot EYSI} - 0}{0.971 - 0},$$

where the 0.971 in the denominator is the maximum observed value of the numerator for all countries (New Zealand, 2010), and

$$\text{Mean Years of Schooling Index (MYSI)} = \frac{MYS}{13.3},$$

where *MYSI* is the mean years of schooling for the country for which the HDI is to be calculated and 13.3 is the maximum observed national mean years of schooling (United States, 2010),

$$\text{Expected Years of Schooling Index (EYSI)} = \frac{EYS - 0}{18.0 - 0}$$

where *EYSI* is the expected years of schooling for the country for which the HDI is to be calculated and 18.0 years is the cap for this index component,

$$\text{Income Index (II)} = \frac{\ln(GNI_{pc}) - \ln(100)}{\ln(87,478) - \ln(100)}$$

where GNI_{pc} is the per capita Gross National Income for the country for which the HDI is to be calculated in purchasing power parity US dollars, 87,478 is the observed maximum GNI_{pc} (Qatar, 2012). The HDI then is calculated as the geometric mean of the previous three normalized indices:

$$\textit{Revised HDI} = \sqrt[3]{LEI \cdot EI \cdot II}$$

The arithmetic mean can be substantially affected by extreme values on any one of the three component indices of the HDI, while the geometric mean is less influenced in this way (see, e.g., Hines 1983). Thus, the Revised HDI geometric mean formula places more emphasis on consistency among the three HDI component statistics for a country and makes an extremely large or small value on any one of the three components less influential on the calculated value.

Supplementary Human Development Indices

The HDI now is supplemented with three other indices reported under the Indices and Data tab on the *Human Development Reports* site.

The *Inequality-Adjusted HDI (IHDI)*, introduced in the 2010 Report, reflects inequality in each dimension of the HDI. Under perfect equality the IHDI is equal to the HDI, but falls below the HDI when inequality rises. The objective of the IHDI is to measure the actual level of human development (taking into account inequality) of a country, with the HDI viewed as an index of the potential human development that could be achieved if there is no inequality.

Similarly, the *Gender Inequality Index (GII)* addresses disadvantages facing women and girls which are a major source of inequality. Findings from the GII indicate that ender inequality varies tremendously across countries – the losses in achievement due to gender inequality (not directly comparable to total inequality losses

because different variables are used) range from 4.9 to 76.9 %. It also has been found that countries with unequal distribution of human development also experience high inequality between women and men, and countries with high gender inequality also experience unequal distribution of human development.

The *Multidimensional Poverty Index (MPI)* is the third supplementary index to the HDI. Launched in July 2010, the objective of this new poverty measure is to give a "multidimensional" picture of people living in poverty that could help target development resources more effectively. The MPI identifies deprivations across the same three dimensions as the HDI and shows the number of people who are multidimensionally poor (suffering deprivations in 33 % of weighted indicators) and the number of deprivations with which poor households typically contend. It can be deconstructed by region, ethnicity and other groupings as well as by dimension, making it an apt tool for policymakers.

Some Empirical Findings

Rankings of Countries

The annual *Human Development Reports (HDRs)* and the associated *HDR* Website are a treasure trove of data and findings, far too many to report or even summarize here. As mentioned above, the various annual HDI Reports that can be accessed there in pdf form. The Indices and Data page contains additional data, including a number of graphs and maps. The numerical values of all of the component indicator time series for the HDI and the revised HDI also are accessible.

One item of general interest in the annual HDI Reports is the rankings assigned to the countries. The 2011 Report gives rankings for a total of 187 countries. These are grouped into quartiles labeled from high to low as: Very High Human Development, High Human Development, Medium Human Development, and Low Human Development. The full table for all 187 countries for three of the indices described above, the HDI, the IHDI, and the GII, from pp. 17–20 of the Summary of the 2011 Report is reproduced below. Due to differential data availability across the countries, the indices use data from different years; details are given in the Statistical Annex to the full Report. In addition, due to the lack of availability of the data necessary for their computation, the IHDI and GII indices are reported for 134 and 142 countries, respectively.

The numerical values of the indices, the rankings of the countries, and the quartiles have a good amount of face validity with what one might expect, given the composition of the indices. Developed countries with relatively small, homogeneous populations tend to be ranked in the first quartile. Larger, more geographically and racially/ethnically diverse populations and less developed countries tend to rank lower. A high ranking on the HDI scale does not ensure a comparable ranking on the IHDI and GII scales. The United States, which ranks 4th on the HDI, 23rd on the IHDI, and 47th on the GII, and Canada, which ranks 6th on the HDI, 12th on the IHDI, and 20th on the GII, are illustrative. By comparison, the Netherlands with 3rd, 4th, and 2nd ranks on the respective three indices is relatively more consistent.

In addition to the general country rankings by the HDI and its supplementary indices, additional HDI reports are produced for many of the 187 countries and for the geographical regions to which they belong. These reports can be accessed under the Countries tab of the *Human Development Reports* Website. This section also gives access to numerical values of the HDI and supplementary indices and the detailed statistics from which they are calculated as well as additional demographic, social, and economic statistics.

Human development indices

HDI rank	Human Development Index (HDI) Value	Inequality-adjusted HDI Value	Inequality-adjusted HDI Rank	Gender Inequality Index Value	Gender Inequality Index Rank
VERY HIGH HUMAN DEVELOPMENT					
1 Norway	0.943	0.890	1	0.075	6
2 Australia	0.929	0.856	2	0.136	18
3 Netherlands	0.910	0.846	4	0.052	2
4 United States	0.910	0.771	23	0.299	47
5 New Zealand	0.908	..	..	0.195	32
6 Canada	0.908	0.829	12	0.140	20
7 Ireland	0.908	0.843	6	0.203	33
8 Liechtenstein	0.905	..	..	..	..
9 Germany	0.905	0.842	7	0.085	7
10 Sweden	0.904	0.851	3	0.049	1
11 Switzerland	0.903	0.840	9	0.067	4
12 Japan	0.901	..	..	0.123	14
13 Hong Kong, China (SAR)	0.898	..	..	..	..
14 Iceland	0.898	0.845	5	0.099	9
15 Korea, Republic of	0.897	0.749	28	0.111	11
16 Denmark	0.895	0.842	8	0.060	3
17 Israel	0.888	0.779	21	0.145	22
18 Belgium	0.886	0.819	15	0.114	12
19 Austria	0.885	0.820	14	0.131	16
20 France	0.884	0.804	16	0.106	10
21 Slovenia	0.884	0.837	10	0.175	28
22 Finland	0.882	0.833	11	0.075	5
23 Spain	0.878	0.799	17	0.117	13
24 Italy	0.874	0.779	22	0.124	15
25 Luxembourg	0.867	0.799	18	0.169	26
26 Singapore	0.866	..	..	0.086	8
27 Czech Republic	0.865	0.821	13	0.136	17
28 United Kingdom	0.863	0.791	19	0.209	34
29 Greece	0.861	0.756	26	0.162	24
30 United Arab Emirates	0.846	..	..	0.234	38
31 Cyprus	0.840	0.755	27	0.141	21
32 Andorra	0.838	..	..	..	..
33 Brunei Darussalam	0.838	..	..	..	..
34 Estonia	0.835	0.769	24	0.194	30
35 Slovakia	0.834	0.787	20	0.194	31
36 Malta	0.832	..	..	0.272	42
37 Qatar	0.831	..	..	0.549	111
38 Hungary	0.816	0.759	25	0.237	39
39 Poland	0.813	0.734	29	0.164	25
40 Lithuania	0.810	0.730	30	0.192	29
41 Portugal	0.809	0.726	31	0.140	19
42 Bahrain	0.806	..	..	0.288	44
43 Latvia	0.805	0.717	33	0.216	36
44 Chile	0.805	0.652	44	0.374	68
45 Argentina	0.797	0.641	47	0.372	67
46 Croatia	0.796	0.675	38	0.170	27
47 Barbados	0.793	..	..	0.364	65
HIGH HUMAN DEVELOPMENT					
48 Uruguay	0.783	0.654	43	0.352	62
49 Palau	0.782	..	..	..	..
50 Romania	0.781	0.683	36	0.333	55
51 Cuba	0.776	..	..	0.337	58
52 Seychelles	0.773	..	..	..	..
53 Bahamas	0.771	0.658	41	0.332	54
54 Montenegro	0.771	0.718	32	..	..
55 Bulgaria	0.771	0.683	37	0.245	40
56 Saudi Arabia	0.770	..	..	0.646	135
57 Mexico	0.770	0.589	56	0.448	79
58 Panama	0.768	0.579	57	0.492	95

HDI rank		Human Development Index (HDI) Value	Inequality-adjusted HDI Value	Inequality-adjusted HDI Rank	Gender Inequality Index Value	Gender Inequality Index Rank
59	Serbia	0.766	0.694	34	..	..
60	Antigua and Barbuda	0.764	..	..	..	..
61	Malaysia	0.761	..	..	0.286	43
62	Trinidad and Tobago	0.760	0.644	46	0.331	53
63	Kuwait	0.760	..	..	0.229	37
64	Libya	0.760	..	..	0.314	51
65	Belarus	0.756	0.693	35	..	..
66	Russian Federation	0.755	0.670	39	0.338	59
67	Grenada	0.748	..	..	..	..
68	Kazakhstan	0.745	0.656	42	0.334	56
69	Costa Rica	0.744	0.591	55	0.361	64
70	Albania	0.739	0.637	49	0.271	41
71	Lebanon	0.739	0.570	59	0.440	76
72	Saint Kitts and Nevis	0.735	..	..	..	..
73	Venezuela, Bolivarian Republic of	0.735	0.540	67	0.447	78
74	Bosnia and Herzegovina	0.733	0.649	45	..	..
75	Georgia	0.733	0.630	51	0.418	73
76	Ukraine	0.729	0.662	40	0.335	57
77	Mauritius	0.728	0.631	50	0.353	63
78	Former Yugoslav Republic of Macedonia	0.728	0.609	54	0.151	23
79	Jamaica	0.727	0.610	53	0.450	81
80	Peru	0.725	0.557	63	0.415	72
81	Dominica	0.724	..	..	..	..
82	Saint Lucia	0.723	..	..	..	..
83	Ecuador	0.720	0.535	69	0.469	85
84	Brazil	0.718	0.519	73	0.449	80
85	Saint Vincent and the Grenadines	0.717	..	..	..	..
86	Armenia	0.716	0.639	48	0.343	60
87	Colombia	0.710	0.479	86	0.482	91
88	Iran, Islamic Republic of	0.707	..	..	0.485	92
89	Oman	0.705	..	..	0.309	49
90	Tonga	0.704	..	..	..	..
91	Azerbaijan	0.700	0.620	52	0.314	50
92	Turkey	0.699	0.542	66	0.443	77
93	Belize	0.699	..	..	0.493	97
94	Tunisia	0.698	0.523	72	0.293	45
MEDIUM HUMAN DEVELOPMENT						
95	Jordan	0.698	0.565	61	0.456	83
96	Algeria	0.698	..	..	0.412	71
97	Sri Lanka	0.691	0.579	58	0.419	74
98	Dominican Republic	0.689	0.510	77	0.480	90
99	Samoa	0.688	..	..	..	..
100	Fiji	0.688	..	..	..	..
101	China	0.687	0.534	70	0.209	35
102	Turkmenistan	0.686	..	..	..	..
103	Thailand	0.682	0.537	68	0.382	69
104	Suriname	0.680	0.518	74	..	..
105	El Salvador	0.674	0.495	83	0.487	93
106	Gabon	0.674	0.543	65	0.509	103
107	Paraguay	0.665	0.505	78	0.476	87
108	Bolivia, Plurinational State of	0.663	0.437	87	0.476	88
109	Maldives	0.661	0.495	82	0.320	52
110	Mongolia	0.653	0.563	62	0.410	70
111	Moldova, Republic of	0.649	0.569	60	0.298	46
112	Philippines	0.644	0.516	75	0.427	75
113	Egypt	0.644	0.489	85	..	..
114	Occupied Palestinian Territory	0.641	..	..	..	..
115	Uzbekistan	0.641	0.544	64	..	..
116	Micronesia, Federated States of	0.636	0.390	94	..	..
117	Guyana	0.633	0.492	84	0.511	106
118	Botswana	0.633	..	..	0.507	102
119	Syrian Arab Republic	0.632	0.503	80	0.474	86
120	Namibia	0.625	0.353	99	0.466	84

HDI rank		Human Development Index (HDI) Value	Inequality-adjusted HDI Value	Inequality-adjusted HDI Rank	Gender Inequality Index Value	Gender Inequality Index Rank
121	Honduras	0.625	0.427	89	0.511	105
122	Kiribati	0.624	..	..	..	..
123	South Africa	0.619	..	..	0.490	94
124	Indonesia	0.617	0.504	79	0.505	100
125	Vanuatu	0.617	..	..	..	..
126	Kyrgyzstan	0.615	0.526	71	0.370	66
127	Tajikistan	0.607	0.500	81	0.347	61
128	Viet Nam	0.593	0.510	76	0.305	48
129	Nicaragua	0.589	0.427	88	0.506	101
130	Morocco	0.582	0.409	90	0.510	104
131	Guatemala	0.574	0.393	92	0.542	109
132	Iraq	0.573	..	..	0.579	117
133	Cape Verde	0.568	..	..	..	..
134	India	0.547	0.392	93	0.617	129
135	Ghana	0.541	0.367	96	0.598	122
136	Equatorial Guinea	0.537	..	..	..	..
137	Congo	0.533	0.367	97	0.628	132
138	Lao People's Democratic Republic	0.524	0.405	91	0.513	107
139	Cambodia	0.523	0.380	95	0.500	99
140	Swaziland	0.522	0.338	103	0.546	110
141	Bhutan	0.522	..	..	0.495	98
LOW HUMAN DEVELOPMENT						
142	Solomon Islands	0.510	..	..	..	..
143	Kenya	0.509	0.338	102	0.627	130
144	São Tomé and Príncipe	0.509	0.348	100	..	..
145	Pakistan	0.504	0.346	101	0.573	115
146	Bangladesh	0.500	0.363	98	0.550	112
147	Timor-Leste	0.495	0.332	105	..	..
148	Angola	0.486	..	..	..	..
149	Myanmar	0.483	..	..	0.492	96
150	Cameroon	0.482	0.321	107	0.639	134
151	Madagascar	0.480	0.332	104	..	..
152	Tanzania, United Republic of	0.466	0.332	106	0.590	119
153	Papua New Guinea	0.466	..	..	0.674	140
154	Yemen	0.462	0.312	108	0.769	146
155	Senegal	0.459	0.304	109	0.566	114
156	Nigeria	0.459	0.278	116	..	..
157	Nepal	0.458	0.301	111	0.558	113
158	Haiti	0.454	0.271	121	0.599	123
159	Mauritania	0.453	0.298	112	0.605	126
160	Lesotho	0.450	0.288	115	0.532	108
161	Uganda	0.446	0.296	113	0.577	116
162	Togo	0.435	0.289	114	0.602	124
163	Comoros	0.433	..	..	..	..
164	Zambia	0.430	0.303	110	0.627	131
165	Djibouti	0.430	0.275	118	..	..
166	Rwanda	0.429	0.276	117	0.453	82
167	Benin	0.427	0.274	119	0.634	133
168	Gambia	0.420	..	..	0.610	127
169	Sudan	0.408	..	..	0.611	128
170	Côte d'Ivoire	0.400	0.246	124	0.655	136
171	Malawi	0.400	0.272	120	0.594	120
172	Afghanistan	0.398	..	..	0.707	141
173	Zimbabwe	0.376	0.268	122	0.583	118
174	Ethiopia	0.363	0.247	123	..	..
175	Mali	0.359	..	..	0.712	143
176	Guinea-Bissau	0.353	0.207	129	..	..
177	Eritrea	0.349	..	..	..	..
178	Guinea	0.344	0.211	128	..	..
179	Central African Republic	0.343	0.204	130	0.669	138
180	Sierra Leone	0.336	0.196	131	0.662	137
181	Burkina Faso	0.331	0.215	126	0.596	121
182	Liberia	0.329	0.213	127	0.671	139

HDI rank	Human Development Index (HDI) Value	Inequality-adjusted HDI Value	Inequality-adjusted HDI Rank	Gender Inequality Index Value	Gender Inequality Index Rank
183 Chad	0.328	0.196	132	0.735	145
184 Mozambique	0.322	0.229	125	0.602	125
185 Burundi	0.316	..	..	0.478	89
186 Niger	0.295	0.195	133	0.724	144
187 Congo, Democratic Republic of the	0.286	0.172	134	0.710	142
OTHER COUNTRIES OR TERRITORIES					
Korea, Democratic People's Rep. of	..	..	..	..	..
Marshall Islands	..	..	..	..	..
Monaco	..	..	..	..	..
Nauru	..	..	..	..	..
San Marino	..	..	..	..	..
Somalia	..	..	..	..	..
Tuvalu	..	..	..	..	..
Human Development Index groups					
Very high human development	0.889	0.787	—	0.224	—
High human development	0.741	0.590	—	0.409	—
Medium human development	0.630	0.480	—	0.475	—
Low human development	0.456	0.304	—	0.606	—
Regions					
Arab States	0.641	0.472	—	0.563	—
East Asia and the Pacific	0.671	0.528	—	..	—
Europe and Central Asia	0.751	0.655	—	0.311	—
Latin America and the Caribbean	0.731	0.540	—	0.445	—
South Asia	0.548	0.393	—	0.601	—
Sub-Saharan Africa	0.463	0.303	—	0.610	—
Least developed countries	0.439	0.296	—	0.594	—
Small island developing states	0.640	0.458	—	..	—
World	0.682	0.525	—	0.492	—

Trends in Human Development

The *Human Development Reports* also provide many findings concerning trends over time in the dimensions, indicators, and composite HDI values across recent decades. These changes over time were the principal subject of the *2010 Human Development Report* the subtitle of which was *The Real Wealth of Nations: Pathways to Human Development*.

The summary chart of temporal paths of the revised HDI (as described in the previous section, the revised formula for calculating the HDI uses a geometric rather than an arithmetic mean; in the footnote to the chart, this is termed the hybrid HDI) for 135 countries over the four decades from 1970 to 2010 from the Report is reproduced nearby. It basically shows steady progress in the HDI across these decades among countries in the Very High Human Development quartile with increasing variability in the trends as one goes down the quartiles of human development. In addition, the most rapid increases in the temporal paths are exhibited by several countries in the medium HDI quartile, including Saudi Arabia, Oman, Russia, China, Indonesia, and Guatemala.

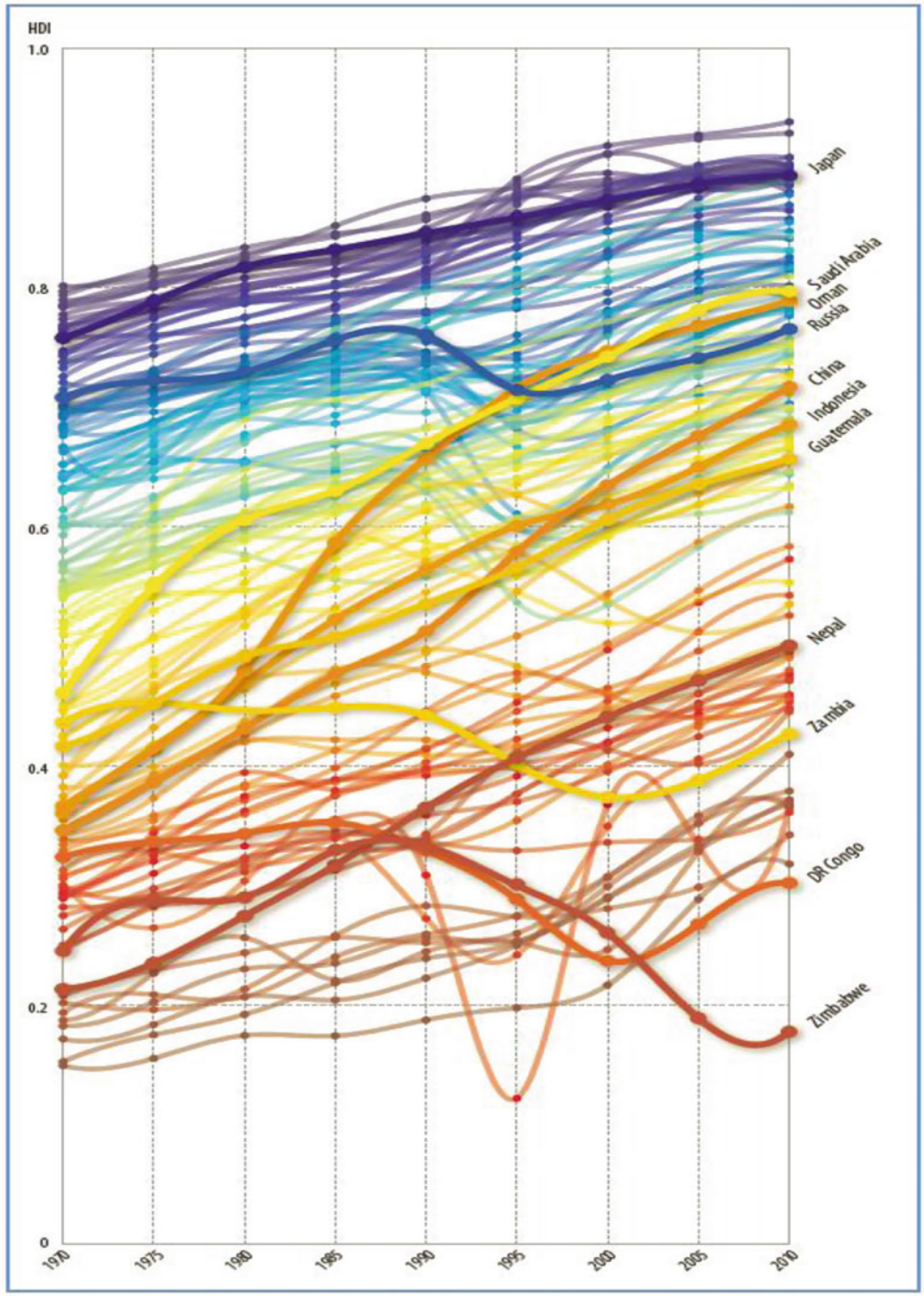
Critique and Assessment of the HDI

Criticisms of the HDI

Shortly after publication of the *HDR 1990*, a lively debate on the HDI, and how to improve it, appeared (Kovacevic 2011). This has continued over the years, albeit not at the intensity of the early 1990s. The UNDP encouraged this discussion – *HDR 1990* indicated that future reports would build on the original structure of the index, the concepts would be further refined and made more robust, and aspects of operationalizing human development would be explored in ever-increasing detail.

FIGURE 2.1 **Overall progress, significant variability**

Worldwide trends in the Human Development Index, 1970–2010



Note: Results are for a sample of 135 countries based on the hybrid HDI described in box 2.1. The top movers (as defined in box 2.1) are Oman, China, Nepal, Indonesia and Saudi Arabia; the bottom movers are DR Congo, Zambia and Zimbabwe.

Source: Hidalgo (2010) based on HDRO calculations using data from the HDRO database.

Some of the key critiques of the original HDI are the following. First, early on Kelley (1991) challenged the usefulness of the conceptual framework of human development as represented in the HDI, illustrated the sensitivity of the HDI to plausible refinements, and argued that it offers only limited insights beyond those obtained by small modifications to simple measures of economic output. Regarding the conceptual and measurement framework of the original HDI, Kelley (1991, pp. 318–320) argued: (1) that the HDI is quite sensitive to the choice of the maximum values (e.g., of life expectancy) in its calculation, (2) the HDI assumes little or no progress in human development can be made by the developed countries, (3) the choice of equal weights for the indicators in the HDI should be subjected to sensitivity analyses, (4) the asymmetry in the choice of the maximum endpoints for the HDI indicators implicitly assigns greater weight to literacy and longevity than to GDP per capita, and (5) due to the basing of the HDI on a relative welfare standard – the extent to which each country is successful in attaining the maximum value of each human development indicator as opposed to an absolute standard such as the percent of a country's population that can purchase a specified bundle of goods and services such as a minimum caloric diet – overall human development as measured by the HDI is advanced not only by improvements in its indicators, but also by their more equal distribution.

Regarding the limited insights of the HDI to measuring welfare and development, Kelley (1991, pp. 321–323) noted the strong positive correlation between rankings of countries by the HDI and log GNP per capita in the *HDR 1990*. Similar observations were made by Stanton (2007) in a regression analysis of the HDI 2003 and log GDP per capita, and a strong positive relationship continues to exist between the log GNI per capita and the HDIs in the 2011 and 2013 *HDRs*. These regression analyses also reveal considerable heteroscedasticity of residuals around the linear regression functions – with smaller variances in the residuals at both the highest and lowest levels of the HDI and larger variances at the mid-levels. Taken as such, these regression results suggest that the highest levels of human development, as measured by the HDI can be obtained only when countries have high levels of all three components of the index, that is, high living standards, education, and health. They also suggest that at the lowest levels of development as measured by the HDI countries are likely to have relatively low levels of living standards, education, and health.

Second, and also early on, Lind (1992) critically examined the HDI and its components with respect to accuracy, sensitivity, and discriminant power. Lind (1992, pp. 99–100) was particularly critical of the use of estimates of adult literacy as a component of the original HDI, arguing that it is ill-defined, subject to measurement and sampling error, vulnerable to falsification, culture-relative, and has a ceiling of 100 % while human cultural development is not so limited. Lind (1992) also noted that the equal weights for the HDI components implies a relative valuation of the components, an economic equivalent of human longevity and literacy that should be examined. This critique is similar to that of Desai (1991) who argued that the additive and averaging formula of the original HDI implies perfect substitution which can hardly be appropriate. This line of analysis was further developed in Lind (2004) which concluded that the HDI's weighting of GDP per capita is in good agreement with people's preferences as revealed in other time allocation indices and that the HDI places many times greater weight on education than is indicated by people's allocation of time in developed countries. Lind (2004, pp. 290–291) also assessed the accuracy of the statistics used for the components of the HDI versus the precision with which the HDI is reported – as shown, for example, in the tables of values of the HDI from the *HDR 2011*, the HDI is reported to three decimal places, thus assuming accuracy on the order of 0.1 %. Lind's assessment, however, is that the population statistics used for the component indicators of the HDI are not sufficiently accurate to justify this precision and that "... the accuracy of the HDI is hardly greater than plus or

minus 0.5 percent" (Lind 2004, p. 291), and, therefore, it should be rounded to two digits. Doing so, the annual reports would signify that a number of countries have similar ranks.

Third, Sagar and Najam (1998) published a critical review of the HDI as of the mid-1990s and proposed ways in which the HDI could be improved to better reflect its original conceptual intent. First, echoing Desai's (1991) criticism of the additivity assumption of the original HDI, Sagar and Najam (1998, pp. 252–260) made a strong case for using the logarithm of GDP per capita rather than the direct purchasing power parity value of GDP per capita in US dollars in the calculation of the living standards component index of the HDI. This adjustment was recommended in order to discount differences in the incomes of the more developed countries that contribute more marginally to development than comparable differences in incomes in less developed countries. Second, Sagar and Najam (1998, pp. 260–263) argued that the HDI needs to factor into its calculation inequalities within countries in the distributions of its living standards, health, and education components. They then illustrated the application of one possible "equity-correction factor" to the HDI for the countries for which income distributional data were available in the *HDR 1996* – showing that the performance and rank on the index can change significantly when income distributional inequalities are taken into account.

Fourth, Srinivasan (1994) and Ravallion (1997; see also Lind 2004) pointed out that the HDI contained implicit marginal rates of substitution whereby different achievements in same dimensions may lead to the same level of human development, because small changes in the achievements in different dimensions can compensate each other. In the case of an equally weighted arithmetic mean, such as HDI, the marginal rate of substitution between two dimensions, say x and y, is the amount of dimension x a country is "willing" to trade-off for a unit of dimension y while maintaining the same level of overall development. While this approach has a tradition in estimating the monetary equivalents of health and education in the economics literature, this is not the case with the wellbeing literature. The HDI is not a production or a utility function to be maximized, it is rather a capability index and the trade-offs should be interpreted differently. Foster and Sen (1997) argued that, even though the implicit prices can be obtained from the form of the HDI, they are inappropriate for well-being comparisons because well-being indices such as the HDI are not price-based indices at the first place.

Fifth, illustrative of alternative approaches to the equal weights-additivity formula for the original HDI, Despotis (2005) applied data envelopment analysis (DEA) to benchmark countries in terms of their relative efficiency in converting income into knowledge and life opportunities. DEA is a leading technique for benchmarking or measuring the relative efficiency of decision-making units for transforming multiple inputs into multiple outputs. The efficiency of a unit is measured as a weighted sum of its outputs divided by a weighted sum of its inputs and it is measured on a 0 to 1 bounded ratio scale. The weights for the inputs and outputs are determined by application of a linear program calculated for each unit so as to maximize its relative efficiency (Charnes et al. 1978; Cooper et al. 1999). To apply DEA to the HDI, Despotis (2005) applied a "transformation paradigm" in which income is viewed as a means to improve the potential of people, beyond the achievement of a decent standard of living. After estimation of an ideal value of the composite HDI for each country by a DEA-like index-maximizing model, Despotis (2005) solves a goal-programming model to obtain global estimates of human development, based on optimal common weights for the component indicators. He shows empirically that the new measure of human development is comparable to, and highly correlated with, the original HDI. But the new measure has the advantage that the weights assumed for the component indicators, as a result of the optimization process, are less arbitrary and more substantively interpretable.

These and related criticisms of the conceptual and methodological basis of the HDI have been taken into account in the various revisions and restructurings of the index over the years:

- Criticisms of the use of the adult literacy measure in the education component of the original HDI by Lind (1992) and others led to the current formulation of the education component of the index in terms of the mean of years of schooling for adults aged 25 years and expected years of schooling for children of school entering age statistics.
- Similarly, criticisms of the use of the untransformed GDP per capita in the decent standard of living component by Sagar and Najam (1998) and others led to the use of the logarithm of gross national income per capita statistics.
- Also, the development of the Inequality-Adjusted HDI and the Gender Inequality Index can be seen as responding to the criticisms by Sagar and Najam (1998) and others concerning the failure of the original HDI to take into account the inequalities within countries in the distributions of its living standards, health, and education components.
- The introduction and use of the revised formula for calculating the HDI, based on a geometric rather than an arithmetic mean, in the *HDR 2001* and beyond responds to criticisms of the original formula by Desai (1991), Lind (1992) and others. While the weights assigned to each of the components of the HDI remain equal, sensitivity analyses of the resulting HDI scores and ranks by Despotis (2005) and others have contributed to an understanding of the robustness and limitations of the scores and ranks.
- The *HDRs* continue to report numerical values of the HDI to three decimal places, despite Lind's (2004) estimates of accuracy to only two decimal places. To some extent, the groupings of countries into the quartiles (Low Human Development, Medium Human Development, High Human Development, Very High Human Development) is responsive to this criticism. An examination of the countries grouped within each of these quartiles in the table from the HDR 2011 reproduced above suggests sufficient heterogeneity within the groupings such that a further refinement of the groupings into quintiles or even deciles would be better.

The HDI as a Social Indicator/Wellbeing Index

The HDI also can be assessed as a social indicator/wellbeing index. To do so, several questions can be raised.

First, to what extent does the HDI, its associated indices, and the annual *HDRs* fulfill the three principles of the social indicators movement? Recall from the summary given above that these principles are that (1) to monitor changes over time in a broad range of social phenomena that extend beyond traditional economic indicators and include indicators of wellbeing/quality of life, (2) to contribute to public enlightenment through social reporting both to the general public as well as policy makers, and (3) to document the consequences that are reasonably attributable to changes in a social indicator, including the systematic use of social indicators to forecast trends in social conditions and/or turning points therein.

As regards the first of these goals, it is clear that the HDI has extended the range of social phenomena systematically monitored for a large number of countries around the world beyond the Gross National Product and related economic indicators. In creating the HDI, Mahbub ul Haq's explicit purpose to shift the focus of development economics from national income accounting to people centered policies. For this purpose, Sen and Nussbaum's capabilities and functionings conceptual approach was matched with Haq's goal of creating a single, composite index, similar to the conventional Gross Domestic Product in macroeconomics, that could capture the attention of the public and of policy makers. Some would argue that the indicators monitored in the three components of the HDI are not sufficiently representative of quality

of life indicators. But the recent creation of the supplementary Inequality-Adjusted HDI and the Gender Inequality Index is a step in the direction of a more general monitoring of wellbeing/quality of life.

The annual *HDRs* also have contributed to social reporting and have made knowledge of human conditions around the world more accessible and thus can be said to have contributed to human enlightenment. As to the extent to which the annual HDI reports have guided national and international human development policy, in the quote above from the *Human Development Reports* Mainpage, UNDP Administrator Helen Clark states that "... the human development approach has profoundly affected an entire generation of policy-makers and development specialists around the world..." This may or may not be considered a fair assessment. Clearly, however, at least at the level of UNDP discourse, the HDI and the *HDRs* have broadened the conception of developmental economics beyond income alone to include measures of health and knowledge. Perhaps just as important from a social reporting perspective, the HDI annual reports have received substantial public distribution and media attention and have helped to inform publics around the world. And, as the saying goes, imitation is the subtlest form of flattery – the development and production of the HDI has stimulated the development of many other composite social indicators at the international level (e.g., the Democracy Index, the Gender Parity Index), the national level (e.g., the Australian Unity Wellbeing Index), and the sub-national level (e.g., the American Human Development Index at the state and regional levels). By this measure, the HDI certainly has been successful.

A related question is the extent to which the HDI functions as one or more of the three types of social indicators identified in the summary above – descriptive, policy, and wellbeing/quality of life. The HDI clearly functions as a descriptive composite social indicator as the statistics on which its three components are based are descriptive demographic, social, and economic statistics. The index, its components, and its supplementary indices also relate as policy indicators to six of the eight Millennium Development Goals for 2015 recounted in the introduction to this chapter – recall that three of the MDGs-2015 are health related (reduce child mortality, improve maternal health, combat HIV/AIDS, malaria, and other diseases – variations in each of which relate to the health component of the HDI), one relates to education (achieve universal primary education – variations in which relate to the statistics in the education component of the HDI), and one relates to living standards (eradicate extreme poverty and hunger – variations in which relate to the statistics in the living standards component of the HDI and the Multidimensional Poverty Index). A sixth of the MDGs-2015, promote gender equality and empower women, relates to the Gender Inequality Index.

Concerning the extent to which the HDI functions as a wellbeing/QOL index, the past four decades have seen huge amounts of new research on subjective wellbeing and social indicators and conceptualization thereof (see, e.g., Sirgy 2011 for a review). Some of this research finds positive associations of composite indices based on objective social indicators and subjective wellbeing indices based on average responses to happiness or overall satisfaction with life questions in sample survey data, both for cross-sectional comparisons among geographical units (e.g., Oswald and Wu 2010) and for changes over time in a specific population (e.g., Land et al. 2012, pp. 63–65). In addition, the paradoxical negative associations between average subjective wellbeing measures and objective composite social indicators found in some studies may be due to the failure of the objective indicators to take into account factors (e.g., climate, air quality, cost of living) that can lead to the negative association (Kuroki 2013).

The implication is that if the HDI is, broadly speaking, functioning as a wellbeing/QOL index, then it should have a positive association with more direct measures of subjective wellbeing, at least in cross-sectional analyses. And, since average levels of happiness and overall life satisfaction tend to be positively associated

cross-nationally with GDP per capita (Easterlin 2010, p. 66; Eckersley 2005, pp. 32–35), albeit at a decreasing rate at higher income levels, it likely is the case that the national HDI scores have a positive cross-sectional association with average happiness levels. In this sense, it can be expected that the HDI functions, to some extent, as a surrogate subjective wellbeing/QOL index for cross-sectional, cross-national comparisons.

This line of analysis recently has been systematically studied in the *World Happiness Report* of 2012 (Helliwell et al. 2012) and the *World Happiness Report 2013* (Helliwell et al. 2013). In July 2011, the United Nations General Assembly passed a resolution that invited member countries to measure the happiness of their people and to use this to help guide their public policies. The World Happiness Reports have been assembled as a contribution to that effort. In the 2013 Report, Hall (2013) describes analyses of the relationships between the HDI and its components to country-specific subjective overall life evaluations measured using average national responses (averaged for the 3 years 2010–2012) to the Gallup World Poll Question: Please imagine a ladder, with steps numbered from zero at the bottom to ten at the top. Suppose we say that the top of the ladder represents the best possible life for you, and the bottom of the ladder represents the worst possible life for you. On which step of the ladder would you say you personally feel you stand at this time, assuming that the higher the step the better you feel about your life, and the lower the step the worse you feel about it? Which step comes closest to the way you feel? The results (based on data from 124 to 152 countries depending on the variables used) are as follows:

- Higher life expectancy at birth is strongly correlated with average national life evaluations, with a correlation coefficient of 0.70.
- Expected years and mean years of schooling are correlated 0.69 and 0.63, respectively, with average national life evaluations.
- The logarithm of Gross National Income per capita is correlated 0.78 with average life evaluations.
- The correlation between the HDI and average national life evaluations is 0.77.
- After adjusting/controlling for the effect of Gross National Income per capita, there remains a strong correlation (0.67) between average national life evaluations and non-income HDI, that is, the life expectancy and education components.

These findings by Hall (2013) corroborate the expectation stated in the preceding paragraph, namely, that, for cross-sectional, cross-national comparisons, the HDI is a surrogate subjective wellbeing/QOL index. Additional studies of the relationship of the HDI and its components to measures of subjective wellbeing are needed, especially of over time relationships. The evidence to date indicates that economic growth alone (as measured by annual growth rates in GDP per capita) is not sufficient to produce over-time increases in average subjective wellbeing levels; rather, full employment and a generous and comprehensive safety net are necessary (Easterlin 2013).

Given its considerable discussion and critique in the commentaries reviewed above, a final general issue that merits attention pertains to the statistical formulas used for calculation of the HDI. Recall that in the original version of the index its three components were equally weighted in an arithmetic mean to form the composite index. The formula for the revised HDI defined above and used beginning with the *HDR 2010* applies a geometric mean in order to make the HDI more sensitive to divergences in country performance on any one of the three dimensions. Nonetheless, the geometric mean also is an equally weighted average of the logarithmic values of the components of the index.

The equal weighting procedure originally was used by the HDI because of its simplicity, with little justification as a statistical estimator. This deficiency was addressed by Hagerty and Land (2007), who showed both analytically and through numerical examples, that the equal weighting method is a *minimax estimator* in the sense that it minimizes extreme disagreements on unequal weighting schemes. In the absence

of an unequal weighting scheme on which there is high consensus, this is a desirable statistical property.

In recognition of the possible diversity of weights among individuals, and as has become a conventional practice in Web-based social reports, the Indices & Data page on the *Human Development Reports* Website has a Do It Yourself HDI tab – DIY HDI: Build Your Own Index – that allows viewers to reset the weights of the component dimensions of the HDI and recalculate the index values and rankings of the countries. While this is a user-friendly device for facilitating the personal, individual construction of weights for the HDI components, the research of Hagerty and Land (2007) yields a useful prediction for such individualized composite indices. Specifically, under an assumption that the weights assigned to the three components of the HDI by individuals are normalized to sum to 1.0 and drawn from a uniform distribution – the weights are uniformly distributed along the unit interval [0, 1] which means that there is no region within this interval within which the weights are more likely to be chosen than any other region, a model of complete lack of consensus on the weights – Hagerty and Land (2007, pp. 472–474) found in a simulation study using the HDI 2001 data that the vast majority of possible weights (98 % of the total volume) result in correlations between individuals' composite indices that are very high (greater than + .90). They also showed mathematically that, for any underlying distribution of the weights for the HDI components, the minimum correlation between individuals' composite scores corresponds to the minimum pairwise correlation among the three components, which for the HDR 2001 was + .77. These findings together with the minimax properties of the equal weights specification used in calculation of the HDI provide a background of statistical analysis to conclude that "...different weights are simply not an impediment to agreement on a QOL index" (Hagerty and Land 2007, p. 473).

In sum, the virtues of the *Human Development Reports* pertain to the application of a conceptual scheme that draws attention to dimensions of wellbeing that go beyond a country's Gross Domestic Product and that is simple enough in its indicator demands that the empirical calculation of the HDI can be highly inclusive of countries around the world. As more data on other wellbeing dimensions become available for more countries, and as the MDGs of the UNDP change, the Human Development Report Office should continue to assess this body of wellbeing data and the social indicators/wellbeing research conceptual and empirical literature for possible refinements, revisions, and extensions of the HDI.

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The Index of Social Progress: Objective Approaches (3)

8

Richard J. Estes

Introduction

The present study is the 16th in a series of analyses of worldwide and regional social development trends.[1] The purpose of all 16 studies has been to: (1) identify significant changes in the "adequacy of social provision"[2] taking place throughout the world; and, (2) assess national and international progress in providing more adequately for the basic material needs of the world's growing population. These reports also are intended to provide policy analysts and development scholars with otherwise difficult to obtain data needed to shape public policy and development assistance priorities at the national, regional, and global levels. Thus, this chapter reports a comprehensive 40-year time-series analysis of the social development performances of 160 nations for the years between 1970 and 2011. The combined population of these 160 countries includes more than 90 % of the world's total population.

Index of Social Progress (ISP)

The primary instrument used in this study is the author's extensively pre-tested *Index of Social Progress* (ISP). In its present form the ISP consists of 41 social indicators (Table 8.1) that have been subdivided into 10 sub indexes (Table 8.1): *Education* (N = 4)*; Health Status* (N = 7)*; Women Status* (N = 5)*; Defense Effort* (N = 1)*; Economic* (N = 5)*; Demographic* (N = 3)*; Environmental* (N = 3)*; Social Chaos* (N = 5)*; Cultural Diversity* (N = 3); and*Welfare Effort* (N = 5).[3] All 41 of the ISP's indicators have been established to be valid indicators of social development and are widely used by development scholars to assess social progress at various levels of aggregation over time (Hagerty et al. 2002).[4]

[1] Estes 1984, 1988, 1995, 1996a, b, 1998b, c, 2004, 2007a, b, 2010, 2012a, b, 2013a.

[2] "Adequacy of social provision" refers to the changing capacity of governments to provide for the basic social, material and other needs of the people living within their borders.

R.J. Estes (✉)
School of Social Policy and Practice, University of Pennsylvania, 3701 Locust Walk, Philadelphia, PA 19104-6214, USA
e-mail: restes@sp2.upenn.edu

[3] The average score for each of the WISP's ten subindexes was set at 10.0. Thus, the theoretical range of WISP scores is 0.0–100.0, albeit owing to the extremely unfavorable conditions that exist in some countries, fell outside the theoretical range.

[4] For methodological reasons, the ISP's 41 indicators are divided between positive and negative indicators of social progress. On the Education Subindex, for example, higher rates of *adult illiteracy* are negatively associated with social progress whereas gains in *primary school enrollment* levels are positively associated improvements in development. Thus, the instrument achieves a balance with respect the range of positive and negative factors that are used to assess changes in social progress over time.

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Table 8.1 Indicators on the Weighted Index of Social Progress (WISP) by subindex, 2011 (41 indicators and 10 subindexes)

WISP subindexes
Education subindex (N = 4)
Public expenditure on education as percentage of GDP, 2008–2009 (+)
Primary school completion rate, 2008–2009 (+)
Secondary school net enrolment rate, 2008–2009 (+)
Adult literacy rate, 2008 (+)
Health status subindex (N = 6)
Life expectation at birth, 2008 (+)
Infant mortality rate, 2008–2009 (−)
Under-five child mortality rate, 2008 (−)
Physicians per 100,000 population, 2005–2008 (+)
Percent of population undernourished, 2006–2008 (−)
Public expenditure on health as percentage of gross domestic product, 2008–2009 (+)
Women status subindex (N = 5)
Female adult literacy as percentage of male literacy, 2009 (+)
Contraceptive prevalence use among married women, 2008 (+)
Life time risk of maternal death, 2005 (+)
Female secondary school enrollment as percentage of male enrolment, 2008 (+)
Seats in parliament held by women as percentage of total, 2010 (+)
Defense effort subindex (N = 1)
Military expenditures as percentage of GDP, 2009 (−)
Economic subindex (N = 5)
Per capita gross domestic product (as measured by PPP), 2009 (+)
Percent growth in gross domestic product (GDP), 2009 (+)
Unemployment rate, 2006–2008 (−)
Total external debt as percentage of GNI, 2009 (−)
GINI index score, most recent year 2005–2009 (−)
Demography subindex (N = 3)
Average annual rate of population growth, 2009 (−)
Percent of population aged <15 years, 2009 (−)
Percent of population aged >64 years, 2009 (+)
Environmental subindex (N = 3)
Percentage of nationally protected area, 2004–2008 (+)
Average annual number of disaster-related deaths, 2000–2009 (−)
Per capita metric tons of carbon dioxide emissions, 2007 (−)
Social chaos subindex (N = 6)
Strength of political rights, 2010 (−)
Strength of civil liberties, 2010 (−)
Number of internally displaced persons per 100,000 population, 2009 (−)
Number of externally displaced persons per 100,000 population, 2009 (−)
Estimated number of deaths from armed conflicts (low estimate), 2006–2007 (−)
Perceived corruption index, 2009 (+)
Cultural diversity subindex (N = 3)
Largest percentage of population sharing the same/similar racial/ethnic origins, 2009 (+)
Largest percentage of population sharing the same or similar religious beliefs, 2009 (+)
Largest share of population sharing the same mother tongue, 2009 (+)
Welfare effort subindex (N = 5)
Age first national law—old age, invalidity & death, 2010 (+)
Age first national law—sickness & maternity, 2010 (+)
Age first national law—work injury, 2010 (+)
Age first national law—unemployment, 2010 (+)
Age first national law—family allowance, 2010 (+)

Table 8.2 Statistical weights used in constructing the weighted index of social progress[a]

WISP2010 = { [(Factor 1) .697)] + [(Factor 2) .163)] + [(Factor 3) .140] }
where:
Factor 1 = [(Health .92) + (Education .91) + (Welfare .72) + (Woman .91) + (Social Chaos .84) + (Economic .71) + (Diversity .64) + (Demographic .93)]
Factor 2 = [(Defense Effort .93)]
Factor 3 = [(Environmental .98)]

[a]Derived from factor analysis using Varimax rotation. For purposes of comparability across the time series, the same statistical weights were used in each of the study's five time periods: 1970, 1980, 1990, 2000 and 2010

Weighted Index of Social Progress (WISP)

Owing to the volume of data gathered for this analysis, this chapter will primarily report scores attained by countries on the statistically weighted version of the ISP, i.e., the *Weighted Index of Social Progress* (hereafter referred to as "the WISP"). Country-specific subindex data for all 160 countries are available for downloading from the project's website.[5]

As described in greater detail in the next part of this chapter, the study's statistical weights were derived through a two-stage principal components and varimax factor analysis in which indicator and subindex scores were analyzed separately for their relative contribution in explaining the variance associated with changes in social progress over time. Standardized indicator scores (N = 41) were multiplied by their respective factor loadings, averaged within their subindex, and the average subindex scores (N = 10), in turn, were subjected to a second statistical weighting prior to being entered into the composite WISP (Table 8.2).[6] Table 8.2 contains the mathematical formulae used in each stage of the ISP's statistical weighting process.

Data Sources

The majority of the data used in the analysis were obtained from annual reports made available by countries to specialized agencies of the United Nations (Estes 2013b), the World Bank (WB), the International Monetary Fund (IMF), the Organization for Economic Cooperation and Development (OECD), the International Social Security Association (ISSA), and other major international data collection and dissemination organizations. Data for the *Environmental* subindex were obtained from the World Resources Institute (WRI), the United Nations Commission on Sustainable Development (UNCSD), and the World Bank. Data for the *Social Chaos* subindex were obtained from Amnesty International (AI), Freedom House (FH), the International Federation of Red Cross and Red Crescent Societies (IFRCRCS), the Stockholm International Peace and Research Institute (SIPRI), and Transparency International (TI). Data for the *Cultural Diversity* subindex were gathered from original data collected by the U.S. Central Intelligence Agency and by independent scholars working in the fields of comparative language, religion, ethnology and cultures (CIA 2013; Ellingsen 2000; SHRM 2009).

Country Selection

The 160 countries selected for inclusion in the analysis satisfied at least three of the following four criteria: (1) a population size of or approaching at least one million persons in 2010; (2) a reasonable degree of political stability such that timely and reliable data collection were possible; (3) the availability of comprehensive social indicator data; and (4) inclusion in the author's prior studies of worldwide social development trends. Countries with missing, inadequate, incomplete,

[5] http://www.sp2.upenn.edu/restes/WSS09.html

[6] A fuller description of these procedures is summarized in Estes (1988), pp. 199–209.

or distorted data on three or more of the WISP's 41 indicators were excluded from the analysis unless reasonable estimates of the missing data could be made.

Table 8.3 identifies the 160 countries included in the present analysis. The table organizes countries by continental and sub-continental groupings and, then, next to the name of each country (in parenthesis), is an acronym indicating to which one of the study's four socio-political developmental groupings the country has been assigned by the United Nations, i.e., *Developed Market Economies* (DMEs, N = 34), *Commonwealth of Independent States* (CISs, N = 21), *Developing Countries* (DCs, N = 66) or socially *Least Developed Countries* (LDCs, N = 41). These are the same country analytical clusters used by the author in earlier reports of global and regional social progress.

Time Frame

Index and subindex findings are reported separately for each of the study's five time periods, i.e., 1970, 1980, 1990, 2000 and 2011. Thus, the study provides a cross-sectional analysis of the "state" of world social development for the same set of countries over a 40-year time period.

Levels of Analysis

Throughout the chapter, data are reported at four levels of analysis: (1) development trends occurring for the world-as-a-whole (N = 1); (2) development trends occurring at the at the regional (N = 6) and sub-regional levels (N = 19); (3) development trends occurring by clusters of nations that share certain social, economic, or religious characteristics in common with one another (N = 4); and, (4) development trends occurring within each of the study's countries (N = 160). In Part 5 of the chapter, the study reports development trends for countries reorganized into three groupings on the basis of their WISP2011 performances *relative to those of the world-as-a-whole*.

The WISP Versus Other Measures of Social Progress

The Index of Social Progress differs from other measures of social development in the number and representativeness of the indicators and subindexes used in its construction. In all cases, the ISP is judged to be a more comprehensive instrument for assessing changes in social development than other instruments which focus on a more narrow set of changes in development, i.e., economic development, political development, and so on. An additional advantage of the WISP is for its subindexes to be disaggregated for use by other development scholars in applying their own system of statistical weights to development assessment.

History of the Index of Social Progress

Referred to in its earliest stages of development as the *Index of National Social Vulnerability* (INSV), the *Index of Social Progress* (ISP) was developed at the invitation of, the then, Secretary-General of the International Council on Social Welfare, Mrs. Kate Katzki, who, like many of her peers in the international development community wanted an approach to development assessment that would place greater emphasis on the *socio-cultural-political* aspects of development rather than on only its *economic* components. Until that time, economic measures such as "gross national product" (GNP), "gross domestic product" (GDP), and "per capita Income" levels (PCI) served as proxy variables for "social development" with the assumption that changes in national wealth and per capita income levels could be used to capture the overall state of both individual and collective wellbeing, i.e., the higher the level of collective and individual income, presumably, the higher the level of social development. This belief prevailed despite the obvious contradictions that existed between economic development and social mal-development in the United States and other rich countries which, along with other

Table 8.3 Countries grouped by continents & subcontinents marked by development groupings, 2011 (N = 162)

Africa (N = 50)	Asia (N = 45)	Latin America (N = 26)	Europe (N = 35)
East Africa (N = 15)	**East Asia (N = 7)**	**Caribbean (N = 7)**	**East Europe (N = 10)**
Burundi (LDC)	China (DC)	Bahamas (DC)	Belarus (CIS)
Comoros (LDC)	Hong Kong SAR (DME)	Belize (DC)	Bulgaria (CIS)
Djibouti (LDC)	Japan (DME)	Cuba (DC)	Czech Republic (DME)
Eritrea (LDC)	Korea, North (DC)	Dominican Republic (DC)	Hungary (DME)
Ethiopia (LDC)	Korea, South (DME)	Haiti (LDC)	Moldova (CIS)
Kenya (DC)	Mongolia (DC)	Jamaica (DC)	Poland (DME)
Madagascar (LDC)	Taiwan (DME)	Trinidad &Tobago (DC)	Romania (CIS)
Malawi (LDC)	**South Central Asia (N = 13)**	**Central America (N = 7)**	Russian Federation (CIS)
Mauritius (DC)	Afghanistan (LDC)	Costa Rica (DC)	Slovak Republic (DME)
Mozambique (LDC)	Bangladesh (LDC)	El Salvador (DC)	Ukraine (CIS)
Rwanda (LDC)	Bhutan (LDC)	Guatemala (DC)	**North Europe (N = 10)**
Somalia (LDC)	India (DC)	Honduras (DC)	Denmark (DME)
Tanzania (LDC)	Iran (DC)	Mexico (DME)	Estonia (CIS)
Uganda (LDC)	Kazakhstan (CIS)	Nicaragua (DC)	Finland (DME)
Zambia (LDC)	Kyrgyzstan (CIS)	Panama (DC)	Iceland (DME)
Middle Africa (N = 7)	Nepal (LDC)	**South America (N = 12)**	Ireland (DME)
Angola (LDC)	Pakistan (DC)	Argentina (DC)	Latvia (CIS)
Cameroon (DC)	Sri Lanka (DC)	Bolivia (DC)	Lithuania (CIS)
Central African Rep (LDC)	Tajikistan (CIS)	Brazil (DC)	Norway (DME)
Chad (LDC)	Turkmenistan (CIS)	Chile (DC)	Sweden (DME)
Congo, Rep (DC)	Uzbekistan (CIS)	Colombia (DC)	United Kingdom (DME)
Congo, DR (LDC)	**South East Asia (N = 9)**	Ecuador (DC)	**South Europe (N = 8)**
Gabon (DC)	Cambodia (LDC)	Guyana (DC)	Albania (CIS)
North Africa (N = 6)	Indonesia (DC)	Paraguay (DC)	Croatia (CIS)
Algeria (DC)	Lao, PDR (LDC)	Peru (DC)	Greece (DME)
Egypt, UAR (DC)	Malaysia (DC)	Suriname (DC)	Italy (DME)
Libya (DC)	Myanmar (LDC)	Uruguay (DC)	Macedonia, TFYR (CIS)
Morocco (DC)	Philippines (DC)	Venezuela (DC)	Portugal (DME)
Sudan (LDC)	Singapore (DME)	**NORTH AMERICA (N = 2)**	Slovenia (CIS)
Tunisia (DC)	Thailand (DC)	Canada (DME)	Spain (DME)
Southern Africa (N = 6)	Viet Nam (DC)	United States (DME)	**West Europe (N = 7)**
Botswana (DC)	**West Asia (N = 16)**	**OCEANIA (N = 4)**	Austria (DME)
Lesotho (LDC)	Armenia (CIS)	**Australia-New Zealand (N = 2)**	Belgium (DME)
Namibia (DC)	Azerbaijan (CIS)	Australia (DME)	France (DME)
South Africa (DC)	Bahrain (DC)	New Zealand (DME)	Germany (DME)
Swaziland (DC)	Cyprus (DC)	**Melanesia (N = 2)**	Luxembourg (DME)
Zimbabwe (DC)	Georgia (CIS)	Fiji (DC)	Netherlands (DME)
West Africa (N = 16)	Iraq (DC)	Papua-New Guinea (DC)	Switzerland (DME)
Benin (LDC)	Israel (DME)		
Burkina-Faso (LDC)	Jordan (DC)		
Cape Verde (LDC)	Kuwait (DC)		
Cote d'Ivoire (DC)	Lebanon (DC)		
Gambia (LDC)	Oman (DC)		
Ghana (DC)	Qatar (DC)		
Guinea-Bissau (LDC)	Saudi Arabia (DC)		

(continued)

Table 8.3 (continued)

Africa (N = 50)	Asia (N = 45)	Latin America (N = 26)	Europe (N = 35)
Guinea (LDC)	Syria (DC)		
Liberia (LDC)	Turkey (DME)		
Mali (LDC)	Yemen (LDC)		
Mauritania (LDC)			
Nigeria (DC)			
Niger (LDC)			
Senegal Leone (LDC)			
Sierra (LDC)			
Togo (LDC)			

Legends: *DME* developed market economy (N = 34), *CIS* commonwealth of independent states (N = 21), *DC* developing countries (N = 66), *LDC* least developed countries (N = 41)

serious social problems, continued to experience high levels of homelessness, unemployment, and income poverty. Even today, one out of every five children in the United States lives under the country's nationally established poverty threshold (U.S. Census Bureau 2012).

The general lackluster performance of the United Nations' *First Development Decade* (1961–1970), which focused on the attainment of a narrow set of economic objectives within the world's poorest countries, added to worldwide recognition of the need for new approaches to development planning and assessment (Encyclopedia of Nations 2013). Agreement also existed in the international community that emerging approaches to development assessment would need to place people at the center of future development initiatives (Bell 1969; McGranahan et al. 1972; Mehrotra and Jolly 1997; Streeten 1981). Thus, an increasing number of development scholars called for a new set of social metrics–systems of social indicators that could measure with increasing precision the changing state of national and international social development and, by implication, changes in individual and collective quality of life and wellbeing *over time* (Drenowski and Wolf 1966; Morris 1979; United Nations 1975; Zapf 1984). These efforts were reinforced by the rapidly emerging social indicators and social reporting movements in Europe (Beck et al. 1998; Glatzer 2002; Glatzer et al. 1992, 2004; Noll 1996) and their parallel, but more tentative, counterpart movements in the United States (Campbell et al. 1976; Ferris 2010; Land and Spillerman 1975; Miringoff et al. 1999; Sheldon and Moore 1968; USDHEW 1969), and elsewhere (Hagerty et al. 2002).

Operationalization of the Index of Social Progress

The conceptual foundations for the *Index of Social Progress* (ISP) were developed between 1973 and 1987 in seven distinct phases. Each phase required the use of both statistical tools and extensive in-person consultations with international development specialists from all areas of the social sciences working in various world regions. Each phase drew heavily from the expanding literatures on the social aspects of development (Estes1998a, b) as well as from empirical reports of changes in development prepared by major international development assistance organizations, e.g., those of the United Nations and its very large network of specialized agencies (Estes 2013b), the Organization for Economic Development and Cooperation (OECD), the World Bank and International Monetary Fund, as well as the increasingly more sophisticated data collection agencies of national governments (Statistics Sweden, the U.S. Census Bureau) and regional associations of countries

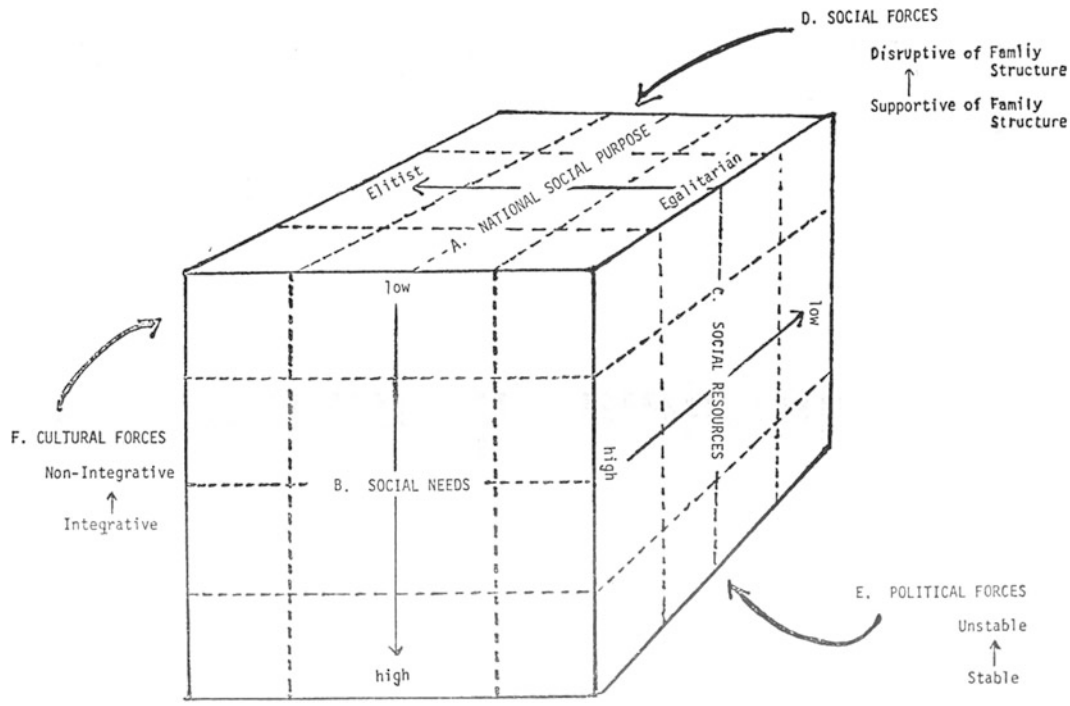


Fig. 8.1 Three dimensional model for national social vulnerability

(ECLAC 2012; ESCAP 2010, 2012). Data supplied by major nongovernmental organizations also were added to the ISP's data base including those of Amnesty International, Freedom House, the Fund for Peace, Save the Children, the Stockholm International Peace Research Institute, and the World Resources Institute, among others. The major difficulty confronting the author at this stage of the ISP's development was to transform the available data into machine readable formats.

Phase 1: Development of the ISP's Conceptual Model (1973–1975)

Referred to initially as the *Index of National Social Vulnerability* (INSV), conceptualization of the INSV took place in three stages: (1) reviews of the relevant literatures dealing with the social aspects of national and international development; (2) consultations with prominent international experts in each of the model's then six major development sectors; and (3) the selection of a limited number of countries for a trial testing of the partially operationalized INSV. The methodological decisions associated with this phase of the INSV's development are described in Estes (1976). The three-dimensional model used in operationalizing the INSV is presented in Fig. 8.1.

Phase 2: Enhancement of the Original *Index of National Social Vulnerability* (INSV) From Six to Ten Sectors and the Renaming of the Index (1976–1978)

In response to the preliminary findings that resulted from the Phase I analysis, the decision was made to expand the number of subindexes included in the general model from six to ten. At the same time, the INSV was renamed as the *Index of Social Progress* (ISP) so as to better reflect both its more comprehensive nature and its emphasis on the positive, rather than negative, aspects of changes in social development. These changes also resulted in an increase in the number of indicators that would be included in the revised model.

Phase 3: Identification and Collection of a Data Bank of Social Indicators for Use in Operationalizing the ISP (1978–1981)

A number of sub-phases also were associated with the operationalization of the ISP during its third phase of development: (1) the identification of a large pool of available social indicators from which a more discrete set of people-centered outcome indicators could be selected; (2) obtaining access to these indicators, the majority of which, at that time, were in print rather than machine readable formats; (3) transforming the selected social indicators into machine readable format; (4) making conceptual decisions concerning the treatment of missing, inaccurate, heavily biased, or incomplete data for individual countries; and, (5) the identification of a provisional methodology for combining the separate indicators into subindexes and, in turn, the subindexes into the composite Index of Social Progress.

Phase 4: Establishment and Refinement of a System of Indicators, Subindexes and Composite Index Statistical Weights (1981)

Completion of Phase 4 of the ISP's development occurred in two steps: (1) the application of traditional index construction tools (mostly factor analysis and linear regression techniques) to the now computerized data bank of approximately 250 social indicators; and (2) in consultation with specialists in international development, finalization of a system of statistical weights that would be assigned to each indicator and subindex as well as to the composite ISP. A complete listing of the individual indicators used in the operationalization of the preliminary ISP, as well as their associated statistical weights, is reported in Appendixes A and B of Estes (1984).

Phase 5: Application of the Preliminary ISP Model to Development Assessment of 107 Countries (1981–1983)

The first set of findings from the fully operationalized ISP and WISP were reported in Estes (1984). This volume reports detailed analysis of development trends for 107 countries for the 10-year period 1970–1980.

The statistical weights assigned to each the ISP's ten subindexes in forming three major components of the index and, in turn, the a second set of weights used to assigning each of the three component to the composite index are identified in Table 8.2. The same weighting system was used for all iterations of the ISP so as to ensure comparability in the measurement approach taken in computing scores over time.

Phase 6: Application of the Refined ISP Model to a Representative Sample of 124 Countries (1983–1987)

Between 1983 and 1987 testing of slightly modified versions of the earlier ISP and WISP to assess changing patterns of social development for 124 countries over the 14-year time period 1970–1983 (Estes 1988). At this stage, the ISP was fully stabilized and all of its operationalized components were confirmed to be valid and reliable measures of *social* development.

Further, and of considerable importance to the utility of the index, the ISP's indicators and subindexes could be aggregated and disaggregated for use at various levels of analysis. This is an important methodological feature of the WISP in that it permitted other investigators to disassemble the WISP and subsequently assign their own system of statistical weights to the ISP's indicators and subindexes in analyzing development sectors of particular interest to them. Though not intended for use at the subnational level, in fact, many elements of the Index could be reorganized for use at the state, provincial, and municipal levels.

Phase 7: Application of the ISP and WISP to 162 Countries Representing 95 Percent of the World's Population (1988-present)

The final, and on-going, phase in the ISP's development involved the application of the ISP to 162 countries representing approximately 95 % of the world's population (Estes 1998c, 2010, 2012a, b; 2013a). With the exception of the

substitution of selected indicators, the fully operationalized ISP and WISP have remained unchanged since 1988.

Similarly, the system of statistical weights developed during Phase 4 has been applied to all subsequent iterations of the ISP. Data previously reported for 1970 and 1980 were reanalyzed using the revised weighting system in order to insure comparability of measurements across all time periods.

Findings

The study's findings for the 40-year time period 1970–2011 are reported in six parts–each of which reports the *state* of social development for different clusters of countries. *Part 1* reports development findings for the *world-as-a-whole* (N = 1). *Part 2* focuses on development trends occurring in selected *world regions* (N = 6) and *subregions* (N = 19). *Part 3* provides a detailed analysis of social conditions for selected *clusters of countries* that share certain geographic, economic, political, or religious characteristics in common with one another: (1) for "Europe" as a transnational geographic region (N = 35); (2) for "Economies in Transition" (EITs, N = 31) which are both transnational and transregional; (3) for member states of the "Organization of Islamic Cooperation" (OIC, N = 53) which includes countries located in all geographic regions but which share a single religious tradition; and, (4) the five rapidly developing countries referred to collectively as the "the BRICS" (Brazil, the Russian Federation, India, China and, more recently, South Africa). *Part 4* summarizes country-specific WISP scores and changes in WISP rank positions for all 160 countries included in the analysis for four of the study's five time periods, i.e., 1980, 1990, 2000, and 2011. WISP scores and WISP rank positions attained by individual countries in 2011 are used in Part 4 to regroup the study's 160 countries into three major developmental grouping: (1) world *Social Leaders* (SLs, N = 34); (2) world *Middle Performing Countries* (MPCs, N = 85); and, (3) world *Socially Least Developed Countries* (SLDCs, N = 43). *Part 5* identifies the countries that experienced the most significant 10-year WISP *gains* (N = 27) *and losses* (N = 26) between 2000 and 2011. And the final part of the analysis, *Part 6,* summarizes the study's major conclusions. All six parts of the chapter focus on the interplay forces that either promote or inhibit the quality of life and wellbeing for people everywhere in the world.

Part 1: Trends in World Social Development – The Search for Global Wellbeing

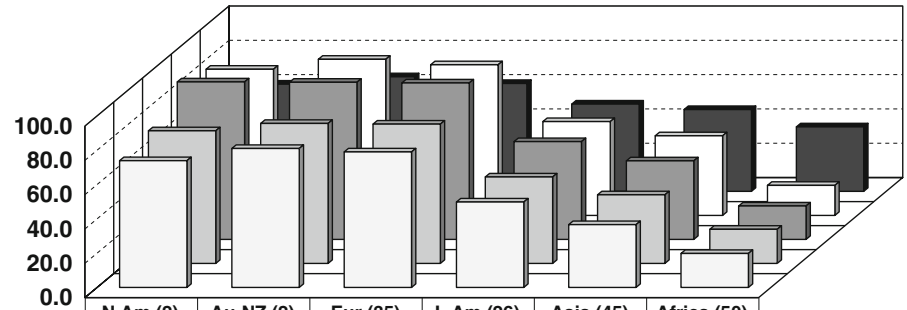
World Development Trends by Continental Groupings and Economic Development Levels

Figures 8.2 and 8.3 summarize the study's major WISP findings for all 160 countries included in the analysis. These data cover the 40-year time period 1970 to 2010/2011 and reflect comparative WISP performances for six continental groupings, i.e., North America (N = 2),Australia-New Zealand (N = 2), Europe (N = 35), Latin America (N = 26), Asia (N = 45), and Africa (N = 50). The WISP scores for these regions averaged 43.6, 43.4, 48.1, 48.5, and 48.7 for 1970, 1980, 1990, 2000, and 2010/2011, respectively.

The Developed Market Economies (DMEs)

Reorganized by level of economic development, the world's most socially developed regions are the 39 *Developed Market Economies* (DMEs) ofAustralia-New Zealand, Europe, and North America (Fig. 8.4). These countries had already attained the most favorable scores on the WISP by 1970 and continued to add to them for the next 30 years. Some improvements continued to accrue to selected DMEs between 2000 and 2011 but, as a group, the DMEs experienced net social losses averaging −28.2 % between 2000 and 2011, respectively (Fig. 8.5).

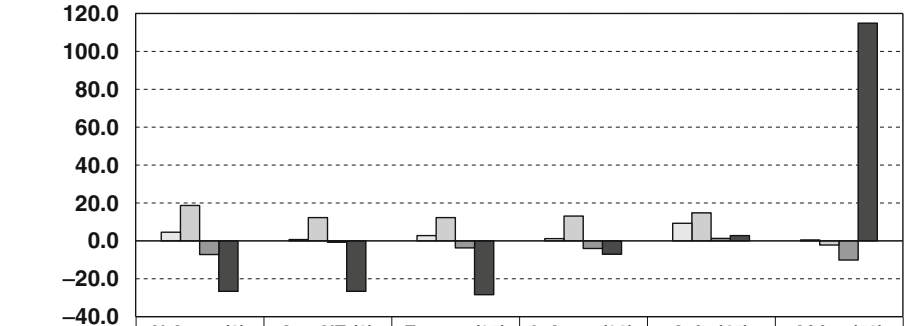
The losses that occurred within the group of DMEs are closely associated with: (a) the near-collapse of global financial markets that



	N Am (2)	Au-NZ (2)	Eur (35)	L Am (26)	Asia (45)	Africa (50)
1970	73.9	81.0	79.0	49.8	36.6	19.8
1980	77.3	81.6	81.2	50.4	40.0	19.9
1990	91.8	91.6	91.2	57.0	45.8	19.5
2000	85.2	91.0	87.8	54.7	46.4	17.5
2011	62.5	66.8	62.9	50.9	47.7	37.6

[CONT_11_bw]

Fig. 8.2 Average WISP scores by continent, 1970–2011 (N = 160)



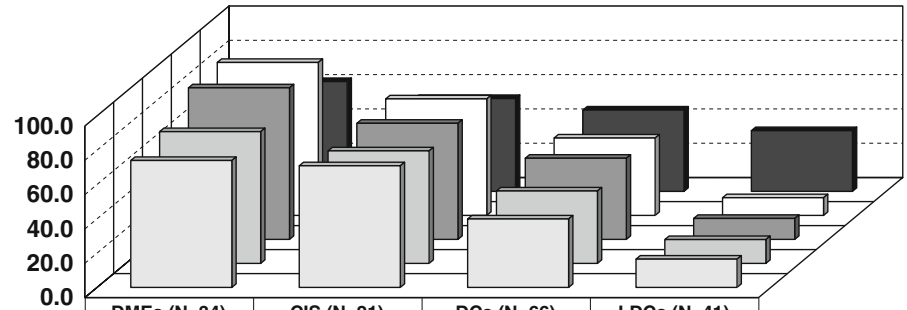
	N Amer (2)	Aus-NZ (2)	Europe (35)	L Amer (26)	Asia (45)	Africa (50)
% 1970-80	4.6	0.7	2.8	1.2	9.3	0.5
% 1980-90	18.7	12.3	12.3	13.1	14.8	–2.2
% 1990-00	–7.2	–0.7	–3.7	–4.0	1.3	–10.1
% 2000-10	–26.6	–26.6	–28.4	–7.0	2.8	114.9

[%CONT_11_bw]

Fig. 8.3 Percent change in average WISP scores by continent, 1970–2011 (N = 160)

originated in North America beginning 2007 (OECD 2009, 2013); (b) the actual collapse in 2008 of both a major global investment bank and securities trading firm (Lehman Brothers); (c) the forced sale of a Bear Stearns, a major investment bank specializing in the sale of securitized subprime mortgages (Boyd 2008); (d) the bursting of the real estate bubbles in North America and Europe; (e) substantial downward pressures on the "Euro" as the common unit of currency among the 17-country "Eurozone"; and, (f) the imposition by conservative governments in all three DME subregions of regressive policies that undermined the relatively secure social "safety nets" that previously existed in the majority of these countries (USSSA 2012).

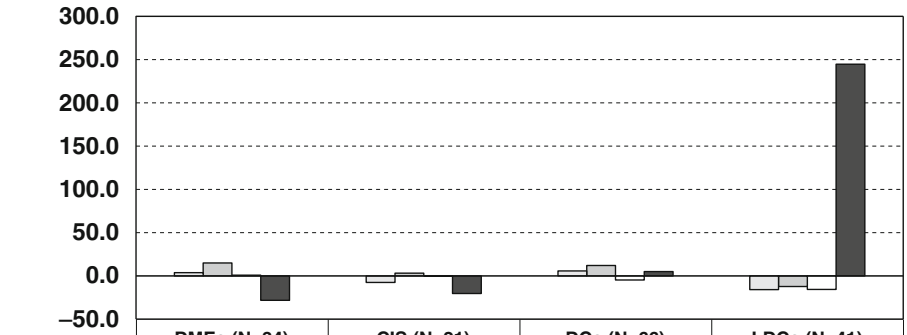
Despite the high levels of social, economic, and political turbulence that characterized the WISP performances of the DMEs after 2000, and despite the net social declines that took place within all three subregions between 2000 and 2010/2011, comparatively small differences currently characterize their development profiles. The comparability of the WISP performance



	DMEs (N=34)	CIS (N=21)	DCs (N=66)	LDCs (N=41)
1970	74.0	70.9	39.9	16.5
1980	76.8	65.6	42.2	13.9
1990	88.3	67.7	47.3	12.2
2000	89.1	67.9	45.1	10.3
2011	64.0	54.1	47.4	35.4

[DEVGRP_11_bw]

Fig. 8.4 Average WISP scores by development groupings, 1970–2011 (N = 162)



	DMEs (N=34)	CIS (N=21)	DCs (N=66)	LDCs (N=41)
% 1970-80	3.8	–7.5	5.8	–15.8
% 1980-90	15.0	3.2	12.1	–12.2
% 1990-00	0.9	0.3	–4.7	–15.6
% 2000-11	–28.2	–20.3	5.1	244.7

[%DEVGRP_11_bw]

Fig. 8.5 Percent change in average WISP scores for development groupings, 1970–2011 (N = 162)

levels of the DMEs are in sharp contrast to the asymmetric development patterns observed for other world regions.

Africa

The remarkable average WISP gains reported in Figs. 8.2 and 8.3 for *Africa's* 50 nations between 2000 and 2010/2011 (+114.9 %), in the main, are accounted for by the continent's recent ability to exploit *to its own advantage* the abundant natural resources located in its Northern (primarily oil) and Southern regions (mostly gold, diamonds, and other precious minerals). The region's countries also are benefitting from large foreign remittances (Anyanwu 2011) and from increased levels of international development assistance directed to Africa on a preferential basis through the *Millennium Development Campaign*. Many resource-rich African states have also benefited from substantial amounts of foreign direct investment in Africa's manufacturing, mining, and agricultural sectors (AfDB 2012).

The restoration of peace to large areas of Africa's Central and Middle subregions also is contributing to the region's rapid development—

a goal that has eluded both the region's and world leaders beyond Africa since political independence was restored to these countries during the 1960s (CIA 2013). Increased levels of political and economic stability, in turn, have contributed to increasing levels of international trade (African Development Bank 2012, 2013; IMF 2012a) and significant improvements in the region's human resource profile also contributed to the higher development performances reported for Africa after 2000.

Central to Africa's recent development accomplishments has been the implementations of the eight *Millennium Development Goals* (MDGs) of the United Nations' 10-year *Millennium Development Campaign* (MDC) that was launched in 2005.[7] Unparalleled in its reach, the MDC, along with its focus on deeply impoverished nations located in other world regions, has targeted Africa's poorest and least developed countries for preferential development assistance (United Nations 2012a, b). Unlike earlier initiatives, the MDC has succeeded in: (a) reversing Africa's long history of misuse of international development assistance (Glennie 2008; Leonard and Straus 2003; Moyo 2009); (b) promoting increased cooperation between neighboring countries; and, (c) through public-private cooperative activities with the region's growing network of nongovernmental organizations has advanced the quality of basic education and health care. The region's countries also are beginning to develop a secure framework for both advancing and protecting the basic human rights of their growing populations.

Though still fragile, and certainly reversible, the social gains reported for the African region are impressive and are continuing to accumulate (AfDB 2012, 2013; UNDP 2011).[8]

Latin America and the Caribbean

The absence of significant social development gains for the *Latin American* and the *Caribbean* region between 2000 and 2011 continues to be perplexing given the region's rich natural resources, well developed infrastructure, and comparatively high levels of human capital (ECLAC 2012; UNDP 2010). The reasons that account for the comparatively slow pace of development throughout the region include: (a) a legacy of civil unrest, political instability, and public corruption, which continues to characterize many of the region's countries (Freedom House 2012; Transparency International 2012); and, (b) steadily declining, but still high, population growth rates, especially within the region's poorest countries and, in turn, in the poorest populations of these countries (ECLAC 2012).

On the more positive side of development accomplishments, rates of infant and child mortality have declined appreciably throughout Latin America as have the number of women dying during child birth. Gains in all three of these areas reflect the region's successes in strengthening its medical infrastructure and in making a wide range of preventive and curative health services available to all people in the region, including those who are poor and rarely have had access to even the most basic health services in the past (WHO 2012). Years of average life expectancy also have increased throughout the Latin American region which reached an average of 74 years in 2010. This is a dramatic shift over earlier development decades and reflects the increasing capacity of the region's governments to meet the nutritional, sanitation, and related needs of their growing populations.

[7] Launched in 2005, the *Millennium Development Campaign* (MDC) is organized around the realization of eight goals (the MDGs) that promote a basic standard of living for people living in the world's poorest and most socially deprived countries: (1) eradicating extreme poverty and hunger; (2) achieve universal primary education; (3) promote gender equality; (4) reduce infant mortality; (5) improve maternal health; (6) combatting HIV/AIDS and other diseases; (7) ensure environmental sustainability; and, (8) promoting global partnerships (United Nations 2012a, b). Reports of global progress in achieving these goals are available from the United Nation's MDC "gateway": http://www.un.org/millenniumgoals/bkgd.shtml

[8] A fuller discussion of development progress occurring within the world's poorest nations is included in other recent reports prepared by Estes (Estes 2013a, b).

And, in 2012, seven Latin American countries ranked the highest in a Gallup poll of 184 countries with respect to their experiencing the "highest positive emotions", or "happiness", in their self-assessments of quality (Clifton 2012)–Panama (No. 1), Paraguay (No. 2), El Salvador (No. 3), Venezuela (No. 4), Guatemala (No. 7), Ecuador (No. 9) and Costa Rica (No. 10). The highly favorable self-assessments of their state of subjective wellbeing exists among the citizens of Latin American countries exist despite the lingering, sometimes formidable, challenges that inhibit the region's development, including those associated with the region's fertility rates and increasing income disparities (ECLAC 2012).

Asia

Considerable 40-year variations also characterize social development patterns in the *Asian* region. These patterns are especially pronounced in China, India, and Indonesia which are home to 2,797 million people or, approximately, 40 % of the world's total population.

Approximately 70 % of the world's total poor, including those surviving under the most desperate circumstances, reside in Asia (ECLAC 2012). The poverty situation is particularly extreme in India, Bangladesh, and in the newly independent successor states of the former Soviet Union of South Central Asia (World Bank 2013b), especially in the remote rural communities of these countries. Conversely, absolute poverty in East Asia has been reduced markedly since 1990, especially in China, which, owing to its now decades-long double-digit rates of economic growth, has succeeded in lifting hundreds of millions of people from poverty (Wan 2008; World Bank 2013b).

Rates of infant, child, and maternal mortality also have declined appreciably within the Asian region (WHO 2012) and, at the same time, literacy levels, years of life expectancy, and per capita income levels have risen (ECLAC 2012). These represent major developmental milestones for the region. Remarkably, Asia is now home to the largest number of the world's super rich (Forbes 2013), a phenomenon that contributes to the reality that Asia is also the region with greatest income disparities (Ghani 2010; WRI 1999). The wealth gap that exists between Asia's poor and rich is readily apparent in both its urban centers and rural communities.

Many of the Asia's impressive gains on the WISP are associated with the end of recurrent internal and intra-regional conflicts (Wikipedia 2013a, b). Even so, Asia remains one the world's *least* peaceful regions as demonstrated by the serious conflicts occurring in Indonesia, Burma, Chechnya, India, Turkey, and Yemen and protracted intra-regional conflicts in Afghanistan, Iraq, and Pakistan (Fund for Peace 2013). Asia's gains are also associated with the region's successful export-oriented economies which, of some significance, include the outmigration of large numbers of both skilled and unskilled workers, especially of nurses and other human service care givers (IOM 2013; World Bank 2013a). The region's long-standing pattern of personal savings also added considerably to the region's financial stability (Horioka and Terada-Hagiwara 2011; Little 2008) as has a more recent pattern on the part of several of Asia's largest economies to invest in sovereign debt bonds issued by some of the world's most economically advanced countries—including those of the United States and leading member states of the European Union (IMF 2013b; Nelson 2013). Most Asian societies, however, have seriously underfinanced their social safety nets and, in doing so, have left large segments of their populations vulnerable to poverty and economic exploitation (USSSA 2011).

Today, WISP scores for the Asian region-as-a-whole (Average = 47.7) more closely approximate those for the world-as-a-whole than those attained by any other of the continental grouping (World M = 48.8, SD = 28.2). This is not surprising since such a large share of the world's population resides within the region. Apart from the serious development challenges associated with Asia's high levels of financial poverty, the following factors are closely associated with the rapid rates of overall development reported for the Asian region-as-a-whole (ADB 2012, 2013):

1. predominantly export-led economies;
2. ability to quickly adopt and improve sophisticated electronic and other technologies for use in manufacturing and other industrial processes;

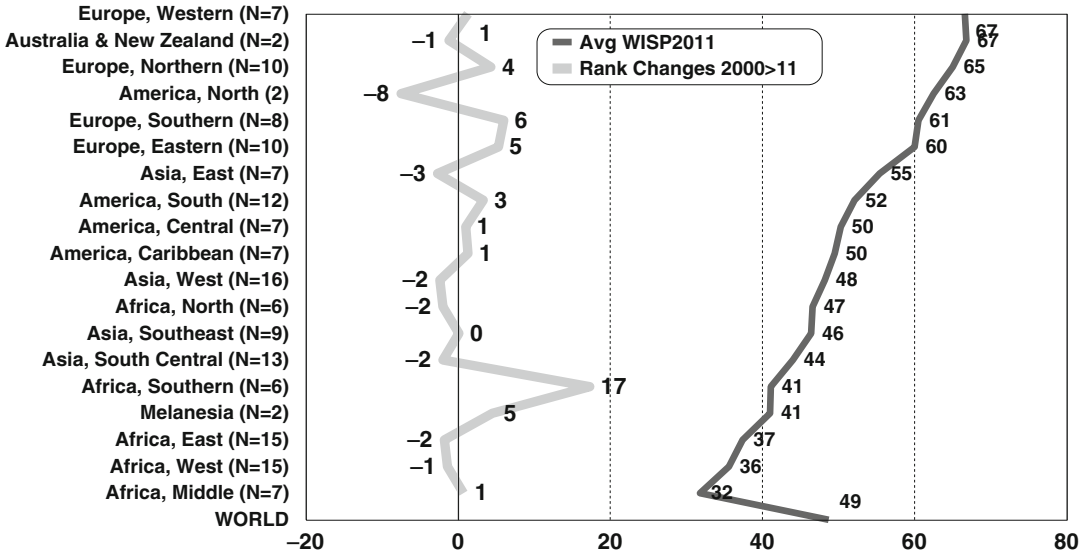
3. ability to quickly export the improved, value added, technologies back to the countries that created the original technologies;
4. increased recognition within the region of the important contribution that can be made by women to Asia's broad-based socio-economic development;
5. renewed willingness on the part of many Asian countries to suspend centuries-old antipathies toward neighboring states in order to pursue shared subregional economic and social goals;
6. creation of new political space that permits the emergence of civil society organizations as partners with government in helping to advance national and regional development;
7. widely shared commitment to full implementation of the eight *Millennium Development Goals* (MDGs); and,
8. steady progress on the part of some of Asian countries in poverty reduction within their borders.

Continuing challenges to Asian development include: (a) the unpredictability of global markets for the goods and services produced by the region's export-led economies; (b) the staggering poverty that continues to exist throughout the region, but especially in China, India, and Indonesia; (c) continuing high rates of fertility *in combination* with longer average life expectancy; (d) continuing out-migration of many of the region's talented young people to neighboring countries, to the DMEs, and, now, to the BRICS; and, (e) in most of Asia's subregions, limited opportunities for women to participate fully in policy-shaping and legislative roles. This pattern is especially prominent among the nations of East, South Central, and Southern Asia (ESCAP 2008, 2010, 2012).

Part 2: Regional and Subregional Development Trends

In addition to measuring the changing state of *world* social development over time (Estes 1984, 1988, 1998c, 2010), the WISP was also designed for use in assessing the development performances for each of the world's six major geographic regions and 19 geographic subregions. Previous publications by the author, for example, include analyses of development trends for Africa (Estes 1995), Asia (Estes 1996b, 2007a), Europe (Estes 2004), and Latin America (Estes 1996a). These analyses were also done for clusters of nations that share similar development challenges, i.e., the pre- and post-independence development challenges confronting the *successor states of the former Soviet Union* (Estes 1998b), development trends within economies in transition (Estes 2007b, 2012b) and development challenges confronting countries classified by the United Nations as socially least developed countries (Estes 2013a). Other reports focus on development trends occurring in "failed" and "failing" states (Estes 2012a) and development patterns for member states of the *Organization of Islamic Cooperation* (Estes and Tiliouine 2014). Regional analyses have also been embedded in a wide range of reports that focus on particular sectors of development and on the needs of historically disadvantaged population groups. This enables the examination of the global importance of wellbeing from a three-dimensional perspective, i.e., through the lenses of time, geographic space, and culture.

In this chapter Fig. 8.6 reorganizes the study's 160 countries into 19 geographic subregions. It rank orders each subregion on the basis of their average WISP performance in 2011 and identifies the average number of changes in rank positions that occurred for each subregion between 2000 and 2011. Thus, in Fig. 8.6, we are able to both: (1) identify both the most and least socially successful subregions on the basis of their current WISP performances and, (2) assess the nature of the WISP rank position vis-à-vis those of other world subregions. Figure 8.6 also confirms the dynamic nature of the development trends that are occurring in various world regions over time. Especially apparent in this figure is that countries are not guaranteed a particular ranking from one time period to the next. Rather,



[regional_ranks_11_bw]

Fig. 8.6 Rank ordered average regional WISP scores and average changes in WISP, 2000–2010/11 (N = 19 regions)

to advance their rank position on the WISP, countries (and subregions) must continue to make social investments in improving the overall status of their populations. Thus, viewed from within this context, the WISP measures both the *absolute* and *relative* status of development performance for each country and each subregion over time. As country and regional investments in development increases or decline so, too, do their rank position in overall performance on the WISP.

As confirmed by the subregional data reported in Fig. 8.6 for 2010/2011, the world's most socially developed subregions are: Western Europe (Rank 1/19, [N = 7], Average WISP2011 = 67); Australia and New Zealand (Rank 2/19, [N = 2], Average WISP2011 = 67); Northern Europe (Rank 3/19, [N = 10], Average WISP2011 = 65); North America (Rank 4/19, [N = 2], Average WISP2011 = 63); and Southern Europe (Rank 5/19, [N = 8], Average WISP2011 = 61). The countries included in these subregions are all members of the group of Developed Market Economies (DMEs) and, as such, have consistently outperformed other world subregions since at least 1970. Though the combined population of the 29 countries included in these subregions is comparatively small as a percentage of the world's total, their consistent representation among the list of most socially developed countries is impressive. This continues to be the case despite the net social losses recorded on the WISP for some DME countries and subregions between 2000 and 2011, e.g., North American countries (N = 2) experienced an average loss of −8 WISP rank positions between 2000 and 2011 andAustralia-New Zealand's (N = 2) average worldwide rank position dropped by −1 between 2000 and 2011. Conversely, the WISP position of the remaining 25 DMEs increased by an average of +1, +4, and +6 rank positions for Western, Northern and Southern Europe, respectively.

The world's socially least developed subregions are: Middle Africa (Rank 19/19, [N = 7], Average WISP2011 = 32); West Africa (Rank 18/19, [N = 15], Average WISP2011 = 36); East Africa (Rank 17/19, [N = 15], Average WISP2011 = 37); Melanesia (Rank 16/19, [N = 2], Average WISP2011 = 41); and, Southern Africa (Rank 15/19, [N = 6], Average WISP2011 = 41). Unfortunately, the countries that make up these

subregions have consistently been, and continue to be, among the lowest performing countries on the WISP since 1970. An additional positive development pattern reflected in Fig. 8.6, however, is the remarkable gains in average WISP rank positions achieved by the six nations of the South African subregion and the average gain of five WISP rank positions recorded for the two countries of the Melanesia subregion. Gains of this magnitude are especially impressive given the generally unfavorable WISP profiles that characterized these subregions during the first 30-years covered by this study. Also, many of the significant gains in development reported for these countries and subregions are the direct result of the successful implementation of the UN's Millennium Development Campaign (MDC) and the similarly focused bi- and multilateral development initiatives of selected countries and private benefactors (Foundation Center 2012; OECD 2012c).

The nine middle performing subregions identified in Fig. 8.6 also experienced a combination of positive and negative changes in their WISP rank positions between 2000 and 2011. With the exception of the Eastern European and North African subregions, all of the subregions in this group are located in Asia and Latin America. Several of these subregions consist of countries that are rich in natural resources (especially North Africa and West Asia) and the vast majority of these countries are enjoying extended periods of peace and, with it, economic prosperity. Several of the subregions identified in Fig. 8.6, including South Central Asia, also are rich in human resources. Even so, unemployment and under-employment patterns in virtually all of these regions are high in comparison with jobless averages reported for the world-as-a-whole (ILO 2012a, b). Population growth rates are also high in these subregions (WHO 2012) and a number of their countries continued to be governed by autocratic regimes (CIA 2013).

Subregional performances on WISP, then, tend to be asymmetrical and to differ dramatically between various regions and subregions. The asymmetrical nature of these patterns is reflected in the data summarized in Figs. 8.5 and 8.6 and are even more pronounced when examining the 40-year development profiles of individual countries. The data summarized in these figures also provide a vivid picture of the changing status of subregions against both their own earlier profiles and those of other subregions worldwide.

Part 3: Development Trends in Selected Groupings of Countries

As elsewhere in the volume, this section of the chapter illustrates the use of the WISP in analyzing development trends occurring in particular clusters of nations. For illustrative purposes only, the author has chosen to focus on a subset of countries that share: (1) the same geographic space (Europe); (2) related economic challenges (Economies in Transition); (3) shared religious beliefs (member states of the Organization of Islamic Cooperation); and, (4) special status as rapidly emerging economies (the "BRICS"). Thus, Part 3 focuses on development trends for Europe as a single geographic region (N = 35), on the transformational challenges confronting economies in transition (N = 31), on the unique challenges to development facing member states of the Organization of Islamic Cooperation (N = 53), and on the major drivers that account for the rapid development of the five countries that make up the BRICS. A more in-depth analysis was undertaken for one of the BRICS, India, which is presented in order to illustrate the importance of the WISP's ten subindexes in understanding historical and contemporary patterns of development at the national level. While some overlap exists between selected countries included in these four categories, in the main, the categories include unique subsets of nations.

European Development Trends

Since the end of the Second World War European nations set the pace for social development worldwide. Their global leadership position stemmed from the lessons learned during extended periods of hyper-inflation, high unemployment, poverty,

and the wide disparities that existed in income and wealth both prior to and following the war years. The devastating destruction to large expanses of Europe's physical infrastructure as a result of these wars also proved to be important drivers of European development, especially as the region's countries sought to regain their former industrial and financial capacities. These efforts were led by the group of "inner six" countries—Belgium, France, West Germany, Italy, the Duchy of Luxembourg, and the Netherlands—who, in working together, forged the path forward for establishing a "new" Europe. Though not part of the continent, the United States and, in time, the United Kingdom played key roles in helping European nations rebuild their societies.[9]

Over the space of a decade or more following the end of the second World War, a new set of core values emerged in Europe that continue to guide much of the continent's contemporary development, i.e., *peace over war*, *cooperation over competition*, and *sharing over squandering*. These values made possible the establishment of the *European Coal and Steel Community* in 1951, the *European Economic Community* in 1958 and, today, the 27-nation *European Union* (1993). These values also served as the basis for the creation of the 17 member state "Eurozone", i.e., a subset of nations of the European Union that agreed to use the *Euro* as a common unit of currency. The adoption of the Euro as the sole currency within these countries sharply reduced the control that individual central governments could exercise over national monetary and fiscal policies. For Euro-zone countries such as Greece and Spain, and possibly Italy, this may not be a workable decision over the long term.

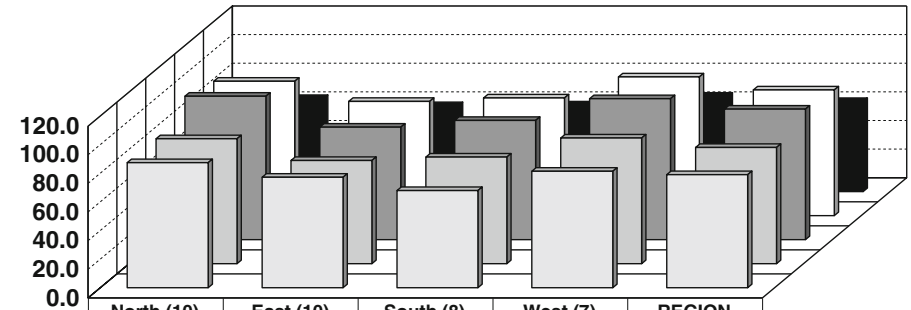
Figure 8.7 summarizes the European accomplishments on the WISP for the full 40-year time period of the study. Beginning as early as 1970, European regional and subregional data offer convincing evidence of the continent's success in advancing the overall wellbeing of all her people, including in its less developed Southern (N = 8) and Eastern (N = 10) subregions. Despite some small statistical differences between the average WISP scores reported for the four subregions, Europe-as-a-whole (N = 35) performed more robustly on the WISP for all five of the study's time periods than did other world regions (Figs. 8.2, 8.3, 8.6 and 8.7).

Figure 8.8 reports more detailed trend data concerning changes in European social development from 1970 to 2011. As previously reported for other DMEs, the regional and subregional WISP averages for Europe declined sharply between 2000 and 2011, i.e., from a 30-year high of 87.8 in 2000 to 62.9 in 2011—a net loss of −28.2 % in regional WISP values. The 10-year social losses have been more substantial in Europe's two most socially advanced subregions – i.e., −31.3 % in Western Europe and −30.8 % in Northern Europe—than in either its Eastern or Southern subregions which traditionally have lagged behind development patterns reported for Western and Eastern Europe (Estes 2004).

Europe's significant 10-year declines on the WISP are the result of the unfavorable financial conditions occurring within the region and those of other DMEs reported in Part 1 of this chapter. Currently, and possibly for some time into the future, these social dislocations are undermining the stability of the Euro and, many believe, that of the European Union itself (Cline and Wolff 2012; Lapavitsas 2012).

Of some importance in understanding the underlying dynamics of the above trends more fully is the rapid aging of Europe's population *in combination with* declining fertility rates and increasing levels of immigration, especially from the former colonies of selected European countries, Turkey, the newly independent states of Eastern and Central Europe, and South Central Asia (Population Reference Bureau 2012; OECD 2012a). Immigration to Europe from North African countries also has reached a high level, albeit immigration into the region from Africa has been

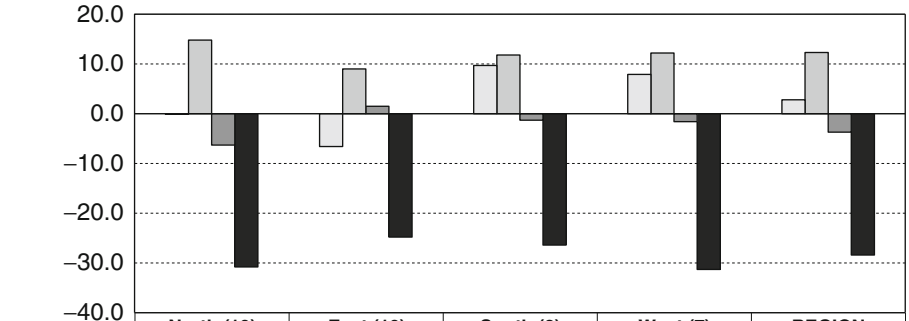
[9] The largest contribution made to European development by the United States was through the US-funded Marshall Plan. . .a decades-long initiative that provided Europe's re-emerging nations with financial and technical assistance, preferential trade agreements and with what, in time, was to become an enduring friendship (Wikipedia 2013c).



	North (10)	East (10)	South (8)	West (7)	REGION
1970	87.4	77.2	67.9	81.4	79.0
1980	87.3	72.1	74.5	87.8	81.2
1990	100.2	78.6	83.3	98.5	91.2
2000	93.9	79.8	82.2	96.9	87.8
2011	65.0	60.0	60.5	66.6	62.9

[Europe_11_bw]

Fig. 8.7 Average WISP scores for Europe by subregion, 1970–2011 (N = 35)



	North (10)	East (10)	South (8)	West (7)	REGION
1970-80	–0.1	–6.6	9.7	7.9	2.8
1980-90	14.8	9.0	11.8	12.2	12.3
1990-00	–6.3	1.5	–1.3	–1.6	–3.7
2000-2011	–30.8	–24.8	–26.4	–31.3	–28.4

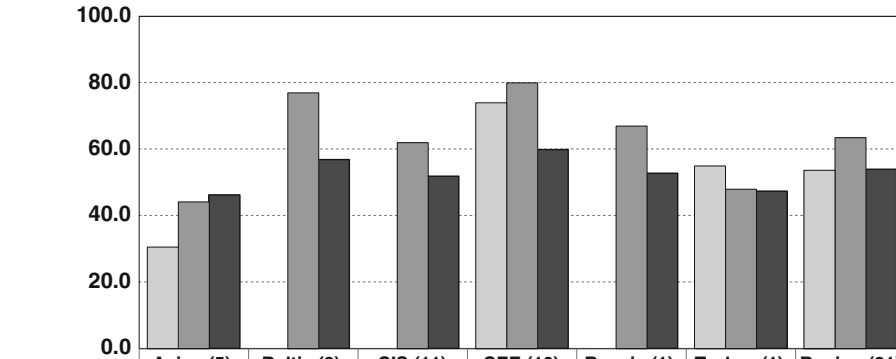
[%Europe_11_bw]

Fig. 8.8 Percent change in average WISP scores for Europe, 1970–2011 (N = 35)

a centuries-long phenomenon (Council on Foreign Relations 2007; IOM 2013). And all of these economic migrants are needed to sustain Europe's industrial and service economies as well as to replenish its traditional, but diminishing, populations (OECD 2012b). However, the rapid introduction of large numbers of persons with very different cultural and religious backgrounds from those of historic Europe is posing a major challenge on the capacity of many of the region's countries to cope with their changing demographic reality.

Development Trends in Economies in Transition (EITs)

Of the 160 countries included in the analysis, 31 are "economies in transition" (EITs), i.e., countries that are in the process of transitioning from centrally planned economies and autocratically controlled political systems to more free market economic and democratic political systems. Taken together, the EITs have a combined population of 1,916 million people, or approximately 28 % of the world's total. The EITs are located in most of the world's regions



	Asian (5)	Baltic (3)	CIS (11)	CEE (10)	Russia (1)	Turkey (1)	Region (31)
WISP1990	30.6	NA		74.0	NA	55.0	53.7
WISP2000	44.2	77.0	62.0	80.0	67.0	48.0	63.5
WISP2010	46.2	56.8	51.8	59.8	52.7	47.3	53.9

[EIT_11_bw]

Fig. 8.9 Average WISP scores for economies in transition by subregion, 1990–2010 (N = 31)

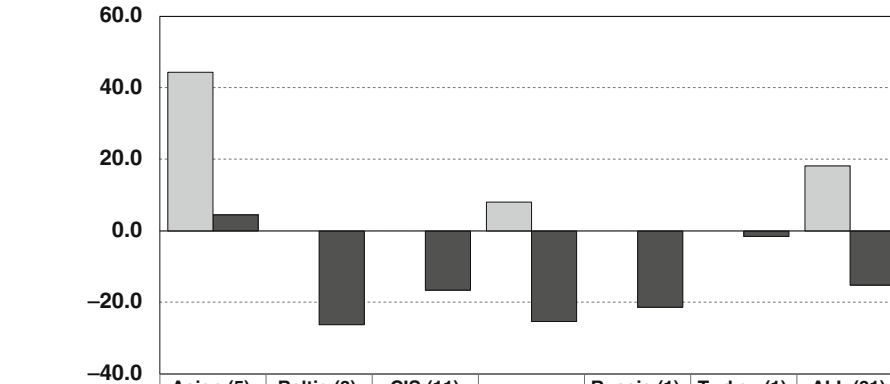
but their major population centers are concentrated in Asia and Eastern Europe (Fig. 8.9).

In general, the EITs are characterized by high levels of poverty (UNDP 2011), limited human and natural resources, weak and eroding physical infrastructures (roads, electricity, communications), and political governance by authoritarian regimes. Average years of life expectation tends to be lower in the EITs than in other WISP middle ranking countries and, although appreciable progress is being made, rates of infant, child, and maternal mortality remain high (UNDP 2011). Most of the EITs are dependent on export-oriented models of economic development to stimulate economic growth and implicitly on the out-migration of many of the EITs youngest and best educated young people in search of improved economic opportunities elsewhere (IMF 2012a). The major exception to the latter pattern exists for China which has succeeded in thwarting the large scale out-migration of here youth given the country's very rapid rate of economic growth (Guo 2010; Guo and Guo 2010).

Figure 8.10 summarizes the percentage change in WISP scores that occurred for the six clusters of EITs over the 20-year time period 1990–2011. The net 10-year changes in WISP values between 2000 and 2011 for each cluster of countries differed appreciably. Net 10-year WISP gains occurred only for the five nations of the Asian region (+4.5 %) whereas all of the other clusters experienced net social losses, i.e., −26.2 % for the three Baltic countries, −25.3 % for the ten countries of Central and Eastern Europe (CEE), −21.3 % for the Russian Federation, and −16.5 % for the 11 other countries of the Commonwealth of Independent States (CIS). The comparatively small 10-year loss in WISP scores reported for Turkey (−1.5 %) is regarded as a statistical artifact. On average, WISP scores for the entire group of 31 EITs declined by −15.1 %.

As evident from the data summarized in both Figs. 8.9 and 8.10, the development challenges confronting the EITs are enormous (Estes 2012b). They are especially significant for the members of the former Warsaw Pact group (e.g., Albania, Bulgaria, the Czech Republic, Hungary, Poland, Romania, the former Yugoslavia) and even more so for the former republics of the Soviet Union located in South Central Asia who regained their political independence only in 1991 (e.g., Azerbaijan, Kazakhstan, the Kyrgyz Republic, the Russian Federation, Tajikistan, Uzbekistan, etc.).

The development challenges confronting the EITs of South Central Asia are especially complex given: (1) their relative isolation from the



	Asian (5)	Baltic (3)	CIS (11)	CEE (10)	Russia (1)	Turkey (1)	ALL (31)
% Chg 90-00	44.4	NA	NA	8.1	NA	NA	18.2
% Chg 00-10	4.5	–26.2	–16.5	–25.3	–21.3	–1.5	–15.1

[%EIT_11_bw]

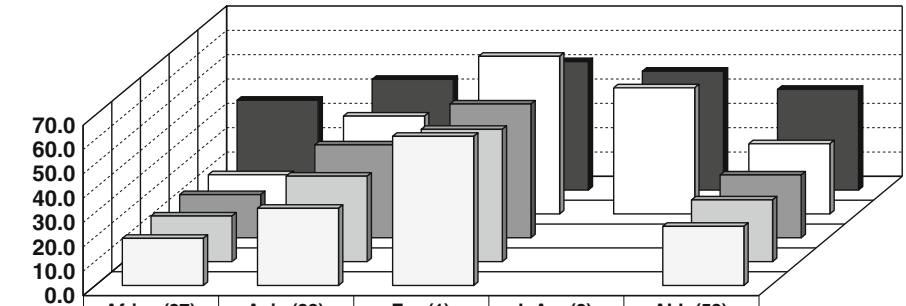
Fig. 8.10 Percent change in average WISP scores for EITs by subregion, 1990–2010 (N = 31)

Western world for more than seven decades; (2) the predominately rural composition of their population and economies; (3) their high levels of financial poverty; and, (4) since their independence, rapid degradation of their physical and economic infrastructure. Many or these nations also are characterized by high levels of public corruption (TI 2012) and repressive autocratic political regimes (AI 2012; FH 2012). There are few viable civil society organizations in the Asian EITs (Anheier et al. 2010; Singh 2003) with the exception of NGOs that engage in activities that are not perceived to be threats to ruling political elites, e.g., those engaged in the provision of basic education and health services, tertiary care for the aged and persons with disabilities, the arts, and cultural exchanges. On the positive side, several of the South Central Asian countries are rich in natural resources (especially in fertile land, transportation networks, and extensive reserves of oil and natural gas) which, in turn, has attracted foreign direct investments into their economies (ESCAP 2003; OECD 2008).

In contrast to the emerging nations of South Central Asia, many of the former Warsaw Pact states, as reflected in the data summarized in Fig. 8.9, are already socially advanced countries. These countries enjoy generally favorable trade relationships with other European countries, especially the Baltic States (Jacobsson 2010). Several of the newly emerging countries of South Central Asia and Eastern Europe are already now included in the memberships of major international economic and political organizations (CIA 2013; World Bank 2013a). In addition to having retained on-going political and economic relationships with Western nations during their period of dominance by the former Soviet Union, these countries also maintained many of the essential elements needed to compete successfully in the global marketplace, e.g., continuous private ownership of the means of production, competitive post-secondary educational institutions, comparatively strong social safety nets, and active participation in international organizations which promoted their relationships with other world regions. The physical infrastructure of these successor states to the former Soviet Union remains comparatively well developed and, since rejoining the wider community of nations, has been further developed. Thus, still very much in a transition state, the majority of the former Warsaw Pact countries are moving rapidly toward inclusion in the group of developed market economies.

Development Trends in Islamic Countries

Today, approximately one fourth of the world's total population consists of 1,580 million persons



	Africa (27)	Asia (23)	Eur (1)	L Am (2)	ALL (53)
1970	19.4	31.7	61.3	NA	24.3
1980	18.7	35.1	54.4	NA	25.4
1990	17.7	38.2	55.0	NA	25.8
2000	16.1	40.2	64.8	51.8	28.8
2011	36.9	45.5	52.8	48.8	41.4

[CONT_OIC_11]

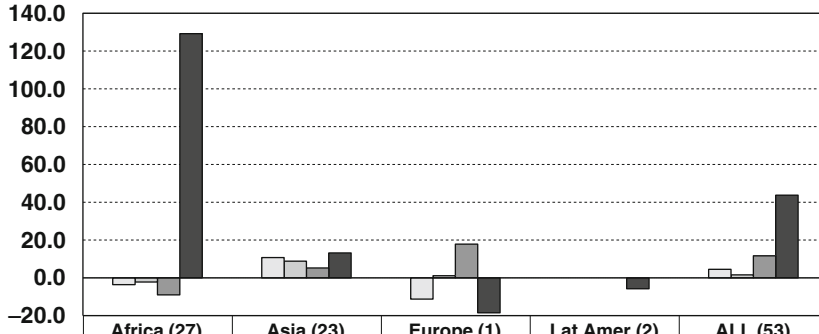
Fig. 8.11 Average WISP scores for member states of the OIC by continental groupings, 1970–2011 (N=53)

who are part of the expanding Islamic *Ummah*.[10] Muslims are found in all regions of the world but are concentrated in Africa, Asia, the Middle East, and in selected successor states to the former Soviet Union. Despite the obvious wealth of some Islamic nations (particularly those of North Africa and West Asia) most Muslims live under conditions of extreme poverty, joblessness, illiteracy, ill health, social and political unrest and, in some regions, religious extremism (Estes and Tiliouine 2014; UNDP 2011). Other dilemmas facing the Muslim World include low-performing educational and health systems, difficulties in financing development programs, inefficient modes of governance, and high levels of public and commercial corruption (ADB 2012; TI 2012). Continued religious extremism also has proved harmful with devastating effects (such as the case of Algeria in the 1990s) and is creating internal tensions in the newly emerging democracies of the "Arab Spring". These dilemmas in Islamic development are compounded by deeply rooted stereotypes held by non-Muslim nations that treat all Muslims as a single block, e.g., that Muslims are predominately Arab when, in fact, people of Arabic extraction make up only 12 % of the Muslim population worldwide (CIA 2013; Ellingsen 2000).

The data reported in Fig. 8.11 summarize WISP trends for 53 of the 57 members of Organization of Islamic Cooperation (OIC). These data span the study's five time periods and are reported separately for the four major geographic regions in which Muslims are concentrated. The majority of Islamic nations beyond Africa attained scores that approximate WISP averages for the world-as-a-whole. The one European member of the OIC, Albania, achieved the most favorable WISP2011 score (52.8), but those of Islamic countries in the Latin America (N = 2) and Asia (N = 23) attained WISP levels that closely approximated that achieved by Albania, i.e., 48.8 and 45.6, respectively. By comparison, the average WISP scores for the 27 African Islamic states averaged only 36.9 in 2011–scores well below those attained by the world-as-a-whole.

Of considerable importance in examining development trend data for this group of nations are the percentage changes in WISP levels that took place for all Islamic subregions between 2000 and 2011. These data are reported in

[10] *Ummah* (Arabic: أمة) is an Arabic word meaning "nation" or "community". It is distinguished from *Sha'b* (Arabic: شعب) which means a nation with common ancestry or geography. Thus, it can be said to be a supra-national community with a common history (Wikipedia 2013d).



	Africa (27)	Asia (23)	Europe (1)	Lat Amer (2)	ALL (53)
% 1970-1980	–3.6	10.7	–11.3	NA	4.5
% 1980-1990	–2.2	8.8	1.1	NA	1.6
% 1990-2000	–9.0	5.2	17.8	NA	11.6
% 2000-2011	129.2	13.2	–18.5	–5.8	43.8

[%CONT_OIC_11]

Fig. 8.12 Percent change in average WISP scores of member states of the OIC by continental groupings, 1970–2011 (N = 53)

Fig. 8.12. Remarkably, the group of African nations (N = 27)–which experienced consistent net social losses on the WISP prior to 2000 (−3.6 % between 1970 and 1980, −2.2 % between 1980 and 1990, and −9.0 % between 1990 and 2000)–experienced a dramatic increase in their average WISP score after 2000, i.e., a gain in excess of 129 % from a group average of 16.1 in 2000!

The remarkable gain in WISP scores reported for these subregions are unparalleled, but they are explainable. In the main, they are associated with the successful implementation of the United Nations' *Millennium Development Campaign* (MDC) which, along with other deeply impoverished countries, targeted the Islamic African states for preferential development assistance (United Nations 2005). The efforts of the United Nations were supplemented by additional activities undertaken by other major international development assistance organizations, those of national governments (including other Islamic states), as well as the generous levels of support directed at development in Africa by individual philanthropists (e.g., Ted Turner, George Soros, William and Melinda Gates, among many other benefactors both within and outside the Islamic community of nations).

All of these resources were brought to bear in helping Africa's poorest and most socially deprived nations make significant progress in promoting the MDC's eight *Millennium Development Goals* (United Nations 2012a, b). Though still fragile and, certainly reversible, the impressive, but recent, WISP gains reported for the 27 African members of the OIC are important and, to be sustained over the long-term, will require continued global investments in these countries (Estes and Tiliouine 2014).

Development Trends in "the BRICS"

Five very rapidly developing countries are referred to collectively as "the BRICS". The acronym was originally coined in a working paper written in 2001 by the Chief economist of Goldman Sachs, James O'Neil, and refers to the emerging economies of Brazil, the Russian Federation, India, China and, more recently, that of South Africa. The BRICS include 40 % of the world's population, occupy 30 % of the planet's landmass and are located on three continents. All five of the BRICS are rich in natural and human resources but each country struggles with its own special set of development challenges. Deeply entrenched poverty, especially among their rural populations, is a major

challenge confronting all five countries. Today, the combined economic output of the BRICS exceeds 25 % of the world's total GDP and is increasing (Ministry of Finance 2012).

Apart from the rapid rate of economic development that the BRICS share, the countries are heterogeneous with respect to virtually all other areas of social development. One country, for example, is a communist state with a self-proclaimed free market economic system (China) while another achieved its independence from the former Soviet Union only in 1991 (the Russian Federation). Resource-rich Brazil achieved its independence peacefully from Portugal in 1822, ended slavery in 1888, but subsequently was ruled by a series of populist and military governments until 1985. Population rich, but resource poor, India has been a fully independent federation of states since 1947. South Africa achieved her independence in 1910 but, subsequently, was subjected to a nearly five decades-long system of "apartheid" (1948–1994) that transferred all the country's economic and political power to its white minority population (<10 %). The populations of India and China are predominately rural (71 % and 57 %, respectively), whereas those of Brazil, the Russian Federation, and South Africa are predominately urban, i.e., 86 %, 73 %, and 61 %, respectively. All five countries have major global cities in which their (and the world's) financial centers are located.

Consistent with the approach taken in all other parts of this chapter, the author's purpose in this section is not to undertake a complete analysis of development trends occurring for all five BRICS. Rather, the intention is to illustrate the use of WISP in undertaking an analysis of development trends occurring in just one country. . .in this case India. Hence, and for purposes of illustration only, this section focuses on Indian social development trends for the 40-year time period between 1970 and 2011. Both WISP index and subindex data are reported for India. Detailed WISP data for the four remaining BRICS have been uploaded to the project's previously referenced website.

India

India is not only one of the world's most ancient societies, with her history of 5000 years of continuous cultural development, but also one of its richest and most diversified countries. India's historical and contemporary roots, however, are deeply enmeshed in layers of internal and intra-regional conflict both of which have denied India of the financial and human resources need to accelerate her pace of social development (Metcalf and Metcalf 2006).

Despite her status as a member of the group of BRICS, contemporary India remains a deeply impoverished country with at least 30 % of her population living under the nationally established poverty threshold (World Bank 2013b). Poverty rates are even higher in India's rural communities in which the majority of the country's population lives which, to date, have benefitted only minimally from the rapid developments taking place in the country's more affluent, but densely populated, urban centers (World Bank 2013b). India's infant (47 per 1,000 live births) and child (61 per 1,000 live births) mortality rates are among the highest in world and the number of children that die each year in the country each year from hunger, malnutrition, and ill health is higher than the number of child deaths in Nigeria, Pakistan, and the People Democratic Republic of the Congo combined (Save the Children 2013). India's rates of maternal mortality also remain high (200 deaths per 100,000 live births in 2010) and are especially high in the large rural communities in which the majority of her population reside. Though declining gradually, these mortality rates are much higher than current world averages, especially those reported for rapidly developing countries (UNICEF 2012).

Currently, India allocates only about 2.4 % of her GDP to health care which ranks the country's investment in health at 185th of the world's nearly 200 nations. India's investment in education is only somewhat higher at 3.3 % of GDP in 2006 or approximately 10.5 % of central government expenditures. Literacy levels are higher for men

than women (73 % vs. 48 %), albeit years of average life expectation for India's women (68.3 years) now exceeds that of men (66.1 years)—a pattern that mirrors that of the world-as-a-whole but represents a reversion of from trends reported for India during earlier development decades. Female infanticide is believed to be a common practice in India (Save the Children 2013); indeed, the United Nations Children's Fund estimates that as many as 50 million girls and women are missing in India's population due to systematic sex discrimination.

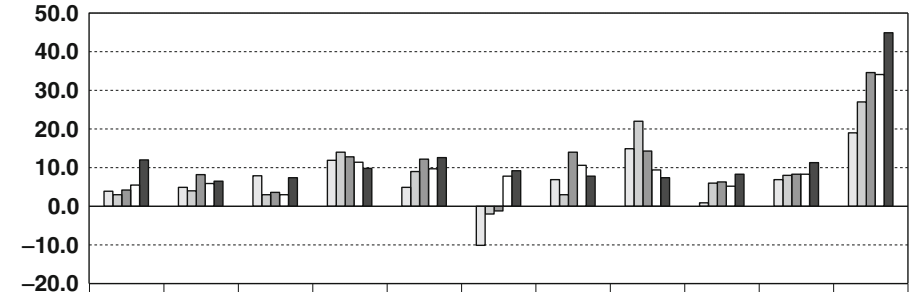
India is characterized by high levels of public corruption and a lack of transparency in many sectors of public life. India also is renowned for the complexity of its public bureaucracies which prove unmovable without bribes and other forms of kickbacks to public officials (TI 2012). Amnesty International (AI 2012) and Freedom House (FH 2013) both report regular infringements on the constitutionally-guaranteed civil and political rights of individual Indian citizens and, from time to time, limitations on press freedoms. These important challenges to the foundations on which democratic societies are established are critical given India's stature as the world's largest democratic society.

Social conflict persists in many of the country's regions as does the growing disparities in income between its very rich and even larger numbers of very poor. The emergence of a well-educated Indian middle class is noteworthy, however, and is one of the outcomes of the country's increasing economic prosperity (UNDP 2011; World Bank 2013a). The situation is especially pronounced between India's urban and rural dwellers which have brought about growing numbers of deeply impoverished people in India's rapidly expanding cities (urban growth rate equals 2.4 % per year). Though outlawed decades ago, the vestiges of India's discriminatory caste system persists and severely hampers her ability to function harmoniously as a society (Metcalf and Metcalf 2006). India's defense expenditures are also very high and deprive the country of critical resources needed to build both its social and physical infrastructure. The presence of such a high profile military also contributes to the continuing conflict between Indian and Pakistan.

These problematic trends in India's development are readily visible on all ten of the WISP's subindex scores for India in 2011—India only performed more favorably than the average score of 10.0 assigned to the world-as-a-whole on the *Education (*Average = 12.0), *Economic* (Average = 12.6), and *Welfare Effort* (Average = 11.3) subindexes. India's scores are substantially less favorable than those reported for the world-as-a-whole on the *Health* (Average = 6.5), *Women's Status* (Average = 7.4), *Environmental* (Average = 7.8), *Social Chaos* (Average = 7.4), *Demographic* (Average = 9.2), and *Cultural Diversity* (Average = 8.3) subindexes. India's score of 9.8 on its *Defense Effort* subindex is appreciably lower than that achieved by India during earlier development decades and suggests an increasing importance being assigned to the military in contemporary Indian society. With the notable exception of its performances in the Defense Effort, Economic, and Education sectors, then, India's general performance pattern on seven of the WISP's subindexes are comparable to those observed for the country over the entire 40-year period covered by this study, i.e., relatively high investments in the military vis-à-vis those made in the country's social sectors (Fig. 8.13).

Figure 8.14 provides a somewhat different picture of contemporary development trends occurring in India than those that emerge from examining Fig. 8.13 alone. Figure 8.14, for example, confirms that the country's most rapid 10-year changes in developments occurred on *Women's Status* (+147 %), *Education* (+118 %), *Cultural Diversity* (+60 %), *Welfare Effort* (+36 %), and *Economic (*+30 %) *subindexes*. Less impressive 10-year changes are reflected on India's *Demographic* (+18 %) and *Health* (+10 %) subindexes. The double and triple digit 10-year gains reported for all seven of these subindexes are significant and were achieved only as a result of a realignment of national development priorities. They were also made possible by the substantial wealth that has flowed into India as a result of her rapid rate of economic growth.

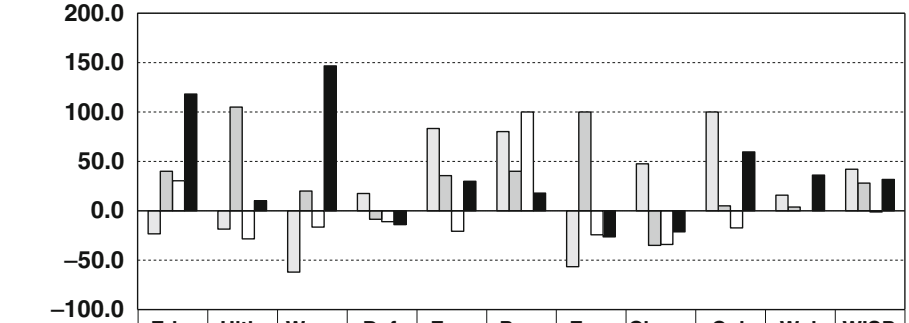
As reflected in the data summarized in Figs. 8.13 and 8.14, population size (1,206 million people in 2012) and population growth rates (1.31 % in 2012) remain as two of the most elusive



	Educ	Hlth	Wom	Def	Econ	Pop	Envir	Chaos	Cul	Wel	WISP
1970	3.9	4.9	7.9	11.9	4.9	–10.1	6.9	14.9	0.9	6.9	19.0
1980	3.0	4.0	3.0	14.0	9.0	–2.0	3.0	22.0	6.0	8.0	27.0
1990	4.2	8.2	3.6	12.8	12.2	–1.2	14.0	14.3	6.3	8.3	34.6
2000	5.5	5.9	3.0	11.4	9.7	7.8	10.6	9.4	5.2	8.3	34.1
2011	12.0	6.5	7.4	9.8	12.6	9.2	7.8	7.4	8.3	11.3	44.9

[sb_India_11_bw]

Fig. 8.13 Average WISP subindex scores for India, 1970–2011



	Edu	Hlth	Wom	Def	Eco	Pop	Env	Chaos	Cul	Wel	WISP
% 1970-80	–23.3	–18.5	–62.1	17.5	83.3	80.2	–56.6	47.6	100.0	15.8	42.1
% 1980-90	40.0	105.0	20.0	–8.6	35.6	40.0	100.0	–35.0	5.0	3.8	28.0
% 1990-00	30.4	–28.4	–16.5	–11.0	–20.7	100.0	–24.3	–34.1	–17.3	0.0	–1.2
% 2000-11	118.2	10.2	146.7	–14.0	29.9	17.9	–26.4	–21.3	59.6	36.1	31.7

[%sb_india_11_bw]

Fig. 8.14 Percent change in WISP subindex scores for India, 1970–2011

challenges impeding India's development. Within the span of the next 20 years India's population is expected to increase to 1,398 million people–an increase that is expected to significantly challenge India's capacity to attain development levels comparable to those achieved by India. Indeed, China's per capita GDP ($6,000 vs. $2,900) and rate of economic growth (9.3 % vs. 6.9 %) already far outpaces those of India which, in large measure, are being held back by the rapid increases in the size of her population (World Bank 2013c).

Part 4: World Social Leaders (SLs), Middle Performing Countries (MPCs), and Socially Least Developed Countries (SLDCs)

Table 8.4 rank orders all 160 countries included in the analysis on the basis of their 2011 WISP scores. Column 5 of the table reports the percentage change in WISP scores that took place for each country between 2000 and 2011. Country rankings on the WISP for all four time

Table 8.4 World social leaders (SLs), middle performing countries (MPCs), and socially least developed countries (SLDCs) rank ordered by WISP2011, 1980–2011 (N = 162)

WISP 1980 (Base = 124)	WISP 1990 (Base = 124)	WISP 2000 (Base = 162)	WISP 2001 (Base = 162)	% Change in WISP scores 2000–2001	Countries	WISP 1980 rank (Base = 124)	WISP 1990 rank (Base = 124)	WISP 2000 rank (Base = 162)	WISP 2011 rank (Base = 162)	Number rank changes 2000–2011
World social leaders–SLs (N = 34)										
92	108	107	72	−32.7	Denmark	3	1	1	1	0
90	103	104	72	−31.4	Norway	6	2	3	1	2
91	102	107	71	−33.7	Sweden	4	3	1	3	−2
…	…	100	71	−29.3	Germany	…	…	5	3	2
90	101	100	70	−29.8	Austria	5	4	5	5	0
82	91	89	69	−22.7	Australia	14	17	22	6	16
83	96	93	68	−26.9	Switzerland	13	11	16	7	9
…	…	98	68	−30.9	Iceland	…	…	8	7	1
89	97	97	68	−30.0	Belgium	8	10	10	7	3
90	98	94	67	−28.4	France	7	6	14	10	4
87	100	95	67	−29.5	Netherlands	9	5	13	10	3
93	97	98	67	−32.1	Italy	2	8	8	10	−2
81	97	101	66	−34.6	Finland	15	9	4	13	−9
…	…	88	66	−25.6	Czech Rep	…	…	24	13	11
81	93	93	66	−29.2	New Zealand	16	16	16	13	3
86	95	91	65	−28.5	Japan	10	14	18	16	2
78	90	96	65	−31.6	Spain	17	19	11	16	−5
76	87	90	65	−27.0	Greece	20	21	20	16	4
84	96	96	65	−31.9	United Kingdom	12	12	11	16	−5
85	95	94	65	−30.6	Ireland	11	13	14	16	−2
70	87	90	64	−28.6	Portugal	26	23	20	21	−1
75	87	91	64	−29.4	Hungary	22	22	18	21	−3
…	…	87	64	−26.4	Slovak Republic	…	…	25	21	4
78	93	86	64	−25.7	Canada	18	15	26	21	5
71	80	85	63	−25.9	Poland	25	25	27	25	2
63	78	79	63	−21.1	Uruguay	31	27	32	25	7

72	79	89	62	−30.8	Bulgaria	23	26	22	27	−5
…	…	70	62	−12.4	Croatia	…	…	43	27	16
77	90	85	61	−27.7	United States	19	18	27	29	−2
…	…	78	60	−22.5	Belarus	…	…	33	30	3
59	71	84	60	−27.9	Hong Kong	38	34	30	30	0
…	…	85	60	−29.4	Slovenia	…	…	27	30	−3
59	65	65	60	−7.3	Cuba	37	41	49	30	19
58	75	77	60	−22.2	Taiwan	39	28	34	30	4
Averages for world social leaders (SLs)										
81.5	***93.3***	***91.2***	***65.4***	***−28.9***	***Median***	***15.0***	***15.0***	***18.2***	***16.0***	***2.3***
79.4	***90.8***	***90.6***	***65.3***	***−27.5***	***Average***	***16.7***	***15.9***	***18.9***	***16.4***	***2.6***
10.6	***10.3***	***9.6***	***3.5***	***5.6***	***SD***	***10.7***	***10.1***	***11.8***	***9.6***	***6.2***
World middle performing countries–MPCs (N = 85)										
60	73	69	59	−14.3	Argentina	35	31	45	35	10
…	…	74	59	−20.2	Lithuania	…	…	39	35	4
70	69	77	59	−23.7	Romania	27	37	34	35	−1
…	…	70	59	−15.0	Cyprus	…	…	43	35	8
55	74	71	58	−18.9	Korea, South	46	30	41	39	2
54	69	75	58	−22.8	Chile	49	36	38	39	−1
63	73	72	58	−20.4	Israel	32	32	40	39	1
69	75	68	58	−14.3	Costa Rica	28	29	46	39	7
…	…	71	57	−19.2	Ukraine	…	…	41	43	−2
…	…	81	57	−29.9	Estonia	…	…	31	43	−12
…	…	100	56	−44.0	Luxembourg	…	…	5	45	−40
…	…	77	55	−28.1	Latvia	…	…	34	46	−12
60	70	64	55	−15.0	Singapore	36	35	52	46	6
57	63	53	54	1.8	Brazil	41	45	74	48	26
…	…	67	54	−19.6	Moldova	…	…	47	48	−1
…	…	58	53	−8.0	Bahamas	…	…	65	50	15
…	…	36	53	47.6	Qatar	…	…	106	50	56
48	57	57	53	−7.7	Tunisia	56	51	67	50	17

(continued)

Table 8.4 (continued)

WISP 1980 (Base = 124)	WISP 1990 (Base = 124)	WISP 2000 (Base = 162)	WISP 2001 (Base = 162)	% Change in WISP scores 2000–2001	Countries	WISP 1980 rank (Base = 124)	WISP 1990 rank (Base = 124)	WISP 2000 rank (Base = 162)	WISP 2011 rank (Base = 162)	Number rank changes 2000–2011
54	55	65	53	−18.5	Albania	48	54	49	50	−1
…	…	50	53	5.8	Kuwait	…	…	82	50	32
…	…	67	53	−20.8	Russia	…	…	47	50	−3
…	…	61	53	−13.6	Kyrgyzstan	…	…	56	50	6
…	…	60	52	−11.9	Azerbaijan	…	…	58	57	1
56	67	61	52	−13.8	Mauritius	45	39	56	57	−1
63	63	59	52	−10.9	Venezuela	33	44	61	57	4
56	63	62	52	−15.8	Panama	43	46	55	57	−2
64	45	52	52	−0.2	Lebanon	30	68	78	57	21
…	…	52	52	−0.9	Uzbekistan	…	…	78	57	21
51	59	60	52	−14.1	Mexico	54	48	58	57	1
53	57	60	52	−13.5	Ecuador	51	52	58	57	1
62	67	59	51	−13.2	Jamaica	34	38	61	65	−4
…	…	55	51	−7.4	Guyana	…	…	70	65	5
57	66	58	51	−12.0	Trinidad &Tobago	42	40	65	65	0
…	…	63	51	−19.8	Georgia	…	…	54	65	−11
53	57	59	51	−14.1	Dominican Republic	52	50	61	65	−4
33	39	43	50	17.3	Nicaragua	78	75	97	70	27
36	49	56	50	−10.8	China	73	62	69	70	−1
37	48	53	50	−4.6	Peru	69	64	74	70	4
33	34	49	50	1.5	Viet Nam	77	82	84	70	14
43	53	53	50	−4.9	El Salvador	58	56	74	70	4
…	…	54	50	−8.3	Turkmenistan	…	…	71	70	1
…	…	59	49	−16.2	Kazakhstan	…	…	61	76	−15
52	62	54	49	−8.8	Thailand	53	47	71	76	−5

...	...	40	49	21.0	Cape Verde[a]	...	...	99	76	23
37	47	48	49	1.1	Egypt	68	65	88	76	12
36	45	38	49	28.1	Morocco	72	67	103	76	27
...	...	65	49	−24.9	Armenia	...	...	49	76	−27
54	53	51	49	−5.1	Paraguay	50	55	81	76	5
36	50	42	49	16.1	Algeria	74	59	98	76	22
37	43	57	49	−14.9	Mongolia	70	72	67	76	−9
35	50	44	48	8.9	Honduras	75	61	93	85	8
...	...	44	48	8.5	Bahrain	...	...	93	85	8
18	19	32	48	47.4	Bangladesh[a]	101	94	114	85	29
...	...	44	48	8.0	Belize	...	...	93	85	8
...	...	63	47	−25.3	Macedonia	...	...	53	89	−36
49	55	48	47	−1.4	Turkey	55	53	88	89	−1
38	45	46	47	2.7	Iran	66	69	90	89	1
43	44	52	47	−9.9	South Africa	59	71	78	89	−11
46	52	49	47	−3.1	Malaysia	57	57	84	89	−5
39	50	40	47	16.7	Jordan	65	60	99	89	10
29	48	38	47	24.7	Saudi Arabia	82	63	103	89	14
41	51	49	47	−5.3	Philippines	61	58	84	89	−5
...	...	29	47	59.7	Oman	...	...	115	89	26
...	...	49	47	−3.7	Suriname	...	...	84	89	−5
42	42	45	46	3.5	Indonesia	60	73	92	99	−7
55	57	53	46	−13.1	Sri Lanka	47	49	74	99	−25
57	64	53	46	−13.3	Colombia	40	43	74	99	−25
37	27	40	46	14.0	Bolivia	67	87	99	99	0
40	44	46	46	−1.4	Libya	62	70	90	99	−9
40	47	35	45	31.0	Korea, North	63	66	109	104	
27	35	34	45	31.9	India	85	81	111	104	7
40	39	39	45	15.4	Syria	64	74	102	104	−2
...	...	50	44	−12.4	Tajikistan	...	...	82	107	−25

(continued)

Table 8.4 (continued)

WISP 1980 (Base = 124)	WISP 1990 (Base = 124)	WISP 2000 (Base = 162)	WISP 2001 (Base = 162)	% Change in WISP scores 2000–2001	Countries	WISP 1980 rank (Base = 124)	WISP 1990 rank (Base = 124)	WISP 2000 rank (Base = 162)	WISP 2011 rank (Base = 162)	Number rank changes 2000–2011
18	21	19	44	128.9	Rwanda[a]	102	93	129	107	22
4	13	9	44	409.1	Malawi[a]	120	104	145	107	38
. . .	. . .	33	43	31.0	Fiji	. . .	. . .	112	110	2
18	16	26	43	67.3	Ghana	99	98	119	110	9
30	36	33	43	29.5	Guatemala	80	77	112	110	2
17	17	22	43	92.2	Nepal[a]	104	97	123	110	13
. . .	. . .	44	42	−5.6	Botswana	. . .	. . .	93	113	−20
20	15	21	42	102.4	Lao, PDR[a]	96	101	127	113	14
20	15	20	42	114.5	Tanzania[a]	95	102	128	113	15
31	23	19	42	114.0	Madagascar[a]	79	91	129	113	16
27	36	35	41	14.5	Myanmar[a]	84	78	109	118	−9
. . .	. . .	28	41	47.5	Gabon	. . .	. . .	116	118	−2
Averages for world middle performing countries (N = 85)										
41.5	***50.1***	***52.4***	***49.3***	***−5.3***	***Median***	***60.5***	***60.5***	***78.3***	***76.0***	***1.8***
42.9	***48.3***	***51.0***	***49.6***	***10.0***	***Average***	***62.4***	***62.1***	***78.1***	***74.5***	***3.6***
14.9	***17.0***	***16.1***	***4.7***	***55.2***	***SD***	***21.7***	***20.4***	***28.1***	***24.5***	***15.7***
World socially least developed countries–SLDCs (N = 43)										
36	36	36	40	11.0	Lesotho[a]	71	79	106	120	−14
. . .	. . .	36	40	13.1	Namibia	. . .	. . .	106	120	−14
. . .	. . .	37	40	8.8	Swaziland	. . .	. . .	105	120	−15
12	12	28	40	43.8	Cambodia[a]	108	108	116	120	−4
. . .	. . .	13	40	212.3	Bhutan[a]	. . .	. . .	137	120	17
11	8	3	40	1,184.0	Burkina Faso[a]	111	113	150	120	30
25	28	22	39	77.9	Zambia[a]	88	84	123	126	−3
18	24	23	39	70.0	Pakistan	103	88	121	126	−5
17	8	19	39	101.8	Benin[a]	105	112	129	126	3
. . .	. . .	22	39	76.5	Comoros[a]	. . .	. . .	123	126	−3

8	4	13	39	205.9	Mali[a]	115	115	137	126	11
29	28	14	39	171.8	Papua-New Guinea	83	85	134	126	8
18	24	19	39	108.5	Senegal[a]	98	89	129	126	3
10	13	12	38	209.3	Mauritania[a]	113	106	141	133	8
−10	−10	−12	38	415.9	Ethiopia[a]	124	124	161	133	28
14	12	7	37	442.5	Uganda[a]	107	107	147	135	12
29	37	24	37	52.7	Zimbabwe	81	76	120	135	−15
26	11	14	37	156.8	Nigeria	87	110	134	135	−1
22	21	15	36	142.8	Cameroon	92	92	133	138	−5
8	18	3	36	959.2	Burundi[a]	117	95	150	138	12
22	27	22	36	59.6	Congo, Rep	91	86	123	138	−15
. . .	. . .	8	35	330.3	Yemen[a]	. . .	. . .	146	141	5
18	13	13	35	179.8	Sudan[a]	100	105	137	141	−4
26	24	12	35	195.3	Kenya	86	90	141	141	0
8	3	−4	35	1,004.2	Niger[a]	116	117	155	141	14
24	16	12	35	197.3	Cote D'Ivoire	90	99	141	141	0
. . .	. . .	13	34	174.3	Gambia[a]	. . .	. . .	137	146	−9
15	17	14	34	142.2	Togo[a]	106	96	134	146	−12
. . .	. . .	12	33	184.7	Djibouti[a]	. . .	. . .	141	148	−7
2	−4	4	33	754.3	Mozambique[a]	122	123	149	148	1
25	28	23	33	44.6	Haiti[a]	89	83	121	148	−27
5	−1	5	32	511.9	Guinea[a]	118	120	148	151	−3
12	9	2	32	1,182.6	Cen African Rep[a]	109	111	152	151	1
. . .	. . .	−15	29	291.9	Eritrea[a]	. . .	. . .	162	153	9
35	35	28	28	−2.0	Iraq	76	80	116	154	−38
. . .	. . .	−4	27	803.2	Guinea-Bissau[a]	. . .	. . .	155	155	0
−4	−2	−4	27	805.1	Chad[a]	123	121	155	155	0
21	14	−2	26	1,224.8	Congo, DR[a]	94	103	154	157	−3
5	−3	−10	26	362.5	Angola[a]	119	122	159	157	2
12	2	−10	25	351.6	Sierra Leone[a]	110	118	159	159	0

(continued)

Table 8.4 (continued)

WISP 1980 (Base = 124)	WISP 1990 (Base = 124)	WISP 2000 (Base = 162)	WISP 2001 (Base = 162)	% Change in WISP scores 2000–2001	Countries	WISP 1980 rank (Base = 124)	WISP 1990 rank (Base = 124)	WISP 2000 rank (Base = 162)	WISP 2011 rank (Base = 162)	Number rank changes 2000–2011
20	12	−6	24	514.0	Liberia[a]	97	109	158	160	−2
10	1	1	17	1,367.5	Somalia[a]	112	119	153	161	−8
4	3	−19	17	188.3	Afghanistan[a]	121	116	163	161	2
Averages for world socially least developed countries only (N = 43)										
15.7	***12.7***	***12.4***	***35.4***	***195.3***	***Median***	***105.5***	***106.5***	***141.4***	***141.0***	***0.2***
15.6	***13.7***	***10.3***	***34.0***	***361.2***	***Average***	***102.4***	***103.0***	***138.9***	***139.6***	***−0.7***
10.5	***12.4***	***13.8***	***6.0***	***383.6***	***SD***	***14.6***	***14.8***	***16.2***	***13.4***	***12.4***
Averages for all countries (N = 162)										
39.2	***47.3***	***49.7***	***48.6***	***−2.5***	***Median***	***65.0***	***65.0***	***83.3***	***76.0***	***1.2***
43.4	***48.1***	***48.5***	***48.7***	***95.4***	***Average***	***63.5***	***63.3***	***81.8***	***79.6***	***2.2***
26.3	***31.2***	***31.2***	***11.8***	***256.7***	***SD***	***35.6***	***35.6***	***47.1***	***46.9***	***13.4***

[a]Indicates countries classified by the United Nations as "Least Developing" (OHRLLS 2009).

periods[11] are reported in the table as are the number of country changes in WISP rank positions between 2000 and 2011. Further, the table subdivides countries into three major development groupings on the basis of their 2011 WISP performance: (1) *world social leaders* (SLs, N = 34); (2) *world middle performing countries* (MPCs, N = 85); and, (3) *world socially least developed countries* (SLDCs, N = 43). Also, embedded in this table are subgroup averages, medians, and standard deviations for each of the three development clusters of countries.

World Social Leaders

Based on their overall WISP performances in 2011, 34 countries are classified as world "Social Leaders" (SLs). The majority of the SLs are located in Europe (N = 26), three are located in East Asia (Japan, Hong Kong, Taiwan), two in Oceania (Australia and New Zealand), and three in either North or South America (Uruguay, the United States, Cuba). The majority of these countries is European or traces their cultural or socio-political roots to Europe (Australia, New Zealand, and the United States). The contemporary social architectures of Japan, Hong Kong and Taiwan were influenced by the United States or Great Britain and, therefore, also have been influenced by European social norms. The eight Eastern European countries included in the list of 34 world SLs (the Czech Republic, Hungary, Slovenia, Poland, Bulgaria, Croatia, Belarus, and Slovenia) are, by virtue of geography and history, European and, thus, share in the traditions, values, and norms of other European nations (despite their five decades of political domination by the former Soviet Union). This is the first study period for which Latin American countries (Uruguay and Cuba) are included in the group of world SLs; their inclusion reflects substantial 10-year increases in the WISP rank positions of these countries relative to those attained by all 160 countries included in the study.

With certain exceptions, most notably that of Cuba, all other SLs is countries with open market economies and multi-party political systems (CIA 2013). As a group they share similar ideological commitments on a broad range of social issues as well as long histories of progressive legislation that resulted in the creation of more or less universal social welfare programs (USSSA 2012). Today, many of the SLs allocate as much as 50–70 % of the expenditures of their central governments to domestic social spending (OECD 2012d).

With the exception of Germany (Rank = 3), many of the world's top-ranked "socially advanced" countries tend to be comparatively small and culturally homogenous, i.e., Denmark and Norway (both of which share first place in the ranking system), Sweden (Rank = 3), Iceland (Rank = 7), Austria (Rank = 5) and Finland (Rank = 13). The populations of these countries range from between 0.31 million (Iceland) to 9.06 million (Sweden) and are predominately white and, with the exception of Austria, Protestant. However, the racial, ethnic, and religious characteristics of these countries, including those of Germany, are changing rapidly in response to declining fertility rates and escalating rates of immigration into Europe world other world regions and subregions (IOM 2013).

Further, the top ranking SLs have distinguished themselves on the basis of their sustained levels of social and economic development *over time*. In comparison with other clusters of countries, SLs enjoy consistently lower population growth rates (M = 0.3 %), low rates of infant and child deaths (M = 5.8 and 6.8, respectively) and, as a result, higher average years of life expectation (M = 77.4 years) (CIA 2013; UNDP 2011). School enrolment rates within the SLs are high as are rates of adult literacy. The social safety nets that exist in these countries are comprehensive in nature and provide a high level of income security for people of all ages.

The majority of SLs also have strong, diversified, and dynamic economies (World Bank 2013a, b). However, rates of

[11] Countries were inversely ranked on the WISP from 1 to 162 with lower rank numbers indicating more favorable WISP rankings.

unemployment in some European SLs are high, e.g., 20.1 % in Spain, 18.8 % in Estonia, 13.7 % in Ireland, and 12.6 % in Greece. The rates of long-term unemployment for the region's young people, many of whom are university graduates, are considerably higher than those reported for other SLs and for many less developed countries worldwide (World Bank 2013a). Overall, though, inflation rates tend to be low in the SLs when compared with the averages reported for the world-as-a-whole (World Bank 2013c). As a result, SL per capita income levels are high (either exceeding or approaching a group average of $31,000 PPP) as are, on average, their overall economic growth rates (OECD 2012b). In addition, SL per capita debt levels–though startling high for some SLs (e.g., Ireland [$448,000]; Switzerland [$177,000]; United Kingdom [$172,000]; the Netherlands [$137,000]) (CIA 2013)–still are lower than those which exist for most developing countries, especially the group of "heavily indebted" developing countries (IMF 2012a, 2013a).

The majority of SLs also are characterized by comparatively low levels of diversity-related social conflict, albeit conflicts between indigenous populations, newly-arrived immigrants, and racial groups continue to persist. Many of the SLs most serious diversity-related social conflicts are occurring in Europe for those nations experiencing high in-flows of immigrants and comparatively limited experience in dealing with the racial, religious, and cultural challenges associated with their newly-arrived residents (OECD 2012b). Only a few SLs have engaged in wars or other significant international conflicts since the end of the Second World War.[12] This pattern has resulted in comparatively small expenditures on the part of the majority of the SLs central governments on defense—an average of just 1.7 % of central government expenditures in 2012 (CIA 2013).

[12] Exceptions to this general pattern are *France, the United Kingdom*, and the *United States* all three of which are actively engaged in wars in *Iraq* and *Afghanistan*.

WISP scores for the SLs averaged 65.3 (SD = 3.5) in 2011; scores range from a low of 60 for Taiwan to an exceptionally high score of 72 for Denmark and Norway each of which retained the highest overall WISP scores (and WISP rank position) for the last two decades. On average, the SLs improved their WISP positions by five ranks between 2000 and 2011, from a group median rank of 21/160 in 2000 to a group median rank of 16/160 in 2011 (SD = 9.6). Ten year losses in WISP rank positions, however, occurred for Sweden (−2), Italy (−2), Finland (−9), Spain (−5), the United Kingdom (−5), Ireland (−2), Portugal (−1), Hungary (−3), Bulgaria (−5), the United States (−2), and Slovenia (−3). These losses in *rank positions* occurred for at least two reasons: (1) significant socio-political-economic changes taking place within the countries themselves; and (2) the remarkable push upward of countries newly identified as SLs, including those three countries that are successor states to the former Soviet Union. The net effect of the development successes experienced by the SLs has resulted in an increase in their relative WISP rank position and, given the way in which the ISP is structured, concomitant drops in the rank positions of countries for which higher ranks positions were previously reported.

Of interest, too, is that only about 15 % of the world's current population, about 1,025 million people, resides in the SLs. The SL's share of the global population is expected to decline steadily over the next two decades.

World Middle Performing Countries

Eighty-five (N = 85) of the study's 160 countries are classified as "Middle Performing Countries" (MPCs) in Table 8.4. The MPCs include 53 Developing Countries (DCs), 17 "Commonwealth of Independent States" (CIS), and 9 Least Developed Countries (LDCs). Six (N = 6) DMEs also are grouped with the MPCs for the purposes of this study, i.e., South Korea, Luxembourg, Israel, Singapore, Mexico, and Turkey. The LDCs included in this grouping typically fall at the bottom end of the MPC spectrum but their recent development performances

qualify several to be placed in the middle to upper range of the MPCs. Similarly, many of the DMEs included in the MPC group are *non-high income* countries and have only recently been reclassified by the OECD from developing country (DC) to developed market economy (DME) status, e.g. *Mexico*, *South Korea*, and *Turkey*. All five countries are located in the upper quintile of MPCs.

The MPCs contain a total of 4,718 million people, approximately 67.4 % of the world's total. Nearly all of the MPCs are located in the developing regions of Africa, Asia, Central and Eastern Europe, and Latin America. Three of the world's four largest population centers, all located in Asia, are grouped with the MPCs, i.e., China (WISP = 50, Rank = 70), Indonesia (WISP = 46, Rank = 99), and India (WISP = 45, Rank = 104). Two of the countries experienced net gains on the WISP between 2000 and 2011 and losses were recorded for only one: −10.8 %, +2.5 %, and +35.9 %, respectively (Table 8.4). Even the modest positive changes reported to two of the countries are significant given the size of their populations, i.e., India (1,200 million) and Indonesia (240 million). WISP scores for the MPCs in 2011 ranged from a low of 41 for Gabon to a high of 59 for Argentina (Table 8.4); the group average WISP2011 score is 49.6 (SD = 4.7)—or approximately 1 point higher than the average WISP score reported for the world-as-a-whole (M = 48.7, SD = 11.8).

The MPCs are highly heterogeneous; indeed, enormous differences characterize the countries grouped at the top and at the bottom of the list. In general, the majority of countries located at the top of the list are well on their way toward becoming SLs (e.g., Argentina, Lithuania, Romania, Cyprus, etc.). The countries at the bottom of the list—i.e. the lowest performing MPCs–are in danger of drifting into SLDC status, e.g., Gabon, Myanmar, Madagascar, Tanzania, Laos, etc.[13] Already, seven of the 15 MPCs at the bottom of the list have been officially classified by the United Nations as "least developed countries" (LDCs), i.e., as part of the "the fourth world" of development.

Middle performing countries located in the middle of the list on Table 8.4 have the potential of moving toward either SL or SLDC status. The trend since the year 2000, though, has been for the majority of these countries to have moved closer to SL status and to do so at a fairly rapid pace. The remaining nine mid-MPCs also are making great strides forward. Concern does exist, though, that many mid-performing MPCs lost social ground between 2000 and 2011. . .some, given their recent histories of violence, at a disquieting pace.

The proportion of the world's population living in the MPCs is expected to remain more or less constant, i.e., to include approximately 2 out of every 3 people on the planet. The group's most rapid population increases, as in the past, will continue to take place among the poorest countries located at the bottom one-third of the list and, within this group, among the poorest populations of these countries.

World Socially Least Developed Countries

As presented in Table 8.4, 43 (N = 43) countries are classified as "Socially Least Developed Countries" (SLDCs) in the present study. Thirty-two of these countries (N = 32) are officially classified by the United Nations as "Least Developed Countries" (LDCs) and 11 previously have been identified by author as "Developing Countries" (Estes 2010). The majority of WISP 2011 SLDCs are located in Sub-Saharan Africa and in the developing regions of Asia and Latin America (Table 8.4).

[13] The phrase "least developed countries" (LDCs) was created by the United Nations in 1971 to describe the situation of the world's "poorest and most economically weak of the developing countries, i.e., countries characterized by formidable economic, institutional and human resource problems, which are often compounded by geographical handicaps and natural and man-made disasters" (see OHRLLS 2009 for current resolutions pertaining to recognition of and special UN support for the LDCs).

WISP scores for the SLDCs range from a low of 17 for Afghanistan to a high of 40 for Lesotho. WISP scores for the SLDCs averaged only 34.0 (SD = 6.0) in 2011, well below the group average score of 65.3 (SD = 3.5) achieved by the SLs for the same time period. Ten-year net gains on the in WISP rank positions occurred for 17 of the SLDCs between 2000 and 2011, including for some of the world's poorest nations (Table 8.4): Burkina Faso (Increase in WISP00-11 Rank Position = +30); Ethiopia (Increase in WISP00-11 Rank Position = +28); Bhutan (Increase in WISP00-11 Rank Position = +17); Niger (Increase in WISP00-11 Rank Position = +14); Uganda (Increase in WISP00-11 Rank Position = +12); Burundi (Increase in WISP00-11 Rank Position = +12); Mali (Increase in WISP00-11 Rank Position = +11); Eritrea (Increase in WISP00-11 Rank Position = +9); Papua-New Guinea (Increase in WISP00-11 Rank Position = +8); Mauritania (Increase in WISP00-11 Rank Position = +8); Yemen (Increase in WISP00-11 Rank Position = +5); Benin (Increase in WISP00-11 Rank Position = +3); Senegal (Increase in WISP00-11 Rank Position = +3); Angola (Increase in WISP00-11 Rank Position = +2); Afghanistan (Increase in WISP00-11 Rank Position = +2); Mozambique (Increase in WISP00-11 Rank Position = +1); and, Central African Republic (Increase in WISP00-11 Rank Position = +1).

The combined population of the SLDCs totals 954 million people, or approximately 13.5 % of the world's total. The population growth rate averages only 0.9 but is considerably higher among the group's poorest countries and, within these countries, higher still within their most impoverished populations. This is the case despite the ready availability of free or low-cost contraception for both men and women (Bulatao 1998).

Per capita income levels within the SLDCs averaged only $1,829 in 2010 and their rate of economic expansion averaged 3.4 %. . .a modest but not remarkable rate of economic growth given the low position from which they are starting. Thus, high population growth rates in combination with comparatively modest rates of economic growth mean that the majority of the SLDCs will continue to function within a fragile economic environment despite the presence of rich natural (and human) resources in many of these countries. These patterns are likely to result in most of the SLDCs continuing to develop at a slow to moderate pace for the foreseeable future.

Despite the social gains already identified above for selected SLDCs, the pace of social progress for most SLDCs is likely to be sluggish over at least the near-term. As captured by the 1980 North–south Commission chaired by Willy Brandt, German statesman and Nobel Laureate, many hundreds of millions of people in the world's poorest countries, the SLDCs, are still preoccupied solely with survival and with meeting their most elementary needs for food, housing, health care and, for some, literacy (Sneider 1980):

> For them work is frequently not available or, when it is, pay is very low and working conditions often barely tolerable. Homes are constructed of impermanent materials and have neither piped water nor sanitation. Electricity is a luxury. Health services are thinly spread and in rural areas only rarely within walking distance. Primary schools, where they exist, may be free and not too far away, but children are needed for work and cannot be easily spared for schooling. Permanent insecurity is the condition of the poor. There are no public systems of social security in the event of unemployment, sickness or death of a wage-earner in the family. Flood, drought or disease affecting people or livestock can destroy livelihoods without hope of compensation
>
> The poorest of the poor. . .remain outside the reach of normal trade and communication. The combination of malnutrition, illiteracy, disease, high birth rates, underemployment and low income closes off the avenues of escape. . . (Sneider 1980: 49).

Fortunately and, thanks in large measure to the progress achieved through the *Millennium Development Campaign*, the situation for some SLDCs has improved considerably since the issuing of the North–south report (UN 2012a, b). Indeed, many countries included in this group of socially least developed countries are in the process of being reclassified as members of the more socially advanced group of developing countries (DCs). Others, though, are continuing their steady decline and are in danger of becoming "failed" or "failing" states (Estes 2012a; Fund for Peace 2011). To prevent the modest

Table 8.5 Countries with the most rapid WISP gains and losses, 2000–2011 (N = 30)

Countries	Population (Mil)	WISP 2000 (Base = 162)	WISP 2011 (Base = 162)	% Change in WISP scores 2000–2011	WISP 2011 rank (Base = 162)	Number rank changes 2000–2011
Countries with the most significant rank gains, 2000–2011 (N = 15)						
Qatar	1.8	36	53	47.6	50	56
Malawi[a]	15.9	9	44	409.1	107	38
Kuwait	3.6	50	53	5.8	50	32
Burkina Faso[a]	15.7	3	40	1,184.0	120	30
Bangladesh[a]	152.6	32	48	47.4	85	29
Ethiopia[a]	84.3	−12	38	415.9	133	28
Morocco	32.8	38	49	28.1	76	27
Nicaragua	6.1	43	50	17.3	70	27
Oman	2.8	29	47	59.7	89	26
Brazil	194.0	53	54	1.8	48	26
Cape Verde[a]	0.5	40	49	21.0	76	23
Rwanda[a]	10.5	19	44	128.9	107	22
Algeria	37.8	42	49	16.1	76	22
Lebanon	4.3	52	52	−0.2	57	21
Uzbekistan	29.6	52	52	−0.9	57	21
Total	**592.3**					
Median	***15.7***	***38.1***	***48.8***	***28.1***	***76.0***	***27.0***
Average	***39.5***	***32.5***	***48.0***	***158.8***	***80.1***	***28.7***
SD	***59.0***	***19.7***	***4.9***	***315.2***	***26.7***	***8.9***
Countries with the most significant rank losses, 2000–2011 (N = 15)						
Luxembourg	0.5	100	56	−44.0	45	−40
Iraq	33.3	28	28	−2.0	154	−38
Macedonia	2.1	63	47	−25.3	89	−36
Haiti[a]	10.1	23	33	44.6	148	−27
Armenia	3.3	65	49	−24.9	76	−27
Sri Lanka	20.3	53	46	−13.1	99	−25
Colombia	46.9	53	46	−13.3	99	−25
Tajikistan	7.8	50	44	−12.4	107	−25
Botswana	2.1	44	42	−5.6	113	−20
Swaziland	1.2	37	40	8.8	120	−15
Zimbabwe	13.0	24	37	52.7	135	−15
Congo, Rep	4.2	22	36	59.6	138	−15
Kazakhstan	16.9	59	49	−16.2	76	−15
Lesotho[a]	2.2	36	40	11.0	120	−14
Namibia	2.1	36	40	13.1	120	−14
Total	**166.0**					
Median	***4.2***	***44.3***	***41.8***	***−5.6***	***113.0***	***−24.8***
Average	***11.1***	***46.3***	***42.2***	***2.2***	***109.3***	***−23.2***
SD	***13.5***	***20.7***	***7.2***	***30.0***	***29.7***	***9.1***

[a]Indicates countries classified by the United Nations as "Least Developing" (OHRLLS 2009)

social gains already achieved by this latter group of countries will require even more proactive initiatives on the part of the global community to stabilize the countries. These efforts, however, must begin with the creation of new, more stable and more people-centered governments as

opposed to the highly restrictive political regimes that predominate throughout the lowest performing SLDCs.

Part 5: Countries with the Most Rapid WISP Gains and Losses

The 30 countries with the most significant social gains and losses on the WISP between 2000 and 2011 are identified in Table 8.5. The table ranks orders these countries by the magnitude of their WISP rank changes between 2000 and 2011 (column 7) and reports: (1) the estimated population size of each country for 2011; (2) individual WISP scores for each country for both 2000 and 2011; (3) 10-year percentage change in these scores for each country; (4) country WISP rank position in 2011; and, (5) the number of changes in country WISP rank positions between 2000 and 2011. The table also contains the means, medians, and standard deviations for both groups of countries.

As summarized in Table 8.5, the 30 countries that experienced the most rapid changes in their WISP rank position represent the full mix of world geographic regions, economic and political systems, and clusters of development groupings. Taken together, the combined population of the country's experiencing the most rapid changes in their WISP rank positions exceeds 758 million people, or 11 % of the world's population in 2012. And not all of the most favorable changes in WISP rank position occurred for nations already classified as socially advanced countries; the group of 30 also included six countries classified by the United Nations as "least developed" (LDCs). Luxembourg, however, was the only socially advanced countries that experienced substantial social losses in WISP rank position between 2000 and 2011–a loss of 40 rank positions from 5th to 45th place between 2000 and 2011. These losses are associated with the severe economic crisis of 2007–2008 as well as the pressures placed on Luxembourg by the European Union and OECD for increased transparency of its mostly foreign-owned banking system which for decades has served as one of Europe's major tax havens (CIA 2013). Though still one of Europe's wealthiest countries, per capita income levels in Luxembourg dropped from an average of $81,900 in 2010 and 2011 to $80,700 in 2015; at the same time, it's economy contracted by 3.6 % (CIA 2013). The Duchy's economy has improved considerably since 2010 but the improvements remain fragile given the economic environment within which the Dutch functions.

Countries with the Most Significant WISP Gains

Fifteen countries achieved 21 or more changes in their WISP rank positions between 2000 and 2011. These countries have a combined population of 592.3 million people and are located in nearly all regions of the world. The most significant changes in WISP positions occurred for Qatar (Rank Changes = +56), Malawi (Rank Changes = +38), Kuwait (Rank Changes = +32), Burkina Faso (Rank Changes = +30), Bangladesh (Rank Changes = +29), Ethiopia (Rank Changes = +28), Morocco (Rank Changes = +27), Nicaragua (Rank Changes = +27), Oman (Rank Changes = +26), and Brazil (Rank Changes = +26). Of these ten countries Malawi, Burkina Faso, Bangladesh, and Ethiopia are classified by the United Nations as "least developed countries" (OHRLLS 2009); thus, the rapid acceleration of development in these four countries is of special significance given the preferential development assistance priority that has been assigned to these countries by the international development assistance community (Foundation Center 2012; United Nations 2005). Qatar, Kuwait, and Oman are small, oil-rich, Islamic countries, whereas Brazil is a member of the group of rapidly developing BRICS countries. The size, geographic location, levels of pre-2000 development, and cultural diversity of the 15 countries included in this listing speaks to the WISP's ability to identify different clusters of rapidly developing countries than those identified when using other approaches to development assessment.

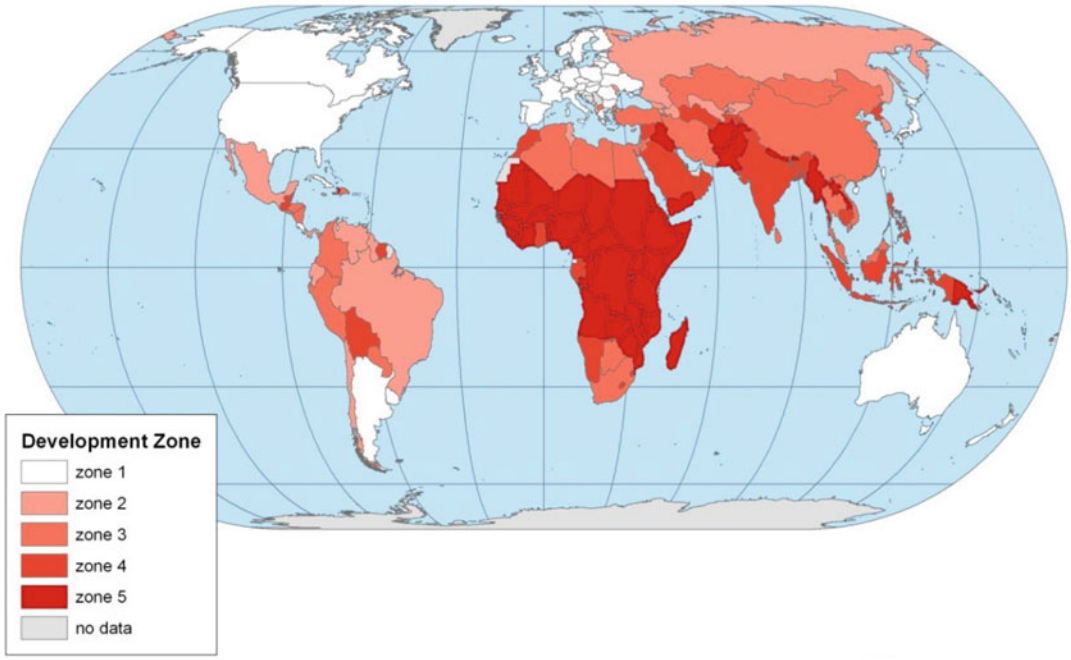


Fig. 8.15 Distribution of WISP scores by country and development zone, 2009 (N = 160) (Source: Estes 2010)

Countries with the Most Significant WISP Losses

Table 8.5 also identifies the 15 countries that experienced the most significant losses in their WISP rank positions between 2000 and 2011. These countries have a combined population of 166.0 million people and, like the group of most rapidly developing countries, are located on a wide range of continental subregions. The ten countries with the most significant losses in WISP rank positions between 2000 and 2011 are: Luxembourg (Rank Changes = −40), Iraq (Rank Changes = −38), Macedonia (Rank Changes = −36), Haiti (Rank Changes = −27), Armenia (Rank Changes = −27), Sri Lanka (Rank Changes = −25), Colombia (Rank Changes = −25), Tajikistan (Rank Changes = −25), Botswana (Rank Changes = −20), and Swaziland (Rank Changes = −15). Four of these countries are successor states to the former Soviet Union (Macedonia, Armenia, Tajikistan, and Kazakhstan), one is experiencing severe social dislocation as a result of internal conflict (Iraq), and two are included in the United Nations' list of "least developed countries" (Haiti and Lesotho). Six of the countries that experienced the most significant losses in WISP rank positions are African and most, despite their rich natural resources, continue to struggle with decades-old patterns of slow rates of economic growth, high rates of fertility, and troublesome levels of infectious and communicable diseases, especially hepatitis and AIDS, e.g., Botswana, Swaziland, Zimbabwe, the Republic of the Congo, Lesotho, and Namibia. All six of these countries, however, are characterizes by moderate to high levels of human capital as well as natural resources (AfDB 2012, 2013; WRI 2013).

Cartographic Representation of World Social Development

Figure 8.15 is a cartographic representation of the development status of all 160 countries included in the present study. Figure 8.15 color codes countries into five development "zones" with Zone 1 representing the most socially developed countries and Zone 5 representing the least socially developed. The map is color coded with those countries with the least favorable WISP scores assigned the darkest colors. Countries

identified in white (Zone 1) are those 32 nations with the most favorable WISP score ratings; darker shades represent progressively less developed countries with the least developed represented by the darker shade (Zones 2–5). Countries not included in the analysis are color coded in a light shade of green which, in the black and white rendering of the map, does not convert very clearly. Comparable versions of the charts for 1970, 1980, 1990, 2000, and 2010 in full color, however, have been uploaded to the project's previously referenced website.

The most important finding portrayed in Fig. 8.15 is the concentration of the lowest WISP scores in Sub-Saharan countries of Central and Middle Africa. Parts of South Central Asia are also located in Zone 5, as are Madagascar and Haiti. All other countries are classified into higher development zones.

When examined side by side with comparable cartographic maps for earlier development decades the changes that have taken place in social development worldwide are pronounced and graphically present a very vivid picture of the important achievements that have been made in meeting the basic needs of people over the full 40-year time period of the study. The rendering of complex statistical data graphically is of great use in communicating development changes to audiences that are not accustomed to dealing with long columns of numbers and other statistical representations of changes in development, e.g., the general public as well as the majority of people who hold public office. The use of these charts is especially helpful in communicating complex data simply to persons in decision-making positions bearing on the distribution of international aid and other forms of development assistance.

Discussion

As evidenced by the data reported in this chapter, 30- and 40-year social development trends for the world-as-a-whole and its many geo-political subregions were uneven and asymmetrical. In the main, development trends for the DMEs (referred to collectively as the "the North") for the 1970–1980, 1980–1990 and 1990–2000 decades far outpaced those that took place among the developing countries of the "South", i.e., the DCs and LDCs. The North's rapid 30-year advances occurred in stark contrast to the slower, frequently negative, trend patterns that were observed during the same time periods for the developing (DCs) and least developed (LDCs) countries of Africa, Asia, and Latin America. These patterns are paradoxical given that *Northern nations make up somewhat less than 20 percent of the world's populations but consume more than 80 percent of the world's total annual economic output* (UNDP 1992; World Bank 2013a, b). This leaves just 20 % of world total GDP for the 80 % of the world's populations that reside in developing countries and who, in fact, produce a disproportionate share of the world's total economic output. Further, the resources needed to drive the world economy and, thereby, sustain the advantaged economic and social position of Northern nations, originate from the developing South in the form of: (1) loans owed by the Southern countries to the sovereign trust funds of Northern nations; (2) the exportation of massive quantities of non-value-added raw materials from the South to the North; and 3, and the provision of cheap labor by Southern nations to the North in the form of low-cost exports (e.g., food, clothing, partially manufactured goods, even in the form of outsourced jobs). On the basis of these dynamics alone, one would expect the pace of social development occurring among Southern nations to be much more rapid than that reported for the 1970–2000 time period.

Further, the high sovereign debt that exists for many Northern nations, including that of the United States (U.S. Treasury 2013), are held by selected DMEs and a handful of rapidly developing Southern countries which assign a high value to personal thrift and collective savings (ADB 2012, 2013; IMF 2012a, b, 2013a). These predominately Asian countries, but especially China and Japan, have emerged as "bankers to the world", a position that brings them considerable influence in shaping Northern policies that are well beyond the sphere of influence of most

Southern countries.[14] Thus, the underlying driver responsible for much of the impressive social 30-year gains reported for the DMEs were financed largely by sovereign indebtedness to Southern nations (CIA 2013).

Despite their increasing levels of foreign indebtedness, many DMEs have been forced to confront a recent series of profound economic challenges of a nature not seen since the period of the Great Depression in the 1920s and 1930s (Navarro 2011). These challenges have taken the form of:

> . . .a threat of total collapse of large financial institutions, the bailout of banks by national governments, and downturns in stock markets around the world. In many areas, the housing market also suffered, resulting in evictions, foreclosures and prolonged unemployment. The crisis played a significant role in the failure of key businesses, declines in consumer wealth estimated in trillions of US dollars, and a downturn in economic activity leading to the 2008–2012 global recession and contributing to the European sovereign-debt crisis. The active phase of the crisis, which manifested as a liquidity crisis, can be dated from August 7, 2007, when *BNP Paribas* terminated withdrawals from three hedge funds citing "a complete evaporation of liquidity" (Wikipedia 2013e).

At the same time, the Euro, the shared unit of currency for 17 European countries came under close scrutiny as information concerning the inefficiencies of the fiscal and monetary policies of some Eurozone members surfaced. In addition to the complex economic and political problems faced by the most affected countries (Greece, Spain, Portugal, Greece, and Italy), the resulting shocks placed enormous pressures on other members of the Eurozone to "bail them out" (Hastings 2013). These problems, in turn, reduced world confidence in the stability of the Euro as a viable unit of international exchange and called into question the underlying assumptions on which the new European monetary system was based (Editors 2011a, b). The most directly affected countries were forced to initiate a series of stringent monetary and fiscal reforms which, in turn, created considerable public unrest and tensions with other European states. The most regressive initiatives associated with these reforms resulted in: (1) the elimination of the public subsidies of many critical goods and services, including in the housing, health and educational sectors; (2) a concurrent dramatic rise in the cost of these goods and services; (3) extensions in retirement ages; (4) reductions in the amount provided through publically-financed pensions; and, (5) further erosions to already weakened social safety nets, a process that had begun some years prior to 2000 (Sakellaropoulos 2012). Another anticipated outcome of these highly unpopular fiscal reforms is the likely withdrawal of several Eurozone members from the currency union (Editors 2012, 2013). However, the near-term prospects of such dramatic actions appear to be declining at the time of writing this chapter.

At the same time as the DMEs were struggling with critical economic challenges of their own making, social progress among many the South's disadvantaged countries was very much on a path of its own (United Nations 2012a, b). Development trends occurring in many Southern nations, for example, were in a "take off" position relative to their earlier development status. These important advances in development for many of the world's poorest countries are directly associated with the unprecedented levels of development assistance provided to them through the United Nations' *Millennium Development Campaign* (UN 2005). They also are the result of the substantial increases in levels of bi- and multi-lateral support provided by selected DMEs to the world's poorest countries (EU 2013; Japanese Ministry of Foreign Affairs 2005; OECD 2012c; USAID 2013). And the progress reported for many DMEs between 2000 and 2011 are directly associated as well with the initiation of new programs of financial and technical assistance financed by private charitable foundations

[14] According to About.com, "Foreign governments hold about 46 % of all U.S. debt held by the public, more than $4.5 trillion. The largest foreign holder of U.S. debt is China, which owns more about $1.2 trillion in bills, notes and bonds, according to the Treasury. Retrieved February 7, 2013 from: http://usgovinfo.about.com/od/moneymatters/ss/How-Much-US-Debt-Does-China-Own.htm

and by individual philanthropists: (1) by George Soros (an American private investment banker and philanthropist) in support of the emergence of "open societies" in the newly emerging nations of South Central Asia; (2) by Bill and Melinda Gates (the founders and principal shareholders of Microsoft) in financing basic health and education services in African countries; and, (3) by Ted Turner (founder of CNN news and other cable networks) for use in revitalizing the United Nations' outreach efforts.

As evidenced by the very dramatic WISP performances recorded for the world's poorest and least developed subregions between 2000 and 2011, the laser-like focus of the MDC and the MDGs proved successful in putting many of the world's poorest countries on a more positive and rapid development track. Indeed, WISP scores for the *poorest countries of Africa* increased by a dramatic 115 % between 2000 and 2011 (Figs. 8.2 and 8.3) and by more than 245 % for all 41 of the world's *least developed countries* located across the planet included in the study (Figs. 8.4 and 8.5). Net social improvements on the WISP of this magnitude are historical and previously have never been reported for any cluster of nations in a single 10-year developmental decade.

Hence, and following decades of comparatively modest social improvements and social losses for most DCs and LDCs, once again, the majority of the world's poorest countries are increasing their capacity to meet at least the basic social and material needs of their growing populations. As reported here, and unlike past reports of worldwide social progress, the most remarkable 10-year social gains on the WISP occurred for the world's poorest (DCs) and socially least developed countries (SLDCs). This trend represents a remarkable turnaround in worldwide social development trends and reflect the more favorable changes in social development that are occurring in the poorest nations of developing Africa, Asia, and Latin America (Figs. 8.2 and 8.3). These 10-year net social improvements on the WISP represent a significant departure from more negative trends reported by the author in previous studies of the state of worldwide social development.

Over the full 40 years of social development patterns reported in this analysis, the majority of the 34 Developed Market Economies (DMEs) retained their position as "World Social Leaders" (SLs), albeit their average scores on the WISP dropped appreciably between 2000 and 2011 while the average WISP scores and WISP rank positions of the world's 66 developing and 41 least developed countries increased (Figs. 8.4 and 8.5, Table 8.4). As to be expected, the WISP rank position of individual DME countries varied from one time period to next but, even so, their overall WISP profile for the entire 40-year period covered by the study remained strong *relative to all 160 countries included in the analysis*.

Overall, the worldwide development patterns and trends reported in this chapter are very dynamic. And the picture presented for the most recent development decade contains many surprises. While surprising, the remarkable positive findings reported for the world's DCs and LDCs are much welcomed and speak favorably to the recent successful efforts of governments, private development assistance organizations, and individual philanthropists in advancing social development among particular clusters of nations.

Overall, though, the most significant development successes for the world's poorest countries reported in this chapter are associated with the successful implementation of the United Nations' M*illennium Development Campaign* (MDC) and its eight *Millennium Development Goals* (MDGs). The social gains experienced by the world's most disadvantaged countries have taken place at a time when the economies of the world's most economically advantaged countries have come under severe assaults from both within and outside the regions within which they are located. This makes the social gains realized by the world's socially disadvantaged nations all the more impressive inasmuch as they have had to carry the burden of social reform within their countries more or less alone.

At the outset of a new century, the need is apparent for new, even more dramatic, initiatives on the part of the world community that will transform all of the world's nations into more caring and socially productive societies. Some of these initiatives have been identified in this chapter and others appear in other writings of this author (Estes 2012a, b; Estes and Tiliouine 2014) and those of other specialists working in the development field (Cline and Wolff 2012; Moyo 2008; Sachs 2008; Sen 2009; Streeten 1981; UNDESA 1995; ESCAP 2010; Wan 2008). All emphasize the promotion of three goals on which the world community already agrees: (1) the elimination of absolute poverty everywhere; (2) enhanced popular participation at all levels of social organization; and, (3) more equitable sharing of the planet's abundant resources.

The fundamental social changes implied by these goals are complex and they will not be brought about through quick or simple solutions. Rather, sustained investments over the long term are required to reverse the underlying conditions that have trapped a large portion of the world's population in poverty and degradation. At the center of an effective worldwide change effort must be a commitment to strengthening the capacity of people to provide for their own needs and within a framework that is consistent with the history, traditions, values and norms of each society (Estes and Zhou 2015). No other approach to development can expect to succeed in helping the world's poor and poorest countries liberate themselves from the deeply entrenched patterns of mal-development that have held their populations hostage for so long.

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Richard J. Estes is Professor of Social Work in the School of Social Policy & Practice of the University of Pennsylvania in Philadelphia. He has studied wellbeing on an international level since the 1970s and developed the *Weighted Index of Social Progress* (WISP), a well-established index for measuring wellbeing. From 2004 to 2006 he was president of the *International Society for Quality of Life Studies* (ISQOLS) and in 2009 he was awarded the Distinguished QOL Researcher Award which is awarded by the Board of Directors of the International Society of Quality of Life Studies (ISQOLS) for a lifetime of substantial contributions to Quality of Life research.

The Overall Satisfaction with Life: Subjective Approaches (1)

9

Ruut Veenhoven

Historical Roots

Over the ages philosophers have reflected on the good life, and although philosophers typically have been more interested in the moral value of life than in subjective enjoyment of it, they have also given thought to what makes life more or less satisfying (McMahon 2005). There is a considerable body of research devoted to advising individuals and policy makers how they lead or promote more satisfying lives, but due to a lack of data on just what constitutes a satisfying life the philosophers have not been able to check the reality value of their recommendations. Hence, our understanding of what determines life-satisfaction remained speculative.

Since the 1970s survey-research introduced by social science researchers has brought about a break-through in our understanding of the factors which control life satisfaction. Dependable ways to measure life-satisfaction have been developed, and we have now amassed a significant body of knowledge on this subject. In this chapter I present an account of this new field and how it continues to evolve.

R. Veenhoven (✉)
Erasmus University Rotterdam, Rotterdam, The Netherlands

North-West University, Vanderbijlpark, South Africa
e-mail: Veenhoven@ese.eur.nl

Development of the Field

Efforts to create a better society started with attacking these most blatant evils: ignorance, illness and poverty. Consequently, historically progress has been measured using such thing as literacy, control of epidemic diseases and the elimination of hunger, and social statistics developed to register this progress.

Once an advance had been made in combating ignorance, illness and poverty, policy makers and individuals began to make the effort to ensure a reasonable material standard of living for everybody. This was mostly measured by determining per capita gains in monetary income and income-security, and gave rise to an abundance of research on the wealth of nations and income distributions within nations. These are still major research topics today.

In the 1960s, a new theme began to be heard in the research-agenda, at that time, most western nations had developed into affluent societies, limits to economic growth had been recognized and post-materialistic values became a topic of interest. This called for broader conceptions of the good life and a wider set of measures that could be used to measure our satisfaction with it. Consequently, new terms were introduced, such as 'quality of life' and 'wellbeing', and older terms such as 'happiness' were revived. Initially these notions were used in a polemic manner, and served to denote that there is more to a good life than just material welfare. Yet soon, they were developed into more substantive concepts and

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became subject of empirical investigation. Life-satisfaction is a major topic in this new strand of research.

Plan of This Chapter

The literature on life-satisfaction can be framed within seven key-questions. (1) What is life-satisfaction precisely? (2) Can life-satisfaction be measured? (3) How satisfied are people currently with their lives? (4) How do we assess how satisfied we are with our life? (5) What conditions add to life-satisfaction? (6) Can life-satisfaction be raised lastingly? (7) Should life-satisfaction be raised?

I will first provide a definition of life-satisfaction, and thereby answer question 1. Then I will outline a set of appropriate measures of life-satisfaction, in answer to question 2. This sets the scene. I will then present research findings, on the basis of which the other questions will be answered. For that purpose I will draw on the World Database of Happiness, which stores some 20.000 research findings yielded with acceptable measures of life-satisfaction. Using that source I will first consider how satisfied people are (question 3) and next why not everybody is equally satisfied with life (question 4 and 5). Drawing on this body of knowledge I will finally address the questions of whether life-satisfaction can be raised lastingly (question 6) and whether it is worth striving to do so (question 7).

What Is Life-Satisfaction?

In this chapter the term life-satisfaction denotes *subjective enjoyment of life*. To ensure that this concept is fully understood I will first discuss the difference between subjective enjoyment of life and other notions of the good life (section "Life-satisfaction and other qualities of life"). Next I will specify what kind of subjective enjoyment of life is meant by this term (section "Four kinds of satisfaction"). Based on this, I will then provide a definition of life satisfaction (section "Definition of life-satisfaction"). Finally I discuss the differences between the overall evaluation of life (life-satisfaction) and two 'components' on which this evaluation draws (section "Components of life-satisfaction").

Life-Satisfaction and Other Qualities of Life

Life-satisfaction is about quality of life, yet not all quality of life is about life-satisfaction. One can have a good life but not be satisfied with that life or be satisfied with a not so good life. To help us understand the difference I distinguish between four quali*ties* of life (Veenhoven 2000).

Chances and Outcomes

The term 'quality of life' mostly denotes *chances* for a good life, such as being in full employment and having a good education. The term is also used for *outcomes* of life, such as happiness and longevity. Chances and outcomes are related, but not the same. Chances can fail to be realized, due for example to stupidity or bad luck. Conversely, people sometimes make much of their life in spite of poor opportunities.

This distinction is quite common in the field of public-health research. Pre-conditions for good health, such as adequate nutrition and professional care are seldom mixed up with the actual health of an individual or group. Much research is aimed at assessing the relationships between these phenomena, for instance by checking whether following nutritional advice really yields extra years lived in good health. The means and ends are less well distinguished in the political discourse on quality of life.

Outer and Inner Qualities

A distinction is made between *external* and *internal* qualities. In the first case the quality is in the environment, in the latter it is in the individual. Lane (1994) makes this distinction clear by distinguishing 'quality of society' from 'quality of persons'.

This distinction is also quite commonly made in public health research. External pathogens are

Scheme 9.1 Four qualities of life (Source: Veenhoven (2000))

	Outer qualities	*Inner qualities*
Life chances	Livability of environment	Life-ability of the person
Life results	Utility of life	**Satisfaction with life**

distinguished from inner afflictions, and researchers try to identify the mechanisms by which the former produce the latter. Yet, this basic insight is lacking in many social policy discussions.

Four Qualities of Life

Combining the life chances vs. life results and outer qualities vs. inner qualities yields a four-fold matrix. This classification is presented in Scheme 9.1. The distinction between chances and results is presented vertically, while the difference between outer and inner qualities horizontally.

In the upper half of the scheme, we see two variants of potential quality of life, with next to the outer opportunities in one's environment, the inner capacities to exploit these. The environmental chances can be denoted by the term *livability*, the personal capacities with the word *life-ability*. This difference is not new. In sociology, the distinction between 'social capital' and 'psychological capital' is sometimes used in this context. In the psychology of stress, the difference is labeled negatively in terms of 'burden' and 'bearing power'.

The lower half of Scheme 9.1 covers quality of life with respect to its outcomes. These outcomes can be judged by their value for one's environment and their value for oneself. The external worth of a life is denoted by the term 'utility' of life. The inner valuation of this life is called 'satisfaction' with life. These matters are of course related. Knowing that one's life is useful will typically add to one's appreciation of it. Yet not all-useful lives are happy lives and not every person living what others perceive to be a good-for-nothing life really cares.

Livability of the Environment

The left top quadrant of Scheme 9.1 denotes the meaning of good living conditions. This matter is also referred to as 'welfare' and 'level of living'.

'Livability' is a better word, because it does not have the limited connotation of material conditions. One could also speak of the 'habitability' of an environment, though that term is also used for the quality of housing. Elsewhere I have explored this concept of livability in more detail (Veenhoven 1996:7–9).

Ecologists see livability in the natural environment and describe it in terms of pollution, global warming and degradation of nature. Currently, they associate livability typically with environmental, preservation. City planners see livability in the built environment and associate it with sewer systems, traffic jams, ghetto formation, etc. Here the good life is seen as a fruit of human intervention.

In the sociological view, society is central. Firstly, livability is associated with the quality of society as a whole. Classic concepts of the 'good society' stress material welfare and social equality, sometimes equating the concept more or less with the welfare state. Current notions emphasize close networks, strong norms and active voluntary associations. The reverse of this livability concept is 'social fragmentation'. Secondly, in the sociological perspective, livability is seen in one's position in society, for a long time, the emphasis was on 'under-class' but currently attention has shifted to 'outer-class'. The corresponding antonyms are 'deprivation' and 'exclusion'.

Life-Ability of the Person

The right top quadrant of Scheme 9.1 denotes inner life-chances. That is: how well we are

equipped to cope with the problems of life. This aspect of the good life is also known by different names. The terms 'quality of life' and 'wellbeing' are also used to denote this specific meaning of the good life. There are more names however, in biology; the phenomenon is referred to as 'adaptive potential'. In other situations, it is denoted by the medical term 'health', in the medium variant of the word,[1] or by psychological terms such as 'efficacy' or 'potency'. Sen (1992) calls this quality of life variant 'capability'. I prefer the simple term 'life-ability', which contrasts elegantly with 'livability'.

The most common depiction of this quality of life is an absence of functional defects. This is 'health' in the limited 'minimum' sense, sometimes referred to as 'negative health'. In this context, doctors focus on unimpaired functioning of the body, while psychologists stress the absence of mental defects. In their language, quality of life and wellbeing are often synonymous with mental health. This use of the words presupposes a 'normal' level of functioning. Good quality of life is the body and mind working as designed, and it is this meaning that is commonly used in curative care.

Next to absence of disease, one can consider excellence of function. This is referred to as 'positive health' and associated with energy and resilience. Psychological concepts of positive mental health also involve autonomy, reality control, creativity and inner synergy of traits and strivings. A new term in this context is 'emotional intelligence'. This broader definition is a favorite of the training professions.

A further step is to evaluate an individual's development and to include acquisition of new skills for living. This is commonly denoted by the term 'self-actualization'. From this point of view a middle-aged man is not 'well' if he behaves like an adolescent, even if he functions without problems at this level. Since abilities do not develop in idleness, this quality of life is close to that of 'activity' in Aristotle's concept of eudaimonia (Ostenfelt 1994). This quality concept is also a favorite of the training professions such as teachers and therapists.

Lastly, the term 'art of living' is used to denote special life-abilities; in most contexts this quality is distinguished from mental health and is sometimes even attributed to slightly disturbed persons. The art of living is associated with having an ability to enjoy life and develop an original style of life (Veenhoven 2003).

Utility of Life

The left bottom quadrant of Scheme 9.1 represents the notion that a good life must be good for something more than just the life itself. This presumes some higher values. There is no current generic term for these external turnouts of life. Gerson (1976:795) refers to these kinds of outcomes as 'transcendental' conceptions of quality of life. Another appellation is 'meaning of life'. I prefer the more simple 'utility' of life, admitting that this label may also give rise to misunderstanding.[2] Be aware that this external utility does not require an individual to have inner awareness. One can lead a useful life without knowing, for instance because its effects manifest after one's death, or one can think to be useful while the effects of one's doing are in fact negative.[3]

When evaluating the external effects of a life, one can consider its functionality for its environment. In this context, the life of a mother with young children will be valued as higher than that of the life of a woman of the same age without children. At a higher level, quality of life is seen in contributions to society. Historians see quality in the addition an individual can make to human culture, and rate for example the lives of great inventors higher than those of anonymous

[1] Three main meanings or health are applied to the term health: The maxi variant is all the good (WHO definition 1984), the medium variant is life-ability, and the mini-variant is absence of physical defect.

[2] A problem with this name is that the utilitarian philosophers used the word utility for subjective appreciation of life, in Bentham's words: 'the sum of pleasures and pains', a meaning which belongs in the right bottom quadrant of Scheme 9.2.

[3] Frankl's (1946) logo-therapy is aimed at helping people to believe in meanings for their life that they do not see.

Scheme 9.2 Four kinds of life satisfaction

	Passing	*Enduring*
Life aspects	Pleasure	Domain-satisfaction
Life as a whole	Peak experience	**Life-satisfaction**

peasants. Moralists see quality in preservation of moral order, and would deem the life of a saint to be better than that of a sinner.

In this vein, the quality of a life is also linked to its effects on an ecosystem. Ecologists see more quality in a life lived in a 'sustainable' manner than in the life of a polluter. In a broader view, the utility of life can be seen in its consequences for long-term evolution. As an individual's life can have many environmental effects, the number of such utilities is almost infinite.

Apart from its functional utility, life is also judged on its moral or esthetic value. Most of us would attribute more quality to the life of Florence Nightingale than to that of a drunk, even if it appeared that her good works had a negative result in the end. In classic moral philosophy this is called 'virtuous living', and is often presented as the essence of 'true happiness'.

Satisfaction with Life

Finally, the bottom right quadrant of Scheme 9.1 represents the inner outcomes of life. That is the quality of a life in the eye of the person living that life, in other words subjective satisfaction with life. This is the subject of this chapter.

Four Kinds of Satisfaction

Even when we focus on subjective satisfaction, it is still difficult to pin down what is *life* satisfaction. There are different kinds of life satisfaction which can also be charted in a fourfold classification. In this case, the classification is based on the following dichotomies.

Satisfaction with Life-Aspects Versus Life-as-a-Whole

Satisfaction with aspects of life will typically contribute to one's satisfaction with life-as-a-whole, i.e. bottom-up effect, and satisfaction with one's life-as-a-whole appears to foster satisfaction with life-aspects, i.e. top-down. These are not identical matters. One can have a satisfying marriage but still be dissatisfied with life-as-a-whole, or be satisfied with one's life-as-a-whole in spite of an unhappy marriage.

Passing Delight Versus Enduring Satisfaction

Satisfaction can be short lived or enduring. Once more, these matters are related but not the same.

When combined, these distinctions produce the fourfold classification presented in Scheme 9.2. The difference between satisfaction with parts of life and with satisfactions with life-as-a-wholes presented vertically, and the distinction between passing satisfactions and enduring satisfaction horizontally.

The top-left quadrant represents passing enjoyments of life-aspects. Examples are the delight of a cup of tea at breakfast, fleeting satisfaction with a chore done or enjoyment of a piece of art. I refer to this category *pleasures*, Kahneman (1999) calls it 'instant-utilities'.

The top right quadrant denotes enduring satisfaction with life-aspects, such as marriage satisfaction and job-satisfaction. This is currently referred to as *domain-satisfactions*. Although domain-satisfactions depend typically on a continuous flow of pleasures, they also have some continuity. For instance, one can remain satisfied with one's marriage even if one has not enjoyed the company of one's spouse for quite some time.

The bottom right quadrant in Scheme 9.2 denotes the combination of passing experience and satisfaction with life-as-a-whole. This combination occurs typically in *peak-experiences*, which involve short-lived but quite intense feelings and the perception of wholeness.

Lastly, the bottom-right quadrant represents the combination of enduring satisfaction with life-as-a-whole. This is what I call *life-satisfaction*.

Definition of Life-Satisfaction

In this line, life-satisfaction is defined as *the degree to which a person evaluates the overall quality of his or her present life-as-a-whole positively*. In other words, how much one likes the life one leads.

Scope of Evaluation

The concept of life-satisfaction denotes an *overall* evaluation of life. Therefore, the appraisal that life is 'exciting' does not mark it as 'satisfying'. There may be too much excitement in life, and too little of other qualities. The overall evaluation of life involves all the criteria figuring in the mind of the individual: how that person feels, how well life meets their expectations, how desirable their life is deemed to be, etc. Though people can use very different criteria, they typically use more simple estimates as we will see in section "Components of life-satisfaction". This holds also for the 'components' of life-satisfaction to be discussed in that section.

Temporal Range

Appraisals of life can concern different periods in time: how life has been, how it is now, and how it will probably be in the future. These evaluations do not coincide necessarily; one may be positive about one's past life, but negative about the future. The focus of this chapter is on satisfaction with *present life*.

Variable Aspects

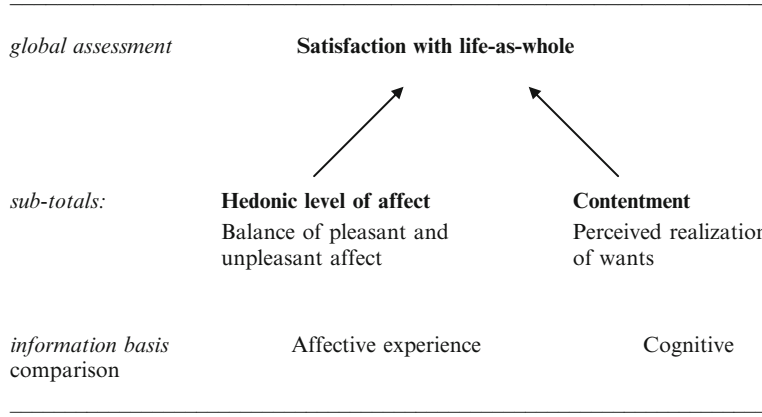
Evaluations of life may differ in several respects. One difference is in their certainty: some people are rather definitive about their satisfaction with life, whereas others vacillate. Another point of variation is how well considered the judgment is: some people judge rather intuitively, while others engage in elaborate contemplation. Furthermore, appraisals of life are probably not always equally appropriate. Like any perception they can be distorted in various ways, such as by mis-attribution and self-deceit. This is commonly referred to as 'false happiness'. Distorted judgments of life are clearly less valuable as an indicator of quality of life. Nevertheless, inappropriate satisfaction is still satisfaction.

Components of Life-Satisfaction

When assessing our satisfaction with life, we use two more or less distinct sources of information: our affects and our thoughts. One can decide that one feels fine most of the time and one can also judge that life meets ones (conscious) demands. These appraisals do not necessarily coincide. One may feel fine generally, but nevertheless be aware of unrealized aspirations. Or one may have surpassed ones aspirations, but nevertheless feel miserable. Using the word 'life-satisfaction' in both these cases would result in three different kinds of life satisfaction, the overall judgment as described above and these two specific appraisals. Therefore I refer to these components as 'hedonic level of affect' and 'contentment'. To mark the difference with the encompassing judgment I will refer to life-satisfaction, the core concept, as *overall* life-satisfaction. These three variants are depicted in Scheme 9.3.

Hedonic Level of Affect

Hedonic level of affect is the degree to which various affects that someone experiences are pleasant in character. Hedonic level of affect is not the same as 'mood'. We experience different kinds of mood: elated moods, calm moods, restless moods, moody moods, etc. Each of these moods is characterized by a special mixture of affective experience, one of which is 'hedonic tone' or 'pleasantness'. The concept of hedonic level concerns only the pleasantness experienced



Scheme 9.3 Components of life-satisfaction (Source: Veenhoven (1984: section 2/3))

in affects; that is, the pleasantness in feelings, in emotions and in moods. So a high hedonic level may be based on strong but passing emotions of love, as well as on moods of steady calmness.

A person's average hedonic level of affect can be assessed over different periods of time: an hour, a week, a year, as well as over a lifetime. The focus here is on 'characteristic' hedonic level. That is so to say: the average over a long time-span such as a month or a year. The concept does not presume subjective awareness of that average level.

Contentment

Contentment is the degree to which an individual perceives his/her aspirations are met. The concept presupposes that the individual has developed some conscious wants and has formed an idea about their realization. The factual correctness of this idea is not at stake. The concept concerns the individual's subjective perception. This concept does assume awareness; one cannot be contented without knowing.

Measurement of Life-Satisfaction

Since life-satisfaction is something we have in mind, it can be measured using questioning. Questions on life-satisfaction can be asked in various contexts; in clinical assessments, in life-review questionnaires and in common survey interviews. The questions can be posed in different ways; directly or indirectly, and by using single or multiple items.

An overview of all questions ever used to assess life satisfaction is available in the collection of Happiness Measures (Veenhoven 2012c). To date (March 2012) the collection involves 750 questions. These questions are sorted using the conceptual distinction described above between overall life-satisfaction and its 'components'. Question that tap overall life-satisfaction are coded 'O' (Overall), questions that address the affective component are coded 'A' (Affect) and questions about the cognitive component are coded 'C' (Contentment). Questions are also sorted by time-frame and rating scale. The collection contains links to studies in which particular questions have been used.

Common Questions

Some common questions used to determine satisfaction with life are presented below.

Single Questions

- "Taking all together, how happy would you say you are: very happy, quite happy, not very happy, not at all happy?" (a standard question in the World Values Surveys)
- "How satisfied are you with the life you lead? Very satisfied, fairly satisfied, not very satisfied, not at all satisfied?" (a standard question in Eurobarometer surveys)

- "Here is a picture of a ladder. Suppose the top of the ladder represents the best possible life for you and the bottom of the ladder the worst possible life. Where on the ladder do you feel you personally stand at the present time?" (0–10 ladder like rating scale) (Cantril's (1965) present life ladder rating)

Multiple Questions (Summed)

- Same questions are asked twice: at the beginning and at the end of an interview
- "How do you feel about your life-as-a-whole? Delighted, pleased, mostly satisfying, mixed, mostly dissatisfying, unhappy, terrible?" (Andrews and Withey's (1976) Life 3)
- Five questions can be used, rated on a 1–7 scale ranging from "strongly agree" to "strongly disagree". (Diener's 1985 Satisfaction With Life Scale SWLS)
  - "In most ways my life is close to ideal".
  - "The conditions of my life are excellent".
  - "I am satisfied with my life".
  - "So far I have gotten the important things I want in life".
  - "If I could live my life over, I would change almost nothing".[4]

Validity Doubts

Critics have suggested that responses to questions on life-satisfaction actually measure other phenomena. Rather than indicating how much the respondent enjoys life, the answers to such questions reflect his normative notions and desires.

No Notion

One of the misgivings about questions on life satisfaction is that most people have no opinion at all of how satisfied they are, they will be more aware of how satisfied they are supposed to be, and report this instead. Though this may happen incidentally, it does not appear to be the rule. Most people know quite well whether or not they enjoy life. Eight out of ten Americans think about it every week. Responses on questions about life-satisfaction tend to be prompt. Non-response on these items is low; both absolutely (±1 %) and relative to other attitudinal questions. 'Don't know' responses are also infrequent (Veenhoven 2010).

Reflected Appraisal

A related assertion is that respondents mix up how satisfied they actually are, with how satisfied other people think they are, given their situation. If so, people considered to be well off would typically report to be very satisfied, and people regarded as disadvantaged should characterize themselves as dissatisfied. That pattern is sometimes observed, but it is not general. For instance, in The Netherlands a good education is seen as a prerequisite for a good life, but the highly educated appear to be slightly less satisfied with their lives compared to their less educated counterparts.

Colored Answers

Another objection concerns the presence of systematic bias in responses. It is assumed that questions on life-satisfaction are interpreted correctly, but that the responses to such questions are often false. People who are actually dissatisfied with their life would tend to answer that they are satisfied, both ego-defense and social-desirability will cause such distortions. This bias is seen to manifest itself in over-report of life-satisfaction; most people claim to be satisfied, at least in modern nations, and most perceive themselves to be more satisfied than average. Another indication of bias is seen in the finding that psychosomatic complaints are not uncommon among those that say they are satisfied.

Yet the above findings allow for other interpretations Firstly, the fact that most people say they are satisfied with their life does not have to imply over-report. It is quite possible that most people are truly satisfied. Secondly, there are also good reasons why most people think that they are more satisfied than average. One such reason is that most people think like critical scientists and

[4] I my view this last item is not appropriate. One can be quite satisfied with life, but still be open to the opportunity to try something else.

think that dissatisfaction is the rule. Thirdly, the occurrence of head-aches and worries among satisfied people does not prove response distortion, life can be a sore trial some times, but can still be satisfying on balance.

The proof of the pudding is in demonstrating response distortion. This has been attempted in a number of clinical studies where responses to single direct questions have been compared with ratings based on in depth interviews and projective tests. The results for such in depth interviews are generally not different from responses made to single direct questions posed by an anonymous interviewer, see for example Wessman and Ricks (1966).

Reliability Doubts

Though single questions on life-satisfaction seem to measure what they are supposed to measure, they measure it rather imprecisely. When the same question is asked twice in an interview, the responses are not always identical. Correlations are about +.70, while over a period of a week, test-retest reliability drops to circa +.60. Though responses seldom change from 'satisfied' to 'dissatisfied', switches from 'very' to 'fairly' are rather common.[5] The difference between response-options is often ambiguous and respondent's notions tend to be general, thus the choice for one answer-category or the next is sometimes haphazard when answering questions on life satisfaction.

Because choice is often arbitrary, subtle differences in the interrogation environment can exert a considerable effect. Variations in the places where the interviews are held, the characteristics of the interviewer, the sequence in which the questions are asked and the precise wording of the key-item can all tip the scale to one response or another. Such effects can occur in different phases of the response process; when the question is presented, during consideration of the answer and when communicating it.

Bias in Appraisal

Though most people have an idea of how much they enjoy life, responding to questions on this matter involves more than just bringing up an earlier judgment from memory. For the most part, memory only indicates a range of satisfaction. Typically, the matter is re-assessed in an instant judgment. This re-appraisal may be limited to recent change: Are there any reasons to be more or less satisfied than I used to be? But it can also involve quick re-evaluation of one's life: What are my blessings and frustrations?. In making such instant judgments, people use various heuristics. These mental simplifications are attended with specific errors. For instance the 'availability' heuristic involves orientation on pieces of information that happen to be readily available. If the interviewer is in a wheelchair, the benefit of good health is salient. Respondents in good health will then rate their life-satisfaction somewhat higher and the correlation with health variables will be more pronounced. Several of these heuristic effects have been demonstrated by Schwarz and Strack (1991).

Bias in Response

Once a respondent has formed a private judgment with respect to their life satisfaction, the next step is to communicate it. At this stage reports can also be biased in various ways. One source of bias is inherent to semantics; respondents interpret words differently and some interpretations may be emphasized by earlier questions. For example, questions on life-satisfaction are more likely to be interpreted as referring to 'contentment' when preceded by questions on success in work, rather than items on mood. Another source of response-bias is found in considerations of self-presentation and social-desirability. Reports of life-satisfaction tend to be slightly higher in personal interviews than that for anonymous questionnaires,[6] however, direct contact with an interviewer does not always inflate reports. If the interviewer

[5] World Database of Happiness, Correlational Findings (Veenhoven 2012e) Earlier by later happiness (H5.2.1).

[6] World Database of Happiness, Correlational Findings (Veenhoven 2012e) Method of interrogation (I5.1.3).

is in a wheel-chair, modest self-presentation is encouraged.

Much of these biases are random, and balance out in large samples. So in large samples, random error does not affect the accuracy of happiness averages. Yet it does affect correlations, random error 'attenuates' correlations. Random error can be estimated using multiple-trait-multiple-method (MTMM) studies, and correlations can be corrected (disattenuated) on that basis. A first application on satisfaction measures is reported in Saris et al. (1996).

Some biases may be systematic; especially bias produced by technique of interrogation and sequence of questions. Bias of this kind does affect the reliability of distributional data, yet in principle it does not affect correlations, unless the measure of the correlate is biased in the same way, i.e. correlated error. To some extent, systematic error can also be estimated and corrected, see also Saris et al. (1996).

Comparability Across Nations

Average life-satisfaction differs markedly across nations. In the next section we will see that Russians currently score 5.4 on a 0–10 scale, while in Canada the average is 7.7. Does this mean that Russians really take less pleasure in life? Several claims to the contrary have been advanced. I have checked these doubts Veenhoven (1993), and the results of that inquiry are summarized below.

The first objection is that differences in *language* hinder comparison. Words like 'happiness' and 'satisfaction' do not have the same connotations in different tongues. Questions using such terms will therefore measure slightly different matters. I checked that hypothesis by comparing the rank orders produced by three kinds of questions on life-satisfaction: a question about 'happiness', a question about 'satisfaction with life' and a question that invites a rating between 'best- and worst possible life'. The rank orders appeared to be almost identical in all languages. I also compared responses to questions on happiness and satisfaction in two bi-lingual countries, and found no evidence for linguistic bias either.

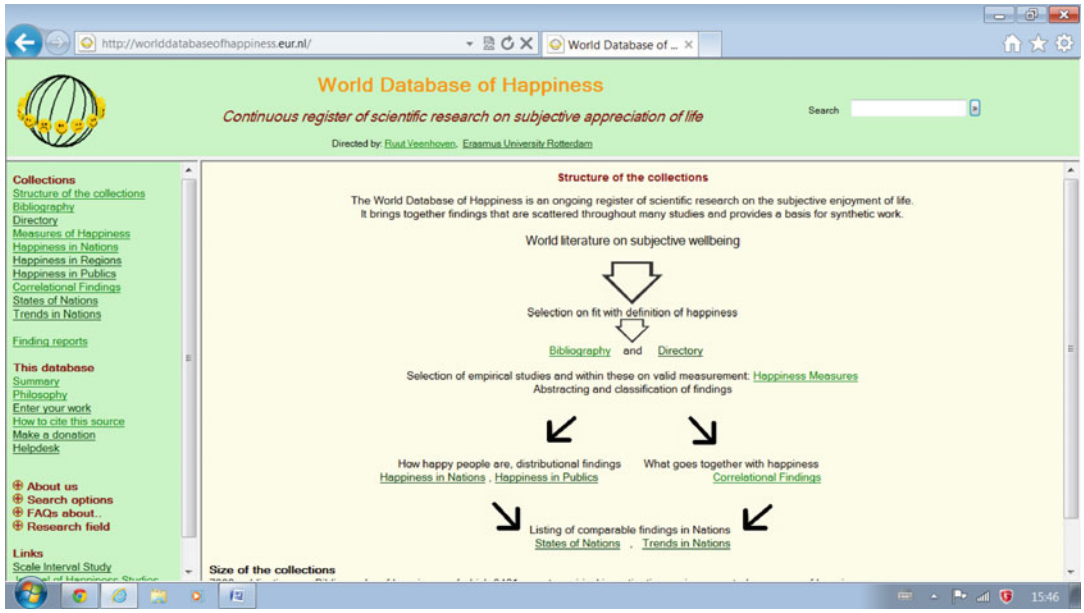
A second objection is that responses are differentially distorted by *desirability-bias*. In countries where happiness ranks high in value, people will be more inclined to overstate their enjoyment of life. I inspected that claim by checking whether reports of general happiness deviate more from feelings in the past few weeks in these countries; the former measure being more vulnerable for desirability distortion than the latter. This appeared not to be the case.

A third claim is that *response-styles* distort the answers dissimilarly in different countries, for instance, a collectivistic orientation would discourage 'very' happy responses, because modest self-presentation is more appropriate within this cultural context. I tested this hypothesis by comparing life-satisfaction in countries differing in value-collectivism, but found no effect in the predicted direction. The hypothesis also failed several other tests.

A related claim is that life-satisfaction is a typical *western concept*, unfamiliarity with it in non-western nations would lead to lower scores. If so, we can expect more 'don't know' and 'no answer' responses in non-western nations, however, that appeared not to be the case.

Many more sources of cultural measurement bias can be involved. If so, there must be little correlation between average life-satisfaction and the actual livability of nations. In section "Conditions for life satisfaction" we will see that this is not the case either. Using a dozen indicators of societal quality we can explain 75 % of the differences in average life-satisfaction in nations, which means that measurement error can be no more than 25 %. If we had more and better indicators of societal quality, we could probably explain some 90 % of the variation and the error-component would then be no more than 10 %. If we take into account that there is also an error component in the measures of societal quality, the estimate shrinks to some 5 %.

The issue of 'cultural bias in the measurement' of happiness must be distinguished from the question of 'cultural influence on the



Scheme 9.4 Home page World Database of Happiness

appraisal' of life. Russians could be truly less satisfied than Canadians, because living conditions are less good in Russia. This latter matter will be discussed in the next section.

World Database of Happiness

Research findings obtained with acceptable measures of life-satisfaction are stored in the World Database of Happiness (Veenhoven 2012a). This is a 'findings archive' that currently contains some 20.000 'finding pages', on which research results are described in a standard format, using a standard terminology, with full detail about sampling, measurement and statistical analysis. About 5000 of these pages concern 'distributional findings', that is, observed degree of life-satisfaction in populations, such as the general public in nations or special publics such as youngsters or medical patients. These data will be used in section "How satisfied are we?" of this chapter on how satisfied people are. About 15.000 of the findings are correlational, that is, on things that go together with more or less life-satisfaction. These findings will be used in section "How do we assess how satisfied we are with our life?" which answers the question why not everybody is equally satisfied.

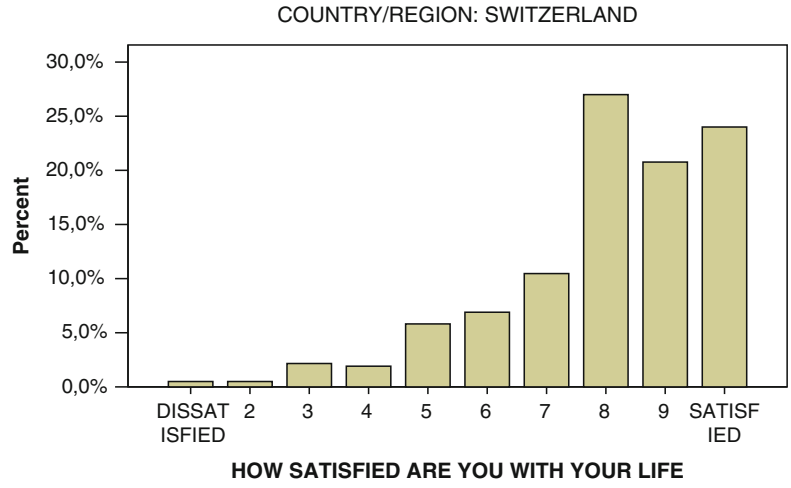
The World Database of Happiness is available free on the internet. A copy of the home page is presented on Scheme 9.4. A detailed description of this source is available in Veenhoven (2011).

How Satisfied Are We?

Having established that life-satisfaction can be measured, we can go on to considering how satisfied people are in the present day world and to what extent they differ in enjoyment of life.

Level of Life-Satisfaction

Throughout time, social critics have bemoaned the miseries of life. Human kind is said to be dissatisfied, and real satisfaction is projected in past paradise or future utopia. Optimists, who stressed human adaptability and social progress, have always denounced such bilious claims, but due to a lack of any empirical gauge, the



Scheme 9.5 Happiness in Switzerland 2010

discussion remained inconclusive. In the last few decades many surveys on satisfaction with life have been carried out, some drawing on world samples. All these findings are gathered in the collection 'Happiness in Nations' of the World Database of Happiness (Veenhoven 2012d), and together, they support the optimist view.

Wide Differences Across Nations

The responses to a single question on life-satisfaction in Switzerland are presented in Scheme 9.5. Most of the inhabitants of this country say they are satisfied with their life, some 70 % rate 8 or higher on the 0–10 scale. The average score is 8.1, and it is positive findings like these that have fueled the suspicions about self-reports of life-satisfaction discussed above.

Later cross-national studies have shown that unhappiness prevails in developing countries, where a large proportion of the population lives at subsistence levels. The responses to the same question asked around the same time as in the Swiss question in another country, Zimbabwe, are presented in Scheme 9.6. Now some 70 % of the sample population scores 5 or less and the average is 3.1. This finding put to rest many of the aforementioned validity doubts.

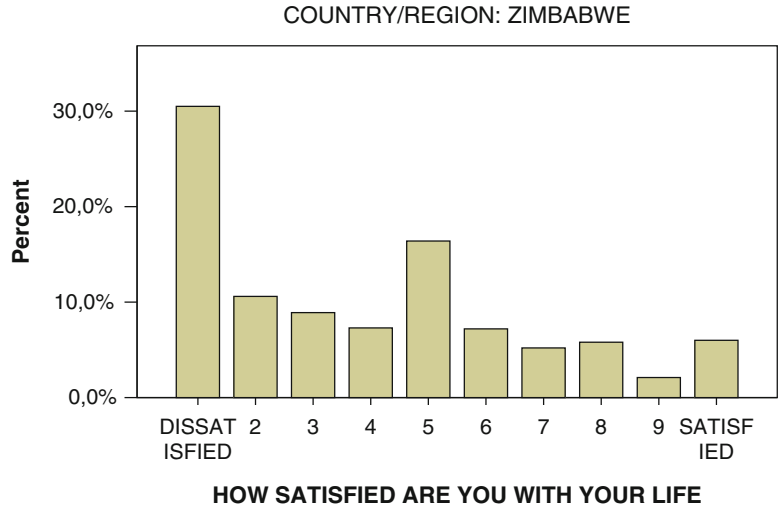
Comparable data on average life-satisfaction are now available for most of the contemporary nations and are presented on the world map of happiness on Scheme 9.7. The darker the green, the more satisfied citizens are on average. The data concern the period 2000–2009; if more than one survey had been held in these years, which was often the case, the mean was used. There are only a few blank spots on this map, typically countries with authoritarian regimes, such as Libya and North Korea.

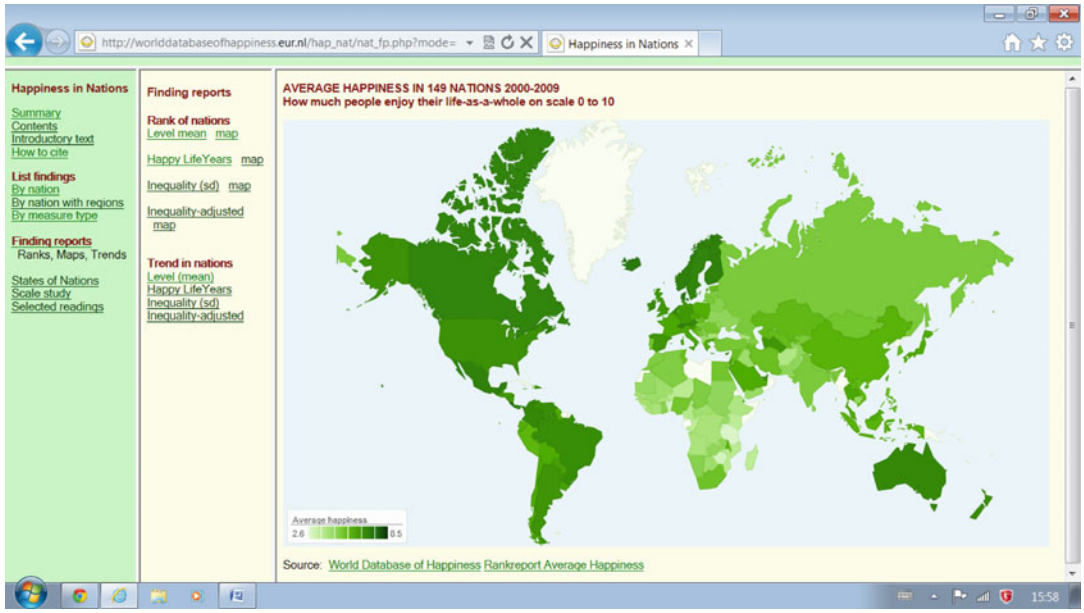
Average life-satisfaction appears to be high in developed western nations, yet averages are not equally high in all developed nations, for instance 7,9 in Finland, but only 6,6 in France, while the income per capita is similar in these countries. Still another surprise is the high averages in Latin American nations, for example, the average Mexican is slightly more satisfied (7,9) than the average American (7,4), although many Mexicans seek a better life in the USA.

Average life-satisfaction tends to be lower in Asian countries, for instance 6,3 in Indonesia. Much lower averages are observed in Africa. The map illustrates that Zimbabwe is no exception. The lowest average was observed in Togo (2,6).

The reasons for these large differences in average life-satisfaction across nations will be discussed in section "Social conditions" of this chapter.

Scheme 9.6 Happiness in Zimbabwe in 2010





Scheme 9.7 World map of happiness

Most People Enjoy Life

Despite the dramatic dissatisfaction in African countries, most contemporary people are not dissatisfied with their lives. In most countries the average is higher than the midpoint of 5 on this 0–10 scale. The world average in this period was 6.0.[7]

[7] Mean of average happiness in nations weighed by number of inhabitants.

No Mere Resignation

Nevertheless, some social critics are still reluctant to believe that most people enjoy life in modern society. Reported life-satisfaction is discounted as sullen adjustment. Rather than really enjoying their life, people would just give up hope for a better one and try to adjust to the inevitable, see for example, Ipsen (1978). Various defensive strategies will be used: simple denial of one's misery, downward comparison and a tendency to

see things as rosier than they actually are. Depressives will see the world more realistically. In addition to the above discussion on validity, two counter-arguments can be mentioned.

One, such resignation must be seen in a discrepancy between the results for 'adjusted' judgment of life and 'raw' affective experience. Appraisal of affect is probably less vulnerable to cognitive adaptation because it is a direct experience and thus less open to defensive distortion. It is also less threatening to admit that one has felt depressed in the last few weeks than to admit to disappointment with life. Various surveys have assessed both general happiness and last week's affect-balance. The results do not suggest that people claim to be satisfied but actually feel lousy.[8] Time sampling of mood-states also shows that pleasant affect dominates unpleasant affect, see for instance Bless and Schwarz (1984) for a meta-analysis of 18 studies.

Two, people are typically dissatisfied when they live in miserable conditions. As we will see dissatisfaction is the rule in developing countries. In western nations life-satisfaction is typically lower where adverse conditions accumulate, such as in persons who are poor, lonely and ill (Glatzer and Zapf 1984:282–397).

Together these findings suggest that people tend to enjoy their lives once conditions are tolerable, and from an adaptive-biological point of view, this does not seem strange. Nature is unlikely to have burdened us with chronic dissatisfaction. Like 'health', life-satisfaction would seem to be the normal condition.

Why Still So Many Complaints?

The prevalence of life-satisfaction does not wash away the multitude of suffering and complaining, even the satisfied are not without their complaints. The German Welfare Survey found that half of the subjects who said they were satisfied with their life-as-a-whole reported frequent worries (Glatzer and Zapf 1984:180).

If not due to response distortion, what else can explain this pattern of worried life-satisfaction? Firstly, one can be satisfied with life-as-a-whole, but still be aware of serious deficits in one's life. In fact, both stem from a reflection on life. Secondly, worrying may contribute to life-satisfaction in the end, only through realistic acknowledgement of hurts and danger can we cope effectively with the problems of life.

Average Life-Satisfaction Over Time

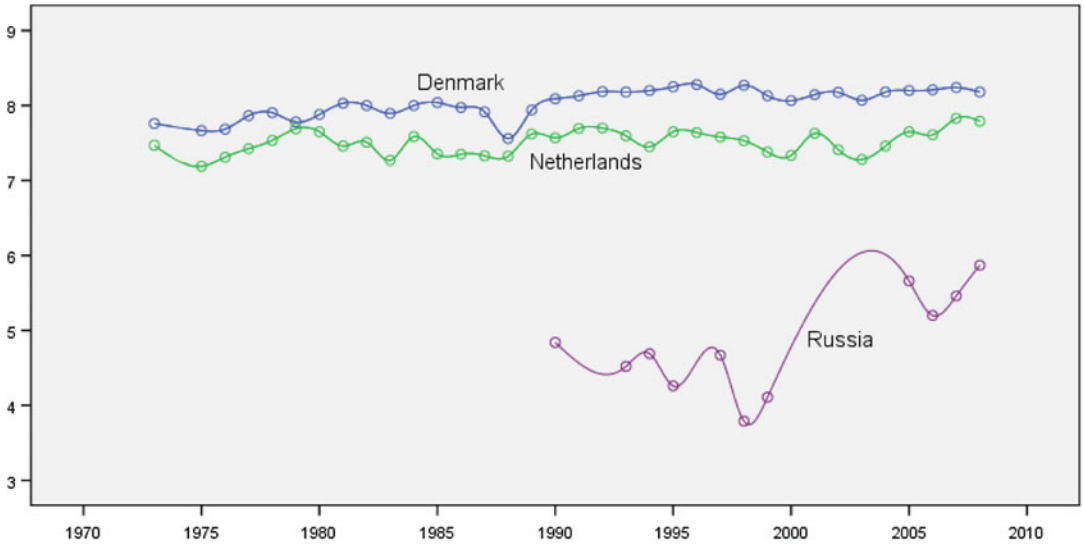
It is generally believed that we were happier in 'the good old days'. Yet the available time series show a rise in average life-satisfaction in most nations.[9] The average scores on a question on life-satisfaction in three nations are presented in Scheme 9.8. A positive trend line appears in Denmark and the Netherlands and after a dip also in Russia. Contrary to common belief, happiness has also risen in the USA since the 1970s. Data on non-western nations are less abundant, but the available findings suggest even greater increases over the last decade (Veenhoven and Hagerty 2006). This rise of happiness goes together with rising longevity, we live now longer and happier than ever before in human history (Veenhoven 2005b).

How Do We Assess How Satisfied We Are with Our Life?

What goes on in our mind when we assess how much we enjoy our life? Speculation on this matter was a main issue for classical philosophy of happiness and this issue is enjoying renewed interest today. It is not just curiosity about what is inside of the black box of our mind that draws the attention, but rather the far-reaching consequences of different points of view with respect to creating greater happiness. This will

[8] World Database of Happiness, Correlational Findings (Veenhoven 2012e) Overall happiness by hedonic level (H61.2).

[9] World Database of Happiness (Veenhoven 2012g) Finding report Trend Average Happiness in Nations.



Scheme 9.8 Trend of average life-satisfaction in three nations (Source: World Database of Happiness, Trends in nations Veenhoven (2012g))

be discussed more fully in below in the section "Is more life-satisfaction desirable?".

Bottom-Up Calculation

Jeremy Bentham (1789) though of life-satisfaction as the "sum of pleasures and pains", established using a "mental calculus". This view on the evaluation process is still dominant. Life-satisfaction can be said to be assessed in a manner similar to that used by accountants to calculate profit. We would count our blessings and blights and then strike a balance. The judgment is made in a bottom-up process, in which appraisals of various aspects of life are combined to obtain an overall judgment.

In this line, Andrews and Withey (1976) suggested that satisfaction with life-as-a-whole is calculated from satisfactions with life-domains. In this view, we first evaluate domains of life, such as those of our job and marriage, comparing the reality of life with various standards of success, like 'security' and 'variation'. Next, we compute an average, weighted by our perceived importance of the domains. Andrews & Withey demonstrate high correlations between satisfaction with life-as-a-whole and life-domain appraisals, but found no evidence for the presumed weighing.

Michalos' (1985) Multiple-Discrepancy-Theory also depicts life-satisfaction as the sum of various sub-evaluations. In his thinking, sub-evaluations are assessments of the discrepancies between perceptions of how one's life 'is' with notions of how it 'should be'. The five main comparison standards are presented as: what one 'wants', what one 'had' earlier in life, what one 'expected' to have, what one thinks 'other people' have, and what one thinks is 'deserved'. Michalos provides ample evidence that small discrepancies are accompanied by high satisfaction with life-as-a-whole. Multiple regression analysis showed that life-satisfaction is primarily a function of perceived discrepancy between reality and 'wants'.

Though satisfaction with life-as-a-whole is statistically correlated with appraisals of various aspects of life, it has not been established that life-satisfaction is causally determined by these sub-evaluations. The correlation can also be due to top-down effects. For instance, when assessing

his job-satisfaction a person can reason "I am generally happy, so apparently I like my job". Panel-analysis has demonstrated strong effects of this kind. The effect of life-satisfaction on our perceptions of have-want discrepancies appears to be greater than the effect of gap-size on life-satisfaction (Headey et al. 1991).

Inference on the Basis of Feeling

A rival theory is that evaluations of life draw on cues that provide indications of our quality of life-as-a-whole. An internal cue of this kind is how well one generally feels; if pleasant affect generally dominates one's life, life cannot be too bad. An external cue is how satisfied other people think one is, i.e. reflected appraisal. The available evidence suggests that internal affective cues are far more important than external social ones. Life-satisfaction is much more related to matters of mood than to reputation.

In assessing how we generally feel, we seem to focus on the relative frequency of positive and negative affects, rather than on the remembered intensity of joy and suffering (Diener et al 1991). A typical heuristic seems to involve departing from the mood of the moment, which can be read quite vividly, and next considering how representative that mood is for general affective experience (Schwarz 1991).

Schwarz and Strack (1991) show that evaluations of life-as-a-whole draw on how one generally feels. This facilitates the judgmental task. Most people know very well how well they generally feel. The alternative of 'calculating' happiness is more difficult and time-consuming. It requires selection of standards, assessments of success and integration of the appraisals into an overall judgment, which involves more mental operations, and entails the need to make many arbitrary decisions.

Still, people sometimes choose to follow this more difficult road. A condition that encourages calculative evaluation is uncertainty about one's typical mood. For instance, in depression it is hard to estimate how one generally feels. Another factor that invites use of the calculative approach is the availability of salient information that provokes comparison, such as the earlier mentioned example of a respondent being confronted with an interviewer in a wheelchair.

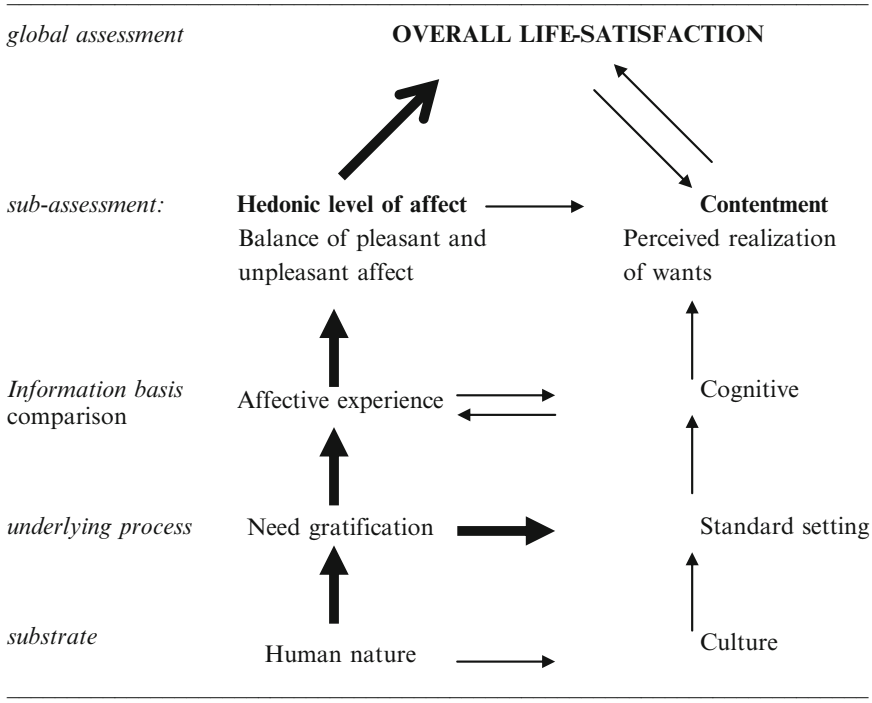
Evaluations of specific aspects of life can less well be derived from estimates of general affect. One can be satisfied with one's job, but still feel generally lousy, because of a bad marriage and poor health. Yet, calculating ones happiness is less difficult when specific life-domains are concerned. The field is easier to oversee and the standards are usually more evident.

Link with Components of Happiness

These different views on how we assess how much we like our life link up with the 'components' of happiness discerned in section "Components of life-satisfaction". The view that we 'calculate' happiness from the plusses and minuses of life fits the cognitive component I called 'contentment'. The view that life-satisfaction is inferred from how we feel most of the time fits the affective component, which I called 'hedonic level of affect'. Below I will argue that these sub-evaluations draw on different sources, that contentment is a matter of perceived realization of *wants*, while hedonic level depends on the meeting of *needs*. This theory is depicted in Scheme 9.9.

Hedonic Level Depends on Gratification of Universal 'Needs'

Why can we experience pleasure and pain? The biological functions of pleasure and pain are evidently to signal that things are good or bad for us. Evolution has programmed us this way. What then is the function of mood? Clearly it does not signal specific benefit or danger, unlike pleasure and pain moods are typically not related to specific stimuli and certainly not our average mood level over longer periods of time. Mood level seems to function as a meta-signal and to indicate how well we are doing on the whole. Feeling good means that all lights are on green



Scheme 9.9 Assessment of life-satisfaction: significance of two causal paths (Source: Veenhoven (2009))

and that we can go ahead, while feeling bad means that there is something wrong and that we should check what that is. This affective signal mechanism seems to exist in all higher animals and its neural basis is found in the evolutionary oldest parts of the human brain.

What then is 'doing well'? I assume, but cannot prove, that this means our innate 'needs' are being met. Needs are requirements that we have to function well that are so essential that evolution has safeguarded gratification of these functions by linking them to affective signals. This is pretty evident in the case if 'deficiency needs' such as hunger and thirst, but also seems to apply to 'growth needs' such as satisfying curiosity.[10]

In this view, happiness is rooted in the gratification of basic needs that are part of human nature, and in that respect happiness draws on universal grounds. I have discussed this theory in more detail elsewhere (Veenhoven 1991, 2009).

Contentment Depends on Meeting Culturally Variable 'Wants'

Why do we have wants? Mainly so we will gratify our needs. In lower animals a set of instinctive behaviors serves to meet their needs. A human's strategy is more flexible and allows for need gratification though planned behavior: 'wants' are a part of that planning.

Why do we want what we want? Part of the answer is that we tend to adopt current standards of the good life, e.g. the standard of what material level of living is desirable and possible. These standards will vary through time and across culture, today we want to have more material comfort then our great grandparents could dream of, and standards of comfort are set higher in American business circles then in Tibetan monasteries.

[10] The distinction between *deficiency needs* and *growth needs* is part of Maslow's (1970) theory of human motivation.

In this view, life-satisfaction is rooted in social standards and in this respect happiness is culturally relative, for a recent statement see Christopher (1999).

Affective Experience Dominates in the Overall Evaluation of Life

Which of these two ways of appraising life, i.e. cognitive and affective, is the most important? I have considered this question in earlier publications (Veenhoven 1991, 2009) and concluded that affective experience dominates our overall evaluation of life. I will summarize the main arguments, and present some more of the supporting evidence for this conclusion.

Theoretical Plausibility

From an evolutionary point of view it is not plausible that cognitive contentment dominates our overall satisfaction with life. Cognition is a much later evolutionary development and serves as an addition to affective appraisal rather than a substitute. Reason helps us to explain why we feel good or bad and allows us to detect false affective signals, although it is difficult to ignore these as depressives can tell you. Affective appraisal tends to precede making a cognitive decision (Zajonc 1984) and without affective appraisal we cannot come to a decision, as has been demonstrated for people with certain kinds of neurological damage (Damasio 1994). In this perspective it is also unlikely that humans orient on variable cultural standards in the first place, rather than on needs that root in their biological evolution.

The limited role of cognitive comparison in determining one's life satisfaction is also illustrated by the fact that little children do not display it, they have no idea, as yet, what they want from life. Still it is clear that children can feel happy or unhappy.

Empirical Indications

Since we cannot (yet) look into people's heads, there is no direct empirical evidence of the relative strength of both ways of appraising life: yet there are there are several indirect indications that can be used to gain an understanding of how we appraise our lives.

Life-Satisfaction More Correlated to Affect than Contentment

If affective experience dominates the overall appraisal of life, this must appear as a sizable correlation with overall life-satisfaction that is more sizable than the correlations to contentment with life satisfaction. Unfortunately there are no reports of studies involving measures of all three of these variants of life satisfaction, so we must do with studies that correlated either life satisfaction with affect or life satisfaction with contentment. The findings of such studies are stored in the collection 'Correlational Findings' of the World Database of Happiness.[11]

Eight studies link self-ratings of life-satisfaction and average affect and find an average correlation of +.70.[12] Another 13 studies relate responses to single questions on life-satisfaction and contentment and find an average correlation of +.46.[13] Likewise, the average correlation between life-satisfaction and affect balance in 70 studies is about +.50.[14] Not surprisingly, the correlation between hedonic level and contentment is weaker.

[11] World Database of Happiness, Correlational Findings (Veenhoven 2012e) Happiness by Happiness (H6).

[12] This analysis involved eight studies, the results of which are summarized section H6.1.2 'Overall happiness by Hedonic level of Affect'. The analysis limited to studies among general population samples using comparable single direct questions on overall happiness (type O-HL, O-SL, O-DT, O-QOL) and Affect (type A-AOL).

[13] This analysis involved seven studies, the results of which are summarized in, section H6.1.3 'Overall happiness by contentment'. The analysis limited to studies among general population samples using comparable single direct questions on overall happiness (type O-HL, O-SL, O-DT) and contentment (type C-BW).

[14] This analysis involved 70 studies, the results of which are summarized in the section H6.1.2 'Overall happiness by Hedonic level of Affect'. The analysis limited to studies among general population samples using comparable single direct questions on overall happiness (type O-HL, O-SL, O-DT, O-QOL) and Affect Balance (type A-AB). See also Suh et al. 1998.

The average in three studies is +.40.[15] An even lower correlation was observed in the 2006 Gallup World Poll the correlation between Best-Worst possible life and Yesterday's Affect being around +.20 (Harter and Arora 2010).

Satisfied with Unfulfilled Aspirations

If life-satisfaction depends on seeing one's wants met, people must be dissatisfied when they have unfulfilled aspirations and the more dissatisfied they will be the more unfulfilled aspirations they have. Yet people with unfulfilled aspirations appear to be more satisfied than people without any, and more so the more unfulfilled aspirations they have (Wessman 1956:210).[16] This finding fits better with the theory that we have an innate need to use our potentials, and unfulfilled aspirations encourage doing so while striving to achieve them.

Satisfied in Spite of Value-Reality Gap in Nation

If contentment drives life-satisfaction in the first place, we can expect that people are more satisfied in nations where the values endorsed in that nation are perceived to be met, than in nations where a gap between value and reality is perceived to exist. This is not always the case, for instance it is not met with 'gender equality' and 'human orientation' as measured in the Globe study in 62 societies (House et al. 2004). Average life-satisfaction is higher in nations where the widest gaps between ideal and reality are perceived to exist on these issues, probably because this marks a more human friendly social climate.

Life-Satisfaction Drives Contentment Rather Than Reversely

The right arrow in Scheme 9.9 denotes a 'bottom-up' effect of contentment on overall happiness. Above I have interpreted the observed correlations in this way. Yet causality can also be 'top-down', satisfaction with life affecting the perception of the gap between what one wants and what one has. Analysis of a panel study has shown that causality typically works this way. In this study, discrepancies (gaps) were assessed between how respondents rated their present life on a 20 step scale and ratings of what they wanted from life, i.e. expectations, aspirations, entitlements, on the same ladder scale. Comparison over time showed a significant top-down effect, but no bottom up effect (Headey and Veenhoven (1989:117). So it seems that contentment is largely driven by life-satisfaction rather than reversely. If we feel satisfied, we infer that we have most of the things we want, and if we feel dissatisfied we start looking for what we might miss.

Though affect seems to dominate the overall appraisal of life, it does not dominate equally much everywhere. Correlations between life-satisfaction and affect balance tend to be stronger in individualistic nations than in collectivistic ones (Suh et al. 1998). Likewise, the relative weight of positive and negative affect differs somewhat across cultures. Negative affect is more strongly correlated to life-satisfaction in individualistic nations than in collectivistic nations, while positive affect correlates more with life-satisfaction in nations where self-expression values are endorsed than in nations where the focus is more on survival (Kuppens et al. 2008).

Conditions for Life Satisfaction

The degree to which needs and wants are met depends on various conditions. These conditions can be charted using the same scheme I use to distinguish four qualities of life. In Scheme 9.1 life-satisfaction was positioned in the right-bottom quadrant as an inner *outcome* of life.

[15] This analysis involved three studies, the results of which are summarized in section H6.23 'Hedonic level of Affect by Contentment'. The analysis limited to studies among general population samples. Hedonic level was measured using Affect balance Scales (type A-AB) and contentment using the Cantril ladder (type C-BW) and questions about perceived realization of wants (type C-RW).

[16] Wessman wrongly interpreted table 44 as showing that unfulfilled aspirations go with *un*happiness.

	Outer qualities	*Inner qualities*
Life chances	Livability of environment	Life-ability of the person
Life results	Utility of life	**Enjoyment of life**

Scheme 9.10 Conditions for life-satisfaction

Outcomes depend on pre-conditions represented by the two top quadrants, external preconditions in the top-left quadrant named *livability* and inner preconditions in the top-right quadrant called *life-ability*. The effects of these conditions on life-satisfaction will often be linked. How satisfied you are in a given environment depends to a great extent on your ability to deal with the challenges of that environment. Some people manage to enjoy life in rather poor conditions because of their living skills, while there are also people who mess up everything and would be dissatisfied even in heaven. This view on conditions for life-satisfaction is presented in Scheme 9.10.

This way of looking at life-satisfaction is similar to how biologists account for the survival of organisms. In the thinking of biologists the top-left quadrant, livability of environment, is the suitability of a *biotope* for a species. Biologists denote the top-right quadrant, life-ability of individual *fitness, that is* that not all abilities add to survival chances, but only those abilities that fit environmental demands will promote survival.

Scheme 9.10 illustrates that the effects of outer conditions and inner abilities should be considered in conjunction. Yet research on their interactions is still in its infancy, for the time being we must make do with findings determined on these things separately. Below I will first discuss the available findings on the relation between living conditions and life-satisfaction (section "Livability of the environment") and then summarize the findings on life-abilities and life-satisfaction (section "Life-ability of the person"). Next will discuss the relative weight of these determinants (section "Course of life-events").

Livability of the Environment

Most research on environmental conditions for life-satisfaction concern the *social* environment.[17] As yet there has been little research on the effects of the *physical* environment.[18]

Social Conditions

Environmental conditions for life-satisfaction are studied at the *macro* level of nations, the *meso* level of organizations and the *micro*-level of individuals.

Macro: Livability of Nations

Average happiness differs greatly across nations and much of the difference goes together with the livability of the society. Many strong correlations between average happiness and societal qualities are presented in Scheme 9.11.

Most of these correlates are part of the 'modernity' syndrome. Hence, similar patterns emerge if we consider further indicators of modernity, such as industrialization, informatisation and individualization. The more modern the country, the happier its citizens are. This finding will be a surprise to prophets of doom, who associate modernity with anomie and alienation. Though modernization may involve problems, its benefits are clearly great (Veenhoven 2005a, b).

[17] World Database of Happiness, Correlational Findings (Veenhoven 2012e): Having Children (C3), Relation with children (C5), Family (F1), Relatives (F3), Friendship (F6), Marriage (M2), Social participation (S8), Socio-economic status (S9), Societal characteristics of the nation (N4), Region (N9), Social support (S10), Value climate (V3), War (W1) and Work conditions (W4).

[18] World Database of Happiness, Correlational Findings (Veenhoven 2012e): Housing (H14), Local Environment (L10) Geography of the nation (N4.2).

Characteristics of society	*correlation with happiness*	*N*
Affluence	+.69	136
Rule of law		
• Civil rights	+.50	131
• Corruption	-.69	137
Freedom		
• Economical	+.63	135
• Political	+.53	131
• Personal	+.41	83
Equality		
• Income inequality	-.08	119
• Gender inequality	-.21	110
Pluriformity		
• % Migrants	+.29	126
• Tolerance of minorities	+.49	77
Modernity		
• Schooling	+.56	138
• Urbanization	+.58	137
Explained variance (Adjusted R^2)	75%	

Scheme 9.11 Happiness and society in 146 nations around 2006 (Source: World Database of Happiness, States of Nations Veenhoven (2012f))

Meso: Livability of Organizations

We spend much of our life in organizations, such as schools, work-places and retirement homes and it would be worth knowing what kind of organizations are the most livable. There is a lot of research on the relation between organizational characteristics and satisfaction with the organization, such as a school, but there has been little research on the effects of organizational characteristics on satisfaction with life. This is particularly surprising in the case of retirement homes, the main product of which is to make the last years of our lives more satisfying.

One of the reasons for this lack of research is that organizations are more interested in satisfaction with their product than on their product's impact on the wider life-satisfaction of those using the product. A related reason is that managers are more interested in satisfaction with details they can change, i.e. How satisfied are you with the coffee? than with looking at the joint impact of organizational conditions which they may be unable to affect. Another reason is probably that the effect of making such changes on life-satisfaction will often be marginal because life-satisfaction is typically determined

by many more things than just organizational conditions.

The few available data on the school environment show no effect of social status or the ethnic homogeneity of a high school on the life-satisfaction of pupils.[19] Nor was there a difference in life-satisfaction for students and staff at big and small schools, public or private schools and traditional schools or 'alternative' schools, i.e. Dalton, Montessori, etc. Yet in secondary education there is some difference in life-satisfaction between average life-satisfaction in schools for bright pupils and not so bright ones.

The scant data on work-places suggest that there is no difference in life satisfaction for workers in small or large work-places or between public and private sector. There are strong correlations between life-satisfaction and a worker's perception of autonomy at work, but no good data about actual self-direction.[20]

One thing is sure however, prisons are not very livable places, prisoners being even unhappier than institutionalized psychiatric patients.[21]

Micro: Individual Position in Society

Numerous studies from all over the world have considered differences in life-satisfaction within countries, and because most of these studies have been inspired by egalitarian social policy, the emphasis is often on social differences, such as in income, education and employment. Contrary to expectation these positional differences bear little relationship to life-satisfaction, at least not in a modern affluent society, where positional variables mostly explain no more than 10 % of the variance. Somewhat stronger correlations have been observed in developing nations.

- *Social status:* Many studies have assessed links with social status variables. The guiding assumption is typically that people in advantaged social positions will take more pleasure in life. Differences are mostly in the expected direction, but small.
  - *Age*:[22] Old and young are about equally satisfied in most countries. Contrary to common opinion life appears to be quite satisfying in old age, even in very old age. The often observed shallow U curve seems to be a cohort effect.
  - *Gender*:[23] The life-satisfaction of males and females do not differ very much either. In some countries males are slightly more satisfied, in others females. At this point, it still has not been established why. Young women tend to enjoy life more than young men do, but after mid-life that pattern reverses, partly as a result of marriage.
  - *Income*:[24] Another commonly investigated issue is the relationship of life-satisfaction with earnings. Studies in affluent welfare states typically find only small correlations, but quite substantial differences are observed in other countries. The poorer the nation, the higher the correlations tend to be. This pattern does not fit the theory that life-satisfaction derives from social comparison. This implication will be discussed in more detail in section "Is greater life-satisfaction possible?" of this chapter.
  - *Education*:[25] The pattern of correlation with schooling is similar. Again there are high correlations in poor nations and low correlations in rich ones. Recent studies in rich nations have shown even slightly negative correlations with level of school-education. In rich nations there is no correlation between IQ and life-satisfaction (Veenhoven and Choi 2012). This

[19] World Database of Happiness, Correlational Findings (Veenhoven 2012e): Happiness and School environment (S2.3).

[20] World Database of Happiness, Correlational Findings (Veenhoven 2012e): Happiness and Work conditions (W4).

[21] World Database of Happiness, Correlational Findings (Veenhoven 2012e): Happiness and Prison (P11).

[22] World Database of Happiness, Correlational Findings (Veenhoven 2012e): Happiness and Age (A4).

[23] World Database of Happiness, Correlational Findings (Veenhoven 2012e): Happiness and Gender (G1).

[24] World Database of Happiness, Correlational Findings (Veenhoven 2012e): Happiness and Income (I1).

[25] World Database of Happiness, Correlational Findings (Veenhoven 2012e): Happiness and Education (E1).

suggests that education as such does not contribute to a more satisfying life and this counter-intuitive implication calls for more research.
  - Despite the above, average life-satisfaction is higher in the most educated countries and this means that education does affect life-satisfaction indirectly. A high level of education is required for the functioning of modern society and life in modern society appears to be more satisfying than in traditional societies. So education is a case of different effects being found at the macro and the micro level.
  - *Occupation*:[26] There is more correlation with vocation. All over the world, professionals and managers tend to be most satisfied with life. It is not clear as to what extent this difference results from the rewards of work-tasks, related advantages or differential selection.
- *Social ties:* Next to social-status matters, social-relations have been considered, both our primary ties in our private sphere of life and secondary relations in public life. Together, these variables explain another 10 % of the observed variation in life-satisfaction.
  - *Intimate ties*: Life-satisfaction is quite consistently related to presence and quality of private relations. However, not all kinds of ties are equally related to life-satisfaction in all countries. In western nations, the tie with a 'spouse' is more important than contacts with 'friends' and 'relatives'.[27] Studies in western nations showed that 'children' do not add to the life-satisfaction of married persons,[28] however, among those who have children, life-satisfaction is closely related to the quality of their contacts with their children.[29]
  - *Social participation*: Life-satisfaction tends to be higher among persons who have 'paid work',[30] however, 'home makers' are not less satisfied, neither does 'retirement' make life less satisfying.[31] Life-satisfaction is more consistently related to participation in 'voluntary organizations'.[32]

The main findings are summarized in Scheme 9.12.

Physical Environment

Research on the relation between life-satisfaction and physical environment is less abundant. Still the following findings stand out:

Climate: Though we tend to associate life-satisfaction with sunshine, average life-satisfaction appears to be highest in the moderate climate zones. The closer to the equator, the less satisfied people tend to be. This difference is partly due to the above discussed societal qualities, but there is still an independent negative effect of sunshine and temperature.[33]

Pollution: Cross-national studies on the relation between life-satisfaction and environmental pollution, show surprisingly little effect, even if economic development is controlled, only for the case of air-quality did a small negative effect appear.[34]

Urban/rural: Though cities are often depicted as a pool of misery, city-dwellers appear to be no

[26] World Database of Happiness, Correlational Findings (Veenhoven 2012e): Happiness and Occupation (O1).

[27] World Database of Happiness, Correlational Findings (Veenhoven 2012e): Family of relatives (F3) Friends (F6), Marriage (M2).

[28] World Database of Happiness, Correlational Findings (Veenhoven 2012e): Happiness and Having Children (C3).

[29] World Database of Happiness, Correlational Findings (Veenhoven 2012e): Happiness and Relation with Children (C5).

[30] World Database of Happiness, Correlational Findings (Veenhoven 2012e): Happiness and Employment (E2).

[31] World Database of Happiness, Correlational Findings (Veenhoven 2012e): Happiness and Retirement (R2).

[32] World Database of Happiness, Correlational Findings (Veenhoven 2012e): Happiness and Social participation in voluntary associations (S7).

[33] World Database of Happiness, Correlational Findings (Veenhoven 2012e): Happiness and Climate (N4.2.5).

[34] World Database of Happiness, Correlational Findings (Veenhoven 2012e): Happiness and Pollution (N4.2.5).

correlation	*Correlation within western nations*	*Similarity of across all nations*
Social rank		
• Income	+	–
• Education	±	–
• Occupational prestige	+	+
Social participation		
• Employment	±	+
• Participation in associations	+	+
Primary network		
• Spouse	++	+
• Children	**0**	**?**
• Friends	+	+
	++ = Strong positive	+ = Similar correlations
	+ = Positive	± = Varying
	0 = No relationship	– = Different correlations
	– = Negative	
	? = Not yet investigated	? = No data

Scheme 9.12 Happiness and position in society (Source: World Database of Happiness, Correlational Findings Veenhoven (2012e))

less satisfied with life than country dwellers. In developing nations they are even happier than their rural compatriots and this is one of the reasons why so many people move from the country to cities.[35]

Local facilities: There is a surprising lack of research on the effect of local facilities on life-satisfaction. Although there is quite some research on the relation between life satisfaction and *satisfaction* with local facilities, there is little research into the effects of actual facilities, such as streets, public transportation, schools and health care. This reflects the fact that research is often aimed at what voters want than determining what actually adds significantly to their life-satisfaction.[36]

Life-Ability of the Person

The strongest correlations observed are those concerning individual capabilities; satisfied people are typically better endowed with life skills than the dissatisfied. The variance explained by such variables tends to be around 50 %. Some

[35] World Database of Happiness, Correlational Findings (Veenhoven 2012e): Happiness and rural/urban residence (L10.2).

[36] World Database of Happiness, Correlational Findings (Veenhoven 2012e): Happiness and Local facilities (L10.4).

main findings are summarized in table 11. Many of these findings boil down to a difference in *ability to control one's environment* and this pattern seems to be universal.

Health: Life-satisfaction tends to be higher among persons who are in good 'physical shape' and who have a lot of 'energy'. The satisfied also share characteristics of good 'mental health' and 'psychological resilience'.[37]

Mental proficiencies: Curiously, life-satisfaction tends to be unrelated to 'intelligence'; at least to school-intelligence as measured by current IQ-tests,[38] however, 'social skills' do differentiate between happy and unhappy. Life-satisfaction is typically accompanied by social assertiveness and good empathy attributes.[39]

Personality: With respect to personality, the satisfied tend to be socially 'extravert' and 'open' to experience. There is a notable tendency towards 'internal control' beliefs, whereas people who are dissatisfied with their life tend to feel they are a toy of fate (Scheme 9.13).[40]

Course of Life-Events

The effect of life-events on life-satisfaction has received little attention. One of the few sophisticated studies that considered the matter is the four-wave 'Australian Quality of Life Panel Study' by Headey and Wearing (1992).

First, this study showed that the course of life-events is not the same for everybody. Some people repeatedly find troubles, they have accidents, are laid off, quarrel with family, fall ill, etc. Others are lucky most of the time; they meet nice people, get promoted, have children who do well, etc. These systematic differences in the course of their life events depend to some extent on life-chances. Favorable events appear to happen more often to persons who are well educated and psychologically extraverted. Adverse events are more frequent among neurotics and occurred less for people with good intimate attachments, both favorable and unfavorable events happen more for persons who are young and psychologically open. Taken together, the life-chances considered explained about 35 % of the variation in an individual's life-events over 8 years.

The study also demonstrated that the course of life-events affects satisfaction with life. First, it was found that the balance of favorable and adverse events in 1 year predicts reported life-satisfaction in the next year. The more positive that balance, the greater the satisfaction with life. Life-events explained some 25 % of the differences in life-satisfaction, of which about 10 % were independent of social position and personality. Next, longitudinal analysis of the data indicated that a change in an individual's characteristic pattern of events was followed by a change in their life-satisfaction. Respondents who shifted to a more positive balance became happier.

Relative Weight of Outer and Inner Conditions

Life-satisfaction depends both on the livability of the environment and on individual life-ability. Still one of these determinants could be more important than the other. Sociologists tend to think that environmental factors are the most important, but psychologists emphasize the importance of individual capabilities and some of them, those promoting set-point theory (e.g. Lykken 1999), even think that the determinants of life-satisfaction are to be found entirely 'between the ears'. There is truth in both views, but the balance appears to vary across contexts.

[37] World Database of Happiness, Correlational Findings (Veenhoven 2012e): Physical health (P6), Mental health (M7).

[38] World Database of Happiness, Correlational Findings (Veenhoven 2012e): Happiness and Intelligence (I3).

[39] World Database of Happiness, Correlational Findings (Veenhoven 2012e): Happiness and Personality (P4.8, P4.33).

[40] World Database of Happiness, Correlational Findings (Veenhoven 2012e): Happiness and Personality (P4).

	Correlation correlation within western nations	*Similarity of correlation across all nations*
Proficiencies		
• Physical health	+	+
• Mental health	++	+
• IQ	**0**	+
Personality		
• Internal control	+	+
• Extraversion	+	+
• Conscientiousness	+	**?**
Art of living		
• Lust acceptance	+	+
• Sociability	++	+
	++ = Strong positive + = Positive 0 = No relationship – = Negative ? = Not yet investigated	+ = Similar correlations ± = Varying – = Different correlations ? = No data

Scheme 9.13 Happiness and life-abilities (Source: World Database of Happiness, Correlational Findings Veenhoven (2008))

Variance in Life-Satisfaction *Across* Nations

Scheme 9.11 showed that some 75 % of the large differences found in average life-satisfaction across nations can be explained by institutional factors such as economic development and rule of law. It is not yet possible to estimate the impact of cross-national variation in average life-ability, both because of a lack of data and because of problems of multi-collinearity. Still the independent effect of life-abilities seems to be relatively small at the macro level.

Variance of Life-Satisfaction *Within* Modern Nations

Things appear to be different at the micro-level, in particular in modern nations. Though average happiness is high in modern nations, not all inhabitants are equally satisfied; remember Scheme 9.5 that shows the distribution of life-satisfaction in Switzerland. Less than half of these individual differences have been explained so far, as can be seen from the various attempts listed in the World Database of Happiness.[41]

Typically, less than 5 % of the variation in life satisfaction is explained by socio-economic status, another 5 % by social ties and about 10 % by life-events that are independent of personality. This means that about a quarter of the differences in life-satisfaction in modern nations is due to variation in living-conditions.

As to individual life abilities, physical health explains some 10 % and mental and personality an additional 15 % of the variation in life

[41] Explained variance is higher when variables are included that are close to life-satisfaction, such as satisfaction with one's job. The analysis below limits to variance explained by variables that do not involve evaluation.

Livability of environment	
• Socio-economic position	± 5%
• Social ties	± 5%
• Neighborhood	± 1%
• Life-events	± 10%
Life-ability of individuals	
• Physical health	± 10%
• Mental health and personality	± 15%
• Life-skills	± 10%?
• Life-choice	± 10%?

Scheme 9.14 Explained variance in life-satisfaction within modern nations (Source: World Database of Happiness, Correlational findings Veenhoven (2012e) Summed effects (S15))

satisfaction, which adds up to 25 %. From twin research we know that about 30 % of the variance in life-satisfaction has a genetic basis (Bartels and Boomsma 2009), so present research has clearly not grasped all individual factors that make a difference.

I guess that another 10 % of the variation in life satisfaction is to be found in particular life-skills, such as social intelligence and an ability to enjoy. Another 10 % of the variance could be down to life-choice, which is particular important in present day multiple-choice-society. One of the reasons for the high level of life-satisfaction in modern societies is that we can choose how we live and in this context much of the variation around the level can lie in the more or less appropriate choice we make regarding our lives, e.g. in our choice of a job and a spouse.

Together these estimates of explained variance in life satisfaction leave us with 40 % unexplained variance. Part of that is clearly in measurement error and part falls in variables not yet measured in conjunction with those listed in Scheme 9.14.

Is Greater Life-Satisfaction Possible?

Can we become more satisfied with life than we are now? Several scientists think not. Some psychologists maintain that life-satisfaction is largely inborn or at least embedded in stable personality. Hence a better society will not yield more life-satisfaction. This view is known as the "set-point" theory. Some sociologists draw the same conclusion because they think that happiness depends on social comparison and that you are no better off than your neighbors if conditions for everybody improve. The case of the USA is often mentioned as an example in that vein, average material wealth has doubled there since the 1950s while average happiness seems to have remained at the same level (e.g. Easterlin 1995). In my view these scientists are wrong, both empirically and theoretically, but the debate is still going on.

Individual Life-Satisfaction Not Fixed

Follow-up research has shown that some people get more satisfied over their life and others less (e.g. Ehrhardt et al. 2000). After the age of 50 most people are at their most satisfied and life-satisfaction declines in the years before death (Gesdorf and Wagner 2010).

Average Life-Satisfaction Not Stagnant

As we have seen above, there is a clear relation between average life-satisfaction and societal quality. Think of the case of Zimbabwe where

average happiness is 3.1. Apparently, people cannot enjoy life in a failed state, even if their neighbors suffer in the same way. The correlations shown in Scheme 9.11 demonstrate that this is no exception, with differences in quality of society explaining 75 % of the variation in average life-satisfaction across nations.

We have also seen that average life-satisfaction *has* changed in most nations, and typically for the better (Veenhoven and Hagerty 2006). A gradual rise in life satisfaction in Denmark over the last 30 years and the dramatic fall in average happiness in Russia, following the rouble crisis in 1995 are shown in Scheme 9.8. Clearly, happiness is not fixed to a set-point!

The data also illustrate that more life-satisfaction is possible in most nations of the world. Average life-satisfaction is currently highest in Denmark, with an average of 8.3 but much lower in most countries of the world, such as Zimbabwe where the average is 3.1. What is possible in Denmark should also be possible in other countries. Do not make the objection that Danish satisfaction is a matter of genetic endowment or national character, because Scheme 9.8 shows that happiness has improved in Denmark since 1973. Present day happiness in Denmark may be close to that maximally possible, if so, there is still a long way to go for most nations of this world, since the world's average is now about 6.

Theoretical Flaws

The erroneous idea that greater life-satisfaction is not possible has roots in erroneous theories about the nature of life satisfaction. One of these mistaken theories is that life-satisfaction is merely a matter of outlook on life and that this outlook is set in fixed dispositions, which are part of an individual's personality and a national character. Another faulty theory is that happiness results from cognitive comparison, in particular from making social comparisons. Twenty years ago I have shown that these theories are wrong (Veenhoven 1991, 1994) and recently Headey (2008) has confirmed that conclusion on the basis of better data. My alternative theory of how we assess how satisfied we are holds that we appraise life on the basis of affective information in the first place, and that affects signal the gratification of basic human needs, remember section "Affective experience dominates in the overall evaluation of life". I have discussed this theory in more detail in Veenhoven 2009.

Is More Life-Satisfaction Desirable?

Not everything that is possible is also desirable, so the next question is whether we should try to promote satisfaction with life. Several scientists believe that the pursuit of happiness will bring us from the frying pan into the fire. One of their qualms is that satisfaction with life will be achieved at the cost of freedom. Another misgiving is that satisfied people tend to be passive and uncreative. These notions figure in Huxley's (1932) science fiction novel *Brave New World* in which happiness for everybody is achieved using genetic manipulation and mind control and where the satisfied citizens are short-sighted consumer slaves.

Yet research on the consequences of life-satisfaction shows another picture. It appears that satisfaction typically fosters activity, creativity and an open mind. Happy people do better as spouses and parents. They are also better citizens; they are typically better informed and they are more involved in social action while being more moderate in their political views (Lyubomirsky et al. 2005). Life-satisfaction also lengthens life considerably, the effect of enjoying one's life being comparable to that of not smoking (Veenhoven 2008). A negative effect of life-satisfaction may be that it may make us less perceptive of risks. The evidence as yet is about minor things and it has not yet been established whether happiness also makes us prone to a too rosy outlook on major things.

These findings on the effects of life-satisfaction fit well with the theory that feeling good works as a 'go-signal' it tells the organism that the situation is OK and that it can go ahead. Consequently, happy people 'broaden' their behavioural scope and 'build' more resources (Fredrickson 2004). So life-satisfaction is worth pursuing for its own sake, and for its positive side effects.

Discussion and Future Expectations

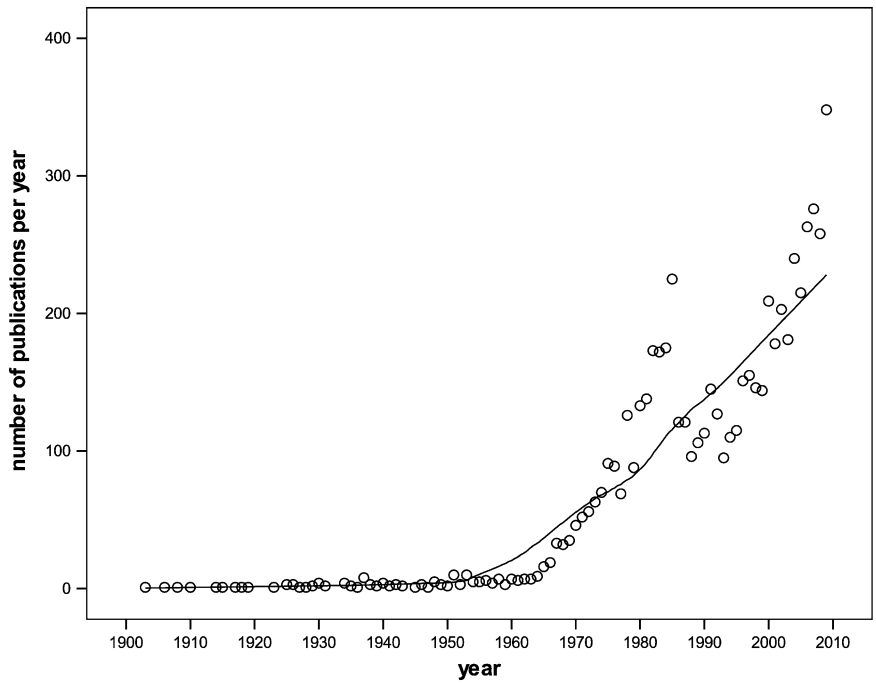
Empirical research on life-satisfaction has developed exponentially since its start in the 1970s and the volume of research is still growing today, as is reflected in Scheme 9.15 in which the yearly numbers of scientific publications on this subject are depicted.

Will this result in greater happiness for a greater number? Probably, but not certainly. More research does not always result in better understanding and better understanding does not always result in better policies.

Limitation to Accumulation of Knowledge

One of the things that impede better understanding is that it becomes ever more difficult to oversee all research findings on life-satisfaction that are becoming available. Even a specialist cannot keep track of the literature. As the pile of research findings grows, typically we see only the ones on the top, while many other findings get buried forever, and an overview of the literature is also limited by the terminological differences that still haunt the social sciences.

These problems are addressed by the World Database of Happiness, mentioned in section "World database of happiness" that contains standardized descriptions of research findings that are sorted on subject, population and methodological features. To date (March 2012) the archive consists of some 20.000 findings This collection is fairly complete up to the year 2000, but many most recent findings have not yet been entered and are therefore in risk of getting lost. A call for cooperation is found in section 7 of Veenhoven 2011.



Scheme 9.15 Yearly number of scientific publications on life-satisfaction (Source: Bibliography of Happiness Veenhoven (2012b))

Limitations to Application of Knowledge

One of the things that impedes application of the gathered knowledge on life-satisfaction is that the case lacks the support of organized interest groups. Interests are typically organized around products, such as automobiles and professions, such as dentists. These groups are eager to claim a contribution to life-satisfaction, e.g. that you are happier when you own a car or happier with shining teeth, but reluctant to consider the real effects. Likewise politicians make their living from social problems and therefore prefer measures of social progress that record their successes in these particular fields rather than deal with average life-satisfaction.

Though institutions are not really interested in promoting life-satisfaction, individuals are, and in particular autonomous individuals in modern multiple-choice-societies. These people can choose how to live and therefore want to know what ways of life will be most satisfying. Their interest is reflected in soaring sales of 'how-to-be-happy' books and in the rising demand for life-coaching services. In the future this interest will probably manifest in call for happier schools and work places and in votes for political parties who take life-satisfaction seriously.

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Multi-item Measurement of Subjective Wellbeing: Subjective Approaches (2)

10

Robert A. Cummins and Melissa K. Weinberg

Introduction

This chapter begins with an overview of Subjective Wellbeing (SWB) and the processes of management called SWB homeostasis. This is relevant to the subsequent evaluation of SWB scales since homeostatic theory makes predictions as to the ability of such scales to reliably support more than one factor. The scales are then evaluated with this prediction in mind.

Defining Subjective Wellbeing

Most commonly, Subjective Wellbeing (SWB) is regarded as a composite construct. In 2006, Diener published a set of guidelines for nomenclature endorsed by some 50 prominent researchers in the area. According to this document, wellbeing and SWB are seen as synonyms, so it is not surprising to see that the description of SWB is highly inclusive. These guidelines describe SWB as referring "to all of the various types of evaluations, both positive and negative, that people make of their lives. It includes reflective cognitive evaluations, such as life satisfaction and work satisfaction, interest and engagement, and affective reactions to life events, such as joy and sadness. – [It] is an umbrella term for the different valuations people make regarding their lives, the events happening to them, their bodies and minds, and the circumstances in which they live." (pp. 399–400). So, within this definitional framework, subjective wellbeing is an inclusive term for the subjective experience of life.

For the purpose of constructing this chapter, the definition of SWB will be considerably tightened. This is assisted by the following empirical results and reasoning:

1. The above definition makes two assumptions, both of which are highly contestable. The first is that 'life satisfaction' reflects a cognitive evaluation. In this context, 'life satisfaction' is intended to mean some variation of the question first asked by Andrews and Withey (1976) 'How do you feel about your life as a whole' (p. 66), with respondents using a 7-point Delighted – Terrible response scale. More recently, the item has been commonly phrased 'How satisfied are you with your life as a whole?' and the response scale presents levels of satisfaction. This single-item measure is termed General Life satisfaction (GLS) and three articles report that GLS is dominated by its affective content.

In the first of these studies, Davern et al. (2007) found that the three affects of content, happy and excited, in combination, accounted for >50 % of the variance in GLS, even in the presence of items measuring the five factors of personality (NEO-PI-R; Costa and

R.A. Cummins (✉) • M.K. Weinberg
School of Psychology, Deakin University, Melbourne, VIC 3125, Australia
e-mail: robert.cummins@deakin.edu.au; melissa.weinberg@deakin.edu.au

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DOI 10.1007/978-94-017-9178-6_10,

McCrae 1992) and seven items derived from Multiple Discrepancies Theory (Michalos 1985). The second such report (Blore et al. 2011) studied the composition of the 4th edition of the Personal Wellbeing Index (PWI: International Wellbeing Group 2013). This scale is described in detail later. Most essentially, it is designed as the first – level deconstruction of GLS, so the two measures are closely related to one another. Blore et al. (2011) found that the three affects of content, happy and active, in combination, accounted for over 50 % of the variance in the PWI after accounting for variance contributed by 7 items derived from Multiple Discrepancies Theory (Michalos 1985), and extraversion and neuroticism measured through the Ten-Item-Personality-Inventory (TIPI; Gosling et al. 2003). The third report (Tomyn and Cummins 2011) confirmed the Blore et al. (2011) results within a sample of Australian adolescents.

The results from these three studies show a high level of agreement and lead to the following conclusions: (a) Both GLS and SWB, as measured by the PWI, are dominantly affective constructs. (b) All three of the cited publications show that the variance accounted for by these regressions is heavily dominated by shared, rather than by unique variance. It has been suggested that the source of this shared variance is Homeostatically Protected Mood (HP Mood: Cummins 2010) which therefore dominates the composition of SWB.

2. The affective content of SWB is normally sourced not from emotion, as inferred by the Diener (2006) definition, but from mood. Following Russell (2003), an emotion is defined as an acute affect generated by some percept and involving cognition, while mood is defined as chronic, trait-like affect, generated automatically without a percept. When Davern et al. (2007) used 31 affects to predict GLS, the question they gave to respondents was 'please indicate how each of the following describes your feelings when you think about your life in general.' Clearly this is intended to tap mood rather than emotion.
3. The affective content of SWB does not normally comprise negative affect. Davern et al. (2007) used multiple regression to determine which of 31 affects, when regressed in combination to predict GLS, were able to contribute unique variance to the prediction. These affects covered all four quadrants of the circumplex (Russell 1980). The six affects that contributed unique variance were: excited, content, happy, satisfied, stressed and pleased. The only one of these that could be considered negative is 'stressed', and the valence of this is ambiguous. Certainly, the positive affects dominate SWB in normal population samples.

In summary of the story so far, the cited results and presented logic do not support the contention that under normal operational levels SWB is dominantly evaluative. Neither does it support the contention that the affective component has a significant emotional content nor that it comprises significant negative affect. However, all this is predicted to change under strongly negative circumstances of living.

This proposition, that the composition of SWB shifts under adverse circumstances, is informed by the theory of subjective wellbeing homeostasis (Cummins 2010, 2013). This theory is based on various empirical and logical building-blocks. Most fundamentally, each person has a set-point for the level of their GLS (Cummins et al. 2014), and a *normal range* around this set-point, within which their GLS is generally found. The mechanism by which GLS is held within its set-point-range is provided by Homeostasis theory. This proposes a management system that acts to defend SWB against emotional reactions, either positive or negative, threatening to move SWB outside its normal operating range. The combination of set-points and homeostasis is mainly responsible for the stability of SWB over time, as shown from repeated cross-sectional surveys in Australia (Cummins et al. 2012) and Macau (Rato and Davey 2012; Rato et al. 2007–2009).

It is proposed that both set-points for GLS and the SWB management system have a strong

genetic basis (Cummins et al. 2014) and that proper functioning of this homeostatic system is essential to life. At normal levels of wellbeing people feel good about them self, are well motivated to conduct their lives, and have a strong sense of optimism. When this homeostatic system fails, however, these essential qualities are severely compromised, and people are at risk of depression (Cummins 2010). This can come about through such circumstances as exposure to chronic stress, chronic pain, failed personal relationships, etc.

Fortunately, however, the homeostatic system is remarkably robust. Many people live in difficult personal circumstances that may involve low income or medical problems, and yet manage to maintain normal levels of wellbeing. This is why SWB is so stable when averaged across the population. But as with any human attribute, some homeostatic systems are more robust than others. Or, put around the other way, some people have fragile systems that are prone to failure.

Homeostatic fragility, in these terms, can be caused by two different kinds of influence. The first is likely to be genetic. Some people have a constitutional weakness in their ability to maintain wellbeing within the normal range, perhaps due to them having a low set-point. The second influence is the experience of life. Here, as has been mentioned, some experiences, such as chronic stress, challenge homeostasis. Other influences, such as intimate personal relationships, strengthen homeostasis by acting as buffers.

In summary, personal wellbeing is under active management and most people are able to maintain normal levels of wellbeing even when challenged by negative life experiences. A minority of people, however, has weaker homeostatic systems as a result of either constitutional or experiential influences. These people are vulnerable to their environment and constitute identifiable population sub-groups with predictably low SWB such as informal carers (Cummins et al. 2007), people who are unemployed (Cummins et al. 2012), people with schizophrenia (Bowins and Shugar 1998), etc.

Issues in Scale Evaluation

Psychometric Implications of HPMood

Over 22 years ago, Meehl (1990) recognized a disturbing phenomenon within self-report survey data, as the predictable inter-correlation between measures. While he did not identify the cause, it was a major reason for him to condemn research in "soft psychology" (e.g., survey research) for testing weakly substantive theories based on correlations. He named the unknown source of this automatic shared variance the "crud factor" and wrote disparagingly "In the social sciences—everything correlates to some extent with everything else" (p. 204). While Meehl's tongue-in-cheek statement somewhat exaggerates reality, confirmatory evidence can be observed in most correlation matrices involving self-report, personally referenced data gathered from surveys.

The interactive system of SWB homeostasis and HPMood sheds light on Meehl's 'crud factor'. This comes from the understanding that HPMood is the dominant component of self-report scales measuring such constructs as self-esteem (Rosenberg 1979), optimism (Carver and Scheier 2003), and primary and secondary control (Chambers et al. 2003). Using Australian data, Lai and Cummins (2013) report the correlations of the above constructs with GLS as .57; .42; .42 and .36 respectively. After using HPMood as a covariate these correlations are reduced to .22; .03; .13; .01. Similar findings are reported by Cummins (2011) in respect of other self-report variables. Thus, these authors argue that HPMood is the source of shared variance which causes self-report measures to predictably inter-correlate.

The reason that HPMood supplies this shared variance is because it represents the genetic set-point for each person. Moreover, since set-points are normally distributed within a range of 70 to 90 points within any general population sample (Cummins et al. 2014), HPMood is also normally distributed. Because of this, the power of HPMood to influence the

level of self-report variables is also normally distributed within this same range. This provides a tendency for people with high set-points to report high self-esteem (for example), and for people with low set-points to report lower self-esteem.

This power of HPMood to cause shared variance within samples will depend on various factors. First is whether the data come from respondents who are experiencing homeostatic control. If their SWB level is dominated by HPMood then shared variance between self-report variables will be high. However, if SWB levels are dominated by a challenging agent, then shared variance becomes less predictable.

The second and third factors are the level of personal relevance and level of abstraction of the measured variables. The influence of HPMood will be maximal in GLS and diminish as the measured variables become either more distal (e.g. satisfaction with government) or more specific (e.g. satisfaction with haircut). Thus, HPMood will cause maximal shared variance between variables that have high levels of personal relevance and abstraction. This approximation is met for the items comprising scales of optimism, self-esteem and perceived control. Thus, since each respondent to a survey will report these variables at a level highly influenced by their level of HPMood, this constitutes a major source of shared variance, causing the scales to correlate with one another.

The propositions above have strong theoretical implications for the construction of scales to measure SWB and for the interpretation of their data. Two of these are as follows:

1. The use of raw correlations between measures of SWB, personality and positive affect cannot be validly used as indicators of 'convergent validity'. Correlations between such variables are predictable at the level of about .20–.40 and are caused by HPMood. Similarly, the factorial cohesion of items forming a SWB scale is a weak measure of 'construct validity', an acceptable Cronbach alpha for such scales is almost entirely predictable, as is test-retest reliability. The crucial step in obtaining meaningful psychometric statistics in this area involves the prior removal of the shared variance, derived from HPMood, before such statistics are calculated.
2. The correlations between scales will be greatly influenced by whether the sample comprises people who are experiencing normal homeostatic control, or whether a high proportion is experiencing homeostatic failure. Therefore, the psychometric characteristics of scales can be expected to be different between normal and pathological samples.
3. Since HPMood makes such a strong contribution to the variance within items forming SWB scales, there is little other systematic variance allowing the reliable formation of factors.

Hedonic vs. Eudaimonic Measurement

In accordance with the ethical system of eudaimonism, individuals have a responsibility to recognize and live in accordance with their daemon or 'true self'. The daemon refers to an individual's potentialities which, when realized, represent the highest life fulfillment of which that person is capable. Thus, the daemon is an idealized form of excellence and perfection toward which each person should strive. The process of this striving then gives meaning and direction to one's life. The concept was introduced into psychology by Waterman (1990, 1993) who operationalizes eudaimonic living as the experiences that flow from developing the aptitudes and talents deemed worth having. It is, thus, an active process of engagement associated with ideas such as flourishing, self-actualization, and personal growth (for a review see Ryan and Deci 2001).

Another term within this philosophical taxonomy is 'Hedonism'. This describes a more passive state of pleasure and satisfaction of desires, such as are the product of 'pleasure-producing' things (but see Vitterso 2013 for a more sophisticated statement).

Whether SWB is regarded as dominantly eudaimonic or hedonic depends on how SWB is defined. In the context of this chapter, SWB has been defined in hedonic terms, but not as envisaged by the Greek philosophers. HPMood

is hedonic in that it is passive and mildly pleasant. Crucially, however, it is not an emotional response to 'pleasure-producing' things. Thus, based on this description, the kinds of scales to be considered by this review can be most easily defined by what they are not. Excluded from consideration are scales which have a primary purpose to measure any of the following:

1. Eudaimonic constructs, such as flourishing and self-actualization.
2. Emotional responses to percepts.
3. Facets of personality, including the Big 5, but also including self-esteem, optimism and perceived control.

Surviving this list of exclusions, the scales remaining for review are those that measure SWB through satisfaction responses to items that refer to broad, semi-abstract areas of life.

Importance × Satisfaction

Several scale developers have adopted the procedure of weighting levels of satisfaction by their level of perceived importance. At an intuitive level this seems to make sense. After all, if someone responds that they are very satisfied with their wealth and yet ascribes no importance to wealth, then surely the domain of wealth satisfaction should be discounted when computing their overall SWB? Surprisingly; the answer to this question is a counterintuitive- no. In fact, all such differential item -weighting schemes are theoretically and psychometrically unsound.

The most important point of critique is certainly that the importance x satisfaction weighting scheme is theoretically flawed. This argument was first developed by Locke (1969, 1976) who noted that ratings made with respect to specific topics, such as job satisfaction, comprise both a judgment of importance to the individual as well as a satisfaction evaluation based on the discrepancy between what the individual wants and what they perceive themself as getting. Most crucially, as determined by Locke, these two processes are not independent. That is, the level of satisfaction is influenced by the interaction of the have-want discrepancy with importance.

He states this principle as the 'range-of-affect hypothesis', in which the level of importance determines the range of satisfaction. That is, an item with high personal importance will produce a wide range of affective reactions, from great satisfaction to great dissatisfaction. An item with low personal importance, on the other hand, will produce a far narrower range of satisfaction. In summary, given the amount of discrepancy, the range of the satisfaction rating on an item is determined by the item's importance. Therefore, according to Locke, item satisfaction has already incorporated the information of item importance, which renders weighting item satisfaction with item importance redundant.

Voluminous psychometric data confirm this prediction and numerous authors have argued that the differential weighting of items is psychometrically unsound (e.g. Evans 1991; Hagerty et al. 2001; Wooden 2002), or at the least unhelpful (Adams 1969; Mikes and Hulin 1968). Further insights have been provided in a series of studies by Wu and colleagues (Wu 2008; Wu and Yao 2006, 2007) and Trauer and Mackinnon (2001) who empirically demonstrate the invalidity of using such multiplicative composites (importance x satisfaction), which are actually interaction terms, as dependent variables. For advanced reading, a very insightful discussion of item weighting is provided by Hagerty et al. (2001).

There is also a logical objection to using importance as a weighting variable due to the ambiguity of its meaning. People can regard areas of their life as important for a wide variety of very different reasons. For example, they may see something as important because they do not have it and want it (e.g., an expensive car), or because they have it and do not want it (e.g., chronic pain), or because they have it and wish to retain it (e.g., political power). The logical link to another dependent variable, such as satisfaction, is clearly not going to be simple.

In summary, the evidence is overwhelming that weighting satisfaction by importance is at best redundant and at worst harmful to understanding. Despite this, several of the scales to be discussed persist with this weighting technique.

Abstract vs. Specific Variables

The archetypal example of an abstract and personal item is 'satisfaction with life as a whole'. People respond to this question effortlessly and immediately, so they are clearly not relying on cognition to form an answer. Under such ambiguous circumstances, the use of mood as information is well established (Schwarz and Clore 1983, 1996) and in this case their source of information is HPMood.

As evaluation targets become less abstract and more specific, it becomes increasingly adaptive to rely on information derived from the environment and experience, rather than HPMood. Because of this, the domains of scales such as the Personal Wellbeing Index (see below) will evidence variability derived from two systematic sources. First, individual differences in set-points will introduce variability associated with the HPMood component. Second, individual differences in experience will contribute variability due to the cognitive evaluative component. As one consequence, there will be higher variability within individual domains than within life as a whole, and this is generally consistent with the data.

Proximal vs. Distal Variables

The influence of homeostasis, and therefore of HPMood, will decrease as items become less personal. This is because SWB homeostasis is purely concerned with maintaining a positive view of an abstract-self. Thus, as evaluation targets become increasingly non-self-related, the influence of homeostasis decreases. This will generally be manifest as decreasing satisfaction as items become less proximal and more distal.

The National Wellbeing Index is a good example of a scale based on distal variables. The six national domains do not directly concern the wellbeing of the individual (Cummins et al. 2003) but rather are evaluative of some external target (e.g., 'How satisfied are you with government?'). Because of this, they are not as strongly held under homeostatic control as the PWI domains. They are, thus, more free to vary and the variation that they show is weakly linked to SWB.

Summary of Issues

The evaluation of scales that follows is based on several assumptions. One is that the essence of what SWB scales are intended to measure is a positive and abstract view of self. This measurement may be made through asking questions of 'satisfaction' with a number of life domains which are personally-relevant, and which refer to general rather than specific targets. The central construct providing the majority of variance in such measures is HPMood, thereby casting these scales as a form of hedonic evaluation. Each scale should provide a single overview statistic which represents SWB. Because of this, scales should embrace parsimony, justifying a minimum number of domains to give a reliable estimate. Finally, if sub-scales are proposed, they must be justified through exploratory factor analysis.

Evaluation Method and Criteria

Method

This second part of the chapter presents a description and discussion of some simple scales to measure satisfaction with life. The scales have been identified by entering the search term 'satisfaction' into the Instruments section of the Australian Centre on Quality of Life http://www.deakin.edu.au/research/acqol/instruments/scale_search.php.

This search returned 202 instruments and revealed the diversity of approaches to measuring constructs within the area of subjective wellbeing. For the purpose of this review we have chosen to examine only the simplest forms of such scales, which can be considered to be

multi-item elaborations on the single item measure 'satisfaction with life as a whole'. The criteria for identifying scales for inclusion are as follows:

1. The instrument must be a multi-item scale of satisfaction.
2. Each scale item must be a simple statement of a personally-relevant life domain that is proximal and not distal.
3. The response mode may be either levels of satisfaction or levels of agreement with appropriate personally-relevant statements.
4. All scale items must be relevant to adults in the general population
5. Unless accompanied by evidence of more than one factor, lists of more than 20 items will not be considered on the basis of redundancy. No single factor scale needs to comprise so many items.

The scales meeting these criteria (N = 31) are listed in alphabetical order with the exception of the first two. The reason for favoritism is that both have the strongest credentials as multi-item representations of 'life as a whole'. Each of these two scales takes a different approach to the representational issue. The Satisfaction with Life Scale (Diener et al. 1985) uses five items, each of which are variations on 'life as a whole', which are combined to create a single index. The Personal Wellbeing Index (International Wellbeing Group 2013) uses the minimum set of life domains to represent the 'life as a whole' construct. Responses to these domains can be combined into a single SWB metric, or analyzed separately to provide a diagnostic profile.

Psychometric Criteria

Because of the similar construction of the scales that follow, they share most of the commonly reported psychometric properties. The reason for this is that they all use items that are heavily saturated with HPMood (Cummins 2013). They predictably have an adequate Cronbach alpha and test- re-test reliability, they inter-correlate positively with one another and with scales measuring extraversion, self-esteem, optimism, perceived control, and eudaimonic variables such as flourishing and life meaning. They also have a predictable negative relationship with scales measuring neuroticism, depression, stress and anxiety. None of these statistics are particularly interesting and none will be reported here. The single purpose of this section is to identify the most parsimonious set of items with which to measure SWB through questions of satisfaction. In this procedure, factor analysis is the key statistic. Quoting Lawton (1982: p. 621) "Exploratory factor analysis is a first-level approach to dimensionalizing a diverse and psychometrically primitive domain."

In following this imperative, short scales of some five or less items are exempt. They cannot contain more than one factor, each with a minimum allowable content of three items. The factorial criterion will be applied, however, to scales with six or more items. We anticipate that the factor structure of such scales is inherently unstable. As described earlier, this is due to the small amount of systematic, non-HPMood variance, caused by cognition and emotion, together with the expectation that such minor variance will change depending on both circumstance and demographic group.

Evaluation of Individual Scales

Satisfaction with Life Scale (Diener et al. 1985)

This is the most widely used scale to measure SWB. Google estimates that by December 2012 it had been cited over 6,800 times. The authors recommend this scale to assess an individual's conscious evaluative judgment of their life using their own criteria. Most users consider it measures SWB.

The SWLS comprises five items and, despite the scale's name, respondents use a 7-point scale anchored by 'strongly disagree' to 'strongly agree'. Thus, the scale score has a range of 5–35 points. A copy of the scale is available from http://internal.psychology.illinois.edu/~ediener/SWLS.html.

This website also provides a list of translations. The items are as follows:

1. In most ways my life is close to my ideal.
2. The conditions of my life are excellent.
3. I am satisfied with my life.
4. So far I have gotten the important things I want in life.
5. If I could live my life over, I would change almost nothing.

The scale has a number of notable characteristics. First, each item is phrased to involve an overall judgment of life in general. Thus, the SWLS represents an expanded version of General Life Satisfaction (GLS). Items are not designed to give individual insights into the structure of SWB. This feature makes it different from the Personal Wellbeing Index (International Wellbeing Group 2013) where each item represents a domain of life that can be separately analyzed.

Given this construction, and the fact that the PWI is designed as the first-level deconstruction of GLS, it might be expected that the SWLS and PWI would correlate strongly with one another. This is indeed the case (.78: Renn et al. 2009). As a consequence, both scales also show much the same degree of relationship to other measures.

The second notable characteristic is that the wording of items tends to be extreme, such as 'If I lived my life over I would change almost nothing'. Most likely due to this construction, people are reticent to give full endorsement as 'strongly agree', so they avoid this highest response category. As a consequence, the SWLS produces a lower average value than the PWI and with a larger variance. For example in a sample of college students (Renn et al. 2009) the mean SWLS and PWI is reported as 72.0 and 75.4 respectively, with standard deviations of 17.0 and 13.9.

An authoritative evaluation of the scale has been reported by Statistics Netherlands (van Beuningen 2012). Using a sample of 3,402 adults the following conclusions are drawn:

1. The scale shows high internal consistency. The five items can be combined into one underlying dimension measuring global life satisfaction.
2. There is evidence of convergent, discriminant, and nomological validity.
3. The correlation between GLS and SWLS is not very strong ($r = 0.56$), mainly because of a group of respondents who misinterpreted the SWLS; without this group the correlation increases to 0.66. As people with low and intermediate levels of education and non-native speakers are overrepresented in this group, it suggests the [wording of the] SWLS may be too complex.
4. The SWLS is sensitive to differences in data collection mode. Respondents report higher life satisfaction when asked face-to-face or via the telephone than when completing the questionnaire online. [Note: This social desirability bias may be a property of SWB scales in general]
5. Correlations of the SWLS with other related constructs are not stronger than correlations using GLS. Hence, we do not recommend that the single-item GLS should be replaced by the SWLS.

Summary: This scale is excellent as a more reliable measure than the single GLS item. Thus, it may be useful for this purpose in some instances.

Personal Wellbeing Index (International Wellbeing Group 2013)

The Personal Wellbeing Index (PWI) is developed under the auspices of the International Wellbeing Group (http://www.deakin.edu.au/research/acqol/iwbg/). Since November 2001, this collaborative network has been developing the PWI as a cross-culturally valid measure of SWB. In December 2012, the International Wellbeing Group involved over 140 researchers from over 50 countries and provinces. As a consequence of this diverse membership, the PWI has been translated into over 20 languages http://www.deakin.edu.au/research/acqol/auwbi/index-translations/ and over 130 publications using the PWI are available from http://www.deakin.edu.au/research/acqol/instruments/wellbeing-index/publications.php

The PWI has an unusual structure that is both theoretically and empirically determined.

In theoretical terms, its items comprise the most parsimonious, first-level deconstruction of general life satisfaction (GLS). In empirical terms, each item (domain) must contribute unique, as well as shared variance, to the prediction of GLS. This is determined through multiple regressions, where GLS is simultaneously regressed against all domains.

The original version of the scale comprised seven domains as standard of living, health, achieving in life, relationships, safety, community-connectedness, and future security. In 2006 the additional item of spirituality/religion was added due to awareness of a forthcoming publication (Wills 2009) showing that this item met the criteria for a new domain. The most recent 5th edition of the PWI (2013) removes this domain from the core set of items and makes its inclusion discretionary. The major reason for this revision was the large percentage of people in some countries who do not have a religious/spiritual dimension to their life.

Respondents use an 11-point, unipolar, end-defined scale ranging from 'no satisfaction at all' (0) to 'completely satisfied' (10). This form of response format is preferable over Likert and Delighted-Terrible formats because it reduces categorical naming and allows respondents to show higher response discrimination (Cummins and Gullone 2000). The average domain score is the measure of SWB and all results are recoded onto a standard 0–100 point distribution.

Psychometric Properties

The most extensive body of results has been produced using the Australian Unity Wellbeing Index (AUWI), which is a national survey conducted since 2001. By December 2012 a total of 28 such surveys had been conducted. Copies of all reports, raw data files, and code books are available free of charge from the Australian Centre on Quality of Life website at Deakin University http://www.deakin.edu.au/research/acqol/auwbi/survey-reports/.

When results are adjusted to fall within a standard range of 0–100, it is now well established (Cummins 1995, 1998, 2003) that, for Western nations, the average mean for population samples is about 75 points, with a normal range from 70 to 80 points.

This estimated range for SWB was originally calculated by grouping survey means reported in the literature. Consequently, the sample mean scores used as data to make this estimation were derived from diverse surveys conducted by different researchers, in a number of countries, and using different methodologies. When all of these factors are held constant, as they are for the mean scores from the 28 AUWI surveys to date, the normal range is from 73.7 to 76.7 points. This variation of the survey mean scores by only 3.0 percentage points has occurred despite major national and international events over the intervening 11 year period.

The scale produces a single factor (Cummins et al. 2012; Renn et al. 2009; van Beuningen and de Jonge 2011).

PWI Domain Regressions Against GLS

One of the defining features of the PWI is the requirement that each domain makes a unique contribution to the variance accounted for in GLS. Table 10.1 shows a relevant multiple regressions using accumulated data from the AUWI. The sr^2 statistic represents the proportion of unique variance contributed by each domain. It is calculated as the square of the 'Part' statistic that can be requested from SPSS in association with a multiple regression. When this value is multiplied by 100 it gives the percentage of unique variance contributed by the domain.

These results show that the seven domains together account for 51.2 % of the variance in GLS. Of this, 36.4 % is shared variance and we suggest that the source of this is Homeostatically Protected Mood (HPMood) which dominates the composition of SWB (Blore et al. 2011; Davern et al. 2007; Tomyn and Cummins 2011). The remainder of the variance accounted for (14.8 %) is the combined variance unique to each of the domains. This, we propose, is the unique cognitive/affective component of each

Table 10.1 Regression of the seven PWI domains against GLS (Combined surveys)

Variable (N = 55,689)	GLS	1.	2.	3.	4.	5.	6.	B		sr^2
1. Standard of living	.58**	.						.30**	.30	6.00
2. Health	.37**	.35**	.					.07**	.08	0.60
3. Achieve in life	.56**	.45**	.37**	.				.24**	.25	4.30
4. Personal relationships	.47**	.34**	.23**	.40**	.			.16**	.20	3.10
5. Safety	.29**	.32**	.24**	.25**	.23**	.		.00	.00	0.00
6. Comm. connect	.36**	.31**	.20**	.34**	.29**	.33**	.	.06**	.07	0.40
7. Future security	.44**	.47**	.28**	.42**	.29**	.44**	.40**	.06**	.07	0.40
R^2 = .512	Total explained unique variance									14.80
Adjusted R^2 = .512	Total explained shared variance									36.40

Note: GLS = General Life Satisfaction measured by the single item 'How satisfied are you with your life as a whole?'
*$p < .01$; **$p < .001$

domain triggered by the domain target. The following observations pertain:

1. While six of the domains contribute unique variance, hence, meeting the criterion for their inclusion in the PWI, the domain of safety makes no unique contribution. This seems to indicate that, in Australia, personal safety does not generate a cognitive-affective complex that is powerful enough to rise above the background shared variance of HPMood. In other words, on average in Australia, personal safety is not an issue that impacts on SWB. The fact that it does so in other countries is the reason it remains as a domain (see PWI manual).
2. The opposite is true for Standard of Living, which contributes 6.0 % unique variance. Clearly, it seems, matters of personal finance are of great relevance to SWB.
3. Of the other domains, Achieving in life (4.3 %) and Personal Relationships (3.1 %) are the next strongest contributors. Thus, these three top-contributing domains appear to be the dominant predictors of SWB in this normal population sample.

Very similar results have been reported using data from Dutch adults (van Beuningen and de Jonge 2011). These authors also report some respondents were unsure what the domains of Community and Future security referred to. This is an almost inevitable problem in constructing a multi-language index using semi-abstract questions.

Normative Data

The multiple-survey data from the AUWI have been used to produce reliable norms for the Australia population. Using raw data, a normal range for individuals can be calculated from the mean (75.02 %) and standard deviation (12.33 %) across the 28 surveys. Two standard deviations on either side of the mean yields a normal range of 99.68–50.36 %. In other words, the normative range for individuals lies within the positive half of the 0–100 range.

A second kind of normative distribution can be calculated for groups instead of individuals. Here the survey mean scores are used as data (N = 28) to create normal ranges for groups. When results from specific groups are projected onto these ranges, the pattern is diagnostic, as shown in Fig. 10.1 for adult students.

Students have mid-range wellbeing, but the two domains concerning other people as Relationships (−1.9) and Community (−1.3) are below the generic normative range for sample mean scores. Domain compensation (see Best et al. 2000) comes from Health (+3.5) and Achieving (+0.3), thereby causing the overall PWI score to remain toward the higher end of the normal range.

Summary: It is evident that the PWI has good psychometric properties. This conclusion is shared by Statistics Netherlands (van Beuningen and de Jonge 2011). The disadvantage of the PWI over the Satisfaction With Life Scale is that, because the domain items are more specific in their focus, the responses that people give are

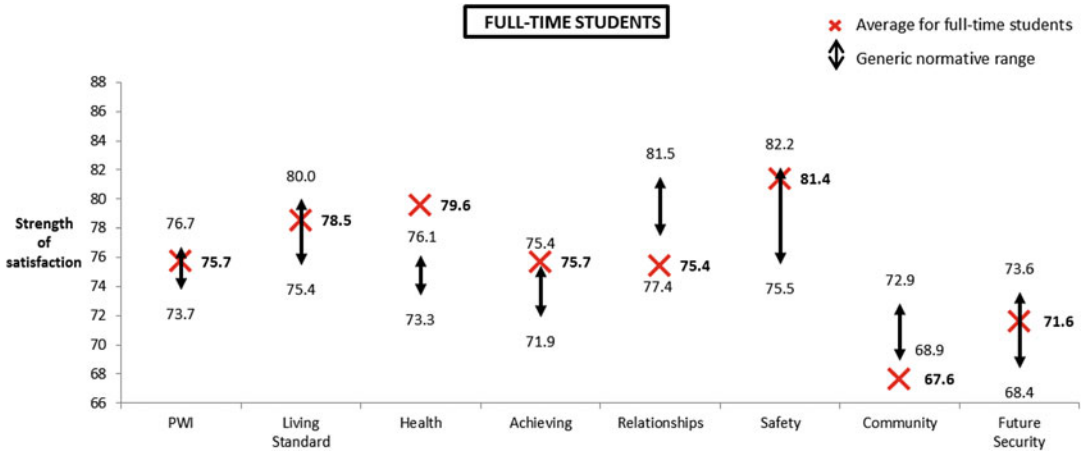

Fig. 10.1 Full-time adult students average vs. Generic normal range (PWI)

further away from HPMood. The advantage of the PWI is that each of the domains carries its own information concerning a broad area of life. Because of this, the scale can be analyzed at either the level of individual domains or by combining the domains to form a single SWB score. There are also parallel versions of the PWI for adults who have a cognitive or intellectual disability (Cummins and Lau 2005a) and school children (Cummins and Lau 2005b).

Domain Index (Andrews and Withey 1974)

These authors used cluster analysis on over 100 items, rated on the delighted-terrible response scale, to arrive at an index with 12 domains measuring 'subjective life quality' This index comprises 6 domains as single items, with the other 6 domains being composites of between 2 and 5 items each, adding to 26 items in all. They report that this index accounts for about 50 % of the variance in another composite index which they call 'Life #3'. This is the combined score from GLS worded as 'How do you feel about your life as a whole?' asked twice, at different times during the interview and separated by 8–12 min. No factor analysis of the 12 Domain Index is reported.

Summary: Composite domains are an additional level of complexity for scale construction since they each need their own psychometric evaluation.

Community Quality of Life Scale (Sirgy and Cornwell 2001; Sirgy et al. 2000)

These authors classify QOL into subjective and objective. They then separate each of these dimensions into five proximal-distal categories as: individual, family, community, state, and world. Their major concern is global satisfaction with community, which is determined by global satisfaction with government services, business services, and non-profit services. Each of these three areas comprises a number of relevant specific items, and respondents rate these in terms of both satisfaction and importance. Global satisfaction with life is also measured using GLS, and also by a composite scale of satisfaction with the following life domains: job, family, financial, health, education, friendship, leisure, community, neighborhood, spiritual, environment, housing, cultural life, and social status. These domains were selected from a larger list of 34 domains gleaned from the literature, with the 20 domains rated as most important by faculty students and staff used for the study. How these 20 domains were reduced to the 14 listed above is not stated. No simple psychometric properties of the scale are provided and it is notable that this list contains distal variables as neighborhood, environment and cultural life. No factor analysis is available [personal communication, Sirgy, 10th February 2013.]

Summary: The scale requires further psychometric investigation. It comprises more items than are necessary for a single measure of SWB and some items are distal.

EUROHIS-QOL 8 (Schmidt et al. 2005)

This 8-item index is a QOL measure that has been derived from the WHOQOL project "as an economic screening measure" (Schmidt et al. 2005 p. 420). Thus, the index was never designed to measure subjective wellbeing. Each domain of the original WHOQOL-100 (WHOQOL Group 1998b) as well as of the WHOQOL-BREF (WHOQOL Group 1998a) (psychological, physical, social and environmental) is represented in the index by two items. All items are rated from 'not at all' to 'completely' satisfied.

1. How would you rate your quality of life
2. How satisfied are you with your health
3. Do you have enough energy for everyday life
4. How satisfied are you with your ability to perform your daily activities
5. How satisfied are you with yourself
6. How satisfied are you with your personal relationships
7. Have you enough money to meet your needs
8. How satisfied are you with the conditions of your living place

The scale has been widely used (see da Rocha et al. 2012). The original authors (Schmidt et al. 2005) conducted a large-scale survey across ten European countries. They report a universal single-factor structure with a generally good fit in structural equation modeling analyses. The following matters are notable in terms of the eight items:

1. They were selected on the basis of being previously available within the WHOQOL-100. There are, thus, three medically-related items (health, energy, performance on daily activities).
2. Two items concern global life satisfaction (Items 1 and 5).
3. The scale combines items with different levels of specificity, from personal abstract (item 5) to specific performance (item 4).
4. The scale combines items with different modalities of measurement as quantity (enough money) and satisfaction (with yourself).
5. Items do not cover satisfaction with: productivity/purpose in life, safety/security, community, or religion/spirituality.
6. Using structural modeling, Schmidt et al. (2005) found evidence for overlap between items 7 and 8. In their large study, da Rocha et al. (2012), using Rasch analysis, report unacceptable residuals for items 4, 7 and 8. They also found item 8 to show disordered thresholds.

Summary: The scale is dominated by health-related items, contains two responses to GLS, and omits some life areas generally considered relevant to SWB. It also incorporates distal variables, combines items with different levels of specificity and different response modalities. There is also evidence of item redundancy and disordered thresholds.

Faces (FACES) Quality of Life Assessment (Zhang et al. 2004)

This is intended as a QOL scale to be used with people who have psychosis, however most items are suitable for general population samples. The 15 questions measure the level of satisfaction with several aspects life, including: Housing, Conditions of daily living, Social Relationships, Supports, Vocational. The scale appears to have been developed for the cited study, no psychometric data are provided and the provenance of items is not stated.

Summary: Additional psychometric analyses are required.

Questions on Life Satisfaction (FLZM) (Henrich and Herschbach 2000)

The scale assesses 'General Life Satisfaction' during the past 4 weeks. In its original form it assessed both importance and satisfaction, with the item scores represented by each multiplicative composite. Subsequent authors (Daig et al. 2009) have used only the satisfaction scale. It comprises eight items as: Friends/acquaintances, Leisure time/hobbies, Health, Income/financial security, Occupation/work, Housing/living conditions, Family life/children, Partnership/sexuality.

Alternative wording has been provided for adolescents (Goldbeck et al. 2007). The method of selection of the items is not stated and no factor analysis is reported.

Summary: Additional psychometric analyses are required.

Huntington's Disease Quality of Life Battery for Carers (Aubeeluck and Buchanan 2007)

The battery incorporates a 'satisfaction' subscale with six items taken from the Comprehensive Quality of Life Scale (Cummins 1997) combined with 'life as a whole' and one health-specific item (the treatment that your HD affected relative receives). The ComQol is a precursor of the Personal Wellbeing Index (International Wellbeing Group 2013). All items ask 'How satisfied are you with. . .' Principal components analysis on the responses from 87 spousal carers revealed the presence of two subscales accounting for 46.33 and 14.94 % of the variance, respectively. Varimax rotation revealed the presence of simple structure, with each component showing strong loadings, and all variables loading highly onto only one component.

- Factor 1: your overall quality of life? 0.88; your own happiness? 0.87; the treatment that your HD affected relative receives? 0.75; and what you achieve in life? 0.55.
- Factor 2: with feeling a part of your community? 0.82; with your close relationships? 0.68; with your health? 0.65; and with how safe you feel? 0.54.

The authors use results from the single superordinate factor for their subsequent analyses.

Summary: The PWI is a more contemporary form of this scale.

Life Satisfaction Index (Clifford et al. 1991)

The scale is intended to measure general life satisfaction. The origin of the items is not stated. Respondents are asked their degree of satisfaction with the following: Safety of belongings, Educational experiences, Friends and associates, Relationship-parents, Self, Standard of living, Leisure time-amount, Leisure time-quality, Life as a whole, National government, Fun-amount. All 11 items load onto a single factor.

Summary: The scale combines items concerning different modalities.

Life Satisfaction Index (Headey and Wearing 1989)

This scale comprises six items rated on a 9-point Delighted-Terrible scale (Andrews and Withey 1976). Each one asks 'How do you feel about – 'your life as a whole?' (asked once at the start and once at the end); 'the sense of purpose and meaning in your life?'; 'what you are accomplishing in life?'; 'how exciting your life is?'; 'the extent to which you are succeeding and getting ahead in life'; 'your life as a whole?'

Summary: GLS is asked twice and the scale comprises a mix of eudaimonic and hedonic items.

Life Satisfaction Index (Man 1991)

While the scale was devised for school children aged 13–16 years in Hong Kong, most of the items are suitable for adults. It comprises 26 items grouped into six sub-scales as: School life, family life, acceptance by others, government, media, living environment. No rationale for the selection of items or their grouping is provided. All items are rated on a seven-point scale from "very satisfied" to "very dissatisfied". The item groupings are as follows:

- School Life: (1) School life; (2) Extracurricular activities in the school; (3) The school itself; (4) Education received in the school.
- Family Life: (1) Family life; (2) Relationship with father; (3) Relationship with mother; (4) Relationship with siblings.
- Acceptance by Others: (1) Relationship with peers; (2) Friendship attained; (3) Acceptance by others; (4) Respect from others; (5) Interaction with others.

- Government: (1) The Government in handling Hong Kong affairs; (2) The Executive and Legislative Councils in handling Hong Kong affairs; (3) The Urban Council in handling local affairs; (4) The District Boards in handling local affairs.
- Media: (1) News or entertainment from TV; (2) News or entertainment from radios; (3) News or entertainment from newspapers; (4) News or entertainment from magazines.
- Living Environment: (1) Degree of air cleanliness in the neighborhood; (2) Noise pollution in the neighborhood; (3) Population density in the neighborhood; (4) Law and order in the neighborhood; (5) Living environment.

Summary: No factor analysis is provided. Many of the items are distal, some are likely to be beyond the purview of 13 year adolescents (e.g. government), and some important dimensions of life quality are missing (e.g. health).

Life Satisfaction Index (Neugarten et al. 1961)

These authors introduced two scales. The LSI-B comprises open-ended and check-list items, and will not be further considered here. Their other scale is the LSI-A, created as measure of successful aging, to be used on people aged 50 years and older. Life satisfaction is defined as a construct encompassing five underlying dimensions as: zest, resolution and fortitude, congruence between desired and achieved goals, positive self-concept, and optimistic mood tone. The authors considered various terms to describe what their scale measures, giving consideration to the terms 'adjustment', 'psychological wellbeing', 'morale' and 'life satisfaction'. They decided to use 'life satisfaction' on the grounds that "although it is not altogether adequate, it comes close to representing the five components" (p. 137). And so began the arbitrary naming of dependent variables that continues to this day.

The original form of the scale, as the LSI-A, comprised 20 statements with an agree – disagree response format. The authors did not group the items under the five 'dimensions' described above and did not perform a factor analysis. Their analyses involved combining all 20 items to yield a single score (Table 10.2).

The studies that have contributed factor analyses are as follows:

LSI-A: Liang (1984) applied structural modeling to a USA sample of 2,797 people aged 65+ years. He created 4 sub-samples of around N = 660 and checked the solutions for consistency. The final model comprised 3 first-order factors and a single second order factor called 'subjective wellbeing'

Stock et al. (1994) Used items from the LSI-A to evaluate both an eight-item, three-factor model (Hoyt and Creech 1983), and an eleven-item, three-factor model (Liang 1984). Their sample of 151 elderly people from Spain failed to demonstrate clear evidence for either factor structure.

Authors who have used the LSI-A with no factor analysis, as a single super-ordinate variable, include the following: Bourland et al. (2000); Burckhardt et al. (1989) and Rook (1984).

LSI-C: Adams (1969) created the LSI-C from a study of American adults. The authors determined that item #20 failed to discriminate between high and low index values, and so was excluded. They note it is a double question. They also excluded item #19 because it showed discrimination between genders. Factor analysis of the 20 items revealed one super-ordinate factor which the authors identify as 'presumably life satisfaction', while factor rotation yielded four factors, with 'positive self-concept' missing. They recommend an 18-item version with the omission of items 19 and 20.

LSI-Z: Wood et al. (1969) created the LSI-Z from a restudy of the LSI-A on a different sample of 100 American adults. Reliability analysis led the authors to suggest the index be reduced from 20 to 13 items and that the scoring system change from one point for each affirmative response to two points, and that one point be given for "un-certain" responses. They did not use factor analysis.

Table 10.2 Versions of the life satisfaction Index

LSI-A	LSI-A	LSI-C	LSI-Z
Neugarten et al. (1961)	Liang (1984)	Adams (1969)	Wood et al. (1969)
1. I am just as happy as when I was younger	MT	MT	*
2. These are the best years of my life.	MT	MT	*
3. My life could be happier than it is now.	MT	MT	
4. This is the dreariest time of my life.		MT	*
5. Most of the things I do are boring or monotonous.	Z	MT	*
6. Compared to other people, I get down in the dumps too often.		MT	*
7. The things I do are as interesting to me as they ever were.	Z	Z	*
8. I have made plans for things I'll be doing a month or a year from now.		Z	*
9. Compared to other people my age, I make a good appearance.		Z	
10. As I grow older, things seem better than I thought they would be.		Z	*
11. I expect some interesting and pleasant things to happen to me in the future.	Z	Z	
12. I feel old and somewhat tired.	Z	Z	
13. As I look back on my life, I am fairly well satisfied.	CON	CON	*
14. I would not change my past life even if I could.	CON	CON	
15. I've gotten pretty much what I expected out of life.	CON	CON	*
16. When I think back over my life, I didn't get most of the important things I wanted.		R&F	*
17. In spite of what people say, the lot of the average man is getting worse, not better.		R&F	*

(continued)

Table 10.2 (continued)

18. I have gotten more of the breaks in life than most of the people I know.	CON	R&F *
19. Compared to other people my age, I've made a lot of foolish decisions in my life.		
20. I feel my age, but it does not bother me.		

Note: * denotes items recommended for the LSI-Z

MT: Mood tone

Z: zest for life

CON: congruence between desired and achieved goals

R&F: resolution and fortitude

: Missing item

Authors who have used the LSI-Z with no factor analysis, as a single super-ordinate variable, include the following: Bennett (1996) and Riddick and Stewart (1994).

Summary: The few analyses that have been performed show little consistency in the factor structure of this scale. This has also been noted by other reviewers (McDowell and Newell 1987; Rook 1984). Many researchers have chosen to use some items in the list to create a single score. This seems unwise given the evident redundancy among so many items and lack of consistent psychometric data.

Life Satisfaction Index for Parents (Renwick and Reid 1992)

The index comprises 5 sub-scales. Each one contains a mixture of items, some asking about satisfaction and some asking about eudaimonic and health matters. No factor analysis is provided.

Summary: Further psychometric analyses are required.

Life Satisfaction Questionnaire (Fugl-Meyer et al. 1991)

This scale is designed to measure life satisfaction through eight questions about domain-specific life satisfaction: No factor analysis is provided.

In 2002, Fugl-Meyer et al. created the 'LiSat-11' scale, which is the above questionnaire with the addition of two items as satisfaction with somatic and psychological health. In a sample of 2,533 Swedish adults they report a factor analysis with a 4-factor solution. The strength of cross loadings is not reported and two factors have just two items each (Table 10.3).

Authors who have used the scale with no factor analysis and assume a single super-ordinate factor include: Boonstra et al. (2008) and Post et al. (1998).

Summary: The intended factor structure cannot be supported with the minimum requirement of 3-items per factor. In other respects the items are dominated by health and some others are distal variables.

Table 10.3 Factor analysis of the life satisfaction questionnaire

	Closeness	Health	Spare time	Provision
Sexual life	.82			
Partner relationship	.88			
Family life	.68			
ADL		.76		
Somatic health		.78		
Psychol. health		.62		
Leisure			.79	
Contacts			.85	
Vocation				.80
Economy				.78

Life Satisfaction Questionnaire (Kulik and Rayyan 2003)

Designed to measure life satisfaction, the scale comprises five items. e.g. 'Things are getting steadily worse with time' and 'I feel a lot of happiness in my life'. The response scale measures frequency, from 'never' to 'always'. No psychometric analysis is reported other than Cronbach alpha, and no explanation is offered as to why these items measure life satisfaction.

Summary: Further psychometric analyses are required.

Life Satisfaction Scale (Viitanen et al. 1988)

This scale was devised to measure the life satisfaction of stroke survivors. The origin of the items is not stated. The scale comprises GLS and six domains: Ability to manage self-care, leisure, sexuality, marriage, togetherness family, togetherness friends. No rationale for the selection of items is given and no factor analysis is provided.

Summary: Further psychometric analyses are required.

Life Satisfaction Scale (Warr et al. 1979)

Early work on measuring the mental health of unemployed workers in Britain (Warr 1978) led to Warr et al. (1979) creating this 15 item scale. Their selection of items is not based on factor analysis. In trialing this with people who were employed and using cluster analysis they discover three clusters and evidence for a super-ordinate factor.

- Satisfaction with personal life: Your present state of health; The education you have received; Your social life; Your family life.
- Satisfaction with standards and achievement: What you are accomplishing in life; What the future seems to hold for you; The present government; Freedom and democracy in Britain today; The state of law and order in Britain today; The moral standards and values in Britain today; Britain's reputation in the world today.
- Satisfaction with life style: The house or flat that you live in; The local district that you live in; Your standard of living: the things you can buy and do; The way you spend your leisure time.

A revision by Leana and Feldman (1992) was intended to be used with people who were unemployed, and expanded the assessment of family and social life satisfaction. This version was factor analyzed by Brown et al. (2002). Using confirmatory factor analysis, they tested 1, 2 and 3 factor models. The best fitting model was the 1 factor solution.

Summary: Using 15 items to produce a single measure of SWB is very inefficient.

Life Satisfaction Scale (Leelakulthanit and Day 1993)

The items are derived from a pilot study reported in conference proceedings. The instrument comprises 13 sub-scales, each one containing 4–8 items of satisfaction. The sub-scales are: life in general, family, self, material possessions, work, social life, health, Thai government, life in Thailand, health care, recreation, consumption, spiritual life, Bangkok administration.

The scale was applied to 496 adults in Bangkok (Leelakulthanit and Day 1993), but no factor analysis is reported. The results of an exploratory and a confirmatory factor analysis (Leelakulthanit and Day 1993) using data from Bangkok and USA describe the whole scale as one-dimensional, so producing a single superordinate factor.

Summary: The scale is inefficient and involves distal variables.

Life Satisfaction Scale for Chinese (Lou 2010)

This 8-item scale measures domain-specific life satisfaction for Chinese older adults. The domains are: Family relationships; Intergenerational communication; Friendship; Partner; Food/meals; Finance; Housing; Health. The author claims two sub-scales can be created as 'life satisfaction with social needs' and 'life satisfaction with basic needs', but offers no factor analysis.

Summary: The scale requires further psychometric analysis.

Manchester Short Assessment of Quality of Life (Priebe et al. 1999)

This scale was developed from the much larger Lancashire Quality of Life Profile (Oliver et al. 1996). The Manchester scale comprises a mixture of objective and subjective items. Within the latter are 11 satisfaction questions relating to work, leisure, finance, living situation, safety, household relations, family relations, social relations, sex life, mental health and health. No factor analysis is reported.

Summary: The scale is dominated by relationships and health. It requires further psychometric validation.

Michalos Questionnaire (Michalos 1980)

Within a larger questionnaire, designed as a research tool to investigate theoretical aspects of satisfaction and happiness, 12 items comprise this life satisfaction scale. The items are: Health; Financial security; Family life; Friendships; Housing; Job; Free time activity Education; Self-esteem; Area you live in; Ability to get around; Secure from crime. The provenance of these items is the 'Michigan group' (Andrews and Withey 1976; Campbell et al. 1976) and no factor analysis of this scale is provided.

Summary: Further psychometric analyses are required. The scale also includes eudaimonic and distal variables.

Quality of Life Scale (Woodruff and Conway 1992a, b)

The purpose of this scale is to measure perceived quality of life. It comprises 16 items adapted from Caplan et al. (1984) using a 7-point response scale anchored by delighted – terrible. The items are: how you feel about your: own personal life; wife/husband (or girlfriend/boyfriend); romantic life; job; the people you work with – your co-workers; the work you do on the job – the work itself; the way you handle problems that come up in your life; what you are accomplishing in your life; your physical appearance – the way you look to others; your own health and physical condition; how you feel about yourself; how you feel about the extent to which you can adjust to changes in your life; how you feel about the kind of person you are; how you feel about your life as a whole; how content are you with your life as a whole. No factor analysis is reported.

Summary: Further psychometric analyses are required.

Quality of Life Index (Ferrans and Powers 1985)

The purpose of this instrument is to measure quality of life Ferrans and Powers (1985). The version for the general population comprises two sections of 31 items each, one to measure satisfaction and the other importance. The provenance of the items is not provided and no factor analysis is reported. A factor analysis is reported by Ferrans and Powers

(1992) on 349 out-patients receiving hemodialysis. They comment "High cross loadings were found for almost all of the items, indicating conceptual overlap between the factors." (p. 32). They report a super-ordinate factor. Their abstract states "A four-factor solution best fit the data". (p. 29).

The factor structure found by Rustoen et al. (1999) is shown in Table 10.4. Using maximum likelihood factor analysis and applying a direct oblimin rotation, eight factors emerged with eigenvalues >1. A four-factor solution was forced to make them comparable with Ferrans and Powers (1992). The four factors accounted for only 45.4 % of the variance, compared with 91 % in the Ferrans and Powers study. In addition, many items cross-loaded and loaded onto different factors than found by the scale authors. Despite this, some authors have assumed the 4 sub-scale structure of Ferrans and Powers (1985) in their data analysis (Ferrans 1990; Greene 2005). Other authors have used the scale with no factor analysis, as a single variable: Arzouman et al. (1991), Faris and Stotts (1990), and Perry and McLaren (2004).

Summary: There is clearly doubt as to whether the scale factors as intended by the scale authors. Moreover, using 31 items to produce a single measure of SWB is very inefficient. In addition, some items are distal and some eudaimonic, while the procedure of multiplying satisfaction by importance is ill-advised as explained earlier.

Quality of Life Interview (Lehman et al. 1982)

The Interview is a substantial 45 min procedure designed to assess the QOL of people with severe mental illness. Within the Interview is a scale comprising nine domains of satisfaction selected from Andrews and Withey (1976) and Campbell et al. (1976). The domains are: living situation, family relations, social relations, leisure activities, work or non-work if unemployed, finances personal safety, health, and GLS. Lehman (1988) gives examples of the contents of each domain in the form of some 6–8 items of satisfaction for each. Lehman et al. (1982) and Lehman (1988) state that the sub-scales comprising the domains produce one or two factors each, but no figures are provided.

Variations: Huxley and Warner (1992) 'adapt' the QOLI domains for use in Britain and rename the scale the 'QOL Profile'. They do not report a factor analysis. Heider et al. (2007) use the eight domains as separate measures.

Summary: Further psychometric analyses are required.

Quality of Life Inventory (Frisch 1994; Frisch et al. 1992)

The 17 items that form this scale were drawn from a literature review by Frish et al. (1992). The items are: Health; Self-regard; Philosophy of life; Standard of living; Work; Recreation; Learning; Creativity; Social service; Civic action; Love relationship; Friendships; Relationship with children; Relationship with relatives; Home; Neighborhood; Community. This paper provides no factor analysis.

The purpose of this original scale was to measure 'life satisfaction' (Frisch et al. 1992). The more recent scale version comprises 66 items grouped into 16 areas: Love, work, health, goals & values, play, creativity, helping, friends, relatives, home, money, children, learning, neighborhood, community, self-esteem. Each item is rated twice, once for importance, and then for satisfaction.

In terms of factorial structure, Frisch (1993) cites an unpublished conference paper as evidence that "Factor analysis of the QOLI has yielded a two-factor solution which, according to a subsequent oblique multiple groups confirmatory factor analysis, fits four different samples." (p. 43). However, in a later review of the scale, Frisch (1998) makes no mention of factor analysis. Table 10.5 shows the results of factor analyses reported by other authors.

Table 10.4 Factor analyses of the quality of life index

Quality of life index	Ferrans and Powers (1992)	Rustoen et al. (1999)
Area / no factors[a]	4	4
1. Usefulness to others	A	AD
2. Physical independence	A	A
3. Ability to meet family responsibilities	A	AD
4. Own health	A	A
5. Stress or worries	A	ACD
6. Leisure time activities	A	ABC
7. Potential for a happy old age/retirement	A	ACD
8. Ability to travel on vacations	A	ABC
9. Potential for long life	A	AC
10. Sex life	A	
11. Health care	A	A
12. Standard of living	B	ABCD
13. Financial independence	B	BC
14. Home (furniture, house or apartment)	B	BCD
15. Job/unemployment	B	
16. Neighborhood	B	CD
17. Overall conditions in USA	B	missing
18. Friends	B	BD
19. Emotional support from others	B	BD
20. Education	B	
21. Satisfaction with life	C	ABCD

(continued)

Table 10.4 (continued)

22. Happiness in general	C	ABCD
23. Satisfaction with self in general	C	AC
24. Achievement of personal goals	C	CD
25. Peace of mind	C	CD
26. Personal appearance	C	C
27. Personal faith in God	C	
28. Family's happiness	D	D
29. Children	D	D
30. Relationship with spouse/significant other	D	D
31. Family's health	D	

[a] Factors: A; Health and functioning; B: Socioeconomic; C: Psychological/spiritual; D: Family

In Table 10.5, factors with the same name are designated with the same letter. The studies are as follows:

(a) Claiborne et al. (1999) surveyed 253 spinal patients. Factor analysis (unspecified) produced 5 factors as: (A) Personal Growth; (F) Accomplishment; (I) Environment; (K) Health; (H) Family/Support.

(b) Eng et al. (2005) sampled 138 USA adults being treated for performance anxiety. They used exploratory principal components analysis followed by varimax rotation. Four factors: Achievement (F), Social functioning (J), Personal growth (self-actualization) (A); Surroundings (I).

(c) O'Cleirigh and Safren (2006) sampled 152 USA people who were HIV positive. They used exploratory principal components analysis and discovered four factors: Achievement (F), Self-expression (G), Relationships (H), Environment (I),

(d) Lunney and Schnurr (2007) surveyed 319 USA male Vietnam veterans with PTSD. They used confirmatory factor analysis, based on O'Cleirigh and Safren (2006), to form four factors as: Achievement (F), Self-expression (G), Relationships (H), Surroundings (I). They also report a superordinate factor.

(e) McAlinden and Oei (2006) sampled 217 - Australian outpatients being treated for depression or anxiety: (D) Self-oriented QOL; (E) QOL related to others.

(f) Thomas et al. (2009) used an Australian sample of 470 adults who had sustained a traumatic brain injury within the preceding month. Factor names: self-functioning and activity (A); self-actualization (B); and family and environment (C)

(g) Thomas et al. (2012): 259 Australian adults were recruited through the families or friends of college students. They tested four models

Table 10.5 Factor analysis of the quality of life inventory

Quality of life inventory	Claiborne et al. (1999)	Eng et al. (2005)	O'Cleirigh and Safren (2006)	McAlinden and Oei (2006)	Lunney and Schnurr (2007)	Thomas et al. (2009)	Thomas et al. (2012)
Area / no factors	5	4	4	2	4	3	3
1. Love	H	J	H	E	H	C	C
2. Work	F	F	F .34	D	F	A	A
3. Health	K		F	D	F	A	A
4. Goals & values	F	A	F+G	D	F	A + B	A
5. Play	F	J + A	G .32	D	G	A + B	B
6. Creativity	A	A	G	D	G	B	B
7. Helping	A	J .38	H+G	D	H	B	C
8. Friends	H	J	H	D + E	H		
9. Relatives	H	J	H	E	H	C	C
10. Home	I	F	I	E	I	C	C
11. Money	F	F	F	E	F	C	C
12. Children	H		H	E	H		
13. Learning	A	A	G	D	G	B	B
14. Neighborhood	I	I	I	E	I	C	C (+15)
15. Community	I	I	I	E	I	C	
16. Self-esteem	K	F .35	F	D	F	A	A

Loadings less than .4 are indicated in parentheses (e.g., .35). Complex item loadings on two or more factors are indicated as, e.g., F+G
C (+15) indicates a double loading of neighborhood and community

for goodness of fit and found the best to represent three factors as shown plus a super-ordinate factor. In relation to the missing areas they refer to a previous study (Thomas et al. 2009) and state "we removed two QOLI domains (children and friends), as their loadings were weak in relation to the relevant factors (p. 226)". Factor names: self-functioning and activity (A); self-actualization (B); and family and environment (C).

Other researchers using the scale as a single variable are Bourland et al. (2000).

Summary: The results of the 7 factor analyses shown in Table 10.5 confirm the expectation, based on an understanding that all items are strongly influenced by HPMood, that

factors derived from lists of satisfaction responses are likely to be unstable. Virtually no coherent pattern of factor structure is evident in these results. Moreover, a 16 item scale is an inefficient way to generate a single SWB score, some items are measuring eudaimonic constructs, and the use of importance weighting is not recommended.

Quality of Life Scale (Burckhardt et al. 1989)

The 16-item QOLS was adapted from the Flanagan (1978) Quality of Life Scale, in order to make it applicable to chronic disease patients, by adding the 16th item of 'independence'. Burckhardt et al. (1989) state "A factor analysis by Flanagan (1978) indicated a 5-factor structure" (p. 194). However this is incorrect. In fact, Flanagan reports three factors from a 'varimax rotated factor matrix' based on the score from a sub-group of 50 year old females who were responding to the question of 'how well their needs and wants were being met' in each of the 15 areas. No details of this analysis are provided and the number of areas comprising each 'factor' are 3, 2 and 2. No sense can be made of this.

All of the five factor structures in Table 10.6 come from Burckhardt and Anderson (2003). The sample designations are: (1.1) Healthy; (1.2) Chronic disease USA; (1.3) Chronic disease Sweden female; (1.4) mixed chronic disease male; (1.5) mixed chronic disease female. Curiously, Burckhardt and Anderson (2003) conclude "The QOLS has a fairly stable factor structure across samples" (p. 5). This claim is repeated in Burckhardt et al. (2003). In fact, as shown in Table 10.5, not one item shows a consistent factor attachment, six items form part of all three factors and four item show cross-loadings >.4.

A second use of this scale is reported by Langeland et al. (2007). These authors analyze their data using the three factors identified by Burckhardt and Anderson (2003), but with no factor analysis applied to their own sample. Other authors combine the 16 items into a single super-ordinate factor (Burckhardt et al. 1992; Treharne et al. 2005, 2007; Wahl et al. 1998, 2004, 2005).

Table 10.6 Factor structure of the quality of life scale

Item/Sample		1.1	1.2	1.3	1.4	1.5
1.	Material comforts	B	C	C	–	C
2.	Health	B	B	B	A	B
3.	Relationship with family	A	C	A, C	C	C
4.	Having/rearing children	A	C	C	C	C
5.	Relationship with partner	A	C	C	C	C
6.	Close friends	A	C	A, C	C	C
7.	Community engagement	A, C	A	A	B	A
8.	Political engagement	C	A	A	B	A
9.	Scholarly activity	C	A	A	B	A
10.	Understanding yourself	C	A	A	B	A
11.	Job or home work	B	B	B	A	B
12.	Creativity	C	A	A	B	A
13.	Social activity	A	A, B	A	A, C	A
14.	Reading or music	A	A	A	–	A
15.	Sport participation	B	B	B	A	B
16.	Independence	Not used			A	B

Factors: A = Relationships and material wellbeing; B = Personal, social, and community commitment; C = Health and functioning

Summary: Once again it is evident that the factor structure of the 16-item scale is unstable, and 16-items are an inefficient way to generate a single SWB value.

Quality of Life Scale (Olson and Barnes 1992)

Using items drawn from a variety of sources, these authors constructed a 40-item scale, using satisfaction responses, which they report as factoring into 12 subscales; marriage and family life, friends, extended family, health, home, education, time, religion, employment, mass media, financial wellbeing, neighborhood/community. However, they do not report cross-loadings and some of their factors comprise two items only.

Summary: Further psychometric analyses are required.

Quality of Life Scale (Flanagan 1978, 1979)

The author uses ratings of 'importance' on a large population sample to devise a scale with 15 dimensions. He reports satisfaction results on 500 adults aged about 30 years, but no factor analysis. The items, published also by Lang et al. (1982) are as follows: Family relationships; Religion & understanding life; Passive recreation; Having children; Health & safety needs; Friends; Active recreation; Creative expression; Socializing; Spouse relationship; Learning; Material comforts; Work; Community activities; Public affairs. An alternative wording of these items is provided by Burckhardt et al. (1989).

The following authors have used the mean of the 15 items as the scale score (Bruscia et al. 2008; Burckhardt et al. 1989; Lang et al. 1982). No factor analysis has been located.

Summary: Further psychometric analyses are required.

Scale of Life Domain Satisfaction (Campbell et al. 1976)

This 9-item scale comprises the domains of housing, transportation, education, job, health, family life, social life, sexual life, and life in general. These are used as a composite index by Rook (1984).

Hall (1976) describes results from a series of studies conducted by the Social Science Research Council Survey Unit, in the UK, between 1971 and 1975. These are described by the author as a 'sister study' to Campbell et al. (1976) but they use a different set of domains as: marriage, family life, job, town, health, district, being a housewife, leisure, house, standard of living, education, democracy, financial situation, life in Britain, life as a whole.

Summary: Both of these lists contain a mixture of proximal and distal domains, and neither has been subjected to factor analysis.

Subjective Quality of Life Profile / Questionnaire (Dazord 1997; Dazord et al. 1994, 1998)

This 36-item instrument was designed to measure subjective quality of life. The items are: Ability to go out; Overall fitness; Pain; Digestion; Relationships; Sleep; Concentration; Sexuality; People's attitudes; Meals; Material possessions; Spare time; Eyesight; Money; Friends; Professional activity; Pets; Daily activities; Self-image; Spiritual life; Health; Faith; Surrounding world; Close relationships; Food; Drink; Worries; Leisure activities; Social activities; Companionship; Physical appearance; Material conditions; Group participation; Physical abilities; Creative interest; Long-term health problem. Each item is rated on satisfaction, with other 'strongly advised' ratings of importance and expectations. It is intended to yield 4 factors as: health, relationship, material context, spiritual life. No factor analysis is provided using satisfaction scores.

Summary: Further psychometric analyses are required.

Subjective Quality of Life Questionnaire (Gerin et al. 1992)

This is a multi-faceted scale which contains a section of 15 items rated on both satisfaction and importance. The items are drawn from the literature (references unspecified) and comprise the following: What you can (or cannot) eat; What you can (or cannot) drink; Your weight; Your relationships with other people in general; Religious belief/faith; Participation (or not) in various activities (cultural, religious, unions); The time you spend (or do not spend) with friends; The relationships that you have (or do not have) with your family; A special relationship with somebody; Your activities, both at home and at work; Hobbies or activities that you might have (for example: sport, do-it-yourself, painting); Other people's attitudes towards you; Your physical appearance (e.g. when you see yourself in a mirror); Material conditions of your daily life; Your

inner life (reflections, reading, meditation, etc.). No factor analysis is provided.

Summary: Further psychometric analyses are required.

Conclusions

Very few of the 31 multi-item scales reviewed meet the basic psychometric criteria required to be regarded as useful tools for research purposes. Of particular interest for this review was the evidence from factor analysis. The reason for this focus was twofold. First that homeostatic theory, outlined in part one of this chapter, predicts that because Homeostatically Protected Mood (HPMood) supplies such strong variance to most items in these scales, this shared variance will dominate correlational analyses, leaving only weak and variable other forms of shared variance by which to create factor structures. Consequently, it was predicted that factors derived from lists of satisfaction responses are likely to be unstable. This prediction is borne out by the results. Virtually no coherent pattern of factor structure is evident in the presented results for scales with more than seven items.

The second reason for the focus on factor analysis is that, in the absence of a stable factor structure, a scale with more than seven or so items is an inefficient way to generate a single Subjective Wellbeing (SWB) score. Most of the items in such scales will not be contributing unique variance, and so are redundant. It is wasteful to consume respondents' time with a lengthy questionnaire when a 7 or 8 item measure can achieve the same result.

Other issues have also been noted which either detract from the simple structure of scales or which are damaging to the interpretation of results. These matters, discussed in the first part of this chapter, are the inclusion of items referring to eudaimonic constructs, the use of distal items, and the use of importance as a weighting for satisfaction.

In summary, two scales stand out as worthy of recommendation for research purposes. The first is the Satisfaction with Life Scale (Diener et al. 1985), which uses five items to create a single reliable index of SWB. The second is the new 5th Edition of the Personal Wellbeing Index (International Wellbeing Group 2013) which uses the minimum set of life domains to represent the 'satisfaction with life as a whole' construct. The advantage of this scale is that the items can be analyzed separately to yield a diagnostic profile, or combined to provide a single measure of SWB.

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The Affect Balance Scale: Subjective Approaches (3)

11

Norman M. Bradburn

The Historical and Theoretical Context

The ABS was developed in the early 1960s as an instrument to measure hedonic wellbeing in normal populations. At the time there was a nascent movement forpopulation-based studies of mental health, but these depended on traditional measures of psychiatric symptoms and what has come to be called evaluative wellbeing, that is measures of overall life satisfaction or happiness (Leighton 1959; Srole et al. 1962; Gurin et al. 1960). The ABS represents a shift from a focus on symptoms of mental illness to a focus on positive functioning and the investigation of the interplay between everyday experiences and personal and social wellbeing.

In the 1950s there were several critiques of the concept of mental health that led to reconsideration of the ways in which mental illness was viewed and how it might be studied in the general population. The development of the Affect Balance Scale took place in the context of these debates about the nature of mental illness and mental health, particularly the idea of positive mental health (Jahoda 1958). It was also enabled by the evolution of sample surveys of the population that permitted the study of mental health in larger populations by lay interviewers (Gurin et al. 1960; Srole et al 1962; Campbell et al. 1976).

The concept of mental illness as a disease with psychosocial rather than physiological roots began to come under examination. One of the most important critiques was that of Thomas Szasz (1961). Szasz viewed the concept of mental illness as a myth based on a faulty analogy with physical disease. He argued that the historically successful attempts to isolate the causes of particular diseases and bring them under control had led to the extension of this approach in grouping together as symptoms of "mental disease" behaviors that violate some types of social or personal norms. The term "illness" is used in an analogic sense because the symptoms are not related to any underlying organic or genetic malfunctioning. For Szasz, what are usually seen as symptoms are in fact communications about the self that arise from problems in living and are judged by others to be maladaptive, bizarre, or dangerous.

Such a conception assumes that the causes of these psychological disorders lie in the interaction betweenlong-term personality dispositions of individuals and the realities of their life situations. It rejects the notion that there is a fundamental medical cause in the sense that there is some organic malfunctioning. Indeed, Szasz is firm in his rejection of the disease model because he feels that it leads to a faulty conception of appropriate therapy – that is, looking toward organic or somatic treatment

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N.M. Bradburn (✉)
NORC at the University of Chicago, 1155 E. 60th St., Chicago IL, 60637, USA
e-mail: Bradburn-Norman@norc.org

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rather than toward treatment that grapples with the fundamental living problems. Advances in genetics and neuroscience since Szasz's day have greatly enhanced our understanding of the organic causes of some mental disorders, but his fundamental point that much of what has been characterized as mental illness can better be conceptualized as difficulties in living is still a valuable one for the study of wellbeing in the general population.

Szasz's formulation of the problem points up a rather fundamental divergence of approaches to the study of mental illness and health. One approach is much more exclusively physiological and directs research toward the neurological and biochemical properties of learning, memory, and emotional reactions. The alternative approach focuses attention on individuals' life situations and how they cope with them. In this approach, one becomes enmeshed in problems that are not medical at all but are what have been more traditionally considered ethical, that is, the problems of proper behavior.

If one abandons the concept of mental health, then one is left with some terminological problems, for as Smith (1961) pointed out, the term "mental health," if nothing else, is a convenient rubric under which to consider human behavior from an evaluative point of view. But perhaps it is just as well that we abandon global terms and deal with specific problems rather than try to lump everything into one single category. Indeed, it may well be that what at first glance appears to be a considerable awkwardness in the use of ordinary language is in fact a blessing in disguise. It forces us to concentrate on specific dependent variables for which we can develop measures that have some common acceptance rather than try to use as a dependent variable such a vague and highly general concept as "mental health."

The Concept of Subjective Wellbeing

We use the concept of subjective wellbeing to capture the variations in the degree to which people have "difficulties in living", at least from the subjective point of view. In contemporary discussions (Diener 1984), subjective wellbeing (SWB) is thought of as having two components: an evaluative component (EWB) and a hedonic or experienced component (HWB). The evaluative component is a summary judgment assessing satisfaction or happiness with one's life. It is measured by responses to questions about overall life satisfaction. The experiential or hedonic component is reflected in some summation of recent affective states experienced by individuals. People who are high in hedonic wellbeing experience many positive feelings and experiences and few negative feelings and experiences, while those low in hedonic wellbeing are at the opposite end of the spectrum. The Affect Balance Scale is one measure of overall hedonic wellbeing.

These general observations lead to the research question: How does one operationalize hedonic wellbeing so that one can array individuals along some sort of dimension of intensity and investigate variations across individuals and over time? The conceptual scheme we used to develop the ABS emerged from a pilot study that attempted to develop operational measures for problems in living (Bradburn and Caplovitz 1965). This framework takes as its fundamental dependent variable measures of evaluative wellbeing such as avowed happiness or life satisfaction. Persons' position on the dimension of subjective wellbeing (SWB) is seen as a function of their hedonic wellbeing plus some judgments about how their experiences compare with their own aspirations and with others in their reference group. Thus SWB is thought of as having a direct emotional component that is determined by recent affective experiences (HWB) and an indirect cognitive component determined by a comparison with-self-aspiration and with others in similar circumstances. We are concerned here primarily with the emotional or hedonic component.

In our view the hedonic component is a resultant of the individual's position on two independent dimensions – one of positive affect and the other of negative affect. The model specifies that individuals will be high in hedonic wellbeing in the degree to which they have an excess of positive over negative affect and will be low in

wellbeing in the degree to which negative affect predominates over positive. Thus, in many respects, the model is similar to older pleasure-pain or utility models that view individuals' happiness or wellbeing in terms of the degree to which pleasure predominates over pain in their life experiences.

This particular model stems from an empirical base. In the pilot study (Bradburn and Caplovitz 1965), a cross section of the population of four small towns was asked whether they had experienced several feeling states during the preceding week. For example, respondents were asked whether during the past week they had felt "on top of the world," "lonely or remote from other people," "bored," or "particularly excited or interested in something." The analysis of the responses showed that individuals varied along two dimensions – one indicative of positive affect and the other indicative of negative affect. Further, it was clear that these two dimensions were independent of one another, making it impossible to predict an individuals' score on the negative affect dimension from any knowledge of their score on the positive affect dimension and vice versa. On the other hand, both dimensions were related in the expected directions to the evaluative component such as overall evaluative self-ratingsof happiness and satisfaction. The best predictor of the overall self-rating was the discrepancy between the two scores: the greater the excess of positive over negative affect, the higher the overall evaluation of subjective wellbeing.

The fact that the discrepancy between positive and negative affect should be the best predictor of overall happiness is, of course, no departure from the usual pleasure-pain models. Where this particular model differs from more traditional ones lies in a further finding. Analysis of the data from the pilot study indicated that not only were variations in positive and negative affect independent of one another but that, on the whole, the two dimensions were correlated with different variables. In the most general terms, it was found that the variables which were related to the presence or absence of positive affect had no relationship to the presence or absence of negative affect, while the variables which were related to the presence or absence of negative affect had a similar lack of relationship to positive affect.

Such a model adds greatly to our understanding of the dynamics of subjective wellbeing in its hedonic dimension. It suggests, on the one hand, that there are a series of experiences whose presence is related to the presence of positive affect but whose absence merely results in a lowering or absence of positive affect rather than any change in negative affect. On the other hand, there is also a series of different circumstances that contribute to the presence or absence of negative affect but have no influence on a person's positive affect. Since an individual's overall sense of wellbeing is dependent on the relative balance of these two sets of experiences, we must look at those experiences contributing to either positive or negative affect in order to understand an individual's position along the resultant dimension of hedonic wellbeing.

A hypothetical example may make the implications of this model clearer. We hypothesize that if a man has an argument with his wife, he is likely to experience an increase in negative affect, but he will not experience a decrease in his level of positive affect. If he does not have an argument with his wife, he will not experience the negative affect, but neither will his positive affect be likely to increase. On the other hand, if he takes his wife out to dinner or to a movie, he is likely to experience an increase in positive affect but no change in his level of negative affect. If he does not take his wife out, he will not experience the positive affect, but neither will he suffer any increase in negative affect. Similarly, if he takes his wife out but they have an argument over where to go, he is likely to experience an increase in both positive and negative affect. Depending on the relative severity of the argument compared with the enjoyment of the night out, the net result of such an evening might be to increase, decrease, or leave unchanged his overall sense of hedonic wellbeing.

Thus, knowing that a man argued frequently with his wife would not give us too much information about his overall subjective sense of

wellbeing (or his marital happiness, for that matter) unless we could combine this information with data on the frequency of experiences that are related to positive affect. Putting the two bits of information together, we would be in a better position to predict the individual's level of subjective wellbeing.

It should be noted here that data on the number of arguments between spouses and on other experiences related to negative affect would be a good predictor of wellbeing if there were a strong negative correlation between experiences like arguments that are related to negative affect and actions like going out with one's wife that are related to positive affect. The assumption of such a negative correlation is, we believe, one of the principal reasons why most of the traditional investigations of "mental illness," which involve cases where there is a strong predominance of negative over positive affect, have focused exclusively on the negative dimension. The evidence to date, however, indicates that in fact no such negative correlation exists, at least not in the population at large. On the contrary, the correlation between the two types of experiences is nearly zero (Bradburn 1969; Diener and Emmons 1984).

For heuristic purposes we have described the model in simple, mechanical terms as if actions such as arguing or going to the movies led simply to negative or positive feelings. Reflection on the complexities of life, however, suggests that such a simple model does not take adequate account of reality. Feelings almost certainly also give rise to actions, and men take their wives out to the movies because they feel good as well as feel good because they have taken their wives to the movies. The main point here is that the cycle of positive affect, going out, positive affect, etc., goes on independently of the cycle of negative affect, arguments, negative affect, etc. Sometimes they go on together, sometimes not, and one cannot predict the level of one from knowing the level of the other.

If these two dimensions of positive and negative affect are independent of each other and related to different things, can we specify what the important variables are? Certain broad outlines of correlations are reasonably clear. Negative affect appears to be related primarily to the variables that have been dealt with by the traditional "mental-illness" approaches. Specifically, variations in negative affect are associated with difficulties in marriage and work adjustment, interpersonal tensions, and feelings of having a "nervous breakdown," as well as with some of the more standard indicators such as anxiety, depression and worry. None of these variables, however, is related to positive affect. On the other hand, positive affect appears to be related to a series of factors concerning the degree to which individuals are involved in the environment around them, social contact, and active interest in the world. These factors include such things as the degree of social participation, which is reflected in organizational membership, number of friends, and frequency of interaction with friends and relatives; the degree of sociability and companionship with one's spouse of partner; and exposures to life situations that introduce a degree of variability into one's life experiences. None of these variables is related to negative affect.

The model of subjective wellbeing as a function of two independent dimensions – positive and negative affect – each of which is related to wellbeing by an independent set of variables, has interesting implications for our general understanding of variations in SWB. If an overall sense of wellbeing is viewed as the difference between two independent dimensions, then the effect that a particular difficulty in life has on the sense of wellbeing will not be immediately clear. If the effect of this particular difficulty is to increase negative affect, then, other things being equal, there would be a diminution in wellbeing. At the same time, however, something could happen that would increase positive affect and thus offset the change in negative affect, producing either no change in wellbeing or, if the change in positive affect were sufficiently large, even increasing the sense of wellbeing.

Evidence from population surveys (Bradburn and Caplovitz 1965; Bradburn and Orden 1969; Bradburn 1969) indicate that tensions in marriage are strongly related to negative affect.

One would expect an increase in marital tensions to be associated with an increase in negative affect and with a concomitant decrease in overall avowed happiness. Several other things, however, may be at work that will complicate this simple model. First, we cannot tell from the changes in marital tensions and in negative affect what might be happening with the factors within or outside the marriage that are related to positive affect. If they should remain the same, then the simple model would be appropriate. If, however, there should be some compensating factor, such as an increase in sociability or success in work, we might expect an increase in positive affect that would tend to cancel out the effect of the increase in negative affect and would result in no change in overall sense of wellbeing.

The fact that there are two independent dimensions then might well help us explain the differential effect of what appear to be equal amounts of stress on different individuals. If the stress works toward changing the levels of negative affect, its total impact on wellbeing would be a differential function of the individual's level of positive affect. Since life is an ongoing, dynamic process, we would expect that factors affecting both positive and negative experiences would be continually changing and that one's sense of wellbeing at any particular time might be thought of as a running average of the relative strength of positive and negative affect averaged out over the recent past. As in any research, we abstract from the ongoing process in an attempt to get measures of particular situations that are related to positive and negative affect, even though this abstraction does considerable violence to the richness of human life. When, as is so often the case in social science, our measuring instruments are rather crude, we expect a considerable amount of error and misclassification. If the model is correct, however, we should on the whole be able to show some significant effects.

The use of subjective wellbeing as the major dependent variable, in terms of the theoretical conceptions outlined above, makes it possible for studies to contribute more to each other. Whether one focuses on interpersonal problems and other factors related to negative affect, which appear to be the concern of those oriented toward the more traditional problems of mental illness, or whether one concentrates on social participation, sociability, environmental variability, and factors that appear to be more related to positive affect and to be the concern of those oriented toward positive mental health, this conception offers a model that enables each type of study to contribute to an understanding of the basic phenomenon of subjective wellbeing. An emphasis on positive affect is a characteristic of the contemporary positive psychology movement (Kahneman et al. 1999; Seligman 2002; Ong and Van Duhmen 2007).

Development of the Affect Balance Scale

The general strategy followed in developing the ABS was to ask about common situations that persons in the general population would be likely to have experienced. We asked respondents a series of questions concerning different pleasurable and unpleasurable feeling states that they might have experienced in the recent past. The items were selected from a large list gleaned from reports of everyday experiences in magazines and newspapers and deliberately avoided experiences that had a medical or psychiatric tone. After some pretesting, 10 items were selected that exhibited a range of frequency and appeared to be readily understandable by respondents at a basic 8th grade language comprehension level.

The items finally selected, ordered in terms of their frequency, were:

Positive Items

1. Pleased about having accomplished something
2. That things were going your way
3. Proud because someone complimented you on something you had done
4. Particularly excited or interested in something
5. On top of the world

Negative Items

1. So restless that you couldn't sit long in a chair

2. Bored
3. Depressed or very unhappy
4. Very lonely or remote from other people
5. Upset because someone criticized you

In some later cross-culturalwork, the "restless" item was changed to read "So restless that you couldn't sit still" because the specification of sitting in a chair was deemed too restrictive in meaning.

While the items were selected to reflect a wide range of positive and negative feeling states that would be common in a heterogeneous population, they do not constitute a probability sample of items from a population of possible positive and negative experiences. While such a sampling might be desirable, it would be difficult to know how to go about constructing such a sample of items since the limits of the population are not known.

Underlying our strategy is the assumption that people tend to code their experiences in terms of (among other things) their affective tone – positive, neutral or negative. For our purposes the particular content of the experience is not so important. We are concerned with the pleasurable or unpleasurable character associated with the experience. Thus, we phrased our questions in general terms, such as "Did you feel pleased about having accomplished something?" and "Did you feel proud because someone complimented you on something you had done?" rather than specifying the particular "something" that might have been accomplished or been the reason for the compliment.

Two examples may make this point clearer. We could have asked many different questions varying around a common theme, such as "pleased because you solved a difficult problem" or "pleased because you could relax and do nothing." For purposes of developing a measure of positive affect, the difference between those who get pleasure from solving difficult problems and those who get pleasure from doing nothing is irrelevant as long as responses to the items show a substantial degree of correlation. If there is, in fact, an underlying dimension of positive affect, it should show up in positive correlations among the pleasurable items because those who are low in positive affect would be unlikely to report pleasurable experiences, while those who are high would report having many such experiences.

We also could have asked a series of questions containing items such as "proud because you won a prize in a contest" or "proud because someone complimented you on a party you had given" that would have given greater scope to the respondent's individuality. We suspected, however, that the number of people who would respond positively to such specific items would not be great enough to justify their use in a broad survey. They might be appropriate, however, if one were studying samples of a more restricted nature, in which many people might be involved in contests or in party-giving. For our study, it seemed most appropriate to make the items as general as possible and to focus attention on the affective tone of the feelings rather than on the particular experiences that gave rise to the feelings.

Another aspect of our research strategy was to ask questions in terms of a particular time focus – the past few weeks – rather than in terms of generalized time dimensions, e.g., do you feel this way "often" or "not very often," as is frequently done in psychological research. This concern for the recent past stemmed from our theoretical orientation toward the effects of current environmental forces on feelings of subjective wellbeing. In studying the effects of changes in the current environment, we are interested in current feelings and the changes in these feelings over time. If we asked for a more generalized report on feeling states, we would be measuring long-term trends that might reflect personality dispositions more than current environmental situations. While personality dispositions undoubtedly have some effect on the kinds of experiences people have and probably on the way they interpret and remember them, we believed that focusing attention on experiences and feelings in the recent past would enable us to discern better the relative contribution of environmental factors to psychological wellbeing. Researchers with other

interests have focused on stable personality affect dispositions but have also found an independence of positive and negative affect (Watson et al. 1988).

Variations in Using the ABS

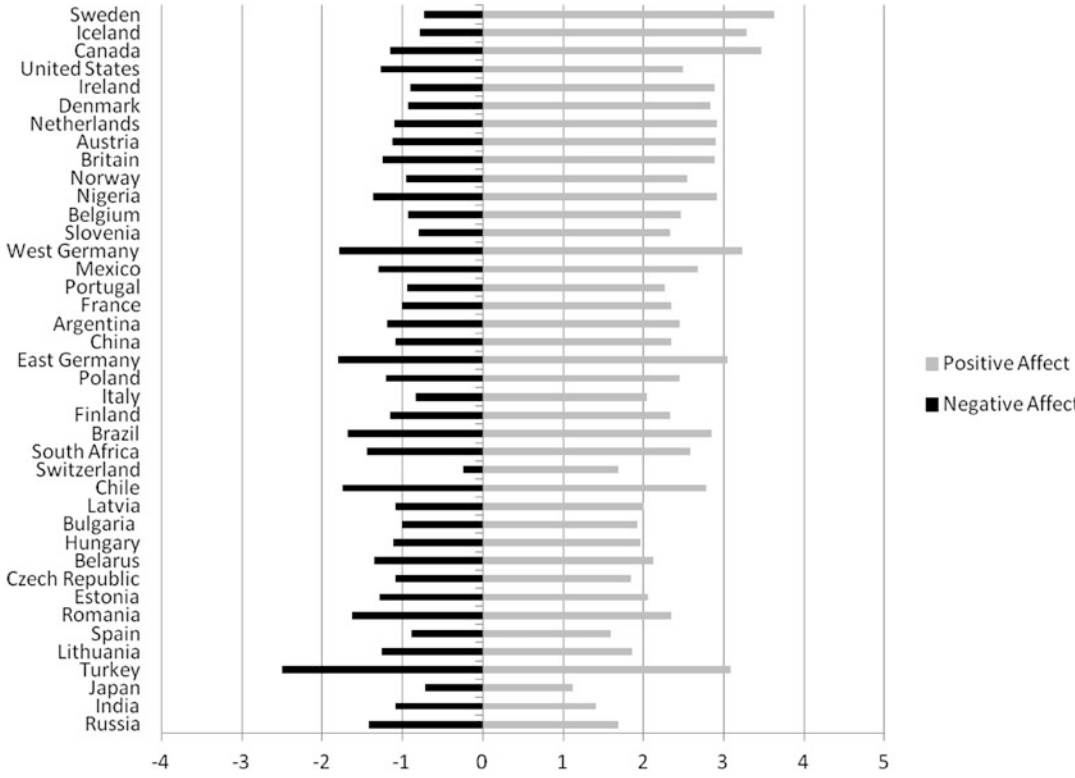
While the actual items that make up the ABS should remain the same (within the limits of cultural relevance when the scale is used in different cultures from that in which it was developed) if one is to compare results from different studies, the researcher can vary the time frame and the frequency categories to suit the research questions without fundamentally altering the validity of the scale.

One of the important decisions a researcher who is going to use the ABS is what time period to ask about. The length of time period will influence the frequency of responses; the longer the time asked about the greater the frequency of reported experiences, although the relative frequency order of the items appears to be relatively unaffected by the time period asked about. The time period of interest will depend on the research question. If the researcher is interested in the influence of daily events on hedonic wellbeing, then it makes sense to ask about frequency of feelings during a day. If one is interested in the influence of short term events such as a blackout or the World Cup, it might be best to ask about the last few days or the last week. If one is interested in longer term events such as a vacation or an election campaign, one might want to ask about the frequency of feeling states in the last few weeks or, less specifically, the recent past. If one wanted to treat a more persistent and not time bound sense of the frequency of positive and negative feeling states, one could ask about how frequently the respondent felt the various ways "in general." In short the temporal reference period is determined by the research question rather than by the nature of the particular items.

The items are asked in terms of how frequently the respondent has felt certain ways within the chosen time fame. For example the general question would be: "How often have you felt..., e.g. Proud because someone complimented you on something you had done?... Bored?" etc. The frequency response categories can be adjusted to fit the time frame or to increase the range of variability. In the original pilot study where the time frame was the last week, the question was "During the past week, did you feel..?" The response categories were "no", "if yes, how often—once, several times, often?" In later studies where the time frame was longer, e.g. "two weeks" or "the last few weeks", the categories were expanded to: "never", "not very often," "often" and "very often." The response categories are treated as if there were equal intervals between the categories, that is, the difference in frequency between "not very often" and "often" is the same as the difference in frequency between "often" and "very often." Studies of vague quantifiers like these indicate that this is probably an incorrect assumption and that using more precise estimates of the actual frequencies associated with vague natural language quantifiers would improve the strength of the relationship between the individual items and the overall measure of wellbeing. But in practice, the effects are rather small and the variance among individuals is large. To use more precise quantitative measures of frequency would require getting much more data from each individual respondent than is usually possible. Bradburn and Miles (1979) have shown that treating the response category values as equal intervals, i.e., scoring "never" as zero, "not very often" as 1, "often" as 2 and "very often" as 3, does not materially alter the results.

International Results

The ABS has proven to be useful in many comparative population studies, such as the World Values Survey (Hallam 1991; World Values Study Group 1994) and of special populations, such as students (Lorr and Wunderlich 1980; Bolin and Dodder 1990) and the elderly (Himmelfarb and Murrell 1983; Liang 1985;



Graphic 11.1 The affect balance scale for selected nations 1994. The nations in the graphic are in order of their hedonic level from best to worst hedonic level; they are specified according to their positive and negative affect scores (Source: Special tabulation from data in Diener and Suh (1999) and World Values Study Group (1994))

Kempen 1992). A comprehensive list of studies is presented in the World Data Base of Happiness (http://worlddatabaseofhappiness.eur.nl). The affect balance scale for countries with broad varying populations shows the following results (Graphic 11.1).

The affect balance scores showed a significant variation between the countries not only in overall ABS scores but also the mix of positive and negative affect levels. Sweden has the highest overall score; Russia the lowest. The graphic shows vividly that a hedonic affect balance levels can be the result of very different positive and negative influences. For example in Sweden positive affects predominate greatly over negative affects. No country shows more negative affect than positive affect, but countries like Turkey and Germany have a high amount of both negative and of positive affect. The results are somewhat different in that Germany achieves a relatively high overall level of wellbeing while Turkey, with more tilt towards negative affect, ranks lower in overall wellbeing. These country differences vividly illustrate the importance of measuring both the positive and negative dimensions of hedonic wellbeing to get a more complete understanding, not only of overall wellbeing but also the way in which those levels are achieved.

In Table 11.1, using a14-iteminstead of the10-itemscale, we see that Iceland (66) shows the best and Ethiopia (11) the worst Yesterday's Affect Balance Score. In between we have the United States (54) which show a rather high score, but on the same level as Indonesia (54). Brazil follows very closely (53) andChina (51) is very close as well. This is a huge difference in comparison with 1990/1991. The big states have come closer together with the exception of India. We see that in comparison with

Table 11.1 14-item yesterday's affect-balance- scores 2007/2008 in countries of the world's highest population size and the best/worst country level

Country	Population (2008) in million	Hedonic level range −100 to +100
Iceland	317,414	66
		. . .
United States	309,349,689	54
Indonesia	234,951,154	54
Brazil	191,543,237	53
China	1,337,825,000	51
India	1,224,614,327	31
		. . .
Ethiopia	79,446,419	11

Data population http://data.worldbank.org/indicator/SP.POP.TOTL?order=wbapi_data_value_2008+wbapi_data_value&sort=desc
Data: R. Veenhoven, World Database of Happiness, collection Happiness in Nations, Overview of happiness surveys using Measure type: 236/14-item yesterday's affect balance, viewed on 2012-12-11 at http://worlddatabaseofhappiness.eur.nl

Graphic 11.1 China and Brazil have increased their level so they are now on nearly the same like the USA. India (31) is still the worst country in the group of the five countries with the most inhabitants of the world.

Final Remarks

Positive and negative affect are measured separately and then the Affect Balance is computed by subtracting the negative affect score from the positive affect score and transforming the resulting scores into positive values. There is no correlation between the positive and the negative score of the affect-balance-scale. This had been shown in factor analyses. Nevertheless the index is formed by subtracting the "negative affect scores" (NAS) from "positive affect scores" (PAS). This paradox has been justified by showing that the two single cumulative scales, PAS and NAS taken together form a-one-dimensionalunfolding scale (Van Schuur and Kruijtbosch 1995). It is also argued that looking separately at the scales would lead to a greater power in understanding happiness. (Diener et al. 2009). I agree with this view and believe that treating the two sub-scalesseparately will produce more fruitful research in the long run and may well be the most interesting data with which to study country differences and trends over time. Kyung and Mueller regard the idea of balancing (positive affect-negativeaffect) to be without merit. So balancing in their point of view is not more useful than summing up (positive affect score + inversely keyed negative affect score) or interpreting the scales separately (Kyung and Mueller 2001).

While widely used, the ABS has not escaped criticism, especially the major finding that the two dimensions are independent, although both related in the expected directions to overall measures of happiness or life satisfaction. This surprising finding has given rise to various critiques that attempt to explain the results either as a methodological artifact or as a result of an incorrect measurement model. Although the preponderance of evidence in the nearly 50 years since the original publication of the scale supports the basic proposition that positive and negative affect should be measured separately and that they have, for the most part, separate correlates, agreement on the theoretical explanation for the independence and the best wording for the scale has still not been reached.

One of the first critiques (Cherlin and Reeder 1975) argued that the finding of independence was an artifact of the way the questions were asked. Independence could have come from a response set, i.e. the tendency for some respondents to agree or disagree with items, regardless of their content or that asking for feelings over a time period as long as a few weeks reduced the correlation that would occur if one had asked about a shorter period of time. They also noted that the items that asked about positive and negative feelings expressed in general terms correlated more highly with each other than positive items tied to specific events such as "complimented you on something you had done" correlated with general negative items.

Although thetwo-factorstructure of the ten items that make up the ABS has been replicated (McDowell and Praught 1982; Van Schuur and

Kruijtbosch 1995) there is something to be said for the view that there is a difference between the items that are more specific and those that are more general. In McDowell and Parught's factor analysis the items "On top of the world" and "things going your way" showed somewhat stronger negative correlations with the negative items "lonely", "depressed", and "bored" and could have made a third weak factor if forced. In another study (Van Schuur and Kruijtbosch 1995) the authors using an unfolding measurement model (Coombs 1964) found that two items: "upset because someone criticized you" and "So restless you could not sit long in your chair" did not fit the scale based on the 1981 European Values Study data and "Upset. . ." did not fit the scale using the 1990 data.

While the ABS model seems to fit fairly well in studies conducted in English speaking countries and those that participated in the European Values Study, extension to a large, more heterogeneous set of countries represented in the World Values Survey produced more a complicated story. MacIntosh (1998) applied a confirmatory factor analysis to the ABS using data from 38 nations and found that the model did not fit in any of the 38 countries. Whether this is due to translation problems or the use of a different measurement model is not clear, although it seems likely that the latter is the case since the average item inter-correlations for the positive and negative scales and the minimal correlation between the positive and negative scales observed in previous international surveys appeared to be replicated. Macintosh concluded that a 4 factor model (accomplishment, feelings of isolation, feelings of elation and need for additional stimulation) would fit the data for the U.S. and Canada.

The ABS was developed as an experimental measure with the expectation that it would be refined and improved as it was used. While it has been widely used since its first publication nearly 50 years ago, little has been done to experiment with refining the particular items or clearing up some of the issues that have been raised such as whether items should be general or tied to specific experiences, what is the meaning of the two dimensions, whether there may be differences in response styles in different countries that affect the measures, or the proper measurement model to apply to the data. While it still appears to be a useful tool in measuring hedonic wellbeing in many large scale surveys, there are other measures that have been developed more recently that have considerable promise, e.g. Kahneman and Krueger's reconstructed day method (Kahneman and Krueger 2006). The renewed interest in hedonic wellbeing measures as indicators of subjective wellbeing at national levels suggests that it would be worthwhile to engage in a program of research to resolve some of these issues.

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Part III

Socio Economic Structures of Wellbeing

Happiness and Economic Growth – The Evidence

12

Richard A. Easterlin

This article summarizes the current evidence on the relationship between subjective wellbeing and economic growth, drawing on research carried on at the University of Southern California over the last decade (see Easterlin 2005a, 2009; Easterlin and Plagnol 2008; Easterlin et al. 2010, 2012; Easterlin and Sawangfa 2010). The focus is on the facts, that is, the evidence regarding the relationship of happiness to economic growth. Views that the empirical evidence differs from that presented here are evaluated.

The term "subjective wellbeing" encompasses a variety of measures of feelings of wellbeing – happiness, life satisfaction, ladder-of-life – which are treated here as interchangeable (cf. Easterlin 2010, pp. 8–9, 103–104; Helliwell et al. 2012, ch.2). Economic growth is measured as the annual growth rate of real gross domestic product (GDP) per capita. The article takes up in succession cross section studies, the long term time series relationship, the short term time series relationship, and counter-claims to the present findings.

Cross Section Studies

Are happiness and economic growth positively related? Attempts to answer this question are often based on the point-of-time bivariate relation between happiness and real GDP per capita, where the basic data are mean values of these two variables for each of a wide range of countries at a given date (Veenhoven 1991; Inglehart 2002; Frey and Stutzer 2002; Diener et al. 2010). By far the most comprehensive cross section study to date is that of Angus Deaton (2008) who analyzes the 2006 Gallup World Poll data for 123 countries. Deaton's Figure 2 (Deaton 2008, p. 57) is reproduced in full here as Fig. 12.1. The inference suggested by the figure is stated explicitly in Deaton's boldface title: "Each Doubling of GDP Is Associated with a Constant Increase in Life Satisfaction."

The standard measure of economic growth is that used by Deaton, real gross domestic product (GDP) per capita. The *rate of growth* is calculated as the *percentage* change in GDP per capita. Hence in graphs of SWB against GDP per capita, the latter is usually plotted on a log scale as in Deaton's figure, so that equal distances on the horizontal axis represent equal percentage changes in GDP per capita, not equal absolute increments. (An example of confusion on this score is Veenhoven (1991) p. 10 who refers to the use of a logarithmic scale as "the classic trick of scales.") If one plots GDP per capita in absolute dollar values, then one observes diminishing marginal utility of income. It is this plot of happiness against GDP per capita in absolute terms that has led some analysts to state that beyond some point equal increments of GDP result in progressively smaller increments of life satisfaction. However, if GDP is plotted on

R.A. Easterlin (✉)
University of Southern California, Los Angeles, CA, USA
e-mail: easterl@usc.edu

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DOI 10.1007/978-94-017-9178-6_12,

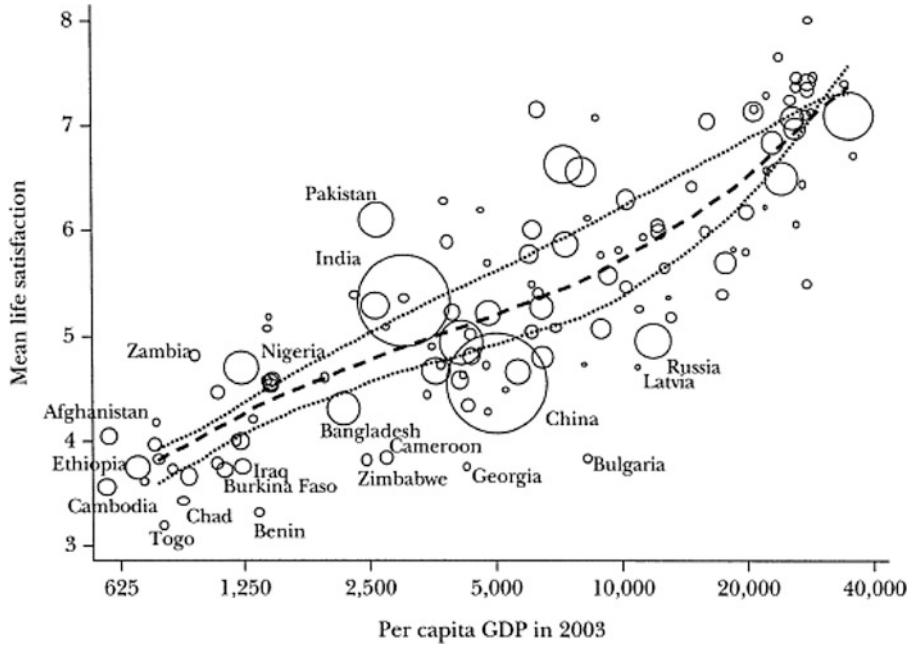

Fig. 12.1 Each doubling of GDP is associated with a constant increase in life satisfaction (Source: The figure and bold-face title are reproduced in full from Deaton (2008), 57. The cross section data are for 2006 and each circle is a country with diameter proportional to population)

a log scale as in Fig. 12.1, there is no diminishing marginal utility of income in cross sectional data – equal percentage differences in GDP are associated with equal differences in happiness between countries irrespective of whether the countries are rich or poor (compare Figures 1 and 2 in Deaton's [2008] article). Indeed, based on regressions of happiness on log GDP, Deaton finds that the difference in life satisfaction associated with a doubling of GDP in cross sectional data is, if anything, greater between richer countries than between poorer countries (Deaton 2008, p. 58).

The Long Term Time Series Relationship

For real world growth rates of GDP per capita, up to, say, 10 % per year, Deaton's boldface generalization in the title of Fig. 12.1 implies that doubling the rate of economic growth over time will double the increment in life satisfaction. The cross section is, of course, describing differences among countries at a point in time, not the actual experience of a given country over time. To evaluate whether Deaton's generalization about the cross sectional relationship is supported by historical experience, I summarize here the results of several time series studies covering recent decades done by my collaborators and me. The countries included are those with a fairly long time series of comparable SWB data. For each country, the longest time span available is used – usually a minimum of 12 years but typically much more. The original time series study of happiness and economic growth (Easterlin 1974) found that, when comparing identical happiness questions, there was an increase in happiness in the United States from 1946 to 1956–1967, followed by a decline to 1970, with a negligible net change over the entire 24 year period. This suggests that in order to ascertain the long term trend, one should aim to analyze as long a series as there is available, and the longer the series, the better.

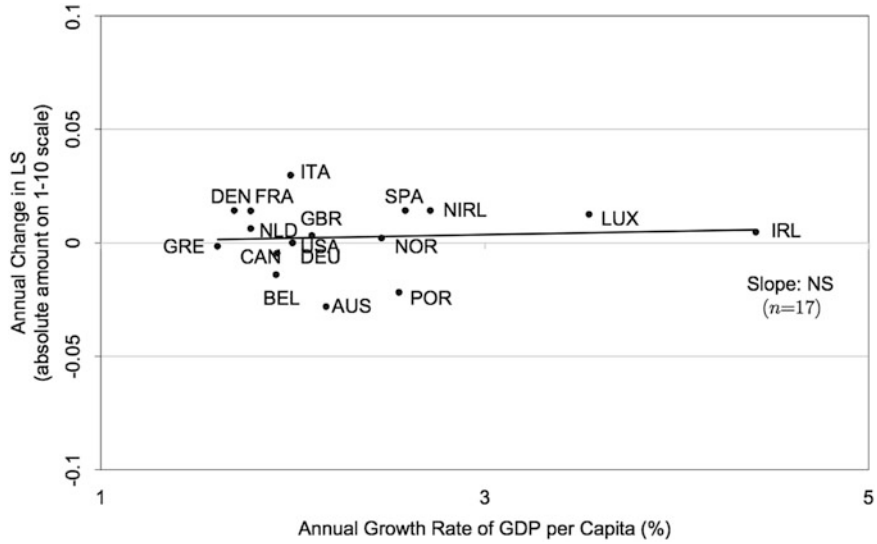

Fig. 12.2 Growth rate of life satisfaction and real GDP per capita, 17 developed countries (Source: Easterlin et al. (2010), Table S2. NS here and in subsequent figures signifies that the slope of the regression line is not significantly different from zero. The time spans of the country growth rates are for periods ranging from 21 to 34 years)

Meaningful use of time series requires careful scrutiny of the data. Is the SWB question the same across surveys? Are the response options the same? Do the interviewer instructions change? Does the question preceding the SWB question change? Are the data nationally representative? If not, what is the nature of the geographic and population coverage? Is the population coverage fairly large? Is the coverage consistent over time? Is the time span of the data long enough so that the trend is not distorted by short term movements? An intensive effort has been made to deal with such issues in the time series data used here (see, e.g. Easterlin and Sawangfa 2010, Appendixes B and C; Easterlin 2010, pp. 20–23, 58–63, 85–87, 112–113). My collaborators and I make no claim that the resulting time series data are faultless. We have done our best, however, to examine carefully the series for each country and to make the series reasonably comparable over time (An example of a pitfall in the use of WVS data is given subsequently in the section on "Alternative Views").

For each country the average annual growth rate of real GDP per capita over the full time span of SWB data is computed, along with the corresponding average yearly change in SWB. The observations for the various countries are then compared to see whether countries with higher rates of economic growth over time have significantly higher increments in subjective wellbeing – at the extreme, whether doubling the growth rate of GDP doubles the increment in life satisfaction. This is, of course, only a bivariate analysis, but so too are the cross section studies, such as Deaton's, on which generalizations are based about the effect of an increase in real GDP per capita on happiness.

The results are quite consistent and easily summarized:

1. For 17 developed countries with time series ranging from 21 to 34 years, there is no significant relationship between the rate of improvement in life satisfaction and the growth rate of GDP per capita (Fig. 12.2). The countries included here are fourteen developed countries of Europe plus the United States, Canada, and Australia. For most countries the long term GDP growth rates are between 1.5 and 3 %, but for two, Ireland

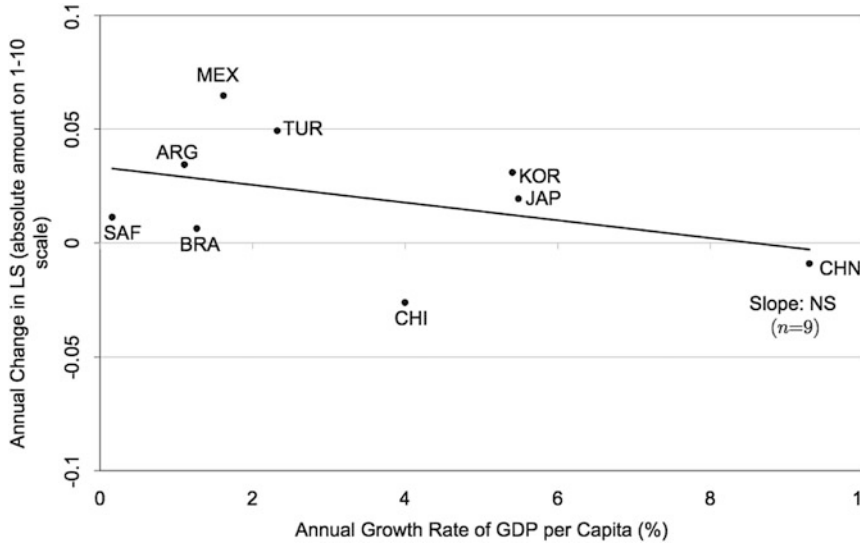

Fig. 12.3 Growth rate of life satisfaction and real GDP per capita, 9 developing countries (Source: See Fig. 12.2. The time spans of the country growth rates are for periods ranging from 15 to 33 years)

and Luxembourg, the rates are between 3 and 5 %. If Ireland and Luxembourg are deleted, there is still no significant relationship, as can readily be seen from a glance at Fig. 12.2.

2. For nine developing countries with time series ranging from 15 to 33 years, there is no significant relationship between the rate of improvement in happiness and the rate of economic growth (Fig. 12.3). The nine countries are those with a fairly long time series on SWB. They are typically fairly populous, four in Asia, four in Latin America, and one in Sub-Saharan Africa. The economic growth rates range from around zero for South Africa to almost 10 % per year for China. If China, the outlier of the group, is omitted, the regression coefficient remains not significant.
3. For 11 transition countries with time series ranging from 12 to 22 years, there is no significant relationship between the improvement in life satisfaction and the rate of economic growth (Fig. 12.4). The eleven countries range across central and eastern Europe and are those for which there is a life satisfaction observation near the start of the transition (the early life satisfaction observation is essential, cf. Easterlin 2009, p. 132, and the discussion of Figs. 12.9 and 12.13). The economic growth rates of the 11 countries range from slightly negative to about 3 % per year.
4. For all 37 countries taken together, with time series ranging from 12 to 34 years in length, there is no significant relation between the improvement in life satisfaction and the rate of economic growth (Fig. 12.5). The growth rates of GDP per capita typically range from slightly negative to almost 10 % per year. If the one outlier, China, is omitted, the regression coefficient is still not significant.

In sum, for rich, developing, and transition countries, whether pooled or analyzed separately, there is no time series evidence that a higher economic growth rate increases the rate of improvement in life satisfaction. Doubling the rate of economic growth does not double the increase in life satisfaction; rather, the evidence is that it has no significant effect at all. The contrast between the positive cross sectional relation and the long term nil relation, demonstrates the well-known happiness-income (or Easterlin) paradox (Easterlin et al. 2010). It also makes clear that the cross sectional relationship is no guide to actual historical experience.

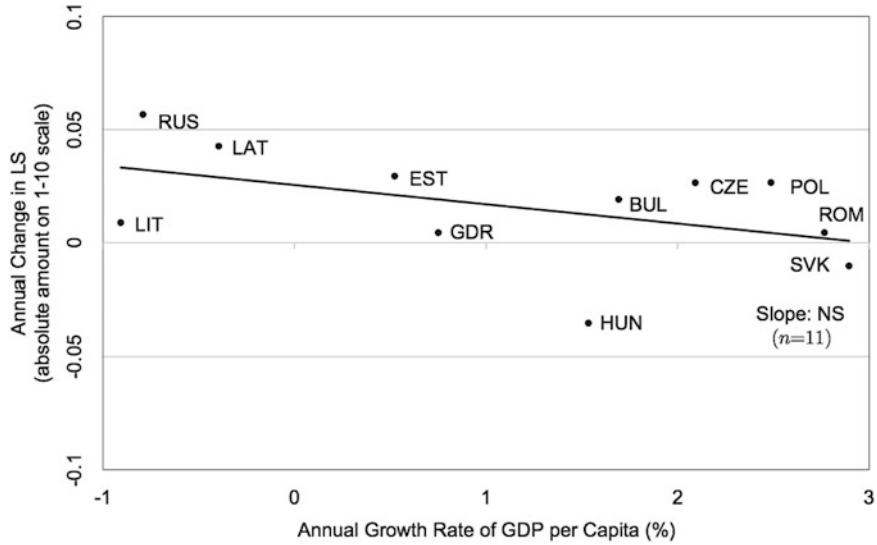

Fig. 12.4 Growth rate of life satisfaction and real GDP per capita, 11 transition countries (Source: See Fig. 12.2. The time spans of the country growth rates are for periods ranging from 12 to 22 years)

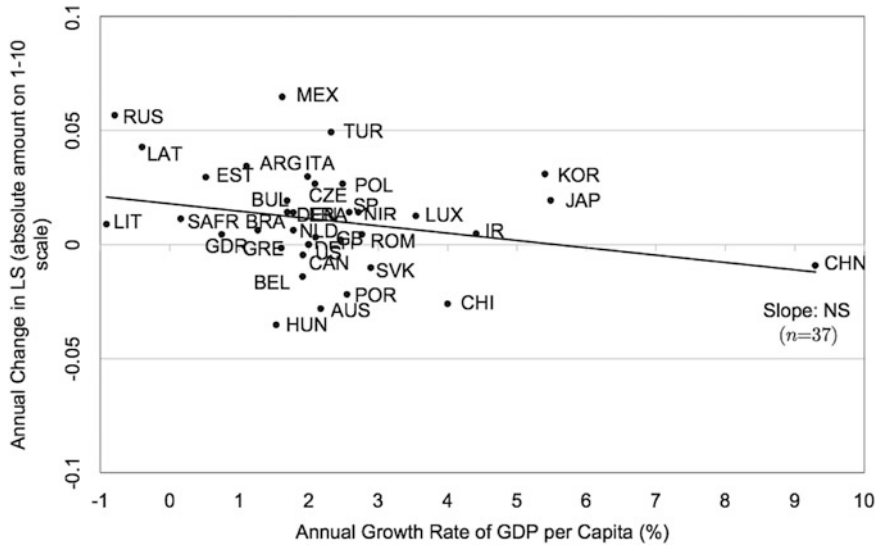

Fig. 12.5 Growth rate of life satisfaction and real GDP per capita, 17 developed, 11 transition, and 9 developing countries (Source: See Fig. 12.2. The time spans of the country growth rates are for periods ranging from 12 to 34 years)

Reasonably comparable time series data on SWB in less developed countries are in short supply. In the foregoing analysis, the World Values Survey (WVS) was the principal source and only nine less developed countries were available with reasonably long and comparable data over time. Fortunately the annual Latinobarometer surveys, covering 17 Latin American countries since 1994, provide a new and additional body of data on the experience of

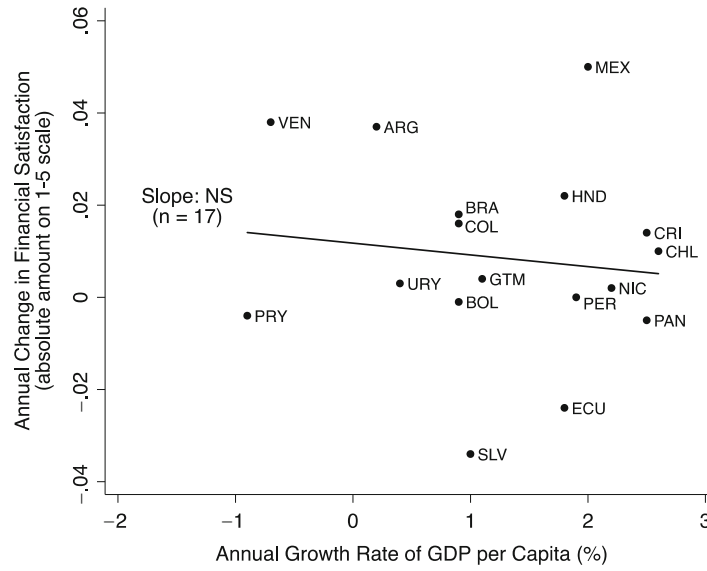

Fig. 12.6 Growth rate of financial satisfaction and real GDP per capita, 17 Latin American countries, 1994–2006 (Source: Easterlin et al. 2010, Table S1)

less developed nations. The life satisfaction question in the Latinobarometer surveys changes too frequently to be used, but the question on financial satisfaction is the same from 1994 to 2006:

> How would you define, in general, the current economic situation of yourself and your family? Would you say that it is. . ..
> 1 = Very bad; 2 = Bad; 3 = Regular; 4 = Good; 5 = Very Good

One would expect that the responses to this question would be even more closely linked to economic growth than those on life satisfaction, because the central feature of economic growth is a rapid increase of real incomes, and such an increase would presumably lead directly to greater satisfaction with one's financial situation. Hence, one might expect that countries with higher growth rates of real GDP per capita would have greater increments in financial satisfaction.

In fact, there is no evidence that a greater increase in financial satisfaction accompanies more rapid economic growth. As in the analysis of the WVS data, the regression line fitted to the Latin American data indicates a nil relationship (Fig. 12.6). The results from the Latinobarometer buttress those from the World Values Survey.

If there is any less developed country for which one would expect a positive impact of economic growth on SWB it is China, whose growth since 1990 from an initially very low value has been at the highest rate ever recorded, a fourfold multiplication of real GDP per capita in two decades (Heston et al. 2012). Household appliances such as refrigerators and washing machines – quite rare in 1990 – are now commonplace in urban areas (OECD 2010a). Color television sets currently average over one per household. By 2008, almost one in ten urban households owned a car and China had become the world's leading automobile producer (OECD 2010b).

Yet, the combined evidence from six SWB surveys is that life satisfaction in China has not improved, and, if anything, may have declined somewhat (Easterlin et al. 2012). Life satisfaction appears to have followed a U-shaped trajectory, bottoming out in the first part of this millennium; the recovery since then has left SWB somewhat short of its 1990 level (Fig. 12.7).

The six surveys in Fig. 12.7 vary in their comprehensiveness. In general, they are more representative of urban areas, but, then, income growth was much higher in urban areas (Chinese Academy of Social Sciences 2011). If economic growth has a strong positive effect on SWB, one

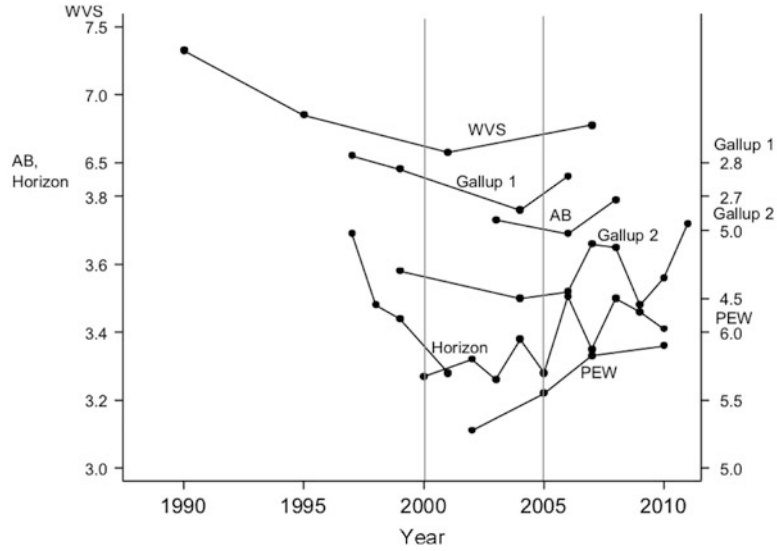

Fig. 12.7 Mean life satisfaction, China, six series, c. 1990–2010 (Source: Easterlin et al. (2012), Table S1. Scales on each side are for mean life satisfaction in specified survey)

would expect that in a two-decade period of more than fourfold growth of real per capita income, any sizable impact on SWB would be picked up in most of these surveys. Yet, all but one fail to give any indication of a marked increase of the type one would expect based on the cross section results.

The one exception in Fig. 12.7 is the PEW survey. But in this survey the initial observation falls at the economic trough, and the subsequent increase captures the recovery segment of the U. This is evident from comparison with the other surveys in Fig. 12.7. It is also apparent from data in the PEW survey itself. Among other things, respondents were asked, "Now thinking about our economic situation, how would you describe the current economic situation in China? Is it very good, somewhat good, somewhat bad, or very bad?" Here are the responses to this question, along with the survey values for mean life satisfaction in 2002 and 2010:

Year	Economic situation (% somewhat or very good)	Mean life satisfaction (scale 0–10)
2002	52	5.27
2010	93	5.85

Clearly the increase in life satisfaction in China reported in the PEW survey occurs in conjunction with a marked improvement in the economy.

The Short Term Time Series Relationship

The PEW data illustrate a widely observed relationship, namely, that in the *short term* happiness goes up and down with the state of the economy. This relationship has been demonstrated for a group of developed countries by DiTella et al. (2001). It is illustrated here for the developed bloc by the recent experience of the United States, where the Great Recession has brought happiness to the lowest level ever recorded in the General Social Survey (Fig. 12.8, see also Deaton 2011). Micro-economic equations consistently show that unemployment has a significant and sizable negative impact on happiness (Frey and Stutzer 2002; Layard 2005; Oswald 1997). The recent United States experience provides a dramatic illustration.

The short term positive association between happiness and GDP holds also in the transition

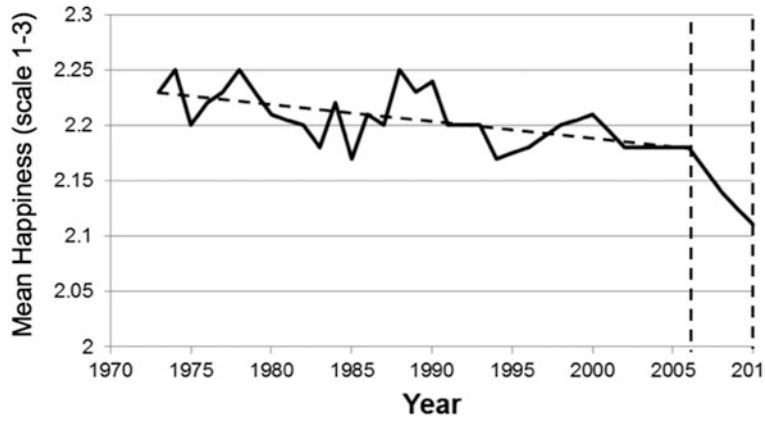

Fig. 12.8 Mean happiness, United States, 1973–2012 (*vertical dotted lines* indicate period of Great Recession) (Source: NORC (2013))

countries. The U-shaped pattern of life satisfaction in China's transition seen above corresponds to the rise and fall of the unemployment rate there (Easterlin et al. 2012). Similar U-shaped movements are apparent in transition countries in Europe for which the time series data encompass the onset of the transition. Figure 12.9 presents life satisfaction and GDP data for three of these transition countries (for others, see Easterlin 2009, pp. 88–91). The timing of the movements in life satisfaction and GDP is closest for the GDR, where there are annual data for both series. For Estonia and the Russian Federation, for which only intermittent life satisfaction data are available, one finds both life satisfaction and GDP with similar U-shaped changes. If the GDP observations are confined to those dates for which only the intermittent life satisfaction data are available, the timing pattern becomes even more similar. The synchronous short-term U-shaped movement of both life satisfaction and GDP is typical of the European transition countries. If trend lines are fitted that span both the contraction and expansion periods, the long term relationship is typically nil, in contrast to the short term positive relationship (see Easterlin 2010, p. 100). Some analysts, who use data that do not include the initial contraction phase of the transition mistakenly take the positive happiness-income relation in the recovery period as indicative of the long-term trend (Frijters et al. 2004; Guriev and Zhuravskaya 2009; Sanfey and Teksoz 2007).

The short term positive association of happiness and income is found also in the developing countries. It is evidenced here in the Latinobarometer data used in Fig. 12.6, the best less developed country data for short term analysis because they are yearly. For both financial satisfaction and GDP, OLS trend lines were fitted to the full time span of data available for each country. The deviation at each date of the actual value from the trend value was then computed. For each country one typically finds that when GDP is above trend, financial satisfaction is above trend; when GDP is below trend, financial satisfaction is below – in short, that in each country deviations from trend for financial satisfaction and GDP are significantly positively related (Easterlin et al. 2010, Figure 3). Moreover, when one compares the 17 countries, the deviations exhibit a synchronous movement. In a year when one country is below trend, almost all of the others are; similarly, almost all countries are above trend at the same time. Figure 12.10 presents for both financial satisfaction and GDP the mean of the deviations for the 17 countries in each year. The GDP time series of mean deviations exhibits a clear pattern of collapse and recovery over the period, reflecting the world crisis precipitated by the Asian financial crisis of 1997 followed

Fig. 12.9 Mean life satisfaction and annual index of real GDP, 3 transition countries, 1989–2005 (Source: Easterlin et al. (2010), Table S5. Life satisfaction is measured on a 1–10 scale)

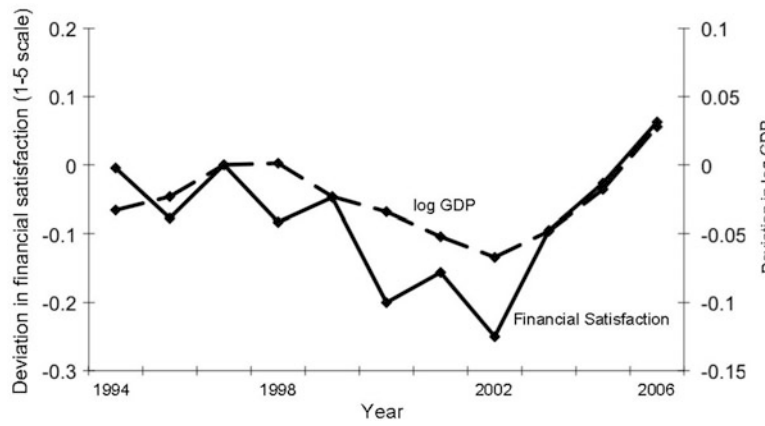

Fig. 12.10 Mean deviation from trend in financial satisfaction and in log GDP per capita, 17 Latin American countries, Annually 1994–2006 (Source: Easterlin et al. (2010), Tables S3, S4)

Fig. 12.11 Illustration of short term fluctuations and long term trends in happiness and income. Happiness (*H*) and Income (*Y*)

by the 1998 Russian crisis. The latter especially affected commodity prices and had a great impact throughout Latin America. What is noteworthy is that for financial satisfaction the time series of mean deviations exhibits a fairly similar movement of collapse and recovery to that for GDP. Clearly in this group of developing countries financial satisfaction and GDP are positively related in the short term. The general conclusion of this section, based on evidence for developing, transition, and developed countries, is that in the short term, happiness and economic growth are positively related. Economic contractions and recoveries induce corresponding movements in happiness.

Reconciling the Short Term and Long Term Relationship

In the short term happiness and income are positively related; in the long term the relationship is nil. Figure 12.11 illustrates how it is possible for these seemingly disparate patterns to exist. The solid lines illustrate the (assumed) actual time series movement of happiness (H) and income (Y). The dotted vertical lines set off expansions and contractions. These lines show how trough-to-peak (t-p) and peak-to-trough movements (p-t) in both happiness and income are synchronous and positively related. The broken lines trace the long term trends in happiness and income, and demonstrate that the happiness

trend remains flat despite the upward trend in income. *Fluctuations* in happiness and income (the short term movement) go together, but the *trends* in happiness and income (the long term movement) do not.

Alternative Views

Cross Section Evidence

Two types of evidence – cross section and time series – are claimed to contradict the findings reported above. The reasoning regarding the cross section evidence is directed at the happiness-income paradox, and appears to be as follows. If, at a point in time, happiness and GDP per capita are positively related among countries, then the time series finding of no relation must be wrong – the higher income countries must have experienced at some time in the past an increase in life satisfaction in conjunction with rising real income per capita (Arrow and Dasgupta 2009; Bok 2010; Guriev and Zhuravskaya 2009). Cross section evidence is also cited in this vein in the Stiglitz-Sen-Fitoussi report (2009).

To say the least, this argument is puzzling. First of all, if economic growth raised life satisfaction at some time in the past, one would expect to find evidence of this effect in current time series for middle- or lower-income countries. Yet, as the data presented here demonstrate, there is no evidence of such an effect, China being the most recent and striking example. Second, the argument assumes that the data demonstrate a causal relationship, in which GDP is the cause of differences in happiness among countries. The possibility that some other factor(s) such as public policy might account for the happiness differences is not even considered (cf. Easterlin 2013). Finally, the essential meaning of "paradox" is the seeming contradiction between the first and second terms of the paradox – in this case, between the cross section and time series results. That scholars would cite cross sectional results as disproving the time series finding is to ignore the very meaning of paradox. If there were no positive relation in the cross section, there would be no paradox! The cross section does not disprove the time series, any more than the time series disproves the cross section. The challenge is to develop an explanation that reconciles these seemingly contradictory empirical findings (for examples, see Clark et al. 2008; Easterlin 2010, chs. 1, 2, 5).

Time Series Evidence

Time series studies claiming that the relationship between happiness and income is, in fact, positive are a more direct challenge, especially because the underlying data in such studies typically overlap considerably with those used here. One of the first such studies was an article by Hagerty and Veenhoven (2003). This has been critiqued by Easterlin (2005b) who pointed out, among other things, the lack of statistical significance of their results. This criticism has been acknowledged by Hagerty and Veenhoven to be correct (Hagerty and Veenhoven 2006).

An article by Ronald Inglehart and his collaborators (2008) concludes that the life satisfaction and happiness measures in the WVS reflect different determinants, the former, economic conditions, and the latter, political circumstances. They argue that "many ex-communist countries experienced democratization accompanied by economic collapse, resulting in rising happiness and falling life satisfaction" (p. 277). Their conclusion that falling life satisfaction accompanied deteriorating economic conditions is consistent with the short-term positive happiness-income relation in transition countries described above. However, their inference that happiness followed a different course, reflecting improved political conditions, is at variance with the view expressed earlier that happiness and life satisfaction are similar concepts; hence they should change similarly over time.

The explanation of the seemingly disparate finding for happiness by Inglehart et al is that it is a statistical artifact, illustrating the point made earlier about the need to study time series data carefully. The upward trend in happiness that

Table 12.1 Percentage of black population in top two response categories of happiness and life satisfaction: South Africa, 1988–1995

	1988	1994	1995
Happiness	32	80	39
Life satisfaction	37	86	45

Source: South African quality of life trends study, kindly provided by Professor Valerie Møller

they report results from a "primacy bias" in the happiness data due to a change in instructions to the interviewers between adjacent waves of the survey data that they use. In wave 2, interviewers were instructed to alternate the order of response choices from one respondent to the next. Thus respondent 1 would be presented with choices ranging from "very happy" down to "not at all happy," while respondent 2 would be presented with "not at all happy" first. There are a number of survey studies demonstrating a tendency for respondents to favor earlier over later choices (Belson 1966; Chan 1991; Schuman and Presser 1981). In wave 2, therefore, half of the respondents would have been more inclined towards less happy choices, by virtue of being presented with the more negative options first. In wave 3, however, the "very happy" option appears first, and the instruction to alternate response options no longer appears. Hence happiness responses in this wave would tend to be biased upward relative to the preceding wave. No such change in instructions occurs in regard to the life satisfaction data, and this is why the life satisfaction data are relied on here in Figs. 12.2, 12.3, 12.4, and 12.5.

In fact, there is evidence from South Africa's experience that life satisfaction and happiness move very similarly in conjunction with democratization. In May 1994, 1 month after the country's first democratic election, a survey was conducted that included questions about both happiness and life satisfaction. Table 12.1 presents for both measures the percentage of the black population in the top two (out of five) categories at that time, and the corresponding percentage at the two adjacent dates when similar surveys were conducted. Note how by both measures the wellbeing of blacks soared around the time of the election. But as noted sociologist Valerie Møller, who was responsible for the collection of these data, observes: "[P]ost-election euphoria was short lived. Satisfaction levels have since returned to ones reminiscent of those under the former regime" (Møller 2007). This return is registered by *both* SWB measures. Moreover, the magnitude of rise and fall is virtually identical for the two measures. This is striking evidence of the tendency for happiness and life satisfaction to move together, not differently, in response to a major change in political conditions.

A recent article by Diener et al. (2012) using Gallup World Poll data reports a positive time series relation between life satisfaction and GDP per capita, which, in the view of the authors, contradicts the Easterlin paradox. The data that they use, however, covers only a 6-year period – too short to test the Easterlin paradox, and obviously dominated by the short term association between happiness and income.

The most widely-cited study claiming to contradict the findings reported here of a nil happiness-income relationship in the long term is that by Stevenson and Wolfers (2008). The recent update of this article, Sachs et al. 2012 (henceforth S-S-W 2012), is cited in the Helliwell et al. World Happiness Report (2012) as having "powerfully challenged" the present conclusion about the long-term relationship. According to the World Happiness Report, S-S-W show that, "both in countries covered by the World Values Survey and in those covered by the Eurobarometer, there has been an increase in life satisfaction over recent decades" (2012, p. 65). In fact, as will be shown in what follows, both the WVS and Eurobarometer results of S-S-W reflect the short-term, not the long-term relationship.

In regard to the WVS, the S-S-W analysis is based only on waves 1 through 4 (for most countries, actually waves 2–4), and the regression results rely heavily on outlier observations for the transition countries that reflect the short term relationship. It is not clear why wave 5 of the WVS, which became available as early as 2008, is not used in their 2012 study. It is used in the regressions presented here in Figs. 12.2, 12.3, 12.4, and 12.5, and also in the Easterlin and

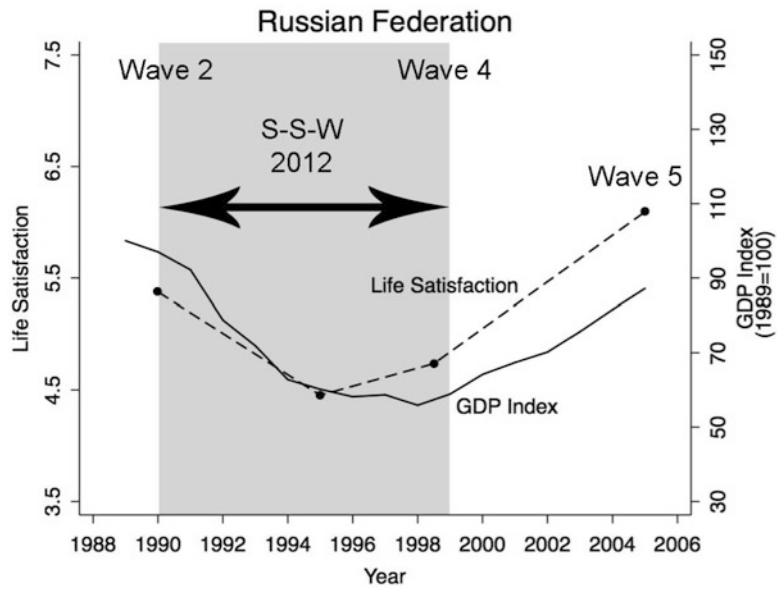

Fig. 12.12 Long term relation: Illustration of mistake (Confusing short term with long term relation) (Source: Easterlin et al. (2010), Table S5)

Sawangfa analysis, published in 2010. As for the Eurobarometer, S-S-W replace long-period time series data with shorter-period segments that reflect the short term relationship of happiness to income. Thus, in their Eurobarometer analysis, they go in the exact opposite direction from the stricture suggested above, to use the *longest* time series available.

As shown in Fig. 12.9, the typical pattern of life satisfaction in the transition from socialism to capitalism is U-shaped. If the time span of a country's WVS series for life satisfaction fails to capture both the contraction and expansion segments of the U, as is often the case when only WVS waves 2–4 are studied, then the short-term relation is likely to be observed rather than the long-term relation.

The WVS data for the Russian Federation analyzed by S-S-W provide an example. As is clear from Fig. 12.12, life satisfaction in Russia describes the typical transition pattern over the period 1990–2005, the time span used for the Russian Federation in Figs. 12.4 and 12.5. S-S-W, however, confine their analysis to waves 2 thru 4, the shaded area in Fig. 12.12. Their time span is thus largely restricted to the contraction phase of the Russian Federation's transition, and consequently they observe large negative changes in both life satisfaction and GDP (S-S-W 2012, Figure 6). If they had included wave 5, they would have found, instead, the relationship plotted in Fig. 12.4 here, a positive change in life satisfaction associated with a slightly negative change in GDP. The S-S-W result for the Russian Federation based on WVS waves 2 and 4 is representative of that for several other transition countries – Latvia, Lithuania, and Belarus – all of which are outliers in S-S-W's Figure 6, and contribute importantly to their statistical result of a positive regression relationship between growth and happiness.

Slovenia is an example of a transition country in which only the expansion phase of the transition is captured in the WVS life satisfaction data. For this reason it is excluded from the analysis in Figs. 12.4 and 12.5; however, S-S-W include Slovenia. As shown in Fig. 12.13, the wave 2 survey of life satisfaction in Slovenia occurred at the trough of the U; and the subsequent movement from wave 2 to wave 4 spans the expansion phase of the transition. Consequently, in the S-S-W regression analysis Slovenia appears as an outlier with a large positive change in both life satisfaction and GDP. As in the case of the Russian Federation, S-S-W are again capturing the short run, not long run relation of happiness

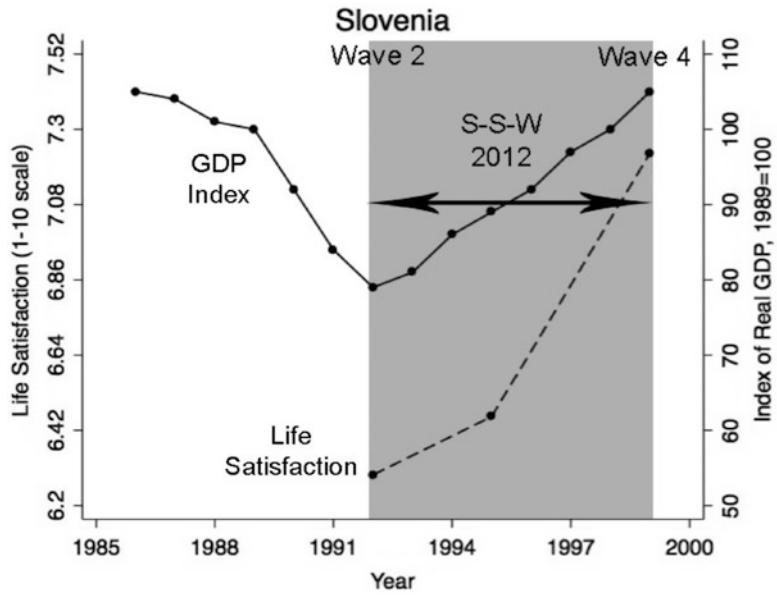

Fig. 12.13 Long term relation: Illustration of mistake (Confusing short term with long term relation) (Source: Easterlin (2010), 91)

to income. It is short run changes such as these that largely explain the positive time series relationship in the WVS reported by S-S-W.

S-S-W's positive regression result is also partly due to two other outlier observations, whose importance in determining the regression result S-S-W specifically acknowledge:

> "There are also some interesting outliers…. Korea, for example, had only a modest change in subjective wellbeing and a very large increase in GDP [it is off-scale in their Figure 6]. Hungary experienced very little growth, but had a serious decline in life satisfaction. In the regression results reported below, we include these countries, but it is clear that excluding them would change our estimates (S-S-W 2012, p. 79)."

Hungary is, of course, a transition country, and the time span of S-S-W's analysis is dominated by the contraction phase of the transition there. Korea's "modest change" in SWB is due entirely to a low value for life satisfaction in 1982 and is probably the result of a bias caused by the survey's timing. The 1982 survey was conducted only a few months after a devastating typhoon. Subsequent observations for Korea, from 1990 to 2005, reveal no improvement in life satisfaction despite the continuation of a very high growth rate of GDP per capita, about 5 % per year. S-S-W's analysis excludes the 2005 WVS wave 5 observation for Korea, but even between waves 2 and 4 (1990–2001) there is no improvement in Korea's life satisfaction.

Taken as a whole, the WVS analysis by S-S-W illustrates the relevance of the statement made earlier: meaningful use of time series requires careful scrutiny of the data. This does not mean that the data must be nationally representative as they assert. In some cases we use here series with about 70 % population coverage, but we have checked that the survey coverage remains reasonably consistent over time and that the population covered would be that expected to benefit from economic growth (cf. Easterlin and Sawangfa 2010, Appendices B and C).

Turning to S-S-W's Eurobarometer analysis, the positive association that S-S-W report between changes in happiness and income is again based on short term changes. Ireland provides an example. In the regression for 17 developed countries shown in Fig. 12.2, Ireland has the highest growth rate of GDP per capita, but only an average rate of change in SWB. In analyzing essentially the same data for Ireland, S-S-W replace the long term change from 1973 to 2007 of Fig. 12.2 by three shorter period movements (S-S-W 2012, pp. 82–84). Figure 12.14 reproduces Fig. 12.2 with the three sub-period observations for Ireland replacing the single 1973–2007 observation in Fig. 12.2.

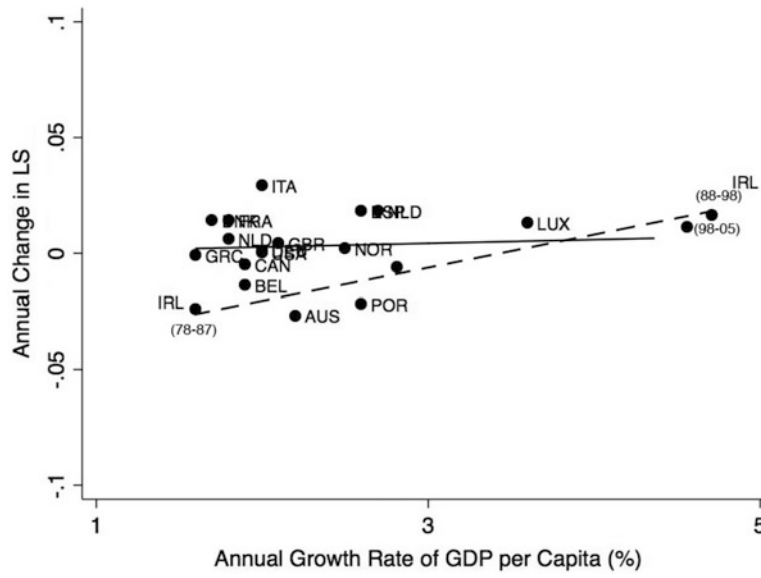

Fig. 12.14 Figure 12.2 with single value for Ireland, 1973–2007, Replaced by three sub-period values as in Sachs et al. (2012), Fig. 7

As can be seen, if one replaces the full period observation by the three sub-period observations it would tend to tilt the regression line in a positive direction. This tilt is illustrated by the broken line connecting the three points for Ireland in Fig. 12.14. The earliest S-S-W observation, that labeled 78–87, spans a period in which the economy plunged into a major recession – the economic growth rate is among the lowest and the rate of change in SWB is negative. The subsequent recovery observations (labeled by S-S-W, 88–98 and 98–05) yield values of high economic growth coupled with positive increments in life satisfaction. The three points together make for a positively-sloped regression line. For all of the Eurobarometer countries included in their analysis, S-S-W similarly replace the long term change with shorter term changes. After doing this, their fitted regression line is tilted moderately in a positive direction. Based on this tilt, they report that the "estimated satisfaction-income gradient resulting from these long-run differences is *marginally statistically significant* at 0.28" (S-S-W, p. 84, emphasis added). From this, it appears that even their shorter term observations are not short enough to produce a statistically acceptable positive regression relationship.

Conclusion

The question posed at the start of this article was whether the facts indicate that economic growth leads to increased happiness. The answer suggested by the evidence surveyed – 17 developed countries, 9 developing countries, 11 transition countries, 17 Latin American countries, and China – is, no. Contrary conclusions are due to analysts confusing the short-term (positive) relation of SWB and GDP with the long-term (nil) relation, or to a statistical artifact.

The evidence also indicates that the frequently cited positive cross section relation of happiness to income is not reproduced in time series, where the long term relation tends to be nil. Nor is there evidence in time series, such as that for China, that in low income countries economic growth raises happiness "up to some point," beyond which growth has no further effect.

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Wellbeing and Sustainable Consumption

13

Monica Guillen-Royo and Harold Langford Wilhite

Introduction

Human wellbeing and ecological sustainability have often been regarded as incompatible. This can be related to two assumptions grounded in the neoclassical economics approach to human welfare: the first is that people's needs and wants are insatiable, and the second is that humans are maximizing agents; this is that they always chose alternatives that maximize their individual wellbeing. If these assumptions hold, it follows that the way people construct their wellbeing, through increased depletion of natural resources, pollution and biodiversity loss cannot be reconciled with the sustainability of the earth eco-systems. However, evidence from wellbeing research suggests that people's wellbeing is determined by many factors besides the economic or material and that increased consumption and production does not necessarily result in increased wellbeing (Helliwell et al. 2012). This new evidence suggests that there is room for creative strategies that can boost both the wellbeing of the poor and the rich while preserving or at least not depleting further our natural environment.

Wellbeing can be defined as 'a state of being with others, where human needs are met, where one can act meaningfully to pursue one's goals, and where one enjoys a satisfactory quality of life' (WeD 2007). This definition is often considered too broad and most researchers chose to address wellbeing either through objective (economic growth, basic needs levels, life expectancy, pollution, capabilities, etc.) or subjective (self-reports on life satisfaction, negative and positive emotions, etc.) approaches. In the original definition of sustainable development, the World Commission on Environment and Development (WCED 1987), related sustainability to wellbeing expressed through the concept of needs of current and future generations: meeting the present generation's current needs should not restrict future generation's capacity to meet their needs. The report also suggested that a modification of our ideas on what constitutes 'progress' was in order in light of the severe environmental impacts of current notions of development. It suggested that the conventional equation needed to be reversed, putting environmental carrying capacity foremost and economy second. In this reverse thinking, the design of socio-technical systems and economic development had to be adjusted to sustain environmental carrying capacity.

In this chapter we will give our attention to the domain of research and policy that refers to itself as sustainable consumption, loosely regarded as efforts to reduce either the environmental impacts of consumption, or to reduce consumption itself, measured in terms of natural resources such as water or energy, or in terms of material throughput. The bulk of these efforts have

M. Guillen-Royo (✉) • H.L. Wilhite
Centre for Development and the Environment, University of Oslo, Oslo, Norway
e-mail: guillenroyo@yahoo.com; h.l.wilhite@sum.uio.no

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implicitly accepted that a transformation to sustainable consumption can be made to happen within a paradigm of expanding needs and expanding economic growth. However, the record shows that a quarter century after the publication of *Our Common* Future little progress has been made in reducing the environmental impacts of consumption. A global elite consisting of a relatively small portion of the global population are supporting their lifestyles with a highly intensive use of resources and materials. Measured in economic terms, it is estimate that 20 % of the global population consumes 80 % of global GDP and produces 80 % of climate gases. This elite consumption has driven the global community towards or past a number of environmental critical points, such as biodiversity loss, species death, air and water pollution and resource depletion.

From a consumption perspective, the most serious environmental problem facing our global society is climate change. This is because the main source of carbon is consumed energy, the use of which is intimately related to the ways that households create and experience comfort, cleanliness, light, food, transport and so on. Each of these in turn are contributors to the creation of wellbeing. In other words, the resolution of climate change cannot be accomplished without a significant reduction of energy consumption in the rich countries and this in turn will not be accomplished without considerable transformations of the everyday consumption of household appliances, cars, space heat and even per capita dwelling space. We claim that new perspectives on wellbeing and its linkages to consumption are essential to theorizing a transformation to sustainable societies.

This chapter outlines conventional and new research approaches to wellbeing and sustainable consumption and explores potential points of synergy between the two research domains. We begin by discussing how the non-satiation and maximization assumptions in neoclassical economics are represented in the social embedding of growth, market logic and assumptions of economic rationality based on an individualistic maximization process. Next, we turn to wellbeing studies, challenging traditional assumptions in terms of growth and wellbeing determinants. Later, we draw on evidence from social practice studies and the study of habits to justify the compatibility of sustainable lifestyles and human wellbeing suggesting a new research and policy agendas.

The Social Embedding of Growth, Markets and Rationality

In the dominating neoclassical approaches to consumption, a positive relationship is assumed between wellbeing, both macroeconomic and personal, and unbounded growth. People who are raised in capitalist or quasi-capitalist political-economic systems are exposed to positive associations between economic growth and wellbeing in virtually every domain of life, from work, to home to public spaces. Robbins (2004) refers to the embedding of this association as the culture of capitalism. Better lives are associated with growth in income as well as growth in the numbers and sizes of things possessed and consumed (houses, cars, televisions, travel). The culture encompasses politicians, marketing specialists, advertisers, corporate public relations specialists, journalists and families, 'all of whom conform to a vision of the world designed to maximize production and consumption of goods' (Robbins 2004:14). Robbins relates how this culture departed significantly from a culture of moderation, thrift and frugality that characterized the nineteenth century – having too many things and splurging on consumption were frowned upon. Home interiors were sparsely-decorated, and it was common for people to make their own clothes and to have gardens or access to their own farm products (in 1870, 53 % of the USA population lived and worked on farms). The culture premiering frugality and durability in the nineteenth century was transformed in the twentieth century into a culture premiering growth, encouraged by government policy, commercial actors and advertisers.

While there were significant junctures in Western economies in the twentieth century, including discontinuities, reversals and setbacks, these junctures have at most only temporarily detained the upward spiraling consumption cycle, and have not derailed the theory and policy hegemony of the growth imperative. At the level of home and household, dwelling sizes have steadily increased, as have numbers and sizes of rooms (bathrooms, bedrooms, kitchens and so on), furnishings and household appliances. There has been an increasing demand for more speed, more convenience and more comfort (Shove 2003). Per capita dwelling space has increased dramatically in OECD countries, as has the geography of everyday lives. In the domain of transport, Urry (2009), citing Buchanan (2002:131), writes that in 1800 people in the USA travelled 50 m a day. Shafer and Victor (2000: 171) estimate that in 2000, the average American travelled 50 km a day and that global population moves 23 billion kilometers daily. They project that this will increase by fourfold to 106 billion km by 2050.

The 'oil shocks' of the 1970s were one of the first wake up calls to the dangers of unbounded consumption. The domain of energy conservation, or energy savings was created in order to make the United States, Europe and Japan less vulnerable to imported oil by increasing the energy efficiency of their economies. The research and policy domains that framed energy savings were dominated by the promises of technical and economic efficiency. The consumption of energy services (kilometers driven, cars owned, home comfort, food convenience and so on) could, and should continue to grow, because it would enable improvements in wellbeing, but energy would be saved through increased technical and economic efficiency. From the 1990s markets were given the main role in promoting efficiency. Energy, which had been regarded as a public good was redefined as a market good. Energy companies and energy markets around USA and Europe were deregulated and in some cases privatized. The theory predicted that markets would serve up efficient technologies and the rational, maximizing consumers would understand the benefits of buying these technologies because the reduced lifetime energy running costs would compensate for the higher purchase costs.

After 40 years of efforts to justify this neoliberal approach, empirical studies both at local and national levels demonstrate quite clearly that energy consumption has not been reduced over this period in OECD countries. There is good reason to question both the political framing of growth and market steering, yet these continue to dominate energy policy. There are ample examples of theoretical critiques of market liberalism, such as that of Polanyi (2001), who argued that the 'free market' has probably never existed in any society, and in fact that the creation of markets has been dependent on State-generated legal frameworks and regulation of institutions such as private property, national currencies, legal contracts and credit markets. In spite of theoretical and empirically-based critiques, in the research domain that has supplied policy with theories of reducing consumption, the imagined consumer continues to be reduced to a processor of information about consumption choices based on deductive reasoning, economic utility maximization and motivational information (Spaargaren and Mol 1992; Maniates 2001; Shove 2010). This perspective ignores the influence of social norms, cultural practices and the structuring effect on choices of the material world. In short, conventional economic theory ignores the mutual shaping of consumption in the interaction between individuals, technologies and markets, as well as importance of public policies that frame the interaction. In section "Acknowledging habits" we flesh out new theoretical perspectives that acknowledge these interactions.

Challenging Satiation and Individualistic Maximization: Evidence from Wellbeing Research

In the previous section we discussed the neoclassical assumptions governing sustainable consumption research and policy. This section

presents evidence from wellbeing studies that challenge the traditional neo-classical assumptions of non-satiation and individual's utility maximization. Studies addressing wellbeing from the subjective, capabilities and human needs perspectives are increasingly providing insights into the lack of empirical evidence for these two main assumptions. They also shed light onto the strategies that at different levels (personal, societal, global) can promote wellbeing and sustainability both as outputs and processes.

Satiation: When More Is Not Necessarily Better

In addressing satiation it is useful to understand the common approach to needs in the neoclassical economics literature. Needs are not distinguished from wants, whims or desires, they are considered as drivers of actions and constitute the motives behind consumption (Guillen-Royo 2007). This justifies relying on approximations to needs and wants based on income or expenditure as well as the clustering of all goods and services acquired by a household or individual in one indicator. By doing so, neoclassical economists bypass the diminishing returns to utility or happiness of single goods and focus on the ever mounting satisfaction derived from consuming more of different goods and services. However, this assumption is empirically challenged by findings from wellbeing research; both from studies on aggregate consumption or income and from studies distinguishing between needs and wants.

Easterlin's pioneering work in 1974 initiated the debate on the empirical relationship between income and subjective wellbeing. Although initially expecting to find a positive relationship between a country's level of development and the SWB of its population, he could not find evidence to justify his expectation with the data available at the time for 23 countries. Since then, a wealth of studies has aimed at finding a positive relationship between economic development and SWB. Many have proven the existence of a relationship, although they have always stressed that this is weak and at the most non-linear (Veenhoven 1989; Diener et al. 1993; Inglehart 2000; Stevenson and Wolfers 2008). The lack of linearity in the relationship has led researchers working on SWB to argue for a curvilinear happiness-income relationship best captured by a logarithmic form. This implies that there exists an inflexion point after which more income progressively reduces its impact on wellbeing until this is nil (Clark et al. 2008). This inflexion point has usually been linked to the level at which basic needs are met, since after reaching this threshold more consumption will simply be directed to the satisfaction of superfluous wants or desires (Veenhoven 2007).

The point at which income does not add to people's SWB has been investigated in several within-country studies. Kahneman and Deaton (2010) showed that in the US for annual incomes higher than $75.000 the relationship between income and emotional wellbeing leveled off, meaning that there was no addition to happiness from higher income. This has great implications for sustainability policy as it means that the wellbeing of those earning over $75.000 in the US does not increase appreciatively even though their consumption and environmental footprints increase. That material wealth is associated with wellbeing only until a certain level of income is supported by research in ecological economics using objective indicators of wellbeing, such as the Index of Sustainable Economic Welfare (ISEW) (Daly and Cobb 1989) or the General Progress Indicator (GPI) (Hamilton and Saddler 1997). The ISEW accounts for GDP, unpaid household labor, social costs, environmental damage and income distribution. Studies in developed and developing countries show that from the seventies onwards GDP has continued to rise whilst the ISEW has declined (Max-Neef 1995; Stockhammer et al. 1997; Daly 2013). Daly (2013: 22) summarizes these findings arguing that 'beyond some level of sufficiency, growth in GDP no longer increases either self-evaluated happiness or measured economic welfare, but it continues to increase costs of depletion, pollution, congestion, etc.'

There is also evidence in the ecological economics literature that there are diminishing returns to wellbeing of additional consumption beyond a certain level. In a correlational study including data from 27 European countries Jackson (2008a) found that there was a point at which, expenditure on leisure, clothing and transport yielded negative returns in terms of wellbeing. This suggested that some European countries were experiencing lower wellbeing associated to large expenditures on these consumption categories. In addition, data from the UK showed that these categories, namely recreation and travel, have increased their requirements of fossil resources in recent decades (Jackson and Papathanasopoulou 2008), which opens the possibility for a reduction of expenditure and of resource use without necessarily experiencing wellbeing losses. This possibility of a 'double dividend' (less consumption and higher wellbeing) is also supported by research on basic needs' fulfillment. For example, Tay and Diener (2011) in their study across 123 countries found that income accounted for little of the variance of the SWB indicator after needs fulfillment was included in the analysis, confirming the reduced usefulness of additional income or consumption after a certain threshold has been reached.

Additional evidence from longitudinal studies on the relationship between income and SWB go beyond the diminishing marginal utility of income to argue for a zero marginal utility (Easterlin 2005). This is again related to the initial studies by Easterlin (1974), which demonstrated a lack of association between economic growth and happiness in the US from 1947 to 1970. Although, as mentioned earlier, there have been many studies attempting to contest this finding with data both from developing and developed countries, the methodological weaknesses of these studies have undermined the validity of the critiques (see Easterlin's chapter in this volume). One of the most serious challenges to the zero marginal utility argument is a study by Stevenson and Wolfers (2008) showing a positive link between average levels of GDP growth and life satisfaction using data from the World Values Survey data for 32 countries. Their study was critiqued by Easterlin and colleagues (2010) who pointed out that the apparently opposite findings are due to the authors focusing on the short-term, where income and SWB are positively related, instead of the long-term; where the relationship is null. Following Easterlin, while contraction and expansion periods might have a significant effect on a society's SWB, long-term economic growth does not and this applies to rich, poor and transition countries. Easterlin (2013) refers to the example of China, where real GDP has multiplied by four over the last two decades and yet life satisfaction has not increased.

Despite the diversity of findings in wellbeing research regarding the nature of the relationship between personal income – or consumption – and wellbeing, few studies if any support the non-satiation assumption (Graham et al. 2010; Easterlin 2013). Two mechanisms are said to be at play to explain both diminishing returns and no-returns to wellbeing of income: social comparison and hedonic adaptation (Frey and Stutzer 2002; Easterlin 2003; Layard 2005). Social comparison is related to the fact that people compare their situation with that of relevant others; the people who constitute their reference group (Schor 1998). These comparisons can be upwards (with richer people) or downwards (with poorer people) and they are usually more prevalent in those domains where consumption is more conspicuous such as housing, clothing, holidaying, etc. (Guillen-Royo 2010). The effect of comparison on wellbeing is usually reported to be negative, implying that when the consumption of the reference group rises, individuals' happiness falls (Layard 2005; Helliwell et al. 2012). However, in contexts where altruism or reciprocity are widespread, or when increases of income are associated with future opportunities, social comparison might be beneficial for wellbeing (Kingdon and Knight 2007).

A second mechanism used to explain the lack of association between income/consumption and wellbeing is hedonic adaptation suggesting that people adjust to their circumstances so that their wellbeing is not affected in the long run.

Evidence suggests that hedonic adaptation occurs in the case of increases income, as the effects of a higher level of consumption easily wear off as material aspirations increase (Frey and Stutzer 2002). This is not the case for other domains of life, like health and marriage (Easterlin 2003); these are domains that do not necessarily entail ever mounting levels of material consumption to be satisfied. So even if adaption to new material goods explains the desire for novelty and limitless consumption, it does not support the non-satiation argument, as this implies that people continue deriving utility or happiness from their consumption, which judging from recent studies does not seem to be the case.

Questioning Individualist Maximization: When Others and Nature Matter

The *homo economicus* is defined by a type of rationality based on the maximization of one's own utility or happiness while not necessarily accounting for other people or the environment when deciding what to consume. Neoclassical economics also acknowledges that sometimes rationality is bounded and individuals cannot make an informed choice because information is too costly or unavailable (Simon 1991). However, there is ample evidence that on a daily basis, individuals make non-individualistic choices for reasons other than lack of information. As Amartya Sen (1977) pointed out four decades ago, many important choices are made because of attachments to a person, a group or a collective. Another example relates to the absence of a maximization process when habits and routines affected by culture and structures are conditioning peoples' consumption choices (Hodgson 1998; Jackson and Papathanasopoulou 2008). We return to the importance of habits in decision making below.

Wellbeing studies support the criticisms to the individualistic maximization axiom through evidence on the importance of others and the environment and through studies suggesting that some activities people engage in do not result in higher wellbeing. The latter is particularly the case when people do not consider the long-term consequences of their decisions on wellbeing. There is evidence, for example, that people who start a long commute to access a better paying job or to live in a more attractive location might actually be exposing themselves to wellbeing losses. Long commutes decrease the time available for family and friends and increase the risk of divorce (Diener et al. 2012); the effects of which on wellbeing are negative and long lasting (Easterlin 2003). There are also studies suggesting that having children might not be directly rewarding in terms of wellbeing, particularly if the socio-economic context of the family does not provide enough support or time for childcare (Helliwell et al. 2012).

Studies on the effect of social comparison mentioned earlier suggest that the income or consumption of others has a direct effect on people's wellbeing, be this positive or negative depending on the context. The literature also suggest that the effect of others' consumption is as important as that of one's own in assessing wellbeing and that in some cases is the only thing that matters (Guillen-Royo 2011). In addition research on affiliation or the effect of personal or social relationships systematically finds a positive relationship between people's contact with relevant others and their wellbeing. As Helliwell and colleagues (2012) remark being in touch with others and having an active social life characterized by seeing friends, attending public events or participating in sports is positively related with SWB, even if reverse causation is taken into account. Thus, if people were to maximize happiness they would certainly include others in the equation.

There are not so many established direct links between happiness and the natural environment. However, studies comparing people's experiences in different environments have been able to identify aspects of the natural surroundings that explain differences in wellbeing between locations. There is empirical evidence about the negative impact of air pollution and airport noise for example and of the positive impacts of having greenery around schools and

hospitals, and well as walking on roads with greenery compared to walking in non-natural environments (Cuñado and Perez 2013; Helliwell et al. 2012). In addition, there is recent evidence showing that people's wellbeing increases when they are outdoors in open and green spaces compared with urban environments (MacKerron and Mourato 2013).

Studies on personal values support the association between caring for others and caring for the environment and experiencing wellbeing (Kasser 2002; Brown and Kasser 2005). People who give relative weight to goals linked to close relationships, self-acceptance and the community are more likely to experience happiness and engage in sustainable behaviours than people prioritizing status, image and financial success (Crompton and Kasser 2009). The latter are less likely to choose sustainable transport alternatives, recycling or buying second-hand (Brown and Kasser 2005) suggesting that individual's wellbeing is tightly linked to that of their close relations, their community and the natural environment. This inter-connectedness is also highlighted in qualitative studies drawing on Max-Neef's Human Scale Development approach (Max-Neef 1991) and poses a serious challenge to the individualistic rational approach to wellbeing that has permeated sustainability science.

Max-Neef, drawing on Maslow's (1957) theory of needs, defined a taxonomy organized around nine axiological (subsistence, protection, affection, understanding, participation, idleness, creation, identity and freedom) and four existential categories (being, having, doing and interacting). The optimal fulfillment of the nine human needs is what defines wellbeing, which is achieved or hampered through *satisfiers* (social practices, forms of organization, values, political models, environments) that are prioritized, imposed or available in the different socio-cultural contexts. Thus, wellbeing becomes a process and an output. Max-Neef maintains that satisfiers might promote or hinder wellbeing depending on their characteristics and their effects in specific contexts. He also argues that for a satisfier to enhance wellbeing it cannot have long-term detrimental effects on the environment because if the environment is negatively affected, this would negatively influence human needs fulfillment.

An example of the application of Max-Neef's approach is Guillen-Royo's (2010) work on wellbeing and sustainability in Lleida, a medium-sized city in Catalonia. Discussing Max-Neef's matrix of needs in participatory workshops, people identified advertising, bureaucracy, individualism, private transportation and time pressure, among other factors, as satisfiers that were making it difficult for them to meet needs and at the same time contributed to increase CO_2 emissions through pollution, energy use and accumulation of waste. A parallel study in Acostambo (Guillen-Royo 2012), a town in the poorest region of Peru, found that social fragmentation, poverty and marginalization were working against people's wellbeing and making in difficult for them to live sustainably. The latter was exemplified by increased waste, extensive use of chemical fertilizers and the spread of deforestation. Other studies have used Max-Neef's approach as an analytical tool to discriminate between alternative activities or consumer goods with regards to their effect on the environment and human needs satisfaction (Hofstetter and Madjar 2005; Hofstetter et al. 2006). These studies seek to maximize both personal and environmental goals drawing on their theoretical and empirical compatibility.

To sum up, results from wellbeing research challenge the individual-centered type of rationality characteristic of conventional economic and policy analyses. People make choices that might not increase their wellbeing in the long run, and given the fact that shortsightedness is not an exception but a very common trait of human beings (Offer 2006), it is unlikely that additional information would change choices such as having children or moving out of city centers. In addition, there are other factors than income affecting wellbeing, some of which are individually related like health and work status and others encompass people's social and natural environments (Layard 2005; Helliwell et al. 2012). Both socializing and being exposed to

nature are positively linked to wellbeing whilst pollution and social comparison are shown to reduce wellbeing. In addition, there seems to be a case for arguing that caring for the environment, others and one-self are inter-linked and result in higher wellbeing (Kasser 2002; Crompton and Kasser 2009). This interdependence suggested by psychological and human needs based studies will be discussed further in section "Synthesis and implications for research and policy".

Acknowledging Habits

Summarizing the argument thus far, conventional assumptions about sustainable consumption and wellbeing reduce them both to rational processes done by self-centered, prescient individuals. This influential perspective does not account for the formation of habits, which in capitalist and other growth-dependent economic systems constantly ratchet up levels of consumption without necessarily increasing the wellbeing of the consuming individuals. Rather, one could say that the wellbeing of the overall economy is increased, as well as that of the producers and provisioners of goods, but does not necessarily trickle down to increased welfare or wellbeing of individuals.

Over the past decade, a new set of perspectives on sustainable consumption has emerged that challenge the neo-classical view of consumers and consumption. These can be loosely framed under the umbrella of social practice theory. We claim that these social practice perspectives also have relevance for wellbeing research. Originally formulated in the writings of Bourdieu (1979), over the past decade social practice theory has been adapted and applied to consumption by social scientists representing a number of academic disciplines (Warde 2005; Shove 2003; Røpke 2009; Wilhite 2013; Halkier et al. 2011 and others). The premise is that consumption can only be understood when contextualized in practices such as those associated with achieving thermal comfort, cleanliness, transport, good food, entertainment and so on. An important premise of practice theory is that lived experience pre-disposes knowledge that is relevant for the performance of future actions (Bourdieu 1996). Sherry Ortner (2006) put the importance of lived experience more concisely: "a theory of practice is a theory of history". Simply put, practices form when the performance of an activity or action becomes regularized. The regular interaction of individuals with material objects forms dispositions for future performances of the same action. Performed often enough, the field of dispositions – practical knowledge – can become strongly agentive and result in the formation of habits, although the distinction between practices, routines and habits is fuzzy. An important source of practical knowledge is cultural learning – another is purposive repetition or training.

The most definitive effort to date to consolidate theory on habits and their implications for consumption is the volume 'Habits of Consumption', edited by Alan Warde and Dale Southerton (2012). In their introductory chapter to the volume, Warde and Southerton argue that habits have been ignored by social science because they are 'mundane', regarded as 'dirty' or 'bad'. They have been associated with laziness and identified with life in underdeveloped societies. Warde and Southerton argue that social science needs to engage with 'the regular, repetitious, routinized, unreflective, mundane and ordinary aspects of consumption'. In his contribution to the volume, Wilhite (2012) points out that habits have different formative processes and differing contributors. He proposes that agency in consumption is distributed between people (bodies and minds), technologies and culturally grounded social structures. He attempts to theorize the differences between strong and weak habits. He relates a habit's strength to cultural learning (referred to by Mauss 1935 as 'enculturation'), to repetition and to the numbers and complexity of material objects involved in the habit. Enculturation results in strong habits that have the capacity to endure changes in time and social context. Body habits such as those associated with walking and eating are learned

through emulation and repetition and are stubborn to change. This is why the military is forced to dedicate many hours of training to the walking and posturing habits of recruits in order that they conform to the standard military versions of standing and walking. These and other body techniques learned through purposive training (such as marching, swimming and typing) can become strong and durable habits, depending on the intensity of the training.

The material objects involved in a practice bring their own capacity to shape habits – in other words, the material constituents of a practice are agentive in habit formation. Anthropologist Madeleine Akrich, working within the SST tradition, theorizes material agency as a 'script' for future actions. With a technology such as a keyboard, bodies (fingers) learn the script and this embodied knowledge produces text without the need for cognitive control. Even more body-distant material structures such as that of the house and the infrastructures into which it is connected (roads, electricity, water, telecommunication) are strongly agentive in habit formation. To state the obvious, automobile infrastructures favor transport habits involving cars. Air conditioning is structured by house design and materials. A recent US census shows that in cities in the southern USA, 86 % of houses have central air conditioning systems (www.census.gov/housing/ahs). Centrally air conditioned houses almost always involve structural properties, designs and materials that keep cool air in, yet make it impossible to cool the home without the use of the air conditioner. Even the dimensions of kitchen appliances are affected by house design. An example used by Shove (2003) is that the size of the spaces designed into kitchens invites a large refrigerator and affects not only electricity consumption, but also a whole range of consumption habits around food shopping, preparation and storage. As Wilhite and Wallenborn (2013) write, many home consumption habits are influenced by the powerfully agency of home appliances such as refrigerators, washing machines, dish washers and televisions.

In general, the socio-material environments of the home or office are relatively stable and are conducive to the formation of strong habits (Warnier 2009). However, these vary in time and across space. In a comparison of household energy consumption practices in Japan and Norway, Wilhite and co-authors found significant cultural difference in the performance of regular household practices. The practices and preferences involved in everyday activities such as lighting, space heating and bathing habits revealed striking differences. Concerning living room lighting, Norwegians prefer the creation of pools of light and shadow with floor and table lamps. This is an important component of a 'cozy' home interior. Norwegians feel uncomfortable with ceiling light. It could be said that for Norwegians, domestic wellbeing would not be feasible without this energy-intensive lighting practice. This contrasts dramatically with Japanese lighting habits, in which good lighting is associated with bright ceiling lights. Japanese lighting practices are much less energy intensive than Norwegian; however, Japanese spend long periods of time showering and bathing every evening. This energy intensive form for bathing is extremely important to Japanese wellbeing, also confirmed in an earlier study by Ruth Benendict, who wrote that bathing every evening is a 'passive indulgence'. This cross-cultural comparison crushes the generic rational maximizing model of the consumer and exemplifies the importance of the cultural shaping of consumption habits and their association with wellbeing (Wilhite et al. 2001).

To recapitulate, a habit's strength depends on cultural learning; the frequency of performance; the numbers and kinds of material objects involved; and the nature and dimensions of the space in which the habit is performed. A theorization of habits enables a break with the neoclassical assumptions and policies and takes us beyond the imagined insatiable individual maximizer to encompass a socio-material contextualization of consumption and wellbeing.

Synthesis and Implications for Research and Policy

Evidence from wellbeing research supports an approach to consumption based on social practices and its constituting elements (technologies, people, physical and natural environments, culture, etc.). This involves leaving behind unfruitful associations between growth, individualistic behavior and wellbeing and focusing on the social, physical, technical and natural contexts in which both consumption and wellbeing are created. To advance towards this new perspective, developments both at the research and policy levels are required. This section presents possible avenues in this direction.

Research on Sustainable Consumption and Wellbeing

Despite the lack of consistent empirical support of a positive relationship between economic growth and subjective wellbeing in the long run, most literature on sustainability still stresses the need for increasing technological efficiency in order to maintain current levels of wellbeing. Sustainability-related economic paradigms such as eco-modernism (Spaargaren and Mol 1992) and green economics (Eckersley 1992, 2004) assume technical efficiency will allow consumption and wellbeing to increase while reducing the environmental side effects of production and consumption. Wilhite and Norgard (2004) refer to the confusion of efficiency with sustainability as the 'efficiency delusion'. The delusion was first proposed as a paradox by Jevons 150 years ago (1866). He wrote that in a growth economy, money saved as a result of reducing the direct energy costs of energy-using technologies and equipment would be invested in other energy using products or practices, the net result of which is a decline in anticipated savings. This is no longer a hypothetical contention but has been confirmed in numerous empirical studies (Brannlund et al. 2007; Sorrell et al. 2009; Turner 2009).

New and old voices advocating for de-growth or non-growth are developing alternative frameworks that are increasingly being given serious consideration in the academic and policy world (Legget 2010). Based on Daly's (2008) definition of the steady-state economy as the one characterized by a constant stock of physical capital that is maintained without exceeding ecological limits, Jackson (2008b) explored the macro-economic characteristics of a society detached from the growth imperative. He argued that this society could be articulated around redirecting investment from private to public goods and reducing both the number and amount of hours worked. This macro-economic scenario would have a positive influence on many of the factors that promote wellbeing (such as employment, time with family and friends, etc.) but there is still a lack of empirical evidence supporting this contention. One way forward would be studying the wellbeing effects of moving to eco-villages or transition towns, which are usually based on local economies and downshifting and are promoted as wellbeing enhancing initiatives (Hopkins 2013).

In addition to studying the wellbeing effects of experiencing low-growth or a steady-state economy, another avenue for future research is to adopt indicators of wellbeing that are not based on levels of production or consumption, but rather on more relevant determinants of human wellbeing. Nowadays, a wealth of indexes that go beyond purely economic indicators exist: from those based on social and economic performance such as the UNDP *Human Development Index* to those that include environmental concerns such as the Index of *Sustainable Economic Welfare* and *Genuine Progress Indicator* (Kubiszewski et al. 2013), and those that consider in addition the SWB of the population such as the New Economics Foundation *Happy Planet Index* and the Kingdom of Bhutan's *Gross National Happiness* index. However, none of the current indexes account for the elements determining unsustainable consumption practices such as: expansion of house size (square meters per capita), numbers of automobiles and distance driven (person-kilometers), sizes and numbers of household

appliances, increases in heating and cooling thermostat settings, number and length of showers, and number and length of air trips, household carbon footprint and so on. More research on indicators accounting for the constitutive elements of unsustainable consumption practices would be desirable.

In addition to the development of new indicators or indexes of progress, research should be targeted at understanding the inter-linkages between the factors that contribute to or deplete both wellbeing and the environment. Psychology research identifies values as one of the elements that connect both outcomes (Crompton and Kasser 2009; Kasser 2011); medical research highlights the importance of green spaces (White et al. 2013); economists have addressed time availability (Reisch 2001) and increased political participation as other important connectors (Frey 2008; Guillen-Royo 2010) . However, more research is needed to understand the myriad of factors that contribute to scenarios that have the potential to achieve high levels of personal wellbeing and environmental conservation.

The systemic approach to wellbeing of Max-Neef's *Human Scale Development* constitutes an interesting paradigm to frame future research on sustainable consumption and wellbeing. It makes it possible to unveil the personal, societal, political, economic and environmental factors that contribute to the sustainability or unsustainability of certain practices. By involving people in the analysis of the factors that hamper or promote the satisfaction of human needs in specific contexts, it also engages them in societal transformation that goes beyond the personal to embrace the structural and technological. Consumption practices can then be understood, modified, adapted and transformed to enhance human need satisfaction and the natural environment. However, this type of approach has not been generally embraced by sustainability researchers or policy makers. Although transferrable to most contexts and circumstances, it is usually focused on the local level and does not necessarily involve the scaling up of processes and outcomes. However, progress has been made in this direction and there are now interesting proposals of indicators that aim at capturing the HSD holistic approach (Hofstetter and Madjar 2005; Hofstetter et al. 2006; Cruz et al. 2009).

Policies for Sustainable Consumption and Wellbeing

One set of policy levers would enable changes of habit through the restructuring of the physical and infrastructural components of consumption practices. Transport is a good example of consumption that is strongly dependent on infrastructure and technologies. We must vastly increase the pace of the building out of train, metro, bus and biking infrastructures. In countries (and cities) that are making significant investments in public transportation, there is near uniform high public acceptance and documentation on the ameliorating effects in terms of congestion and pollution. A second set of policy levers would stimulate the creation of spaces for experimentation with, or demonstration of low-energy practices. Insights from social learning theory argue for the use of publicly supported demonstrations, used extensively in the USA in the 1970s and 1980s in the wake of the oil shocks, but abandoned in the wave of free-market energy ideology from the 1990s. In Davis, California great strides were made in home weatherization after demonstration homes were set up in neighborhoods. People were able to experience first-hand how life in a low energy house in their community was comfortable and to talk to their neighbors about the specific costs and benefits of projects such as insulation, new windows and weather-stripping.

Another form for experimentation involves the creation of physical spaces or networks of collaborative consumption which have both positive wellbeing and sustainability effects. Flea-markets and second hand shops extend the lifetime of goods as do new internet-based networks for sale or exchange of clothing, sports equipment, books and baby-related equipment (Levine 2009; Botsman and Rogers 2010). A study by Hirvilani and colleagues (2013) using Sen's

capabilities approach (1999) confirms the positive relationship between collaborative consumption and sustainability. They found that among Finnish minimum income receivers using household goods mainly bought in second hand shops, the level of wellbeing or capabilities was maintained whilst their material footprint was significantly reduced.

A more ambitious form for collaborative consumption involves sharing, such as car sharing or sharing of a washing machine with the other residents of an apartment building. These forms for collaboration involve a minimum of collective planning and in fact both car sharing and laundry service provision are run on a commercial basis in many parts of the world (Attali and Wilhite 2001). The most ambitious form for collaborative consumption involves community visioning and planning of alternative forms for practices that are less environmentally intrusive and in some cases aim at no growth or low growth microeconomics. May (1994, quoted in Scott-Cato and Hillier 2010:880) characterizes these community efforts as micro political, defined this way: "It is a concept best understood as engaging in a practice that, while within the social network of practices and thus not transgressing that network, occupies a place that disrupts dominant practices by showing creative possibilities within these practices." The idea is to enable experimentation, differentiation and the emergence of new social forms. Berressem (2009:64) writes that this process involves a 'healthy destabilization of habits' (Berressem 2009:64) and thus provides an opportunity for the formation of new habits.

One micro political movement calls itself 'Transition towns'. It is one of the most robust examples of bottom up, community driven change. It began in a community in England in 2006 and has rapidly spread across the world. In 2009, there were 134 communities officially registered as Transition Towns (Scott-Cato and Hillier 2010). In order to be designated as a Transition Town, a new community must commit to adherence with certain principles involving both participatory planning and an aim to be less environmentally intrusive. Implicit to the movement is an alternative political economic framing that is 'non-capitalist', yet incorporates a positive vision rather than one of denial or simplicity (Hopkins 2013). The processes that communities such as this follow to transition to a less environmentally intrusive and more socially inclusive society draw on wellbeing research, both at the theoretical and practical levels. At the theoretical level they use knowledge about the factors that positively affect and facilitate wellbeing such as relatedness, outdoor activities, volunteering, intrinsic values (www.networkofwellbeing.org). At the practical level they use methodologies such as Mas-Nef's HSD workshops to identify satisfiers with low material intensity that foster both wellbeing and sustainability in their communities (www.transitionnnetwork.org).

These transition communities constitute islands of practice in which the participants live, experience and build up new habits. In this process, the culture of growth is questioned and replaced with a culture grounded in environmentally sustainable habits. These and other bottom-up community efforts have been criticized for being politically naïve and elitist (Cato 2009). Nonetheless, they constitute a source of knowledge and inspiration for alternatives to the growth culture and deserve public support and encouragement.

Conclusions

The literature shows that growth in consumption is not positively correlated with increases in wellbeing. Thus reducing environmentally problematic consumption will not necessarily reduce people's sense of wellbeing. A problem is that this empirically unsupported positive correlation together with the assumption that people behave in an individualistic maximizing way are deeply embedded in the politics, policies and everyday practices of most countries. From a sustainability perspective, overarching economic paradigms need to be adjusted to discourage growth in consumption. Further there needs to be recognition among both sustainable consumption and

wellbeing theorists that everyday practices are driven by more than economic utility maximization. A more robust theory of consumption is needed that acknowledges unsustainable habits and their contributors. New efforts to integrate benchmarking of consumption and wellbeing are also needed that account for elements such as length and frequency of road and air travel, house sizes, indoors temperature, etc. and these need to be more systematically investigated by wellbeing researchers.

A new research agenda that takes into account both empirical evidence from wellbeing research and new theoretical perspectives on sustainable consumption should focus on the understanding of the elements that make possible what Jackson (2008a) called the 'wellbeing dividend'. This would imply highlighting the factors, both institutional and personal, that constitute scenarios where people experience high levels of personal wellbeing within the ecological limits of the earth. There is already research on downshifters, individuals who voluntarily decide to cut their own and their families' consumption (Brown and Kasser 2005; Boujbel and D'Astous 2012) but there is a need to incorporate research that considers societies and groups of people who engage in community action towards a reduced environmental impact. It is likely that this type of research will demand a multiplicity of methods and approaches that can both provide causal evidence and evaluate the processes experienced by individuals and groups in their quest to reduce their environmental impact and the characteristics of the resulting practices.

Sustainability policies that support initiatives like transition towns, eco-villages, eco-neighborhoods, etc. are likely to enhance wellbeing because these projects put emphasis on factors, such as relationships, family, collaborative production and consumption, community and the natural environment that are shown to be positively linked to people's SWB. Extending the experience of demonstration homes to that of 'demonstration towns' could be a way forward but requires institutional flexibility and willingness to experiment. Finally, we admit that we have only scratched the surface of a vastly important new domain of research and policy at the interface between wellbeing and sustainability. New thinking is urgently needed on the conceptual links and courageous policy makers are needed who are willing to experiment with a new genre of policy that puts sustainability and increased wellbeing ahead of conventional ideas of economic progress.

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Poverty and People's Wellbeing

14

Mariano Rojas

Introduction

The concepts of poverty and wellbeing are closely intertwined; as a matter of fact, the concept of poverty is associated to a situation where people have low wellbeing -sometimes alternative terms are used, such as lack of wellbeing or even ill-being-. This association between the concepts of poverty and wellbeing implies for the conception of poverty to be contingent on our understanding of wellbeing. In other words: different conceptions of wellbeing lead to different conceptions of poverty; in addition, when the conception of wellbeing changes the conception of poverty needs to be revised. This has consequences for the design of social programs and policies aiming to reduce poverty.

It is the understanding of poverty as a situation where people are experiencing low wellbeing which implies for poverty being a very appealing concept which calls for immediate action to reduce it or at least to mitigate its wellbeing impact. Experiencing low wellbeing is not something human beings appreciate; thus, there is value in rising people's wellbeing, and this translates into a strong desire for reducing poverty in the world. It is the understanding of poverty as a situation associated to people experiencing low wellbeing which justifies the actions undertaken by governments, international organizations, and private foundations which look to reduce poverty.

Eradicating poverty from the world is a widely accepted goal, and during the last decades many poverty-abatement programs have been implemented at the local, national and global level. The importance of reducing poverty has been strengthened by the Millennium Development Goals Initiative, which makes of poverty reduction its first goal and which sets specific targets to be reached in the year 2015. The interest in keeping track of progress in attaining the goals has placed an enormous emphasis in measuring poverty, since it is necessary to know how many people are in poverty, how these poverty numbers evolve over time, and what the impact of different programs is.

When dealing with an issue which is associated to millions of people experiencing low wellbeing there is clearly a sense of urgent action needed. This desire of immediate action, together with the widespread implementation of focalized social programs, has stimulated an interest in studying measurement methods to designate the potential beneficiaries of the programs and to evaluate their success. In consequence, during the last decades the focus of interest in poverty studies has been on measuring poverty rather than on discussing conceptual issues. It is safe to state that poverty has ended up being conceptualized on the basis of its measurement, rather than being measured on the basis of its conceptualization.

M. Rojas (✉)
FLACSO-México and UPAEP, Mexico City, Mexico
e-mail: mariano.rojas.h@gmail.com

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This chapter argues that more attention needs to be placed on conceptualizing poverty and on rescuing its initial association to a situation where people are experiencing wellbeing deprivation. Not doing so would expose poverty studies, as well as poverty-abatement programs, to the risk of ending up with a conception of poverty which is completely detached from people's daily experience of wellbeing deprivation. Measurements of poverty may satisfy all axioms and aggregation criteria, and poverty-abatement programs may reach their targets; however, deficiencies in the understanding of people's wellbeing may imply that a relative success in the dashboard indicators of poverty does not translate into people experiencing greater wellbeing.

The increasing detachment created by this disassociation between the conception of poverty and people's experience of being-well is evident nowadays: In principle, poverty is something happening to people and in their wellbeing realm; people are in deprivation because they are experiencing low wellbeing (or ill-being) It was the role of experts to study this situation of people experiencing low wellbeing and to make recommendations to increasing it. However, we have now reached in many countries a senseless state where people have to wait for the criteria being advanced by official institutions in order to know whether they are (classified as) poor or not; this is: people have to wait for experts telling them whether they are in wellbeing deprivation or not. No doubt this process originates from associating the classification of people as poor to access to some public benefits, such as cash transfers.

This chapter's purposes are manifold: First, it addresses the fundamental issue of what the concept of poverty is and it discusses the different conceptions of poverty as they are associated to different traditions in conceptualizing wellbeing. Second, it discusses measurement issues, cautioning for the common practice of understanding poverty on the basis of its measurement rather than measuring poverty on the basis of its understanding. Third, it presents some data on the situation of poverty in the world; however, it is not the objective of this chapter to proliferate in figures of poverty but to discuss its relationship to wellbeing. Fourth, the chapter advances a subjective wellbeing approach to know people's wellbeing, and it ponders the advantages and limitations of the approach. Fifth, the chapter discusses -theoretically and empirically- the relationship between poverty and wellbeing, and it shows that dissonances between poverty and wellbeing are common. Sixth, some reasons for these dissonances emerging are presented; special attention is placed on biases and risks faced when people's experience of being well is not taken into account. Seven, the chapter elaborates on the implications for social programs and poverty-abatement actions of following a wellbeing perspective in the understanding of poverty. Finally, the chapter ends with some proposals for having a conception of poverty which is closer to people's wellbeing experience.

The chapter is structured as follows: Section "Wellbeing and the concept of poverty" discusses the main traditions in the understanding of poverty as well as some methodological issues. Section "The income-based conception of poverty. A dominant conception" presents the dominant income-based definition of poverty. Section "The income-based conception of poverty. A dominant conception" also mentions the idea of poverty being multidimensional. Section "Experienced wellbeing and poverty" discusses the subjective wellbeing tradition and shows that substantial dissonances emerge when the income-based and the multi-dimensional approaches to poverty are contrasted with wellbeing assessments based on the subjective wellbeing approach. Finally, section "Explaining dissonances in the classification of people as poor" discusses some crucial issues which may lead to the existence of some substantial dissonances in the classification of people as poor. Section "Enhancing poverty abatement programs: from income to wellbeing" elaborates on the consequences a shift from income-poverty to people's wellbeing has on social programs. It is stated that it is fine to get people out of income poverty, but that it is even better if people end up being placed in a wellbeing enhancing situation; thus, poverty-abatement programs would benefit from having a greater wellbeing scope. Final comments are made in section "Conclusion".

Wellbeing and the Concept of Poverty

Poverty and Wellbeing Deprivation

Poverty is, in fact, a very old concept. Poverty is a folk concept people are familiar with; it was being used by people even before universities and disciplines emerged.[1] People use the concept of poverty to qualify their life; for example: 'a poor person' and 'a poor family'. The folk conception of poverty makes reference to people who are in a bad situation, who are suffering, who are failing in attaining some basic goals, and so on. In general, this conception refers to a situation where people are not doing well; they are not having an experience of being well. In this sense, poverty refers to something that happens to people and that cannot be detached from the person who is experiencing it. Some research has studied poverty on the basis of people's own classification as being poor; this research typically asks people whether they consider themselves as poor or not and then aims to understand people's self-classification (Rojas and Jiménez 2008; Herrera et al. 2006; Posel and Rogan 2013) Ravallion (2012) states. "*The challenges faced in calibrating poverty and welfare measures to objective data have long been recognized. Until recently, most economists have resisted a seemingly obvious solution, namely to ask people themselves: "Do you feel poor?*"" (p. 1)[2]

The academic community is also familiar with the concept of poverty; as a matter of fact, it is possible to make an academic career on the basis of studying poverty. Unfortunately, most academicians working in the area of poverty studies have specialized in measurement issues rather than in conceptualizing poverty. The academic community has been prolific in proposing measurement criteria to 'identify and count the poor'. The study of poverty has also involved generating and corroborating theories about its causes, investigating the conditions that lead to or that foster poverty, researching the actions people can undertake to get out of poverty, and exploring and implementing public-policy strategies for reducing poverty.

One of the few structured exercises in conceptualizing poverty was promoted by the International Poverty Center (IPC). In 2006 the IPC published a very interesting brochure entitled "*What is poverty? Concepts and Measures*" (International Poverty Centre, 2006); this brochure contains contributions by many poverty experts discussing the main question posed. Most contributions end up making reference to the concept of human wellbeing when discussing the concept of poverty. For example, Caterina Ruggeri Laderchi, Euhi Saith and Frances Stewart relate poverty to wellbeing when they state that "*considering that individual wellbeing/poverty manifests itself in multiple dimensions*" (p. 10). Gustav Ranis, Frances Stewart and Emma Samman make reference to different kinds of wellbeing in their contribution. Peter Edward states that "*Poverty defined as a lack of wellbeing is clearly multidimensional*" (p. 14), in the following page Edward refers to poverty as low levels of wellbeing. Ravi Kanbur states: "*the specific assumptions underlying any measure need to be made clear; in particular how to define the population whose wellbeing is being evaluated*" (p. 19). Nanak Kakwani states that "*poverty means low levels of wellbeing, not just low income; measures must relate closely to people's lives*"; he also refers to a "*decent level of wellbeing*" and states that "*Poverty is viewed here as the lowest level of wellbeing*" (p. 20). Within a context of a discussion on poverty and deprivation Robert Chambers

[1] For example, about 2000 years ago in the famous Sermon on the Mount, known as The Beatitudes, it is said: "*Blessed are the poor in spirit: for theirs is the kingdom of heaven*". The Beatitudes go further to talk about the meek and about those who hunger and thirst for righteousness. (The Bible, Matthew 5: 3–12)

[2] Rojas and Jiménez (2008) find that it is not only how much income a person has, but also social comparisons (how a person's income compares to others) as well as historical comparisons (how a person's current income compares to past income) do play an important role in people's own classification as poor. The authors pose the following question: "Do you consider yourself poor?", which does differ from Ravallion (2012) question because it points out to an assessment of people's situation rather than to feelings.

mentions that "*Development thus can be seen as shifting from illbeing to wellbeing with equity, interventions to enhance wellbeing . . .*" (p. 4); Chambers further develops the idea that "*the case is for the language of illbeing and wellbeing to be widely used in addition to poverty and wealth, which are only one part of them*" (p. 4) and states that: "*Policies and actions that follow would then be designed to reduce illbeing and enhance wellbeing*" (p. 4) The close association between the concepts of poverty and wellbeing in the academic and policy-making arenas is visible in chapter 1 of the 2000/2001 World Development Report, where it is stated that "*poverty is pronounced deprivation in wellbeing*"; the statement then asks: "*But what precisely is deprivation?*" (World Bank 2000) It is curious that no question about wellbeing is asked. Furthermore, Haughton and Khandker (2009) began their introductory chapter to the Handbook on Poverty and Inequality by discussing the concept of poverty; they start by repeating the World Bank's statement: "*Poverty is 'pronounced deprivation in wellbeing'*" (p. 1), in the following page Haughton and Khandker asks themselves "*what is meant by wellbeing and what is the reference point against which to measure deprivation*."

Politicians and public officers do also heavily rely on the concept of poverty. For politicians the concept constitutes a call for immediate action; the desire of abating poverty is used to justify the implementation of social programs and social policies as well as the adoption of major economic-development strategies. The evolution of poverty rates is also used as a criterion in assessing social progress as well as government performance. International organizations do also state that the eradication of poverty is one of their central motivations. Even private firms mention the interest in reducing poverty as part of their social corporate responsibility. It is clear that in most cases the concept of poverty refers to something that is happening to people, which is not good, and which leads to people being in wellbeing deprivation. It is also assumed that people's wellbeing is increased by reducing poverty.

Because the concept of poverty is closely associated to the notion of wellbeing, different conceptions of wellbeing will clearly lead to different understandings of poverty. Thus, any study of the concept of poverty must necessarily address the related issue of how people's wellbeing is conceived (Griffin 1988; Elster and Roemer 1991; McGillivray and Clarke 2006; Gough and McGregor 2007; McGillivray 2007).

Poverty is clearly associated to a situation where people are experiencing wellbeing deprivation; but, what is wellbeing and how to assess it? Two dominant traditions have prevailed in approaching wellbeing: the presumption and the imputation traditions. As expected, these traditions have influenced our understanding and measurement of poverty. The presumption tradition postulates that wellbeing is something that people experiences, but it keeps the authority to assess a person's wellbeing situation in the hands of third-persons. The imputation tradition is based on the idea of a third party –usually assumed as a thoughtful person or institution- providing criteria to judge a person's life (Rojas 2007a). These traditions end up focusing on measuring wellbeing and understanding wellbeing on the basis of its measurement.

A new wellbeing tradition has emerged during the last decades: the subjective wellbeing approach; this tradition understands wellbeing as the experience of being well people do have. The approach states that it is in human condition to experience wellbeing, and that every person is in a privileged position to appraise her wellbeing. The following sections deal with these main traditions in understanding wellbeing.

Knowing People's Wellbeing. The Presumption Tradition

A major tradition in the assessment of people's wellbeing is based on the presumption of some variables being of relevance for wellbeing. This tradition is interested in wellbeing as it is experienced by people; however, rather than asking people directly about their wellbeing experience, the tradition relies on uncorroborated theories and models to justify a list of objective variables which it ends up employing so that a third person

can appraise people's wellbeing. Researchers working within the presumption tradition are usually skeptic about using people's wellbeing reports. Third-parties usually justify their resistance to using people's wellbeing reports on the basis of their strong preference for using objective variables; sometimes a critique to the informational basis people do have when assessing their own wellbeing is also advanced as a reason for reluctance.

In the end, the presumption tradition opts for relying on disciplinary, compartmentalized and uncorroborated theories regarding academic agents' behavior and motivations to justify its preference for some variables as proxies for people's wellbeing. The predominance of disciplinary and compartmentalized approaches in this tradition is clearly illustrated by the frequent references to the wellbeing of disciplinary agents; for example: consumers' wellbeing, workers' wellbeing, citizens' wellbeing, voters' wellbeing, patients' wellbeing, and so on. There has been little reference to the wellbeing of human beings.

Research within the presumption tradition is not concerned about corroborating wellbeing theories, since no direct measure for people's wellbeing is available within this tradition. In consequence, organizations quickly move towards the construction of indicators on the basis of the objective variables which, in presumption, explain people's wellbeing; from here, organizations rapidly move to the design, evaluation and implementation of programs and policies to increase people's presumed wellbeing.

A clear example of this presumption tradition is found in economic theory. Economists are used to work with the consumer, which is a disciplinary and abstract agent whose main role is to consume. Economic theory states that utility –a notion commonly associated to people's wellbeing- strongly depends on income.[3] Microeconomic textbooks usually state that income is the unique variable explaining a person's utility and that people are rational; hence, they get as much utility as possible from their income. Thus, the unique way of rising a consumer's wellbeing is through increases in income (Varian 2009) Macroeconomic theory does also emphasize the importance of increases in national income, making of economic growth the key variable to assess a country's performance. Most economists would sustain that income is a variable strongly related to people's wellbeing; some are willing to go as far as using income as a proxy for people's wellbeing. However, this crucial assumption about the importance of income in generating people's wellbeing lacks corroboration within standard economic theory.

Economists are not alone in following the presumption tradition. Other disciplines do also tend to emphasize the wellbeing importance of their disciplinary variables without any corroboration. For example, political scientists tend to assume that wellbeing is closely related to political regimes and to political participation, while sociologists attribute a large wellbeing relevance to social classes and social mobility. These presumptions may be partially correct, but it is not a scientific attitude to accept them without corroboration. Actually, these disciplinary theories should be considered as sources of hypotheses regarding what the relevant factors for wellbeing are and what their importance is. These hypotheses could easily be corroborated once a wellbeing variable is available.

Knowing People's Wellbeing. The Imputation Tradition

The imputation tradition is rooted in the long-standing philosophical considerations about what constitutes a good life (Aristotle 2009; Annas 1995; Dohmen 2003; Veenhoven 2003). The tradition is based on a third person –who is assumed as a thoughtful, knowledgeable, and wise person- providing criteria to judge the existence of goodness in the life of

[3] There is a difference between ordinal and cardinal utility; cardinal utility assumes that people's utility measures their wellbeing. Ordinal utility is a device used to explain choice, however, it relies on this choice being made on the basis of people's own interest; thus, wellbeing is implicit in this approach (Broome 1991).

others.[4] It is on the basis of these criteria that an assessment is made about people's wellbeing situation. This tradition is common in ethics but also in many moral movements which are accustomed to judging other people's lives.

Within this imputation tradition thoughtful and knowledgeable persons provide persuasive and appealing arguments to advance their proposed criteria. The tradition is not used to provide research-based evidence to support the proposed criteria nor to develop hypotheses to be corroborated; rather, the tradition looks for a receptive audience willing to accept the proposed criteria. The audience must choose among proposal in an aesthetic way; this is: in terms of likes and dislikes. There is no role for theories and hypotheses to be corroborated within this tradition; thus, organizations rely on intellectual frameworks which assume as valid without corroboration. Of course, it is always possible to appeal to social-decision mechanisms, such as referendums and Congress decisions, to choose among these intellectual frameworks and to give a certain degree of legitimacy to the selected framework. A discussion of the role social-decision mechanisms can play and of their weaknesses and strengths is beyond the objectives of this chapter.

It is not uncommon for academicians working within the imputation tradition to assume that people themselves are not in a good position to judge their life. Assessments made by people themselves are considered as irrelevant or of inferior quality. For example, Sen (1987) argues that small mercies may lead a person who has had a life of misfortune to experience some wellbeing; it seems that judging what a small mercy is and what a not-so small mercy is requires from the wisdom of a third party rather than from the knowledge of the person herself. Hence, in the imputation tradition what people think about their life and how they are experiencing it is not relevant information for assessing their wellbeing. The schools of thought working within the imputation tradition mostly focus on transforming people rather than on understanding their wellbeing; in consequence, they are more prescriptive than descriptive.

The capabilities approach constitutes a recent school of thought working within the imputation tradition. The capabilities approach provides a framework (criteria) that relates the expansion of opportunities for leading a life which a person considers of value to the concept of wellbeing (Sen 1985, 1993; Anand et al. 2005; Anand and van Hees 2006; Nussbaum and Sen 1993; Alkire 2007) The approach associates a good life to the lack of restrictions people face in choosing the functionings they value. The absence of criteria in this approach to define which capabilities are relevant and how relevant they are has led to proliferation of lists of capabilities as well as to organizations and groups incorporating their variables of interest as part of the set of capabilities (Nussbaum 2011) Sometimes it is not even clear whether a variable constitutes a proxy for a capability or a functioning. For example; the United Nations Development Program handles income as a capability; however, not everybody attaches the same value to the things income may buy; thus, it may be reasonable to treat income as a functioning while the capacity to generate income is treated as a capability.

In principle, wellbeing assessments made within the imputation tradition cannot be corroborated, since the wellbeing which is experienced by people is of little relevance within this tradition. The tradition is based on acceptance of the intellectual framework rather than on corroborating it. In consequence, it is of no surprise that after many centuries and hundreds of discussions the imputation tradition can provide hundreds of books and many convincing frameworks, but not a single corroborated finding. Rather than using people's experience of being well to corroborate their assessments, the many

[4] Regarding the role of a third person, Collard (2003: 2) states that "*Bentham insisted that the measurement of well-being should be firmly based on the concerns and subjective valuations of those directly concerned. Those who wished to superimpose other judgements were dismissed as 'ipsedixitists'*", Collard concludes his work with the following recommendation: "*Beware of the ipsedixitists: don't allow a few people (even important people) to dictate what is to be included or excluded.*" (Collard 2003: 17)

schools which exist within this tradition advance their views by convincing their audience. The imputation tradition is beyond corroboration; however, it is possible to check whether its views are compatible or not with findings from other traditions.

Knowing People's Wellbeing? The Subjective Wellbeing Approach

The subjective wellbeing approach understands wellbeing as the experience people have of being well. Wellbeing is, in consequence, something that happens in the realm of the person and not in the realm of objects. Objects and factors may be of relevance in generating wellbeing, but they are not wellbeing. The person is indispensable for the wellbeing experience to take place; in other words, the experience of being well cannot exist without the person who is having it. It is in this sense that wellbeing is inherently subjective, because the experience cannot be detached from the person who is having it. In consequence, it is senseless to conceive an objective wellbeing; although it is possible to talk about factors which may generate wellbeing and which are measured on the basis of objective variables.

The subjective wellbeing approach recognizes that human beings are capable of experiencing wellbeing. It is in human condition to be able of recognizing different types of wellbeing experiences, such as: First, sensorial experiences associated to pain and pleasure. Second, affective experiences related to emotions and moods which are usually classified as positive and negative affects and understood in terms of enjoyment and suffering. Third, evaluative experiences assessed on the basis of the attainment of goals and aspirations people do have and which are usually termed as achievements and failures in life. Fourth, very intensive, short, and global experiences of being well which are usually classified as flow states (Argyle 2002; Veenhoven 1991; Rojas and Veenhoven 2013; Csikszentmihalyi 2008) These experiences may take place in different intensities and durations; a particular event may detonate all kinds of experiences and not always in a reinforcing way. Some events may be associated to an evaluative experience of achievement but to an affective experience of suffering; other events may imply a sensorial experience of great pleasure but an evaluative experience of failure. For example, hunger ends up being experienced by people in terms of stomach pain, headache, irritation, tiredness, lack of concentration, and so on. The kind and extent of food at the table may also constitute an object of social comparison, those in hunger may not only suffer from negative sensorial and affective experiences, but they main also be experiencing a sense of failure associated to their lack of food being associated to a lower status in society. In the mid-run experiencing chronic hunger may have other consequences –such as learning disability- which also reflect in sensorial, affective, evaluative and even flow experiences (Guardiola and Rojas 2014).

The approach also recognizes that people are able of making a synthesis about how well life is going on the basis of these essential experiences of being well. For example, it is very likely for people experiencing pleasure, joy and achievement to make a synthesis in terms of their life going well or in terms of being highly satisfied with their life. In other cases, when there are conflicting experiences, people face a greater challenge of making a synthesis, but they are able of doing so and they may end up being modestly satisfied or unsatisfied with their life depending on the personal importance they give to the conflicting experiences.. For example, there are events that detonate pain but joy, such as the case of a woman delivering a baby. It is likely for these experiences to be pondered differently by different people. Thus, for some people the affective experiences may have a greater relative importance in assessing their overall evaluation of life, while for other people it may be the evaluative experiences, and for some it may even be the sensorial experiences.

A crucial feature in the subjective wellbeing approach is the recognition that every person is in a privileged position to judge and report her wellbeing; hence, the best way of knowing

people's wellbeing is by directly asking them. People can be queried about their overall assessment of life; 'how is life going on?' is a common question most people are familiar with. People may be queried about their satisfaction with life as well as about their essential experiences of being well. It could be said that the subjective wellbeing approach is very old; as old as when people began asking friends and relatives questions like "how are you?", "how are you doing?", and "how is life?". However, the incorporation of the approach into academic studies of wellbeing is relatively new. Some sociologists, psychologists and economists started using subjective wellbeing information in the late 1960 and early 1970s (Campbell 1976; Campbell et al 1976; Andrews and Withey 1976; Argyle 1987; Diener 1984; Michalos 1985; Veenhoven 1984; Easterlin 1973, 1974; van Praag 1971)

Wellbeing Traditions and Poverty

The three traditions in the study of wellbeing: presumption, imputation, and subjective wellbeing will reflect in the conceptions of wellbeing deprivation and, in consequence in the understanding and measurement of poverty. Of the three traditions there is no doubt that poverty studies have been dominated by the presumption tradition and, in specific, by the belief that a person's income can be a good proxy for her wellbeing and that can be used to study wellbeing deprivation. Recent approaches have also relied on the imputation tradition to provide a conception of poverty that goes beyond income by incorporating other dimensions which are considered important for having a good life; in consequence, a substantive approach is followed by enumerating dimensions. More recently, the subjective wellbeing approach has been used in poverty studies; the interest has centered on investigating how people's (subjective) wellbeing relates to poverty classifications; some research has also focused on providing a subjective wellbeing conception of poverty.

The Income-Based Conception of Poverty. A Dominant Conception

Presumption. Income and Wellbeing

Assumption of a Close Relationship Between Income and People's Experience of Being Well

The income-based conception of poverty has dominated the understanding, study and measurement of poverty during the last decades. This conception understands poverty as a situation where people have low income so that their capacity to satisfy needs is limited. Two main assumptions are involved in this view. First, that income is strongly related to people's wellbeing[5]; the relationship is assumed to be positive (greater income leads to greater wellbeing) and close (more income implies, for sure, greater wellbeing) Second, a relevant income threshold exists; this is: it is presumed for low income to be associated to experiencing low wellbeing and for high income to be associated to experiencing high wellbeing, but the relationship is not linear. An income threshold is assumed to exist beyond which wellbeing substantially raises and wellbeing deprivation no longer exists. Even though economic theory strongly argues about the relevance of income, it does not provide a clear argument for defining what a low-income level is. In other words, economic theory does not have a justification for setting an income threshold beneath which wellbeing deprivation exists.

Setting an Income Threshold. Basic-Needs Theory

Some economists and other social scientists have proposed a basic-needs approach to setting a threshold level in the income-based study of wellbeing deprivation (Streeten 1977, 1984). Basic-needs theory argues for a hierarchy of needs so that the satisfaction of some needs is more important than the satisfaction of others.

[5] As expressed earlier, most economics textbooks use the term 'utility' rather than the term 'wellbeing'.

The delineation of this hierarchy of needs is unclear.

Most people agree with the existence of survival-level needs so that not satisfying them leads to death in a short period of time. Being alive is a requisite to experiencing wellbeing as we understand it. The hierarchy of needs and the definition of thresholds are not clear once people move beyond the survival-level needs. In principle, economic theory states that the utility attained from consumption is a matter of each person. However, different normative theories have been proposed to establish a hierarchy of needs and to define thresholds to classify people as poor or non-poor on the basis of their purchasing power (Gasper 2007; Doyal and Gough 1991, 1993).

Great economists and social thinkers such as Adam Smith (1776 (1937)), John Maynard Keynes (1931) and Karl Marx (1849 (1977)) have argued that beyond survival-level needs there is a realm of relative needs; in other words, the utility people get from satisfying these needs is contingent on whether other people are also satisfying them or not. The view that most needs are relative rather than absolute has led to understanding wellbeing deprivation as a situation where people are not living a decent life according to the consumption standards of their society (Townsend 1962). Thus, basic needs are conceived not as absolute but relative to the standards of the society under consideration; in consequence, societies tend to follow their own standards and to define a country-specific income threshold to classify people as poor.

Basic-needs theory has usually assumed that those needs which are basic can only be satisfied by consuming economic goods, which implies that people need purchasing power (income) to be able to satisfy their needs and attain greater wellbeing. Therefore, it is assumed that it is only through greater purchasing power that people can get out of their wellbeing deprivation situation. Consequently, the income-based conception of poverty is based on the idea that people who have low purchasing power cannot afford the satisfaction of their basic-needs and, as a consequence, end up in wellbeing deprivation. By proposing the existence of a hierarchy of needs, basic-needs theory justifies the assumption of a somewhat vague threshold; yet, it does not solve the underlying problem of establishing a precise cut-off to classify people as poor or non-poor.

Many methodologies have been advanced to define a poverty line in order to classify people as poor (Orshansky 1965; Ruggles 1990; Fisher 1992; Ravallion 1998; Feres and Mancero 2001). As expected, these methodologies depend on many assumptions to come up with a somewhat arbitrary cut-off. On the basis of the income criterion a person is classified as poor if she does not have the capacity to buy a bundle of commodities which, according to the proposed criteria, would imply the satisfaction of all their basic needs. However, having the capacity does not necessarily imply doing so. People may have a different hierarchy in the satisfaction of needs and that reflects in consumption patterns that diverge with respect to those contemplated by basic-needs theory. The existence of discord in the hierarchy of needs people do have and that which was used to construct a bundle of commodities to satisfy what experts propose as basic needs is a common critique to this approach.

Furthermore, a person's income in a given period does not necessarily reflect her capacity to satisfy needs, since people may have access to credit or debts to be paid; in consequence, rather than using current income to assess people's capacity to buy a bundle of satisfiers, some authors do recommend using a proxy for permanent income, such as the ownership of income-generating assets (Shapiro and Wolff 2005)

It is noteworthy to state that the absence in economic theory of an observable wellbeing variable and the confidence economists show in their microeconomic-theory assumptions has led to a view that directly identifies poverty with low income. In other words, poverty has ended up being directly understood as a situation where people have low income, rather than as a situation where people have low wellbeing due to their low income. The difference between these two understanding of poverty seems minor; however, it is important to recognize that the link

between income and poverty is not a direct one because it goes through wellbeing. Most economists –and many policy-makers- end up understanding poverty as a situation where people have low income, independently of their wellbeing situation.

There are also many methodological problems which need to be addressed before using income in poverty studies. For example:

First, data on household income comes mostly from people's reports. People may misreport their income due to many factors such as being afraid of losing some social benefits, being afraid of crime, working in informality, evading taxes, lack of knowledge about their income, and many more. Hurst et al. (2013) show that self-employed people tend to misreport their income. Self-employed people as well as informal employment are common in many societies where high rates of poverty have been estimated; this fact reduces our confidence in the accurateness of the estimated poverty rates. In an empirical study in Albania, Pudney and Francavilla (2006) found substantial income underreporting by people who are classified as being in income poverty; they conclude that income poverty rates are overestimated due to income underreporting.

Second, income is reported at the household level, but wellbeing is a personal-level concept. Thus, it is necessary to transform household income into a proxy for personal access to economic resources; this is a difficult task because households differ in their size and demographic composition as well as in their intra-household norms. Is the economic situation in a family of two adults and two children with a household income of US$10 dollars per day similar to that of a family of three adults and one baby with the same income? Do children imply a similar economic burden than adults? Are there differences by gender? Rojas (2007b) has found that there are substantial size economies in the family and that, as a consequence, household per capita income tend to underestimate the economic situation people have, with the consequence of overestimating poverty rates. Furthermore, Rojas (2010) finds evidence of some altruistic behavior in Mexican households, were some members –children- tend to enjoy a better economic situation than adults –breadwinners-; this finding suggests that the assumption of the benefits from household income being equally shared within all family members may be wrong.

Third, in-kind income is large not only in rural societies but also in urban ones. It is difficult to estimate the monetary value of in-kind income as well as of self-production, in special when market prices cannot be appropriately estimated (Székely et al. 2004).

Main Initiatives Within the Income-Based Approach to Poverty

Poverty and a Call for Action

As it was mentioned before, poverty is a concept associated to wellbeing deprivation; as such it calls for immediate action at all levels: public policy, international aid, personal and organized charity, community programs, and even social revolutions are sometimes justified on the basis of reducing poverty. The interest in abating poverty and increasing people's wellbeing is not new. However, during the last decades there has been an increase in local, national and global initiatives aiming to reduce poverty.

In 1964, Lyndon B. Johnson, president of the United States, declared the war on poverty and proposed the *Economic Opportunity Act*, which was passed by the U.S. Congress, in order to guide federal resources in the abatement of poverty (Levitan 1969) As with any other war, it became necessary to have performance indicators to design the strategy, to know the effectiveness of the implemented programs and, in the end, to know whether the war had been won or lost. Furthermore, being an initiative funded by public resources, it became necessary to define and keep track of its beneficiaries. Thus, it became necessary to count the poor, and the measurement of poverty –which required classifying some people as poor- became a relevant issue. An income threshold approach was adopted which, implicitly, associated poverty to lack of purchasing power to satisfy some needs (Orshansky 1965). Even though there is almost

general agreement on the need to confront poverty, there is not much agreement on the best way to do it. Johnson's war-on-poverty strategy faced the criticism of conservative groups for being based on State intervention rather than on promoting growth and opportunities; thus, it faced great opposition in a nation that conceives itself as the 'land of opportunity' and where many people dislike the idea of generating a 'culture of poverty' (Niskanen 1996).[6]

The Millennium Development Goals Initiative

During the last decade of the past millennium a new initiative emerged to reinforce some general values and to pursue some global compromises in international cooperation, foreign aid, and national policies. In the year 2000 the Millennium Summit of the United Nations adopted the Millennium Declaration. The Millennium Development Goals initiative (MDGs) was launched as a consequence of this declaration; it sets specific targets, as well as general compromises for the first years of the millennium. The first goal of the MDGs focuses on eradicating extreme poverty and hunger, and it explicitly states as its first target to "*Halve, between 1990 and 2015, the proportion of people whose income is less than $1.25 a day*".[7] The MDG's initiative not only makes of poverty abatement its first goal but also, by doing so, it ends up defining poverty on the basis of its measurement: a poor person is that whose income is less than US$1.25 a day. An income-based conception of poverty is clearly dominant in the MDG's view of poverty; three income-based indicators are used to keep track of the first goal: the proportion of people below the poverty line, the poverty gap ratio, and the share of the poorest quintile in national consumption.

The MDGs initiative has made of poverty-abatement a central issue in international-cooperation agreements as well as in international-development programs; it has also generated a lot of interest in poverty studies and in poverty evaluation. Many programs and initiatives have been locally and internationally launched to reduce poverty. The need of 'counting the poor' –or 'identifying the poor'- is crucial within the MDGs initiative. It is impossible to set targets and to declare victory if there is 'no counting of the poor'. Thus, the measurement of poverty became a central issue within this initiative. The dominance of measurement over conceptualization is clear in a document published by the United Nations Development Program in 2003; this document is entitled '*Indicators for Monitoring the Millennium Development Goals. Definitions, Rationale, Concepts and Sources*'. In page 5 of this document it states:

> *Goal1. Eradicate extreme poverty and hunger*
>
> *Target 1. Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day.*
>
> *Rationale. The indicator allows for comparing and aggregating progress across countries in reducing the number of people living under extreme poverty and for monitoring trends at the global level.* (UNDP 2003, p. 5)

It is clear that the rationale for this indicator does not go beyond the tautology of defining extreme poverty on the basis of the indicator used to measure it and then appealing for comparability across countries. Extreme poverty is clearly defined by the indicator used ('one dollar a day') rather than the other way around. After providing this quick and tautological rationale for the indicator the document goes on to provide a long explanation on the 'method of computation' and on 'data collection and sources'.

According to its own criteria the initiative has been successful in halving poverty rates, and this global goal was attained before the specified year for reaching the target. However, attaining the global goal does not mean for each country

[6] Conservative groups tend to rely more on private and personal initiatives to do good in society; U.S. President George H. Bush used the term 'a *thousand points of light*' in his inaugural address to refer to the many countrywide private initiatives that could do good in society. The term 'compassionate conservatism', used by George W. Bush during his presidential campaign, also reflects this view of relying on private initiatives to help people in need, rather than on big State-administered programs.

[7] www.un.org/millenniumgoals/poverty.shtml

being successful in doing so; some countries are lagging behind. The using of a simplistic measurement of poverty in order to allow easy comparisons across regions of the world is not exclusive of the MDG's; for many years the World Bank has also relied on income-based indicators to count 'the poor' and to make cross-country comparisons. The World Bank has used income-based poverty lines at levels of US$1.00 per day (in purchasing power parity), a figure which was updated to US$1.25 in 2005 (Ravallion et al. 2008).

The MDG's initiative was oriented to action; however, it has had crucial implications for our understanding of poverty by fostering a conception which is basically associated to low income. People have been classified as poor or non-poor worldwide on the basis of this criterion; millions of cases have been categorized as successful because their income has surpassed the poverty line, and international organizations and local governments can state that these people are now out of poverty. International organizations, governments, and experts presume these people are better off; however, they do not really know whether these people's 'graduation' from poverty is associated to any change in their lives which people themselves appreciate or consider important. There are fundamental questions that go unanswered, such as: Do these people consider themselves better off? Are they really experiencing greater wellbeing?

Income-Poverty Situation in the World

Table 14.1 presents the current situation of poverty in the world on the basis of the income-based conception. It is observed that at the threshold level of US$1.25 dollars per day the rate of poverty is practically negligible in Europe; however, poverty rates are very high in Sub-Saharan Africa and in South Asia. Poverty rates are also beyond one digit in the East Asia and the Pacific region. Given the large populations in the East and South Asia regions, the extensive reduction in poverty rates in these regions has implied a substantial decline in the number of poor people in the world. It is observed that the number of persons living with less than US$1.25 has declines from 1.91 billion in 1990 to 0.97 billion in 2015 (an estimated figure). It is this extensive decline in poverty rates in South and East Asia which allows for attaining the first goal of the MDGs. However, it is clear that the Sub-Saharan Africa region is lagging behind.

There are many countries where poverty figures are very high. For example, according to the World Bank, the following countries have a headcount ratio above 60 % (for the US$1.25 threshold): Haiti, Chad, Central African Republic, Rwanda, Tanzania, Nigeria, Zambia, Malawi, Madagascar, Burundi, Liberia and Democratic Republic of Congo. The last four countries have figures above 80 %. As observed, with the exception of Haiti, the other countries belong to the Sub-Saharan Africa region. When a

Table 14.1 Poverty headcount ratio and population in poverty At different thresholds of income a day (purchasing power parity) By region

	As % of population in the region 2010[a]		Absolute number of persons in poverty (at US $1.25) (in millions)		
	US$1.25 (PPP)	US$2 (PPP)	1990	2010[a]	2015[a]
East Asia & Pacific	12.5	29.7	926	251	115
Europe & Central Asia	0.7	2.4	9	3	2
Latin America & Caribbean	5.5	10.4	53	32	30
Middle East & North Africa	2.4	12.0	13	8	9
South Asia	31.0	66.7	617	507	406
Sub-Saharan Africa	48.5	69.9	290	414	408
			1,908	1,215	970

Source: World Bank WDI http://data.worldbank.org/topic/poverty
[a]Estimated figures

poverty line of US$2 dollars is used some countries reach headcount ratios above 90 %, such as: Malawi, Madagascar, Burundi, Liberia and the Democratic Republic of Congo. Of course, there are many countries with negligible figures.

The headcount ratio as a percentage of the population does not show how absolute figures evolve. There are some regions with large populations but with low population growth, such as the East Asia and Pacific region, which includes China, where a 1 percentage point decline in the headcount ratio would mean a huge decline in the absolute number of poor. In countries with high rates of population growth a decline in the headcount ratio does not necessarily translate into a decline in the absolute number of persons in poverty.

There are many indicators which aim to further provide information about the intensity and characteristics of poverty. For example, the poverty gap indicator is constructed to measure the depth of poverty in a country, this is: the indicator measures the average distance between the income of people in poverty and the poverty line as a percentage of the poverty line. For example, the poverty gap at US$1.25 a day in the Democratic Republic of Congo is 52.8, meaning that those beneath the poverty line in this country (a figure which is above 80 %) are also very deep below that line (having, on average, an income of about US$0.60 a day). Getting this people out of income poverty would require an enormous effort because the poverty gap is very high. Thus, it is not only important to know the percentage of people who are below an arbitrarily defined income-poverty line but also to know how much below that line people are. The poverty gap is an indicator that allows making a distinction among those people being classified as poor on the basis of their income.

Other indicators of poverty aim to provide further information about the depth and nature of poverty in a country. For example, the Foster-Greer-Thorbecke (FGT) is a poverty indicator which allows for taking into consideration income inequality within the poor; this indicator is based on an arbitrarily defined coefficient which aims to represent society's dislike for inequality (Foster et al. 1984a, b).

The poverty headcount ratio does not take into consideration whether those persons in poverty have been in that situation on a permanent or on a transitional basis. People may be into poverty for short periods of time –transitional poverty-, but if some people get in while others get out then it is possible for the headcount ratio to remain constant even if, over time, people are entering and exit poverty. Thus, it is necessary to contemplate whether people in poverty are structurally there or just temporarily there; this distinction is made by the literature on chronic and transient poverty (Hulme and Shepherd 2003); there is a presumption that chronic poverty constitutes a greater wellbeing burden than transient poverty.

It is noteworthy to state that many countries do also compute their own metrics of poverty on the basis of nationally-defined poverty lines. These measures may substantially differ from the World Bank and the United Nations generalized poverty lines. National poverty lines are constructed on the basis of basic-needs theory and aim to define a threshold level so that people beneath this level are considered as being in wellbeing deprivation (poverty). These national poverty lines are basically constructed on the basis of estimating the purchasing power that a family needs to satisfy a normatively-defined basket of commodities (Feres and Mancero 2001). The construction of this basket of commodities contemplates their capacity to satisfy a list of requirements which are considered as basic according to some normative criteria which usually ends up being approved by public-officers and congresspersons. Thus, official and country-specific rates of poverty do exist in most countries; these poverty rates may substantially differ to those estimated by the World Bank and the MDG's on the basis of universal and simplistic criteria. For example, according to World Bank figures, while the headcount rate in Peru is 5 % according to the US$1.25 household per capita income threshold, it is almost 26 % according to the country's own criteria. On the contrary, in Malawi the headcount ratio is around 62 % on the basis of

the universal US$1.25 threshold, but 51 % on the basis of the country's own criteria. Thus, national poverty rates may substantially differ from the internationally-defined poverty rates, and they probably reflect a political consensus -or a political compromise- reached in each country. The nature of these compromises is beyond the scope of this chapter; however, it is important to remark that these political decisions are contingent on the kind of political institutions that prevail in the countries. Many countries in the world do rely on very weak institutional and political frameworks that may introduce doubts on what national poverty rates reflect.

Debates Within the Income-Based Approach to Poverty

As expected, there has been substantial debate on whether some poverty measures are really 'counting –and not counting- the poor'. For example, Reddy and Pogge (2010) start their paper by stating "*How many poor people are there in the world? This simple question is surprisingly difficult to answer at present*" (p. 3). Perhaps the question is not so simple; perhaps, as Gaston Bachelard used to say, '*simple things do not exist, only simplified ones*'.

In an interesting debate with Ravallion (2010) -who has lead the World Bank's research on poverty-, Reddy and Pogge (2010) and Pogge (2010) question the appropriate way of 'counting the poor' the World Bank uses; they discuss the deficiencies of using income to measure poverty and propose moving towards measuring poverty on the basis of the cost of satisfying a group of basic needs in a given country. It is clear that Reddy and Pogge are bending towards rate of poverty which is defined not on the basis of a universal criterion but on the basis of country-specific criteria. Deaton and Dupriez (2011) point towards deficiencies in income comparisons across countries when focusing on low-income persons; they argue that a different using of weights that takes into account the consumption patterns of low-income people do lead to different global poverty counts. Even though these debates are addressing some relevant issues, they are always framed within the same tradition of presuming that income –or a related purchasing-power proxy- is the main variable in assessing people's wellbeing.

Furthermore, the debates show the typical view of considering poverty as a characteristic of persons rather than as an attribute the expert places on people; for example, Reedy and Pogge (2010) use the term 'counting the poor', while Sen (1976) goes with the term 'identifying the poor'. There is little thinking in the literature about what do we mean by 'the poor' and there is a lot of effort in 'counting' and 'identifying' them. It seems that poverty ends up being defined on the basis of its measurement and those called 'the poor' end up in this category because of their low income. Section "'The poor': an academic construct" of this chapter will address this crucial issue as a critique to the presumption and imputation traditions; it basically states that we are not really 'counting the poor' nor 'identifying the poor' –not because of errors in computing their income and related purchasing-power proxies, as Reddy and Pogge (2010) suggest- but because what is really happening is that experts and organizations are 'classifying some human beings as poor'.

Beyond Income-Based Poverty. The Imputation Approach

A Substantive Approach to Poverty. Imputation

There has always been some distrust on the relevance of income as a proxy for wellbeing. Income has been associated to the predominance of economists in studying wellbeing and emphasizing their main variable of interest. As a reasonable reaction within the prevalent disciplinary compartmentalization of knowledge, other social scientists have aimed to reducing the importance of income in assessing people's wellbeing by introducing other variables –and dimensions- into the wellbeing equation (Rojas 2011a) Many economists who are concerned about ethical considerations in economics have also ended up

following this option of classifying people as poor on the basis of an expanded list of factors.

Following the imputation tradition to assessing people's wellbeing, these approaches rely on a conceptual framework to justify a list of dimensions which are considered important for having a good life. These approaches keep the authority of judging a person's wellbeing in the hands of experts, but they use multi-dimensional criteria –plus some dimension-reduction techniques- to assessing the wellbeing situation of a person.

In consequence, the imputation tradition leads to a conception of poverty based on lists of indicators that somehow need to be reduced to a single dimension. There is usually an emphasis in measurement, handling of variables, and dimension-reduction techniques. In addition, there is usually little discussion about the relevance of the conceptual framework and, of course, no corroboration at all. Poverty refers in this case to the absence of those factors which contribute to a good life according to experts.

The Human Poverty Index

The human poverty index (HPI) is a good illustration of the implementation of the imputation tradition of wellbeing to poverty. This measure of poverty was introduced by the United Nations Development Program to somehow mirror its Human Development Index (HDI). The HPI was introduced in UNDP's Human Development Report 1997, which focused on poverty eradication.

Like the HDI, the HPI is, in principle, loosely based on the concept of relevant capabilities people ought to have; when people do not have access to these capabilities experts end up talking about deficiencies and imputing low wellbeing.

The human poverty index relies on three main areas: health, knowledge, and standard of living. Health is measured on the basis of the likeliness of death at an early age, literacy rates are used to measure knowledge, and income is used as a proxy for the standard of living. Unemployment, as a proxy for exclusion, was also incorporated in other versions of the HPI. It is important to remark that these variables that constitute the HPI could be highly correlated.

Like all approaches that rely on lists of variables, the HPI faces the problem of how to handle several variables to reach a conclusion on a person's poverty situation. Are all areas essential? Is it possible to substitute deficiency in one area with affluence in other area?

Multidimensional Poverty

During the last decades a large literature has emerged proposing a view of poverty which goes beyond the single-dimensional income criterion (Tsui 2002; Bourguignon and Chakravarty 2003; Kakwani and Silber 2007) The approach states that poverty is a multi-dimensional phenomenon, meaning that in order to define and measure poverty it is necessary to take a look at many variables depicting the situation of people in many dimensions. The main claim of the approach is simple: poverty is multi-dimensional; following the imputation-based approach to wellbeing, there is no interest in corroborating this claim. Rather than providing some support to corroborate this claim, the approach quickly moves to discuss the dimensions to be incorporated (Alkire 2007), as well as to discuss many measurement issues in the construction of composite indices; such as: cut-offs and dimension-reduction techniques (Thorbecke 2007; Kakwani and Silber 2008; Alkire and Foster 2009, 2011).

The UNDP introduced a multi-dimensional poverty index in its 2010 Report; it is basically an expansion of the HPI, using three main dimensions (health, education, and living standards) and 10 indicators. Health is assessed on the basis of nutrition (at least one member in the household is malnourished) and child mortality (one or more household children in the household have died). Education is assessed on the basis of years of schooling (no one in the household has completed 5 years of schooling) and children enrollment (at least one school-age child is not enrolled in school). Living standards are assessed on the basis of 'dirty' cooking fuel (household uses dung, firewood or charcoal), access to electricity (household has no electricity), clean water (household has no access to clean drinking water), dirt floor, and assets ownership (household has no car and owns at most

one of: bicycle, motorcycle, radio, refrigerator, telephone or television). These indicators are defined at the household –rather than personal-level; thus, household size needs to be incorporated as another factor to be considered in the estimation of multi-dimensional poverty, and some household and intra-household arrangement assumptions are required. It is possible for high correlations among all these indicators to show up.

Imputation-based conceptions of poverty necessarily rely on: first, a general framework mentioning what dimensions are considered as relevant for assessing people's wellbeing; second, a list of variables measuring the situation in these dimensions; third, the definition in each dimension of deficiency levels (cut-offs); and fourth, the application of a dimension-reduction technique to reach a general conclusion on the situation of the person.

Experienced Wellbeing and Poverty

Subjective Wellbeing and Wellbeing Deprivation

The subjective wellbeing approach (SWB) understands wellbeing as a living experience people have; while poverty refers to a situation where people are in wellbeing deprivation, this is: they are experiencing low wellbeing (ill-being). Thus, in a similar way than the other traditions, the SWB approach understands poverty as a situation of wellbeing deprivation; however, rather than presuming or imputing its existence, the SWB approach relies on people's answer to direct questions about their wellbeing situation. If people adequately report their experience of being well then the SWB provides a good way of knowing who is in wellbeing deprivation. One of the advantages of the approach is that it explores wellbeing deprivation where it takes place: in the realm of the person herself.

It is important to distinguish between the experience of wellbeing people do have and the wellbeing report people do make; this is important in order to avoid the common mistake -made in other traditions- of following a measurement-driven conception of poverty. Wellbeing deprivation takes place in the realm of the experience of being well people have; the report is just a proxy for this experience, but it is not the experience itself. Wellbeing deprivation is therefore understood as a situation where people mostly experience pain –rather than pleasure-, suffering –rather than joy-, and failure –rather than achievements-, and this is synthesized by the person herself in terms of being dissatisfied with her life.

Methodological Issues Within the SWB Approach

The SWB approach to poverty faces many challenges which in principle are not uncommon to other approaches. For example, it is necessary to choose a specific variable to measuring people's wellbeing; there is agreement that variables such as life satisfaction, happiness and life evaluation constitute overall assessments people use when judging goodness in their life (OECD 2013). Some research has been done on the relationship among these variables and it is likely for differences to emerge in the classification of people as being in wellbeing deprivation on the basis of which variable is used (Ferrer-i-Carbonell 2002). As a matter of fact, this is also a common problem in the other traditions; income-based assessments face the problem of which proxy for access to resources to use (household income, household per-capita income, current expenditure, ownership of productive assets, monetary income plus in-kind income, permanent income, and so on), and multidimensional-poverty assessments face the problem of which variables and even which dimensions to incorporate.

It is necessary to choose a response scale for the overall wellbeing assessment question. For example, the literature uses both numerical and categorical response scales (Rojas and Martinez 2012). Quantitative analyses can easily be done with any of the two types of scales and, in general, the main conclusions seem to sustain

independently of the scale being used (Ferrer-i-Carbonell and Frijters 2004). However, it is likely for differences in the assessment of wellbeing deprivation to emerge depending on the scale used and it is important to be aware of this.[8] The categorical response scale probably provides a closer link to how people think about their life; people may tend to synthesize life in words and labels rather than in numbers, but this is an issue for further research. In addition, categorical scales going from very or extremely unsatisfied to very or extremely satisfied allow for setting clear cut-offs regarding the satisfaction levels. For example, people reporting 'unsatisfactory' levels can reasonably be considered as being in wellbeing deprivation.

It is also necessary to assume that what people report reflects their wellbeing experience. Many reporting biases have been studied and some precautions can be taken (Rojas and Martinez 2012) for the purposes of this chapter it may be of interest to focus on the strategic response bias; this is: people may have an interest in reporting a situation which is different to their experience if they get some benefits by doing so. Exposure to this risk emerges when people's reports are associated to some rewards or punishments. The interest of misreporting and even deceiving and cheating is common in programs which tie access to the benefits of the program to some action or behavior of its beneficiaries. For example, people may find in their benefit to transfer to a relative their ownership of assets if by doing so they can keep some social-program benefits. This is a general problem which can only be solved either by separating rewards and punishments from reports and actions or by implementing highly-expensive monitoring schemes.

It is also necessary to assume that wellbeing reports are comparable across persons; in other words, that what people report closely reflects their wellbeing experience and that human experience of being well are comparable across persons. Hence, a person stating that she is very unsatisfied with life would be placed in the same situation than another person stating she is very unsatisfied with life, and they would be placed below another person stating she is satisfied with life. Comparability across persons seems easier when using categorical response scales, and some discussion may emerge when using cardinal (1 to 10) response scales. It is important to remark that the main issue of comparing wellbeing across persons emerges in poverty assessments independently of the tradition which is followed. The assumption that wellbeing comparisons make sense is general to all traditions, although some traditions are weaker than others in resolving the challenges raised by the assumption. For example, it is well known that income has cardinal properties and is –in principle- a variable that can be observed by a third party; however, income comparisons across persons -whatever the income variable is- are not really made because of the cardinal and observable properties income has but because a close and homogeneous-across-people relationship between income and wellbeing is presumed to exists. The following section argues that these assumptions do not sustain; the literature has shown that even though income may be related to wellbeing it is not a determinant variable influencing people's wellbeing; hence, the relationship between income and wellbeing is not close (Rojas 2011a, b). Furthermore, the literature also shows that there is heterogeneity in the explanatory structure of wellbeing across persons; this heterogeneity emerges because the relationship between income and wellbeing is contingent on other factors, such as people's values and aspirations (Rojas 2007c). Hence, it is perfectly reasonable for two persons having a similar income to have substantially different wellbeing experiences. In consequence, from a wellbeing perspective, income comparisons across persons require very strong assumptions which are difficult to satisfy in practice. The same argument applies for the relationship between the many variables used in multi-dimensional poverty approaches and wellbeing.

[8] It is very likely for some type of question and for some type of scale to predominate. This is also common for many indicators; for example, when assessing the rate of economic growth economists tend to focus on the gross domestic product rather than on the gross national product.

Table 14.2 Strength of the income[a] – subjective wellbeing relationship Overall subjective wellbeing measures OLS simple regression Mexico's cross-section data

	Life satisfaction[b]	Happiness[c]	Best-worst life[d]	Affective balance scale[e]
Estimated coefficient	0.169***	0.135***	0.255***	0.066***
Goodness of fit (R-squared)	**0.014**	**0.007**	**0.015**	**0.015**

Source: Author's own findings on the basis of the ImaginaMéxico 2012 Survey
Statistical significance ***/(0.01)
[a]Income: logarithm of household per capita income
[b]Life satisfaction corresponds to the typical question "Taking everything in your life into consideration, how satisfied are you with your life?". The response scale is categorical; it has seven categories going from extremely unsatisfied to extremely satisfied. The scale is cardinalized in a 1 to 7 range
[c]Happiness corresponds to the typical question "Taking everything in your life into consideration, how happy are you?". The response scale is categorical; it has seven categories going from extremely happy to extremely unhappy. The scale is cardinalized in a 1 to 7 range
[d]Best-Worst Life corresponds to the typical ladder question which asks the respondent to place his/her life in a 0 to 10 ladder scale, 0 being the worst possible and 10 the best possible life
[e]The affective balance scale is constructed as the difference between the percentage of positive minus the percentage of negative affects experienced the day before. It is measured in a −1 to 1 scale

Subjective Wellbeing and Income

In the decade of the 70s Easterlin (1974) published a paper showing that economic growth does not enhance the human lot in the long run. This paper follows a short note of his own arguing that money does not buy happiness (Easterlin 1973). This finding is now known as the Easterlin paradox, and it states that there is a negligible long-run relationship between income and subjective wellbeing. Easterlin's empirical research has been the inspiration for many research projects on the relationship between subjective wellbeing and income. With some exceptions, further studies have corroborated the lack of a long-run relationship between income and subjective wellbeing indicators at the country level (Bartolini and Sarraceno 2011; Clark et al. 2008; Easterlin and Angelescu 2009, for an exception see Stevenson and Wolfers 2008). Cross-country studies usually find a positive and logarithm relationship between income and life satisfaction. These findings indicate that there are strong relative concerns in the evaluation of income and that income acts as a status marker.

Independently of the nature of the relationship between income and wellbeing, the studies show that the relationship is very weak; this is: it is impossible to predict a person's life satisfaction –and other subjective wellbeing variables- on the basis of her income (Rojas 2011b) The goodness of fit of a regression using a subjective wellbeing indicator as dependent variable and the natural logarithm of income as the independent variable is always very low. As an illustration, Table 14.2 presents the results of an *OLS* simple regression using a large cross-section survey applied during the fall of 2012 in Mexico.[9] The survey has about 19,500 persons reporting their wellbeing as well as their income.

Table 14.2 shows that in even in cross-section data –where the impact of income is expected to be greater due to its status-marker role- there is a very weak relationship between income and subjective wellbeing. The goodness of fit coefficient is practically nil in all cases; this shows that it would be an enormous mistake to base any indicator of wellbeing deprivation on the basis of income alone.

Many reasons explain this weak relationship between income and subjective wellbeing. First, the household per capita income variable may be a bad proxy for people's access to economic goods and services because it does not appropriately take into consideration household and intra-household arrangements and it poorly considers

[9] This survey was financed by *Fundacin ImaginaMexico*, which is a think-and-do Mexican tank interested in promoting grass-roots and municipal-level actions to promote happiness in Mexico.

in-kind income (Rojas 2006c). Second, reported income reflects current income but it does not necessarily correspond to people's command over relevant economic resources in the long run (permanent income). Third, people may be more concerned about relative income than about absolute income; this is a fact commonly found in the literature and which supports a relative –rather than absolute- conception of poverty. Fourth, people may not use their income efficiently; some people may use their income in an inefficient way while other people may act more efficiently in attaining high satisfaction from their income (Rojas 2008a). Fifth, values may differ across persons; it has been shown that materialistic persons tend to have a different income-life satisfaction relationship than non-materialistic persons (Rojas 2007c).

These reasons may partially explain why the relationship between income and subjective wellbeing is weak. However, they do not exhaust all the potential reasons; as a matter of fact, these explanations are of lesser importance once it is considered that persons are much more than consumers. In economic models consumers do get all their wellbeing from consuming economic goods and services; however, for persons there is more to life than their standard of living, and for many of them there are even more important aspects in life (Rojas 2006a, 2007a, 2008b). The domains-of-life literature shows that people do get their life satisfaction not only from their actions as consumers (getting economic satisfaction) but also from their actions as spouses, parents, workers, housekeepers, friends, neighbors, colleagues, and many others. Life satisfaction can be understood as the result from satisfaction in all those domains of life people act as human beings, and income is of little relevance in explaining satisfaction in many of these domains (Rojas 2006b, 2007a).

The weak relationship between income and subjective wellbeing implies for income-based poverty measures to be bad proxies for people's wellbeing deprivation. This is empirically shown in the following section.

Dissonances and Consonances in the Classification of People as Being in Wellbeing Deprivation

Income-Based Classification

It may happen that people are classified as poor on an income-based measure of poverty and that they are not experiencing low wellbeing; it may also happen that people are classified as non-poor on the basis of their income and that they are experiencing low wellbeing. In other words, there may be people who are classified –by a third party- as poor and who are satisfied with their life and enjoying high wellbeing; there are also people classified as non-poor who may feel miserable about their life. These dissonances between the classification of people as poor on the basis of income-based measures and their reported experience of being well may raise some questions about people's reports but, fundamentally, they raise questions about the adequacy of measures of poverty which are based on the presumption and imputation traditions to assess the wellbeing situation of people.

It is possible to explore the wellbeing situation of those who would be classified as poor on the basis of their income by using the ImaginaMexico 2012 Survey, with about 19,500 observations. Following the World Bank and the MDG's criterion, a threshold level of US $1.25 dollars of household per capita income per day is assumed. Life satisfaction is measured in a categorical scale with the following response options: extremely unsatisfied, very unsatisfied, somewhat unsatisfied, neither satisfied nor unsatisfied, somewhat satisfied, very satisfied, and extremely satisfied. For illustration purposes the first four response categories are pooled up in an 'unsatisfied' category, while the last three response categories are pooled up in a 'satisfied' category. Table 14.3 shows the dissonances and consonances that arise when the poverty classification based on a US$1.25 cut-off is compared to the 'satisfied' and 'unsatisfied' classification on the basis of people's reported life satisfaction.

It is observed in Table 14.3 that only 23.1 % of people classified as poor on the basis of an

Table 14.3 Dissonances and consonances in classification of people as poor and wellbeing situation Worldwide poverty criterion of US$1.25 household per capita income per day Mexico 2012

	Income-based poverty classification[a]	
Subjective wellbeing. Deprivation situation	Less than US$1.25	More than US$1.25
Wellbeing deprivation[b]	23.1 %	16.3 %
Very and extremely unsatisfied	4.8 %	3.7 %
No wellbeing deprivation[c]	76.9 %	83.7 %
Very and extremely satisfied	44.1 %	54.8 %
Total observations	2,340	17,166

Source: ImaginaMexico 2012 Survey
[a]Household per capita income per day
[b]People reporting life satisfaction levels of "Extremely unsatisfied", "Vey unsatisfied", "somewhat unsatisfied" and "Neither satisfied not unsatisfied"
[c]People reporting life satisfaction levels of "extremely satisfied", "very satisfied", and "somewhat satisfied"

income threshold of US$1.25 dollars per day report being in wellbeing deprivation; while 76.9 % of those classified as poor report high levels of satisfaction with life. Furthermore, 16.3 % of those classified as non-poor report low wellbeing. It could be argued that these results emerge from lack of texture in the wellbeing classification, since we have pooled up people into two big wellbeing categories on the basis of their life satisfaction. Table 14.3 also provides more detail by looking at those who are 'very' or 'extremely unsatisfied' and those who are 'very' or 'extremely satisfied' with their life, and who are being classified as poor or non-poor on the basis of the World Bank and the MDG's criterion. It is observed that it is very likely to find people who would be classified as poor and who are reporting high wellbeing; as a matter of fact, 44 % of people who would be classified as poor state that they are 'very satisfied' or 'extremely satisfied' with their life. On the other hand, not all the non-poor are thriving, as a matter of fact only 55 % of those who would be classified as non-poor report being 'very' or 'extremely' satisfied with their life.

It could also be argued that income-based measures of poverty are correct but that the World Bank and the MDG's criterion is incorrect; in other words, that the universal criterion of US$1.25 dollars per day is not appropriate for Mexico. Actually, this is the argument advanced by Reddy and Pogge (2010) and Pogge (2010). To explore this argument, Table 14.4 shows what happens when the criterion adopted by Mexico's official institution in charge of measuring poverty (CONEVAL: National Council to Evaluate Social Development Policy) is used. CONEVAL established a cut-off of about US$2.93 dollars of household per capita income per day and calls it a 'minimum wellbeing' income-poverty line. As it is observed in Table 14.4, dissonances exist and are important; only 20 % of people classified as poor on the basis of the country-specific income-poverty line are in wellbeing deprivation; as a matter of fact, only 4 % are 'very' or 'extremely unsatisfied' with their life. 80 % of those who are classified as poor are not in wellbeing deprivation, and 48 % are 'very' or 'extremely satisfied' with their life.

Thus, substantial dissonances between the income-based classification of poverty and the subjective wellbeing situation are found. It is not only a problem about the specific income cut-off, it is a fundamental problem on income being a bad proxy for people's experience of being well.

Multidimensional Poverty

Multidimensional poverty calls for going beyond the income dimension when assessing a person's wellbeing. The dimensions to be incorporated are somehow arbitrarily defined. Based on this approach the government of Mexico has implemented new criteria to assess poverty on the basis

Table 14.4 Dissonances and consonances in classification of people as poor and wellbeing situation Mexico's specific poverty line Poverty line defined at about US$2.93 dollars of daily household per capita income Mexico 2012

	Income-based poverty classification[a]	
Subjective wellbeing. Deprivation situation	Less than US$2.93	More than US$2.93
Wellbeing deprivation[b]	20.5 %	13.5 %
Very and extremely unsatisfied	4.1 %	3.6 %
No wellbeing deprivation[c]	79.5 %	86.5 %
Very and extremely satisfied	47.6 %	59.5 %
Total observations	9,828	9,678

Source: ImaginaMexico 2012 Survey
[a]Household per capita income per day
[b]People reporting life satisfaction levels of "Extremely unsatisfied", "Vey unsatisfied", "somewhat unsatisfied" and "Neither satisfied not unsatisfied"
[c]People reporting life satisfaction levels of "extremely satisfied", "very satisfied", and "somewhat satisfied"

Table 14.5 Multidimensional poverty and wellbeing deprivation[a] In percentage terms, by multidimensional-poverty category

Multi-dimensional-poverty category	In wellbeing deprivation	Not in wellbeing deprivation
Extreme poverty	41.3	58.7
Moderate poverty	28.4	71.6
Vulnerability to deficiencies	20.2	79.8
Vulnerability to income	19.0	81.0
Non-poor and non-vulnerable	13.4	86.6

Source: INMUJERES-UPAEP database 2010
[a]Persons are classified as being in wellbeing deprivation if their life satisfaction is in the categories of 'extremely unsatisfied', 'very unsatisfied', 'somewhat unsatisfied' and 'neither satisfied nor unsatisfied'. Persons are classified as not in wellbeing deprivation if their life satisfaction is in the categories of 'somewhat satisfies', 'very satisfied', and 'extremely satisfied'

of the following dimensions: household economic situation (based on household per capita income), educational backwardness, access to health services, access to social security, quality and size of housing, access to basic utilities, and access to food. The household economic situation is given greater weight, while the other six dimensions are pooled up together into a so-called deficiencies index. The following five categories of multidimensional deprivation are constructed in order to classify people: extreme multidimensional poverty, moderate multidimensional poverty, vulnerability in deficiencies, vulnerability in income, and non-poor and non-vulnerable (Gordon 2010)

This multidimensional-poverty approach is based on the imputation tradition and, as a consequence, some dissonances between the approach's classification of people as poor and people's reported wellbeing are expected. Table 14.5 shows the dissonances and consonances found on the basis of a relatively small survey applied in two states of Mexico; with 2,000 observations the survey is representative at the state level but not at the national level.

In a similar way than with income-based poverty measures, multidimensional poverty seems to be associated to people's wellbeing deprivation; however, substantial dissonances are observed in the classification of people as poor on the basis of the multidimensional-poverty criterion and their reported life satisfaction. For example, almost 59 % of those persons classified as being in extreme poverty –on the basis of the multidimensional criterion- report high levels of life satisfaction. On the other hand, about 13 % of

those classified as non-poor and non-vulnerable report low life-satisfaction levels. This is not surprising since the multidimensional-poverty approach relies on the imputation tradition and it ends up providing a list of universal and somehow arbitrarily-defined dimensions, it also applies arbitrarily-defined cut-offs and it uses universal and arbitrarily-defined weights to reduce the many dimensions.

Explaining Dissonances in the Classification of People as Poor

It is clear that there are huge dissonances in the classification of people as poor on the basis of income-based and multidimensional-poverty indicators and the wellbeing which is experienced by people. Why these dissonances emerge and what do they tell us? An easy tactic to address these questions would be to focus on problems in the subjective wellbeing approach; for example: that people are misreporting their wellbeing, that the sampling is not correct, that there are survey biases, that comparability problems across persons make results irrelevant, and so on. Most of these concerns have already being addressed in section "Methodological issues within the SWB approach". There is confidence in the information provided by the subjective wellbeing approach, as it is shown by the OECD publishing a guideline to measuring subjective wellbeing (OECD 2013) and by many national statistical offices incorporating subjective wellbeing information into their information system.

Another easy tactic would be to focus on problems in measuring and handling income; for example, perhaps a good estimation of access to public services would solve the problems, or perhaps working with an adult-equivalent income rather than with household per capita income would provide a better fit. Some studies show that by correcting these problems there would be a minor decrease in dissonances; however, this does not really solve the puzzle of substantial dissonances showing up (Rojas 2006c).

This section takes stakes with two main explanations for these huge dissonances showing up. First, it argues that 'the poor' is an academic construct and that rather than identifying 'the poor' what the construct is doing is classifying some human beings as poor and that, in doing so, it is exposed to many risks and biases. Second, it argues that poverty has become a reductionist label which is placed on some human beings and that, by doing so, many other aspects in a person's life are being neglected.

'The Poor': An Academic Construct

Are We Really Identifying 'The Poor'? Classifying vs. Identifying

It is not uncommon for experts working within the imputation and the presumption traditions to make reference to 'the poor'. For example, the literature is abundant in terms such as 'identifying the poor' (Sen 1976; Ir et al. 2001; Falkingham and Namazie 2001), 'counting the poor' (Orshansky 1965; Besharov and Couch 2012; Chandy 2013; Reddy 2008), and even 'the poorest of the poor' (Alkire 2013). The using of the term 'the poor' creates the false impression of poverty being a trait some people have. It is within this view of poverty-as-a-trait-people-have that experts become involved in finding an adequate methodology to count -or identify- those who have this characteristic in order to separate 'the poor' from 'the non-poor'. Debates such as Reddy and Pogge (2010) and Pogge (2010) vs. Ravallion (2010) are framed in terms of problems researchers face in 'counting the poor', as well as in terms of finding better ways to 'identify the poor'.

Rather than identifying or counting 'the poor', what researchers within the presumption and imputation traditions are really doing is 'classifying some human beings as poor' on the basis of their criteria. The term 'counting the poor' and the debates around it suggest that researchers really believe they are looking for precise techniques to identify and count 'the poor'; in other words; poverty is an attribute some people have and what is necessary is to

find the appropriate instrument or methodology to achieve a precise detection. On the other hand, the term 'classifying people as poor' suggests that what researchers are really doing is using indicators and methodologies to define categories, place people into these categories, and construct a sphere of social, academic, and policy concern. By selecting different poverty measures and methodologies researchers are creating different spheres of concern.[10]

The absence of an external validation criteria in the imputation and presumption traditions to contrasts poverty assessments to people's wellbeing deprivation implies that in the end it is impossible to corroborate whether the counting and identifying techniques being used really classify people according to their wellbeing deprivation. Because in the presumption and imputation traditions measurement methodologies cannot be externally corroborated, the task of choosing among alternative methodologies becomes a matter of tastes, preferences and interests, rather than a matter of scientific corroboration. Of course, there may be substantial debate on technical issues associated to different methodologies, but in the end the best answer to someone working within traditions when asking how many poor people are out there may be: 'It depends on you'. It is for this reason that framing the discussions in terms of whether 'the poor' are being appropriately counted or identified is fruitless.

Furthermore, the study of poverty within the traditions of imputation and presumption creates the false impression of poverty being a feature which is completely exogenous to the researchers. In other words, the epistemological approach which is followed by researchers assumes that criteria, measures, and indices are constructed by researchers in order to better know a phenomenon that is happening to persons and which is completely external to and independent of the researcher. This view of researchers studying an object which is external to and independent of them has dominated science; it is implicit in the methodological objectivism of the physical sciences. However, by lacking any kind of external validation on the basis of people's experience of being well, researchers working within the imputation and presumption traditions are not really studying a phenomenon that is external to them but constructing it on the basis of their measures and methodologies; in consequence, they are not really 'counting' or 'identifying' 'the poor', they are classifying people as poor. By doing this, poverty becomes and academic construct and a label experts place on some people. In consequence, the experts are not really exogenous to the phenomenon they are studying; as a matter of fact experts cannot be detached from this phenomenon. Being part of their area of study, the role experts play in poverty studies should also be an issue of study. The following section deals with some risks and biases those who are classifying people as poor are exposed to.

Some Risks and Biases 'The Classifiers' Are Exposed To

Experts working within the presumption and imputation approaches to poverty are exposed to many risks and biases when classifying people as being in wellbeing deprivation. Some of these risks and biases are:

– *Perspectivism*: experts, like any other human being, have their own life trajectory which places them in a specific position in time and space. It is from this specific position that they have a perspective of their world, and it is from this perspective that they end up classifying other people as poor. Their own life trajectory plays a role in the formation of their tastes and preferences as well as of their interests. For example, some people like

[10] There was a time where being in wellbeing deprivation was something that happened to people. It was associated to people suffering, being tired and having pain, and having a sense of failure and frustration in life. People were aware of it because wellbeing deprivation was taking place in the realm of people; and the role of the experts was to study it. However, it seems that nowadays poverty studies have become very detached from their original purpose. Now people have to wait for the experts to define the criteria and methodology to measure poverty in order to know whether they are classified as being in poverty or not.

mathematics and working with complex models, others may like constructing indicators and working with databases, others are inclined to action, others may prefer working with concepts, and so on. Experts face the risk of classifying others based on how they see others' circumstance from their own perspective, rather than from people's own perspective.

- *Ethnocentrism*: experts do also have their own cultural background. It is impossible to detach a person from her culture and from her own values because these are basic constituents of her personality. For example, some cultures may be more materialistic, showing greater value to possessions, fame, power and money (Kasser 2002), while other cultures may be more relational, showing greater value to human relations (Rojas 2012). Experts are greatly exposed to the values which are predominant in the culture they are raised in; in consequence, experts face the risk of classifying others based on how they see others' circumstance from their own values, rather than from people's own values.
- *Disciplinary focus*: experts have their own professions. It seems an essential requirement for being an expert to spend a lot of time and energy studying some issues within a specific area of knowledge. Thus, due to its own nature, experts are highly exposed to Kahneman's 'Focusing Illusion' risk. Kahneman (2011) states that "*nothing in life is as important as you think it is, while you are thinking about it*". For example, experts focusing on the study of income and consumption would tend to overestimate their importance; in a similar way, academicians studying social class would overestimate its importance, and those studying the axioms some indicators ought to satisfy do also tend to overestimate their importance. Most ordinary people are not economists –or sociologists, or mathematicians-, most of them are not even professionals; thus, it is very likely for ordinary people not to attach the same meaning and relevance to the disciplinary variables which economists -and other professionals- study on a regular basis. It is a common complain of politicians that ordinary people do not show the same passion for wellbeing indicators as those who are constructing and using them show. In consequence, experts face the risk of classifying others based on their own disciplinary focus, rather than on people's own life focus.
- *Reductionism*: experts do also simplify. Experts are used to work with disciplinary agents rather than with persons. For example, it is common for economics textbooks to talk about the wellbeing of consumers rather than about the wellbeing of persons; however, a person is much more than a consumer, and the life of concrete persons -of flesh and blood- is richer than the abstract and simplified life of a consumer. Furthermore, while it is easier to assume that a consumer is a 'representative agent', it is impossible to ask a concrete human being to behave and think as a clone. Composite indicators have been advanced in an attempt to capture complexity in life; however, a person's life is not only richer than a consumer's life, but there is also richness in heterogeneity across persons –in their personalities, values, culture, life trajectory, and so on-. It is difficult for composite indicators to capture this richness in heterogeneity across people because they rely on universal weights to reduce dimensions. In consequence, experts face the risk of classifying others based on abstract conceptions of human beings, rather than on how these human beings are really living their life.
- *Observability*: experts do need to observe some attributes of a person in order to classify her as poor or non-poor. However, not all relevant attributes are easily observable to a third party; some are only observable at a high cost and some may even be unobservable at all. In consequence, experts face the risk of

classifying others based exclusively on some of those attributes they can (easily) observe, rather than on all factors which are relevant for people's wellbeing.

– *Personal interests*: Experts do also have their own careers, goals, interests, and aspirations. Jobs, promotions, prestige, publishing, consulting, and so on, are factors which are important to most people, including experts doing poverty studies. Access to financial resources, power, and others are also important to organizations, including those working in poverty issues. Even though there may be a genuine desire of separating professional activities from personal and organization interests, there is a risk for these interests influencing the selection of methodologies and the criteria used in studying poverty. In consequence, experts face the risk of classifying others based on their own interest rather than on these people's interest.
– *Narcissism*: Like anybody else, experts do have their own self-esteem. It would not be surprising for experts to see themselves as the role model to be followed; thus, when looking at others they would tend to contrast others' lives and situation to their own. By using themselves as aspirational standards for the rest of the population, experts would face the risk of trying to transform others into their own image rather than trying to understand others as they are.
– *Lack of external validation*: the previously discussed risks are not exclusive to the study of poverty, as a matter of fact, they may show up in many research processes. However, what makes exposure to these risks especially critical in the case of the imputation and presumption traditions in the study of poverty is that these traditions do not incorporate any kind of external validation. Any external validation would require incorporating human beings –those who are experiencing wellbeing- into the equation. It is important to remark that this corroboration should be based on studying the wellbeing of all people and not only the wellbeing of those who have already been classified as poor.[11] It is this lack of corroboration (external validation) which allows the other risks not only to show up but also to survive and grow over time.

Not So Small Mercies. A Domains-of-Life Explanation

The using of 'the poor' term minimizes the fact that people are much more than 'poor people' and even much more than 'the poor'. Persons are human beings and as such they may have plentiful lives even if they happen to be 'in poverty' –whatever its meaning is-. It is clear that the term 'the poor' not only overstresses the importance of income, but it is also reductionist by shrinking the richness there is in human beings into a simple label. This reductionist view of 'the poor' leads to apparent paradoxes which what really reflect is the using of partial, limited and even erroneous views about people's life and their wellbeing. There are no paradoxes, only the using of inappropriate theories to understand a phenomenon.

For example, Sen (1987) has proposed a small-mercies argument to explain the apparent paradox of the happy poor (happy beggar). He argues that "*a person who has had a life of misfortune, with very little opportunities, and rather little hope, may be more easily reconciled to deprivations than those raised in more fortunate and affluent circumstances. The metric of happiness may, therefore, distort the extent of deprivation, in a specific and biased way. The hopeless beggar, the precarious landless*

[11] As a matter of fact, a well-known program sponsored by the World Bank's World Development Report 2000/01 and called 'voices of the poor' did run a cross-country project of Consultations with the Poor. The program is highly regarded and deserves a lot of compliments due to its participatory methodology and its interest in going beyond and income perspective in order to study other important aspects in people's lives (Brock 1999; Narayan et al 1999; World Bank 1999). However, the project took for granted a key aspect: it did not discuss the classification of people as poor, and the survey was applied to those already 'classified as poor'. In consequence, the program should really be called 'voices of those classified –by experts- as poor'.

Table 14.6 Explaining dissonances in wellbeing deprivation[a] and income-based classification of people as poor US$1.25 dollars of household per capita income as threshold Domains of life[b] and essential experiences[c] of being well explanation

		A	B	C	D
		Mean values			
		Income poor and in wellbeing deprivation	Income poor and not in wellbeing deprivation	Not in income poverty and not in wellbeing deprivation	Not in income poverty and not in wellbeing deprivation
	Life satisfaction	**3.21**	**5.64**	**3.17**	**5.74**
Domains-of-life satisfaction	Health	4.23	5.22	4.51	5.46
	Economic	3.78	4.55	4.13	4.93
	Occupation	4.27	5.11	4.53	5.39
	Spouse relationship	4.89	5.62	5.02	5.87
	Children relationship	5.19	5.80	5.29	5.98
	Parents relationship	5.22	5.78	5.23	5.89
	Friends relationship	4.73	5.19	4.88	5.43
	Free time	4.46	5.04	4.55	5.16
	Spiritual	5.00	5.56	4.98	5.55
	Community	4.62	5.22	4.64	5.26
Affective state	Negative affect	0.52	0.40	0.47	0.33
	Positive affect	0.71	0.81	0.70	0.83
	Affective balance scale	0.19	0.41	0.23	0.50
	Life evaluation	6.62	7.56	6.94	7.95
	Income[d]	**0.84**	**0.80**	**3.94**	**4.65**
	Number of observations	540	1,802	2,790	14,394

Source: ImaginaMexico Database 2012 Survey

[a]Persons are classified as being in wellbeing deprivation if their life satisfaction is in the categories of 'extremely unsatisfied', 'very unsatisfied', 'somewhat unsatisfied' and 'neither satisfied nor unsatisfied'. For descriptive purposes these categories are cardinalized with values going from 1 to 4. Persons are classified as not in wellbeing deprivation if their life satisfaction is in the categories of 'somewhat satisfies', 'very satisfied', and 'extremely satisfied'. For descriptive purposes these categories are cardinalized with values going from 5 to 7

[b]Satisfaction in domains of life is measured in a similar scale than life satisfaction, ranging from 1 for 'extremely unsatisfied' to 7 for 'extremely satisfied'

[c]Positive and negative affects are measured in a scale that goes from 0 (person not experiencing that kind of affect the day before) to 1 (person experiencing all affects the day before). The affective balance scale is computed as positive minus negative affects; it ranges from −1 to 1. Life evaluation corresponds to the well-known Best-Worst Life question; the scale goes from 1 to 10

[d]Income is measured as household per capita income per day, in US dollars

laborer, the dominated housewife, the hardened unemployed or the over-exhausted coolie may all take pleasures in small mercies, and manage to suppress intense suffering for the necessity of continuing survival, but it would be ethically deeply mistaken to attach a correspondingly small value to the loss of their wellbeing because of this survival strategy" (Sen 1987, pp. 45–6). This argument seems convincing but lacks empirical support. For example, how this process

of 'reconciling to deprivations' works? How deprivations are defined? What other factors play an important role in the process? Why the described process does not apply to all persons in misfortune (a general term associated to poverty)? As a matter of fact, many persons with low income are unhappy; however, not all are unhappy and it is possible to find some who are very happy. In consequence, what explains the apparent happy-poor paradox? A good candidate for explaining this apparent paradox can be found in the limitations the presumption and imputation traditions have in understanding wellbeing deprivation.

One of the main problems of income-based poverty measures is that they overstress the importance of income in explaining wellbeing because these measures are inspired on studying consumer's wellbeing rather than people's wellbeing. It has been argued that people are much more than consumers and that there is more to life than income. Table 14.6 provides an explanation to the apparent paradox based on the domains-of-life approach; this approach states that people's wellbeing emerges from satisfaction in the economic domain but also from satisfaction in other domains of life where people act as human beings (Rojas 2006b, 2007a). In consequence, Table 14.6 presents not only the situation in life satisfaction (an overall assessment of life) but also information about satisfaction in many domains of life: health, economic, occupation, family relationships (spouse, children, and parents), friends, free time, spirituality and community. Table 14.6 also presents information on the affective state of people as well as on how they evaluate their life in terms of reaching what they consider their best possible life.

Column A in Table 14.6 presents the situation of those persons who would be classified as poor on the basis of their income (World Bank and MDG's criterion) and who have reported wellbeing deprivation on the basis of their life satisfaction; this case could be coined the unhappy-poor situation. In this case there is consonance between the income-poverty and the subjective wellbeing classifications. Column B presents the situation of those who would be classified as poor on the basis of their income but who report satisfaction with their life; this case could also be coined the happy-poor situation. There is substantial difference in life satisfaction between cases A and B; while the mean life satisfaction of the happy poor is 5.6, the average life satisfaction of the unhappy poor is 3.2. What explains this substantial difference in wellbeing? Both the happy-poor and the unhappy-poor cases are associated to similar income levels, on average of about US$ 0.80 per day. Thus, the huge life-satisfaction difference cannot be attributed to income differences between the two groups. It is observed in Table 14.6 that the happy poor enjoy greater satisfaction in all domains of life; they get greater life satisfaction because they have better family relations and better relationships with friends, as well as an occupation they are more pleased with, greater satisfaction with their health, and greater enjoyment of their free time and spiritual and community life. They even get more economic satisfaction from their low income. In addition, the happy poor have a more positive affective balance scale thanks to experiencing less negative affects and more positive affects; this could be explained by the combination of a satisfying occupation, good human relations, better health, better using of their free time and a nicer community environment.

Column C shows the situation of those who are not classified as poor on the basis of their income but who are reporting wellbeing deprivation. This unhappy-rich case can easily be explained once it is recognized that higher income does not ensure higher satisfaction in all domains of life nor a better affective life. With the exception of earning a much higher income, persons in column C do not show any major difference with respect to persons in column A.

In general, Table 14.6 shows that an income-based conception of poverty is a bad approach to understanding people's wellbeing deprivation. Any classification of wellbeing deprivation based on income is clearly insufficient to provide an appropriate view of how a person is experiencing her wellbeing. Income may contribute to raise life satisfaction, but it is not a factor that determines it. Thus, a low-income person

who is satisfied with life is not a paradox but a problem of wrong theories; it is understandable once we recognize that a person is much more than a consumer. In consequence, the paradox is apparent and it emerges from working with wrong and incomplete theories as well as from a flawed interpretation of the indicators. It becomes clear that it is possible to have a gratifying life even if income is low because there is more to life than income, and there are other aspects that may be more important to persons, such as their family relations. It would be wrong to categorize these relevant human factors as 'small mercies' because they are important to people, the importance of these factors reflect their values. For example, studies in Latin America and in Mexico show that satisfaction in the family domain is crucial for life satisfaction, health satisfaction is also of great relevance. Satisfaction in the economic domain –where income has a large impact- is important, but it is not the most important; as a matter of fact its importance is not higher than that of the occupation domain.

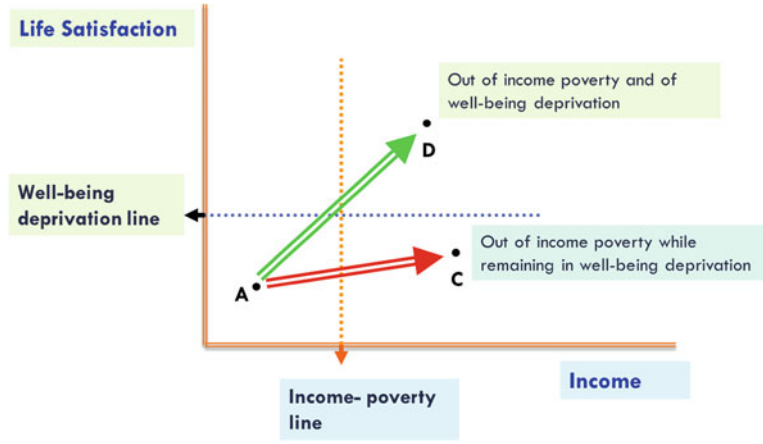
Thus, in order to be accurate, what an income-based conception of poverty indicates is the fact that a person has low income, but it is wrong to conclude from here that she has low wellbeing. This important point has implications for the design and evaluation of social programs aiming to abate poverty. If the objective of these programs is to raise people's income then current measures of income poverty may provide good insight; however, if the objective of these programs is to raise people's wellbeing then they can be substantially enhanced.

Enhancing Poverty Abatement Programs: From Income to Wellbeing

The subjective wellbeing approach states that public policy should not only be concerned with getting people out of income poverty, but also with placing them in a life-satisfying situation (Rojas 2009). In other words, getting people out of poverty is not enough to ensure that people have a satisfactory life; it is necessary for public policy not only to be concerned about where people are getting out from but also about where they are being placed in. Furthermore, the subjective wellbeing approach states that by focusing on income poverty-abatement programs may neglect other relevant impacts it may have on people's wellbeing. Thus, social programs aiming to abate income poverty can have a greater impact on people's wellbeing if they recognize that human beings are much more than mere consumers and if it is acknowledged that these programs also impact other domains of life besides the economic one. By acknowledging this, social programs could rise their efficiency in using scarce resources to attain the desired goal.

The dissonance analyses presented in section "Experienced wellbeing and poverty", as well as the domains-of-life explanation provided in section "Explaining dissonances in the classification of people as poor" shows that there may be different wellbeing paths for people to get out of income poverty.

There is an out-of-income-poverty path that leads people to have more income but not more life satisfaction. This is illustrated in Graph 14.1 by the arrow from point A (associated to column A in Table 14.6) to point C (associated to column C in Table 14.6); by focusing only on the vertical line –the income variable- it would easily be concluded that the program is successful: people have more income and they are now over the income-poverty line. This situation represents what in Table 14.6 would be a move from column A to C while focusing on the income raw: in column A people have an average income of 0.83 while in column C they have an average income of 3.94; thus, there is greater income and people in C are out of income-poverty. However, a look at the vertical axis provides better information about the situation of this people; even if they have more income their life satisfaction is not higher, and this happens because the program would be raising income but having little impact on satisfaction in most domains of life. In Table 14.6, people in column A have an average life satisfaction of 3.21 while people in column C they have a life satisfaction of 3.17.



Graph 14.1 Patterns out of income poverty

There is also an out-of-income-poverty path that leads people to more income as well as to more life satisfaction. This is clearly a superior path, and it is illustrated in Graph 14.1 by the arrow from point A (associated to column A in Table 14.6) to point D (associated to column D in Table 14.6) It is not only to raise income but to do so in a way that also raises satisfaction in many and the most important domains of life, leading to experiencing a better affective balance as well as to greater life satisfaction. In Table 14.6, people in column A have an average income of 0.83 while people in column D have an average income of 4.65. In addition, there is a substantial difference in life satisfaction, and this emerges thanks to large differences in satisfaction in all domains of life and even in the affective and evaluative assessments of life. In Table 14.6, people in column A have an average life satisfaction of 3.21 while people in column D have a life satisfaction of 5.74.

Graph 14.1 shows that it is important to get people out of income poverty, but it is important to be sure that people end up at point D rather than at point C. Unfortunately, an income-based poverty conception tends to overstress programs that focus on ways to rise income –probably increasing economic satisfaction- but that neglect what these actions do in other domains of life. For example, many poverty-abatement programs, such as conditional cash transfer programs, which are very popular in Latin America, emphasize an income-based conception of poverty and, in consequence, tend to accentuate human-capital strategies that allow people to have the skills to generate greater income. By focusing on income, these programs tend to neglect the impact they may have on satisfaction with family relations, availability and gratifying use of free time, enjoyment at work, community satisfaction and so on. There could be trade-offs between the pursuing of higher income and the attainment of other qualities and attributes in life. Because persons experience wellbeing as entire human beings rather than as compartmentalized academic agents, it is reasonable to assume that even if a poverty-abatement program focusses on the economic domain of life alone it will inevitably affect all other domains in a person's life –for good or for bad-. In consequence, there may be substantial wellbeing costs and benefits that are hidden to policy makers and evaluators because the concept of poverty is dominated by an income-based conception and because there is no information on people's wellbeing.

Rojas (2009) discusses the important contribution that subjective wellbeing can make to enhancing poverty-abatement programs by forcing policy makers to address -in an integral way- the wellbeing of people. Many issues become important when the objective of social programs is not only to get people out of income poverty but also to place them in a life-satisfying

situation; and it is important to contemplate these issues in the design, implementation and evaluation of social programs, even if these programs focus on rising people's income. For example, when designing social programs that aim to get people out of poverty and to place them in a life-satisfying situation it is important to keep in mind issues such as: the important role of leisure and the relevance of recreational infrastructure for the using of free time. The crucial role that satisfaction in family relations (with spouse, children and rest of family) plays in life satisfaction, as well as the inputs which are required for having satisfactory interpersonal relationships; people need time and community infrastructure as well as education to enhance their human relationships. It is also important to go recognize that getting a job that provides some earnings does not ensure having job satisfaction; thus, it is not only a matter of finding a job but of finding a gratifying one. Furthermore, an education that looks only at providing skills for people to work and earn money falls short of its greatest potential of contributing to people's wellbeing; education can play an important role in providing values to live in society and to relate with other persons, it can also contribute to provide habits that contribute to good health and to enjoy free time.

Conclusion

This chapter has argued that greater attention needs to be placed in the wellbeing conception which prevails behind any measurement of poverty. Not doing so would imply facing the risk of conceptualizing poverty on the basis of its measurement rather than measuring poverty on the basis of its conceptualization. It has been argued that wellbeing must be conceptualized as a living experience of being well people do have. People do experience wellbeing and they are in a privileged position to report what their situation is; it is for this reason that subjective wellbeing provides useful information about people's wellbeing situation. By following a subjective wellbeing approach to poverty, social programs could not only aim to abate poverty but they could also aim to raise people's wellbeing.

The chapter has shown that there are important risks in following the imputation and presumption traditions when assessing the wellbeing of people. The lack of corroboration in these traditions implies that risks and biases in the classification of people as being in wellbeing deprivation cannot be identified nor corrected. An important problem in these traditions is that a third-party (the expert) ends up judging people's life and classifying them on the basis of uncorroborated criteria.

The imputation and presumption traditions have generated a huge literature on methodological techniques, but there is a risk of ending up with measures that do not reflect people's wellbeing situation; furthermore, there is a risk for social programs to have little impact on people's wellbeing as they experience it.

Poverty studies would benefit from placing greater attention to the essential experiences of being well people do have as well as to their overall evaluation of life: Are people having pain (sensorial experiences)? Are they suffering (affective experiences)? Are they experiencing a sense of failure and frustration (evaluative experiences)? Are people dissatisfied with life? A better theory of wellbeing can be constructed on the basis of this information; and this would reflect, in the end, in better social programs that do really impact on people's wellbeing.

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Well-Being and the Labour Market from a Global View: It's Not Just the Money

15

Duncan Campbell and Roger Magi Gomis Porquet

Introduction

The ILO introduced the concept of decent work in 1999. It was defined then as the "promotion of opportunities for women and men to obtain productive work in conditions of freedom, equity, security, and human dignity". The concept places work at the fulcrum of economic opportunity and human rights, individual and social. The sentiment that economic and social development are, in fact, two facets of the same process and, by implication, neither is sustainable without the other, situates work in an other than purely economic or material dimension. In short, it is a concept that evokes an important, non-material dimension of economic activity, and of life.

The inherent value of decent work is easily intuited by all, and its support as a worthy aim requires no particular evidence. People do not need proof that decent work is preferable to indecent work. Support for that which is, therefore, self-evident has flourished since 1999. This is reflected in the broad political endorsement that the concept and objective have received at multilateral and national levels. Indeed, it has made its mark politically.

But, it is making its mark scientifically as well, in the social and natural sciences, through the burgeoning academic literature on the "economics of happiness". The stream of research on happiness is a confluence: one centred on how the discipline of economics evaluates well-being, the other on how research in psychology does the same. Both are social sciences, both strongly grounded conceptually in a view of human behaviour, and both having the epistemological aim of understanding it. Both inquiries have their own set of assumptions to explain behaviour. Both explore it in a way that is largely contextual. But, as behaviour is more than contextual, so thus is happiness. It is also physiological and genetic. Medical research thus joins this confluence.

This chapter begins on the conceptual level and distinguishes between how economics and other sciences might approach the question of well-being. Methodological issues also arise in this discussion. The second section approaches the matter empirically. A non-comprehensive decent work index is constructed with the aim of excluding "income" as an explanatory variable, and this index is applied to the 27 countries of the European Union. Our well-being measure here is from the Eurobarometer. A simple econometric test evaluates the relation between this

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D. Campbell (✉)
ILO, Genève, Switzerland

Institute for the Study of Labor (IZA), Bonn, Germany
e-mail: campbell@ilo.org

R.M.G. Porquet
Economics Department, Universitat Pompeu Fabra, Barcelona, Spain

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index and self-reported measures of well-being. The third section reintroduces income in an effort to determine just how important it is or is not. The data for this section are global, not just European, from the Gallup World Survey.

Part One: Standard Economic Explanations of Well-Being Are Found Wanting

Interest in the economics of happiness arose from the inadequacy of normal economic measures of well-being: GDP per capita, gross national income, while useful in their own right, are nonetheless awkward and imperfect measures of well-being. They are imperfect even in standard economic terms since, as aggregate national averages, they do not indicate the distribution of this well-being. In addition, and this is what is so closely aligned with ILO values, this research is an approach to well-being that rigorously accords non-material dimensions as vital components. Pride, identity, fairness, inclusion or belongingness – in life, but also at work – become measurable indicators of the well-being that should be associated with growth or development.

Through its focus on a fuller view of what constitutes well-being, it is a research agenda that has everything to do with the concept of decent work, and its findings are extraordinarily supportive of that concept. Worthwhile, then, it is to take a closer look at just what the economics of happiness is all about.

The interest in this topic is not particularly new, as, over time, a large amount of thinking in economics and organizational psychology has dwelt on how a happy and motivated worker is also a productive one: happiness does indeed show up on the bottom line! Many studies in this vein argue that "non-material" does not necessarily mean "non-economic".[1] It is also the case, explored in medical research, that environmental influences on the experience of happiness do, of course, exist, but that individuals also have a variable genetic predisposition to happiness. Some people are simply genetically predisposed to be happier than others. Both of these paths of understanding are undoubtedly highly and intrinsically valuable, but "happiness and productivity", or "happiness and genetics" are not really the point here. The point is that the non-material dimension of work appears to matter and if it does, should not policy address interest in this matter?

Origins of Inadequacy in Explaining Well-Being

In both the academic and policy communities, the traditional propensity in economics to define well-being in purely material terms is increasingly unsatisfying: yes, maybe people do want that bigger, more luxurious automobile, but they also want clean air and less congested roads. The thinking on viewing happiness in terms broader than material acquisition is not new in economics. Adam Smith, Jeremy Bentham, and others in the nineteenth century were quite mindful of this – as was Aristotle many centuries before.

What appears to have been lost, as the discipline of economics progressed, may owe less to some sort of ideological bend in the road, than to the "scientification" of economics: "as economics grew more rigorous and quantitative, more parsimonious definitions of welfare took hold. Utility was taken to depend only on income as mediated by *individual choices* or preferences within a *rational* individual's monetary budget constraint" (Graham 2011, emphasis added). Economists no longer needed to think broadly about happiness or the "common good" – happiness could simply be inferred from the choices that people made – their "revealed preferences". Happiness, well-being, life satisfaction became non-issues: if the individual has made a choice, then they must be happy about it, or, in the jargon of economics, find "utility" in it.

[1] A recent exploration of this link is in, "The value of happiness: How employee well-being drives profits", *Harvard Business Review*, January–February 2012. It is also why we use the term "non-material" in this chapter, rather than "non-economic", as there is, of course, an "economics of happiness".

There is much wanting in this parsimony, the key doubts centering on the three highlighted words above – "choice," "individual" and "rational". Choices are circumscribed or, indeed, can be unavailing. The Nobel economist Amartya Sen argued compellingly that poverty is the absence of capabilities – capabilities, therefore, to choose. For the poor, "preferences" are not "revealed". What is revealed is an absence of choice. If choice is proscribed, then the very notion of "individual utility maximization" is quite limited. Individual utility maximization when de-jargonized can be thought of simply as "what do I prefer, given what I can afford?" The absence of choice, in Sen's critique of his discipline, nearly makes a mockery of "preference". Not coincidentally, Sen was among the distinguished guest speakers at the 1999 International Labour Conference (ILC), where the concept of decent work was first introduced, and where Sen advanced an other than purely "economic" construct of work.

Utility Is Relative, Not Merely Individual

Perhaps more fundamentally limiting, however, especially in view of economics' stature as a behavioural science, is that behavioural choices are not always about the individual, on the one hand, and exclude choices that individuals might like to make, but over which they have no control, on the other. Standard economics reposes on a view of "behaviour" that is narrow indeed, limited in its capacity to explain and, worse still, sometimes giving the wrong answers as to what people truly want.

A standard economic approach to behaviour cannot explain the comportment that people otherwise manifest, such as altruism, trust, compassion, the search for companionship, which are often not within the calculus of material gain or loss, or reliant upon a budget line. The Harvard biologist, Edmund O. Wilson, in a seminal work, *Sociobiology* (Wilson 2000), found a biological basis for the altruism of certain species – an altruism nonetheless consistent with Darwin, in the sense that altruism can preserve the chances of the survival of the species.

For those exploring the economics of happiness, the conclusion is stark: individual utility, call it preference, certainly matters, but many preferences are not only individual, but interdependent with the standing of others to whom we compare ourselves, or the "orbit of coercive comparison". A well-known natural experiment found that people would prefer to earn US $50,000, if others to whom they compared themselves were earning US$25,000, but would not prefer to earn US$100,000, if the others were earning US$200,000. Similarly, it turns out that the adverse health consequences of unemployment are less great the more that people around you are unemployed (Wilson 2000, p. 9). "How am I doing?" This depends on how others are doing.[2]

Another Nobel economist, George Akerlof (2007), and his colleagues have written extensively on "identity". A key insight of their work is that "people have views regarding how they and others *should* or *should not* behave", and these are guides to behaviour beyond a simple price mechanism or rationality. People "engage in activities because they care *directly* about their identity".

There is no purely material logic to these findings. People are fundamentally social beings; their individual preferences are often not absolute, they are relative:

> we are inherently social creatures and our sense of self-worth and happiness derives in part from comparing ourself with others. If others' wealth or income is different than ours, then we are more or less satisfied with our own level by comparison, regardless of our absolute level (assuming a minimal amount to meet basic human needs). Consequently, if there are considerable differences in wealth and income in a society, then there are also likely to be higher levels of dissatisfaction. Wealth and income are typically concentrated in a small proportion of the community, leaving the majority of people dissatisfied by comparison (The Sustainable Scale Project 2003).

[2] Satisfaction with income is influenced by social comparison, but it is also influenced relative to the individual's previous income trajectory.

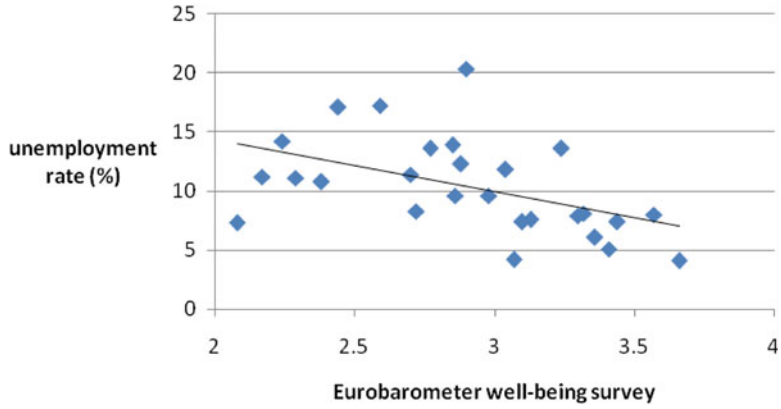

Fig. 15.1 Life satisfaction and the unemployment rate in 2010 (Source: Authors' calculations from Eurobarometer survey and ILO unemployment rates from ILO *Global Employment Trends*, 2011)

The protest against the "1 %" in the Occupy Wall Street movement owes its origin at least in part to this phenomenon.

And, there are preferences that affect well-being, but over which people have no control. Much evidence suggests, for example, that unemployment in general – not our own this time, as in the example above – and inflation are matters that affect well-being, but which are beyond our control. Some notional evidence of this is shown in Fig. 15.1. In fact, it supports both points: others' problems influence people's own well-being; and there are some preferences, such as full employment, over which they are powerless, but which do matter.

Analyses of self-reported well-being have potential, if untested policy significance. Well known, of course, is the initiative undertaken by the Kingdom of Bhutan since 1972, to give pride of place to a measure of "gross national happiness", rather than relying upon the retroactive measures of economic output upon which GDP is based. Less well known is its currency of interest among all countries:

> The General Assembly of the United Nations has added Bhutan's model of Gross National Happiness (GNH) on its agenda to see whether it can be used as a development indicator. In a non-binding resolution, the UN body called on member states to draw up their own measures of happiness based on Bhutan's GNH principle. The goal is to measure economics not only in terms of production and per capita revenue but also in terms of people's sense of satisfaction (AsiaNews.it 2011).

The inadequacy in meaning of purely economic numbers to express well-being is a sign, and a healthy one, of the times. The Government of France commissioned an enquiry in 2009, headed by the Nobel laureates, Joseph Stiglitz and Amartya Sen, and the eminent French economist, Jean-Paul Fitoussi, "to identify the limits of GDP as an indicator of economic performance and social progress" (Stiglitz et al. 2009). And, for 20 years now, the UNDP, through its human development index, has measured countries' development using a yardstick well beyond economic data alone (and, in so doing, defining "development" as something other than purely economic).

Well-Being and Decent Work

The "new science" (Layard 2005) of happiness is the result of the intersection of economics' focus on "revealed preference" as an understanding of behaviour, and experimental psychology's interest in "subjective" or "self-reported" perceptions of well-being. Often, reported happiness or well-being or life satisfaction, is used rather interchangeably. There are some grounds for this, as they are related to each other, but they are not synonyms. Ben Bernanke, Chairman of the Board of Governors of the U.S. Federal Reserve System notes that: "researchers have distinguished between two related, but different, concepts – 'happiness' and 'life satisfaction'.

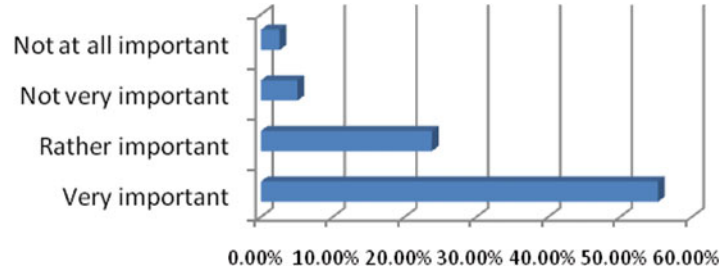

Fig. 15.2 How important is work to you?

They use 'happiness' to mean a short-term state of mind that may depend on a person's temperament, but also on external factors, such as whether it is a sunny or a rainy day. They use 'life satisfaction' to refer to a longer-term state of contentment and well-being" (Bernanke 2010). The semantics of the matter is not unimportant, but this report will use the term "well-being" and "life satisfaction" interchangeably, and draws conclusions on the growing scientific interest in the non-material dimensions of work.

That the concept of decent work has gained such widespread acceptance since 1999 is due in large measure to its simple, but compelling perception that work indeed does have both material and non-material – human, social – dimensions. In fact, the decency of work implies both such dimensions. As to the former, for example, pay, an economic variable, can be said to be "decent", the implication being that the amount is adequate for an individual's consumption needs. Yet, the decency of pay is, as noted above, also a relative measure that depends upon an orbit of comparison of those doing similar work. If the work is the same, but there is great disparity in pay among those doing it, then pay might be judged as less than decent; unfair, even if, objectively, the pay is more than enough to live on. While the adequacy of earnings is a quintessential economic indicator, it also has a non-material dimension relating to how fairness is considered and, in turn, affects well-being.

A third of a person's life is spent at work. A fair proportion of well-being depends upon the non-material dimensions of that activity. Work, beyond income, conveys well-being, or it does not. This has been the singular insight of the concept of decent work: money matters, but it is not the only thing that matters in work. It is not merely the income-generating, demand-derivative pursuit that is the stuff of labour economics textbooks: it defines people, and does so for better or for worse. "Well-being", understood as self-perception of satisfaction, does indeed have a strong economic component: across countries, it is positively related to income, as revealed by global surveys, such as those by the World Values Survey Organization as well as Gallup World Polls (Deaton 2008). This is no doubt part of the explanation of why a large majority of working men and women in over 100 countries deem work to be "very important" or "rather important". The Gallup results are shown in the Fig. 15.2.

Clearly, however, the chief need here is to unbundle the adjective "important" into its material and non-material dimensions.

The Health of the Unemployed

Unemployment strains the social fabric in ways that the Arab Spring demonstrated. Beyond its impact on social stability, there is also an extensive literature relating unemployment to the rise of economic crime rates (Papps and Winkelmann 1998).

Arguably, the most critical non-material dimension of work is its effect on health, both psychological and physical. Much of the evidence of this comes from the rather extensive literature on the effect of unemployment on psychological well-being. National survey data from the United Kingdom, for example, show that: "unemployment appears to have a significant impact on the individual since it is

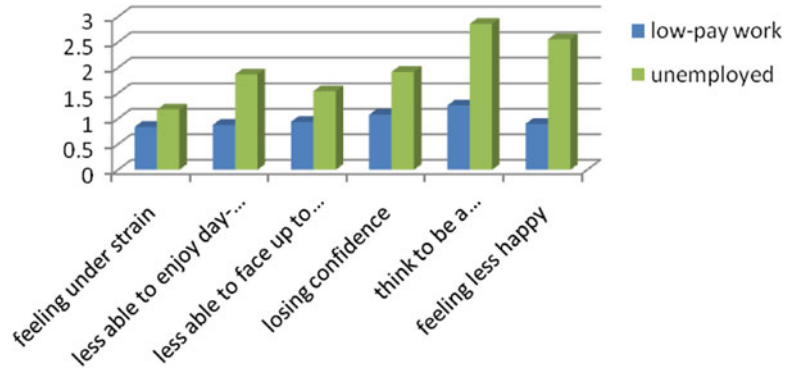

Fig. 15.3 Reported well-being relative to a high-paid worker (benchmarked at 1) (Source: I. Theodossiou, p. 92)

associated with a rise in anxiety, an inability to face up to problems, a loss of confidence and a reduction in self-esteem, the ability to enjoy day-to-day activities and the level of general happiness" (Theodossiou 1998). One important and consensual theoretical conclusion to draw from these findings is that, contrary to neo-classical economic theory, unemployment is involuntary: as the unemployed experience significant disutility from their labour market status, it can be logically assumed that few would opt for it. Indeed, in the British study, considerably higher well-being is reported by those even in low-paid work: "Thus, in a sense, it appears that it is more important for human beings to have a job than just money" (Theodossiou 1998, p. 93). This is shown in Fig. 15.3.

Relative to a high-paid worker, an unemployed person is 250 % more likely to feel less happy, and 180 % more likely to lose confidence. Medical research on the unemployed invokes phenomena such as "loss of control" and "learned helplessness" (Baum et al. 1986). Perhaps surprisingly, however, the low-paid worker often reports a higher level of well-being than the high-paid worker along the dimensions represented in the figure.

The findings on the unemployed are not surprising and have, in fact, been intuited truths for centuries. The French philosopher, Diderot, observed that: "work is something to which man is condemned by need, but something to which he owes his health", while Sigmund Freud identified work as one of the two chief sources of psychological health, the other being love (Warr 2007). Henry Ford believed "Work is our sanity."

Unemployment could indeed affect the perceived well-being of those who are not unemployed. Figure 15.1 showed that, in countries with lower unemployment, more people, i.e. not only the unemployed, reported being "fairly satisfied" with their lives (EU's Eurobarometer survey).[3]

While there is broad consensus that the domains of psychological well-being are adversely affected by unemployment, that consensus also extends to physical health risks. One study comparing long-term unemployed men with a control group of employed workers found that:

> Days in bed during the six months averaged five for the unemployed and .9 for the employed. Visits to the physician were five times more in the unemployed than employed men; the unemployed men averaged taking twice as many medications as the employed men; self-rated health was less favorable in those who lost their jobs. Although the number of diagnosed illnesses did not differ between the groups, the presenting complaints for the increased number of physician visits were most often related to gastrointestinal, respiratory, and skin disorders (Linn et al. 1985).

[3] Warr 2007, p. 41 for the Eurobarometer survey results. The survey asks: "on the whole, how satisfied are you, very satisfied (=4), fairly satisfied (=3), not very satisfied (=2), or not at all satisfied (=1) with the life you lead?"

And, while we do not "yet understand how the physical health and mental health of nations are connected" (Blanchflower and Oswald 2011), there is certainty at the individual level that psychological factors can have physical consequences, and vice versa. Unemployment-related stress, for example, can have adverse cardio-vascular consequences. A relationship between psychological and physical health among the unemployed was found in the aforementioned study:

> Those who made more visits to their physicians had more symptoms of somatization, depression, and anxiety. More time spent in bed was associated with increased somatization and depression. Those who took more medications had more somatization and were less internal in their locus of control. Poorer self-assessed health correlated with several of the psychological states, such as more somatization, obsessive-compulsiveness, depression, and anxiety and less life satisfaction (Linn et al. 1985, p. 504).

At the tragic extreme, many studies have found significantly higher suicide rates among the long-term unemployed (Dooley et al. 1996). More generally, studies also find that the unemployed, with no previous illness, tend to die younger than the employed (Doyle et al. 2005).

Well-Being, the Macroeconomy and Labour Market Structure

The significance of this rising interest in the non-material dimensions of well-being is its potential to tilt the balance of macroeconomic policy-thinking towards more explicit service of what makes lives more satisfying to live: a sort of "macroeconomics as if people mattered". This is implicit in the UN General Assembly's appreciation of Bhutan's GNH. Evidence shows that as work becomes more decent in income terms, people's concerns over corruption and interest in democratic governance increases (Banerjee and Duflo 2008). They are also more likely to invest in their children, an investment *inter alia* in future citizens. Employed wage-earners are almost twice as likely as the unemployed to report having a general trust in people. They also report a substantially higher propensity to have some type of civic engagement.

A major review of factors affecting happiness in the world yields a consistent finding: "Unemployment is about ten times worse for happiness than inflation" (Graham 2010). For governments wishing to pursue the well-being of their countries' citizens, the implied macroeconomic policy message is rather clear: inflation is less of an enemy than is joblessness.[4]

Labour market structure matters as well. If, in one study cited earlier, low pay seems considerably more exempt from the sort of psychological ill-being that characterizes the experience of the unemployed, the same cannot be said for job insecurity.

A broadly based empirical finding confirms that "there is a powerful link between job insecurity and low well-being". Self-reported well-being is substantially higher among those who deem it as "not at all likely" that they will lose their job, and substantially lower among those who report "it would not be at all easy to find another job" (Blanchflower and Oswald 2011). Obviously, this finding does not apply to those voluntarily in temporary jobs.

A collection of other studies finds that:

> Low job security is frequently associated with flexibility and this has significant adverse effects on self-reported psychological and physical health outcomes. Health deteriorates when people are anticipating job loss. A study of British civil servants showed those who experienced job insecurity reported a significant worsening of self-rated health compared with those who experienced continuing job security. Women who experienced reduced job security reported an increase in long standing illness. Women also showed a larger elevation in blood pressure associated with reduced job security, marking them at risk for cardiovascular disease (Blanchflower and Oswald 2011, p. 11).

[4] But policy implications from happiness economics findings are not always straightforward. For example, victims of crime suffer less psychological trauma, the greater the number of victims. Similarly, the psychological health of the unemployed is less damaged the greater the number of unemployed!

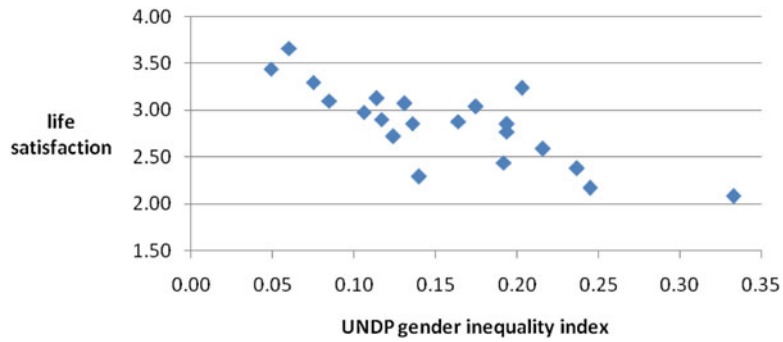

Fig. 15.4 Two indices: life satisfaction and gender inequality (Source: Gallup World Survey data and UNDP Human Development Report, 2011)

Medical research findings thus tend, in a sense, to confirm what might be called the health advantages of decent work: "Having secure employment in favourable working conditions greatly reduces the risk of otherwise healthy people developing limiting illness. Secure employment increases the likelihood of their recovery. These findings have considerable implications for both health inequality and economic policies" (Bartley et al. 2004).

Inequality, Economic Growth and Well-Being

A certain consensus is emerging in studies on what actually constitutes well-being. Moreover, this consensus is generalized across countries. As noted, income and well-being are related, although with the previously discussed qualifications. Health and happiness appear to be even more strongly correlated, again, however, with the qualification that health and healthcare systems are, to a certain degree, income-dependent.

Other common findings are that marriage and religiosity tend to be positively related to well-being. Age, too, is found to be related to well-being, albeit in a U-shaped fashion: well-being appears to be at its ebb around the age of 40 (Powdthavee 2010). There are other findings, however, that have more implications related to the conceptual underpinnings of decent work.

Some of these have to do with macroeconomic outcomes, other than unemployment, that relate to happiness. A common finding, for example, is that inequality and well-being are directly related: the greater the degree of inequality, the lower the level of well-being (Wilkinson and Pickett 2009). Figure 15.5 provides visual support for this. Put another way, more equal societies show a higher degree of perceived well-being. This could be related to the finding that relative, rather than just absolute income appears to affect well-being.

Yet, it is not only direct income inequality that is negatively related to well-being: so, too, is inequality arising from indirectly income-related factors. For example, the UNDP's gender inequality index comprises measures of maternal mortality, fertility rates, women's seats in national parliaments, labour force participation rates, and various indicators of reproductive health. Figure 15.4 shows a relatively strong correlation between indices of well-being and the UNDP gender inequality index.

One rather surprising finding (shown in Fig. 15.5a, b) is that: "strong economic growth is bad for happiness" (Graham 2010; see also Deaton 2008). Called the "paradox of unhappy growth", this result could be associated with the higher level of uncertainty that growth might generate, or the unequal distribution of income gains arising from growth. In addition: "dissatisfaction in rapidly growing countries is the result of the accelerated increase in expectations of material consumption, and competition for economic and social status" (Inter-American Development Bank 2011). Whatever the reason, this is additional evidence that growth and well-being neither move in tandem nor are synonyms. To sum up, at least from the point of view of perceived well-being, policies that either do not address inequality or focus inordinately on high

Fig. 15.5 The paradox of unhappy growth (**a**) GDP growth and job satisfaction. (**b**) GDP growth and life satisfaction (Source: Inter-American Development Bank 2011)

growth alone, may be at the expense of well-being.

In international reviews (and without further elaboration here), the following characteristics appear to apply to national senses of well-being (Blanchflower and Oswald 2011, pp. 20–21).

- Low inequality.
- High "social capital" and strong friendship networks: for example, in addition to the "misery loves company" phenomenon of less loss of well-being among the unemployed if they are surrounded by others in the same labour market status, well-being among the unemployed – irrespective of the unemployment rate – declines less the more the unemployed person is surrounded by a network of support.
- Low unemployment and inflation.
- High levels of democracy and democratic participation.
- High trust.
- Strong welfare states and public spending: this may be a proxy measure for, for example, greater spending on education and healthcare, or lower inequality through taxes and transfer payments.
- Low pollution.

It is hard to mistake the consonance of these findings with the "freedom, equity, security, and dignity" that describe the non-material components of decent work.

Key Determinants of Well-Being at the Workplace Itself

In any language, the question, "what do you do?" is elliptical. Obviously, what is being asked is what work do you do? Similarly (although increasingly an anachronism), women might be asked, "do you work?", the implication being whether she worked for pay, rather than the often demanding and economically discounted work that constitutes child-rearing or running a household. The semantic point is that people quite often identify themselves by their work.

This chapter is not primarily interested in the micro-economic level of well-being. In passing, then, a survey by the French statistical agency, The National Institute of Statistics and Economic Studies (INSEE), finds that: "40 % of those questioned and 54 % of the labour force consider work to be one of the three elements that 'best defines them', it comes in second place far behind family".[5] As Karl Marx put it in 1844: "Dans ma production, je raliserais mon individualit, ma particularit; j'prouverais, en travaillant, la jouissance d'une manifestation individuelle de ma vie, et dans la contemplation de l'objet, j'aurais la joie individuelle de

[5] http://insee.fr/en/themes/document.asp?reg_id=0&id=1831

reconnaître ma personnalit comme une puissance relle, concrètement saisissable et chappant à tout doute" (Marx 1844).[6] Pride, self-affirmation, and self-esteem are causes of work satisfaction, but they are also the consequences of work performed in a favourable context.

One medical viewpoint notes that: "Work is perceived, therefore, as not only providing an income, but giving social legitimacy to our lives. For many, it may be the principal source of personal identity, mediating the sense of being a valued person necessary for self-esteem. A profession or trade gives us an identity – as a doctor, a teacher, an engineer, a motor mechanic, a secretary, an electrician, and so on." Work similarly gives a sense of belonging, both in the social relations it brings, but also in the sense of the contribution to society that working for an organization can engender (Fryers 2006).

In the workplace, factors that affect well-being include: "opportunity for personal control, opportunity for skill use, job demands, variety, environmental clarity, income level, physical security, supportive supervision, opportunity for interpersonal contact, and valued social position" (Warr 2001).

These non-material factors appear to be vital to well-being, but they do not always prevail. Succinctly put from a micro-economic perspective, although from a far more comprehensive literature review, the evidence suggests[7]:

- great decision-making power reduces rates of absence and turnover;
- decision-making power increases level of performance and job satisfaction and reduces financial losses;
- lack of decision-making latitude and recognition increases the risk of cardio-vascular diseases;
- a clearly defined role decreases absenteeism and lateness;
- low workplace support increases the rate of absence;
- high support at work decreases the intention to quit jobs;
- abusive supervision is associated with an increase in absenteeism;
- high presence of interpersonal conflicts within a work team is associated with a reduction in performance;
- the manager-subordinate relationship is the most commonly reported cause of stress;
- managerial behaviour can have a significant impact on health outcomes of subordinates.

Part Two: Life Satisfaction and Decent Work: Can the Link Be Quantified?

In the foregoing sections, the strong conceptual link between self-reported measurements of well-being and the core tenets of the concept of decent work was presented, as were some empirical results. Both uniformly show the high consistency of findings from the economics of happiness research and the concept of decent work.

The present section delves more deeply into this link through some simple quantification between measurements of "life satisfaction" and some rather "reduced-form" variables intended to capture proxy measures of decent work across its four pillars. For reasons of their availability (and comparability), the data are drawn from the 27 EU member States.

Beginning first with a rather material dimension of work – income – the literature is quite consistent in finding that, indeed, money does buy happiness (Easterlin 1974). Thus, as distinct from the intra-national conclusions of the Easterlin paradox, in which increases in real income do not appear to show up in self-reported well-being, cross-country comparisons of incomes and well-being show a strong positive relationship. This is reflected in the simple correlation results in Fig. 15.6 for 20 EU countries.

[6] "Through what I produce, I realize my individuality, that which makes me special. I experience, while working, the pleasure of an individual facet of my life, and, in focusing on the object of my work, I have the personal pleasure of acknowledging my personality as a true force, concrete and unimpeachable."

[7] This is a summary of the scientific literature in Jean-Pierre Brun (2008). See also Semmer (2007).

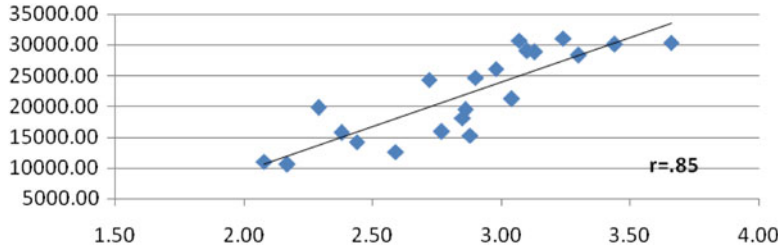

Fig. 15.6 GDP per capita in constant US dollars and life satisfaction index

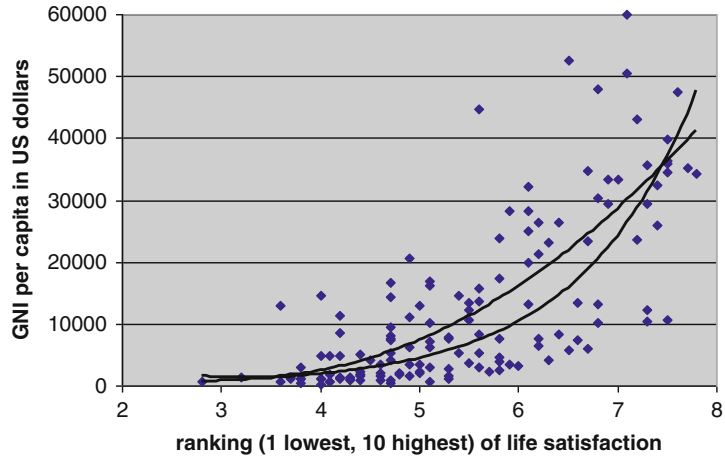

Fig. 15.7 Self-reported life satisfaction and GNI per capita (Source: Authors' calculation on data from UNDP Human Development Report 2011)

For a larger sample of countries, income-related well-being is also in evidence. A qualification can nonetheless be made, as discussed below.

A Standard Deviation That Is Not So Standard

There is, then, compelling evidence from many sources that self-reported life satisfaction and income are positive correlates. Figure 15.7 shows the same for a sample of over 100 countries with a Pearson coefficient of $r=0.67$.

There are, however, at least four comments to make on this profile. The first, as previously mentioned, is that money does matter when satisfaction with life is evaluated. Wealthier countries do report being more satisfied with life.

The second refers to the inadequate proxy of an aggregate measure of income as an explanatory variable. In essence, "money in the pocket" might matter, but GNI per capita is also highly associated with wealth-related provisions that a State might be able to provide. So, is it only the money in the pocket that makes people satisfied, or the fact that healthcare and education systems are superior, the streets cleaner, civil rights more guaranteed and the rule of law more dependable, available and predictable? All these are ancillary dividends of income quite beyond personal bank accounts.

The third comment refers to what hides behind any aggregate number, and it is also income-related. GNI per capita says nothing of the distribution of that income. Indeed, an outlier removed from the country sample above, Qatar, has a GNI per capita of well over US $100,000 in 2005 PPP terms. However, this says very little about its distribution among Qataris and cannot usefully explain how people evaluate the satisfaction of their lives. Anticipating a major conclusion of this paper, it will be found that it is not just income that matters, but its distribution.

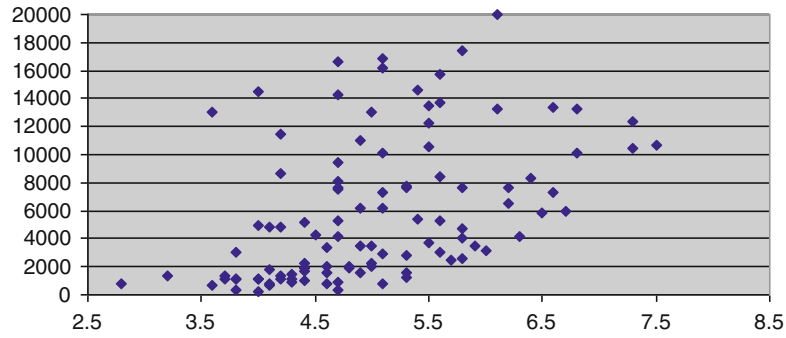

Fig. 15.8 Self-reported life satisfaction and GNI per capita (constant 2005 PPP dollars) up to 20,000 threshold (Source: Author's calculation on data from UNDP Human Development Report 2011)

Fourth and finally, the data points presented in the figure above are not all that orderly. This is seen in Fig. 15.8, when a US$20,000 cap is placed on the sample: for example, life satisfaction in otherwise poor countries shows a high degree of deviation. Income, again, is not everything.

While the same positive correlation between satisfaction and income is evident, that relation is far less linear. Two explanations are plausible. First, and as mentioned, GNI per capita says nothing of its distribution. Second, and not adequately captured in a purely economic explanation, satisfaction is simply not just a function of income. This seems intuitive. Beyond the fulfilment of basic needs, it is hoped that this would be the case.

Beyond Income: Four Proxy Measures of the Non-material Dimensions of Decent Work

This section, however, is concerned with the non-material dimensions of decent work. Indications of these are represented by proxy measures across the four substantive components of the concept. These measures are:

- The UNDP gender inequality index is a composite index including mortality and fertility data, the number of seats in parliament held by women, an educational attainment variable, the labour force participation rate of women and various indicators of reproductive health. Figure 15.4 showed a strong correlation between this index and the index of life satisfaction. Discussion returns to this variable below.
- The Gini index,[8] as a measure of relative income inequality and, by extension, equity (and security) in labour markets, as the inequality measure is also an implicit reflection of how tax and transfer payments serve to offer some social protection against market-determined risks.
- The unemployment rate, as an indicator of labour market slackness, is used as a proxy measure of the state of productive employment.
- The variations in the extent of collective bargaining coverage are used to show the institutional embeddedness of social dialogue in economies in interaction with distributive policies to extend the fruits of bargaining results.

These variables were chosen to approximate the ILO's four strategic objectives: productive employment (whence the unemployment variable); equality of opportunity (whence the

[8] Initially, the male-female wage gap was selected as an (imperfect) indicator of gender-based discrimination in labour markets. The measure is imperfect because gender-based pay gaps have both observable and non-observable dimensions, and these cannot be disaggregated from the pay gap figures used. In other words, there are "objective" explanations for the existence of a pay gap, e.g. education, tenure, even economic structure, and there are "non-objective" or discriminatory explanations for the gap. Because wage gap data cannot fully reflect discrimination, regression results using this variable were not particularly strong. The variable was thus dropped and the UNDP gender inequality index was substituted.

Table 15.1 A correlation of the independent variables

Correlation matrix					
	Life satisfaction	Gini index	Gender inequality	Unemployment rate	Collective bargaining coverage
Life satisfaction	1	.53	−.79	−.35	.32
Gini index		1	.33	.54	.25
Gender inequality			1	.34	.38
Unemployment rate				1	.33
Collective bargaining coverage					1

Source: Author's calculations based on the Europe data set

gender inequality index); social protection (and thus the Gini index as a reflection of tax and transfers after market-determined incomes); and social dialogue, (our collective bargaining coverage variable).

In every instance, the dependent variable is life satisfaction as revealed by the Eurobarometer surveys. The independent variables are intended, respectively, as proxies for the four strategic objectives of decent work.

A Few Tentative Observations

The correlation matrix shown in Table 15.1 shows the degree of relatedness among the variables. The difficulty of adducing causation from correlation has been previously described in this report. For example, does unemployment make people unhappy, or are unhappy people more likely to become unemployed? While authors have addressed these issues through, for instance, using time-series panel data to evaluate the effect of a change in status on well-being, the issue of causality nonetheless remains an extant one in the present section. (It can, however, be noted here that the causal relation between unemployment and unhappiness does appear to proceed from the former to the latter.)

In order to draw the bold conclusions implied in this correlation, admittedly, much more to go on is needed. That said, some of the correlations presented in the matrix find broad support in the literature. In particular, the relatively strong negative relationship between unemployment and reported life satisfaction, shown above (and previously in Fig. 15.1) is corroborated by many others, including those to whose work was referred in the preceding section. Similarly, the strongly negative relation between the extent of inequality and reported life satisfaction finds a good deal of support in the literature, and is consistent with the hypothesis that utility is relative, rather than just absolute.

Three other observations are, at the very least, worthy of mention, if not resolution, at this juncture. The strong positive relation shown above between inequality and unemployment appears to be less prominent in existing literature. Again, this is not readily explained by a simple quantitative test: does the relationship, for example, derive from the fact that the more equal societies in this European sample are also the smaller, more homogeneous ones? The former trait, smallness, might allow greater ease of labour market absorption. The latter trait, homogeneity, begs the question that: if societies are more unequal, is this because their ethnic mix, or mix between migrant and domestic labour, is more heterogeneous, and more to the detriment of some ethnicities than others? The question is merely posed, rather than answered by this chapter.

Why collective bargaining coverage emerges as so weakly related to inequality is also a puzzle, the origins of which might be merely statistical. (The sample does not have many observations to go on.) Other explorations have found a relatively strong relationship

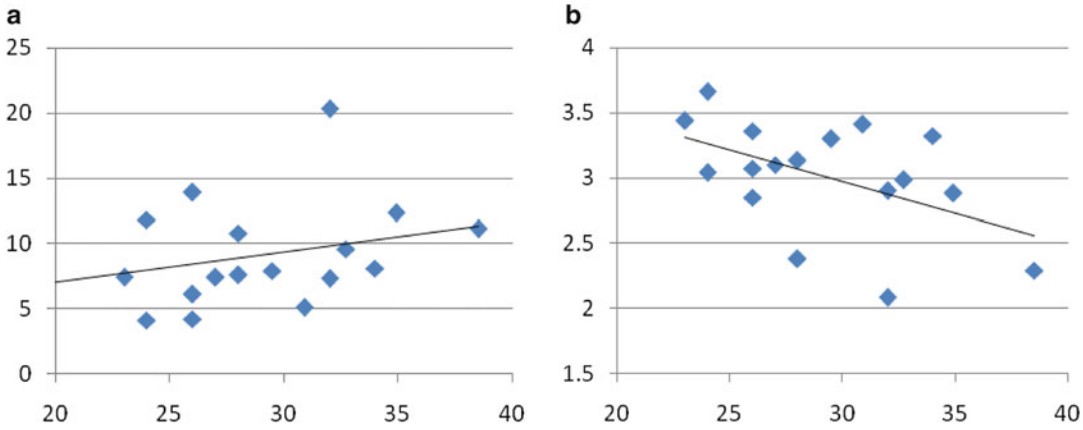

Fig. 15.9 Effects of inequality on unemployment and life satisfaction. (**a**) The higher the level of economic inequality the lower our life satisfaction. (**b**) The higher the rate of unemployment – irrespective of our own – the lower is our perceived life satisfaction

between collective bargaining coverage and inequality (Hayter 2002). At present, these questions remain unanswered. It would seem promising, however, that a simple regression experiment could add further insight into, at least, the significance of inequality on reported life satisfaction, and on unemployment. These are visualized in Fig. 15.9a, b.

To obtain an early sense, prior to a modelling exercise, of whether these measures of decent work do bear a relationship to reported life satisfaction, a rank-on-rank correlation was made. Countries were first ranked on the basis of their reported life satisfaction. The four decent work measures were then ranked across countries in Eq. (15.1):

$$dw = \sum_{k=0}^{n} \frac{[[(g + gi + c + u)]]}{4} \qquad (15.1)$$

Where dw is the decent-work index for country n, g is the Gini index, gi is the gender inequality index, c is the extent of collective bargaining coverage, and u is the unemployment rate. Thus, a "country score" or rank was then calculated by aggregating all four ranks for an individual country and dividing by four. Consequently, the four measures comprising the index are equally weighted, there being no obvious rationale for weighting one more highly than another. The results are shown in Fig. 15.10.[9]

The first observation is that there does appear be a clear correlation between the ranked measure of decent work and reported life satisfaction in a country. Moreover, with r greater than 0.5, the correlation is slightly higher than any of the pair-wise correlations in the matrix.

Two outliers appear of interest and invite some speculation. The first is that the United Kingdom appears to report a much higher level of life satisfaction than would be "predicted" by the decent-work measures. Although not presented here, this is a feature shared by other Anglo-Saxon countries and might even suggest that the very correlation shown above is a spurious one. Further analysis does not confirm this conclusion, however, and discussion will return to this in the conclusion.

The second outlier reported in the figure is the converse of the British case: while Romania

[9] Of the EU 27, the comparison in this figure drops to 20, as a result of the absence of data on collective bargaining coverage in some of the countries. More crucially, the figure presents a "ranking" of countries on the basis of four criteria, argued to be proxy measures of decent work. It can, as such, in no way be considered a ranking of countries on the basis of "decent work"; there are simply too many component measures missing. There is, in consequence, little reason to name the countries in the ranking, as to do so would be misleading, if not outright erroneous.

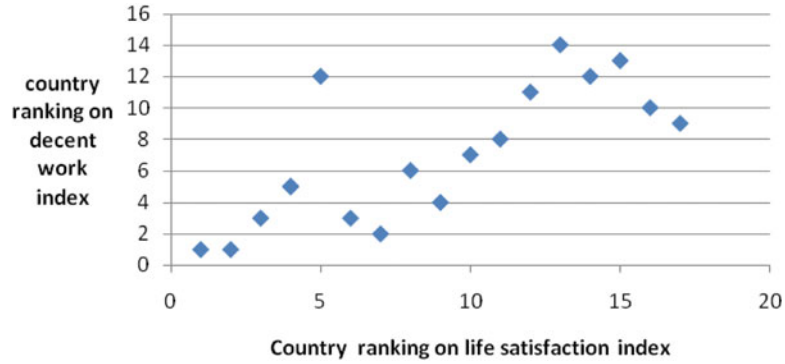

Fig. 15.10 Rank-on-rank correlation of life satisfaction and the decent work index (1 = "best") (Source: Authors' calculations)

reports the lowest life satisfaction in the sample, it scores considerably higher in the decent-work measures. Two observations might be made here. The first, Romania joins a group of countries in Central and Eastern Europe (CEE) where reported life satisfaction is far lower than income alone might predict (Deaton 2008). Thus, while the inter-country relationship between life satisfaction and the level of GDP per capita presents in almost a linear fashion, the CEE countries tend to cluster together as outliers, well below where they "ought" to be in measured satisfaction. Authors have attributed this *inter alia* to the continued travails of economic and political transition in those countries – greater uncertainty, rising inequality, the fact that not everyone's standard of living was improved by the transition – resulting in the empirical finding that many lives appear, in fact, to be worse off than they were in the previous political economy regime.

The second observation is that, while inequality might be rising in Romania and elsewhere in the region, it remains a region of relative income equality, the consequence of its political economy under communism. Unemployment, at 7.3 %, is not astonishingly high in Romania: in fact, it remains a country with well over 1.2 million subsistence farmers, which might have absorbed job losses in the Great Recession, thus yielding a (relatively) "low" unemployment rate more akin to that of a developing country. Finally, while trade unionism weakened substantially in the early transition years in the region, as the unions acquired new functions, the collective bargaining coverage rate in Romania remains at 73 % (and thus ranked highly in decent-work measures above), while it is, for example, only 35 % in Hungary.

Taking a Closer Look at the European Data

Adding a bit more rigour yields results that are consistent with the exploration thus far undertaken. The analysis now leads to the construction of an ordinary least squares multiple regression model built on two assumptions. The first is that the proxy measures of decent work discussed earlier are likely to be appropriate predictors of the level of life satisfaction. The second is that the relationship can logically be assumed to be linear i.e. the more decent is work, the more satisfied people are. This can be expressed in the following manner in Eq. (15.2):

$$ls = \beta + gX + cX + giX + uX + e \qquad (15.2)$$

where the dependent variable ls is life satisfaction, β is the intercept, g is the Gini index, c the extent of collective bargaining coverage, gi is the gender inequality measure, u is the unemployment rate, and e is an error term. The regression results are presented on the following page.

An initial problem to resolve was hinted at in Fig. 15.7 above, showing a rather strong correlation between income and life satisfaction among countries. A legitimate question is the extent to which the four independent variables, intended

Table 15.2 Estimated model dependent variable: well-being

Variable	Description of the variable	OLS coefficient T-statistic in parentheses
C	Constant	3.033***
		(3.948)
G	Gini index	−.0492 **
		(−2.574)
GI	Gender inequality	.0174**
		(2.865)
CB	Collective bargaining Coverage	−.0016
		(−.4398)
U	Unemployment rate	.0067
		(.3164)

Note: ***significant at the 2.5 % level; **significant at the 5 % level
R-Squared: .70291; Adjusted R-Squared: .57087; F-Statistic: 5.3235

as proxies for non-material dimensions of work, are, in fact, "hidden proxies" for the level of income? Three variables would seem exempt from the suspicion that income drives results. These are the income inequality measure, the unemployment rate and the level of collective bargaining coverage. As to the last, an argument could be made that collective bargaining coverage is indeed income-dependent and substantially lower in poor countries with large informal economies. This is arguably true, but does not apply to the sample of countries selected here: relatively wealthy countries of Western Europe and formerly Communist countries of the CEE.

One variable nevertheless remains suspicious, and that is the gender inequality variable. As described earlier, it is the UNDP's composite measure incorporating vectors such as mortality rates and reproductive health. These are quite likely to be income-related. In consequence, the construction of the gender inequality variable for this paper's model chose only: (i) the share of women in parliament; and (ii) the labour force participation rate of women. The hypothesis is that neither of these measures is plausibly income-related. This is an arguable point, indeed, and we relax this assumption later in the chapter.

The effort, therefore, has been to identify variables, which are as distant from income dependency as possible, to the extent that, what is being analysed here is truly the non-material dimensions of work.

Some First Conclusions on Europe

A few noteworthy conclusions can be drawn. First, and fundamentally, the null hypothesis that there is no relationship between life satisfaction and these measures of decent work can be rejected. In this model, satisfaction and decent work are indeed related, as summarized in Table 15.2. To over-summarize, in a sentence, it is preferred to be more rather than less equal over a range of dimensions.

The two variables that emerge as the most significant predictors of life satisfaction are the income inequality variable, and that of non-income dependent gender inequality variability. The two other variables, collective bargaining coverage and unemployment, turn out to be not significant, with the former even having the "wrong" sign. These are possibly casualties of model misspecification, as well as peculiarities of the chosen sample. Indeed, bivariate regressions using these variables, respectively, return results that are both of the right sign and significant. Figure 15.11 offers some visual support of this.

Of course, the selected measures of decent work do not explain all of satisfaction in life, and this could be the consequence of many factors. "Omitted variables" frequently diminish explanatory power, most notably income. It may also be true that the variables chosen are not the best ones for capturing decent work (as the ILO's own, much broader identification of decent work indicators, clearly suggests).

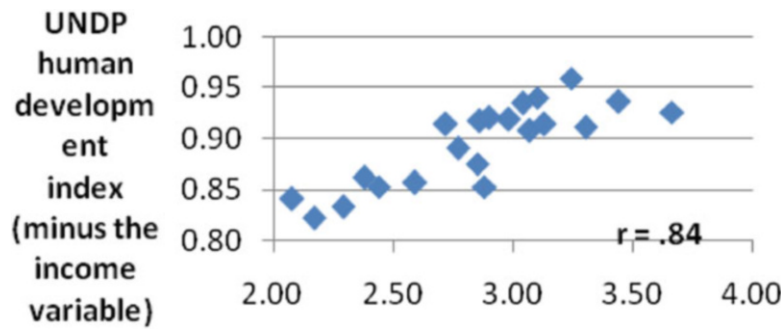

Fig. 15.11 Two indices: life satisfaction (x axis) and the UNDP human development index (Source: Authors' calculations from the Eurobarometer Survey and UNDP Human Development Report 2011)

On the purely speculative plane, however, the imperfect fit of this model is not necessarily an undesirable outcome. Perhaps the model's conclusions are, in fact, suggesting that: "work is important, but it is not 'all important'; there are other dimensions of life outside the workplace which make mine a satisfying life." Consider, for example, Fig. 15.7's strong correlation between life satisfaction and the UNDP's Human Development Index. The latter is a composite of life expectancy, years of education and income. The correlation in Fig. 15.11 excludes the income variable.[10] In no way, of course, can the merely relative importance of work be unimpeachably inferred by the model's results. Neither, however, are the results inconsistent with such a conclusion.

The multivariate model yields a higher explanatory outcome than bivariate regressions based on the individual independent variables. Doubts about the explanatory power of the variable on collective bargaining coverage are perhaps not too surprising, as it is not logically straightforward why its extent would matter to life satisfaction, unless it is related to decent-work variables that may matter more, such as relative income equality, a lower gender-based wage gap, or some other consequence of it on outcomes not measured by the model.

It will be recalled that the collective bargaining coverage variable was selected as a proxy measure of the extent of social dialogue or participation. In fact, this variable is not really designed to service this aim, as it is legal extension, rather than dialogue, that is often the main means through which collective bargaining coverage arises. This is dramatically so in France where, for example, trade union membership is in single digits, while the coverage of collective bargaining agreements extends to the vast majority of workers. Thus, it is perhaps the case that this variable is not a particularly good indicator of the true extent of participation.

The weak results of the unemployment variable are perhaps more surprising in view of the rather extensive (and consensual) literature on the relationship between unemployment and well-being. Many factors could account for this, such as sample composition. For example, an unemployment rate in one of the transition countries might not be a good indication of underemployment and the latter's effect on well-being. It is not inconceivable, however, that there could be something akin to a hysteresis effect in play here; that is, a country with sustained high unemployment simply "gets used to it". Such an explanation, moreover, would find support in the economics of happiness literature: lottery winners experience a momentary rocketing increase in well-being, and then return to their prior steady state; those who become physically disabled see their well-being plummet before returning to its prior level. This paper's results, of course, prove none of this, but are not inconsistent with similar findings elsewhere.

[10] Admittedly, however, one encounters the same problem as with the gender inequality variable, e.g. years of schooling and life expectancy are highly likely to be income-dependent, and the figure above may merely be showing proxy measures of income.

Part Three: Taking Things Further: World Data, More Variables – And Including Income This Time

We now turn our attention to a vaster set of countries than the EU countries considered in the foregoing sections. The dependent variable still remains self-reported well-being, but now from a global data set – the Gallup World Survey on well-being. In the previous sections, it seemed arguable to eliminate "income" as an independent variable on the perhaps heroic assumption that income variance across a number of EU countries might be less important – because of relative homogeneity – in explaining well-being. The effort, then, was the search for plausibly "non-material" independent variables. In the present section, we also want to know just how much income matters.

There are two efforts in this section: first, as noted, it is time to bring income back into the picture to see just how much it matters. But we also expand our pool of plausible independent variables explaining well-being from the labour-market perspective. We do this in an effort to capture a broader view of labour market conditions in the world. For example, "unemployment" has a sturdy meaning in advanced countries – it means far less in poorer countries without social protection and where, therefore, the option to be unemployed exists far less.

We retain unemployment, nonetheless, but add data on, poverty, inequality, gender equality, amongst other variables, shown in Table 15.5. Most of them are significant under the chosen specification. We also construct aggregate indices. The indices allow an analysis of the evolution of decent work and its cross-country differences. A look at evolution is possible because the empirical work in this section uses panel data. The sample ranges from 2006 to 2010. We find that the evolution of the decent work indices is positive until 2008–2009, when, with the Great Recession, they decline or stagnate. The ranking of countries according to decent work correlates with income. Nonetheless, important variations in a country's decent work cannot be explained only by its income. How do we know this? A small, technical digression explains.

The Importance of "Weak Exogeneity"

The most important assumption of the classical model for causal analysis is weak exogeneity; that is that the regressors and the disturbance term be uncorrelated.

$$y_i = x_{1i}\beta_1 + x_{2i}\beta_2 + \cdots + x_{ki}\beta_k + \varepsilon_i \quad (15.3)$$

$$E\left[\varepsilon_i \middle| x_{1i}, x_{2i}, \ldots, x_{ki}\right] = 0 \quad (15.4)$$

This condition is expressed in Eq. (15.4). If there were an unobserved factor included in the perturbation term, and it was correlated with some "regressor" or independent variable, we would not be able to distinguish between the effect of the unobserved factor and the regressor. In such circumstances, causal analysis could not really be performed, since the correlation with the unobserved factor will overestimate or underestimate the effect of the variable of interest (3). In short, "weak exogeneity" is important: if only three things explain something, and we have data on both the something and the three things, then we can be more causally convinced; on the other hand, if ten things explain that something, but we only have data on three of those things, then any causal statement we might venture would be dubious.

The problem with the present inquiry is, as will be recalled, that the variables used as decent work indicators are likely to be correlated with income. Let us reconsider our measure of gender equality, the proportion of parliamentary seats held by women. In Fig. 15.4 we observe a clear positive correlation between the Gallup life satisfaction index and the gender equality variable. However, as seen in Fig. 15.12, it cannot be certain that this correlation is due to the variable itself or due to the positive correlation with income as well.

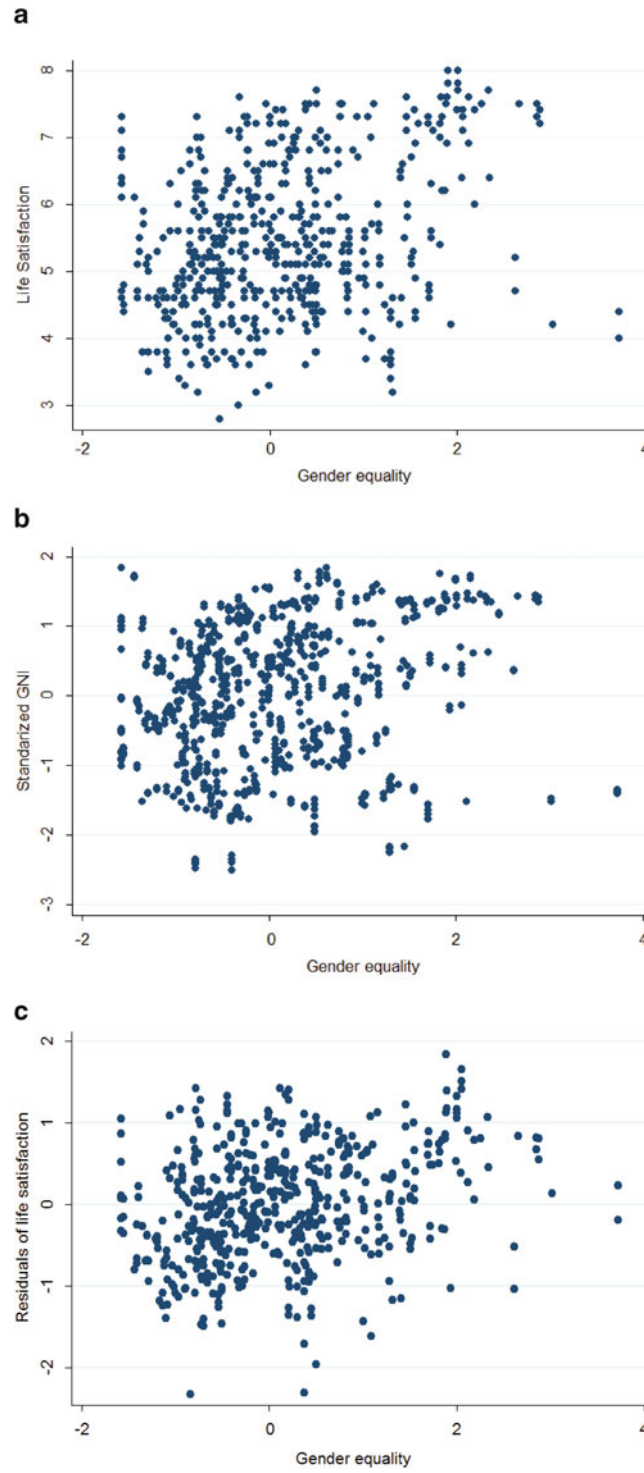

Fig. 15.12 Gender equality and life satisfaction, with and without income. (**a**) Life satisfaction vs. Gender equality. (**b**) Standarized GNI vs. Gender equality. (**c**) Residuals of life satisfaction vs. Gender equality. The Gender equality indicator is the proportion of parliamentary seats held by women. The Life satisfaction indicator is the Life Today index from Gallup World Survey on well-being. GNI stands for gross national income measure described in the Appendix. The figures illustrate that the positive effect of the gender equality indicator on life satisfaction is positive even after controlling for income

As expressed in Eqs. (15.3) and (15.4), the adequate technical resolution of this problem is to consider a regression with the gender index but controlling for income. One immediate way to do so would be to first regress the life satisfaction index and income, and then regress the residuals of the first model with the gender equality index. The result is illustrated in Fig. 15.12a–c. They indicate that the gender equality variable has indeed a positive effect on life satisfaction in its own right, irrespective of income.

This is the purpose of multiple linear regression, if the factor in the disturbance term is observable we include it as an independent variable, thus controlling for its effect. This moves the discussion forward from the first sections of this chapter, where only the measures of gender equality and life satisfaction were regressed. When we add income to the picture, one observes a drop in the gender equality coefficient. This was predictable given that the income variable was missing. The important point is that, when adding the income variable, the relationship between life satisfaction and gender equality remains both positive and significant. To ensure that we capture the effects of the decent work indicator free of income, all the analysis is done in a multiple regression setting controlling for income.

The Variables and the Results

The aim of this section is to analyze whether the results obtained in the previous section hold using a larger sample and controlling for the effect of income.

Several empirical approaches were both considered and tried in the analysis of the problem of well-being.[11] The Panel Corrected Standard Errors (PSCE) approach produced the best results. PCSE allows controlling cross-sectional dependence, that is, the shocks that contemporaneously affect various cross-sectional units. This is the case for several specifications used in this analysis and in most cases has been dealt with.

The independent variable, the same for all specifications for better comparability, is, once again, the Life Today index from Gallup World Survey on well-being. The set of dependent variables includes plausible decent work indicators.[12] We use measures of gender equality, income inequality and variables plausibly related to decent work conditions.

In some cases several variables have been used to construct a synthetic variable called factor, the factor is a linear combination of the variables using specific weights.[13] Table 15.3 summarizes the variables and weights used to construct these factors. The interpretation of factors is straight-forward: together, they construct a combination of variables with different weights. Nor do the variables themselves require much logical justification as to why they might be favourable to or inimical to life satisfaction. There are some interesting discrepancies, however. Perhaps the most interesting case is the part-time employment factor. Female part-time employment displays a large, positive coefficient, while male part-time employment, while positive, is less great. And, finally, the proportion of part-time employment in total employment shows a large negative coefficient.

[11] While the substantial amount of empirical work informing this paper has not been discussed, it is described in an annex.

[12] The sources used for the independent variables are: World Bank, ILO, Freedom House and Inter-Parliamentary Union. The sample ranges from 2006 to 2010 both included. The source of each variable is specified in Table 6 in the appendix. The number of countries in the sample varies from variable to variable, the number of countries for which the Life Today index is available is 191.

[13] See Tucker and MacCallum (1993) for further information in factors purpose and optimal weights.

Table 15.3 Combinations of variables used to construct the factors

Variables	Economically active children	Economic sectors	Part Time employment	Inequality	Equality	Extreme poverty	Poverty
Economically active children male	0.60667						
Economically active children female	0.38681						
Economically active children whilst studying	0.00436						
Employment agriculture		−0.32					
Employment industry		−0.08					
Employment services		0.71					
Part time employment female			4.73				
Part time employment female of total part time			0.11				
Part time employment male			1.61				
Part time employment of total employment			−5.86				
Income highest 20 %				0.95	−2.27		
Income second 20 %				2.34	−2.98		
Income third 20 %				−0.42	0.94		
Income fourth 20 %				−0.11	0.31		
Poverty gap at 1.25$ ppp						0.49	
Poverty head count at 1.25$ ppp						0.49	
Poverty gap at 2$ ppp							0.49
Poverty head count at 2$ ppp							0.49

Table 15.3 shows the weights used to construct each factor. The variables are combined linearly using the weights indicated in the table, a void cell indicates 0 weight (non inclusion in the factor)

How could this be interpreted? Part-time employment represents work flexibility and, especially for women, could be related to maternity leaves or other non-market responsibilities. On the other hand, total part-time employment could reflect negative factors, such as underemployment or dual-job holding.

Which Labour Market Circumstances Are Most Important to Life Satisfaction?: Weighting the Variables

Table 15.4 reports the results of regressions of the various independent variables on life satisfaction. All the coefficients are unit independent because the regression was done with the standardized values of the variables.[14] Thus, they have the following interpretation: a change

[14] If the analysis was carried out in levels, the coefficients obtained would be not comparable, for instance the coefficient obtained for income would be smaller in absolute value that the one for unemployment. This cannot be taken as an indication that unemployment has a larger impact on well-being, rather it is just a consequence that income is on a scale of tens of thousands yet unemployment ranges from zero to one. A normalization is then required in order to interpret the coefficients quantitatively. One natural normalization is to standardize (subtracting the mean and dividing by the standard deviation), then the coefficients can be compared. As an example consider a cross sectional regression between countries, a coefficient of 0.63 of standardized income would have the following meaning: Being above the mean in income by one standard deviation will imply (ceteris paribus) being above the mean in life satisfaction by 0.63 standard deviation.

Table 15.4 Coefficients obtained using PCSE

Variable	Coefficient PCSE
Gross national income at ppp $	0.63***
Employment to population ratio	ns
Proportion of parliamentary seats held by women	0.12***
Unemployment	−0.24***
Proportion of women working in the agriculture sector	−0 27***
Factor of proportion of economic sectors	0.36***
Fatality rate	−0.53**
Factor of part time employment	0.10***
Factor of inequality	−0.28***
Factor of equality	ns
Factor of extreme poverty	−0.21***
Factor of poverty	−0.29***
Weekly hours of work	ns
Proportion of working poor at 1.25$	−0.28***
Proportion of working poor at 2$	−0.31**
Factor of child labour	−0.40***
Freedom house index	−0.10**
Contributing family members	−0.42***
Employers of total employment	0.17**
Long term unemployment	−0.23***
Self employed of total employment	0.94**
Vulnerable employment	−1.21***

In Table 15.4 the coefficients obtained from the PCSE regression are reported
alfa: 10 %* 5 %** 1 %***, *ns* non significant

of one standard in the independent variable causes (ceteris paribus) an increment of the coefficient times the standard deviation in life satisfaction. The coefficients have in consequence the interpretation of relative importance – the higher the coefficient the higher (or lower, depending upon the coefficient's sign) the relative weight to life satisfaction. It stands out that income is an important determinant of well-being, but it is not the only one. To illustrate this point consider the following. An increase of 13,000 dollars (one standard deviation) in income per capita increases life satisfaction by 0.7 points on a 10 scale. This is indeed a large effect, but decent work indicators have a sizeable impact as well. For instance, an increase in 7 percentage points (one standard deviation) in unemployment will decrease life satisfaction by 0.3 points. As can be observed in table 15.4, many decent work indicators have significant and sizeable effects on life satisfaction. Indicators related to gender equality increase life satisfaction, variables related to the harshness of work conditions and inequality tend to decrease it, finally measures related to unemployment or under employment have a negative impact on life satisfaction as well.

Since We Now Have the Relative Weights, Can an Index of "Decent Work" Relative to Life Satisfaction Be Constructed?

Having the estimates of the causal effect to life satisfaction of each decent work indicator, we might be interested in answering questions such as: how has the overall decent work indicator evolved in the sample, or how has the contribution of each variable been evolving over time? We would also be interested in knowing how each country compares in the level of decent work, and how distant this is from a ranking based solely on income. To answer all these questions we develop an index of decent work based on the relative importance to life satisfaction. The fundamental idea is just to add the contribution of each variable, computed as the variable times the coefficient.

Figure 15.13 shows the evolution of the decent work index, which shows consistent growth, and the income contribution to life satisfaction. A slowdown in the decent work index growth rate in the last year of the sample, 2010, might reflect the effects of the recent recession. To analyze the reasons for the improvement of the index as well as knowing in detail its structure it is convenient to consider the contribution terms of each decent work indicator. It is worth noticing however that the decent work contribution is of the same order of magnitude than the one of income, and in fact is much more variable.[15] Regarding the components of the index

[15] To a certain extent this probably reflects higher accuracy and availability of income data compared to decent work data.

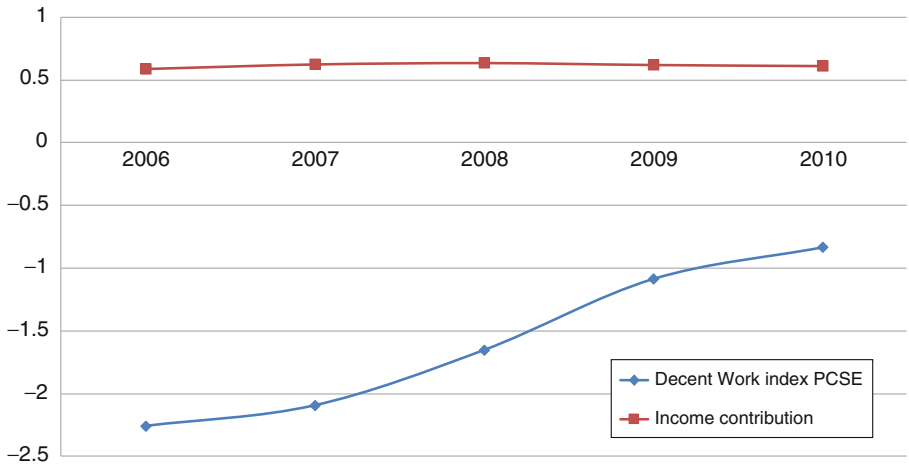

Fig. 15.13 Evolution of income and decent work contributions to life satisfaction (Source: Authors calculations based on the data set described in the Appendix)

and its relative importance, in Fig. 15.14, the level contribution of each variable is shown as a percentage of the absolute value of the index. Self- employment (positive) and vulnerable employment (negative) stand out as the main contributors. The composition of economic sector makes a sizeable contribution as well, a higher share of services and a lower share of agriculture leads to an improvement in life satisfaction. An interesting result is that many variables have a larger impact than the unemployment rate which contributes only modestly. For instance child labour has a negative impact 3 times larger than that of unemployment. Regarding the evolution of the index Fig. 15.15 shows the evolution of each component of the index in value (not relative to the index). By analyzing the level it is easier to find the causes of the evolution of the index. There is a notable reduction of vulnerable employment, which is the main driver of the increase of the overall index. Child labour slightly decreases and thus has a positive impact on the index. Finally there is a decline in self employment, since the variable has a positive impact on life satisfaction, this dampens the improvement of the index. Nonetheless in the sample period, 2006–2010, there has been a significant improvement of the contribution to life satisfaction decent work indicators. In 2006 the indicators contributed minus 2.2 points to life satisfaction, whilst in 2010 the wedge had been reduced to minus 0.8.

Ranking Countries on Decent Work and Relative to Income

Can we rank countries according to the decent work indices and compare those to the ranking according to income? Fig. 15.16 presents the scatter of ranking GNI vs. our decent-work rankings. The correlation is far from perfect. But if we regress both rankings, GNI explains roughly 50 % of the decent work index variability. The message, as throughout this chapter, is that income explains a lot, but by no means everything.

The Result: The Relation Between Income and Life Satisfaction is Non-linear

There is one caveat in the discussion above: the assumption of a linear relation between Life Satisfaction and Income. Evidence suggests that the relation is better described as logarithmic. We perform a robustness exercise against log GNI

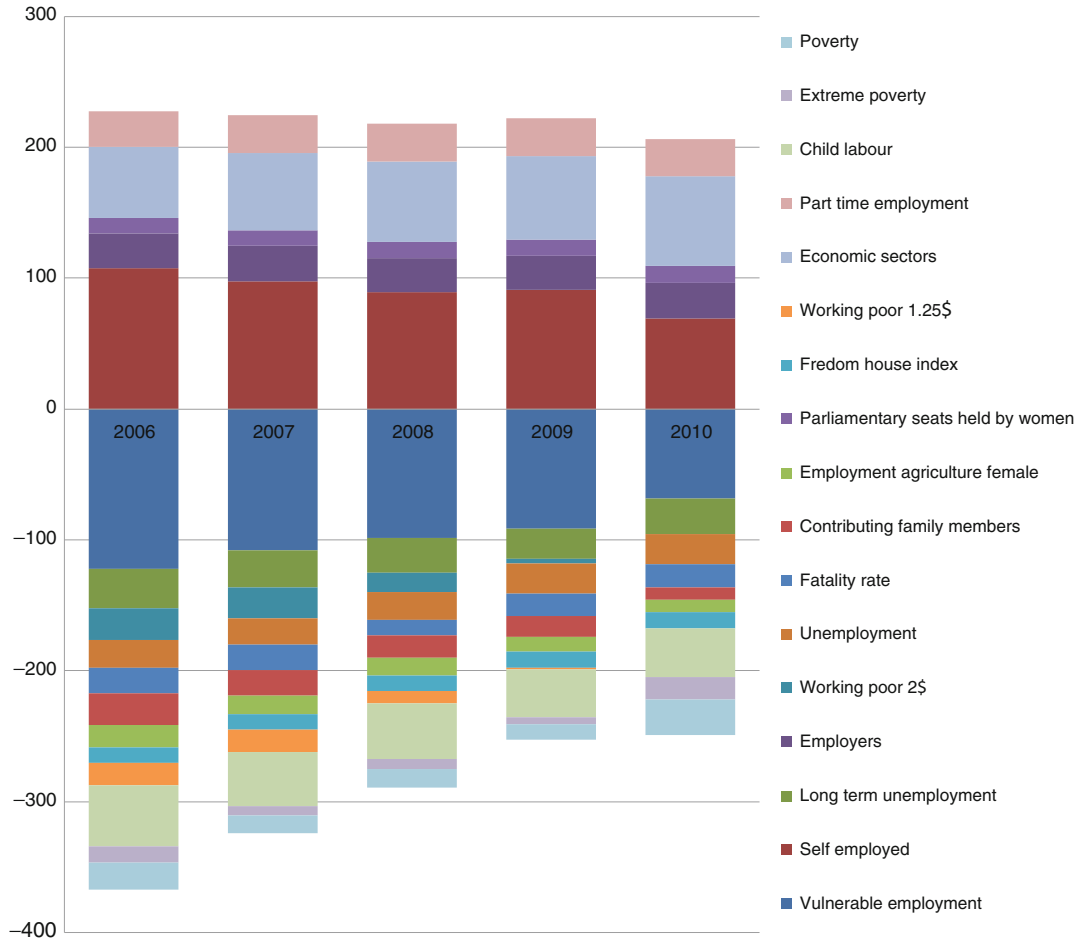

Fig. 15.14 % weight of each decent work indicator to the index (Source: Authors calculations based on the data set described in the appendix)

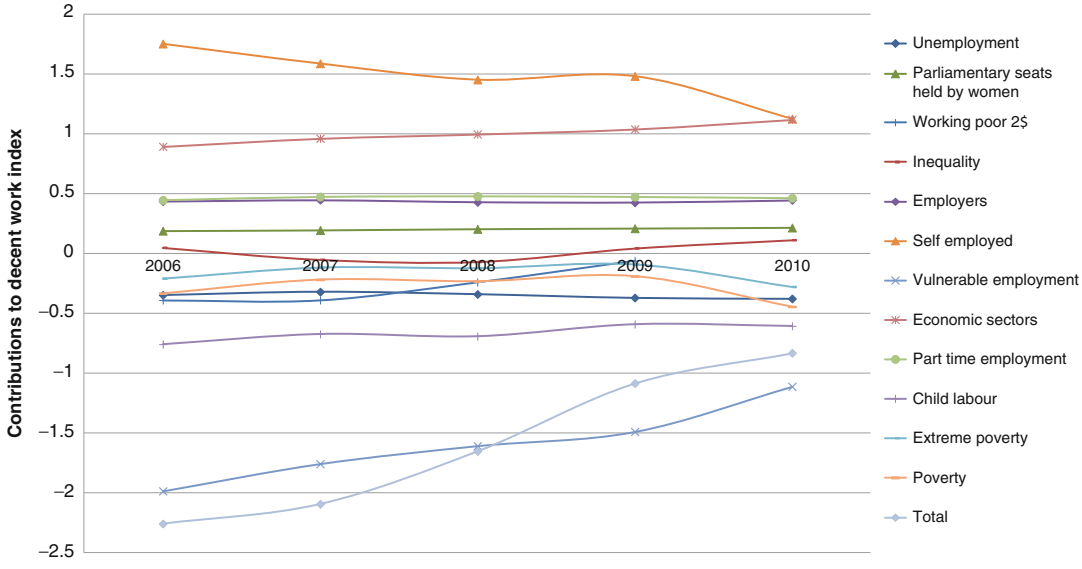

Fig. 15.15 Index contributions to evolution (Source: Authors calculations based on the data set described in the appendix)

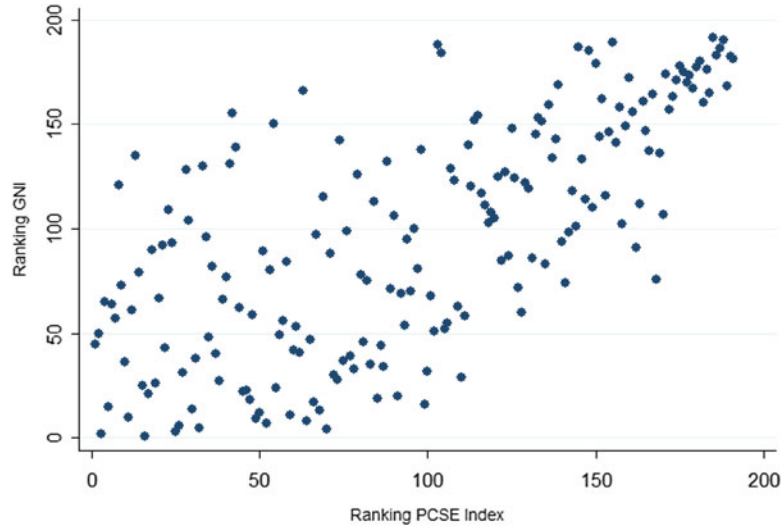

Fig. 15.16 Ranking of income and decent work (Source: Authors calculations based on the data set described in the Appendix)

specifications. We observe important losses of significance for several variables, nevertheless more than half of the decent work indicators remain significant, and of similar order of magnitude than that of income. Yet the logarithm of income explains some of the life satisfaction that was assigned to some decent work indicators. This is interesting as it implies – almost counter-intuitively, again, given the parabolic relationship between income and life satisfaction – that more income equates with more life satisfaction. But this is not unreasonable; as the model takes into account the non-linearity it can account properly that low levels of income will have a larger than average negative effect on life satisfaction. In the linear model this effect was ruled out by assumption thus some decent work indicators were found to explain the effect (as they are correlated with income and they can account for the "extra" effect of non linearity). This fact does not contradict the main argument of this chapter that decent work has an impact on life satisfaction of the same order of magnitude than that of income. The reason is the following, in low income countries it is true that income will be of more quantitative importance for life satisfaction, nevertheless in high income countries the quantitative effect of income will be smaller due to the same non-linearity.

Conclusion

This chapter had two modest ambitions. The first was to relate the findings of the growing literature on the "economics of happiness" to the main tenets of the concept of decent work. The complementarity between the two is close indeed. The second was to explore empirically the relationship between a measure of life satisfaction and proxy measures of decent work.

The chapter makes the argument that decent work and self-reported well-being are likely to be conceptually similar, and likely to be related in a causal way. There is, of course, more to life than work and the material, as well as non-material outcomes that work conveys. That said, the effort in this chapter has been to deal with the world of work, which engages most of our lives and has a preponderant effect on our well-being.

In the chapter's first sections, a "first pass" at the question was the effort, using just European Union data, and to "firewall" any income-related dimensions of well-being from the analysis. This was because of the well-known (parabolic) correlation between income and well-being – i.e. if you are poor, an additional rupee means a lot more to you than if you are better off. Think, for example, of Abraham Maslow's hierarchy of needs (Maslow 1943).

As to the non-material dimensions of decent work, many of us might well argue that the results presented are hardly "non-obvious": people presumably prefer decent to indecent work in broader terms than just pay; people presumably prefer to be satisfied than dissatisfied – whether at work or not. We would, of course, agree.

The final part of the chapter, however, expanded our indicators of "non-material" well-being, by re-introducing income as well. The purpose was to try to determine just how much income matters relative to other indicators of decent work. The answer, we find, appears to be about 50 % – hefty, but not the only variable in a happy life and, more to our point, a happy worklife – where happiness is also relative to those around you.

We feel our effort has been an analysis, not hitherto undertaken, of the close complementarity of the emerging literature on the economics of well-being and the concept of decent work – in our sense, at the macroeconomic level. We find robust empirical support for the proposition that the non-material dimensions of decent work are indeed related to how people evaluate their satisfaction with their lives as a whole.

By extension, this second point would seem quite consistent with those who argue that economic policy should not be unduly obsessed with "nominal" targets, such as the inflation or growth rate, important though these are, to the exclusion of "real" targets. If economic policy were to target "well-being", then targeting poverty, inequality, status at work, and the other variables we considered would appear to matter.

Appendix

Fixed Effects, Random Effects or Panel Corrected Standard Errors

One important source of concern in panel data analysis is the heterogeneity problem. The heterogeneity problem arises when the units of the panel have an unobserved factor that influences the dependent variable, and at the same time is correlated with some of the independent variables. In this case the regression results would be biased. If we suspect that this is the case, and we can assume that the unobservable factor is constant the Fixed Effects model can solve this issue. It basically consists in using the variables as differences from the mean and not as levels. If the hidden factors are indeed constant then the estimates obtained are unbiased. The problem with the Fixed Effect model is precisely that it discards all cross sectional information, and it only uses the time variation of the variables. In a short panel with many cross sectional units this is extremely inefficient since we would have to discard most of the information. If we suspect that our sample is not harshly affected by heterogeneity then other methods can be used with a more efficient use of information. The Random Effects model and the Panel Corrected Standard Errors model. The RE model assumes that there is an individual intercept for each country but that overall the intercepts are uncorrelated with the independent variables. The PCSE Ordinary Least Squares considers the specific structure of the panel data error term. Conceptually is similar to Generalized Least Squares, however Monte Carlo simulations show that in short panel data as the present case, GLS leads to optimistic standard errors, and demonstrate that PCSE are the adequate instrument.[16] The PCSE basically considers that errors can be heteroscedastic between cross sectional units and autocorrelated within. The scheme allows for general autocorrelation as well, but in the sample used this is barely an issue. However we have treated the sample as having panel specific autocorrelation as a precaution, with the results not being strongly affected. Finally PCSE allows controlling cross sectional dependence, that is the shocks contemporaneously affect various cross sectional units. This is the case for several specifications used in this analysis and in most cases has been dealt with.

The crucial distinction is between FE and RE/PCSE, that is, if we have an heterogeneity issue.

[16] See Beck and Katz (1995).

Table 15.5 Data sources

Variable	Inter-Parliamentary Union	World Bank	ILO	Freedom house
Gross national income ppp $		X		
Employment to population ratio			X	
Proportion of parliamentary seats held by women	X			
Unemployment			X	
Proportion of women working in the agriculture sector			X	
Factor of proportion of economic sectors			X	
Fatality rate			X	
Factor of part time employment			X	
Factor of inequality		X		
Factor of equality		X		
Factor of extreme poverty		X		
Factor of poverty			X	
Weekly hours of work			X	
Proportion of working poor at 2$			X	
Factor of child labour		X		
Freedom house index				X
Contributing family members			X	
Employers of total employment			X	
Long term unemployment			X	
Self employment of total employment			X	
Vulnerable employment			X	

Table 15.5 reports the sources of the variables used in the analysis

Ex ante we could suspect that governance, culture, work systems are indeed likely to be a fixed factor (at least during a 5 year period) and most likely are correlated with income or decent work indicators. In this chapter we have taken a practical approach. Comparing the FE results with the PCSE results, a general pattern emerges, the coefficients obtained are not qualitatively very different yet the significance was quite different. The FE approach rejected the significance of many variables that in the PCSE analysis were found significant. Since the FE model discards most of the information a higher rejection rate is to be expected, and given the qualitative similarities between the coefficients, a likely conclusion is that heterogeneity is not gravely affecting the results. Considering the choice between RE or PCSE we just used the criteria of picking the technique with the smallest rejection rate, since the RE has no ex ante advantage over PCSE.

Data Sources

In Table 15.5 the source of each independent variable is reported.

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The Contribution of Unpaid Work to Global Wellbeing

16

Maria-Angeles Duran

Introduction[1]

The title of an article is its cover letter. In this case, the title contains five key concepts that will be explored in the study:

1. The concept of wellbeing
2. The concept of globality
3. The concept of work
4. The concept of paid or remunerated work
5. The concept of contribution

The first and main objective of the article is to analyze each of the concepts and how they relate to each other. It should be noted that there are major differences between the use of these concepts by different social groups and in different linguistic and cultural contexts. Although we accepted beforehand that the task of studying them in depth would go beyond the scope of this study, some of these differences will at least be explored and highlighted. The conceptual discussion will be accompanied, wherever possible, by data obtained from extensive observation (surveys, censuses) that support the arguments presented.

In summary, the study will show that unpaid work is both a powerful wellbeing and distress factor.

In the second part of the article we set out in detail care demand forecasts in the medium term, mainly based on United Nations demographic forecasts. Care is a vital element for the wellbeing of broad sectors of the population (self-care, childcare, care of sick people, care of the elderly, exempt healthy adults) and accounts for huge amounts of unpaid work. It is difficult that such demands can be met by the market in developed economies through paid work, so a new social organization model needs to be considered for redistributing care.

Basic Concepts

On the Concept of Wellbeing and Its Uses

Concepts have history: they are created at a certain time, fight to establish them, complete with other similar or alternative concepts, are supported by institutions and schools of thought, and succeed or perish. Above all else though,

[1] Maria-Angeles Duran is the author of the book *Unpaid Work in the Global Economy,* Fundacion BBVA, Bilbao 2012, where this topic is largely analysed. She has directed the research of the same title, with the cooperation of Vivian Milosavljevic, Montserrat Diaz-Fernandez, Maria Mar Llorente-Marron, Monica Dominguez-Serrano, Susana Garcia-Diez, Jesus Rogero-Garcia.

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M.-A. Duran (✉)
Center for Human and Social Sciences (CCHS), Council for Research of Spain, Madrid, Spain
e-mail: angeles.duran@cchs.csic.es

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their content and the way in which they are used changes.

Wellbeing is the conjunction of "well" and "being". It is a gradational concept. In some languages and cultures, the gradational feeling is more evident than in others. For example, in English there is no such concept as "badbeing"; a concept with an etymological root and quite a different meaning needs to be used, such as "distress" or by counteracting its positive meaning turning it into a "negative" adjective. In Spanish and other languages, the positive pole of "bienestar" (wellbeing) moves without any conceptual suddenness to the negative pole known as "malestar" (distress).

While intellectuals, opinion makers and legislators "create" concepts and try to unify vocabulary, in common language innovations take years to become adopted, and word use differs between academics. The more abstract the concept, the more difficult it is for it to be used homogenously by the population. At the moment, the concept of "wellbeing" is used with a wide range of meanings in different languages, paying particular attention to the different emphasis placed on its subjective, objective, individual, social, physical, psychological and institutional aspects. The entries in two important dictionaries, the Oxford Dictionary and Dictionary of the Spanish Language of the Royal Spanish Academy, show that the words "wellbeing" and "bienestar" are in both cases defined by their reference to individuals; in English, as the "the state of being comfortable, healthy or happy" and in Spanish as "el conjunto de las cosas necesarias para vivir bien". Insofar as dictionaries are tools for encoding and consolidating language, the concept of "wellbeing" still has a long way to go. Modern and very often controversial digital libraries are more flexible than renowned dictionaries. In Wikipedia, the concept of wellbeing receives far broader and more open treatment and its definition starts by stating that "wellbeing or welfare is a general term for the condition of an individual or group, for example their social, economic, psychological, spiritual or medical state; high wellbeing means that, in some sense, the individual or group's experience is positive, while low wellbeing is associated with negative happenings". If instead of looking for wellbeing in dictionaries or encyclopedias, its use is investigated through changing digital displays (Google, etc.), it appears most closely associated with physical wellbeing, with its principal propagators being private establishments that advertise therapeutic and aesthetic services. Secondly, in terms of frequency, is use associated with public bodies responsible for social care and other social services. Although its frequency is not that high in digital media, these bodies play an important role in creating language due to their prominent role in public administrations. It should be pointed out that some concepts such as "Welfare State" are translated into other languages in terms which are not exactly equivalent, with only specialists debating their different nuances. For example, the Welfare State commonly translates into Spanish as "Estado de Bienestar", which might also be equivalent to "State for Wellbeing". This concept has been subject to immense criticism over the past decade, especially since the beginning in 2006 of the still ongoing economic crisis. For the most radical neoliberal sectors, the Welfare State has become synonymous with ruin, and more akin to the State of Distress.

Probably the most active and powerful propagator of new concepts and language on wellbeing is the Organization for Economic Cooperation and Development (OECD). In its well documented report, How's Life? 2013, on "Measuring Wellbeing", it highlights its aim of changing the traditional focus of its interest from the economy to people, but without abandoning its mission of helping governments to design "better policies for better lives". For this it proposes measuring wellbeing through 11 basic indicators. These include income, wealth, health, sociability, aspirations, trust in institutions, environmental quality, family time and assessment of life experience.

There is no doubt over the ability of large institutions to know and generate interpretations of the world. This report expressly recognizes this in its introduction, in a statement that could

in itself lead to a thesis on the sociology of science. "In the two years since the first edition was published, OECD work on wellbeing has had a profound influence on the way wellbeing is measured across the world and on the public debate on what matters to citizens".

As the reader may have guessed, the aim of this long introduction on the term wellbeing is not etymological disquisition, but rather to establish from the outset the methodological difficulties of international comparison. If you want to measure wellbeing and much of the information has to be obtained by consulting citizens, then transparent and unambiguous communication is a priority but difficult to achieve objective.

On the Concept of Globality

There is a popular metaphor that states that when a butterfly flaps its wings in Hong Kong it can unleash a storm in New York. Perhaps its origin lies in an old Chinese proverb, or maybe it was just invented by a sharp advertiser. Whatever the case, it is applied to the difficulties of establishing the cause-effect relationship in complex systems.

The introduction of the concept of globality reflects the desire and need to show interactions between different countries and social movements on a global scale. The concept "worldwide" has been overused and has excessive geographical or historical connotations; while the concept "international" has almost been reserved for the time in which bilateral treaties still predominated, a relic in the twenty-first century. The concept "global" fits far better with more recent perspectives or study fields, such as the economy, sociology or environmentalism; but it is one thing to use or propose a concept and quite another to put it into practice. Global is not the juxtaposition of the partial, orderly presentation, one by one, of what happens in each country or on each continent. Global is, at least as an aspiration, the explanation of how what happens to an individual, group or country affects another individual, group or country. Analysis of a global nature must be dynamic not static. Rather than descriptions it looks for cause-effect relationships. And that aspiration is difficult to fulfill, particularly if you want to substantiate it with non-existent data. It is true that international statistics are getting better, but they tend to measure individuals or groups rather than their interactions.

By highlighting the major hurdles of research into any subject that strives for a global view, we are not making a disqualification. On the contrary, adopting a global perspective is a requirement for progress in social sciences, a stimulus for trying to first develop conceptually the ways of interaction between countries, institutions and social groups, and then designing as far as possible observation instruments that help corroborate or disprove this.

On the Concept of Work

In every language there are words which refer to work, but often there is more than one to indicate different aspects of the activity. There are dozens of synonyms and antonyms. The origins of the word work (*travail* in French, *trabalho* in Portuguese, *trabajo* in Spanish) are not very promising with regard to wellbeing. It comes from the Latin word tripalium, an instrument of torture with three stakes to which slaves were tied to punish them. However, labor (laboral, lavoro, etc.) comes from a more pleasant Latin word which meant woven decorations. In English, four words cover most of the semantic field here: work, labor, job and employment. According to the first meaning of the Oxford dictionary "work" is "activity involving mental or physical effort done in order to achieve a result" and only the second sub-meaning refers to it as "work as a means of earning income: employment". Other languages have other words, without equivalences of meaning and use being exactly interchangeable. What do we mean when we talk about work today? What are the ILO's statistics referring to when they provide data on countries with very different production structures? When

comparing the European languages of relatively similar countries, there are significant differences between the legal, statistical and street vocabulary of common people. Labour law usually refers exclusively to employees, so this excludes a significant number of both paid and unpaid workers. There are even greater differences between languages from very different production and cultural environments. For example, in the populous city of Lima (8,693,387 inhabitants, INEI 2014), the modern capital of Peru, the vocabulary used by ILO statistics does have meaning to the people, but that meaning is lost and does not reflect type of work and conditions of community agriculture in the Andean region.[2]

Paid work is just one of the variants of the general concept of work. In many languages, social practices allow us to tell whether paid or unpaid work is being talked about because the former is called employment, but it is not always easy to distinguish between the two. Labour statistics necessitate the international homogenization of vocabulary, which is positive but does have unwanted effects, such as altering meaning or failing to include activities which interviewees do consider work. The translation of certain languages into others of work-related activities is complicated, e.g. in some countries the ministry or body of the corresponding public administration is called Work, while in others it is known as Employment. To give an extreme example, one of the meanings of "labor" in English is to give birth (parturition, delivery), which in other languages would require using in its translation words of a very different etymological root.

The current prototype of paid work is industrial wage work, where the worker is paid monthly. However, even with paid work there is a wide variety of types of workers with different working conditions and relationships, which presumably affect how this work produces either wellbeing or distress in them. Both type and quality of work affect lack of work, unemployment or underemployment. Data on formal work varies in quality and in many developing countries is of poor quality.

With regard to informal, black market or illegal work, data quality is very poor. Indirect estimates are used because neither workers nor companies, or more often than not governments, are interested in offering or disseminating information. For example, in an UNECE report it is estimated that in countries as developed as Italy, the underground economy may be responsible for between 12 and 18 % of GDP (UNECE 2008). For the world as a whole, the ILO estimates that currently the number of self-employed workers is still higher than salaried workers.

As there is an article in this handbook on paid work I am not going to go into further detail on the matter, and refer readers to it instead.

On the Concept of Unpaid Work

Globalization of interest in unpaid work has a key date: 1995. Although previously some researchers had shown interest in the subject from a social sciences perspective, and it had been mentioned in several documents published by international bodies, it was the Platform for Action approved by the United Nations Conference held that year in Beijing which urged governments from all over the world to innovate in the System of National Accounts and include a Satellite Account for Unpaid Work produced in households.

Compared to wage-earning work, interest in unpaid work is very recent. A significant part of labor law, trade unions and the structure of modern states originate from disputes between workers and employers during the nineteenth century which caused enormous suffering and social upheaval. That is why wage-earning work today is accompanied by a huge amount of research, regulations and statistics which other types of work lack.

Interest in unpaid work is part of a movement of reaction to the excessive predominance of

[2] I am grateful to Peru's National Institute of Statistics and Informatics (INEI) and the Manuela Ramos Association for the opportunity of gaining a closer insight into these matters at the International Seminar on the Economic Valuation of Domestic Work, Lima, October 2013.

commodities and what can be commodified in the economy as a whole. If by economy we mean production, distribution, consumption and accumulation of scarce resources that can be used for alternative purposes, the commodities economy is just a part of the real economy of any country.

Unpaid work is clearly different to wage-earning work, mainly because of the time and space conditions in which it is performed, but also due to the fact that boundaries are difficult to draw with respect to self-employment or work intended for self-consumption. Even observation instruments as formidable and costly as Labour Force Surveys have problems in determining what and what is not work, and even more so in who is the active worker and who is not.

The solution to demarcation difficulties is therefore obtained through both logical criteria and international conventions, i.e. agreements. Having reached an agreement, there is inertia in the process of obtaining and processing data, especially in statistical series for international comparison, making their modification highly unlikely. By statistical convention, it is considered that the production of goods and services for others or third parties is work and therefore part of Gross Domestic Product. However, also by statistical convention, the production of services for family consumption or self-consumption is not included in GDP. By way of example, if a farmer produces apples and sets aside part of this for family consumption, they must be assigned a value and included in GDP. But if a math teacher gives classes to his/her child after school, this activity is not considered part of GDP.

The rise of interest in unpaid work is due to the inclusion of women in the study and job market, and the emergence of broad sectors of the population over 65 years old that do not form part of the job market but who produce a large amount of services for self-consumption and consumption by their families. This interest has also been heightened through the increase in international social movements of a philanthropic nature where volunteers offer their own time instead of money, as a donation to resolve situations of deprivation in other environments.

Estimating the number of paid and unpaid workers in the world is a risky task, particularly the number of hours of different types of work that are produced annually worldwide. The most widespread definition for referring to paid workers as a whole is the "active population", but this does not precisely cover employed workers because this definition also includes unemployed jobseekers. The definition of "employed" in this case is very loose because it includes people with work permits, on holiday or who only worked a very small amount of time (one hour, in some statistics) the week prior to collecting the information. In terms of employment time, the existence of contracts and space and time constraints require considering contracted time almost the same as actual time worked.

The definition of "unpaid worker" has no equivalent psychological or social content to that of "paid worker" except perhaps for housewives. There are no clear space or time constraints in this type of work, nor contracts or counterparties in the form of social rights. Active Population surveys only require that a worker has worked one hour in this activity the previous week to be statistically considered "employed". If the same criterion is applied to unpaid work, almost the entire global population would be classed as an "unpaid worker".

The large volume of unpaid work is due to the very active involvement of the female population globally, particularly in less developed areas and in social sectors with fewer resources or with limited access to paid work. Unlike wage-earning work, unpaid work is carried out on public holidays, before and after normal working hours and by pensioners and, in many cases, children, the elderly and sick. According to a report sponsored by the United Nations Development Programme and produced by the Institute of Political Studies of Paris (UNDP 2005),[3] the

[3] It was produced in Benin, Mexico and India. The authors of the annex on Benin are Gabriel Brunnich and Anne-Laure Radas; on India, Mehdi Ghissassi, Mercedes Johnson and Camille de Sentenec; and on Mexico, Pippa Druce and Pilar Rodríguez Riccheri.

data provided by traditional statistics underestimate the actual work of men and women by not including unpaid work. If it were included, the total work time of women would be equal to or surpass that of men. Due to the accumulation of paid and unpaid work, women and girls have less time for schooling and leisure, particularly in rural areas (UNDP 2005: 5). Unpaid work contributes more to social cohesion than any other public policy program. Therefore, social cohesion achievements cannot be limited to insertion in production, forgetting the key role of families, especially their female members, to produce social wellbeing (FIIAPP 2010: 11).

In reality, and despite major advances highlighted by Time Use surveys, most countries around the world do not have reliable, and far less periodic, statistics, which would determine the number of hours dedicated to unpaid work by the population as a whole. Some surveys offer information on unpaid work performed by the central age range (15–64 years old) population for comparison with that of the job market population, but those who are above or below that age range are excluded.

Moreover, specialist study surveys on time use have to resolve the methodological problem caused by the fragmentation of time into observation units (generally, from 10 to 15 min) and the overlapping of activities. As with paid work, unpaid work is heterogeneous in its internal composition: this heading encompasses hard and arduous work in households that lack basic material infrastructure (drinking water, electricity, sanitary and sewer system) to social representation work in the households of the affluent.

There are various classification systems for unpaid activities carried out regularly in households, which are broken down in similar ways to paid activities. The first block includes activities of a more physical and transformative nature, such as cleaning, cooking and washing and ironing. These are the easiest activities to observe and measure, and which are most frequently performed outside households or in the household by paid workers. The second block includes activities of a managerial nature, such as acquisitions, relations with external institutions and asset management and consumption. These activities are difficult to measure because they are not carried out periodically and do not involve material transformations. The third block includes care activities, which are normally divided into self-care, childcare, care of healthy adults, the sick and elderly. They are activities with a strong affective component. They have traditionally been treated as "natural" duties and moral obligations, so the mere fact of calling them or not calling them "work" is in itself a question of ideology.

In theoretical and methodological discussions on unpaid work, some subjects appear repeatedly. These include the difference between availability and active work, the opinion of the receiver and assessment of productivity.

In care activities, the difference between availability and active work is vital, because both the number of hours and intensity of effort are different. Mere availability time can be combined with other activities, but it is not free time, "time for oneself". As time is a scarce resource, the amount of time devoted to care cannot be devoted simultaneously to employment; a choice must be made between these alternatives. If observation instruments urge viewing specific activities, availability time becomes non-observable. Conversely, if complemented with the observation of simultaneous activities, the tendency is for days to exceed 24 h.

The opinion of the receiver answers the question of for whom the activity is performed. Some authors exclude work for producing services for oneself from the concept of unpaid work. Based on this criterion, unpaid work would not exist in single-person households. Other statistical instruments only offer information on work carried out in and for members of the household itself, making the abundant support networks and collaboration between households and extended families non-observable. With respect to caring for healthy adults, an interesting category is "exempt" adults; these are individuals who do not devote any time to other members of the household but receive from them the necessary services for their maintenance. At a legal, psychological and political level the question of

"for whom" takes the subject of unpaid work to implicit and explicit social contracts and the bases of reciprocity.

Productivity is an important criterion in the market economy and often economic analyses talk about "productive work" and "unproductive work" or set "productive work" against "reproductive work". "Productivity" criteria, contrary to what might be inferred, are highly ideological, and have more to do with the ability to divert costs to other individuals than their usefulness or contribution to common wellbeing.

In a strictly market economy, only those activities for which purchasers are willing to pay more than their production cost can survive. The market production cost of care is basically set by salaries, which are established legally in most developed economies: not the final salary, but the minimum, as well as compulsory payments (social security, etc.) and minimum working conditions (working hours, holidays, leave, etc.). Any agreement to provide paid care below minimum conditions places both the carer and care receiver in an illegal status.

It is difficult to introduce technological and organizational improvements to individual care that increase the amount of services produced without reducing their quality. Individuals who need more care are subject to the so-called "iron law of care", i.e. the more they need, the less they are able to obtain for themselves. The purchasing power of children, the sick and elderly is low or non-existent. Who is responsible then for providing them care?

The Concept of Contribution

A contribution is "the part planned by a person or thing in bringing about a result or helping something to advance" (Oxford Dictionary). Generally it is used in a positive sense, such as a gift, but in its Latin origin it is closer in meaning to the idea of a tax or compulsory payment. This second aspect is present in many European languages, although with less emphasis and less widely used than the first meaning.

The choice of this concept to link unpaid work to wellbeing meets the need to loosen the causal link between them. It implicitly assumes that wellbeing is a result of multiple factors and unpaid work does not produce it entirely; it only "helps to advance". At the same time, without showing it, it introduces in the title of the article the idea that there may be a background of obligation with the contribution, such as taxes or levies originally associated with the term. The dream of social researchers who look for a scientific statute similar to that in physical or biological sciences would be to separate into fine strands a concept and a situation, remove any other factor that might affect them and precisely measure changes arising in the situation (in this case, wellbeing) when the presence or intensity of the causal agent (in this case, unpaid work) is altered. The indicators would be the operational substitutes of the concept and the changes in the situation. This article in no way intends to be an experimental model, although it will use as much empirical data as possible. The main focus is on offering an overview of unpaid work in the contemporary world, suggesting rather than showing connections between wellbeing and unpaid work. It will highlight the methodological difficulties in observing and coding the materials obtained, as well as the risks of assigning the same meaning to data referring to very different cultural contexts.

With regard to wellbeing, unpaid work is translational in nature. Although people may simultaneously be producers and receivers of own and external unpaid work, almost all empirical studies have focused on the production of unpaid work rather than its consumption. In care provided to children and the sick, which makes up a significant part of unpaid work, it is almost impossible to obtain information directly from the receivers. Estimating the extent to which unpaid work contributes to their wellbeing can only be obtained through logical inference, or directly through the opinion of carers or other external observers. Being translational activities, their effect on producers may be very different to that on receivers, and even of a different nature.

Freedom, Necessity, and Coercion in Unpaid Work. ¿Does It Matter for Quality of Life and Wellbeing?

Freedom is the capacity to choose, to do or not to do. In paid work, the law protects the freedom of workers explicitly guaranteeing, among other things – barring a few exceptions – collective negotiation and the right to strike.

There are three main types of unpaid work: (a) forced labor; (b) voluntary work; (c) unpaid work in households. Forced labor was a major historical reality in other times. The International Labour Organization (ILO) identifies eight categories: slavery, confined work in remote areas in agriculture, debt bondage, human trafficking, abuse of domestic workers, forced labor in prisons for profit-making purposes, mandatory participation of personnel in public works and forced labor imposed by armies.

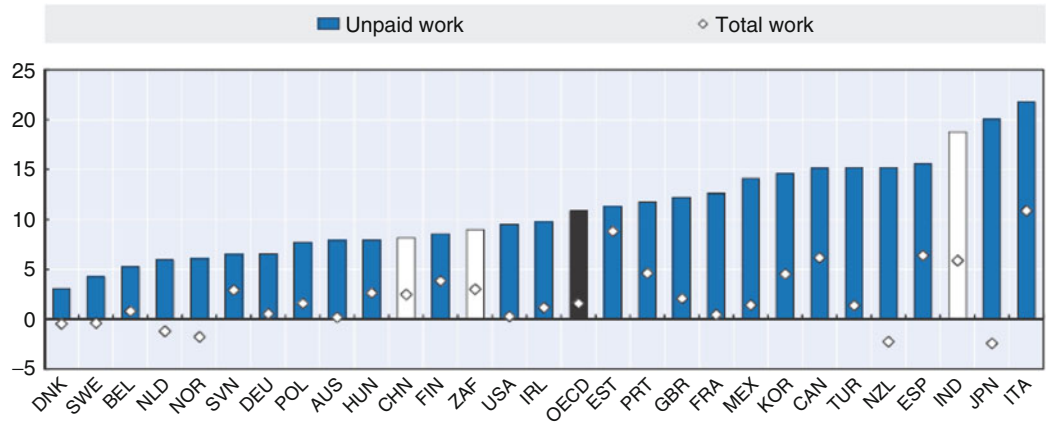
Even though no empirical data is available, it can be assumed that this type of work, almost completely eradicated (United Nations 2012), would not contribute to the personal wellbeing of those who performed it. Paradoxically, it would occasionally contribute to the wealth and wellbeing of certain social groups while simultaneously impoverishing and causing distress in others. Although in this chapter we are not going to concern ourselves with forced labor, we wanted to mention it to remember its existence, the need to eradicate it and the contradiction of how one type of job can simultaneously cause the enrichment and wellbeing of certain social groups and the impoverishment and distress of others.

Volunteer work is work carried out in favor of a community or a group of persons. It is work which does not seek personal benefit, but which attempts to fulfill a social function. It is not remunerated, and may be carried out informally, outside any institution, or in a formal, organized manner as part of an institution. Volunteer work will not be discussed in this study in more than an occasional manner, to compare with or to complement the analysis of the remunerated work and non-remunerated work performed in households.

Non-remunerated or unpaid domestic work is the work carried out in the household for oneself or for other members of the household. Unlike forced labor or volunteer work, non-remunerated domestic work throughout the world is of enormous magnitude. Perhaps it would be more accurate to label it as non-monetarized work, in order to emphasize that this is a type of work which does not give rise to any immediate monetary transactions, but usage has established the term non-remunerated or unpaid work. From some points of view, domestic work is remunerated, in the sense that the average wage has to include the cost of reproduction (it has to be sufficient for the worker and for his/her family), and it is frequently augmented by allowances for the family situation, or there are tax deductions for the same reason. Nevertheless, the essential element of this work, and what differentiates it from other types of work carried out in the household, is that it is not linked to a direct payment, and in this sense it is correct to identify it as non-remunerated work (Graph 16.1).

In the OECD, carrying out unpaid work represents between 10 and 15 % of the daily time of the 15–64 year old age group (Veerle 2011). According to the recent OECD report "*How's Life? 2013: Measuring Wellbeing*", in their area men devote 21 h a week to unpaid work, half the amount of time as women. The overall workload, which is the sum total of paid and unpaid work, is 2 h a week more for women. The differences would be far greater if methodology with a broader definition of care was used and there was a better way of including time estimates of simultaneous activities. Within the OECD area there are big differences in the distribution of the overall workload between men and women, and these differences are accentuated in certain areas outside the OECD.

Throughout the world the greater part of non-remunerated domestic work is carried out by women, and this reduces their opportunities to take up remunerated work. It forms a part of a tradition of dividing work by sex which takes on new meaning in contemporary societies in which individual autonomy is closely tied to the opportunity to obtain income from work. It has to be



Graph 16.1 Gender differences in time allocated to unpaid and total work. Difference in weekly hours worked between women and men

Note: Countries are ranked in ascending order of the gender gap in unpaid work. Data refer to 2011 for Japan and the United States; to 2010 for Canada and Norway and to 2009–2010 for Estonia, Finland, France, New Zealand and Spain. Data refer to 2009 for Korea and Mexico; to 2008–2009 for Austria and Italy; and to 2008 for Turkey. Data refer to 2006 for Australia, China, the Netherlands and Turkey; to 2005 for Belgium, Ireland and the United Kingdom; to 2003–2004 for Poland; and to 2001–2002 for Germany. Data refer to 2001 for Denmark; to 2000–2001 for Slovenia and Sweden; to 2000 for South Africa; to 1999–2000 for Hungary; and to 1999 for India and Portugal. For details on the definition of unpaid work and total work see Miranda (2011), http://dx.doi.org/10.1787/5kghrjm8s142-en

Source: OECD's calculations based on national time use surveys

StatLink http://dx.doi.org/10.1787/888932888870

pointed out that according to the European Social Survey and other methods of extensive observation, the happiness of women is not lower than the men's one.

The increase in life expectancy, the decrease in the average number of children per woman, and the loss of the economic importance of family wealth in comparison with income has given a new dimension to the sexual segregation of work, and has deprived it of a part of its historical legitimacy. Nowadays, the search for the recognition of non-remunerated domestic work as "real work" forms a part of the political struggle by women, and is the basis of redistribution programs which require not only a change in the relationship between men and women, but also between the basic institutions of contemporary economies: the households, the enterprises, the State, and the States.

With respect to the need to work, this is a quality which the labor market does not take into consideration. Necessary, useful, or superfluous are not categories which are important to the market, where the fundamental criterion is that the product, whatever it may be, should be bought and sold. When a society "prizes" an activity and demands it from the market and pays for it, it is considered to be productive even if it is harmful.

If the categories of freedom and need are applied to non-remunerated work, the situation is quite different from the case of employment. Many non-remunerated activities are considered to be necessary, and are performed precisely because they are considered to be so, although they are not rewarded with any type of economic compensation. From a social and political perspective, the debate is not so much about whether they are necessary, although that is also part of it, as about "who has to take responsibility for them" and "the reasons for doing it" (Garrido 2000, 551:568).

The limit between work and leisure is not clear in any type of work. In every activity there is a spectrum between what is strictly indispensable (the "sufficient condition") and technical excellence. Where does need end and enjoyment begin, the prolongation of the job

just for the personal satisfaction of improving its quality? Where does the limit lie between "necessary" repetitive work and "unnecessary" but creative work, that of the search for new solutions even at the risk of not finding them, or of making a mistake?

Coercion appears at work in many guises. Forced labor under threat of physical punishment is only one end of a continuum in which there is an infinite number of levels and variants, including forms of punishment which run from the loss of the means of subsistence (dismission, divorce) to the withdrawal of alternatives, emotional threats, and moral pressure.

In the cruder forms of coercion, the paid or unpaid worker can see them clearly, as he/she can see the agents which impose them, and it is therefore easy to identify it as external and to direct individual or collective action towards eliminating it. On the other hand, in subtle forms of coercion, the externality is scarcely visible because its effectiveness consists specifically in ensuring that the worker internalizes it, feels it to be a personal decision and not a decision by some other; furthermore, in order to be effective it is indispensable that the worker should interpret it in individualistic or naturalistic terms, in order to prevent him or her from engaging in structural analysis or in collective action.

Consciousness and insatisfaction go often together, making difficult the interpretation of expressed satisfaction data. As far as insatisfaction or unhappiness is recognition of failure, people tend to rate themselves better than other people. For instance, in a recent survey (CIS, Spain, June 2013), the average of happiness is 7′24 point in a scale of 10 point, while "other's happiness" is rated only with 4′84 points. In this respect, the unveiling of the coercion and its reinterpretation as a matter which does not depend purely on the actors directly involved is the first and indispensable condition for eliminating it.

Non-remunerated work in the home has traditionally been interpreted as an obligation to which the individual has had to submit on the basis of belonging to a group constructed in social terms on sex-based criteria. This is what the administrative language of Spain called "the obligations appropriate to her sex" until the end of the twentieth century, or as abbreviated in the simplified form for the national identity document "S.L." (i.e., in Spanish, "sus labores" – her tasks); a concept which nowadays fits into another, wider, interpretative context: gender relationships. As part of the implicit social contract which controls the division of labor between men and women, there are also "obligations appropriate to their sex" which fall principally on the men, such as physical defense and the provision of financial resources. While both men and women accepted the sexual division of labor as something natural, minor conflict was generated; its effectiveness was reinforced by all of the resources that a society is capable of generating, such as education, law, ethics, and aesthetics. Although still strong and with a powerful capacity for coercion, the model for the division of tasks between men and women has begun to crack, and is incompatible with an individualistic industrial society, the belief in the value of equality, universal access to education, and above all the lengthening of life expectancy and the reduction in the proportional time devoted to motherhood in the life cycle. Social support for the idea that women "must" give their time and their lives to the care of their families is becoming more and more restricted (European Social Survey, second round, 2004). Rejection of care-giving as a natural moral obligation which only affects women is becoming more and more frequent, and by the same token, the idea that it is a collective expropriation which occurs outside the household, but which finds its expression within the household as its daily materialization, is becoming more and more widespread.

For instance in Spain as in most countries, the preference for the model of the egalitarian twin-career family has become thoroughly established. According to a recent study by the CIS, this is preferred by more than two thirds of the population (67.6 %) while only a 14.7 % express preference for a model of strict division of work within family, in which only one

member of the couple is engaged in paid work while the other is in charge of the home (CIS 2010). Among young people, these figures reach 76.6 % and 7.1 % respectively, a preference which is quite distant from that of those over the age of 65 years old, among whom, however, the strict division of labor model by sex is also a minority-held view (44.4 % and 30.8 %), in favor of the egalitarian model. Contrary to what might be expected, the opinions expressed about this topic by men and women are similar, although men are somewhat more in favor of the traditional model (17.1 %) than women (12.4 %).

The preference for the model is rhetorical, and is expressed on the assumption of it being possible. If it were not and one of the members of the couple had to do less paid work in order to take care of the home and children, similar positions are held by men and women; both the men (46.6 %) and the women (44.9 %) believe that it should be the woman who should reduce their paid work, although more than half proposed alternative formulas, such as distributing it without differentiation (21 %), that the one who had the worse paid employment should take care of the home (10 %), or that it should be decided by reference to other criteria.

All of the available data confirm that the egalitarian model for the division of labor is a rhetorical one: in the same survey, 64 % of women, as opposed to 16 % of men, said that they were the ones who were principally responsible for the most important domestic chores in their homes. However, the fact that they took responsibility for the chores does not mean that they identified themselves with the chores in terms of employment. Only one quarter of the men who lived in a couple said that the occupation of their partner was the domestic chores, which is equivalent to saying that the remaining three quarters identified their partner with a different job or socio-economic status. This is a piece of data which demonstrates the change which has occurred in comparison with a few decades ago, but it loses a lot of meaning when it is remembered that only 0.8 % of women living in a couple said that the principal occupation of their partner was the domestic chores. There continues to be a wide gap between the models which are supported publicly, expectations, and everyday reality. According to the European Social Survey 2010–2011, even women having a full-time job do, as a European average, two thirds of the total amount of housework in their households. However some authors estimate that for 2023 gender equality will arrive to the households in some equalitarian countries (Bonke 2012, 108:109), in spite of slower arrival of equity (2033) in paid work.

The Fading Limits Between Unpaid Work and Other Activities

From a conceptual point of view, the separation between what is work and what is not in household chores is difficult and stimulating at the same time. The criterion of direct remuneration is of no use in the definition, given that all of the activities are non-remunerated. Nor is the criterion of effort or recipient. The European Social Survey usually identifies work with employment; the only round partially devoted to family work and wellbeing (2004) excluded care from housework, applying to housework the "unpaid work" term.

Unpaid work in households is performed for oneself or other members of the family, just as a farmer uses all or part of his animals for household consumption or a mechanic repairs his own car. In the single person homes of young people, divorcees and widows and widowers, unpaid work for self-consumption helps improve quality of life and wellbeing, reducing dependence on the market. Work for other members of the household is the type of unpaid work that generates the least amount of discussion and identification problems; it varies appreciably in volume and content depending on whether we are talking about societies with predominantly small-sized nuclear households or large and multi-nuclear households, but in all households it provides a significant amount of wellbeing. Work for other family members or friends that do not share the home is also work, even if some

statistical indications are unclear about its recognition. The existence of family-oriented societies in which this type of work continues to play an important role cannot go unrecognized, both in terms of activities of daily living and, in particular, when it comes to facing exceptional circumstances.

The criterion of the "third party", on the other hand, i.e. if the activity could be carried out by a paid third party, is the criterion which is most used by analysts, but it too fails to resolve the matter fully. In the Spanish language, as well as other languages, there are many action verbs (to comb, to dress, to wash) which become reflexives (to comb <your hair>, to dress <oneself>, to wash <oneself>) in order to exemplify the variability of the action; in fact, any of these three activities, without having to refer to distant cultures or historical periods, is, under certain special circumstances (sickness, social events, galas), transferred to paid professionals (hairdressers, butlers, valets, etc.). Management activity (purchases, dealing with institutions, representation) take up time, and are of considerable economic importance, but neither their theoretical nor legal status, nor their status in financial accounting, are clear. Sometimes they are considered to represent productive activity (in the purchasing departments of every company), and at other times a mere domestic obligation, or even a privilege or a hobby of high social prestige, depending upon the type of purchase and who performs it (Durán 2000, 455:506).

The most difficult activities to separate out are those which are habitually accompanied by a high emotional content, and which therefore are far removed from remunerated work; for example, leisure and sexual relations. When these activities are performed freely and for pleasure or out of conviction, they cannot be classified as work: the question, therefore, is precisely to what extent are they carried out for those reasons, or due wholly or partially to distinct motives and reasons which would bring them into line with remunerated work or obligated work. There is no doubt that sexual relations can be classified as work, and the fact is that prostitution constitutes a major sector which is included in the National Accounting, and moves huge sums of money, giving rise to legal regulations and polemic among the general public, both because of the sexual activity itself and because of the context in which they are immersed. Even activities which provide company without sexual relations sometimes become work. The escort or geisha have popularized the two examples as particular forms of work which the majority of the population have not experienced through direct contact, but with which they are familiar through literature, the cinema, and the media.

Another diffuse conceptual boundary which involves women in particular, is that of "self-maintenance": activities which are intended to improve their physical appearance (Duran 1988, 47:50). In professions connected to public relations, it is not uncommon for employers to recognize that part of the time devoted to this activity is work, and a budget or an increase in pay is assigned in order to compensate for the expenses this gives rise to.

Content of Unpaid Work in Households

The classifications of the ILO and statistics bodies record thousands of jobs and different activities. Activities are also varied within households, although not that much (ICATUS and CAUTAL classifications, etc.). Most catalogues or lists are based on a set of basic activities which are broken down into more specific activities, although some lists merge the content criteria of the activity with the type of recipient. Basic activities include: food preparation, home cleaning and maintenance, child care, care of healthy adults, care of sick or frail adults due to their advanced age, transport or mobility, management.

The preparation of food is an economic activity pervaded with cultural determinants and social rules, which go beyond the merely nutritional aspects (Durán 2010, 65:88). A meal may become a celebration, a source of pleasure

and a fine expression of wellbeing. And the opposite can be said of a poorly cooked meal.

In under-developed countries, where monetary resources are very scarce, the relative value of the time applied to the food-providing function is of the greatest importance. Drinking water is an essential item, coming before and with equal importance to foodstuffs, and obtaining it consumes a great amount of working time. According to the Population Reference Bureau, 18 % of the overall population is undernourished in under-developed countries: this proportion reaches 35 % in the least developed countries. In some sub-Saharan countries the proportion of people who consume fewer calories than are necessary every day reaches a level of 60 %. To give a comparison between two types of societies, in Italy or the United States the percentage of under nourished people does not come to 2.5 %, while in the Democratic Republic of the Congo, the figure is 74 %. In Italy, the population will only increase by 2 million people (0.3 %) between 2010 and 2050. On the other hand, the population will increase by 122 million people (182 %) in the Congo, which means that the need for accessible foodstuffs will be even greater than now (PRB 2009[a]:2).

A large proportion of the food is produced and, above all, is processed in the households, without going through the market. The task of obtaining foodstuffs, storing them, cooking them, and offering them to the members of the household every day is one of the tasks which consumes the greatest amount of non-remunerated work, both in terms of the time consumed in the preparation of each meal and in terms of the number of times which it has to be carried out every day. In some rural areas, women with limited resources devote twice as much time as the rest in preparing food, because of the time spent in collecting firewood, milling the grain, and looking after the fire (Orozco 2005, 7:9).[4] The use of non-remunerated work converts raw food materials, which cannot be assimilated, into true foodstuffs, and makes it possible to satisfy nutritional needs at a cost which is affordable for households. In the developed countries, the work involved in feeding oneself and others can be observed from a certain distance, because part of the work has been transferred from the households to the formal market, and this function only consumes a relatively small part of the monetary household resources (Calatrava and Melero 2000, 125:202).

However, households continue to account for most of the food consumed by the population around the world, for which they need to devote a significant amount of unpaid work time. Different subsistence allowances and timetables among members of the family offset part of the reduction in time provided by new technologies (frozen goods, electrical household appliances, ready meals). According to the INE's Time Use Survey (2002–2003), 43 % of men and 88 % of women devote some time to cooking on workdays. Men who cook devote an average of 48 minutes to it every day, while women devote 2 h 02 min a day. If all of the time devoted to this activity is added up (purchasing foodstuffs, storing them, processing them, serving them, cleaning up, and table service) throughout the year, it turns out that the activity consumes approximately the same amount of time as industry as a whole.

In Mexico, according to the National Survey on Time Use, 2009, weekly amount of time devoted by population over 12 years old to preparing food in the household is more than 19 h.[5]

Without the cleaning and maintenance of the home, the wellbeing of its habitants would disappear. This is the activity in which the move from unpaid work to paid work most easily occurs, both through the outsourcing of the service (dry cleaning, maintenance services, etc.) and the hiring of paid workers to carry this out in situ (domestic staff, gardeners, etc.). People remember the disastrous effects of the lack of cleaning on the quality of life in cities (for example,

[4] According to this study, having certain electrical home appliances is considered to save seven hours of work every week: three hours for the electric cooker, three for the microwave, and one for the refrigerator.

[5] INEGI, National Survey on Time Use, 2009.

during public service strikes) or how cleaning staff strikes produce similar consequences for hospitals as surgeon's strikes, with both of them causing the near paralysis of the establishments.

Care, Soins, Cuidado. Converting the Need into Demands

The concept of care is more variable than what statistics on time use might show. Referring only to a few European languages for example, the words "care", "soins" and "cuidado" in English, French and Spanish, are used by most people in a different way with different degrees of immateriality in the action described. For example, "*soins*" in French has a more material and physical transformation content than "cuidados" in Spanish, which is more closely associated with the idea of responsibility and availability than physical transformation. When these words are used in empirical research, international comparison is difficult because the same figures mean different things in different cultural contexts.

Wellbeing is not possible in a society if people who need care do not receive it. Large social groups that receive care include children, the sick or disabled, frail elderly individuals and adults who, even though they could care for themselves, delegate their care to others because they want to and are able to, or because these are the established customs. Care, like many other services, is an activity which is highly varied in terms of its form, quantity and quality. There is minimum care, without which the person who receives it would die, and sophisticated and highly specialized care, whose quality and cost puts it in the luxury category.

Furthermore, a distinction needs to be made between care that is necessary, demanded and provided. Whether care is necessary can be determined by the individual him/herself, by outside observers or by individuals who would have to provide the necessary resources to satisfy the need. If it is left up to the individual with the need to decide, more often than not the neediest are unaware of this or incapable of expressing it. This is the case with children, those who are very sick and some types of marginal individuals, and also with social groups whose social weakness conditions have nullified their self-awareness capabilities. If it is left up to those who have to provide the resources to satisfy the need, they might underestimate it or even overestimate it if they derive some benefit from it. If the decision is left up to outside observers or experts, there is a risk of bureaucratization, delay and costliness in arriving at that decision, not to mention the communication difficulties with both care recipients and service providers. Many care needs are not converted into demands because individuals who need the care lack the ability to organize, express or make themselves heard. There are also demands, and even obligations, which are not based on actual needs, but rather the power to obtain benefits for other subordinated individuals. It is not a question of need, but rather relative power: physical and psychological, ideological, economic, social or political power.

Satisfying Care Demands and Wellbeing. The Macro Perspective

The degree of coverage in satisfying care demands is variable, ranging from no satisfaction to medium satisfaction, full satisfaction and even over satisfaction. The care may be provided by various institutions and social groups, of which the most important are family members or friends, the public administration, market and non-profitmaking bodies. The relationship between those who produce and demand care can be expressed as a schematized ratio as follows:

$$R = \frac{D(\text{Demand for care} = D_i + D_e + D_{ad} + D_m)}{P(\text{Production of care} = P_{fam} + P_{AdmP} + P_{mer} + P_{vol})}$$

D_i is the aggregated child care demand; D_e is demand from the sick and disabled; D_{ad} is demand from healthy adults and includes both those who provide care for themselves and those who require care from other people or institutions; D_m is demand from elderly people,

who despite not being sick, are frail due to their advanced age.

P_{fam} is the production of care by family members and friends, including self-care; P_{AdmP} is the production of care by public administrations; P_{mer} is production by the market, both through the direct purchase and sale of services and indirectly through insurance companies; P_{vol} is the production of care by non-profitmaking individuals and organizations for people not connected by family or friendship ties. It is often international in nature. Care produced by family members and volunteers is mainly unpaid work, while care produced by the market and the public administration is through paid workers.

Both demand and production have a heterogeneous composition, are dynamic and both have components which interact with one and other and are currently globalized through migrations, businesses and international institutions. If the production or supply of care is greater than demand, wellbeing will increase, while if demand exceeds production, it will be partially unsatisfied and wellbeing will decrease. However, demand and production are not static, and there is no guarantee that care resources will be applied uniformly to all those who demand it. In fact, very much the opposite. Some groups who demand care receive it from their family members, the market, public administrations and even volunteers, while others do not approach any of the above. The demand from each group preferentially targets a certain type of producer, who may or may not satisfy it. From a political viewpoint, the essential issue is that social groups are at risk of not receiving the care they need and that producers are forced to produce the care they cannot or do not want to produce.

Do Children Bring Happiness?

Care is a physical, mental and emotional activity. For there to be children, first they must be born. Does the existence of children contribute to the individual happiness of their families and the wellbeing of society in general? Does pregnancy bring happiness and wellbeing to women? Although children already born are one of the few reasons why many people would be prepared to give up their life and although the accidental loss of a child is considered one of the most painful circumstances that can happen to a person, the number of births per women has continued to decline for several decades, which leads us to believe that the relationship between having children and wellbeing is highly complex, and that there is no precise correlation between what people think, say and do.

According to figures from the Population Reference Bureau (PRB), the ideal number of children for women aged 30–34 varies widely, between 9.1 children in Chad and 1.9 in the Ukraine (Westoff 2010). The replacement rate for the developed countries is estimated to be between 2.1 and 2.4 children per woman, but in Europe the majority of countries are well below that minimum figure, which is only achieved by Iceland (Eurostat 2009, 52:53).

On average throughout the world, each woman has 2.6 children. In the developing countries, even though pregnancy does not appear in the National Accounting, it is a high risk occupation. In spite of the undeniable advances, one out of every 75 women still dies from causes related to pregnancy. In the 50 countries classified by the United Nations as least developed, this proportion rises to 1 out of every 22 women, while in the developed countries the unpaid work of pregnancy only ends in the death of the mother in 1 out of every 6,000 women. The work of pregnancy is repeated frequently in the less developed countries: women have an average of 4.7 children throughout their lives, which contrasts with the 1.6 of the developed countries.

The future of childcare in Europe has to be sure to take into account and include an essential item of data, which is the transformation of the institution of marriage. The number of children born whose mothers are not married is growing constantly; although many of them are married, in the sense of sharing a house with the father of their children, many others are not. They are legally, socially, and economically single.

The dissociation between marriage and reproduction is characteristic of developed countries, although consensual unions are also very widespread in Latin America and some African countries. In Spain, one quarter of all children are born to non-matrimonial unions, the majority of which are unmarried but stable couples (Castro-Martín 2007).[6]

The conception, gestation and nursing of one's own children are not often perceived as "work", although these tasks are recognized as "laborious". However, the nursing of other people's children was a profession in past times (the wet nurse), and although conception and gestation (surrogacy) have not become professional or paid activities presently, this is due more to the laws that prohibit this rather than the actual difficulty of doing so or lack of suitors for the task.

Paradoxically, the price of pregnancies in developed economies can be estimated in a fairly approximate way; not by the value of what is produced, which are new human lives, but rather the cost of interrupting the paid work by the pregnant mother (and sometimes the father) and her obtaining of work leave and economic benefits from social security, private insurance companies and employment institutions. According to economic logic, if there are big social differences, the cost/value of the child of the rural or unqualified worker will be ten or even 20 times less than that of a highly qualified professional, with this difference being repeated if the average cost in developed countries is compared to that in developing countries.

There is no doubt that child care is an essential contribution to their wellbeing, that of their family members and society as a whole. But it is such a costly activity in personal and collective terms that in most developed countries birth rates are below the population survival rate. It is not possible to clearly determine what the direct impact the gestation of children has on the average level of wellbeing that a society attributes to itself.

From the standpoint of the National Accounting, the birth of a child reduces the income per capita, while the birth of a lamb increases it. Someone who looks after the sheep is considered to be a person in employment, while a person who looks after children is considered to be out of the market. Nevertheless, few could doubt that carrying and giving birth to a child is laborious, that looking after the child is an absorbing occupation, and that children are even more necessary to a society than sheep. How can we reconcile the view points of the market with those of the society as a whole?

The estimated amount of care time necessary varies depending on whether we are referring to specific actions or "being ready". According to the Care Times Survey (CSIC, Spain, 2009), the average estimate of time required for children aged between 4 and 24 months is 17 h a day. This is not the active time that each person dedicates but rather the total time that each child consumes daily and which is offered to them by their parents, other family members and other non-family individuals. It is a time frequently shared with other activities or other children in the household. The average time spent among those who personally care for children (39 % of the population) is seven and a half hours a day.

Care requires active involvement, but also means being alert, concerned and able to anticipate something, i.e. being available. It is an activity which often overlaps with other activities, so its analysis requires special conceptual and methodological refinement. It is frequently invisible to monitoring instruments, blinded by the more evident display of other activities carried out simultaneously, such as watching the TV or reading, so the results of measuring the time devoted to this activity vary hugely. There are jobs (teachers, babysitters, etc.) which produce very similar services to those provided in households, and the fact that the emotional activity is higher in households is not a good enough reason to not consider it work for others.

[6] Some indicators which measure the change in fertility outside marriage are the number of births, the fertility rate for unmarried women, and the proportion of those born out of marriage in comparison with the total number of births. This latter is the indicator most used in international comparisons (Castro-Martín 2007).

Caring for the Sick and Disabled

Although caring and receiving care are different activities, most people perform both activities throughout the life cycle, including at the same time in their lives. No philosophical or political theory has been sufficiently developed to analyze the causes of why care should be given and received, who is bound together by the obligation and/or right to receive care and what the limits and trade-offs are of this right/obligation, nor the awards/punishments arising from its fulfillment/non-fulfillment. Some laws refer to the duty and right to care and be cared for,[7] but not with the scope and detail required by modern individualistic societies. Those who produce care increase the wellbeing of those who receive it, but the relationship is not only one way. Many people feel a sense of gratification for providing free care to others, both for emotional and moral reasons and expecting there to be other reasons too. Sometimes the person who receives the care does not feel wellbeing in return, because they reject the situation of indebtedness or weakness in which they are placed.[8] Finally, it is not unusual for the continuous and intensive provision of care to provide wellbeing to those who receive it, but either deprive the providers of it or lessen its effects.

As regards survey-based research on how caring for others affects the level of wellbeing of the carer, it is important to note the huge amount of social pressure on carers in general. If caring is a moral and legal obligation, interviewees, particularly in superficial interviews, will rarely show feelings of hostility or rebelliousness in the role that they have been socially assigned. These feelings do surface frequently in more in-depth interviews though, but do not produce good outcomes in terms of the representativeness of the samples or their statistical quality. In the study on unpaid carers of severely dependent people who had suffered a stroke (Durán 2004) conducted with in-depth interviews, it was found that one third of carers were receiving treatment for depression. The proportion would probably have been even higher if information had been obtained on those individuals who had not even visited the psychologist or another professional to seek care for themselves.

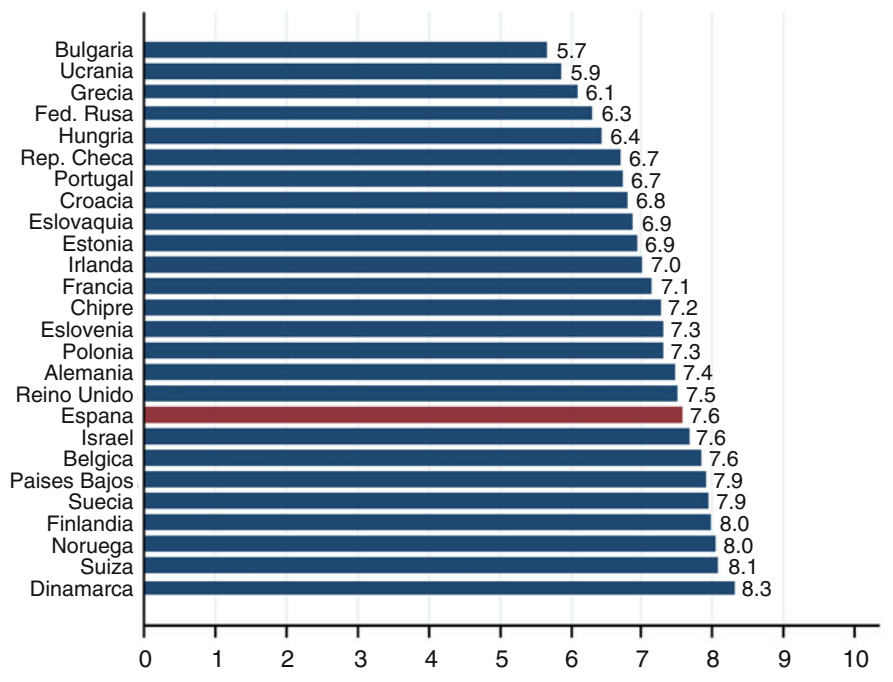
Graph 16.2 shows the results of the European Social Survey on individual happiness in average assessments by countries. It describes and shows, although does not explain, levels of self-perceived happiness, and is a good starting point for posing interesting questions. Some European countries obtain averages of 46 % more individual happiness than other countries. For example, Spain has 7.6 points out of 10, ahead of Germany, the United Kingdom or France. Although this cannot be confirmed, it is likely that the abundant availability of unpaid family work for the care receiver has a greater impact on individual level of wellbeing and happiness than other factors traditionally more considered, such as income, security or political freedom.

Health care decisively contributes to individual and collective wellbeing, which is why societies allocate plenty of collective resources into guaranteeing and improving the health of their population. Unpaid care work applies to disease prevention (looking after the healthy conditions of the home, food, transport, physical exercise), managing relations with the health system, treatment during diseases or disabilities and rehabilitation afterwards.

The so-called survival curves show at an aggregated level the association between health and other demographic variables, mainly age and gender. In undeveloped countries there is a higher incidence of mortality and morbidity among children. In countries with high levels of discrimination towards women, there may be less of a difference between their survival curves and those of men, or even reflect the effect of gender selective abortions on decreases in the female

[7] As an illustration, art. 68 of the Spanish Civil Code.

[8] A good illustration is the Spanish law commonly called the Dependency Law (Law 39/2006). It was mainly created to provide assistance for the disabled and elderly dependent, but the pressure of disabled persons' organisations saw it place specific emphasis on autonomy. Its official title is Promotion of Personal Autonomy and Care for Dependent People.

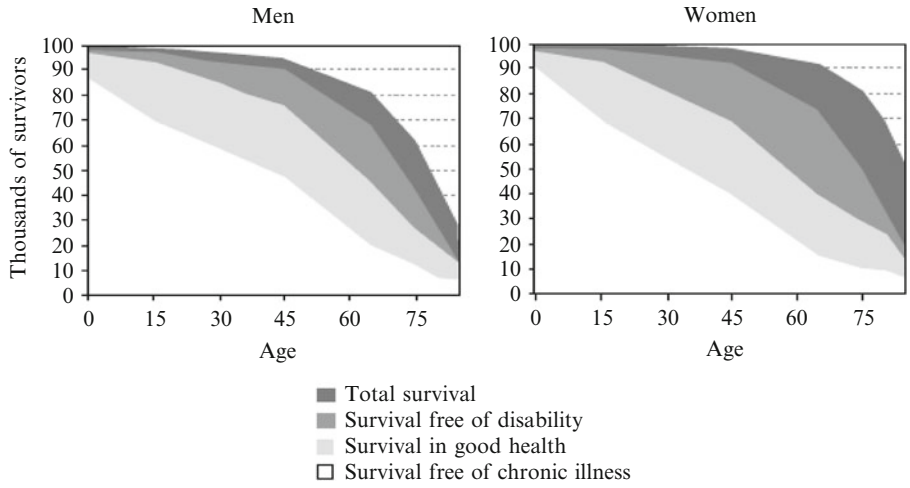


Graph 16.2 Individual happiness (average, from zero to ten points) (Source: European Social Survey. Universidad Pompeau Fabra. Results of the Fifth Edition of the European Social Survey (2010–2011). http://www.upf.edu/ess)

population. In countries with a lot of social unrest it may show a higher level of male mortality at young ages. However, overall the current survival curves of developed countries anticipate the likely evolution towards the model of the rest of the developing countries. Shown below are those for Spain, which are similar to those of other developed countries.

Although health surveys and mortality statistics do not provide direct information on wellbeing or unpaid work, they are an essential contribution to the understanding of both. Graph 16.3 shows changes in health throughout the life cycle. It is just a simplification, because with the data from some health surveys up to 14 different categories can be disaggregated. The shape of the optimum health curve is virtually diagonal, while the survival or non-mortality curve remains during the first half of life at the top of the graph close to 100 %. The space above the survival line is for the deceased. As can be seen, the survival line for women is far higher than that for men, resulting in fewer deaths at the same age but with a higher proportion of sick women than sick men.

Roughly speaking, disease results in care needs, or rather unpaid work. For the sick sector of the population, care is vital for regaining their wellbeing or for reducing distress to a minimum. If the health care need for the average of the healthy population is estimated in a unit, how would it be estimated for the average of the population with the worst health, i.e. the severely sick or disabled? Ten, fifteen or twenty times more? How much of this care is provided by paid workers and how much by unpaid family members? Or, in other words, what would happen to those people if they did not receive unpaid care? How many would become ill through lack of care, would their illnesses become worse or



Graph 16.3 Observed mortality and theoretical curves for survivors of disability, poor health and chronic illness. Lines of survivors (Source: INE, 2002 Survey on Disabilities, Deficiencies, and States of Health, 1999. www.ines.es/inebase/indes.html)

might they even die? In short, the quality of life of the entire population would worsen if free care was not available in households. According to the Care Times Survey 2009 (Spain), each dependent elderly person needs an average of 19 h of care per day. According to the Disability, Personal Autonomy and Dependency Situations survey carried out in 2008 in Spain, 80 % of households do not have anyone with a disability, 16.8 % have one person, 3 % have two people and 0.2 % have three or more people. Three quarters of all carers are women.[9] Despite variations within one country and between different countries, most of the care that the sick and disabled receive is from family members who are not directly remunerated for this.

From the point of view of care, chronic and disabling illnesses have a much greater impact than short-lived episodic illnesses. The care of the long-term sick is an absorbing task which consumes immense resources of time. Almost 10 % of adults provide daily care for sick or disabled persons (CSIC 2009). The age at which this commitment is at its greatest lies between 50 and 64 years old (15.4 % providing care every day), because they take care of sick and disabled people from their own generation as well as from the preceding.

The proportion of dependent people increases continually through the cycle of life although at a slow rate, and intensifies sharply after the age of 65, when also income is strongly reduced after retirement.

Contrary to the situation in respect of the care of children, the highest levels of socio-economic status are those who assume less care of sick and disabled people. If they were to provide care, they would lose their high status jobs. The families of sick and disabled people belong proportionately more to the lower socio-economic levels, which is an important piece of data for health and social policies. For the wellbeing of the sick from high socio-economic levels, it is not so vital that they receive unpaid care from their family members because they are better protected by employment-related rights and can acquire part of the services in the market.

Those who say they would not be able to dedicate their time to caring for family members

[9] INE (National Institute of Statistics) *Women and men in Spain*, 2012, updated on 5 June, 2012, p. 3.

or the sick or dependent, cite their main reasons for doing so as follows: incompatibility with job (52 %) or other family responsibilities (20 %), distance from place of residence (10 %), family conflicts (7 %), lack of suitability (5 %), better availability of other family members (4 %) or they do not believe it is their responsibility (1 %).

The Wellbeing of the Elderly and the Consumption of Unpaid Work

As in all surveys, it is predictable that the severely sick and disabled are underestimated, precisely because their poor state of health makes it difficult to obtain access to interview them, and increases the number of those admitted to institutions which do not form a part of the sampling plans. The social objectives have been displaced towards a new frontier i.e. that of improving living conditions for the elderly population and extending the healthy period without dependence. Success has been spectacular in quantitative terms (the number of years lived), but not so much in qualitative terms (the number of years lived without illness). The number of years lived has grown, as has the number of years lived without illness, but so has the number of years lived with illness. Degenerative and chronic diseases are the corollary, the other side of the coin of health and social progress which has been without historical precedent.

The indicators of life expectancy (the number of years one is expected to live) have surpassed the indicators of healthy life expectancy. On average, European men who reach the age of 65 years old still have 16.84 years to live, and European women 20.40 years. Women who reach this age will live on average three and a half years longer than men, but this apparent gain virtually disappears if the comparison is made between the indicators of healthy life expectancy: European men can expect to live 8.70 healthy more years and 8.14 years of ill health, while women can expect to live 8.90 years in health and 11.50 years of ill health. Women have an advantage of 0.2 years free of sickness (three months) but their life expectancy in ill health is 3.36 years (1,226 days) greater than that of men. During these years it is likely their income will below and they will not have a household. Can this situation be interpreted as a success, as a sign of quality of life and wellbeing?

Some European countries, such as Iceland, Denmark, and Sweden almost double the European average life expectancy at the age of 65 years, and this does not depend on genetic differences but on life style and an efficient social organization for this purpose.

Both social, economic and health policies have to plan for the care of an elderly population, with the consequences of illness that the aging process entails. The national differences within Europe are considerable, both in terms of life expectancy and healthy life expectancy and in the systems provided to address economic survival beyond working age and to maintain the best possible quality of life for the population who are ill. In some countries, such as Japan and Korea, the expansion of socialized care has become an electoral matter because of the increase in the number of people who live alone and the fall in tri-generational families. In China, the obligation that children have to take care of their parents or ancestors has been reinforced by legislation (Razavi 2005, 8). Everywhere, and particularly in the developing countries, carers receive little attention from Social Security, generally reduced to workers with formal employment, and nor do they have money to buy it on the market (United Nations 2010).

The indicators of aging, and above all those of illness and dependence in advanced old age, must become a potent element in weighting indicators of development or wealth based exclusively upon monetary elements, such as GDP. Care for the elderly population is indispensable and must include budget planning, both public and private, and is a huge pending liability which requires copious resources if it is to be paid for appropriately. Does it have to be the current working population who have to finance the care of those who are not working? Does it have to be the working population who finance their future care, through their taxes and private

Table 16.1 The transfer of activities as a consequence of aging (percentage)

		Person performing the activity				
Activity	Age ranges	Person interviewed	Husband/ wife	Child or other family member with whom they live	Family or neighbors with whom they do not live	Domestic worker
Washing clothes	65–69	53.8	38.0	1.8	0.5	3.0
	85 and +	23.1	10.9	36.8	9.3	16.4
Small repairs	65–69	49.6	21.9	9.0	9.3	0.2
	85 and +	10.7	2.5	40.5	25.0	4.0
Doing the shopping	65–69	60.1	26.8	3.3	1.3	0.9
	85 and +	22.4	7.7	42.9	12.2	9.3
Doing the cleaning	65–69	50.9	34.8	2.9	0.2	6.8
	85 and +	14.0	9.1	34.0	11.3	27.1
Doing official business	65–69	64.3	22.7	6.5	2.0	0.1
	85 and +	22.6	4.0	45.7	20.3	3.7
Cooking	65–69	57.1	37.3	1.8	0.5	0.8
	85 and +	31.7	12.0	35.3	7.2	10.7
Taking care of sick members of the family	65–69	43.8	20.1	3.7	2.5	0.5
	85 and +	9.2	7.1	44.6	5.4	5.8

Source: Prepared by M.A. Duran using data from the CIS "*Survey on Living Standards among the Elderly, 2006*" 2.755 interviews. The "Other" and "No answer" groups have not been reproduced because they are a very small number

pension plans, when they stop working? Should it be the "non-working" population who have to take responsibility for care on a massive scale, in particular the elderly who are no longer working? All of these questions are of the greatest political, social, and economic importance, in which decision-making requires previous in-depth studies and reaching consensus between the social groups who will have to provide the resources to meet the growing demand.

Table 16.1 shows that very elderly people (+85 years old) transfer most care activities to their immediate family environment. The transfer to paid workers who help them in their own home is far from negligible, especially when it comes to cleaning activities, but it is tiny in comparison to that transferred freely to spouses, children and other non-cohabiting family members. Unpaid care work when it consists of intensive long-term care frequently leads to the deterioration of the carer's own health. Analysts usually differentiate systems of care for elderly people by the degree of State and family participation. However, even in countries which have very highly-developed public systems for the care of the elderly, the role of the family continues to be very important (Rogero-García 2012).

In Spain, informal carers also save money for the national Budget and for insurance companies (Durán 2004), thus permitting less extreme tax pressure and good quality attention within the home. Public opinion is ambivalent about the question of the responsibility of the State and the family in caring for dependents; although people hope that the State will increase the benefits, there is no confidence that this will be done properly or soon, which are two indispensable qualities in the care of dependents in the family. According to the Survey on Informal Support for Dependents, 91 % of carers agree with the statement that it is their moral obligation to take care of that person, although 51 % are of

the opinion that "there's no option", 22 % believe that "there is no way out", and 21 % believe that "it is too heavy a burden" (Imserso 2005:49; Jiménez-Martín 2007). Some 85 % of carers provide care every day, and 40 % devote between 8 and 24 h a day to this activity. 45 % of carers suffer from chronic illness. Sending dependents to institutions is an option which is increasingly being demanded, but it is still not a majority opinion, even among those carers who believe that it is an excessive burden for them.

Death is inevitable at the end of the life-cycle. Western culture fails to face up to this reality and values of freedom and responsibility which, at least theoretically, guide the actions of citizens during their lives, fade when it is time to finally leave this world. Memory of historical abuse and fear that citizens assume control over the final moments of their lives prevents aspiration for quality of life extending with the same intensity to quality of death.

Unpaid Care Need Forecasts for the World's Major Regions

A Scale for Weighting Care Needs

Table 16.2 shows the care needs forecasts for the world's major regions for 1950, 2015 and 2050. This has been produced by applying the Madrid II scale (also called Duran scale) to the United Nations population projections (*World Population Prospects*). The Madrid II or Duran scale is a replica of the so-called Oxford scale or the OECD scale, frequently used in purely monetary studies about consumption and poverty in households. It weights the per capita demand for care according to age: this scale attributes 1 unit by capita to the average population aged between 15 and 64; 2 points for those aged 5–14 and 65–79, and 3 points for those aged 0–4 and over 80. For each region the first column shows in millions the amount of care units that the region will have to produce if it wants to satisfy needs resulting from demographic changes. The second column shows the amount of care units that will have to be produced, per capita, by the population aged 15–64, assuming that only this sector of the population would take responsibility for satisfying care needs. This assumption is just a first scenery or working hypothesis. Both columns show the composition of demand by age groups.

Africa

Between 1950 and 2015, the population of Africa has multiplied by four, and it will double again by the year 2050. The ratio of units of care will not vary significantly, but the ratio between units of care and the population between 15 and 64 years of age will suffer a significant change: between 2015 and 2050 it will fall from 2.9 to 2.4, a fall of 20 %. The time resource devoted to care which will be freed up with the new demographic structure can be directed to education, employment, leisure, or to any other activity. Over the next few decades, Africa will enjoy a *demographic bonus* because the great increase in the demand for care from the elderly population will not have arrived, and the continent will have an extensive contingent of population in the central, potentially working, age groups.

Easterly (2009: 37) and other authors have called attention to the fact that it is unjust and counterproductive to measure Africa by the same criteria as other regions in relation to the Millennium Objectives. Foreign aid to developing countries is very much on the way to achieving seven of these objectives by the year 2015, and therefore the programs are being monitored closely by the United Nations, the World Bank, the International Monetary Fund, and other bilateral and international agencies. There is general agreement that Sub-Saharan Africa will not achieve any of the objectives, but this apparent failure conceals efforts and successes which are deserving of recognition. The indicators employed to measure improvement in conditions of poverty are focused on measuring the proportion of people who cross over the set threshold, but not those who get close to the threshold but do not manage to cross it. For example, reducing the population in poverty from 35 to 20 %, in

Table 16.2 The demand for care by age groups in the world's large regions. 1950, 2015 and 2050

	Needed care units[a] (in millions)			Ratio of care/ population of 15–64 years old			Needed care units[a] (in millions)			Ratio of care/ population of 15–64 years old		
	1950	2015	2050	1950	2015	2050	1950	2015	2050	1950	2015	2050
	Africa						Asia					
Total variation	228.8	1,166.2	2,393.2	2.9	2.9	2.4	2,166.7	6,210.2	8,064.7	2.6	2.1	2.4
Population from 0–4 years of age	38.7	179.5	270.9	0.9	0.8	0.5	598.3	1,098.7	918.0	0.7	0.4	0.3
Population from 5–14 years of age	56.1	294.2	500.2	0.9	0.9	0.7	621.1	1,409.0	1,262.9	0.7	0.5	0.4
Population from 15–64 years of age	126.7	651.8	1,482.0	1.0	1.0	1.0	829.0	2,985.8	3,388.0	1.0	1.0	1.0
Population from 65–80 years of age	6.7	35.4	119.7	0.1	0.1	0.2	102.8	536.2	1,812.1	0.1	0.2	0.4
Population of 80 plus years of age	0.6	5.3	20.4	0.0	0.0	0.0	15.5	180.5	683.7	0.0	0.1	0.2
	Europe						United States and Canada					
Total variation	794.6	1,063.1	1,112.2	2.2	2.1	2.7	232.5	469.0	615.7	2.3	2.2	2.5
Population from 0–4 years of age	155.1	120.3	108.5	0.4	0.2	0.3	51.7	63.3	73.0	0.5	0.3	0.3
Population from 5–14 years of age	185.9	153.7	145.7	0.5	0.3	0.4	50.7	83.9	96.8	0.5	0.4	0.4
Population from 15–64 years of age	360.7	497.4	409.4	1.0	1.0	1.0	102.2	214.4	242.1	1.0	1.0	1.0
Population from 65–80 years of age	76.2	189.2	246.7	0.2	0.4	0.6	22.5	71.3	108.5	0.2	0.3	0.4
Population of 80 plus years of age	16.6	102.5	201.9	0.0	0.2	0.5	5.4	36.1	95.2	0.1	0.2	0.4
	Latin American and Caribbean						Oceania					
Total variation	268.9	906.8	1,158.5	2.8	2.2	2.3	19.0	57.8	86.1	2.4	2.3	2.5
Population from 0–4 years of age	80.9	161.7	134.1	0.9	0.4	0.3	0.1	0.0	0.0	0.6	0.4	0.3
Population from 5–14 years of age	81.1	220.9	185.4	0.9	0.5	0.4	0.2	0.0	0.0	0.6	0.5	0.4
Population from 15–64 years of age	94.5	417.6	493.7	1.0	1.0	1.0	3.9	0.2	0.0	1.0	1.0	1.0
Population from 65–80 years of age	10.3	75.5	212.1	0.1	0.2	0.4	0.1	0.0	0.0	0.2	0.3	0.4
Population of 80 plus years of age	2.2	31.0	133.2	0.0	0.1	0.3	0.0	0.0	0.0	0.0	0.1	0.3

Source: Prepared by M.A. Duran using data from the "World Population Prospects: The 2012 Revision. Population Database. 2013

[a]The weighting used under the terms of the Madrid II scale is as follows: population from 0 to 4 years of age = 3; from 5 to 14 years of age = 2; from 15 to 64 years of age = 1; from 65 to 80 years of age = 2; from 80 years of age = 3

comparison with some other place where it has been reduced from 10 to 5 % can appear more favorable to the first country if what is being measured is the amount reduced (15 % in the first case) than the proportional reduction (5 or 50 % in the second case, depending on the point of view taken). In other objectives, such as achieving universal education by 2015, Africa has to cover much more ground given that its starting point was much further away. In fact, Africa is achieving a speed of change in this matter which experts calculate to be much faster

than that obtained by the western countries in the period of their own development.

It is not possible to accurately predict the contribution of unpaid work to social changes, but as a hypothesis Dominguez-Serrano considers that currently households provide 85 % of care consumed by children, 70 % of care consumed by the 15–65-year-old age group and 95 % of that consumed by people over 65.

Asia

The continent of Asia is the great demographic powerhouse of the world. Between 1950 and 2015, the population almost tripled, and over the coming four decades it will still continue growing. Applied to its enormous starting point, this means an increase of more than one thousand million people, equivalent to more than twice the current population of the United States and Canada.

Over this period, the average age of the population has changed from 22.3 years old to 29.0 years old, and by the year 2050 it will have reached 40.0 years old. The general dependence ratio will fall progressively until the year 2030, and then it will start to grow. The weight which will fall on the population between 15 and 64 years old will see greater change: between 1950 and 2050 it fell from 2.6 to 2.1, equivalent to a bonus of 24 %. However, by 2050 it will have lost a large part of that bonus, and the ratio will be 2.4.

The demand for child care will be considerably reduced in the next four decades, while the demand for elderly care will quadruple in absolute terms, and more than double in proportion to total care. Highly varied regions and countries are classified by the common denominator of Asia, including some of the poorest and richest areas in the world, with very varied demographic structures and ways of organizing care.[10]

According to the method used, for China the value assigned to unpaid work varies between 25 and 32 % of China's official GDP, between 52 and 66 % of final consumption (Xiao-Yuan and Xini An 2012).

United States and Canada

Life expectancy at birth was already almost 6 years greater for women than for men in 1950 (71.9 vs. 66.1), at the present moment this has reduced to 3 years, and by the year 2050 it will once again have increased to 5 years (86.0 vs. 81.1).

At the present time, there are twice as many women as men (8.5 million vs. 4.8 million) among the group of those over the age of 80 years old, which is the group which requires most care because of their advanced age. Among the centenarians, there are six times as many women as men. In terms of potential carers, these figures highlight the difficulty women face in having family carers free of charge during the period when they are most in need of them. Over the next four decades the demand for units of care will grow by 24 %, and will be redistributed internally. The proportion of the demand originating with children with respect to the total demand will fall by more than one quarter (from 14.1 to 11 %), while demand from octogenarians will double. While North America has enjoyed a demographic bonus which has allowed it to transfer resources from households to employment or to other activities between 1950 and 2010, by the year 2050 the corresponding care ratio in respect of the population from 15 to 64 years old will once again be higher than it was a century before as a result of the pressure from the elderly population.

Europe

Between 2015 and 2050, Europe will see a reduction in the number of children classed as minors by four million and those aged 5–14 by five million. The ratio of care units produced by the 15–64 year-old age group will have to rise from 2.1 to 2.7, a 30 % increase. Although the total number of children will fall by nine million,

[10] For a more in-depth look at Japan, India and China see Durán, see Durán, M.A. *Unpaid work in the global economy* (BBVA Foundation, 2012).

it is not likely that the services for this group will decline in proportion; the trend is for demand to become higher in quality and, therefore, costlier in the future (García-Diez 2012).

The great increase in the elderly will give rise to a transformation in family relations and in the public and private care services, which will force a demand for immigrant care workers. According to the European Social Survey, European women are more worried than men about their income when they reach old age, which directly affects their capacity to acquire from the market the care services which they do not receive from the State. This fear is greater in some countries than others: between 10 and 60 % of European women express this worry, with the minimum in the Scandinavian countries, and the maximum in Bulgaria, the Ukraine, Poland, Hungary, and Russia. In Spain and Portugal, more than 40 % of the population express worries for this reason, but there is no difference between women and men (data for the years 2006–2007) (ESS 2009:4).

Currently, the overall daily workload is somewhat greater for women according to the Time Use Surveys (Harmonized Eurostat Survey), in spite of the fact that these surveys under-estimate care time. In all European countries except for Norway, the overall workload is greater for women, and is between half an hour and one hour greater than the workload for men. In Spain it is almost one hour, similar to the situation in Estonia, Hungary, or Slovenia (Duran 2010:163). The crisis and contraction of the labor market may reduce paid working time relatively quickly.

From the budget point of view, in order to offer the same services in 2050 as are currently offered to people over the age of 80 years old, the budget allocation for these services will have to be multiplied by 2.5 at constant prices, a figure which will in fact be higher because of the slow reduction in the number of potential carers in good health due to the same aging process. The idea that the old should take care of the elderly will become a must for the market and for the State, in the face of the great difficulty in providing them with the necessary services through private companies and public funding. A more detailed examination of the relation between the demographic predictions and the labor market in Europe can be seen in Díaz and Llorente (2011).

Latin America and the Caribbean

Research on non-remunerated work has hit the political agenda recently in Latin America, and has hit it hard. The most visible result of this has been the preparation of new statistical instruments to make it more easily understood both by means of incorporating modules in the Household Surveys, the Income and Expenses Surveys, and the Living Standards Surveys, and by means of the preparation and implementation of Time Use Surveys. Meetings, debates, and seminars have also been held between statisticians and other experts and those responsible for public policies. The official closing document at the X Regional Conference on Women in Latin America and the Caribbean, held in Quito in 2007, agreed to develop periodic instruments for the measurement of non-remunerated work in order to include it in the System of National Accounts. Statements made during the conferences and summits held in Brasilia (2010), Río de Janeiro (2012) and Santo Domingo (2013) echo these opinions. Milosavjevic has found 19 Time Use Surveys in the region between 2001 and 2009, and several more in process of execution (Duran and Milosavjevic 2012).

From the point of view of changes in the future demand for care arising from demographic causes, the change in the age composition and the migratory pressure should be emphasized. Migration is stronger in the countries in Central America and the Caribbean, where it even reaches annual rates of more than 3 %, than in South America. The accumulation of generations with a heavy incidence of migration leaves unpopulated segments which may, over the medium term, lead to a scarcity of carers. Because of the fall in birth-rate and the increase in longevity, a change in the composition of the demand and in the distribution of the care load among potential carers can be expected. The high

incidence of single-parent families is also an important factor in the organization of care.

According to the WHO (2009) the average healthy life span in Latin America is 64 years: men are likely to live a further 8 years in poor health and women 10 years. Between 1950 and 2015, the region has enjoyed a demographic bonus and it has been possible to devote the extra time to other alternative activities instead of care. From the year 2015, the trend will revert, and the demand for care will increase: while every adult now has to produce 2.2 units of care (one for themselves and 1.2 for others), in 2050 they will have to produce 2.30. In 1950, only 0.8 % of the units of care were devoted to those over the age of 80 years old, but nowadays this is already 3.1 %, and by the year 2050 it will be 10.4 %, a fact which necessitates a substantial change in the forecasting models.

Oceania

After tripling between 1950 and 2015, the population of Oceania still has sufficient vitality to continue growing, although at a less intense rate. It has gained a demographic bonus of 10 %, but by the year 2050 the care load on the population of central age will be similar to that of a century before. At the present time, the demand for care arising from children is still three times higher than that from the elderly population, but by the year 2050 they will have become level.

Demand for Care and Global Wellbeing. Medium-Term Expectations

There are many economic indicators based on monetary data, but for now there are no indicators that precisely measure the way in which the amount and quality of unpaid care help increase the level of individual wellbeing. There are even fewer similar indicators at a collective level and not even any care and wellbeing indicators for the entire world population. However, no one can doubt that care improves the quality of the personal life and wellbeing of all social groups and its absence leads to diminished wellbeing and heightened distress. If a value could be assigned to care time, the development-related figures would change significantly. Access to paid and unpaid care is largely determined by the amount of material resources and available time each individual has; sometimes these resources have a positive association and other times a negative one.

The population of the developed regions can purchase care services at market prices, but the population of the undeveloped regions cannot do so, with the exception of their economic elites. As has already been seen, a good part of the population of the developed countries cannot do so either when they most need it, especially for the care of the elderly and the sick.

Between 1950 and 2050, the population of the economically most developed regions increased by 52 %, while that of the least developed regions grew by 330 %. By the year 2050, the former will barely have increased their population by 3 %, while the latter will have grown by 40 %. At least in demographic terms, over the past half century the relative weight of the developed regions in the world population has shrunk, while that of the undeveloped regions has expanded.

In terms of the internal composition of the demand for care, the proportion of care devoted to the potentially working population (47.5 %) and that devoted to the rest of the population in the developed societies have at the present moment become almost equal. With respect to dependents by age, approximately half of the demand stems from children (27 %) and the other half from the elderly (25 %).

In the underdeveloped regions, the demand which originates in the potentially working population is not very different from that of the developed regions (45 % of the total), but it is concentrated almost entirely in children, who absorb a proportion of care (47 %) which is higher than that of the population in the central ages, and the demand which stems from the elderly is very limited (8.5 %).

Within four decades, in the developed regions the demand originating in the potentially

working population will reduce to 37.4 % of the total, equivalent to a fall of 22 %. The demand from children will fall, but that from the elderly will increase by 56 %. If the potentially working population is the population which controls the economic resources deriving from their participation in the market, will it share those resources with the generations of a more advanced age? The care load, if this term is understood to mean the ratio between the units of care required and the population between 15 and 64 years of age, will go from 2.1 units per person to 2.7; or, in other words, if every individual in the central ages in 2010 has to devote one unit per capita of care to themselves, and 1.1 to other persons, in 2050 they will have to produce 1.7 units for other people, and that will require an increase of 55 % in the effort devoted to caring for others. Of the 1.7 units of care, only 0.7 will be for the following generations (the children), while 1.1, which is more than they will devote to caring for themselves, will be for attending to the needs of the preceding generation.

In the economically less developed regions there will be no changes in the demand for care which falls to the population of central age, and in 2050 it will be the same as in 2010 (2.2 care units). Nevertheless, the internal structure will change: infant demand will fall to approximately half, and that of the elderly will grow by a factor of four.

Within the less developed regions, the less developed countries will exhibit the extreme trends of their own regions. Demographic growth has been more intense since 1950 (it has quadrupled), and it will continue to be very intense over the coming decades (it will almost double). The change in the internal composition of the demand for care has been spectacular. The demand from children from 0 to 4 years old generated 70 % of total demand in 1950, at the present time it is only 20.8 %, and by 2050 it is forecast that it will only be 13.8 %. Simultaneously, the demand from the elderly will grow by a factor of ten over the century, and that from octogenarians will be 36 times higher than it was at the beginning of the period under consideration.

The care load which falls on each person of potentially working age, which was 6.9 units of care in the year 1950, has already fallen to 5.8; by the year 2050, it is forecast that it will be 3.0 units, a figure which is only 10 % higher than the load which each person in the central age group will have to face in the more developed regions. In this respect, the poorest and the richest countries will become closer, although this will not be in the resources necessary to cope with the care. Childcare will continue to require more care than that of the population of central age; and although the care for the elderly population is already quite visible in the distribution it will still be light in terms of the load which will fall on the adults of potentially working age.

The resources freed up for care do not have the same significance in countries which have already covered the necessary minima for the population as they do in countries which have still not achieved them. For this reason, although there may have occurred an enormous descent in the dedication to care required, there will probably not occur a proportional transfer back to employment, but principally to education and towards a more intensive dedication to the care in which they are currently short.

The current care and wellbeing models, mainly based on unpaid work carried out by women, are unsustainable in the medium term. The principal demographic conditions which affect care are the distribution of the population between the age groups, the proportion of people who live alone, the proportion of children in single-parent families, the location of the population in isolated areas, and the age and sex of the migrants. The most frequent profiles of those who demand care and of their potential carers can be established using the demographic data. The financial conditions which affect care most are those of entry to employment (determination of the population which is only partially available for care), those of the levels of income and wealth (this determines who can have access to remunerated care services), and those of direct or indirect access to public cover for non-employment income and care services.

The social conditions of care are more diffuse and therefore more difficult to understand than the foregoing conditions. Important among them are belonging to extended networks (family, friends, neighbors), the implantation of the feeling of moral obligation to care for others, the degree to which the values of individualism and egalitarianism are established in each group, the capacity for organization and innovation, the degree of internal conflict between groups, and the relative power of each subgroup to modify the previous forms of social organization. All of these conditions interact together and form models of care sustained in a delicate equilibrium, which is broken when any of the conditions at all, not only material but also evaluative, are changed. The unsustainability of the traditional model of care is the consequence of the weakening of affective and economic ties between the dependent elderly generation and the generation in a potential position of taking responsibility for care, migrations (the place where the demand is located and in which the potential carers live do not coincide), the entry of women into education and employment, and the asymmetry in the adaptation of men to the new demands for care.

Conclusion

As seen in population-based estimates, care needs will rise globally in the coming decades, but there is no guarantee that current levels of wellbeing will be maintained if there is no major innovation in the way in which care is organized and distributed, especially unpaid care. The market economy cannot offer services for low income people, which is the case with most elderly people. If the market cannot take responsibility for providing services for them, only four alternatives are offered:

1. Those unable to purchase services will be neglected and their care needs not met.
2. The whole of society will finance through a high level of taxation the paid care of people who cannot care for themselves.
3. The care will be the responsibility of the same social groups, mainly women, who have traditionally been responsible for care work, but this will lead to a significant proportion of women falling into poverty and deprivation as a result of not having been able to continue on or to access the job market.
4. There will be greater emphasis on charitable organizations which take responsibility for the care of the elderly, sick and children, and there will also be greater social pressure to provide this care for free.

None of these alternatives are attractive or associated with the idea of improving the average level of wellbeing. Therefore, new care distribution models must be worked on that prevent neglect and the overwhelming burden falling on unpaid family carers if they are unable to share the workload with other institutions.

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Welfare Production and Quality of Life 17

Michael Dauderstädt

Human Wellbeing comprises many dimensions starting from basic physical survival to the fulfillment of more cultural needs. The classical description is Maslow's hierarchy of needs (Maslow 1943) usually shown as a pyramid with physical needs at its base, ranging upwards through safety, love/belonging, esteem to self-actualization. Many of those aspects are enshrined as rights or entitlements in national laws, constitutions and international declarations.

The modern approach stresses capabilities more than resources or outcomes. This capability approach by Amartya Sen and Martha Nussbaum considers goods and services and income as means rather than ends, the end being the human capacity to live a decent life as desired. It depends on human freedom, choice and capabilities to transform resources into achieved functionings. Nussbaum (2003) provides a list of ten central human capabilities. Social context becomes an important condition of human Wellbeing and quality of life.

Another way to approach Wellbeing tries to determine happiness. It looks at the opinions and feelings of human beings rather than at material indicators such as income. Actually, one of the most discussed results of happiness research is the decoupling of income growth and happiness (Easterlin paradox; Easterlin 1974). An important dimension of Wellbeing is equality. Inequality (in the narrow sense of income inequality) reduces happiness and is correlated with many phenomena which reduce the quality of life, as Richard G. Wilkinson and Kate Pickett (2009) have shown.

Most of the above considerations highlight the limits of the still dominant economic theory, welfare economics. Its approach is basically treating individuals as utility maximizers. Utility is a function of goods and services which can be acquired on the market, albeit subject to the individual's budget constraints. In this paper Wellbeing is primarily understood as material Wellbeing which depends on goods and services including those not provided through the market. The concept used here neglects non-physical dimensions of Wellbeing such as self-esteem or belonging.

The Diverse Origins of Welfare

The broader the concept of Wellbeing or welfare is the more its production depends on various suppliers. Although, according to the concepts presented above, Wellbeing eventually is produced by the individual itself she or he uses a variety of inputs including cultural, societal and political structures. Welfare can be seen as these inputs, in particular goods and services, which are produced by a variety of other individuals and institutions which the individual interacts with through different channels such as markets, relations of rights, entitlements and duties, or social interactions.

M. Dauderstädt (✉)
Verlag J.H.W. Dietz Nachf. GmbH, Dreizehnmorgenweg 24, Bonn 53175, Germany
e-mail: michael@dauderstaedt.de

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Table 17.1 Types of welfare production

		Market		
		For profit	Non profit	Non market
Monetized	Formal	Private enterprise	Cooperatives	Government (transfers)
	Informal	Black market	Informal economy	Voluntary organizations
In kind		Barter trade		Government (public goods and services)
				Household/family

The Four Sectors of Welfare Production

There are four large sectors encompassing the most important "producers" of welfare.[1]

1. The private corporate sector: Private enterprises interact with their suppliers (including investors and workers as suppliers of capital and labor) and customers through markets. They are profit oriented.
2. The public sector (government): The welfare state provides public goods and services, in most cases outside markets although it acquires the necessary inputs to a large extent through markets, including capital and labor markets. The most important non-market input is the system of taxes and social security contributions which finance a large part of the public welfare production.
3. The household sector: The basic and core source of welfare is the family which often, but not always is identical to the private household. Extended families will comprise several households while many households are not formed by one family (e.g. residential communities which share apartments). Households interact extensively with the other sectors. They buy goods and services from the private sector. Although usually considered as consumption by the national accounts, they are inputs in the welfare production and many durable ("consumer") goods such as household appliances could be regarded as investment goods. Households provide labor to the other sectors and finance the corporate and public sector.
4. The social economy: It comprises a large diverse group of entities such as cooperatives, non-profit organizations, associations, and mutual benefit societies. They provide primarily services to their members and rely only partly on markets. (Defourny et al. 2009)

Table 17.1 provides an overview. It differentiates between types of welfare production which are organized through markets and by other ways. It further differentiates within market-oriented types between profit and non-profit organizations, between those using money and those exchanging goods and services in kind or as gift or entitlement.

The mix of types of welfare production and the weight of different types vary over time and space. Over long periods of human history families and forms of mutual assistance have dominated. States which emerged later can be regarded as specific types of societal organization whose functions encompassed the production of welfare (in particular internal and external security, justice, and often material wealth). The corporate sector is a more recent development although its origins go back to trade and trading companies. Its relative dominance started with the industrialization and the evolution of capitalism. Socialism tried to reverse this trend by nationalizing parts or all of the corporate sector although this model largely collapsed in the 1990s.

Even today, in spite of some convergent historic development, there is a wide variety of welfare production regimes with different weights and roles of the four basic types. Some poor agricultural economies are still

[1] See also Zapf (1984) who uses the same categorization albeit replacing private corporations by "markets". Actually, markets do not produce welfare but organize welfare production through the interaction of producers and consumers which can be any of the four types listed here.

characterized by a large subsistence sector in the informal economy which consists of households/families that produce primarily for their own consumption rather than the market. The transition from communist planned economies to market economies in Central and Eastern Europe changed the proportion of market and state sectors dramatically. There also remain some socialist (communist) countries such as North Korea and, to a diminishing extent, Cuba, Vietnam and China with a dominant role of the state in the economy. In a few countries such as Somalia one can observe a failed state.

But even among the developed capitalist economies one can differentiate between different welfare production models (Glatzer 2001; Vogel 2000) or different worlds of welfare capitalism (Esping-Andersen 1990) or different varieties of capitalism (Hall and Soskice 2001). There are countries with a stronger role of the welfare state such as the Scandinavian countries and others such as the Mediterranean countries where families are still very important. There is no consensus about the causes of the different size and expansion of the welfare state (Iversen 2005). Increased openness of the economies and deindustrialization are two probable causes of the expansion of the welfare state in many developed economies after 1960 as they increased risks and vulnerabilities of large segments of the population.

In the following sections, the four different sectors will be discussed starting with the two visibly dominant sectors, the market-oriented private-business economy and the state, followed by the household sector and the social economy.

The Mix of Public and Private Welfare Production

The formal economy remains the central pillar of welfare production, in particular in the more developed societies. It consists of the private and the public sector. While the private sector is fully integrated in the market economy, the public sector relies on markets more for its inputs than its output. State employees are hired on the labor market, public infrastructure is usually built by private contractors. Public goods and services are mostly provided free and not sold through markets. Because there is no market price for public goods and services the value added and productivity of public welfare production are difficult to assess.

As mentioned above the mix of public and private welfare production varies substantially. In order to gain an overview one can rely on employment, revenue/expenditure or consumption data. Public employment[2] makes up between 5 % (Philippines) or 8 % (South Africa) and over 55 % (Azerbaijan and Belarus). On average (based on 54 countries) the employment shares are 28 % for the public sector and 72 % for the private sector. In OECD (Organization for Economic Cooperation and Development) countries (15 countries) the respective shares are 21 and 79 %, in transition economies (14 countries) 40 and 60 %. Scandinavian countries have relatively large public sectors with a public employment share of over 35 % in Norway or Sweden.

Assessing the role of the state by measuring the proportion of taxes and government spending[3] in the gross domestic product (GDP) provides a similar diverse picture. The tax burden ranges from 1.5 % of GDP in Kuwait to 63.1 % in Lesotho. In most OECD countries the shares are between 25 and 50 % with the highest shares (more than 40 %) in Scandinavian countries. But the tax burden is a worse indicator than government spending as it does reflect less the level of public welfare production than the way of financing it. Kuwait obviously relies on oil royalties rather than taxes to finance public spending of 31 % of GDP. Other countries cover the difference between tax revenue and spending by public debt.

[2] Employment figures in this paragraph are based on Hammouya (1999).

[3] Figures in this paragraph are taken from the 2012 Economic Freedom index of the Heritage Foundation (http://www.heritage.org/index/explore?view=by-variables)

Table 17.2 The share of government and household consumption (in % of GDP)

Country group	Indicator	1960	1970	1980	1990	2000	2010
High income	Government consumption	14.6	16.1	17.5	17.5	16.8	19.5
	Gross fixed capital formation	21.8	23.8	23.9	22.5	21.5	17.8
	Household consumption		58.3	59.1	59.8	61.5	62.6
Middle income	Government consumption	8.6	10.4	12.5	13.3	14.2	14.5
	Gross fixed capital formation		20.2	24.3	22.6	22.6	27.4
	Household consumption		67.9	62.6	60.7	60.3	55.6
Low income	Government consumption				10.4	10.1	10.5
	Gross fixed capital formation			15.7	17.3	18.3	22.4
	Household consumption				81.1	78.6	79.8

Source: World Development Indicators (http://data.worldbank.org/indicator)

Government spending as a proportion of GDP ranges from 8 % in Burma to 114 % in Kiribati.[4] OECD countries usually have shares between 35 and 50 %. Government spending (in 17 OECD countries) increased from 28.7 % in 1960 to 49 % in 1995 with the standard deviation almost doubling from 4.9 to 9.0. The difference between Sweden and the U.S. increased during that period from 3 to 31 % points.[5]

Table 17.2 gives a more comprehensive picture in time and space, albeit based on consumption data. One megatrend can be seen: Richer countries have a higher preference for or propensity to public consumption than poorer ones. Government consumption tends to increase over time and with income with the second trend more pronounced than the first. But the rise over time is very likely to result from the increasing income during that period. Both trends also reflect the substitution of family care by public welfare. The relative stagnation in the high income group during the 1980s and 1990s is probably due to (neoliberal) retrenchment policies and slower growth.

Government provision of goods and services such as health or education improve the welfare of the recipients and increase the disposable income. In countries with large welfare states such as the Scandinavian countries these social transfers in kind make up more than 37 % of the disposable income while in liberal societies such as the U.S.A. they account for only 11 % (see Table 17.3).

Table 17.3 Social transfers in kind in relation to disposable income 2010 (in %)

Country	
Denmark	47
Sweden	42
Netherlands	40
Norway	37
France	28
UK	27
Germany	20
Korea	15
Switzerland	14
USA	11

Source: Schwahn and Schwarz (2012, p. 832)

The alternating expansion of public and private welfare production is, at least to some extent, due to changing preferences reacting to state and market failures. A.O. Hirschman (1982) has analyzed both, the drawbacks of private consumption without appropriate public policies, and of public provision neglecting citizens' preferences. The expression and aggregation of social preferences which should orient welfare production is a major problem. In the market economy where the price mechanism should match supply and demand preferences are distorted by purchasing power (see also section "The limits to market-oriented welfare production" below). Public welfare production is

[4] This unusual case can probably be explained by a relatively, to the recipient's GDP, high volume of foreign aid received by the government which allows spending to exceed GDP.

[5] See Iversen (2005) table 1.1 on p. 16.

Table 17.4 Time allocation (minutes/day)

Country	Germany		Italy		Netherlands		USA	
Year	1991–1992	2001–2002	1998–1999	2002–2003	1990	2000	1985	2003
Market work	264	198	248	207	174	189	246	256
Household production	220	243	236	237	221	206	201	218
Family care	23	30	32	30	37	34	30	45
Shopping	43	57	38	43	41	44	50	51
All work	484	441	484	444	395	395	447	474
Tertiary time	639	667	678	594	635	647	648	628
Sleep	501	504	515	498	500	514	481	503
Leisure	316	335	278	401	410	398	346	337
Radio/TV	114	118	102	101	108	109	141	147
Total time (minutes/day)	1,440	1,440	1,440	1,440	1,440	1,440	1,440	1,440

Source: Boeri et al. (2008, p. 25)

ideally guided by citizens' participation through elections or referenda or, indirectly, other expression of opinion. Democracies are usually more responsive to social preferences. The competition of political parties ensures that the wishes and opinions of the population are crucial to win elections and gain the power over public welfare production. But in many capitalist societies, the rich succeeded in shaping public opinion and policies in a way that protects their interests at the expense of the poor (Stiglitz 2012). More generally, aggregation (Arrow's paradox) and collective action problems as well as the self-interest of politicians distort, also in democracies, social preferences as public choice theory has pointed out. In authoritarian regimes the government often neglects the social preferences of large parts of the population.

A bulk of public spending consists of social insurance (pensions, unemployment and sickness benefits, etc.) which have replaced family support in advanced market economies. The preference or need for public social protection depends also on the skill structure of the population. Countries where industry-specific skills dominate, such as continental European or Scandinavian economies, use to have stronger welfare states than those with general skill systems such as the U.S. (Iversen 2005). In times of public austerity, this trend can be reversed. The different growth rates of productivity are also responsible for the changing composition of employment and value added (see below section "Structural change and service productivity"). Disappointment with public welfare production such as lack of customer orientation or rising costs can cause a backlash in favor of private enterprise and free markets.

Informal Welfare Production: Households and the Social Economy

In spite of the apparent dominance and strong visibility of the market-oriented enterprise sector and the state, household production within families makes up the bulk of work in most societies. Time use studies give a first basic picture of the kind of life people live and where they invest their time, and implicitly other efforts in order to fulfill their needs. As Table 17.4 shows, market work makes up only between 13 and 18 % of total time. Household production is similar important (in Europe more than in the USA). These averages hide significant differences between age groups and sexes. Pensioners obviously work much less for the market. Women work more time for household production, in particular family care. Tertiary time is also key for human Wellbeing. It includes sleep as its largest component and comprises reproductive activities no other work can exist without.

For Germany, the time use study of the Federal Statistical Office (Destatis) of 2003[6] provides a detailed picture of Germany. Paid and unpaid work (including education and training) make up 28 % of the time with different gender mixes (16 %+12 % for men; 10 %+ 18 % for women who work much more without getting directly paid). In 2001, Germans worked 95.1 billion hours unpaid and 56 billion paid (plus 10 billion hours for transport time). In the long run the time needed for household production has declined with the availability of machines and the marketization (outsourcing) of activities such as food processing or sewing (Gregory et al. 2007; Schettkat 2010). This development allowed women who did (and do) most of this work to enter the labor market.

Household production is even more important in poorer, less developed societies where subsistence agriculture makes up a large part of the economy. The informal economy has been the rule in all societies for most of the time until the emergence and dominance of markets and capitalism. In richer, more developed economies it continues to exist partly as household production, partly as underground or black economy. Research on the size of the informal economy which comprises household production as well as informal enterprises shows its importance. As a share of the formal economy measured by the gross national income (GNI), the relative size of the informal economy is 41 % in developing countries, 38 % in transition countries and 18 % in OECD countries (Schneider 2002).

While household production in the narrow sense is not market-oriented, the output of the informal economy is often sold and bought on markets. The underground economy often consists of illegal activities (e.g. drug trafficking) or semi-legal work (ordinary in content but avoiding tax and social security contributions). Furthermore many people do voluntary (unpaid) work, often in non-profit organizations. Thus it is not included in the official GDP statistics, too.

A SIDA (Swedish International Development Agency) fact finding study[7] estimates the contribution of the informal enterprise sector to the non-agricultural GDP at 27 % in Northern Africa, 41 % in Sub-Saharan Africa, and 31 % in Asia. In terms of employment, the role of the informal sector is even more important. Its share of non-agricultural employment is 78 % in Africa, 57 % in Latin America and Caribbean, and 45–85 % in Asia. New jobs are overwhelmingly created in this sector. If one included the agricultural sector, the figures would be even higher. Development consists to a large extent of productivity rises in the informal (agricultural) sector which allows labor to move into new activities in manufacturing and services when the provision of food can be guaranteed by a smaller and smaller share of the labor force.

The social economy (sometimes also called the Third Sector besides the public and the private business sector) is, in the view adopted here, the fourth sector of welfare production, and consists of the private non-profit sector with its huge variety of associations, cooperatives and foundations. Other approaches use the terms "non-profit organizations" or "solidarity economy".[8] The terminology varies from country to country as does the role of the social economy. Its share in total employment varies substantially throughout the European Union (see Table 17.5 below).

The large shares of volunteers, as shown in the last column of Table 17.5, indicate the vast amount of work performed in the social economy. Beyond the formal employment (given in the first column of Table 17.5) by the organizations of this sector, people work as volunteers, for instance in associations, thus increasing their own Wellbeing and that of other people, and the welfare of societies. The networks of these organizations and institutions improve the societal relations, providing trust and enhancing the stock of social capital.

[6] Destatis "Wo bleibt die Zeit? Die Zeitverwendung der Bevölkerung in Deutschland 2001/2" (http://www.bmfsfj.de/RedaktionBMFSFJ/Abteilung2/Pdf-Anlagen/wo-bleibt-zeit,property=pdf.pdf; accessed 23 July 2012).

[7] See Flodman Becker (2004), based on ILO (International Labor Organization) statistics.

[8] See Monzón and Chaves (2012) Chapter 4, pp. 19–21.

Table 17.5 The size and development of the social economy in the European Union (EU)

Country	Share of employment 2009/2010 (in %)	Change in employment between 2002/2003 and 2009/2010 (in %)	Volunteers as a percentage of total population (in %)
Austria	5.7	−10.23	37
Belgium	10.3	65.42	26
Bulgaria	3.97	n.a.	12
Cyprus	1.32	12.83	23
Czech Republic	3.28	−3.11	23
Denmark	7.22	21.6	43
Estonia	6.63	62.8	30
Finland	7.65	6.73	39
France	9.02	16.79	24
Germany	6.35	21	34
Greece	2.67	67.72	14
Hungary	4.71	135.51	22
Ireland	5.34	−36.41	32
Italy	9.74	66.72	26
Latvia	0.05	46.67	22
Lithuania	0.67	16.51	2
Luxembourg	7.3	122.23	35
Malta	1.02	604.62	16
Netherlands	10.23	10.87	57
Poland	3.71	12.02	9
Portugal	5.04	19.03	12
Romania	1.77	n.a.	14
Slovakia	1.94	−54.28	29
Slovenia	0.73	51.87	34
Spain	6.74	42.53	15
Sweden	11.16	146.58	21
UK	5.64	−4.57	23
EU 15	7.41	25.14	
EU 27	6.53	26.79	

Source: Monzón and Chavez (2012, pp. 31–35)

Structural Problems of Welfare Production

The more economies are market economies the more central are markets to welfare production. People satisfy many needs by buying goods and services. Free market economists/economics assume that markets are the best and fairest way to organize the production and distribution of goods and services. The reasons given for this are based on theoretical models of general equilibrium where consumers and producers maximize their profits or utility. The distribution resulting from competition on free markets is considered Pareto-optimal, meaning that nobody's welfare can be improved without reducing somebody else's welfare. These models require many pre-conditions such as (near-)perfect competition and information or the absence of non-economic motivations.

The Limits to Market-Oriented Welfare Production

In reality, these conditions are never fulfilled.[9] Competition is always constrained by diverse

[9] For a good overview see Stiglitz (2012).

barriers to entry. Actually, profits beyond interest on capital can only occur when competition is not perfect. Transaction costs might prevent markets from coming into existence as the fact shows that many transactions are organized in a planned way within enterprises rather than through markets (Coase theorem). Information is imperfect and, as a rule, asymmetrically distributed to the detriment of the consumer ("Caveat emptor!"). People are not simply maximizing utility but follow norms and other interests (Akerlof 2006) as the new branch of experimental economics (e.g. "dictator game")[10] has shown. Prices do not reflect external effects such as emissions or harmful working conditions which might lower the quality of life.

Public goods and services which are not exclusive cannot be provided through markets as everybody can benefit from them without paying or contributing to their production. Typical examples are external security or a healthy environment. The use of such commons is often subject to free riding which might lead to overuse (the "tragedy of the commons").

As the financial crisis of 2008 has made painfully clear, some markets, in particular asset markets, are highly unstable (Minsky 2011). When asset prices increase demand increases, too – contrary to the "normal" goods markets. Inversely, when asset prices collapse everybody wants to sell. Since asset prices decide about the allocation of capital the instability and volatility of asset markets causes misallocations such as construction booms and exaggerates the oscillations of economic activity thus undermining the welfare of the population.

[10] In this experiment one player receives an amount of money which he must share with a second player. If both players cannot agree on the split the money will go back to the bank. Pure microeconomics suggests that the second player should accept any share as it increases his wealth. Actually the results of the experiment show that most players are willing to forego the gain if they consider the split unfair (usually meaning less than a third). Fairness is obviously valued higher than monetary gain.

Insurance is a market service which on the one hand is highly desirable but on the other hand is affected by the moral hazard problem that the more protection against risks is provided the weaker are the incentives to prevent risky outcomes. Furthermore insurers are risk averse and tend to practice adverse selection of customers. The more a potential customer is exposed to a risk the less an insurer wants to offer him/her protection.

From the point of view of welfare the neglect of the distribution of income and wealth probably is the greatest drawback of market-led production. The market perceives needs only to the extent that they are backed by purchasing power. Where there is demand supply will follow. In an unequal society the structure of supply will be distorted in favor of the needs and demand of the rich. Positional goods will be more in demand although their supply is limited (Hirsch 1977). The unequal distribution of monetary income is not optimal if one assumes that the marginal utility of money decreases like that of any other good. Although it might be difficult to measure and compare individual utility levels, it seems safe to assume that one additional unit of money has a much higher utility for a poor person than for a rich. Redistribution from the rich to the poor will therefore increase the overall welfare.

All these deficits do not justify the complete abolishing of markets which can enhance welfare under well specified circumstances. This implies a strong framework of rules and regulations and interventionist public policies. Markets depend anyway on the state in order to protect property rights and enforce contracts. Historically the state organized the societal space where markets could develop.

In order to ensure the welfare of the population in a market economy specific interventions are necessary:

- Provision of public goods and services.
- Regulation of banks and financial markets.
- Regulation of the labor market (guaranteeing the rights of trade unions and autonomous collective wage negotiations).

- Offering insurance systems with a broad coverage to prevent adverse selection, in particular in areas crucial to welfare such as old age, health and unemployment.
- Regulation to internalize external effects such as emission control, safety and health regulation and environmental policies.
- Redistribution through the tax system and other policies (e.g. minimum wage; income-dependent social security contributions; subsidizing basic needs goods or taxing them at lower rates).
- Competition policy.
- Consumer protection.

Markets, states and households interact to produce welfare. The different ways and systems of interaction can be described as varieties of capitalism (Hall and Soskice 2001) which have evolved historically. Although some varieties have produced better results than others in terms of growth or equality (comparisons depend on the choice of indicators, too; see section "Measuring welfare beyond GDP" below) it is hard to transfer institutional arrangements between economies. No system relied on markets or the state alone. Even communist planned economies used markets for the distribution of consumer goods.

Nonetheless one should not consider the state as a panacea for all market failures. How far public policies can change market outcomes and if these changed outcomes are actually better for all depends very much on the character of the state. In many cases, the state has been a force of exploitation and patronage rather than an impartial producer and guarantor of the public welfare. Two qualities make a positive role of the state less likely: a lack of democracy and a rentier economy which is usually based on the exploitation of natural resources. In rentier economies the state is financed by rents rather than taxes. Thus it does not depend on the support of the tax payer and there are no taxed citizens who ask for a voice on the use of their taxes (no taxation without representation). Instead, the government is likely to use the income to stabilize its power and buy support from strategically important groups, usually the clients within the patronage system. People in rentier economies tend to try to improve their lot through privileged access to the system of rent-distribution rather than through productive work or entrepreneurship (Dauderstädt and Schildberg 2006).

In democracies, periodic elections and systems of checks and balances prevent the worst state failures. However, as all required public policies (see list above) affect income and wealth there will be substantial rent-seeking by households and enterprises. There is a strong danger that policy-makers collude with private interests. Corruption is the most direct channel but many other ways are possible such as support during election campaigns or the shaping of public opinion and legislative processes by powerful interest groups and lobbies. Although democracies are vulnerable to bad governance, too, there is at least a good chance that failures and distributional bias will be corrected in the longer run by parliamentary opposition or the judicial system.

Welfare Production Through Social Growth

In spite of their limits, markets and private enterprise are still widely believed to be the best form of welfare production. Even more, the state, in particular the welfare state, is considered as a burden at the expense of private welfare. Social services such as education, health, care or social insurance which form the core of the welfare state are seen as a cost that only a vibrant private economy can afford and that endangers this base if the welfare state becomes too broad and expensive (Lee et al. 2011). Public debt is the most prominent reason given to cut government expenditure and the corresponding social services although the subsequent decline of income will reduce private production and investment further rather than stimulate it.

A more balanced view sees the economy in a perspective of closed loops of flows of money (see Fig. 17.1) starting from households as the providers of resources and consumers. Households can spend their money on taxes,

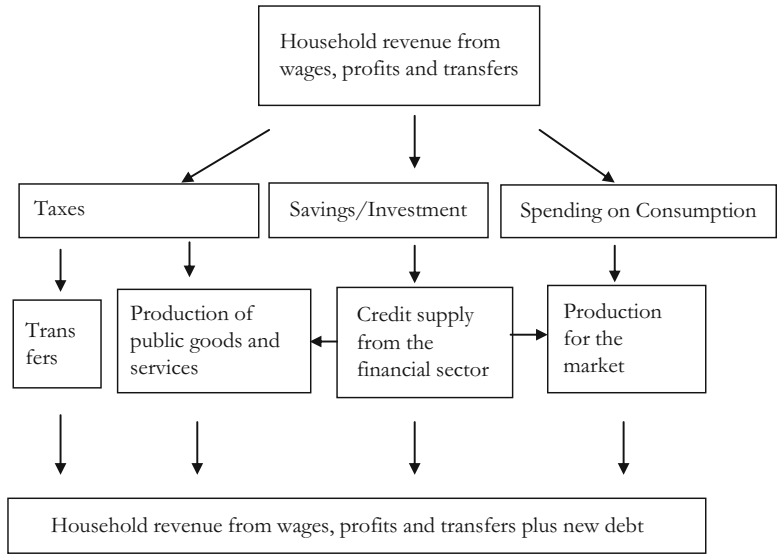

Fig. 17.1 The (growing) circulation of funds

consumption or save it. After financing either transfers or the production of public goods and services or the production for the market that money flows back as factor incomes from the producing entities (government, private enterprises). The risky bottleneck is savings. In a closed economy, they have to be borrowed by either enterprises, government or households (in the latter case it reduces the total net savings of the household sector). If the savings are higher than the credit demand of the private sector either the state has to run a deficit and incur new debt or the economy will shrink. In an open economy a savings surplus will lead to a capital outflow accompanied by an export surplus which both require foreigners ready to incur new debt. Income inequality is likely to exacerbate the lack of demand as richer households tend to save a higher share of their income than poor households.

(Nominal) growth results from the creation of new credit money by the financial sector. It depends on the reaction of the supply side if this higher monetary demand turns into real growth rather than inflation. In a closed economy a positive reaction requires free (i.e. not yet employed) production factors and/or a rise of productivity, while additional imports might fill the gap in an open economy. Given the usually high level of unemployment in most capitalist economies, labor shortage should not be the problem except regarding the right mix of skills. Historically the labor supply increased substantially when women entered the labor force and unpaid household work was turned into paid market production. As a rule, this transformation increased the productivity, too.

In this view, the ratio of public to private supply depends on the needs of the households. If they want more public goods, more resources should flow through the public channel (in Fig. 17.1). If they want more private consumption the private sector should expand. The problem is the transformation of needs into purchasing power which is necessary to finance the production. In a completely equal society (Gini $=0$) the spending patterns would adequately express the needs and preferences of the population. Supply could then largely be left to markets and private enterprise (with the exception of "true" public goods such as security). In the real world of inequality either transfers or public provision is necessary in so far as basic needs are concerned. "Basic" should be defined according to the general level of wealth in a given society.

Debt will fuel the growth and, as long as there is growth, the debt can be served. Government debt is no worse than private debt when it is sensibly invested in (capital) goods, ventures and activities which enhance output. Contrary

Table 17.6 Development of household expenditure

Year	1949	1969	1983	1988	1993	1998	2003	2008
Gross income	100	100	100	100	100	100	100	100
Direct taxes	2.3	9.0	12.2	11.7	11.4	10.8	10.4	11.2
Social security contributions	8.6	5.2	7.4	8.3	8.7	9.9	10.1	10.2
Net income	89.1	85.8	80.4	80.0	79.9	79.3	79.6	78.6
Consumption expenditure	87.7	72.2	63.1	62.3	60.3	62.5	61.1	60.6
Food	46.1	21.7	15.7	13.8	11.9	8.8	8.5	8.7
Clothing	10.1	7.4	5.9	5.2	4.3	3.6	3.1	2.9
Housing (incl. energy)	9.0	11.8	12.3	12.8	13.9	19.9	19.6	19.7
Furniture	2.9	7.3	6.4	5.9	5.5	4.4	3.6	3.0
Health (private)	2.2	3.3	3.0	3.3	3.4	2.3	2.4	2.5
Transport	2.0	9.2	8.1	9.3	8.9	8.4	8.6	8.8
Communication	0.0	0.9	1.2	1.3	1.3	1.5	1.9	1.8
Leisure	0.7	7.4	6.6	6.5	6.0	7.5	7.3	6.9
Education	5.3					0.3	0.6	0.5
Hotels, restaurants						3.1	2.8	3.0
Miscellaneous	9.4	3.2	3.8	4.4	4.8	2.7	2.8	2.7

Source: Stat. Bundesamt: Einkommens- und Verbrauchsstichprobe/own calculations
Note: The difference between net income and consumption expenditure consists of further taxes, insurance premiums, debt service and savings

to wide-spread mainstream thinking the expansion of sectors like health or care is not a drag on the economy but part of a different growth path which could be called "social growth".[11] Money spent on social services is not more a cost to society than money spent on housing or transport. There are always opportunity costs but these costs constrain welfare only when an economy is full employed and the supply of a certain good or service can only be made if the production of something else is reduced.

Structural Change and Service Productivity

In the long run, it is productivity growth which determines the distribution of labor on the production of different outputs fulfilling different needs. Productivity is usually measured as value added per unit of input (of labor and/or capital). In order to control for price changes, deflators are used to obtain real values. But changing quality and new types of goods and services make it difficult to assess productivity growth in the longer run.

The distribution of labor determines the distribution of income and of spending and vice versa. The following Table 17.6 shows the spending pattern of German households. With the strong rise of productivity in the tradable sector (e.g. food and clothing) the share of these goods in household expenditure declined while spending on public goods (via taxes and social security contributions) increased. Correspondingly, employment in agriculture and many manufacturing industries declined although their output has grown.

The decline of agricultural and manufacturing employment (deindustrialization) due to rising productivity in these sectors has destroyed many jobs but set labor free for other uses in the service sector. This development has been reinforced by the entrance of women in the labor market thanks to rising productivity in household production. Different societies have reacted in different ways to these challenges of rising unemployment. Continental European societies, often ruled by conservatives, tried to

[11] Friedrich-Ebert-Foundation has commissioned several quantitative studies to analyze social growth; see Gramke et al. (2012) and Augurzky et al. (2012). A summarizing view is given in Thementeam "Soziales Wachstum" (2011).

reduce the labor supply by keeping women at home and retiring older workers early. Scandinavian countries, mostly ruled by social democrats, have created jobs in the public sector providing social services. Market-oriented economies, often governed by liberal parties, created a low wage service sector in order to keep service prices low and to stimulate demand for services.[12]

Productivity in the service sector usually grows at a lower rate (Baumol's "cost disease"; Baumol 2012). In Germany, for instance, productivity growth in market services has been even negative between 2000 and 2005 (van Ark et al. 2009). In the USA, employment in the non-tradable sector increased by 26.7 million jobs between 1990 and 2008 (out of 27.3 million in the whole economy). 6.3 million jobs were created in the health sector and 4.1 million in government while the tradable sector (primarily manufacturing, but also some services) provided only 0.6 million new jobs (Spence and Hlatshwayo 2011). This development in employment contrasts with the one in productivity (measured as value added per employee): While it increased in the tradable sector from 80,000 USD in 1990 to 120,000 USD in 2008, it almost stagnated in the non-tradable sector (from 70,000 to 80,000 USD. The respective growth rates of productivity are thus about 2.5 % p.a. for tradables and 0.8 % p.a. for nontradables.

As productivity is measured here as value added, low wages translate in low productivity which explains the negative value in Germany (2000–2005) where the low wage sector expanded after the labor market reforms of 2003. But even with very unequal growth of real productivity in the two sectors structural changes in employment, relative prices and real wages are possible and likely which allow growth and social cohesion. Following Baumol (2012), these processes can be understood as divergent inflation rates (lower for most manufactured goods, higher for many services) leading to changing relative prices and real incomes.

Table 17.7 gives a simple two-sector model (manufacturing and services) with both sectors employing 3,000 workers in the basic scenario (column 3 in Table 17.7) having the same productivity of 2 units of output/worker. The price is assumed to be the same resulting in an exchange ratio of 1:1. The population consumes the same quantities of both outputs which maximizes the welfare. If now the productivity of manufacturing doubles and employment remained the same (column 4 in Table 17.7) the manufacturing output would double, too. Real wages in manufacturing would double and the workers would exchange a quarter of their output against services given the old exchange ratio (=relative price). This situation is neither optimal nor stable as the consumption pattern of the manufacturing workers (3:1) does not fit the preferences and the wage differential would lead service workers to move in the better paid manufacturing sector.

Different scenarios of adjustment are possible (columns 5–8 in Table 17.7):

- Translating higher productivity growth into less labor input (column 5): Manufacturing employment and output would be halved. With the output back to the original level the consumption pattern would return to its optimal mix (1:1). The labor input could be reduced by halving the working time or by firing half the workers In the first cases hourly wages would still be higher (by 100 %) in manufacturing than in services which is no stable solution.
- Partial transfer of the gains from productivity to the losers (column 6): Half of the gains in the manufacturing sector would be taxed away and given to the service workers equalizing net incomes which would be sufficient to buy the whole output whose composition would still remain suboptimal, however. Total welfare would be nonetheless higher as the utility of consuming more manufactured goods would be higher for the service workers than the loss of utility for the manufacturing

[12] See Iversen (2005, pp. 246–250) for a more detailed analysis of the "service economy trilemma" between equality, employment and fiscal restraint.

Table 17.7 Scenarios of possible reactions to unequal productivity growth

1	2	3	4	5	6	7	8
		Basic scenario	Rising productivity	Leisure or unemployment	Equality through transfers	Equality through wage/price adjustment	Constant consumption pattern plus labor mobility
Manufacturing	Labor input	3,000	3,000	1,500	3,000	3,000	2,000
	Productivity	2	4	4	4	4	4
	Real output	6,000	12,000	6,000	12,000	12,000	8,000
	Value of output	6,000	12,000	6,000	12,000	9,000	8,000
	Value productivity	2	4	4	4	3	4
	Gross income	6,000	12,000	6,000	12,000	9,000	8,000
	Net income	6,000	12,000	6,000	9,000	9,000	8,000
Services	Labor input	3,000	3,000	3,000	3,000	3,000	4,000
	Productivity	2	2	2	2	2	2
	Real output	6,000	6,000	6,000	6,000	6,000	8,000
	Value of output	6,000	6,000	6,000	6,000	9,000	8,000
	Value productivity	2	2	2	2	3	2
	Gross income	6,000	6,000	6,000	6,000	9,000	8,000
	Net income	6,000	6,000	6,000	9,000	9,000	8,000
Whole economy	GDP real = consumption	12,000	18,000	12,000	18,000	18,000	16,000
	GDP nominal	12,000	18,000	12,000	18,000	18,000	16,000

workers (assuming declining marginal utility).

- Translating productivity gains into lower prices (column 7): The prices of manufactured goods would decrease (from 1 to ¾) and those of services increase (from 1 to 3/2) resulting in an exchange ratio of 1:2 instead of 1:1. This adjustment should be expected given the oversupply of manufactured goods. Monetary productivity and real wages are equalized again. However the consumption pattern is still suboptimal. Basically this scenario is similar to the former with the adjustment done through the market (prices) rather than though the state (taxes).
- Equal welfare through reallocation of labor (column 8): When a third of the manufacturing labor force moves into services, output and employment in the service sector will increase so that the composition of total output meets the preference structure (1:1). Total output would be lower than in the former scenarios but welfare would probably be higher as the benefits (utility) resulting from the consumption of 8,000 manufactured goods plus 8,000 services would be greater than from consuming 12,000 and 6,000.

But the productivity in the service sector is not bound to stagnate. The more quality determines the value of output the more intangible assets (human capital, software, branding etc.) become crucial. Investing in these assets by, among others, spending more on education and training, will increase the value and the productivity. Social growth is thus not as constrained by the cost disease as one might have assumed.

Nonetheless, welfare production can no longer safely rely on indebted states and crisis-prone and anti-poor markets. States which cut spending ask families and charities to fill the gap. Households which do neither receive sufficient market income nor public transfers to survive will be forced to increase their own production, possibly returning to small-scale agriculture as

some crisis-hit Greek families do. The more limited the role of government and the level of taxation is the more a society will have to rely on the two other sectors to compensate for state and market failures. For some anti-growth proponents urban subsistence[13] is a way out of the growth problems of sustainability and unhappiness (as they perceive them). Such an expansion of non-market production would register as (relatively) lower GDP.

Measuring Welfare Beyond GDP

Due to the long established dominance of traditional economics welfare has been identified with market income (GDP) to a large extent. The critique of this narrow concept has recently gained momentum thanks to some initiatives such as the French "Commission on the Measurement of Economic Performance and Social Progress" led by Amartya Sen, Joseph Stiglitz, and Jean Fitoussi[14] in 2008/2009 or the joint initiative "Beyond GDP" of the EU, OECD and others.[15] The OECD (2011) is now publishing broader reports on human Wellbeing. More recently, in 2011, the German parliament has established an Enquete commission[16] analyzing these issues.

GDP has several deficiencies as a measure of welfare. It excludes all the informal activities (see section "Informal welfare production: households and the social economy" above), in particular household production and the informal economy. It does not take into consideration the value of leisure time. It does not take into account the externalities of market production such as the damage to the environment or to the workers' health and safety. The depletion of a stock of natural resources may count as value added (e.g. in the GDP of raw material producers such as Saudi Arabia) although it possibly reduces the wealth of a nation since keeping oil in the ground might be more profitable than selling it today. Activities which repair damages ranging from minor accidents to natural disasters like an earthquake or tsunami are – rightly so – counted as adding value but the prior subtraction of value through the incident and its effects are usually neglected in GDP statistics.

In spite of these deficiencies, (neo)classical economics used to assume that GDP reflects the optimal welfare of a society because in the theoretically underlying general equilibrium model the quantities and composition of the total output of goods and services reflects the best use of available resources such as labor and capital given the preferences of the people. Although it is quite difficult to compare the value of two sets of goods and services at different times as qualities and prices change it appears to be justified as an expression of utility based on preferences revealed by purchasing power. One of the most problematic drawbacks of this approach is the neglect of the distribution of income and wealth.

Thus, the growth of GDP indicates a growth of welfare. But growth figures can be misleading even if one neglects the structural deficiencies of the concept. The growth rate of a national economy hardly reflects welfare if it hides an even higher growth rate of the population implying a declining GDP/capita. The international comparison of GDP and growth rates is even more fraught with problems (see section "The international dimension and global welfare" below).

Meanwhile there are a plethora of measures of welfare, Wellbeing and quality of life which intend to correct some of the above mentioned deficiencies and drawbacks of the GDP. Relatively well known are the "Index for Sustainable Economic Welfare" (ISEW) or the "Genuine Progress Indicators" (GPI) which also try to take income inequality into account. In most

[13] A life style based on local networks (including regional currencies) and homework; see Paech (2012).

[14] http://www.stiglitz-sen-fitoussi.fr/en/index.htm (accessed 24 July 2012); see also Joseph Stiglitz, Amartya Sen und Jean Paul Fitoussi (2010).

[15] See http://www.beyond-gdp.eu/ (accessed 24 July 2012).

[16] See http://www.bundestag.de/bundestag/ausschuesse17/gremien/enquete/wachstum/index.jsp(accessed 24 July 2012).

Table 17.8 Welfare indicator work-GDP in international comparison 2005

Country	Work-GDP		GDP	Work-GDP/cap	GDP/cap
	Bn €	In % of GDP	Bn €	€	€
Denmark	242.3	116.8	207.4	44769.0	38320.0
USA	13705.8	134.9	10.158.7	46342.0	34348.5
Sweden	353.9	118.6	298.4	39277.0	33108.5
Netherlands	612.9	119.4	513.4	37588.3	31486.7
UK	2484.8	135.5	1834.0	41386.7	30546.2
Finland	194.6	123.7	157.3	37159.7	30039.8
Austria	318.8	130.9	243.6	38875.2	29700.6
Belgium	391.0	129.1	302.8	37428.0	28991.9
Japan	5015.3	136.8	3666.3	39361.1	28774.0
France	2341.4	135.6	1726.1	37299.0	27497.0
Germany	3117.0	139.0	2242.2	37810.5	27198.6
Italy	1938.5	135.6	1429.5	33158.4	24451.3
Spain	1184.2	130.3	908.8	27514.1	21116.0
Greece	271.5	139.4	194.8	24498.0	17578.6
Slovenia	38.9	135.3	28.8	19478.1	14.396.4
Czech Republic	125.1	124.9	100.2	12243.0	9802.8
Hungary	117.1	132.2	88.6	11596.4	8771.8
Estonia	14.2	126.7	11.2	10510.8	8298.0
Romania	107.6	134.8	79.8	4698.6	3684.5
Bulgaria	29.4	126.5	23.3	3791.8	2996.5

Source: Ostwald and Sesselmeier (2008)

cases they are composite indicators like the already above mentioned HDI. As such they usually have to justify the relative weight given to a specific component, e.g. income vs. life expectancy.

A narrower, but not composite indicator is the "Work-GDP" ("Arbeits-BIP") developed by the Friedrich-Ebert-Foundation. It extends the GDP by calculating the additional value of leisure time, household production and underground economic activities. There are several methodological difficulties to overcome such as the pricing of work or leisure time. The following Table 17.8 gives the values of the Work-GDP for several OECD countries. The inclusion of informal components adds between 16.8 % (Denmark) and 39 % (Germany) to the traditional GDP.

Some indicators try to include the subjective dimension of welfare such as happiness. They must use opinion polls to assess the situation. Usually opinions and feelings are ranked by those polled on a limited scale such as −5 to 5 or 0 to 5. These forms of measurement can possibly explain to some extent the Easterlin paradox as variables such as growth can increase without formal limits while satisfaction or happiness cannot rise above their maximum value.

In spite of the many new approaches and indicators to measure welfare beyond GDP the latter still is the dominant goal of economic policy. One currently important reason for that bias is the relation between GDP and debt. The capacity of economies to carry debt depends on the growth of GDP rather than on other dimensions of welfare because debt is measured in monetary terms and debt service usually requires monetary income. Actually, high levels of debt threaten to undermine welfare production by imposing austerity and a redistribution from debtors to creditors, and by pushing for GDP growth neglecting ecological limits.

Outlook: Global and Future Welfare

Work and productivity are essential dimensions of welfare production as shown in the sections above. Growth depends on increasing labor input and/or productivity which might occur in any of the four sectors considered above in section "The diverse origins of welfare". On the one hand, globalization has contributed to mobilizing more labor and rising productivity. On the other hand, higher growth endangers the sustainability of welfare. This outlook analyses their broader ramifications focusing on the distribution of welfare between countries and people on a global scale and between present and future generations.

The International Dimension and Global Welfare

Productivity can increase by international trade as the figures given above regarding the tradable sector already indicate. As Ricardo has shown, the specialization of national economies according their comparative advantages will increase productivity, and overall output, consumption and welfare as larger markets allow economies of scale. The distribution of those gains between countries, however, depends on the exchange rate (the logic is very similar to the one in Table 17.7). Free trade will increase welfare under the, unfortunately very demanding and unrealistic, assumptions of the Ricardo model. This beneficial effect does not depend on the absolute levels of productivity. Even a country with lower productivity in all sectors will benefit from specialization in the relatively more productive sector.

But many real-world obstacles constrain this beneficial effect. Low wages in poor countries tend to reflect low productivity levels. But the GDP figures tend to underestimate the actual welfare in developing countries for several reasons: They do not take into account the informal sector (see section "Informal welfare production: households and the social economy" above). Comparisons based on exchange rates neglect different price levels in poor and rich countries which result primarily from non-tradable goods and services being cheaper in low-wage countries. Comparisons based on purchasing power parities (ppp) correct this bias but have the problem that the underlying baskets of goods and services cannot do justice to the actual consumption patterns in all countries.

In an integrated world economy with relatively free flows of goods, services and capital (what is called "globalization") neither the Ricardo nor the Heckscher-Ohlin view is longer fully valid. The latter assumes that specialization occurs according to a factor endowment with labor-abundant countries specializing in labor-intensive industries and capital-abundant ones in capital-intensive industries. This process should lead to higher wages in (poor) labor-abundant countries. But now global capital and multinational enterprises locate production which usually is part of a longer value chain wherever the cost is lowest due to low wages or cheap other inputs. This process has led to a disjunction between wages and productivity with inequality rising in poor countries, too.

Composite welfare indicators like HDI provide a more realistic picture of global welfare by including aspects such as life expectancy and literacy. Indeed, some poor countries show a good ranking in spite of low GDP/capita thanks to investments in health and education (Cuba used to excel in this regard). Nonetheless, as a rule, most welfare indicators are highly correlated. Indicators of sustainability might be affected by globalization when ecologically harmful activities are relocated. Europe, for instance, might show apparently good figures of CO_2 emissions but actually imports large quantities of goods whose production caused high emissions which are statistically allocated to the producing rather than the consuming country.

Global welfare requires a substantial growth of the low incomes of the majority of the world population. Global income distribution is much more unequal than national distributions. The ratio of income between the poorest and the richest quintile (=20 %=1.4 billion people), often called "S80/S20 ratio", is 1:50 while the

respective values for individual countries range from 1:3 (Scandinavia) to 1:30 and worse (Brazil, Gabon),[17] and Germany's ratio is about 1:5. The much higher international values result from the high inequality between countries. Thus the S80/S20 ratio for the European Union is 1:11 (at exchange rates) or 1:7 (at ppp) (Dauderstädt 2010). Although lower within-country inequality is desirable and helpful, the reduction of global inequality has probably to rely more on the catching-up growth of poor countries. Their development might even be accompanied by, hopefully transitional, rises of within-country inequality (as in the case of China).

Catching-up results primarily from structural change which increases productivity and GDP. People leave subsistence agriculture in order to work in manufacturing or the service sector while at the same time turning agriculture into a more market-oriented activity. The productivity rise in agriculture is the very base on which the manufacturing success of emerging economies is built. It allows wages which are low in international comparison but higher in real terms as (relative) food prices decline. As the growth pattern of most catching-up processes follows the model of already developed rich countries the demand for and use of natural resources has increased strongly with the rise of emerging economies and endangers the natural basis of welfare on the planet.

While rising commodity prices will to some extent lead to savings and higher resource productivity there are no market mechanisms to protect the global commons from overuse. In particular climate policy depends on political intervention via caps, taxes or the creation of markets for emission certificates. To stop climate change and the rise of CO_2 output beyond the absorptive capacity of the planet GDP growth must be limited to the progress of decoupling of growth and CO_2 emissions. Given the present growth rate of efficiency (GDP/CO_2) this would allow for 2–3 % of growth implying a growth of per capita income of about 1 % as the world population grows by 1.2 %. Distributed equally among the global population this implies a rise of the per-capita income by about 100 USD/year. This amount corresponds to a GDP growth rate of 3.3 % in India, 1.6 % in China, 0.36 % in Europe and 0.24 % in the USA (Dauderstädt 2011).

Sustainability and the Welfare of Future Generations

Present growth, while arguably beneficial for the present generation, is likely to harm the welfare of future generations. In the worst case, future generations have problems to survive as the earth becomes less inhabitable. In any case, future generations will have to invest more work to extract the same natural contribution to growth such as natural resources (oil, gas or other commodities) or the earth's absorptive capacities for emissions. In the best case, technological progress will outpace the exhaustion of global resources and allow future generations the same or better quality of life.

In the shorter term, there is some concern about the consequences of demographic change, i.e. growing life time expectancy and declining birth rates. Given the natural limits to economic growth slower population growth or a decline will enhance individual welfare as it permits the growth of per-capita income and consumption with less or even without overall economic growth. In particular in rich countries, smaller populations would be a blessing for the planet as their per-capita use of nature is much higher than in poor countries.

The concerns in many aging societies are focusing on the welfare of senior citizens whose pensions or, in real terms, the corresponding consumption of goods and services threatens to overwhelm the capacity or willingness of the still active population. In order to stabilize the contribution rates for old age insurance many countries have reduced entitlements, increased the

[17] see Dauderstädt and Keltek (2011) based on the World Inequality Database (http://www.wider.unu.edu/research/Database/en_GB/wiid/).

retirement age, and promoted capital-based insurance at the expense of pay-as-you-go systems. The latter are often regarded as implicit government debt which, together with the explicit debt, is supposed to be a burden for future generations. At the same time, saving and the built-up of monetary wealth are considered as the appropriate strategy. Indeed, given the weakening of public pension regimes savings are increasing, for instance in Germany.

This strategy to ensure future welfare is largely mis-guided. Any future Wellbeing depends on the production of future active suppliers (workers and business) and the prices they are going to charge. The real value of monetary assets might be substantially lower than expected as asset prices decline when too many assets chase too few buyers or when the relative prices of goods and services increase. Monetary assets as such do not increase the wealth of a society because to each asset corresponds a liability (debt) and the total net monetary wealth within an economy is always zero (except claims or liabilities abroad). Future generations inherit the positive wealth (assets) and the debt. Thus they neither suffer from the present debt nor have to repay it. It is a question of intra-generational distribution between asset owners and others and not a question of inter-generational distribution.

The real contribution of savings to future welfare is not the saving but the investment which might be alleviated by the saving but does not depend on it. The production of capital goods (=investment) requires a reduction in the production of consumer goods (=consumption) only in a situation of full employment. When an investment creates a capital stock that either increases the productivity in the future (e.g. through machinery or education) or can be used in a consumptive way (e.g. housing) it will improve the future welfare and enable future generations to support a larger group of retired people without a decline of their own real income. The same is true for the saving of natural resources as it increases the productivity of future production which will have to spend less labor or capital on extracting those resources.

Conclusion

The Wellbeing of individuals depends on inputs from welfare production units which belong to four sectors: (1) The market-oriented corporate sector, (2) The public sector (state), (3) The household sector, and (4) The social economy. Although all sectors provide essential contributions in proportions, varying in time and from country to country, they all have major drawbacks, too. Markets neglect external effects and privilege the rich. Governments, in particular democratic ones, can correct these failures, but often fail, too. The two informal sectors suffer from lack of physical and human capital and thus slow productivity growth. In the end, it is the right mix and interaction of all four sectors which will increase welfare and Wellbeing. This should be reflected in measures of welfare which reflect the output of all sectors.

The expansion of public social services can create social growth which benefits all people. It also allows adopting a climate-protecting growth model which relies less on the exploitation of natural resources. Less global inequality will require more catch-up growth in poor countries which will result from transforming informal into formal economic activities. Growth will also be needed to protect the active population in ageing societies from income decline. At the same time, more growth along traditional patterns will destroy its natural basis. There lies the major challenge to future welfare production: coping with the natural limits to growth, the demographic change and the high, and in many countries increasing, inequality.

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Part IV

Social Structures of Wellbeing

Living Alone and Living Together – Their Significance for Wellbeing

18

Elizabeth Eckermann

Impact of Demographic Transitions on Family Format

Major demographic changes in high and middle income economies over the past 60 years, particularly population ageing and reduced fertility (see the Japanese population pyramid in Fig. 18.1), have dramatically altered family structures, living arrangements and relationship formation.

In most high income countries marriage rates are declining, marriage and childbearing are being postponed or avoided, and living alone, co-habitation without marriage, same sex relationships and non-relationship house sharing have become increasingly popular (Fine-Davis 2013). More recently a trend towards living-apart- together (LAT: 'single' people in a relationship without co-habiting) and virtual relationships have introduced new categories into the relationship matrix (Reimondos et al. 2011). Surveys across the globe suggest that in many Western societies between 6 and 9 % of the adult population is living in a LAT relationship (Milan and Peters 2003; Strohm et al. 2010; Reimondos et al. 2011). So when we are comparing the quality of life of people living alone versus those living together, the confounding impact of LAT and virtual relationships needs to be taken into account. The question arises of whether a relationship without cohabitation provides the same protective shield against low subjective wellbeing as is evident in cohabiting and married couple relationships.

In contrast to Western demographic trends, fertility rates remain high and life expectancy remains low in many low income economies, such as Lao PDR (see Fig. 18.2). However global and national initiatives (such as the Millennium Development Goals) aimed at improving health outcomes and empowering women (UNDP 2013) are starting to impact on demographic patterns in less developed areas of the world too, as the slight narrowing of the base of the population pyramid and slight elongation of the apex in Fig. 18.2 indicates.

Despite these demographic changes, without economic advancement and an inclusive social security net, the opportunities for people to make individual choices about living arrangements are limited and multigenerational living is still common. The ageing of the population (rectangularization of the survival curve) and persistent feminization of survival are particularly challenging in developing countries. Thus one would expect slower impacts on family structures, living arrangements and relationship formation over the next few decades compared to the rapid change in the developed world. UNFPA (2012:27) reports that in the developing world only 9 % of men over 60 years old, and 10 % of women over 60 years old, live alone, compared to 16 % of men and 33 % of

E. Eckermann (✉)
Professor, Deakin University, Geelong, VIC 3217, Australia
e-mail: liz.eckermann@deakin.edu.au

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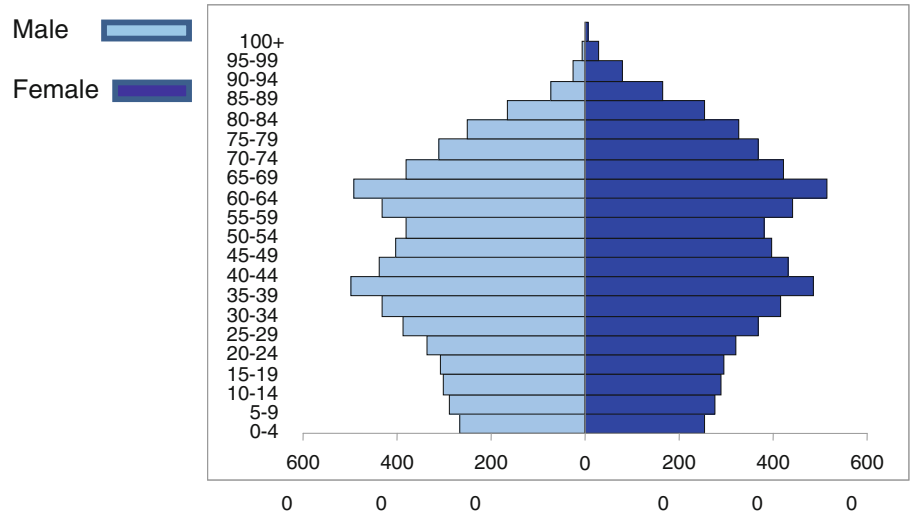

Fig. 18.1 Demographic profile of Japan 2010 (Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, World Population Prospects)

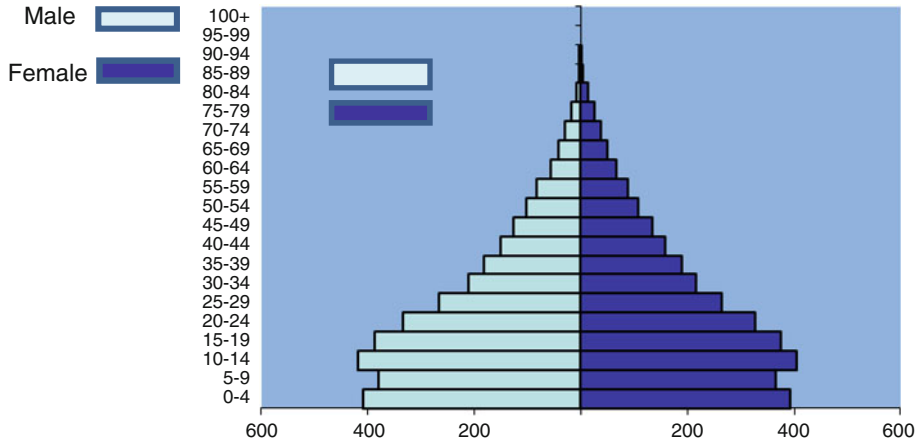

Fig. 18.2 Demographic profile of Lao PDR 2010 (Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, World Population Prospects)

women in developed countries. In most cases older people in the developing countries are living in trans-generational households with their adult children and grandchildren. Another feature of developing countries is 'skipped generation' households where children live with their grandparents when their parents migrate to cities to get jobs, or in the case of parts of Asia and Africa their parents have died or are infected by HIV (UNFPA 2012:27).

Given that living alone in developing countries is both recent and rare, limited data are available on the impact of living alone versus living with others in this context. The significance of living alone may be quite distinct between the developed and developing country contexts and between the East and West. In developed countries living alone or with just a spouse could be a positive 'indicator of economic independence' for all cohorts yet in the

developing country context it could represent lack of filial piety and 'a source of insecurity and vulnerability' (UNFPA 2012:27). This remains speculative as there are no objective or subjective data to test the assertion but Velkoff (2000:1) argues that cross-national comparisons of living arrangements for older people reveal four key findings. She notes that:

'First, women in developed countries are much more likely than men to live alone as they age: older men are likely to live in family settings, typically with a spouse. Secondly, there has been an increase in the proportion of the older population that is living alone in developed countries. Thirdly, both older men and women in developing countries usually live with adult children. Fourthly, the use of non-family institutions for care of the frail elderly varies widely around the world but it is relatively low everywhere'.

Living Trends in Developed Countries

The percentage of the population living alone is growing rapidly in developed countries and we do have data on the implications of this change for wellbeing. Census data in most developed economies report a decline in family size, more single and single parent households, more same sex couples, and more older women living alone as the gender gap in life expectancy continues to favor women (Velkoff 2000). More recent data from the UNFPA (2012:27) suggests that this trend is persisting with estimates that worldwide 'almost half of the women living independently live alone (but) only a minority of older men live alone'. Researchers across the globe are examining the impact of living alone on quality of life for both men and women and comparing this with quality of life outcomes for those living with others. This chapter reports on those findings.

A major impediment to reporting worldwide trends in living arrangements is that the categories for living arrangements used by official census sources have expanded significantly over the past few decades which limits the comparability of data over time. Six decades ago most jurisdictions just distinguished between married and single adults but over time shared household, de-facto, same sex, co-habiting, divorced, separated and widowed status have been added to official census categories and more recently the classification living-apart-together (LAT) is appearing in some data sets. The popularization of internet and social media has created further categories- virtual relationships, second life partners, Skype and Facebook pairing and other forms of digital partnership where people may be actually living alone but perceive themselves as 'living' in a relationship with another, or others, in a virtual world. As with LAT relationships, the question arises of whether virtual relationships provide the same positive wellbeing outcome as traditional cohabiting relationships.

Findings: Gender Dimension of Marriage

In the early days of quality of life research, classic studies by Gove (1973), Glenn (1975) and Bernard (1976) suggested that marriage improved the mental health and wellbeing of men but was deleterious to women. In the 1980s, Veenhoven (1983:49) questioned this argument reporting similar findings to those of Verbrugge (1979) that marriage was protective against ill-health, unhappiness, mental illness and suicide for both sexes albeit with a slightly stronger positive effect for men. Veenhoven qualified this generalization about the positive impact of marriage, arguing that the quality of the marriage was important and that a 'good marriage' provided a '"haven" in an increasingly "privatizing" world'. Veenhoven's analysis of trends in suicide, mental health indicators and happiness levels between married, single, widowed, divorced and separated individuals, particularly in the Netherlands, led him to conclude that a satisfying marriage was 'more indispensable than ever' (Veenhoven 1983:61)

at the end of the twentieth century for improving Wellbeing for both sexes. However he warned of the danger of marriage becoming the only 'source of affection and belongingness' as the public sphere became less accessible and formalized, and that this resulted in spouses placing 'higher demands on each other' which in the future could erode some of the positive impact.

Challenges to the gendered interpretation of the relationship between marriage and quality of life continue. De Vaus (2002) tested the validity of the theory of gender disadvantage of marriage for women in the Australian context. Using the ABS National Survey of Mental Health and Wellbeing of Adults 1997–1998 data, he argues that by the end of the twentieth century the gendered advantage of marriage for men had disappeared with both sexes gaining equally from being married. Contrary to Bernard's findings in the 1960s and 1970s in the United States, the Australian ABS data from the late 1990s found that even the 'married full-time mother is at much less risk of suffering from any disorder compared with any of the not married group' (De Vaus 2002:31). He suggests that this may be the result of a 'marriage revolution' where 'marriage rates have declined, there is less pressure to marry, it is easier to end a damaging relationship, fertility has sharply declined, women can more easily control their fertility, childlessness has increased, and the participation of women in the (part-time) workforce has steadily increased' (De Vaus 2002:31). Research by Botha and Booysen (2013) suggests that marriage continues to lead to the highest levels of life satisfaction in South Africa but that the tables have turned entirely in relation to gender advantages from marriage. Using data from the 2008 South African National Income Dynamic Survey they found a significant gender skew with women experiencing much higher life satisfaction from marriage than men.

Further evidence on the protective effect of marriage and de facto cohabitation in the early twenty-first century is provided by the Australian Unity Wellbeing Index Report 28 using the Personal Wellbeing Index (PWI) as the measure of subjective wellbeing. Weinberg and Cummins (2012: 3) summarize their findings:

> Married people exhibit the highest Wellbeing, followed by those in de facto relationships. The lowest wellbeing is reported by Separated people, who are coming to terms with the dissolution of their marriage. A divorce may signify some resolution to their marital problems, and a longer time for adaptation, explaining the slightly higher score for this group. The wellbeing of divorced people is no different from people who have never been married, whilst the wellbeing of widows falls just below the normal range. According to these figures, it is better to have loved and lost than never to have loved at all. However, this old adage is only true if your partner has been lost through death.

The 28th version of the Australian Unity Wellbeing Index (2012) found being married (PWI 77.9) put one above the normative Personal Wellbeing Index (PWI) range of 73.8–76.7, being in a de facto relationship (PWI 75.7) placed individuals within the normative range and being widowed (PWI 73.3) located one just below the normative range. However, being never married (71.8), divorced (71.1) and separated (69.2) put individuals at risk of falling well below the normative range (see Fig. 18.3).

The First World Happiness Report (Helliwell et al. 2012) reinforces Verbrugge's (1979), Gove et al. (1983), Veenhoven's (1983), De Vaus' (2002) and Weinberg and Cummins' (2012) assessments of the importance of a good quality marriage to the happiness of all parties, concluding that "stable family life and enduring marriages are important for the happiness of parents and children" (Helliwell et al. 2012: 165). However, children do not always increase the subjective wellbeing (SWB) of parents. Michon (2013) provides a contrary view from Poland and other EU countries where married mothers, while having higher SWB than single mothers, have much lower SWB than childless singles and childless mothers.

The ultimate gender dimension of marriage is the laws against same sex marriage in most parts of the world which prevent same sex couples from benefitting from the wellbeing advantages of a formal relationship commitment.

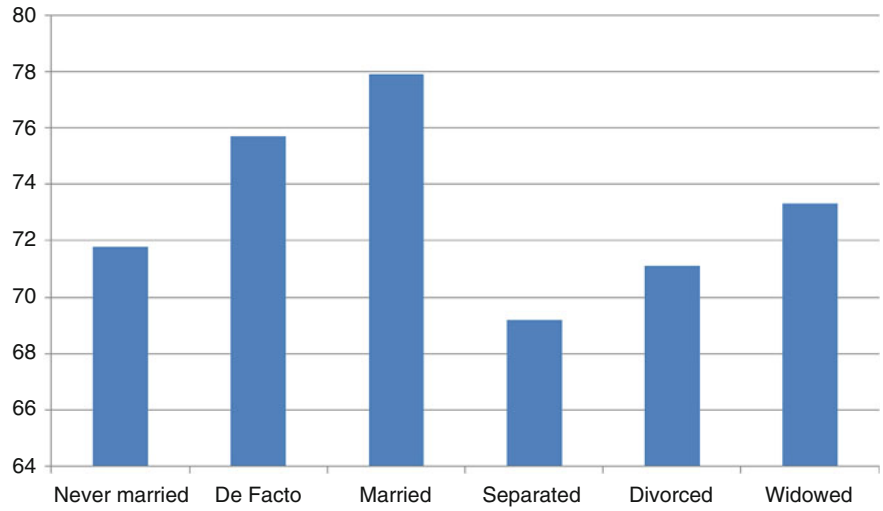

Fig. 18.3 Personal Wellbeing Index score (PWI) by marital status (Based on data from Weinberg and Cummins 2012:3) Normative range 73.8–76.7

Findings: Co-habitation and De Facto Relationships

As the research reported above indicates, unmarried co-habitation (with or without an intimate relationship), appears to not provide the same buffer against compromised wellbeing as marriage, except where co-habitors plan to marry (Brown and Booth 1996; Brown 2000a, b, 2004). Brown (2004) found that people who co-habit, but do not plan to marry their current partner, have very poor relationship quality. Despite this caveat, co-habitation does appear to produce better wellbeing outcomes than being single and not co-habiting. However, the findings need to be qualified given, unclear and flexible definitions of co-habitation, contested social mores which skew the evidence, and questions about the validity of the data.

The definitional problems with the term co-habitation arise from the conflation between the concepts of 'an arrangement where two people who are not married live together in an intimate relationship, particularly an emotionally and/or sexually intimate one on a long- term or permanent basis' (Wikipedia 2013), a temporary relationship where people live together with or without intimacy and the broader notion of any number of people living together in the same household. The motivations for co-habitation can vary enormously and include factors such as economic convenience, emotional attachment, laws against same sex marriage and lack of choice given limited housing stock, yet much research reports this living arrangement as a homogenous phenomenon.

In the developed world the intimate version of co-habitation without marriage has moved from a stigmatized living arrangement in the 1950s to a common household choice in the second decade of the twenty-first century 'both as a precursor to marriage and as a stand-alone relationship' (Hayford and Morgan 2008:130). Once de facto living arrangements received popular acceptance as a form of relationship, statistical bureaus started gathering data on the dimensions of de facto relationships and their impact on many aspects of life. However, some sections of the community have never accepted intimate co-habitation without marriage and this is reflected in the selective literature they report. Some moral and religious groups, as well as defenders of children's development who argue that cohabitation is deleterious for children, tend to magnify negative findings for this genre of family formation.

Despite this bias, the literature from cross-sectional studies argues that couples living together in de facto relationships are more prone to separate, less likely to reconcile after separation and report a poorer quality of relationship overall than married individuals (Binstock and Thornton 2003: Brown 2004). It is argued that further compromise to their quality of life comes from being more likely to experience infidelity (Treas and Giesen 2000) and domestic violence (Brown and Booth 1996) and less psychological and financial wellbeing (Wilmoth and Koso 2002).

Using data from the US National Survey of Families and Households, Brown (2004) reported on relationship quality dynamics of cohabiting unions. She compared large samples of cohabiting (de facto) and married couples to establish the duration dependence of relationship quality for each category. Employing 3 scales to measure relationship happiness, interaction and instability, Brown found that both groups experience declines in relationship interaction and happiness over time but in contrast to the situation with marriage, the stability of cohabiting unions is positively correlated with duration (Brown 2004). Delayed or no marriage among co-habitors produces high instability, and very low relationship happiness and interaction.

Hayford and Morgan (2008) argue for the need to be wary about the scientific validity of retrospective data on co-habitation. They compared data from four United States surveys—the National Survey of Families and Households and three rounds of the National Survey of Family Growth—with a view to assessing the quality of co-habitation data. They found 'discrepancies among the four surveys consistent with the suggestion that co-habitation histories underestimate co-habitation rates in distant periods relative to rates estimated closer to the date of survey' (Hayford and Morgan 2008:129) thus arguing for caution in using retrospective data on this topic.

The bulk of the literature suggests that marriage is the living arrangement with best outcomes for health and Wellbeing for both men and women and that co-habitation produces worse outcomes on all wellbeing dimensions. Are there then advantages in single life over co-habitation?

Living Alone: Comparative Data

Across the globe there are discrepant findings on the centrality of living arrangements to wellbeing and quality of life outcomes, particularly in the many circumstances whereby individuals live alone. Strongly held individual and community perceptions of the meaning of solitary living are likely to impact on the quality of life outcomes for those living alone.

In some contexts living alone is voluntarily and actively pursued. If perceived as a symbol of freedom, independence, protected privacy and affluence, solo living can raise wellbeing and increase public engagement (Klinenberg 2012). Klinenberg attributes the normalization of solo living in the United States (28 % of all households), much of Europe and Japan to choice.

In other situations, especially where solo living is not the living arrangement of choice, it represents abandonment, loneliness and despair leading to depression and compromised wellbeing (Chou et al. 2006; Sun et al. 2011). Studies in the Netherlands, United States, Japan (Iwasawa 2004), China (Xiaojie et al. 2011), Taiwan, Hong Kong, South Africa (Botha and Booysen 2013) and Australia support this theory of the nexus between living arrangements and wellbeing. As reported above by Weinberg and Cummins (2012) living alone as result of separation produces the worst wellbeing outcomes in Australia followed by divorce, never being married and widowhood. All of these categories fare significantly worse than the wellbeing outcomes for Married individuals (Highest) and those living in De Facto Relationships (Second Highest). But what about the quality of life outcomes from living alone in other parts of the world? In some countries living arrangements appear to have minimal impact on wellbeing outcomes (Yahaya et al. 2010; Lim and Kua 2011).

Malaysian (Yahaya et al. 2010) and Singaporean (Lim and Kua 2011) studies of

older persons living alone indicate minimal impact of solo living arrangements on wellbeing. Yahaya et al. (2010) report that the 2000 Malaysian census, found only 7 % of the population over 60 years of age living alone. The researchers conducted a study with approximately 300 older persons who were 60 years and older who were living alone and asked them "In general, how do you perceive your Quality of Life". Although their perceived quality of life was lower overall than those living with others, the standard deviation within this group was large with socioeconomic factors being far more important than living arrangements in determining perceived quality of life outcomes. Four key factors 'predicted perceived quality of life', namely self-rated health, level of education, gender and employment status. High self-rated health and high level of education had positive impacts on perceived quality of life, whereas older women and employed older persons experienced much poorer perceived quality of life (Yahaya et al. 2010:893) regardless of living arrangements.

A Singaporean study of 2808 older persons living alone (Lim and Kua 2011) similarly found other factors more determining of wellbeing outcomes than living arrangements. Examining the 'independent and interactive effects of living alone and loneliness on depressive symptoms (GDS score) and quality of life (SF-12 MCS score)' Lim and Kua (2011:1) discovered that loneliness was a better predictor of GDS and SF-12 MCS scores than living arrangements.

Living Apart Together (LAT) Relationships: Best of Both Worlds?

Living apart together (LAT) 'is a term to describe couples who have an intimate relationship but live at separate addresses' (Wikipedia 2013). In household categorization terms technically those in a LAT relationship are single but some may in fact be married and living in separate households. LAT relationships are becoming common in developed nations (estimates from 6 to 10 % of all relationships) and may provide the best of both worlds, namely the advantages of living alone, in terms of privacy, autonomy, independence and freedom, with the protection against loneliness and despair of an intimate and ongoing relationship. Upton and Davis (2012:1) describe LAT relationships as providing further protections 'against both the erosion of autonomy whilst in the relationship, and the erosion of resources following relationship dissolution '.

There are as many reasons for living in a LAT relationship as there are for co-habiting arrangements, ranging from active choice, partners feeling it premature to move in together, barriers because of children still cohabiting from prior unions to economic/ legal / occupational constraints. The most comprehensive study of LAT relationships was undertaken by Reimondos et al. (2011) using the Household, Income and Labour Dynamics in Australia (HILDA) Wave 5 data. The Wave 5 HILDA data revealed that more than 24 % of the population identified in census data as single, was in fact living in LAT relationships with varying degrees of contact frequency. Reimondos et al. (2011) found older respondents most likely to be voluntarily living in separate households and not desiring a transition to cohabitation. Major reasons for remaining apart included wishing to retain autonomy, maintaining relationships with subsequent generations of offspring (children and grandchildren) and not wanting to adjust to the habits of another person.

The story for the younger generations was slightly different with the individualistic values (representative of the older generation) being mixed with risk aversion, fear of commitment and financial and housing constraints. In some cases this living arrangement was not voluntary especially where partners were unable to relocate employment to be together. Whatever the motivation for LAT relationships, they have become a dominant living arrangement for the twenty-first century and have important implications for policy.

No systematic study of the quality of life and personal wellbeing outcomes of those living in LAT relationships has yet been undertaken but given the popularity of this form of living mode, such a study is long overdue.

Virtual Relationships

Non-traditional forms of living associated with contemporary and emerging relationship formations, such as LAT unions and virtual unions, may provide a buffer against the loneliness and despair which is recorded in much of the quality of life and personal wellbeing literature as the inevitable consequence of solo living. The research has not yet been undertaken on whether or not cohabitation is the element of relationships (whether married or defacto) that is protective of wellbeing. Inconsistencies in the wellbeing data for people categorized as living alone may in fact reflect that those 'singles' in either LAT or virtual relationships do not perceive themselves as living alone and find comfort in a union that is not necessarily ever present.

Many authors suggest that Social Networking Sites (SNS) such as Myspace and Facebook provide a sense of virtual community to individuals independent of face to face contact and communication (Zhang 2011). However, others (for example Reich 2010) argue that typical adolescent users of SNS do not see their virtual connections in terms of a community, but rather as selective networking and individualistic online communication similar to what one experiences in intimate friendships and partnerships. If the latter interpretation of SNS use more clearly reflects the reality for adolescents, the protective effect in relation to wellbeing may more clearly mirror the impact on quality of life of intimate relationships than that of community.

Conclusions

Demographic, economic and social changes since World War 2 have produced a plethora of alternative living arrangements in the developed world. The nuclear family of parents and children living together under the same roof has become a minority living arrangement in the twenty-first century yet many government policies and services are predicated on the nuclear family as the norm. These demographic and social changes, along with increased individualization of society (Fine-Davis 2013) have create both opportunities for creative living arrangements and challenges for social policy to keep up with the consequences of individuals no longer living in a relationship, namely marriage, which in the past has been shown to be most protective of quality of life. Even de facto relationships, which have been shown to produce the next best quality of life outcomes, may be on the decline. More individuals, whether through choice, risk aversion or economic and employment constraints, are living alone with or without a significant relationship with another. No systematic research has yet been conducted to unravel the elements of intimate relationships that are most protective of quality of life. Is it the cohabiting, or sense of an intimate ally that provides a buffer against depression and low wellbeing.

The decline in social networks (Fine-Davis 2013) and the dubious benefits of SNS networks as an alternative community (Reich 2010) points to the need for urgent research to establish what alternative forms of protection against poor psychological wellbeing outcomes that single, LAT and virtual living arrangements can provide. Furthermore, policy makers need to keep in step with these changes in living arrangements and be responsive to the specific challenges that such domestic configurations pose. This phenomenon will become a worldwide problem in the middle of the twenty-first century as demographic, economic and social transformations reverberate in the developing world and the cohesive elements of traditional lifestyles disintegrate. An essential element of measuring, monitoring and responding to, the impact of such change is the development of reliable and comparable wellbeing and quality of life tools which can rapidly inform both national and global policy makers. The OECD (2011) and organizations such as the International Wellbeing Group (Cummins 2006) are actively involved in preparing for such a scenario.

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Worldwide View of Child Wellbeing

19

Vicki L. Lamb and Kenneth C. Land

Introduction

Child wellbeing research is an outgrowth of the social indicators movement of the 1960s and 1970s. International experts from a number of disciplines began a project to initiate the international monitoring and measurement of child wellbeing. The project was due, in part, to reactions to UNICEF's annual reports on *The Progress of Nations* that began in the 1993. The reports were designed to monitor the wellbeing of children across the globe to chart "the advances made since the 1990 World Summit for Children" (UNICEF 1997). The reports documented that available indicators were not adequate for monitoring children even in the developed world where most of the children's survival needs had already been met. In time, the project led to the development of the *International Society for Child Indicators* (ISCI) in 2006. Persons across the globe could meet and network with a focus on data collection, analyses, and dissemination of results to further the monitoring, measurement, and study of child wellbeing.

V.L. Lamb (✉)
Department of Human Sciences, North Carolina Central University, 1801 Fayetteville Street, Durham, NC 27703, USA
e-mail: vlamb@nccu.edu

K.C. Land
Center for Population Health and Aging, Duke University, 90088, Durham, NC 27708-0088, USA
e-mail: kland@soc.duke.edu

There have emerged numerous ways to measure and quantify child wellbeing (Ben-Arieh 2006, 2008a, 2012). Much of the research, data analysis, and construction of knowledge about child wellbeing was initially guided by available data rather than tested theoretical frameworks (Casas 1997). However, this field of study has matured and child-based methodological and theoretical perspectives now guide many of the frameworks for assessing child wellbeing cross-nationally.

The purposes of this chapter are to examine:

- basic views in measuring child wellbeing,
- the methodological and theoretical development of child wellbeing research,
- the results of multinational studies of child wellbeing, and
- future directions and needs to further the global monitoring of child wellbeing.

Objective and Subjective Views

Two basic views or approaches to measures of child wellbeing are objective and subjective. Objective measures focus on the state or status of the child, whereas subjective views focus on the expression of opinions, behaviors, beliefs, or experiences.

Objective measures of child wellbeing are based on available statistical data and can include indicators associated with health (e.g., infant mortality or low birth weight), education

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(e.g., completion or graduation rates at various school levels), economy (e.g., child poverty), or behaviors (e.g., teen pregnancy rates). Such measures have been used to generate reports on the "State of the Child" to monitor the status of children. The state of the child reports have been produced for children of varied age-groups and from different population settings including local, state or sub-region, nation, and multinational regions. Literature reviews have revealed that such reports date back to the 1950s although the majority of the reports are one-time reports rather than a series of reports (Ben-Arieh and Goerge 2001; Ben-Arieh 2006, 2012). However there are notable series reporting objective measures of children including UNICEF's *State of the World's Children* reports since 1979 and their *The Progress of Nations* reports published since 1993. In the United States, the Annie E. Casey Foundation has published the *KIDS COUNT Databook* since 1990 in which the 50 U.S. states are ranked and compared based on ten negative objective indicators of child wellbeing and the U.S. Federal Interagency Forum on Child and Youth Statistics has issued reports entitled *America's Children: Key National Indicators of Wellbeing* since 1997.

Subjective measures or indicators of child wellbeing are usually obtained through sample surveys and are designed to measure opinions, attitudes, or responses from children or adults speaking on behalf of children. Such measures are important to more fully understand notions of wellbeing expressed or experienced. Efforts to facilitate the harmonization of multi-nation comparisons have yielded survey instruments that are used in a number of countries. In Europe, child wellbeing indicators from sample surveys of children and youth, include the Program for International Student Assessment (PISA), the Health Behavior in School-aged Children (HBSC), and European School Survey Project on Alcohol and other Drugs (ESPAD), and from indicators regularly collected via surveys by international organizations such as UNICEF. As the survey titles indicate, such surveys are collected for specific reasons, yet they yield important indicators for comparative research of child wellbeing.

The Social Indicators Movement and Child Wellbeing

The term *social indicators* was coined in the early 1960s to refer to efforts to detect and anticipate social change and to evaluate specific programs, such as the U.S. space program, to determine their impact. The basic social indicator question is: How are we doing? (Land 2000). Work on social indicators during the 1960s and 1970s followed two basic traditions. One direction was the *development of objective measures* through the review of available data to provide descriptive evaluations of the status of society and to recommend unmet data needs for such evaluations. The other direction was the *development of subjective indicators of wellbeing and quality of life*. Both traditions have impacted the monitoring and measurement of child wellbeing (Land et al. 2007); see the preceding section.

In the tradition of subjective indicators, Cummins (1996) conducted a review of empirical studies of adult quality of life. He found that a vast majority of the total reported data could be grouped into the following seven domains of life: (1) economic or material wellbeing (e.g., command over material and financial resources and consumption); (2) health (e.g., health functioning, personal health); (3) safety (e.g., security from violence, personal control); (4) productive activity (e.g., employment, job, work, schooling); (5) place in community or community engagement (e.g., education and job status, community involvement, self-esteem, and empowerment); (6) intimacy (e.g., relationships with family and friends); and (7) emotional wellbeing (e.g., mental health, morale, spiritual wellbeing). According to Cummins, the empirical studies indicate that all of these seven domains are very relevant to the overall concept of subjective wellbeing or quality of life.

These seven domains of wellbeing were derived from subjective assessments in focus groups, case studies, clinical studies, and sample surveys that cannot, by definition, be replicated in studies of the quality of life that utilize objective data. Nonetheless, as recommended in a comprehensive review of numerous quality of life indices (Hagerty et al. 2001), the domains identified by Cummins (1996) can and should be used to guide the selection and classification of indices of quality of life that are based on objective data. These findings on domains of adult wellbeing plus research that focused on children and adolescents led to the development of the U.S. Child and Youth Wellbeing Index.

The U.S. Child and Youth Wellbeing Index: An Outgrowth of the Social Indicators Movement

In 1994, the U.S. Federal Interagency Forum on Child and Family Statistics was founded to foster cooperation and collaboration among the U.S. federal agencies that collect data on children and families. Initially, there was a proposal to produce a child wellbeing index using the varied measures collected and calculated by the participating federal agencies, but the proposal was not supported because some areas of child wellbeing were underrepresented in the data and there was no methodologies or guidelines for the selection and weighting of indicators to develop an overall index of child wellbeing. Instead, the members decided to publish a report that presented separate trends for the key child wellbeing indicators that were organized in four domains: economic security, health, behavior and social environment plus a section on demographic measures of family and child statistics. The first report, *America's Children: Key National Indicators of Wellbeing*, was published in 1997 and presented data on 25 key indicators of child wellbeing (Federal Interagency Forum on Child and Family Statistics 1997). *America's Children* continues to be published annually with many indicators presented by sub-groups such as age groups, gender, or race/ethnic groups.

The availability of a growing collection of key indicators led the Foundation for Child Development to support the construction of an *overall, composite index of child wellbeing – the Child and Youth Wellbeing Index (CWI)*. The CWI was developed by Kenneth C. Land, Vicki L. Lamb, and their colleagues (Land et al. 2001, 2007, 2011, 2012a, b) to address the following questions: Are the circumstances of life for children and youth in the United States bad and worsening or good and improving? Has the wellbeing of America's children improved or deteriorated? Their objective was to measure the circumstances of children's lives in a way that reflects their wellbeing – to assess their quality of life – and to track changes in wellbeing and over time. A major goal for the CWI was to develop a composite indicator or index of wellbeing that encompassed different domains of children's lives from birth to age 18.

Land and colleagues (2001, 2007, 2012a) identified research studies that focused on children and adolescent participants and their articulation of subjective or positive wellbeing. These child and youth-based studies also highlighted themes or domains that were similar to the seven that were identified by Cummins (1996). Thus, those seven domains of wellbeing were adapted to focus on children and youth in the construction of the CWI.

A number of data sources were examined to identify key indicators of child wellbeing. The five criteria for the selection of key indicators were that each indicator must be: (1) easy to understand by a broad range of audiences, (2) objectively based on substantial research connecting them to child wellbeing and based on reliable data, (3) balanced so that no single area of children's lives dominates the CWI, (4) measured regularly so that they can be updated and show trends over time, and (5) representative of large segments of the target population, rather than one particular age group.

A total of 28 Key Indicators were compiled and grouped into seven domains. Using the

Cummins (1996) domains as a guide, the CWI wellbeing domains are: (1) family economic/material wellbeing (child poverty, secure parental employment, median family income for families with children under age 18, and children covered by health insurance); (2) heath (infant mortality, low birth weight, mortality for ages 1–19, children with very good or excellent health, children with activity limitations, and obese children and adolescents); (3) safe/risky behavior (teen births, violent crime victimization, violent crime offenders, cigarette smoking, binge drinking, and illicit drug use); (4) productive activity/educational attainment (reading test scores and mathematics test scores); (5) community engagement (preschool enrollment, receipt of high school diploma, receipt of bachelor's degree, youth not working nor in school, and voting in Presidential elections); (6) social relationships (single-parentheaded families and moving residences within the past year); and (7) emotional/spiritual (suicides, weekly attendance of religious services, and reporting religion is very important). Many of the indicators refer to broad age groups (ages 0 to 17 at last birthday) whereas some indicators are age-groupspecific. Also, the indicators represent both positive and negative measures of child wellbeing.

These 28 indicators are based on statistical time series data collected in annual (calendar year) time periods at the national level and most could be dated back to 1975. The data sources included U.S. Federal (objective) data, a number of sample surveys of youth (such as the Monitoring the Future Study and the National Crime Victimization Survey), and sample surveys of adults reporting on youth and families (such as the National Health Interview Survey and the Current Population Survey).

The major goal of the CWI project is to *measure trends in child wellbeing* (by indicator, domain, and overall) based on annual changing values. "Change rate ratios" were calculated in order to measure the percentage change in the value of a rate (such as infant mortality) in a particular year compared with the base year rate value, thus creating an index value. Index values for years subsequent to the base year that are greater, equal, or lesser than 100, indicate improvement, no change, or deterioration, respectively, in the time series relative to its base year value. The base year used by the CWI is 1975, which corresponds to the period in which many of the 28 Key Indicator time series began to be available at the national level in the U.S. Given the base year, the CWI then calculates an equally-weighted composite index of changes for all indicators within each of the seven domains of wellbeing. After constructing composite indicators of changes over time for each wellbeing domain relative to base year levels, the overall composite CWI then is calculated as an equally-weighted average for each year of the domain-specific index values.

Figure 19.1 shows the trend of change in the overall CWI for the years 1975 to 2011, using 1975 as the base year. This chart indicates that, on average across all Key Indicators and wellbeing domains, child and youth wellbeing in the U.S. went through a long "recession" from the early 1980s to the early 1990s followed by a "recovery" through 2001 and an oscillating period of ups and downs across the first decade of the twenty-first century. In their various publications, Land and colleagues have identified several demographic, economic, and social forces that help to explain these trends. Briefly, the early 1980s were years of cohort replacement of parental generations as the Baby Boomers of the 1946–1964 post-WorldWar II period themselves matured into the adult ages of childbearing and child-rearing, replacing parents from the 1920s and 1930s. These years also saw an increasing prevalence of female-headed households with children and increasing levels of female labor force participation. The adaptation of other societal institutions to these demographic and social changes (e.g., the development and diffusion of after-school hours care programs for children with working parents) began but took several years into the 1990s to be available on a large scale. This lag led to an increase in relatively unsupervised children, adolescents, and teenagers that increasingly engaged in various forms of risky behavior

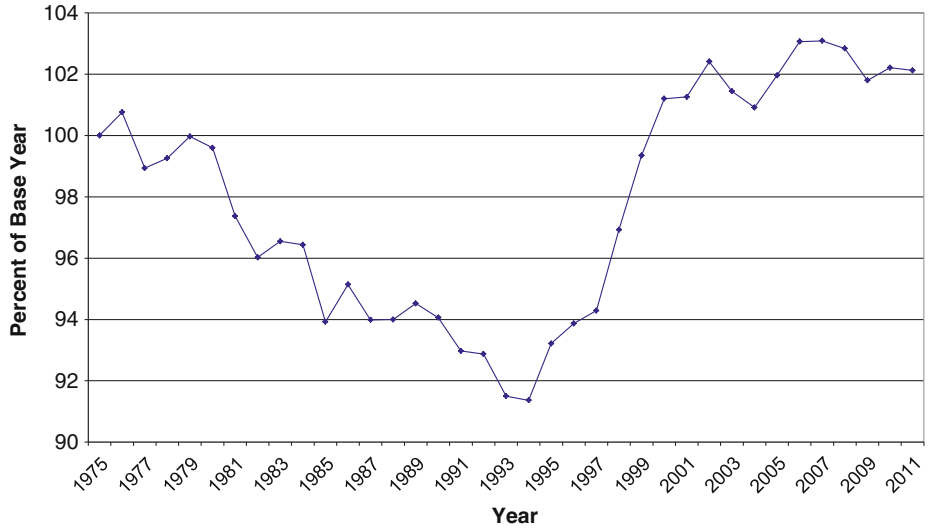

Fig. 19.1 Overall index of U.S. child and youth wellbeing, 1975–2011

(e.g., drug use, teenage child-bearing, violent crime). By the early 1990s, however, parents and community institutions had seen the severity of these problems and put into place many initiatives to supervise children more closely and engage adolescents and teenagers. This accounts for the major recessionary and recovery periods noted above. Since 2001, these parental and community efforts have been in place and the main trends in the CWI have primarily been related to expansions and recessions in the national economy.

The Equal-Weighting Method As noted above, in their initial article on the composite Child and Youth Wellbeing Index, Land et al. (2001) applied an equal-weighting arithmetic averaging method to the change-rate ratio indices of changes in the Key Indicators belonging to each of the seven domains of wellbeing in the CWI. This yields a composite index for each of the domains that measures the average percent change in the domain's indicators from the base year of the index. A second equal-weighting method then was applied to compose the overall CWI as an average percent change from the base year. In this initial article, Land et al. noted only that there did not exist any systematic research on which to base differential weights for any of the Key Indicators in the domain indices nor for any of the domain indices in the overall CWI. Nor was there systematic research on the priority and influence of different indicators for children at different life stages. In addition, the equal-weighting method had precedent in the Human Development Index (HDI) and its associated Annual Report that had been calculated and published since 1990 by the United Nations Human Development Programme (Land 2013). The HDI is based on the work of Amartya Sen (Professor of Economics, Harvard University, Nobel Laureate in Economics, 1998) and Martha Nussbaum (Ernst Freund Distinguished Service Professor of Law and Ethics at the University of Chicago) (Nussbaum and Sen 1992; Sen 1987) and is used for cross-national comparisons of societal development.

The equal weighting procedure originally was used by the HDI and by Land et al. (2001) because of its simplicity, with little justification as a statistical estimator. This deficiency was addressed by Hagerty and Land (2007, 2012), who showed both analytically and through numerical examples, that the equal weighting method is what is termed in statistics a *minimax estimator* in the sense that it minimizes extreme disagreements on unequal weighting schemes. In the absence of an unequal weighting scheme

on which there is high consensus, this is a desirable statistical property. Hagerty and Land also showed that numerical values for composite indices obtained from application of an equal-weighting method are quite robust and consistent with those that would be obtained from many differential weighting schemes. This is an important methodological finding because of the widespread use of equal-weights methods in social indicators and wellbeing research, including in the CWI and other indices to be described below.

Child Wellbeing in Anglophone Countries Land et al. (2011) conducted a comparative cross-national study of child wellbeing for the U.S. and four other English-speaking countries, specifically: Australia, Canada, New Zealand, and the United Kingdom. These countries were selected for the international comparison because: (1) all share a common language, (2) Australia, Canada, New Zealand, and the U.S. were all former colonies of the U.K., (3) all five nations are liberal democracies with representative forms of government, (4) all five emphasize the use of economic markets for the production and distribution of goods and services, and (5) all share a common history and culture (Land et al. 2011). The authors found 19 indicators that were measured around the year 2000. These indicators were classified into seven domains: family economic wellbeing, social relationships, health, safety and behavior, educational attainment, community connectedness, and emotional wellbeing.

Table 19.1 shows the relative ranking for the domains for the five nations. The rankings for the domains range from '1', the highest ranking to '5' (or '4' for social relationships), which designates the lowest ranking. An examination of the separate domains indicates that no country consistently scored the same rank across the seven domains. Each country scored a '1' or '2' in some of the domains, and Canada ranked '1' in three of the domains. Thus each country is doing well in some domains but each country also had domains that ranked lower and suggest areas that need greater attention.

The last two columns in Table 19.1 show the arithmetic averages across domains and across the indicators for the five countries. For both calculated Average Rankings, the order remains the same: Canada, Australia, the U.S., New Zealand, and the U.K.

Land et al. (2011) note that Canada, Australia, New Zealand, and the United Kingdom are all countries with egalitarian and/or universalism traits; and thus, score higher than the U.S. on the health and educational attainment domains due to greater public funding for these institutions. The United States scores higher in a number of domains: safety/behavior, community connectedness, and emotional wellbeing. These domains are supported in the U.S. by non-public initiatives provided by familial, religious, and civil society groups that can work to encourage positive outcomes.

The United Nations Convention on the Rights of the Child

In 1989, the United Nations adopted the Convention on the Rights of the Child (CRC) (United Nations 1989). To date all UN countries except the United States and Somalia have ratified the CRC. The CRC was an outgrowth of previous international resolutions and declarations regarding children, including the Geneva Declaration of the Rights of the Child of 1924, the Declaration of the Rights of the Child adopted by the United Nations General Assembly in 1959, plus International Covenants on Civil and Political Rights and on Economic, Social and Cultural Rights. The CRC was formulated to recognize that children are citizens of society in their own right rather than merely future adults. The overriding purpose was to grant children the full range of human rights including: the right to survival; to develop to the fullest; to protection from harmful influences, abuse and exploitation; and to participate fully in family, cultural, and social life (UNICEF n.d.).

Table 19.1 Relative ranking of five English-speaking countries by domain: 2000

Countries	Family economic wellbeing	Social relationships	Health	Safety/behavioral concerns	Educational attainment	Community connectedness	Emotional wellbeing	Average rank across domains	Average rank across indicators
Canada	1	1	1	3	1	2	3	**1.7**	**2.0**
Australia	2	2	3	1	3	3	4	**2.6**	**2.6**
U.S.	2	3	5	2	5	1	2	**2.9**	**2.9**
NewZealand	2	–	4	5	1	3	5	**3.3**	**3.0**
U.K.	5	4	2	4	4	5	1	**3.6**	**3.1**

Note: Data are from Table 3, Land et al. (2011). '1' represents the highest ranking

In the CRC, there are four core principles that encompass the human rights to be held by all children:

(1) non-discrimination (*Article 2*),
(2) devotion to the best interests of the child (*Article 3*),
(3) the right to life, survival, and development (*Article 6*), and
(4) respect for the views of the child (*Article 12*) (United Nations 1989).

The CRC therefore recognizes that children are active members of a society with entitled rights in addition to being dependents of their families. Associated with the direct focus on children as full citizens with basic human rights is the hope that child wellbeing and child quality of life will improve (Casas 1997).

According to Article 1 of the Convention, a child is defined as "every human being below the age of 18 years unless, under the law applicable to the child, majority is attained earlier" (United Nations 1989: 2). The CRC indicates that childhood is to be recognized as a separate phase in life, and children are to be considered active members of the society. Part I of the Convention on the Rights of Children lists 41 *Articles* that define the numerous rights of children. In addition to the four core principles listed above, the CRC also includes other specific rights for children:

- citizenship, and a unique identity (*Articles 7, 8*),
- the implementation and legal protection of children's rights including when arrested, imprisoned, or accused of infringing penal law (*Articles 4, 16, 37, 40*),
- freedom of thought, religion and other basic freedoms (*Articles 13, 14, 15*),
- access to "the highest attainable standard" of health care and health facilities, which include accommodation for children with disabilities or in institutions due to physical and/or mental health needs (*Articles 23, 24, 25*),
- the right to a standard of living that promotes proper "physical, mental, spiritual, moral and social" development as well as equal access to education at all levels (*Articles 27, 28*),
- protection from child trafficking, economic exploitation, sexual exploitation and abuse, and other exploitation that adversely affects the child's welfare (*Articles 11, 32, 34, 35, 36*), as well as
- respect for parents and family and the duties they fulfill in nurturing and protection of children (*Articles 5, 9, 10, 18*).

The fourth CRC core principle on respect for the views of the child has had an impact on the establishment of methods and indicators in the study of child wellbeing. Understanding the perspectives of children is important in that their perspectives differ from those of adults. Thus children should be respected as persons that can contribute to informing policymakers and child advocacy concerns, and children should be better informed about legal and political issues that directly affect their lives (Ben-Arieh 2005). In fulfilling these obligations, a number of countries, particularly in Europe, are collecting data or reviewing available data to establish the baseline rights and concerns of children as citizens with defined human rights.

Cross-National Studies of Child Wellbeing Using the CRC Approach

OECD Starting with the credo *"to improve something, first measure it,"* and incorporating the CRC in the conceptualization and interpretation of child wellbeing, UNICEF (2007) conducted a study of child wellbeing for OECD countries. The end result was an *Innocenti Report Card* on *Child Wellbeing in Rich Countries* (UNICEF 2007) in which multiple domains of child wellbeing were calculated to measure child wellbeing. This represented an improvement over UNICEF's previous use of income poverty as a proxy for child wellbeing.

A major issue in the establishment of a multinationstudy of child wellbeing is the question of finding measures that are available and comparable for all OECD nations that also encompass the important components associated with children's rights and child wellbeing. As a result, UNICEF accumulated 40 separate indicators that were sorted into 18 components, which were then sorted into 6 dimensions. The resultant six dimensions (and components) were: material

wellbeing (child income poverty, deprivation, work), health and safety (health at birth, immunizations, child mortality), educational wellbeing (achievement, participation, aspirations), peer and family relationships (family structure, family relations, peer relations), behaviors and risks (risk behavior, experiences of violence, health behavior), and subjective wellbeing (health, personal wellbeing, school wellbeing) (UNICEF 2007). Insufficient data resulted in 9 of the 30 OECD countries (Australia, Iceland, Japan, Luxembourg, Mexico, New Zealand, the Slovak Republic, South Korea, and Turkey) being excluded from the *Report Card* on child wellbeing.

Each dimension was composed of three components and each dimension score was the average of its three components. Thus equal weighting was used "in the absence of any compelling reason to apply different weightings. . ." (UNICEF 2007: 5). All scores were converted to *z*-scores to have a common scale for each measure and can show how by standard deviations far a country's score is from the OECD average score.

The rankings for each of the six dimensions for each of the 21 OECD countries are presented in Table 19.2. The last column of the table reports the average ranking across the six dimensions and the countries are ordered based on this average ranking. For ease of comparison, the white cells represent the top one third, the light gray shaded cells the middle one third, and the dark gray shaded cells the bottom third. There is much variation in the ranking of the OECD countries among the six dimensions. No one country has all dimensions ranking in the top third, although the Netherlands and Sweden each have only one dimension that is not in the top third. This indicates that all of the OECD countries studied have weaknesses to be addressed. A review of the overall rankings indicates that the Northern European countries of the Netherlands, Sweden, Denmark, and Finland are at the top. The Netherlands and Denmark have no dimension that scores in the bottom third and Sweden and Finland each have one, family and peer relationships. The United States and the United Kingdom are in the bottom ranking for all but one of their scored dimensions. In addition, the United Kingdom is the only country that does not have a dimension that ranks in the top third.

Given the varied ordering of the countries within each of the six dimensions of the UNICEF *Report Card*, it is evident that no one dimension can serve as a proxy for the overall average ranking of child wellbeing. It was also reported that there was not a particularly strong relationship between a country's wealth and average ranking. For example, the Czech Republic ranks higher than the more wealthy countries of France, Austria, the United States, and the United Kingdom (UNICEF 2007).

Jonathan Bradshaw and colleagues Petra Hoelscher and Dominic Richardson were members of the group of external advisors for the UNICEF *Report Card 7*. They have conducted a number of cross-sectional, cross-national studies of the wellbeing of children, one of which was a report in conjunction with the above UNICEF report. The Bradshaw et al. (2007a) report provided additional details on the selection of indicators for assessing child wellbeing for OECD countries and greater explanation regarding the methodology used to develop the rankings.

Bradshaw and his colleagues used a number of overriding principles in the selection of indicators for the OECD study and for all of their multinational studies. (1) Indicators were chosen "that best represented a constituent domain of the concept of child wellbeing" (p. 21). (2) Efforts were made to use indicators in which the child, rather than the family or household, was the unit of analysis. (3) The most up-to-date data for each indicator was used although all indicators were not measured the same year. Efforts were made to select indicators that were measured in 2003 or later. However some indicators, particularly from sample surveys, were measured somewhat earlier. (4) The same data source was used to measure a single variable across the OECD countries to reduce problems with comparability. (5) A number of potentially useful indicators had to be rejected because the measures were not available for an adequate number of countries. The

Table 19.2 Ranking of 21 OECD countries on six dimensions

Country	Material wellbeing	Health and Safety	Education	Family and Peer Relationships	Subjective Wellbeing	Behavior and Risks	*Average Ranking*
Netherlands	10	2	6	3	1	3	**4.2**
Sweden	1	1	5	15	7	1	**5.0**
Denmark	4	4	8	9	12	6	**7.2**
Finland	3	3	4	17	11	7	**7.5**
Spain	12	6	15	8	2	5	**8.0**
Switzerland	5	9	14	4	6	12	**8.3**
Norway	2	8	11	10	8	13	**8.7**
Italy	14	5	20	1	10	10	**10.0**
Ireland	19	19	7	7	5	4	**10.2**
Belgium	7	16	1	5	16	19	**10.7**
Germany	13	11	10	13	9	11	**11.2**
Canada	6	13	2	18	15	17	**11.8**
Greece	15	18	16	11	3	8	**11.8**
Poland	21	15	3	14	19	2	**12.3**
Czech Rep.	11	10	9	19	17	9	**12.5**
France	9	7	18	12	18	14	**13.0**
Portugal	16	14	21	2	14	15	**13.7**
Austria	8	20	19	16	4	16	**13.8**
Hungary	20	17	13	6	13	18	**14.5**
United States	17	21	12	20	--	20	**18.0**
U Kingdom	18	12	17	21	20	21	**18.2**

Note: Data are from Chart in the "Executive Summary" (p. 7) in UNICEF (2007)

researchers established a 75 % cut-offin that indicators were included in the OECD child wellbeing index if the countries had at least 75 % of the indicators available. (6) When countries had missing indicators within a domain, the domain average score was calculated based on the available indicators within that domain. (7) If data were not available for a country's component or dimension they averaged the indicators or components that were available. As noted in the UNICEF (2007) report, there were serious problems with missing data for Australia, Iceland, Japan, Luxembourg, Mexico, New Zealand, South Korea, and Turkey. The authors did calculate components and dimensions for Australia, Iceland, Japan, and New Zealand to be included in the OECD ranking where adequate data were available.

Table 19.3 presents the rankings for the six dimensions for the re-analyzed 25 OECD

Table 19.3 Ranking of 25 OECD countries on six dimensions

Country	Material Situation	Health and Safety	Education	Family and Peer Relationships	Subjective Wellbeing	Behaviors and Risks	*Average Ranking*
Netherlands	10	3	6	3	1	3	**4.3**
Sweden	1	1	5	15	7	1	**5.0**
Denmark	4	5	9	9	12	6	**7.5**
Finland	3	4	4	17	11	7	**7.7**
Spain	12	7	18	8	2	5	**8.7**
Switzerland	5	10	16	4	6	12	**8.8**
Norway	2	9	12	10	8	13	**9.0**
Italy	15	6	23	1	10	10	**10.8**
Belgium	7	19	1	5	16	19	**11.2**
Ireland	22	22	8	7	5	4	**11.3**
Germany	14	12	11	13	9	11	**11.7**
Canada	6	16	2	18	15	17	**12.3**
Czech Rep	11	11	10	19	17	9	**12.8**
Greece	17	21	19	11	3	8	**13.2**
Poland	24	18	3	14	20	2	**13.5**
France	9	8	21	12	18	14	**13.7**
Austria	8	23	22	16	4	16	**14.8**
Portugal	19	17	24	2	14	15	**15.2**
Hungary	23	20	15	6	13	18	**15.8**
United States	20	25	14	20	19	20	**19.7**
U. Kingdom	21	15	20	21	21	20	**19.7**
Countries with greater than 75% missing data							
Iceland	--	2	13	--	--	--	**7.5**
Australia	13	14	7	--	--	--	**11.3**
Japan	18	13	--	--	--	--	**15.5**
New Zealand	16	24	17	--	--	--	**19.0**

Note: Data are from Charts 4.1.7, 4.2.9, 4.3.9, 4.4.8, 4.5.8. 4.6.16 in Bradshaw et al. (2006). Average rankings were calculated by the authors.

countries as reported in Bradshaw et al. (2007a). Regarding the 4 added countries with excessive missing data (at the bottom of the table), Iceland appears to be ranked in the top third, while Australia and Japan are in the middle third, and New Zealand ranks in the bottom third with an average ranking near the U.S. and U.K.

EU Countries Bradshaw et al. (2007b) also developed a multi-dimensional child wellbeing index for the 25 European Union countries (EU25) because there were more indicators available for the European countries as compared with the OECD nations. In deciding which indicators to use and the ones that had to be discarded the researchers established a 70 % cut-off such that countries were included in the EU25 child wellbeing index if at least 70 % of the indicator data were available. Four countries had less than 70 % response rates overall (Cyprus, Luxembourg, Malta, and the Slovak Republic). Sensitivity analysis was used regarding the effect of their inclusion on the index position of the other countries. Two overall ordered rankings were calculated: one that included all 25 EU countries and another that only included the 21 EU countries with less than 30 % missing values.

The child wellbeing indicators came from European surveys of children and youth, including the Program for International Student Assessment (PISA), which measures educational achievement; Health Behavior in School-aged Children (HBSC); and European School Survey Project on Alcohol and other Drugs (ESPAD) and from administrative data regularly collected by international organizations such as UNICEF, World Bank and World Health Organization (WHO).

The proposed EU25 child wellbeing index was composed of 51 indicators, which were classified into 23 domains that were organized into eight clusters. The eight clusters (and their domains) were material situation (poverty, deprivation, jobless parents), child health (health at birth, immunizations, health behaviors), education (educational attainment, participation, youth labor market outcomes), housing and environment (overcrowding, local environment, housing problems), children's relationships (family structure, relationships with parents and peers), children's subjective wellbeing (self-defined health, personal wellbeing, wellbeing at school), risk and safety (mortality, risky behavior, experiences of violence), and civic participation (participation in civic activities, political interest) (Bradshaw et al. 2007b).

The EU25 child wellbeing index was considered a causal indicator model, in that the indicators *cause* the domain (or latent variable) (Bollen and Lennox 1991), and thus the indicator variables are each making *separate* contributions to a domain. Thus, there was no assumption that the indicators within a domain are strongly correlated with each other. In fact, if variables within a domain were found to be highly correlated only one variable was used to ensure a concept or measure was not multiplying the weight of that concept to be contained within the domain. Equal weighting was used in the calculation of the domains, clusters, and overall index for each EU country.

The methodology used to create the overall index was based on standardized (z) scores to have consistent measures of both rank order and range of dispersion across the measures. The 51 indicators were converted to z-scores and then the average z-score was calculated for each of the 23 domains. The domain z-scores were then averaged to compute a z-score for each of the eight clusters. The average of the 23 domain scores (rather than of the eight clusters) was used to create the overall child wellbeing index ranking for each country. Bradshaw and colleagues used domain scores to compute the overall ranking because the domains were considered to represent the "essence" of the concept of child wellbeing.

Table 19.4 presents a summary of the EU25 rankings by cluster and overall. As noted earlier, the overall rankings were calculated two ways. First, the overall ranking was calculated for all 25 European countries. The second column of overall rankings included only the countries that had at least 70 % response rates (N = 21). The

Table 19.4 Ranking of 25 EU countries on eight clusters: 2003

Country	Material Situation	Child Health	Education	Housing & Environment	Children's Relationships	Subjective Wellbeing	Risk and Safety	Civic Participation	RANKING: 21 EU Countries*
Netherlands	10	2	6	7	5	1	5	--	**1**
Sweden	2	1	2	3	15	6	3	14	**2**
Denmark	5	3	3	2	10	9	15	4	**3**
Finland	3	7	4	10	17	12	7	18	**4**
Spain	8	13	15	13	9	3	1	--	**4**
Slovenia	4	15	--	12	3	8	18	13	**6**
Belgium	18	20	1	5	6	15	16	5	**7**
Germany	12	10	9	8	12	7	12	10	**8**
Ireland	19	19	7	9	8	5	20	--	**9**
Austria	7	21	17	6	16	2	19	--	**10**
France	11	14	14	15	14	13	10	--	**11**
Italy	15	16	19	18	4	11	6	11	**12**
Poland	23	6	5	20	13	19	11	6	**13**
Greece	17	25	16	17	11	4	8	2	**14**
Portugal	13	9	18	22	2	16	17	7	**15**
Hungary	14	22	12	21	7	10	14	3	**16**
Czech Rep	9	4	10	16	22	14	21	17	**17**
UK	20	23	13	1	23	18	22	8	**18**
Latvia	16	18	8	24	18	21	23	12	**19**
Estonia	21	12	--	23	21	23	24	15	**20**
Lithuania	22	8	--	25	20	24	25	16	**21**
Countries with greater than 70% missing data									
Cyprus	1	5	--	14	--	--	2	1	**--**
Luxembourg	5	11	20	4	19	20	9	--	**--**
Malta	24	24	--	11	1	17	4	--	**--**
Slovak Rep.	25	17	11	19	--	22	13	9	**--**

Note: Data are from Figures 4, 8, 12, 16, 20, 24, 28, 29, 31 in Bradshaw et al. (2007b)

*Overall rankings are for countries with less than 30% missing data and are based on the average score of the 23 *domains*.

order of the overall rankings in this column is very similar to the overall rankings for the total 25 countries.

In viewing the overall child wellbeing ranking of the 21 countries in the last column, it is notable that the top four are the Nordic countries of the Netherlands, Sweden, Denmark, and Finland. Those countries that rank lowest on the overall child wellbeing index tend to be from the former Eastern bloc except for Slovenia, which ranked in the middle third. Also, when the average overall child wellbeing indices for all EU states are ordered from high to low, the trend indicated that there was a relationship between the child wellbeing ranking and wealth of the country. However, there were a few exceptions – Spain was in the top third, Slovenia was in the middle third, and the United Kingdom was in the bottom third (Bradshaw et al. 2007b).

As with previous cross-national studies, an examination of country scores across the eight clusters indicates that no one country consistently scored the same ranking for each cluster. For example, Belgium is ranked first in education, fifth in housing and environment and civic participation, and sixth in children's relationships; yet the country ranked poorly on child health (20), material situation (18), risk and safety (16), and subjective wellbeing (15). The United Kingdom was first in housing and environment and eighth in civic participation; however the rest of the clusters rank from 13 (education) to 23 (child health and children's relationships). The Nordic countries also had individual cluster rankings at 10 or higher. The first ranked Netherlands ranked 10th in material situation. Sweden, Denmark, and Finland ranked 15th, 10th, and 17th, respectively, on children's relationships. The Nordic countries also scored below 10 in subjective wellbeing (Finland), risk and safety (Denmark), and civic participation (Sweden and Finland). An examination of the lowest third of the ranked countries indicates that all of the countries, except Estonia, ranked above 10 in at least one cluster. Thus, the individual cluster scores show that even the countries ranking the lowest third in overall child wellbeing is each doing better in some of the individual clusters.

Bradshaw and Richardson (2009) conducted another study of child wellbeing in 27 EU countries plus Iceland and Norway. The results were similar to their study of the 25 EU countries with the Nordic countries (the Netherlands, Sweden, Finland, and Denmark) in the top third and the former Eastern bloc countries, except Slovenia, in the bottom third. Iceland and Norway were in the top third ranking third and fourth, respectively, between Sweden, ranked second, and Finland, ranked fifth (Bradshaw and Richardson 2009).

CEE/CIS Countries Richardson, Hoelscher, and Bradshaw (2008) expanded their global multidimensional study of child wellbeing by focusing on the Central and Eastern European (CEE) countries and the Commonwealth of Independent States (CIS) (N = 21). "The CEE/CIS region is very heterogeneous in terms of geography and natural resources, demographic structure, economic and political developments" (Richardson et al. 2008: 212). All the countries are experiencing social changes, particularly in demographic reforms and economic structures, so it is important to study the wellbeing of children amid such transitions. Richardson and colleagues note that in the past the monitoring of children and their lives was based on tracking Millennium Development Goal (MDG) indicators whose primary focus is on changes in developing countries. Such MDG indicators do contain information on the health and education of children, which represent some of the important domains of child wellbeing. As the CEE/CIS countries are in transition, it would be better to develop a more comprehensive picture of the wellbeing of children in this region.

As with other studies, data were drawn from survey and administrative sources. The criteria for the inclusion of indicators were replicated from their previous research. Many of the surveys used in the EU index (e.g., HBSC) were not conducted in the CEE/CIS countries. Instead, survey data gathered or supported by UNICEF, such as the Multiple Indicator Cluster Survey (MICS), and the Young Voices survey. UNICEF databases were also used for objective indicators associated with dimensions of child wellbeing. The authors identified

52 indicators that were summarized into 24 components that composed 7 dimensions. The seven dimensions were: material situation, housing and environment, health, education, person and social wellbeing, family forms and care, and risk and safety (Richardson et al. 2008). The indicators were standardized, using *z*-scores, and averaged to create the components. Then the components were standardized to create the dimensions. Equal weighting was used as there was no compelling framework to address weighting, plus the results from Hagerty and Land (2007) justify the use of equal weights. They used a 50 % threshold for the inclusion of data in the construction of the components and dimensions. To be included the components had to have at least 50 % of its indicators and for the comparison of dimensions the dimension had to have at least 50 % of its components.

Table 19.5 presents the CEE/CIS dimensions and overall ranking of child wellbeing. Croatia has the highest rank and Moldavia is the lowest. No country have all dimensions ranked in any one level, however the top and bottom ranked countries come close. Croatia ranks all the dimensions in the top third except for risk and safety. All of Moldavia's dimensions rank in the bottom third except for health, which ranks 2nd overall.

There is quite a bit of variation across countries in their rankings within the seven dimensions. For example, Azerbaijan was in the top third in risk and safety but ranked in the bottom third on housing and environment, health, education, personal and social wellbeing, and risk and safety.

Richardson et al. (2008) identify trends in the ranking of dimensions. Belarus, Bulgaria, and Russia rank high in dimensions associated with standard public services, such as material situation, child health, and education, and rank poorly on relationships and risk and safety. The opposite effect was evident for Bosnia Herzegovina, Uzbekistan, and Azerbaijan; countries that are in turmoil. For example, ethnic conflict and divisions in Bosnia Herzegovina have stalled the establishment of public services to support the diverse population, and thus, poverty rates are high and there are many displaced persons. The new EU members Romania and Bulgaria only rank in the middle and lower third, respectively, indicating that the children in these countries have yet to benefit from membership in the EU.

The authors conducted analyses to determine how influential a country's wealth, or GDP per capita, was associated with overall rankings of the CEE/CIS countries. They found wealth to only explain about a third of the variation in ranking of children in this multinational study.

Pacific Rim Countries Maggie Lau and Jonathan Bradshaw created multi-dimensional evaluations of children's wellbeing focusing on a new area, 13 countries in the Pacific Rim. The Pacific Rim is composed of countries that are at various levels of successful economic growth and development. A number of countries – Australia, Japan, New Zealand and the Asian newly developing economies of Singapore, Hong Kong, and South Korea – have the highest rankings on the global Human Development Index (HDI). Whereas Malaysia, Thailand, China, the Philippines, Indonesia, and Vietnam have HDI rankings in the high to medium categories from 66th to 116th in 2007 (Lau and Bradshaw 2010).

The first hurdle with which the authors had to contend was the difficulty in finding survey data that addressed subjective conditions of children, particularly in conjunction with the implicit and implicit rights and needs of children as enumerated in the CRC. UNICEF's Speaking Out survey was heavily used for appropriate indicators. In addition, data were drawn from the UNICEF MICS, the Progress in International Reading Literacy Study (PIRLS), the Trends in International Mathematics and Science Study (TIMSS), and the OECD Programme for International Student Assessment (PISA). Administrative sources from the World Bank, WHO, and UNICEF were also used. The result was 46 indicators that were summarized in 21 components that were organized into 6 domains: material situation, health, education, subjective wellbeing, living environment, and risk and safety. As with previous studies, the indicators and components were standardized using *z*-scores and were equally weighted. Lau

Table 19.5 Ranking of 21 CEE and the CIS countries on seven dimensions

Country	**Material Situation**	**Housing & Environment**	**Child Health**	**Education**	**Personal and Social Wellbeing**	**Family Forms and Care**	**Risk and Safety**	*Average Rank*
Croatia	1	1	1	4	1	7	9	**3.4**
Bosnia Herzegovina	9	3	13	--	2	1	1	**4.8**
FYR Macedonia	8	10	3	6	3	4	10	**6.3**
Serbia	5	6	9	11	7	3	5	**6.6**
Uzbekistan	14	2	6	--	13	8	2	**7.5**
Turkmenistan	--	9	15	--	4	6	4	**7.6**
Belarus	6	5	4	2	11	14	16	**8.3**
Montenegro	7	11	8	13	7	2	12	**8.6**
Bulgaria	2	7	14	5	16	12	18	**10.6**
Ukraine	4	13	7	8	9	19	14	**10.6**
Kazakhstan	15	12	10	1	12	17	11	**11.1**
Russia	3	15	5	3	17	16	20	**11.3**
Kyrgyzstan	16	17	11	18	5	9	6	**11.7**
Romania	10	19	16	7	14	5	13	**12.0**
Armenia	17	8	19	12	15	11	3	**12.1**
Georgia	18	4	17	15	6	18	17	**13.6**
Turkey	13	--	12	17	--	--	--	**14.0**
Azerbaijan	11	16	20	16	19	10	7	**14.1**
Albania	12	14	18	9	20	13	15	**14.4**
Tajikistan	19	18	21	10	10	15	8	**14.4**
Moldova	20	20	2	14	18	20	19	**16.1**

Note: Data are from Figure 32 in Richardson et al. (2008)

Table 19.6 Ranking of 13 Pacific Rim countries on seven domains

Country	Material Situation	Child Health	Education	Subjective Wellbeing	Living Environment	Risk and Safety	*Overall Rank*
Japan	1	3	2	12	1	5	**1**
Singapore	7	2	1	9	2	2	**2**
Taiwan	6	6	4	5	--	4	**3**
Hong Kong	8	1	6	11	5	1	**4**
New Zealand	5	8	5	8	4	10	**5**
China	12	7	--	1	7	3	**6**
Australia	4	5	7	7	8	9	**7**
Vietnam	3	11	10	2	10	7	**8**
Malaysia	11	10	8	6	6	6	**9**
South Korea	2	4	3	13	12	8	**10**
Thailand	9	9	9	10	3	11	**11**
Indonesia	10	12	11	4	11	12	**12**
Philippines	13	13	12	3	9	13	**13**

Note: Data are from Figure 7 and Table 2 in Lau and Bradshaw (2010)

and Bradshaw wanted to include as many countries as possible; however missing data was a big issue. Thus a country was included if its missing data did not exceed two-thirds of the available indicators.

The domain and overall rankings of child wellbeing in the Pacific Rim countries are presented in Table 19.6. Following the discussion by Lau and Bradshaw (2010) the top five rankings in each domain are white, the bottom five are dark grey, and the middle three are light grey. An examination of the table indicates that Japan, Singapore, Taiwan, Hong Kong, and New Zealand are the five top ranking countries in overall child wellbeing. New Zealand's relative ranking is much higher than that in Bradshaw et al. (2006) and Land et al. (2011) and may be due to the inclusion of components and dimensions with up to two-thirds missing data. Malaysia, South Korea, Thailand, Indonesia, and the Philippines constitute the bottom five countries.

As with the other multinational studies of multi-domain measures of child wellbeing, no Pacific Rim country is consistent in its ranking among the seven domains. Indonesia and the Philippines, at the bottom of the overall rankings, each score high for subjective wellbeing and Thailand ranks high for living environment. In this study, the wealthier countries were associated with higher scores ($R^2 = 0.54$), although there were some notable exceptions. Australia and South Korea rank lower than one might expect given their nations' wealth.

These multinational studies of multidimensional rankings of child wellbeing by Bradshaw and colleagues represent important first forays in assessing the wellbeing of children while attempting to address the intent of the Convention of the Right of the Child. However, the researchers have always listed important limitations that will hopefully be addressed in future data collection and cross-national studies of child wellbeing (Bradshaw et al. 2007a; Richardson et al. 2008; Bradshaw and Richardson 2009; Lau and Bradshaw 2010). The limitations include:

- Too focused on adolescents and health in the first year of life. Many ages in between may not be represented at all.
- All dimensions of child wellbeing are not covered (e.g., mental health and emotional wellbeing).
- The use of official administrative data and sample surveys tend to provide a broad picture of a country's children with little data on minority or other excluded children. In addition there are no official data on violence within the family, child prostitution, or children with disabilities.
- There is little dispersion within countries within the indicators because thresholds are used and estimates were based on the proportion of children below or above the established threshold. In some instances the researchers did not gain access to the raw data, particularly with the Health Behavior in School Aged Children Survey, in which they were provided with only aggregate data.
- Some of the data were quite old in regards to the reference year for a study. Many of the international surveys have long intervals between data collection (e.g., HBSC 4 years, PISA 3 years, Luxembourg study 5 years).
- There are obvious missing data on measures that should be included in the dimensions studied. They note that 'material situation' has no data on persistent poverty.
- The subjective indicators used in these studies are based on secondary analyses of existing surveys, some of which are heavily used for an analysis of a particular region, such as the Young Voices survey for the CEE/CIS study and the Speaking Out survey for the Pacific Rim study. In addition, some of the existing surveys were not specifically developed to study the multidimensional aspects of the wellbeing of children. Some international surveys focus on households or families per se and have little to no data on or from individual children.
- Missing data can also be a problem, particularly in multinational research if every country of interest was not included in an international survey. In addition, decisions had to be made regarding percent missing thresholds for inclusion/exclusion of components and dimensions.
- The authors made choices regarding which indicators to use and the construction and weighting of the components and dimensions. However, they ask for comments and offer their data files for reanalysis by other researchers.
- Finally, all of the analyses are cross-sectional. There are no trend data or analyses that could measure changing trends of child wellbeing over time. This is an important omission that needs to be addressed in future research efforts.

Research Efforts to Include Children in the Assessment of Child Wellbeing

As noted, the foregoing studies of overall child wellbeing at the national and cross-national levels have directed more focus on child-centered indicators as advanced by the CRC, the data

sources are sample surveys, administrative records, and information provided by international organizations, and thus the resultant child wellbeing indices are limited to the data that are available and most complete. Fortunately, there has been an increase in the number and types of surveys in which children and youth provide their own responses rather than having responses that are provided by only parents and teachers. However, as Bradshaw and his colleagues acknowledge, children are not included in *all* phases of the data collection and interpretation process. It would be rather difficult to elicit significant and meaningful involvement from children in the selection of indicators already collected, particularly for cross-national research. But, as Bradshaw et al. (2006) have indicated, the children's perspectives can also be represented in prior qualitative and quantitative research that elicits children's views and experiences.

Ben-Arieh (2005) has discussed possible roles of children in conjunction with child wellbeing research. (1) Children should be part of the initial design of studies to enhance the development of indicators and measures that are based on the experiences of all children, including those in disadvantaged groups. (2) Children should be used as sources of information to inform and stimulate child wellbeing research. In modern society, most adults spend much of their time away from their children and may not know the details of children's daily lives, regular activities, and their understanding and concerns about the world that surrounds them. (3) Older children can be part of the data collection process to be trained as interviewers to possibly get around methodological problems associated with unequal power relationships between adult interviewers and child respondents. (4) Children could be part of the data analysis to bring their subjective perspectives to the gathering and interpretation of information regarding child wellbeing indicators and domains or dimensions. The children's participation in the data analysis process could enhance the adult researchers' understanding of the data that have been collected. (5) The second core principle of the CRC emphasizes that "In all actions concerning children, whether undertaken by public or private social welfare institutions, courts of law, administrative authorities or legislative bodies, *the best interests of the child shall be a primary consideration*" (our emphasis, United Nations 1989: 3). Thus, Ben-Arieh argues that children should be partners in disseminating and utilizing data results, to add their voice to the political, legal, and administrative processes that directly affect their lives.

Part II of the CRC directs countries ("States Parties") that have ratified the Convention to "make the principles and provisions of the Convention widely known, by appropriate and active means, to adults and children alike" (United Nations 1989: 18). In addition, each country or state is required to establish a "Committee on the Rights of the Child" to implement the provisions stated within the CRC and to report efforts that are made to adopt the provisions therein.

There have been efforts in national and sub-nationalareas, particularly in Europe and OECD countries, to include children and youth in the research process to add their voices and concerns to the understanding of their wellbeing. A number of these efforts were associated with the development of diverse measures in order to create "State of the Child" reports that could be used to identify troubling inequalities and disparities, highlight positive areas, and develop policies to improve the lives of children and youth.

Ireland One such effort was in the Republic of Ireland. The National Children's Strategy was developed in 2000, and a key objective was to develop a national set of child wellbeing indicators that encompassed the many facets of children's lives to be used in a Nation's Children Report (Hanafin et al. 2007). The overarching perspective was to focus on the "whole child" acknowledging that children are active participants in their own lives and that the process of selecting indicators of overall child wellbeing must include and respect children's voices.

A four-step approach was used to develop the national set of child wellbeing indicators. First, there was a review of indicators, domains, and other measures that had been used in previous

research and reports on child wellbeing yielding over 2,500 indicators. The review also addressed the selection criteria for the identification of appropriate indicators. Second, national statistics and data sources were examined as possible sources for the development of indicators as identified in the first step. Then the indicators in the first step were classified as to whether or not the information could be obtained from such data sources. At that time, all the indicators were categorized into 56 main areas. Third, a panel composed of persons with expertise in areas of children's lives was used via the Delphi technique to gain consensus on broad areas of indicators to be used in the *National Children's Report for the Republic of Ireland*. The experts included service providers, researchers, policy makers, and parents. And fourth, concurrent with the rounds of the Delphi process, a study was conducted on children's understandings of wellbeing (Hanafin et al. 2007). The finalized set of indicators was composed of 42 child wellbeing indicators and 7 demographic indicators. The selected indicators were drawn from census and administrative data and European or international surveys of children, particularly adolescents.

A number of challenges occurred in the preparation of Ireland's first State of Nation's Children report that was released in 2006. The key challenges included issues related to the availability of data, inconsistency in the quality of data, problems with consistent international measures of demographic variables such as poverty, and challenges in the construction and organization of the report (Hanafin and Brooks 2009). Nonetheless, this project represents a step towards inclusion of multiple shareholders in the analysis of overall child wellbeing. In addition, a National Strategy on Children's Lives was formed to address the data availability of indicators to encompass the topics expressed by the children regarding their wellbeing.

New South Wales, Australia There has been widespread use of qualitative methods to engage children in defining and explaining their current concepts of "wellbeing." In New South Wales, Australia, Fattore et al. (2007, 2009) used a phenomenological/ethnographic approach to the study of positive wellbeing. Children ranging in age from 8 to 15 years were allowed to articulate their ideas regarding wellbeing. The researchers used multi-stage processes to understand children's and youths' conceptualizations of wellbeing and the dominant domains of wellbeing. This was accomplished through individual and group interviews and engaging in task-oriented projects including drawing, photography, collage, or keeping journals (Fattore et al. 2007, 2009).

Their findings indicated that children's ideas and dominant themes of wellbeing were defined through their feelings and were related to their relationships with family and peers, their sense of self, and the importance of safety and security. Many of the themes mentioned by children were similar to those in adult-developed studies; however, their focus was slightly different. For example, the children discussed material and economic resources in the sense of having what is needed to provide a decent standard of living for families and households. There also was a stronger emphasis by children on the overlapping areas of their emotional lives, a domain that has proven difficult to measure with quantitative indicators. Indeed, one of the issues associated with obtaining rich results from qualitative research is that it should be followed with the development of quantitative measures to capture a large group of children's perspectives regarding wellbeing and this often is difficult.

Advances continue to be made in child wellbeing research that is based on the principles of the CRC. An overview of more recent advancements and challenges in research with and by children was the focus of a special issue of *Child Indicators Research* (2011, Volume 4, #2).

Shifts in the Study and Monitoring of the "Status of the Child" and Child Wellbeing

Asher Ben-Arieh has tracked the changes or shifts in the worldwide monitoring and assessment of the status of the child and expansion of

child wellbeing research in the late twentieth and early twenty-firstcenturies (Ben-Arieh and Goerge 2001; Ben-Arieh 2006, 2012). He has recently documented nine major shifts in the field, which are expanded on below (Ben-Arieh 2012): (1) survival to beyond survival, (2) negative to positive indicators, (3) well becoming to wellbeing, (4) focus on children's rights, (5) traditional to new domains, (6) adult to child perspective, (7) geographic level of the report, (8) inclusion of indices, and (9) policy relevance (Ben-Arieh 2012).

Early social indicators on children were focused on children's physical health and threats to survival using objective measures such as infant mortality rates, school dropout rates, etc. The field shifted with the acknowledgement that child indicators should also focus on child development and wellbeing. With this shift from survival to wellbeing came the shift from negative to positive indicators. No longer could one assume the absence of a negative behavior or outcome indicates that the child is developing to his or her full potential.

The shift from well becoming to wellbeing was in part due to the recognition that childhood is not just a status in transition to *becoming* an adult. The sociology of childhood and the Convention for the Rights of the Child shifted focus to childhood as a separate stage of the life course, and thus research should shift to the child's current wellbeing in addition to well *becoming*. Accompanying the shift from child well-becomingto child wellbeing was the recognition through the Convention on the Rights of the Child that childhood is a separate status and that this status has its own rights, as discussed earlier.

The transition from traditional to new domains follows from the previous shifts and the increasingly interdisciplinary nature of the study of child indicators. New domains include more child-centered measures that include subjective wellbeing, happiness, and security. With the recognition of childhood as a separate status that has accompanying rights, the child has increasingly become the unit of analysis rather than the family or the perceptions or responses of adults about their children. The inclusion of children in all stages of the research process yields new areas to study and measure. In addition, there has been an increase in the sources of indicators calculated from administrative records, national and international data collection, and sample surveys of children and adolescents.

The increase of objective and subjective data across regions of the globe has led to studies of different geographical units including local, state or sub-national, national, and multinational levels. This chapter has directed focus on multinational studies of different countries and geographical regions. More recent geographical studies and the availability of increasing sources of data have led researchers to advance the development of indices to measure the multiple components of child wellbeing.

Finally, the reporting, analysis, and publication of child wellbeing research has begun to shift focus to the application and policy relevance of this work. In 2008, Ben-Arieh called for a more policy-oriented perspective in the study of child wellbeing. As an exercise, he critiqued the UNICEF Index of Child Wellbeing (UNICEF 2007) and the U.S. Child and Youth Wellbeing Index (Land et al. 2001, 2007) for their potential impact on policy (Ben-Arieh 2008b) although neither index was initially established to directly impact policy. He concluded his evaluation with five research questions in order to focus on policy relevance. (1) What are the most salient outcome measures? (2) Which indicators have the most impact on shaping policies? (3) How should indicators be packaged and marketed? (4) How can indicators be used to shape public opinion? (5) What are the most meaningful metrics for indicators? Ben-Arieh sees policy impact and relevance as becoming an increasingly important direction in child wellbeing research.

Child Wellbeing in the Developing World

A notable omission in this "worldwide view of child wellbeing" is research results from countries in Africa, Central and South America, and South and West Asia. There are international publications of objective indicators of the state of the child, such as UNICEF's *State of the World's Children* reports published annually since 1979 and their *The Progress of Nations* reports published since 1993. Other international organizations such as the World Bank also collect and publish objective indicators for countries of the world.

In 2000, the United Nations General Assembly adopted the Resolution of the United Nations Millennium Declaration that established the *Millennium Development Goals Project* (MDG) to monitor changes in the achievement of universal goal (United Nations 2000). This internationally accepted project is using 48 technical (objective) indicators to address 18 targets to fulfill 8 goals by the year 2015. The eight goals include: (1) eradicating extreme hunger and poverty, (2) achieve universal primary education, (3) promote gender equity and empower women, (4) reduce child mortality, (5) improve maternal health, (6) combat HIV/AIDS, malaria and other diseases, (7) ensure environmental sustainability, and (8) develop a global partnership for development. The objective data that are collected and monitored for this project include a number of child-based indicators for worldwide comparisons. There are a number of cross-national surveys that include information about children in a variety of nations. Examples include the UNICEF-sponsored Multiple Indicator Cluster Surveys to monitor the situation of women and children across the world; the Demographic and Health Surveys, which focus on women and also provide information on children's health and educational achievements; and the World Bank-sponsored Living Standard Measurement Surveys to collect household data to inform policy decisions. At this time there is a dearth of child or youth-based surveys and subjective indicators, which are needed to adequately assess the full dimensions of child wellbeing. Yet studies of child wellbeing indices need to be initiated using what indicators are available to begin the multinational cross-nationaland trend comparison studies.

Concluding Remarks

Child wellbeing studies have their roots in the social indicators movement that occurred in the last half of the twentieth century. In the twenty-firstcentury, there has been an explosion in the number of studies on the measurement and assessment of child wellbeing. Increasingly, there have been cross-sectional multinational multidimensional studies and rankings of child wellbeing, many of which have been guided by the Convention on the Rights of the Child. We have reviewed a number of these studies and there are more to be examined and compared. The results indicate that no country excels in all dimensions of child wellbeing, which can point to areas in need of greater focus on improving the life of the child. Economic, political, social, and cultural characteristics of a nation affect how well children are faring across multiple dimensions.

Jonathan Bradshaw and his colleagues have indicated many limitations in their current efforts to study child wellbeing across nations. There are additional limitations and perhaps difficult questions that remain to be addressed as this research grows and matures. For example, are subjective indicators comparable in meaning across nations with different cultures? The CRC directs countries to include children in articulating and analyzing their status, but at what age can they meaningfully participate? Who speaks on their behalf if younger children cannot understand abstract concepts or describe their subjective experiences?

As can be seen from this review, there is much work to be done to contribute to worldwide measurement and monitoring of child wellbeing. There is a great need to extend theory regarding

the conceptualization of child wellbeing, which unfortunately is beyond the scope of this entry. In addition, the availability of more reliable and more diverse indictors that are collected internationally is an important need. Also needed are sophisticated methodological techniques to evaluate the sensitivity of the inclusion or exclusion of indicators as well as the measurement and development of dimensions or domains and to evaluate the strength and weaknesses of possible weighting schemes.

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Global Perspective on Quality in Later Life

20

Fermina Rojo-Perez, Gloria Fernandez-Mayoralas, and Vicente Rodriguez-Rodriguez

The Ageing of the World: Current Figures and Prospective

Ageing is a demographic phenomena of great global importance, due both to the size of its figures and how fast it is occurring, and due to its countless social, economic and political implications at different levels.

According to United Nations figures (United Nations 2013), by 2010, the world's population aged 60 and over (the most widespread statutory retirement age) amounted to 765 million, this figure having been reached in a relatively short period of time, because in 1950 there were just over 200 million people of this age (Table 20.1). This rapid evolution has been more marked above all from 1970 among the so-called developing countries (fundamentally in the Asian region), where nearly 2/3 of this population lives at present. Most of these elderly people are women, with a worldwide ratio ranging from 84 men for every 100 women aged 60 and over to only 61 men aged 80 and over. This gender gap is more pronounced in the developed countries' figures, where for the same age groups there are only 75 and 52 men for every 100 women, respectively (United Nations 2012).

F. Rojo-Perez (✉) • G. Fernandez-Mayoralas
V. Rodriguez-Rodriguez
Spanish National Research Council, Centre for Human and Social Sciences, Institute of Economics, Geography and Demography, Madrid, Spain
e-mail: fermina.rojo@csic.es

However, demographic ageing must be assessed while taking into account the proportion of this population group with regard to other age groups. Accordingly, at present 1 in every 10 people in the world is aged 60 and over, and percentage figures have also evolved substantially from 1950 until today, particularly in the more developed countries, where their elderly population, into proportion to their total population, has doubled, the highest proportions being observed in the countries of the regions of Europe (22 %), North America (19 %) and Oceania (15 %). Furthermore, the developing countries in the Asian, Latin American and Caribbean regions are converging in the same trend towards a fast and sharp demographic ageing, with proportions of around 10 %, while only Africa currently has a relative figure of little more than 5 % of older adults.

Ageing and its worldwide distribution is the result of two fundamental factors, fertility and life expectancy. In developed countries, a situation marked by a trend of falling fertility and rising life expectancy has been visible for decades, while in developing countries, a rising life expectancy still coincides with a high level of fertility, and the gap between both groups of countries is almost 10 years in Life Expectancy at Birth (78 vs 68, respectively) and one point in the Total Fertility Rate (1.6 vs 2.6, respectively). As a result, 2050 projections (United Nations 2012) predict that 22 % of the world's population will be 60 or older on that date, a larger proportion of elderly people being seen in the more

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Table 20.1 Ageing in the world: figures and living conditions

		World	More developed regions	Less developed regions
Population 60+ (number in thousands)	1950	201,775	93,822	107,953
	1970	305,699	146,745	158,954
	1990	490,269	202,922	287,348
	2010	764,852	270,791	494,061
	2050	2,031,337	418,326	1,613,011
Projection % (2050): mid-range estimate	60+/Total population	22	32	20
	80+/60+	20	29	17
Sex ratio men *100 women	60+	84	75	89
	80+	61	52	71
Life expectancy at 60 (years)	Men	18	21	18
	Women	22	25	20
% living independently 60+	Men	40	75	28
	Women	39	73	25
% in labor force 60+	Men	42	26	50
	Women	20	15	22
Non-communicable diseases death rate (2008) * 100,000	Men	705	563	734
	Women	520	340	561
Total dependency ratio	0–14 & 65+/15–64 *100	52.2	48.1	53.2
Old-dependency ratio	65+/15–64 *100	11.7	23.8	8.9
Potential support ratio	15–64/65+ *100	8.6	4.2	11.2
Gross national income PPP ($)		10,760	33,460	5,900

Sources referenced in the text (Made by authors)

developed countries, which will have one third of their population in this age group. Meanwhile, countries in the less developed regions will start a period of fast demographic ageing, accounting for a quarter of the population in Asia, Latin America and the Caribbean, and even Africa's proportion of elderly population will see its current figures double (5–10.4 %). This situation will be accompanied by over ageing or 'ageing of ageing', such that 1 in every 5 people aged 60 and over in the world will be 80 or older in 2050, and the proportion of this subgroup of elderly people will exceed 9 % in all the more developed countries, approaching 4 % in the less developed ones.

A direct result of this demographic structure can be drawn from the Total and Old Age Dependency Ratio and Potential Support Ratio figures for 2010 (United Nations 2013). On a worldwide scale, the Total Dependency Ratio (ratio of population 0–14 and 65+ per 100 population 15–64) exceeds 50 % and is even higher among the less developed countries, particularly in Africa with more than 80 %, attributable above all to the size of its younger population. The demographic ageing is best reflected by the Old Age Dependency Ratio (ratio of population 65+ per 100 population 15–64), a useful indicator of trends in potential support needs, which shows that in the more developed countries, fundamentally of Europe (24 %) and North America (20 %), the world average of nearly 12 people aged 65 and over for every 100 people aged between 15 and 64 is almost double, while in the less developed countries it barely exceeds 10 % in Asia or Latin America and the Caribbean and is little more than 6 % in Africa.

If one considers that only one third of the countries, in general in the more developed regions, have comprehensive social security system plans, the majority of which only cover

people who have a job in the structured economy, then less than half of the world's economically active population would be entitled to that protection (UNFPA and HelpAge International 2012). Accordingly, the dependency ratio situation would be especially critical in the less developed regions, which would explain why, in these regions, 50 % of men and 22 % of women stay on the job market after turning 60 years old, as opposed to 26 % and 15 % respectively in the more developed countries (United Nations 2012). Complementarily, in these latter countries one also observes a smaller Potential Support Ratio (ratio of population 15–64 per 100 population 65+), that indicates how many potential workers there are per older person. By way of example, one would only find between 4 and 5 potential workers in Europe or North America, respectively, as compared to 10 in Asia or Latin America and the Caribbean or 16 in Africa. As a result, in the developed countries more and more questions are being asked about ways of maintaining pensions systems in the future and, accordingly, the statutory retirement age tends to be higher than in the less developed countries and with a tendency to increase it.

The Old Age Dependency Ratio does not express that all the elderly people in a population depend necessarily on other younger people. However, disability estimates from the Global Burden of Disease study for 2004 show that more than 45 % of the people aged 60 and over, without gender differences, have a moderate or serious disability (World Health Organization 2011). Once more, a more critical situation is observed between people who live in low-income countries, with a prevalence of between 7 and 12 percentage points more than among the older adult population in high-income countries.

Moreover, to the disability and dependency figures one must add the figures about other living conditions related to the population's health, like those that have to do with non-communicable diseases (NCD), such as cardiovascular diseases, cancers, diabetes, and chronic lung diseases, that are now the leading causes of death in all regions in the world. Contrary to popular perception, the NCD death rate in 2008 was higher in less developed countries than in more developed countries, with different results by gender, figures between 734 deaths for every 100,000 men and 561 for every 100,000 women, in the former, and 563 and 340, respectively, in the latter (Population Reference Bureau 2012). Although differences exist between mortality rates in more and less developed regions, and particularly also for causes ties to chronic diseases that are normally more prevalent among the older adult population, the fact is that life expectancy at 60 does not differ much from one region to another, even though in all cases it is higher among women, with a gap of 2–4 years always in their favour vis-à-vis men. This would also explain the difference between the sizes of the female and male populations. Consequently, the world average of life expectancy at 60 is 18 more years for men and 22 for women, with 16 and 18 years, respectively, for men and women in Africa, as the region with the lowest figures.

One way to assess whether the family network is available to provide support and care is to consider the living arrangements at older ages and particularly what is referred to as living independently, i.e., either living alone or only with one's spouse. This is the dominant living arrangement in developed countries, with 3 out of every 4 men and women aged with 60 and over living this way. However, this is rare among older persons in the less developed countries, with only 28 % of men and 25 % of women living alone or only with one's spouse, and the proportion is even smaller in Africa (United Nations 2012). Older men are more likely to be married than older women (81 % of older men compared to only 50 % of older women) and sex differences in the proportion married are largest in least developed countries (85 % for men compared to 38 % for women). Furthermore, women are more likely to outlive their spouses because they live longer and are, on average, younger than their husbands, such that older women are more likely to be widowed and living alone (United Nations 2012). Throughout the world, most of the care given to the disabled population

is provided by the family and social network. This so-called informal care is not always available nor is it appropriate, while the provision of formal services is insufficient in many places, in particular in the low-income countries (World Health Organization 2011). Within the family network, care tends to be provided by women of all ages, yet with a significant proportion of elderly women who look after husbands, children and grandchildren (World Health Organization 2011).

Other differences between the world's regions that affect the population's living conditions are also seen in the economic context. According to figures from the Population Reference Bureau (2012), the Gross National Income per capita at purchasing power parity (GNIPPP) in 2010 was US$10,760 and 5 times higher in the more developed countries than in less developed regions (US$33,460 and US$5,900, respectively) with an even larger gap if one compares Africa, with US$2,630, and North America, with US$46,400. In the ageing context, investments in pensions systems are regarded as one of the most important means of ensuring financial independence and reducing poverty in old age, in addition to constituting, in times of economic crisis, a main input in many younger population's households; while the challenge in the less developed countries is still the very development and coverage of social security and health systems (UNFPA and HelpAge International 2012).

The falling fertility and rising life expectancy trends are unlikely to change, so population ageing is now an irreversible phenomenon on a worldwide scale and, according to the general data available, a demographical success especially in the most advanced societies. Even though this entails major challenges in the quality of life field, also and particularly for countries in the less developed regions.

The Importance of Quality of Life in an Ageing Society

The longevity revolution has been underway for over a century in the developed countries, this being a consequence of the amazing social development, rather than of biological evolution (Butler 1994). This has kept pace with progress in other technological, socio-economic and public health fields. On another note, as has been seen, developing countries are ageing very rapidly, but at different timing in relation to wealth generation (World Health Organization 2002), so much so that this process will have a very heavy impact on the social and economic fields of these countries.

It is only recent that policy makers and planners have begun being concerned with this ageing phenomenon (Phellas 2013), and especially with 'ageing of ageing', in other words, with the rising population aged 80 years or older, more prone to frailty, this being broadly understood as a 'syndrome of loss of reserves' in different life dimensions (health, functioning, cognition, socio-economic conditions, social networks) that increase vulnerability (Malaguarnera et al. 2013) and, consequently, the demand for assistance and care services.

In the scientific realm, as a source of knowledge to provide accurate information to society, ageing research is interesting for the purposes of integrating all disciplines around this process (biology of ageing, health, social and behavioural aspects) to improve the quality of life as one ages (Butler 1994). The study of living conditions and quality of life at old age is relatively recent and growing, inasmuch as not only is it positive to live 'more' but also 'better' and without frailty so as to face up to and prolong the expectations of a good life as one ages.

Increased frailty conditions in the elderly population entails a growing demand for several kinds of needs (personal, health and social services, financial resources, the physical environment, etc.) that, when met, help to face the consequences of ageing. The positive balance between the population's demands and expectations in their ageing process, on the one hand, and personal perception of the level of satisfaction with them, on the other, is what underlies a good quality of life for individuals. Contrarily, when that balance is negative, this is too. In this context, ageing and quality of life are a social and political challenge, but also for individuals, as society has to provide the

resources for ageing well and individuals are ultimately responsible for this.

The rising numbers of the elderly population, its causes and implications are of interest in ageing research insofar as how one ages in good conditions often acts as a cause and at other times as a result of wellbeing and quality of life. Lying behind this scientific interest is social policy designers' and managers' concern with the consequences of ageing in different areas, especially about spending on social security and pensions systems and socio-sanitary services (Bowling 2005; OECD 1998; Walker and Mollenkopf 2007). In this respect, maintaining or improving the population's quality of life as it ages is of extraordinary interest to ensure that older adults remain independent and in their usual residential environment as long as possible (Rojo-Pérez et al. 2007). This would help to ease the burden on the public social services system, but also on the family and the individuals themselves by becoming a resource for society, family and the economy.

Knowing and measuring the quality of later life is useful for assessing the need for social policies but also for assessing the results of these policy interventions. Therefore, its study and analysis is justified by the evidence that quality of life is a desirable goal for people and countries alike, as it produces beneficial results that feed one another or interact. Back in the 1980s, George and Bearon (1980) noted that quality of life is an important issue in both social science theory and social policy, and underpins the interests of basic research, applied research and the population's social support services. So the question is to know what quality of life is and how individuals perceive and rate it according to their circumstances, to design action policies that help to maintain or improve the quality of life as one ages.

In short, the increased general life expectancy and good health is a positive feature associated with the last century, especially in Western societies. Yet the rising amount of very old people will inevitably lead to the incidence of various factors associated with frailty in ageing, especially those related to the decline in health and functioning and other social conditions (Grewal et al. 2006), that must be answered from various sectors (community, family and individual) to minimise the consequences. Hence the great interest of research into ageing and quality of life to provide information to social policy designers and managers and to individuals to face up to these facts.

Quality of Life Theoretical Issues: Concept, Definitions, Components and Objective-Subjective Approaches

The relatively recent interest in the subject of quality of life, and specially regarding the elderly population, could explain why the conceptualisation of this term is not uniformly accepted among scholars. Indeed, one can find as many conceptual approaches as researchers, and that also depends on subject areas and study objectives. It has even been claimed that there may be as many definitions of quality of life as people (Hoe et al. 2011).

In a brief summary of the **conceptual evolution**, although attempts have been made to see analogies between the term "quality of life" and the notion of "the good life" expressed by Aristotle (Fayers and Machin 2007), the emergence of the term "quality of life" only dates back to the 1950s and 1960s to refer to the problems of the deteriorating living environment ensuing from the industrialisation process (Katz and Gurland 1991). It is only later that this term attracts the interest of professionals and scientists from both medical science, because they believed that health was the domain responsible for quality of life, and economists, for whom the material wealth indicator was the primary criterion for measuring social progress (Noll 2002). As this very same author noted, the term "quality of life" emerged in the late 1960s as a non-material alternative to the era's terminology, dominated by society's material growth and wealth. Further details of the historic-conceptual evolution of this term can be seen in other publications (Fayers and Machin 2007; Noll 2002; Walker and Van der Maesen 2004).

In the scientific realm, the **use of the term "quality of life"** has been explored by various authors through systematic reviews and by searching in various bibliographical databases. For instance, (Lawton 1991) confirmed that the number of references to "quality of life" rose considerably between 1985 and 1988. Analysing a broader time period, an exponential increase has been observed in the scientific use of the term "quality of life" (Fernández-Ballesteros 2011), especially in medical databases (Martínez Martín and Frades Payo 2006) and, to a much lesser extent, in social science and psychological databases. In the same vein, other authors have noted the development of quality of life measuring instruments (Netuveli and Blane 2008), to a very large extent in the health domain (Fernández-Mayoralas and Rojo Pérez 2005), and either as generic or specific instruments (Fayers and Machin 2007).

However, despite having a growing scientific use and being a highly topical term, **few studies define** the concept of quality of life and, consequently, address research based on that definition. For instance, in a recent review of the literature on quality of life in the elderly population, Halvorsrud and Kalfoss (2007) found that 87 % of the references analysed lacked any conceptual framework, just over half did not report on the methodological considerations and one third did not express a formal definition of quality of life. This might explain why the term has evolved relatively little conceptually and the fact that its meaning is not uniformly accepted. Most experts steer their conceptual approaches towards their own disciplinary fields (Bowling 2013; Fernández-Ballesteros 2011; Walker and Lowenstein 2009) and the elements deemed most important in each discipline. In this state of uncertainty, quality of life does not suffice as an indicator for tackling the design and planning of social policies.

The most recent literature reviews on quality of life among older adults not only note the absence of an agreed definition of quality of life, but also on **how to measure it** (Bowling 2005, 2007; Fernández-Ballesteros 2011; Halvorsrud and Kalfoss 2007; Hoe et al. 2011; Kelley-Gillespie 2009; Netuveli and Blane 2008). However, there is a general agreement to consider that, as a concept, quality of life is rather amorphous, hard to measure, multidimensional, multifaceted, and one that affects diverse life domains observed from different contexts (Walker and Lowenstein 2009) and that can interact (Lawton 1991).

One **influential definition** was established by Lawton (Lawton 1991), who describes quality of life as "the multidimensional evaluation, by both intrapersonal and social-normative criteria, of the person-environment system of an individual in time past, current and anticipated". This is a broad definition of quality of life that takes into consideration objective and subjective dimensions that can report on quality of life facets; it is an intrapersonal valuation insofar as quality of life aspects can be measured by people in different directions (positive vs negative, good vs. bad) according to intrapersonal standards; the social-normative aspects of quality of life are related to objective facets of life that can be measured; the person-environment system alludes to the possible interaction of the elements of the person-environment duo; the time perspective is related to the dynamic nature of the person / environment system insofar as past events can influence the present and the future, and because the population's circumstances may change over time. This broad conceptualisation connects with other postulates that recommend the need for a longitudinal approach to measure the dynamic characteristics of ageing's effects on quality of life (Bowling 2007; Hickey et al. 1999; Martínez Martín and Frades Payo 2006).

Another conceptualisation that is also important in quality of life research stems from **the WHOQOL Group** (The WHOQOL Group 1995), which defines it as "the individual's perception of their position in life in the context of the culture and value systems in which they live, and in relation to their goals, expectations, standards, and concerns". It is a broad-ranging concept that incorporates the person's physical health, psychological state, level of independence, social relations, individual beliefs and their relations with their environment. And under this meaning,

it emphasises the subjective and multifaceted dimension of quality of life in several domains (physical, psychological, level of independence, social relationships, environment and spirituality/religion/personal beliefs) and subdomains including the positive and negative perceptions of them.

A complementary perspective may be found in the definition given by Cummins (Cummins 1998), for whom quality of life is "a universal construct both objectively and subjectively defined, where the objective domains would include culturally relevant measures of objective wellbeing, and the subjective domains would include satisfaction with different dimensions weighted by their importance to the individual".

The definitions mention numerous **components or aspects of life** that might affect the measurement of its quality. Netuveli and Blane (2008) present a taxonomic synthesis of quality of life models based on the dual consideration of objective and subjective dimensions and diversity of domains (health, psychological, social) and measuring instruments (general and specific).

In a systematic review of the literature on quality of life components in elderly population, Brown et al. (2004) found the following: family relationships, relationships/contact with others, emotional wellbeing, religion/spirituality, independence/mobility/autonomy, social/leisure activities and community, finances/standard of living, own health, health of others. These same authors concluded that, independently of the type of residence, sample size and methods used, the results are consistent.

More recently, Fernández-Ballesteros (Fernández-Ballesteros 2011) has established a classification of the multidimensionality of quality of life components in old age according to different contexts (individual/microlevel context vs. population/macrolevel context) and approaches (objective conditions vs. subjective perception). The objective perspective refers to personal or environmental characteristics independent of human perception, including demographic, physical environment and residential aspects, economic, social, health and functioning factors, with the result that most of the objective components, be it at the macro or micro level, are similar but measured at different levels (Fernández-Ballesteros 2011). For its part, the subjective perspective relates to how individuals assess their circumstances or life domains (micro level), and to the conditions and stereotypes attributed to a population context (macro level).

The **subjective perspective** of quality of life **is operationalised** in different ways, using a wide variety of indicators, often with meanings that hardly differ from one another, such as wellbeing, subjective quality of life, subjective wellbeing, happiness, life satisfaction, personal fulfillment, moral, affection, self-esteem, control, autonomy, expectations, aspirations, perceived physical and mental health, perception of social network and support, etc., all of which are names derived largely from different types of models (psychological, philosophical, human need satisfaction, health and performance, physical and environmental, etc.).

Just like the term "quality of life", **wellbeing** is also relatively hard to define and measure. Like other general and omnicomprehensive concepts, it serves to refer to a person's condition characterised by good health, happiness, prosperity, satisfaction with life, . . . in short, all positive components. In essence, a subjective wellbeing (Diener and Lucas 1999; Ryan and Deci 2001) that is multidimensional in nature (Demakakos et al. 2010). Beyond a grammatical definition, more characteristic of dictionaries, wellbeing analysis is widely used in the scientific world, yet it is not easy to approach, nor is there an accepted way of measuring it, nor even have boundaries been defined to keep it separate from other concepts such as quality of life. Ever since the 1970s, there has been concern about its conceptualisation, measurement and differentiating between its multiple types (Levy and Guttman 1975). In recent years, many disciplines have approached this concept, each with its own set of meanings and methodology (Chavez et al. 2005; McGillivray 2007; White 2010). However, to mention a few examples, certain authors have opted for some of its basic dimensions, such as the personal one, from psychology (Linley and Joseph 2004; Ryff 1995), from geography, especially related to health geography (Fernández-Mayoralas et al. 2007;

Fleuret and Atkinson 2007), or the relational dimension such as sociology – social inequality, participation, support, . . . – (Veenhoven 2008), or the material dimension, within the domain of economics, where it interacts with other material aspects (Gasper 2004; Stiglitz et al. 2009).

On the other hand, the concept of wellbeing has not been free of critical approaches, some connected to its compartmentalisation in dimensions according to various disciplinary interests (Chavez et al. 2005), others to its role in the structuring of developed societies as a 'collateral victim of late modernity' (Carlisle et al. 2009); and yet others related to its cultural entrenchment in social environments (White et al. 2012) and developing political societies (Deneulin and McGregor 2009).

Based on the review of the literature to understand the relationship between the concepts used in quality of life and subjective wellbeing, Camfield and Skevington (2008) point out that the subjective perspective of quality of life has pushed aside the objective perspective; and suggest that Subjective Wellbeing (SWB) and subjective QoL are virtually synonyms.

In any case, whatever the study perspective, the analyses are based on designs made by experts or professionals from the disciplines under which the research is broached. In these circumstances, the population's opinions are not usually taken into account, insofar as the measuring instruments generally used are designed from the expert's perspective and their study objectives. On the other hand, some authors acknowledge that the population has an intuitive idea of what the term "quality of life" means and can give its opinion even if it does not know the meaning (Bowling 2007; Fayers and Machin 2007; Fernández-Mayoralas et al. 2011; Netuveli and Blane 2008). In this regard, a more recent trend is to address **methodologies that take account of individuals' opinions** using broadly-designed tools based on open questions about subjective quality of life indicators. This approach prevents the risk of a person's quality of life or wellbeing being judged by others, avoiding "diminishing empowering people" in evaluating their own wellbeing (Rojas 2011).

The next two relevant studies mentioned have been performed with this methodology. One was conducted among older adults in Spain (Fernández-Mayoralas et al. 2011) and used an ideographic instrument like the SEIQoL-DW (Browne et al. 1997), based on the phenomenological perspective and individual assessment. With this instrument, individuals are asked to mention the five most important areas of their life, rate their level of satisfaction or functioning in each of those areas, and their relative satisfaction. The results of this research showed that, of among nineteen nominated, the five most important areas in the elderly's quality of life were health, family network, financial situation, social network and leisure and free time. Of these, the best rated in satisfaction or functioning terms was the family, but other areas not nominated as often, like religion / spirituality and residential environment reached a high level of satisfaction.

Another type of research was conducted in Great Britain (Bowling et al. 2003; Bowling and Gabriel 2004; Bowling 2005, 2007) to ascertain how older people themselves perceive and define a good quality of life. A dual methodological approach was used. Based on a semi-structured questionnaire, open-ended questions were asked at the beginning of the survey to elicit the individuals descriptions of both good and bad quality of life, their prioritisation of these descriptions and the way as their quality of life can be improved. The themes and sub-themes obtained by this method were subsequently validated through qualitative methodology using in-depth interviews of a subsample of respondents. The results of both methods showed that the themes mentioned most often were social relationships, social roles and activities, other leisure pursuits and activities enjoyed alone, health, psychological outlook and wellbeing, home and neighbourhood, financial circumstances, and independence. A comparison of the dimensions obtained in this research with those analysed using several instruments for measuring overall or domain-specific quality of life in the population concluded that many of the dimensions are absent from these instruments (Bowling 2007, p. 21).

The controversy about quality of life definitions and the appropriate terminology for addressing this construct, but also the large number of issues in quality of life research from various disciplines, from health and functioning, epidemiology, psychology, economics, sociology and so on, has led to a wide variety of **measuring instruments and scales** being devised to respond to the research questions. No scale provides a comprehensive view of people's life nor is it relevant for everyone (Hoe et al. 2011).

In general, there are many measures of quality of life and wellbeing, that are either general or refer to specific or multiple domains. Similarly, there are several information-collection methods that can range from the self-reporting type to simple indicators, composite measures and direct observation. Studying quality of life and wellbeing is even more complex in the case of specific groups of people with some kind of disease that makes it harder for them to express how they conceive and rate these constructs. Thus, in the case of people with cognitive impairment or people with dementia, particularly in severe stages, the proxy method of information can be valid for ascertaining the population's quality of life and wellbeing (Blesa González 2006).

The dominant quality of life instruments include those connected with the discipline of physical and mental health and functioning, insofar as quality of life research has been traditional in these disciplines and also because, as discussed in other works, very often the approach taken is a reductionist perspective of quality of life (Fernández-Ballesteros 2011) limited to health issues. In line with the larger amount of research into health-related quality of life, many of the collections of quality of life instruments are so in the context of the discipline. In this respect, Fayers and Machin (2007), in a book that provides a comprehensive analysis and assessment of the measurement of quality of life and use of statistical techniques, compile a list of generic measurement tools (or general-use tools covering a wide range of health conditions), disease-specific instruments (intended to detect the consequences of specific diseases in quality of life) and instruments for specific quality of life aspects. In a major compendium of quality of life consumer-related measures, Sirgy (2001) establishes a classification of instruments according to the analysis scale (individual, family, regional, nationwide), indicators used (objective, subjective, both), and the overall or domain-specific approach of the measure.

In this sense, many quality of life measures for the general population have been used as well to analyse the quality of life of specific groups, such as the elderly population, so a suitable measure must be selected in order to address the study objective. One section of the Sirgy's book (2001) is given over to the elderly population, insofar as it is a growing group and, consequently, may represent consumer potential because the new-age elderly are better off financially, have fewer health problems and are more satisfied with their lives. Hoe et al. (2011) conduct a review of measures of quality of life in old age but oriented to quality of life related to health. There are no comprehensive compilations about the elderly population and from other non-Health Science disciplines, although the studies of Steward and King (1994), and the more recent reviews of Bowling (2007), Brown et al. (2004) and Fernández-Ballesteros (2011) may be very helpful. Later on, this chapter lists a series of quality of life and wellbeing indicators used in longitudinal studies.

Another topic of interest in quality of life studies refers to its measurement in a given period (**cross-sectional measurement**), which is useful for comparing living conditions in connection with other variables at the same time. This type of data also enables one to make comparisons of two or more independent cross-sectional studies from different times and samples; however, the direction of the associations between the outcome variable and possible influential factors cannot be ascertained. These are the kind of studies usually conducted, largely due to the availability of this type of data and the fact that it costs less to obtain them. However, the ageing process per se means that the population's characteristics are always changing, and it is very interesting to know what these changes are, detect if they are

prompted by new circumstances, what these are and their impact on quality of life, and what attitudes the population takes throughout their life cycle. If one considers that quality of life at older ages "is the outcome of the interactive combination of life course factors and immediate situational ones" (Walker and Lowenstein 2009, p. 63), then the **longitudinal studies** would allow this approach and consequently provide information on the cause-effect relations to determine the changing situation of quality of life during the ageing process. This type of analysis has a relatively recent tradition in elderly population. An extensive review of scientific literature on longitudinal studies, either on the elderly population, or on elderly adults, may be seen in Seematter-Bagnoud and Santos-Eggimann (2006).

Measuring Concepts from a Longitudinal Perspective

International research widely recognises the difficulties involved in operationalising concepts such as wellbeing and quality of life, as has been seen. There is no consensus about the concept that has to be translated into measures (Bowling 2009), or about the most suitable types of measures, the simplest vs. the most complex (Bowling et al. 2013), the objective vs. the subjective vs. the general (Chen et al. 2013), or about the factors and dimensions that should be associated (Newton 2007). Even the most established, and largely harmonised international longitudinal studies, have failed to establish uniform measuring instruments (Hauser and Weir 2010).

A review of the elderly population longitudinal studies that are significantly harmonised, and referring to the US Health and Retirement Study from the National Institute on Aging (Table 20.2), have shed light on two important facts: first of all, wellbeing and quality of life indicators are proposed and present in all the studies evaluated yet, secondly, they are not done so homogeneously, although some of them predominate over other more specific instruments that measure emotional distress, positive and negative emotions, the psychological wellbeing or the use of time.

Outside the scope of longitudinal studies, measuring instruments are even more heterogeneous and diverse, attached to specific and particular research strategies, as mentioned above, that depend heavily on data that can be accessed but not always compared with contexts other than those of the research itself, and that pay little attention to harmonisation with general studies, largely longitudinal in nature. Precisely the latter are held in higher regard because they are based on prior knowledge of people's reality in their ageing process, and they address research holistically (multiple dimensions and factors that affect the population), putting the focus on individuals' life course in their living environments.

For instance, to judge the practical importance of these measuring instruments in international literature on wellbeing and quality of life in the elderly population, we have selected those that share certain essential traits, namely: having a more general application in longitudinal studies, being supported theoretically in the individual context of wellbeing and quality of life from a holistic approach, and considering several joint parameters of people's behaviour to form a global index, rather than just assessing some aspects of life satisfaction. In this respect, the CASP instrument seems to be the most adequate and widely used. There are two essential versions of this instrument, CASP-19 and CASP-12. The first is an index formed by 19 questions asked in a positive and negative sense and structured in four fundamental domains, 'Control', 'Autonomy', 'Self-realisation' and 'Pleasure', whose initials are used to form the instrument's name. Each item is assessed on a four-point Likert scale (rated 'this applies to me: often, sometimes, not often, never'). The resulting scale scores are summed to form an index that ranges between 0 and 57 (Blane et al. 2008; Howel 2012; Zaninotto et al. 2009), with the highest reporting a higher perceived quality of life in the 4 domains, and vice versa. While control and autonomy document individual capabilities (interaction with the environment and freedom of action), the other domains reflect a personal construction effort (Netuveli et al. 2007; Sim et al. 2011).

Table 20.2 Longitudinal ageing studies around the world

Longitudinal study	Wellbeing – life satisfaction – quality of life
Chinese Health, Ageing and Retirement Longitudinal Study (CHARLS)	Single item life satisfaction
English Longitudinal Study of Ageing (ELSA)	Diener's 5-item life satisfaction questionnaire; satisfaction with job, satisfaction/perceptions of aging, quality of life scale (CASP 19/12)
Brazil Study Description (ELSI)	Diener's 5-item life satisfaction questionnaire; satisfaction with job, satisfaction/perceptions of aging, quality of life scale (CASP 19/12)
Health, Aging, and Retirement in Thailand (HART)	Domain-specific satisfaction (physical health, economic status, relationship with spouse, relationship with children, and over-all life satisfaction), quality of life scale: not included in the pilot, but considered for the national baseline
Health and Retirement Study (HRS)	Single item life satisfaction, Diener's 5-item life satisfaction questionnaire
Indonesia Family Life Survey (IFLS)	Diener's 5-item, single item (Campbell), domain-specific satisfaction (job, financial, health care, etc.): life satisfaction and domain satisfaction (income, health) added in IFLS Wave 3
Japanese Study of Aging and Retirement (JSTAR)	Domain-specific satisfaction (job, family relationship, friendship) questionnaire, quality of life scale (CASP-19)
Korean Longitudinal Study of Ageing (KLoSA)	Domain-specific satisfaction (health, financial, spouse, family relationship), quality of life scale (CASP-19)
Longitudinal Aging Study in India (LASI)	Diener's 5-item life satisfaction and domain-specific satisfaction (job, financial, family relationship) questionnaire, quality of life scale (CASP-19): not included in the pilot, but considered for the baseline
Mexican Health and Aging Study	A life satisfaction questionnaire was included in 2003
Survey of Health, Ageing and Retirement in Europe (SHARE)	LOT-R (Life Orientation Test: pessimism/optimism), quality of life scale (CASP-12)
Irish Longitudinal Study on Ageing (TILDA)	Diener's 5-item, single item (Campbell), domain-specific satisfaction (job, financial, health care, etc.), quality of life scale (CASP-19)

Rand Survey Metadata Repository (2011) (Made by authors)

This instrument's design is based on theoretical approaches associated with satisfying individual needs in the social environment (Bowling 2009), but not in the medical or biological sphere (Higgs et al. 2003; Blane et al. 2007; Sim et al. 2011), and is intended to be applied to adults and elderly people overcoming negative stereotypes often applied to this life stage (Jenkins and Mostafa 2013). Precisely this is a period in which 'there is room for reflection and pleasure' (CEDEFOP 2012) or the relaxation of family ties (Howel 2012). Even so, this instrument is evidently linked to other dimensions of the individual, like health and physical functioning (Breeze and Stafford 2010) or economic resources and social networks (Wiggins et al. 2004). Although in more complex analyses, each of the four domains can be used separately, they are worth less than when used together, with a large degree of internal consistency and other psychometric properties (Blane et al. 2004; Wiggins et al. 2008; Zaninotto et al. 2009; Sim et al. 2011).

The second, CASP-12, is an abbreviated instrument with only 12 questions, 3 in each domain, which has also been validated psychometrically, statistically well-related with CASP-19 and therefore recommended for application in subjective wellbeing and quality of life studies (Wiggins et al. 2008), although it may have a certain ceiling effect (Howel 2012).

CASP-19 tends to heavily complement other instruments that measure aspects of wellbeing or people's other dimensions. The fundamental idea that emerges from the research carried out in the environment of longitudinal or similar studies is that many of these instruments preferably suit one of the dimensions and that they are statistically related to each other when used as triangulation and validation components. For instance, CASP-19 is related to other simpler life

satisfaction measures such as Diener's Satisfaction with Life Scale (SWLS), evolving in the same sense as CASP-19 (Sim et al. 2011) or to the Life Satisfaction Index (Hyde et al. 2003).

As was to be expected and like others instruments, CASP-19 is subject to certain limitations. The most evident is the difficulty of apprehending broad and complex concepts, such as quality of life and wellbeing (Walker and Mollenkopf 2007), with synthetic instruments that fail to appreciate transitions between processes, relations between generations or cultural differences (Niedzwiedz et al. 2012), or between different populations in diverse contexts (Sim et al. 2011). There are just as many problems with obtaining self-reported information, ceiling and/or floor effects or the different internal consistency of the instrument's four dimensions (Sim et al. 2011), or the loss of sample in longitudinal studies with various waves (Zaninotto et al. 2009).

In the field of health-related quality of life, CASP-19 has often been triangulated with more specific instruments like WHOQOL-OLD (World Health Organization Quality of Life, Older adults questionnaire) (Power et al. 2005) or OPQOL (Older People's Quality of Life) (Bowling 2007, 2013). Compared to WHOQOL-OLD, CASP-19 is an independent instrument in the sense that it is not a module of other, broader questionnaires (like WHOQOLD-OLD), and is designed from the perspective of the positive sense of quality of life, moving away from the orientation towards health-related quality of life (Zaninotto et al. 2009). Even so, it evolves in the same direction as other instruments that measure health-related quality of life, so high scores in CASP-19 also tend to match high scores in SF-12 (Sim et al. 2011).

Another instrument widely used in harmonised longitudinal ageing studies (Table 20.2) is the Diener's 5 item life satisfaction scale. This scale is a short 5-item instrument designed to measure global cognitive judgments of satisfaction with one's life. Participants indicate how much they agree or disagree with each of the 5 items using a 7-point scale that ranges from 7 (strongly agree) to 1 (strongly disagree) (Diener et al. 1985). The scale shows a valid and reliable measure of life satisfaction, and is suited for use with a wide range of age groups and applications, which makes possible the savings of interview time and resources, compared to many measures of life satisfaction (Pavot et al. 1991). This scale has shown sufficient sensitivity to be potentially valuable to detect change in life satisfaction during the course of clinical intervention (Pavot and Diener 1993).

The longitudinal study review (see Table 20.2) has failed to detect any study that uses either of the quality of life measuring instruments designed specifically for the elderly population, WHOQOL-OLD or OPQOL. The first was designed by the WHO and is an adaptation of the WHOQOL to assess the older adult population's quality of life. It consists of 24 items structured in six dimensions (1- sensory abilities; 2- autonomy; 3- past, present and future activities, 4- social participation, 5- death and dying, 6- intimacy) (The WHOQOL Group 1998; Lucas-Carrasco et al. 2011) of four items each, in a 5-point Likert scale, but with differing assessment terminology (not at all to an extra amount; completely/extremely; very poor to very good; very unhappy to very happy; very dissatisfied to very satisfied). Higher scores indicate higher QoL. This instrument has been tested in the elderly population of different countries (Bunout et al. 2012; Power et al. 2005; Lucas-Carrasco et al. 2011) with good results and psychometric properties for measuring the quality of life in elderly people. However, Bowling (2007) notes that the questionnaire is still being tested, is very long and the scale on which it is presented is difficult, especially for use with the elderly population. Fang et al. (2012) have developed several smaller versions of this instrument and tested its psychometric properties, yet in doing so have lost the multidimensionality of the full version.

The 35-item OPQOL instrument was originally designed on a broad conceptual basis and considering the older individuals' own perspective (Bowling 2009). This scale measures the level of disagreement/agreement in a 5-point Likert scale (strongly disagree to strongly agree) about several spheres of life: life overall, health, social

relationships and social participation, independence, control over life and freedom, home and neighbourhood, psychological and emotional wellbeing, financial circumstances, culture and religion. An abbreviated version (OPQOL-brief) has been developed subsequent (Bowling et al. 2013). The scale has proven to be more valid and reliable than other quality of life measures like CASP-19 and WHOQOL-OLD (Bowling et al. 2013), and compared to the latter, covers a broad spectrum of life domains rated by the elderly population itself, although its psychometric properties are more modest when an ethnically diverse population is involved (Bowling 2009).

In short, the elderly population is a heterogeneous group and assessing its circumstances is a challenge to be tackled in the scientific realm. Therefore, within the wide range of scales that measure quality of life and wellbeing, it would be ideal to choose and include a measuring instrument that is brief, simple to use and understand, and that is valid, reliable and sensitive to change (Hoe et al. 2011) but that also includes the relevant items for addressing the multidimensionality of quality of life in old age (Bowling 2007).

Quality of Life Associated Factors Throughout Longitudinal Studies

As explained earlier (Table 20.2), CASP-19 and other similar instruments appear quite generally within the set of tools used to assess the situation and conditions in which the population ages, as reflected in various studies; and those that have been in use longest have managed to transfer their experience to others that have appeared more recently. The former include the US Health and Retirement Study (HRS), the UK's English Longitudinal Study on Ageing (ELSA) and the Study on Health, Ageing and Retirement in Europe (SHARE) (Blane et al. 2007; Cardona 2010; Howel 2012; Schuller et al. 2012). Although other longitudinal studies reportedly used CASP (Brazil, Japan, India, Korea,. . .) no wellbeing and quality of life analysis and publications based on their data have been found. Its use is also widespread in other cross-sectional and smaller-scale studies (Wiggins et al. 2008; Zaninotto et al. 2009; Wikman et al. 2011); Schuller et al. 2012). A further use has been in assessing the influence of multiple dimensions of individual wellbeing, in order to generate explanatory models that employ a range of personal, social, economic, health and cultural factors in a fairly complex manner. Even though regularities can be found in how these factors influence individual wellbeing, it is not always the same factors that are associated with wellbeing, nor do they influence it in the same way.

From a demographic viewpoint, it seems to be a general rule, essentially using data from the English Longitudinal Study of Ageing (ELSA), that the younger elderly report higher CASP values than their elders, together with other explanatory factors, such as ties to the place of residence or its degree of economic deprivation (Gilleard et al. 2007), or placing under control other factors, such as socio-economic status or depression (Netuveli et al. 2006; Banks et al. 2010). Some studies go so far as to establish a specific age (68 years), after which a change is noted in the assessment of wellbeing (Netuveli et al. 2006), with individual wellbeing following a downward trend as age increases (Banks et al. 2012), and other studies have even recorded a loss of 1.8 points in the wellbeing indicator between each longitudinal wave (Zaninotto et al. 2009; Banks et al. 2010).

However, people's life course does not seem to have a bearing on how they rate their wellbeing upon reaching later ages (Blane et al. 2004). The door remains opens to clarifying age's effect when other factors can be analysed in a more complex way, especially the degree of general wellbeing that society does (or does not) enjoy at any given time. In such cases, the older-elderly might tend to "subjectively compensate" for the loss of wellbeing by better adapting to their social or community environments (Motel-Klingebiel et al. 2009).

In contrast, longitudinal studies have found no conclusive evidence of a relationship between gender and wellbeing assessment. As with age, gender exerts its influence through other factors,

and its role remains difficult to identify individually. When this happens, women seem to express (slightly) higher scores than men in wellbeing and quality of life indicators (Netuveli et al. 2006; Zaninotto et al. 2009), except when men are living with a partner, in which case they are more satisfied with life. However, when the influence is exerted from other aspects of life such as depression, the relationship exists in the opposite direction (Wikman et al. 2011).

Other socio-demographic factors, like education (Litwin and Stoeckel 2013), have recognisable effects on wellbeing, but sometimes these effects are mediated by health or economic resources (Newton 2007).

Without a doubt, socio-economic factors tend to have the strongest influence on perception of quality of life and individual wellbeing. The general rule that is established is normally regarded as being true: the more financial means you have throughout your working life, the higher you rate your wellbeing, as has been documented in various studies with European longitudinal data like the English ELSA (Banks et al. 2012) or the Irish TILDA (Barrett et al. 2011). Even so, this relationship is qualified by certain very important aspects. One is that research does not distinguish between economic resources and other dimensions of individuals' lives, such as health, well above other determinants (social networks, community participation) (Blane et al. 2004) that very clearly remain in the background. These authors refer precisely to economic and health resources as 'the infrastructure of people's quality of life'. A second aspect has to do with the role played by economic resources (or economic standing in general) in the assessment of individual wellbeing, and the influence of other phenomena such as depression or loneliness. In such cases the relationship stays in the same direction: the greater one's economic wealth, the less depressed or lonely one feels (Banks et al. 2010). A third fact to consider is how the assessment of quality of life upon the retirement is affected by the importance of the individual's life course (Von dem Knesebeck et al. 2007), through specific pre-retirement events, such as home ownership, enjoying early retirement, the effects of disabling processes, the impact of 'structural dependence' processes, etc. (Blane et al. 2004).

Not to be overlooked is another interesting relationship discovered in longitudinal wellbeing studies using SHARE data about several European countries, namely how quality of life is influenced by the effects of social services under the welfare state in certain countries (Motel-Klingebiel et al. 2009). When establishing a comparison between countries in assessing the importance of economic resources as determinants of quality of life, the differences between countries tend to be defined very clearly (Von dem Knesebeck et al. 2007), in the same way as the differences between population subgroups within a country, from different patterns of behaviour in people's activities ('social productivity' in the terminology of (Wahrendorf et al. 2006) and in the transfers of care received and given (Ateca-Amestoy and Ugidos 2013), in terms of efforts, rewards and reciprocity (Siegrist and Wahrendorf 2009).

Worth mentioning too is another unique feature that affects the determination of what economic resources are deemed to mean, and the indicators employed derives largely from the characteristics of the database used. Without being exhaustive, there is very wide range of variables, such as home ownership, obtaining social benefits of a monetary nature, (Blane et al. 2004), owning vehicles (Netuveli et al. 2006), savings and debts, or receipt of non-pension related income. Its effects are not always assessed in the same direction, due to the use of absolute or relative values, as noted by Newton (2007) who, referring to several studies in the UK, warns that "high aspirations and expectations have negative impact on subjective wellbeing (SWB) yet are raised by higher incomes. This reinforces findings that perceptions of financial status have stronger predictive power than actual income" (Newton 2007, p. 14).

Similar controversies can be identified when using subjective socio-economic indicators, such as economic self-positioning of the individual or household, the use of class or social status indicators and their effects on quality of life indicators (Netuveli and Bartley 2012) through hypotheses such as the 'social gradient' or

'different groups' (Blane et al. 2007), or assessing household spending or its material needs (Newton 2007).

Learning formal and informal activities plays a very prominent role in retirement as a socio-economic indicator that predisposes a positive assessment of individual wellbeing, as Jenkins and Mostafa (2013) have demonstrated using ELSA data, differentiating its effects by age groups and gender in relation to the type of learning. Other indirect economic value factors, such as perception of the general or residential environment (noise, hazards, deterioration, insecurity) have far more diffuse effects (Newton 2007; Mottus et al. 2012).

As mentioned earlier, health is one of the most salient factors that are best associated with assessing wellbeing and quality of life, playing a fairly well-defined role: the better one's diagnosed or referred health, the higher the level of wellbeing, as demonstrated in some longitudinal studies (Barrett et al. 2011; Steptoe et al. 2012) and systematic reviews (Chen et al. 2013). Unlike economic resources, health is identified by a set of physical (long-term illness) and mental indicators (depression), that impact people's functional limitations (mobility difficulties) (Blane et al. 2004; Netuveli et al. 2006), especially when age advances (Blane et al. 2007). According to Cardona (Cardona 2010), functional physical impairment is an essential determinant of satisfaction with life, and through this criterion, of quality of life in general. A controversy arises when analysing the effect of both the physical and mental dimensions, in the assessment of quality of life measured by complex indicators, and although no general rule can be singled out, psychological factors seem to play a larger role in reducing the quality of life (Zaninotto et al. 2009).

When controlling for other social factors, having or not having any chronic diseases is a decisive factor in the reduction of individual wellbeing, even though the effects of several kinds of diseases do not always move in the same direction and as strong as one another (Wikman et al. 2011), not so much on account of the risk of death that they may involve, but because they limit the performance of daily activities. Indeed, these limitations also have a negative bearing on the reduction of individual wellbeing (Banks et al. 2010), which becomes stronger when this relationship is measured longitudinally. When the relationship is established with anthropometric measures, no meaningful relationships are seen, probably because its effect has already been included when respondents reported a poor state of health, as a global factor. However, there is another health component, the strain involved in caring for people when the caregiver is elderly, especially in the case of the husband or wife, which is also clearly identified as a factor that tends to reduce people's wellbeing. This is influenced by three elements: the number of hours spent caring, the number of people cared for and the sense of having a duty to provide care (Banks et al. 2010).

Finally, an interesting issue in the context of research into quality of life and wellbeing in older population, from a longitudinal approach, is the study of how different geographical and cultural environments affect the assessment of individual wellbeing. The main problem faced by many studies of this kind, which rely on surveys as their data collection method, is questionnaire standardisation. More than often, they are not standardised, making them very difficult to compare, especially in the event of a comparison between countries. If the measures can be standardised or harmonised proxy measures are used, the problem is likely to be solved (Netuveli et al. 2007; Motel-Klingebiel et al. 2009; Niedzwiedz et al. 2012), by using data both from longitudinal studies and systematic bibliography reviews. However, when the objective is to compare individual wellbeing in different geographical areas, it is found that, indeed, and within Europe, the Northern countries differ clearly from the Mediterranean countries when one analyses individual wellbeing indicators based on several reference longitudinal studies in the UK and Europe (SHARE) (Netuveli et al. 2007; Siegrist and Wahrendorf 2009; Ateca-Amestoy and Ugidos 2013), or the type of wellbeing system (Motel-Klingebiel et al. 2009; Siegrist and Wahrendorf 2009). If

the inequalities are established between groups with cultural, ethnic or racial differences, the interpretation of the cultural effects on the assessment of individual wellbeing is not so evident or easy to address (Niedzwiedz et al. 2012) because there are plenty of possible general factors that may be interfering with that interpretation.

In conclusion, scientific analyses of the quality of life and wellbeing of older people exhibit results that have both common similarities and many differences, due to the difficulties to standardize the conditions for the analysis. This does not prevent, however, that these can be translated to society when care policies for the elderly are implemented by policy makers and governments.

Quality of Life and Wellbeing at Old Age: Policy and Scientific Interests

Political interest in quality of life and wellbeing in old age is not new, as evidenced by the International Plan of Action on Ageing adopted by the United Nations at the first World Assembly on Ageing held in Vienna in 1982 (United Nations 1983). The Preamble of this plan acknowledges that "...quality of life is no less important than longevity, and that the aging should therefore, as far as possible, be enabled to enjoy in their own families and communities a life of fulfillment, health, security and contentment, appreciated as an integral part of society". However, most of the recommendations to be found throughout the Plan are for governments, institutions, organisations, etc., even for families and caregivers, while the older person is regarded as a passive subject whose health, safety and wellbeing must be protected.

More recently, ageing policies have been overhauled in line with a series of paradigm shifts whose origin lie in the Political Declaration and Madrid International Plan of Action on Ageing adopted by the Second World Assembly on Ageing in 2002 (United Nations 2002). This is an ambitious programme to address the ageing challenge in the twenty-first century in three priority areas: older persons and development; advancing health and wellbeing into old age; and ensuring enabling and supportive environments. Both Political Declaration and Plan of Action were joined by a Policy Framework of the World Health Organization to the Second United Nations World Assembly on Ageing, which recognises the success of public health and economic and social development policies in the achievement of an ageing global population, but also the need for a positive experience, that is, active ageing, defining it as "the process of optimising opportunities for health, participation and security in order to enhance quality of life as people age" (World Health Organization 2002).

These United Nations action frames have organised the political and research strategy guidelines over the last decade all over the world, and prompted paradigm shifts in active aging policies in order to enhance quality of life. The first has to do with individuals being regarded as active players and responsible, therefore, for their ageing process, a responsibility that they share with society, which has to provide appropriate political, legal and societal structures that offer more opportunities for individuals to age actively. In this respect, policies on active ageing are intended to improve both societal wellbeing and individual quality of life. The second paradigmatic shift focuses on regarding old age as the result of a process rather than a status, in other words, adding a life-course approach that recognises that older people are not one homogeneous group and that individual diversity tends to increase with age. The third shift comes from the mainstreaming of gender and equal opportunities for men and women, in the recognition that both experience old age differently, that gender relations structure the entire life course, influencing access to resources and opportunities, and that women are more vulnerable to discrimination in areas such as employment, education, health, or ill-treatment. Finally, there has been a general and conceptual shift, in the sense that active ageing would be a broader and more inclusive concept than others such as successful ageing, healthy ageing or productive ageing, and its development, based on three pillars -health, participation and security-, would make it possible to include the whole

population as it ages, without putting the focus only on one of its dimensions, although health always appears as being most influential on people's quality of life and wellbeing.

In an active ageing framework, policies and programs that promote mental and social connections are as important as those that improve physical health status, as the first pillar underpinning active ageing. A life course approach would support the inclusion of preventive, curative and long-term policies, that is, policies to promote health and healthy lifestyles, disease prevention, development of rehabilitation services and new technologies. Meanwhile the gender perspective supports policies for equality between men and women in the field of health and access to services. Co-responsibility between individuals and society also underpins policies aimed at training the people who look after and care for elderly people, including elderly people themselves. Not forgetting long-term care in community care settings for frail elderly people or the development of care systems for ageing at home.

Active ageing is also an integrating concept in its participation pillar that includes social, economic, cultural, spiritual and civic affairs, not just the ability to be physically active or to participate in the labour force. A life course approach pursues the inclusion of all ages and the promotion of intergenerational solidarity, and wound be a cornerstone of policies for the flexibilisation of working careers, breaking down the barriers between its three traditional phases: qualification phase, working phase and retirement phase, and allowing the employment effort to be distributed throughout life and access to learning and promotion at all ages. One particular aspect would be policies for promoting volunteer work and leisure activities to improve social inclusion. Meanwhile, the gender perspective would favour equality in the realm of family, social and support networks, and in labour market participation, and underlies policies designed to foster a the work/life balance for men and women alike. Policies against discrimination in any field and improving the image of old age must serve to make individuals and society share responsibility.

The third pillar of the active ageing framework has to do with security, also understood in a broad sense that encompasses financial income security and the fight against poverty in old age, an adequate protection, security and care when people require assistance, and a secure physical and social environment. Policies designed to develop social security and pension systems are based on this pillar and on society's responsibility through government regulations. On another note, the promotion of age friendly environments, including aspects such as the dwelling's location, barrier-free access to services, the distance to friends and relatives or an adequate work environment, would contribute positively to staying autonomous and independent in old age and staying on the labour market. Other policies in this field have to do with ensuring safe social environments, preventing and avoiding elder abuse, through information for its recognition and the involvement of all sectors of society, including older people themselves.

In short, the growth of the older population throughout the world, the political and social interest in tackling its causes and consequences and the need to design public policies to extend the quality of life of older people are reasons that underlie the scientific interest in addressing these problems. As stated, scientists still fail to agree on the different aspects of quality of life and wellbeing (definition, study methods, tools, domains), and no less complicated is the study of these constructs in elderly population subject to some type of cognitive impairment. Research from the life course perspective adds a further complexity. Yet scientists are not unaware of this problem, hence the wealth and complementarity of quality of later life studies with which to ascertain the heterogeneity of this population, its needs and expectations.

The continuing lack of agreement about quality of life studies must be solved by combining several facts, including the following: (i) the building of a greater consensus about how to define and measure quality of life, but also considering regional and cultural specificities; (ii) research into quality of later life also requires a greater theoretical impetus and strengthening

of the multidisciplinary perspective to understand the integration of the different quality of life domains; and (iii) a more older-person centred approach is needed to delve deeper into their circumstances, perceptions, experiences and expectations, and thereby assist in defining the quality of life concept.

The European Union, to quote just one example, has committed heavily to ageing research, and several years ago began funding initiatives like the European Research Area in Ageing (ERA-AGE) and ERA-AGE 2 programmes, within the European Research Area Network scheme (ERANET), as a basis for coordinating ageing research in terms of research projects, postdoctoral fellowships, summer schools for future leaders in ageing research in Europe and other actions to promote research in aging. More recently, the FUTURAGE (A Road Map for Ageing Research) programme has sought to create the multidisciplinary strategy in ageing in Europe, for the next years 15 years from seven priority areas.

Some of the key contents to be researched and detected in these initiatives have been included in the new instrument for future research in Europe, Horizon 2020. Its many outstanding aspects include orienting future research to solving social challenges, one of which is demographic change, essentially population ageing, associated with people's health and wellbeing. Although there is a clear relationship between health and wellbeing, it is not so obvious that definite steps have been taken to conduct a detailed analysis of wellbeing as a measurable concept, even if this wellbeing stems from the improvement of the population's health conditions, and from measures to improve food and weather conditions. The development of work programmes in the next few years must steer future research in this field. Also in connection with individual wellbeing, emphasis is placed on active ageing as an expected and desired outcome of improved health conditions, but there is no description of what it means to age actively and how to analyse and foster it as an instrument for improving the quality of life of older people. However, there are several initiatives within the European Union that promote scientific cooperation in the field of 'active and healthy ageing' to access financial resources. Worth highlighting are the 'European Innovation Partnership on Active and Healthy Ageing' (http://ec.europa.eu/research/innovation-union/index_en.cfm?section=active-healthy-ageing) and the 'Joint Programming Initiative' 'More Years Better Lives. The challenges of the demographic change' (http://www.jp-demographic.eu).

In short, the general concepts such as demographic change, wellbeing or active ageing are present in many of the European Union's programmatic documents. Yet these concepts are not developed when it is a matter of defining major research topics that, in the field of ageing, mainly refer to caring for the population's health, the treatment of diseases and the use of applicable technologies in the older person's life.

In the light of these facts, one would hope for an increase in research into the elderly population and quality of life and its interaction with various disciplines whose study objectives include improving quality of life as one ages. Hopefully too, this research effort will succeed in transferring results to the public sector but also to society and the elderly, insofar as research methods are supplemented by new methodologies that recommend engaging the studied population itself in the research process.

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Migration and Quality of Life in the Global Context

21

David Bartram

Introduction

From the point of view of the migrant, migration is fundamentally a means of improving one's wellbeing (and/or, perhaps, the wellbeing of one's family members). One could reasonably make that observation about any significant decision (moving house, getting married, taking a new job). Improvement of wellbeing is also the fundamental goal for any sort of public policy; policy proposals might have different views about how consequences for wellbeing should be distributed, but one would surely struggle to imagine a policy informed by a goal that cannot be sensibly framed in terms of human wellbeing.[1]

'Wellbeing' is quite a vague term, however. To make it useful, one must qualify it in specific ways: financial wellbeing, emotional wellbeing, physical wellbeing, etc. In recent years happiness as a specific form of wellbeing has become highly salient in public discourse. Far from being merely a topic for 'self-help' books, it has recently gained significant attention from academics, political leaders and others in the public sphere.

One reason for that salience is that there is growing appreciation for the idea that happiness is not achieved primarily via economic growth and ever-increasing consumption. A number of writers have observed that many wealthy societies have entered a 'post-materialist' age: people are less likely to put highest priority on maximization of their incomes, instead emphasizing more basic notions of wellbeing. Even as early as Aristotle's time many people understood that money is not reasonably considered an end in itself. Likewise, economic growth is not in itself a sensible goal (though politicians in many wealthy countries persist in treating it as such). Instead, economic growth is – potentially, at any rate – a *means* to more fundamental goals.

These ideas are penetrating a number of social science fields, including interdisciplinary fields such as development studies and, more recently, migration studies. The obsession with conventional notions of development – reducing it to economic growth – was overcome at an earlier stage via the 'capabilities' perspective, emphasizing people's 'freedoms' (Sen 1999); what matters in this view is not the resources people have but the extent to which they can use their resources to fulfill their human potential. This perspective was institutionalized via the widespread adoption of the Human Development Index as a measure of development. Some observers have recently advocated for further revision of development indicators to include information about the subjective consequences of objective forms of development (Schimmel

[1] Some people might wish to extend the point to include the well-being of other species.

D. Bartram (✉)
Department of Sociology, University of Leicester, Leicester, UK
e-mail: d.bartram@le.ac.uk

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2009). One such effort is Bhutan's measure of 'Gross National Happiness', capturing the extent to which individuals have reached specified thresholds for various aspects of wellbeing including subjective dimensions (Bates 2009).[2] Another initiative, the New Economics Foundation's 'Happy Planet Index', has been applied more broadly (Thompson et al. 2007). These indicators have not (yet) become as influential as the HDI. Even so, once we recognize that it is unwise to rely on any single indicator, we can surely see the advantages – and perhaps even the necessity – of considering happiness measures alongside more established indicators of development (cf. Graham 2011; Blanchflower and Oswald 2005).

Issues of this sort can readily be connected to the study of migration. With more than 200 million people currently living outside the country of their birth and/or nationality, international migration is a key element of globalization and has become a highly salient feature of many societies (Vargas-Silva 2012). In proportional terms migration to another country is relatively rare (200 million is after all less than 3 % of the world's population); in addition, and contrary to the fears stoked by politicians in many wealthy countries, many migrants from poorer countries take up residence in other poorer countries (Ratha and Shaw 2007). That point is particularly true for refugees/asylum seekers. A far more common path of entry for migrants to wealthy countries is via 'family reunification' rights of earlier migrants. Many immigrants become established ('permanent') members of their new societies, but significant numbers also engage in return or circular migration (Bartram et al. 2013).

In some instances immigrant stocks are proportionally quite large: foreign-born individuals make up almost 40 % of the Luxemburg population and more than 25 % of the population in Australia, Israel and Switzerland (OECD 2013; cf. Castles and Miller 2009). Even where numbers are smaller, however, migration in wealthy countries is commonly experienced as a very considerable phenomenon, often leading to significant forms of social change. Migration has changed the meaning of citizenship and the basis for belonging in many countries (e.g. Joppke 2010), with a multicultural orientation becoming more common; in many countries immigration has led to the formation of new forms of ethnic groups, often with an overlay of economic stratification that persists into the second and subsequent generations. For some countries, migration is the only factor mitigating rapid ageing of the population, and in many places migrants are an essential component of the labor force. For the migrants themselves, migration is often highly consequential; the decision to migrate is typically made with a great deal of hope that it will lead to real improvement in one's quality of life.

A number of intriguing and challenging questions about happiness arise for people who become migrants, especially when going to another country. The rest of this chapter explores the happiness implications of migration and associated processes, a topic that has received sustained scholarly attention quite recently. I review existing research and consider implications that might follow for institutional policies and practices. Research on this connection is at an early stage and so conclusions and recommendations must be considered with caution; there is a clear need for better data, in particular a form of data that would be useful not only for understanding happiness outcomes but for evaluating the consequences of migration more broadly.

Research on Happiness and Income

Many migrants moving to another country do so in hopes of improving their economic situations. It can sometimes be difficult to distinguish between 'economic migrants' and 'forced migrants', but that difficulty ought not to impair our understanding of the fact that migration is often motivated by economic aspirations. That

[2] There is a 'Facebook Gross National Happiness' indicator; some might be reassured by the fact that it does not correlate with more conventional measures of happiness (Wang et al. 2014).

motivation can pertain whether or not the destination country is wealthier than the country of origin: one might gain a higher income even when moving to a country where average incomes are lower.

The salience of economic migration connects to a core interest of happiness researchers, i.e., the relationship between happiness and income. Many people believe that income is important for happiness, and governments often treat economic growth as an overriding policy goal. An influential stream of happiness research concludes, however, that at least above a certain threshold rising income contributes little if anything to happiness.

Doubts about income in this context are usually expressed with reference to the 'Easterlin paradox.' Richard Easterlin (1974) noted that, while a cross-sectional comparison shows that people with higher incomes are happier than those who earn less, increases in income over time do not appear to raise average happiness. The point is especially apparent in the experience of Japan: the very impressive growth of the Japanese economy starting in the 1950s did not result in greater happiness even after several decades.

What is true for countries appears to be true for individuals as well. On gaining a higher income one might experience a small increase in happiness – but at best this increase is usually temporary. A number of interrelated psychological processes help explain why. A key point is that the 'happiness value' of income consists not so much directly in the way it enables purchases of various sorts, but rather in the way it embodies and signals status (e.g. Clark et al. 2008). Those with higher incomes are happier than those with less in part via 'social comparisons': to the extent that one experiences happiness through income, that experience is rooted in the perception that one compares favorably to others. Income increases in general, then, cannot raise average happiness. Individual mobility – an increase in rank – might raise happiness for some individuals, but even then average happiness would remain unchanged: an increase in rank for some means a decrease in rank for others.

That point helps explain a related process, of aspirations. Again, many people believe that gaining a higher income will bring greater happiness. But even those earning relatively high incomes hold this belief – and (more to the point) many people continue to want further income increases even after gaining one (Stutzer 2003). In part, that desire emerges from comparisons: if others are gaining, one must advance just to stand still. But even an increase in rank does not lead inevitably to greater happiness or satisfaction with one's income: many who gain a higher rank begin to compare themselves to a higher reference group, rather than deriving satisfaction via comparison to a stable reference group (Boyce et al. 2010). In short, aspirations for increased income are difficult to satisfy: we adapt (often quite quickly) to any higher level we might achieve.

Research on these issues is usually conducted on wealthy/developed countries, where the quality of data is typically higher (Graham 2009). One might wonder, then, whether it can help us understand the happiness of people in poorer or developing countries. Some recent critiques of Easterlin's perspective (e.g. Stevenson and Wolfers 2008) build on analyses that appear to show happiness changing over time together with economic growth (or decline). Easterlin and his colleagues (2010), however, subsequently identified a number of flaws in those studies and reiterate the conclusion that over the 'long' term (more than 10 years) economic growth does not result in greater happiness. What is more, in his recent work Easterlin presents new evidence that extends that finding to certain developing countries that do not count as wealthy: for China, in particular, one is struck by the fact that happiness has remained 'flat' despite very rapid economic growth. Other economists go further, perceiving indications of an 'unhappy growth paradox': if we control for level of development, countries with a higher growth rate show lower average reported happiness (Lora and Chaparro 2009).

Even so, the Easterlin perspective does not enjoy universal adherence among happiness researchers. Ruut Veenhoven's 'liveability'

theory (1995) constitutes a significant contrasting framework. Veenhoven asserts that social comparisons (an essential component of Easterlin's approach) are less important for happiness than many happiness researchers believe. On this view, happiness is determined mainly by whether one can meet one's needs; wealthy countries are more liveable, offering better conditions for achieving happiness, because people are better able to meet their needs there.

As noted above, happiness studies is conducted mainly via research on wealthier countries, where data are generally more plentiful and of higher quality. That is a significant fact when considering the connection between happiness and migration, especially when one's interest relates to the migration of people originating from (and sometimes going to) developing countries. Analysis of migration raises challenging questions also about the connection between happiness and culture – an area commonly identified as underdeveloped, even in relation to basic data issues. One key area of inquiry is the possibility that people in different cultures might understand the word 'happiness' in different ways and might have a different mode of answering survey questions (Oishi 2010). In these terms, happiness studies is a relatively 'young' field.

Happiness and Migration

At first glance, it seems reasonable enough to assume that migration (at least when it is voluntary) improves the wellbeing of the migrants themselves – otherwise (so the thinking goes) they would not choose it. But the review in the preceding section implies that it is better not to *assume* that outcomes for migrants are generally positive. Sometimes the choices people make do not lead to happiness in the way they expect or hope (Gilbert 2006; Haybron 2008). One would not want to assume on this basis that migration is generally misguided. An important research goal, then, is to identify the conditions under which migration does (or does not) lead to greater happiness for migrants and others connected to them. This section raises questions and considers evidence about consequences for migrants, with emphasis on those motivated by the prospect of increased income. Economic migrants might also be pursuing economic goals of other types (diversification of risk, or access to credit markets – Stark 1991), though implications for their happiness are likely more complex and even more difficult to analyze with the data available. Migration is also sometimes motivated by non-economic considerations: global migration flows consist also of refugees and people who want to join family members already living in another country. Even when migration is not 'economic' in motivation, however, the migrants might well encounter similar economic processes and outcomes.

The most interesting question about economic migration and happiness emerges directly from research on the connection between happiness and income.[3] If in general increased income does not bring greater happiness, then should we expect that migration undertaken for the purpose of increasing one's income will bring greater happiness? That question might seem less than compelling if one believes that migration is usually undertaken by very poor people, but in reality the very poorest in a global sense typically do not migrate, at least not to wealthier countries. Many migrants, especially those going to wealthier countries, originate in middle-income countries and so prior to migration might be above a threshold where (as per Easterlin) increased income does not raise happiness.[4] Even in such instances migrants might intend to improve or remedy situations that are quite difficult in certain respects, but most migrants to wealthy countries are not using migration as a means of resolving famine and other direct threats to survival.

[3] Another way of posing questions about migration and happiness studies focuses on the effect of migration on average happiness in destination countries; Polgreen and Simpson (2011) find that net migration raises happiness for relatively unhappy countries but lowers it for relatively happy countries.

[4] See Kenny (2005) for a discussion of how to think about what that threshold might be.

There are some significant data challenges in evaluating the happiness consequences of migration. The most effective way of learning about changes in happiness is via analysis of data collected at several points in time on the same individuals. For migrants, that means gaining data before migration as well as afterwards. There are no data sets that meet this requirement and include data on happiness or life satisfaction. Most panel surveys are constructed as national endeavors, thus the *British* Household Panel Survey. Such surveys sometimes capture immigrants poorly (often requiring 'refresh' exercises or 'boost samples') and do not gain data on immigrants at all prior to their arrival. From the perspective of a country of origin, on the other hand, emigration is a mechanism of 'attrition': those who emigrate are lost to the survey.

In these circumstances, analysis is mainly limited to cross-sectional comparisons (comparing different individuals at one point in time). A common approach is to compare immigrants to natives in destination countries. Analyses in this mode typically find that immigrants are on average less happy than natives (Baltatescu 2007; Safi 2010). This finding is evident in a very general sense – but it persists even in regression models that control for the association of happiness with other variables. In other words, immigrants are less happy than natives even when comparing immigrants to natives who have the same characteristics or circumstances (the same income, employment status, relationship status, health, and so on).

A key reason is that immigrants are generally less satisfied with their financial situation even when earning incomes comparable to those of natives (Bartram 2011). Immigrants in the USA, for example – even those who originate in poorer countries – have average earnings roughly on par with those of natives and thus have succeeded in raising their incomes (relative to pre-migration levels), but they are nonetheless more dissatisfied with their incomes than natives even at the same income levels. This result is striking in light of the fact that immigrants also show a stronger association between income and happiness (relative to that association for natives). Most research on that association treats it as a general matter – but as with any average tendency, certain types of individuals will be different from the average. Migrants in general are quite different from non-migrants in a number of respects (often more willing to take risks, more entrepreneurial) – and a relevant point of difference emerges in the fact that income matters more for their happiness than it does for natives' happiness (at least in cross-sectional comparisons).

That point, however, makes immigrants' greater financial dissatisfaction all the more striking. On the other hand, that latter finding is in line with expectations from the Easterlin paradox: economic migrants aspire to increase their incomes, but when they succeed in this regard it appears that they then aspire to increase their incomes even further (and might then be frustrated if they encounter limits in their ability to do so). This finding is also sensible when considering income and social comparisons among immigrants: although some immigrants are highly successful in economic terms (and indeed some countries such as Canada attempt to ensure this outcome via selection mechanisms for entry), others find that their relative position in the destination country is lower than it was in the origin country. Some immigrants who had good educational qualifications in the origin country find that those qualifications are not recognized in the destination country; they might also encounter discrimination and/or language difficulties that impair their economic advancement. Their outcomes after migration, then, might include an income that is higher in 'absolute' terms (that is, in comparison to pre-migration income after currency conversion) but which allocates them to a lower rank in the destination country – perhaps with predictable consequences for their happiness (cf. Aycan and Berry 1996).

However, a comparison between immigrants and natives in destination countries is not obviously the best foundation for inferring how the happiness of migrants might have changed as a consequence of migration. Migrants from countries where average happiness is low could,

if they move to countries where average happiness is higher, experience an increase in happiness that still leaves them at a level below that of natives. To assess happiness changes for migrants, it is arguably more useful to compare migrants to people who remain in the countries the migrants left ('stayers').

For example, in research on migration from eastern to western Europe, a comparison between migrants and stayers shows that migrants are happier than stayers, with a difference of three-quarters of a point on the 11-point happiness scale used in the European Social Survey (ESS). Here, however, an important caveat arises in connection with the use of cross-sectional data. It is possible that the happiness advantage of migrants over stayers does not represent an increase but instead merely reflects greater happiness among those who choose to become migrants. An analysis using 'treatment models' (in Stata: treatreg) to correct for endogeneity provides some support for this suggestion: if we control for the apparently greater propensity towards migration among happier people, the happiness difference between migrants and stayers disappears (Bartram 2013a).[5]

Comparisons of migrants to stayers are useful also because they help move the analysis beyond the quite general question of whether migration leads to increased happiness. As with any proposition of that sort, a single/general finding provokes a further question: *when* does migration lead to greater happiness, and when does it not? Comparisons between migrants and stayers can be conducted at the level of countries – and it then becomes clear that migration can have quite different consequences for migrants in different flows. In the research addressing migration from eastern to Western Europe, migrants originating in certain countries (Russia, Romania, and Turkey) do show greater happiness than stayers in those countries even when considering endogeneity. For migrants from Poland, however, the correction for endogeneity indicates that migrants are significantly less happy than stayers, more than a point on the 11-point scale. Here as well, happier people are apparently more likely to migrate, and the 'treatment model' then suggests that migration has led to decreased happiness for Polish migrants who move to countries in Western Europe (Bartram 2013a).

Again, the significance of the comparison of different migration flows consists in the finding that different flows can lead to different happiness outcomes. That point is evident also in a comparison between Moroccan and Turkish immigrants in the Netherlands (Gokdemir and Dumludag 2012): for Moroccan immigrants, happiness is associated with 'absolute' income as well as 'relative' income – but for Turkish immigrants only relative income matters. Moroccan immigrants seem to care less about comparison to (other) Dutch people and more about the improvement in their circumstances over what they experienced prior to migration. In general, absolute income does not contribute much to happiness (Ball and Chernova 2008) – but behind that general finding one can discern variation at least at the level of different migration streams.

Most research on happiness and migration has used quantitative analysis of survey data, but there are some qualitative studies as well. Wright (2010, 2011) interviewed Peruvian immigrants in London and Madrid and found that they were materially richer but felt poorer in a broader sense, with many (particularly in London) experiencing a high degree of loneliness, isolation, and emptiness. A significant theme for many was a feeling of exclusion emanating from the native population and from other immigrant groups; there was also less trust and greater competition within the Peruvian community in both destination countries. On the other hand, some of the migrant women reported feeling that they had achieved greater autonomy and independence in London.

It is generally easier to determine happiness consequences for migrants who move internally

[5] This finding comes in contrast to the results of research approaching the question in a different way. An analysis of survey data on Latin America shows that people expressing an intention to migrate are less happy than those lacking such an intention: their situations are objectively favourable but they are nonetheless dissatisfied (Graham and Markowitz 2011, who call them 'frustrated achievers').

rather than to another country, as panel data are available in certain instances. Melzer's (2011) research on Germany is useful here, especially insofar as migration from eastern to Western Germany is in certain respects akin to international migration given that the two regions were separate countries from 1949 until 1990. Melzer finds that east-to-west migrants were happier after migration and happier than those who did not migrate, in part because their employment prospects were better. Even so, this migration flow is different in some ways from international migration generally: migrants' experiences were probably less challenging given that they shared a common language and a common culture with natives in western Germany. Research on China, by contrast, shows that rural-to-urban migrants were less happy than rural stayers and urban natives (Knight and Gunatilaka 2010); although the data were cross-sectional, they were suitable for more sophisticated analysis, leading the authors to conclude that migrants experienced disappointment probably because they did not anticipate that their economic aspirations would rise after migration (as one would expect via the Easterlin perspective).

Other Forms of Migration

The analysis of European Social Survey data discussed above was constructed in ways designed to discern outcomes for people whose migration was likely motivated by desire to improve their economic situation; that focus is also evident in research by other scholars. As noted earlier, however, migrants sometimes pursue other goals: in some destinations, the largest single category of entrants consists of people joining a family member already living there, and there are also significant flows of refugees/asylum seekers.[6] International survey datasets such as the ESS do not allow us to learn about motivations for migration; some of the people analyzed above might fit better in a category of 'family reunification' than in 'economic migration' (the concepts usually cannot be precisely applied in any event). Migrants who are not mainly focused on economic gain might experience less disappointment if their economic outcomes in destination countries do not live up to expectations. On the other hand, the changes in their economic circumstances might be similar to the changes experienced by the initial migrant, perhaps with similar consequences for happiness.

Research on happiness among refugees includes a study of Palestinian children in a West Bank camp; the authors (Veronese et al. 2012) found that the children's happiness was similar to that of Palestinian children living in an Israeli village. Research on refugees in Australia indicates that the experience of discrimination (arising in part from natives' suspicion that the refugees are not 'genuine') produces some bitterness; all the same, refugees generally show a degree of resilience and are grateful for having been able to escape some very difficult situations (Fozdar and Torezani 2008).

The discussion to this point has considered migration as a straightforward single relocation. In reality, migration can take a variety of forms, including circular migration and return migration. Research on return migration includes a study of returned Thai migrants: Jones and Kittisuksathit (2003) found that 'subjective wellbeing' of families with returned migrants was not different from that of other families. Bartram (2013b) compared the happiness of Romanian return migrants to that of stayers, finding that migrants who have returned to Romania are not happier than stayers despite earning higher incomes – and if one compares returned migrants to stayers at similar levels of income the returned migrants are significantly less happy than stayers. Determining which finding is more pertinent requires knowing whether or not returned migrants' higher incomes were achieved as a consequence of migration: if they were, then the finding of equivalent happiness captures migrants' experiences

[6] One can also find 'lifestyle migration', particularly of citizens of affluent countries seeking what they consider a better way of life; an example is British expatriates living in France and Spain (Benson and O'Reilly 2009).

better, though it is nonetheless striking (albeit in accordance with the Easterlin perspective) that their happiness is not higher despite the higher incomes. Here the limitations of the cross-sectional data are particularly acute, given that there are two 'selection' processes (first into outward migration, second into return).

Research on international migration is not limited to analysis of the migrants themselves. Migration can affect the wellbeing of others, e.g. family members in the origin country, when the migrant is not accompanied by his/her immediate family. Research on migration and happiness has considered whether benefits from remittances are sufficient to outweigh the subjective costs arising from family separation. This is another area where one can find qualitative research on subjective wellbeing. Research on Nepal shows that subjective outcomes depend on context for the (mainly) women whose husbands become migrants: when women stay in their own houses and thus become heads of households in their husbands' absence, their subjective wellbeing might improve, particularly if they were previously very poor and so remittances make a big difference to household income (Gartaula et al. 2012). However, subjective wellbeing does not improve and can even decline when women enter their in-laws' households, and/or when their pre-migration financial situation was comfortable to the point that remittances have a relatively small financial impact. Research by Dreby (2010) on the USA, though not framed in terms of happiness per se, also shows quite clearly the emotional costs of family separation, particularly for children even when left in care of other family members.

More conventional quantitative research on this topic indicates conflicting findings. One study on a town in Ecuador reinforces the notion that the benefits of remittances are outweighed by the costs of separation (Borraz et al. 2007). An investigation via survey data on Latin America more broadly (the 'Latinobarometro'), however, finds that households receiving remittances from a family member abroad are happier than households without a direct migration connection (Cardenas et al. 2009); the authors suggest that this difference might be explained via the way migration diversifies risk for the household (and thus perhaps enhances financial security, rather than simply raising incomes). A limitation of research on this topic is that the studies in question do not consider the happiness of the absent migrant and so do not fully address the happiness of the household (family) as a whole.

Policy Implications

Research on happiness leads inevitably to discussions of policy implications. This tendency is understandable enough, and there is no lack of interest in happiness currently among politicians. The United Kingdom government has launched a 'national wellbeing project' with some emphasis on happiness. The French government commissioned a major report in this area by the economists Joseph Stiglitz, Amartya Sen and Jean-Paul Fitoussy (2009). Most governments have not made happiness a core policy goal (economic growth remains firmly entrenched), but politicians are keen at least to give voters the impression that they care about happiness.

The idea that happiness research leads directly to constructive happiness policies should not be taken for granted, especially when 'policy' means government policy (Duncan 2010). Scholars and others interested in happiness research sometimes write in ways that imply that there is an easy path from research findings to policies. In reality, policies motivated by specified goals sometimes do not achieve those goals – and sometimes they make matters worse. From certain political perspectives, any expansion of state power raises concerns, even when the explicit goal is to improve wellbeing: the exercise of state power itself is sometimes perceived as a potential (or even likely) threat to wellbeing. At a minimum, (i.e., regardless of one's political predispositions), one should perhaps expect to find unintended consequences of policy initiatives. This caution is arguably warranted by certain strands of happiness studies

itself: freedom is an important determinant of happiness.[7] Some observers also believe that happiness studies has not achieved clarity with regard to ethical and ideological issues to an extent that would support systematic policy interventions (De Prycker 2010).

As an example of how policy recommendations can go wrong, consider the notion that, if research on happiness shows that migration to wealthier countries might make the migrants less happy, then governments in wealthy countries can claim to be acting in the interests of would-be migrants by taking steps to impede migration. A position of this sort would be difficult to justify even on quite lax standards for paternalist state interventions (Goodin 1998); it also fails to consider the likely happiness consequences of measures adopted to enforce immigration restrictions (arrest, deportation, and so on). At bottom, this view would be transparently self-serving and deeply cynical (Bartram 2010).

It is then quite difficult to think about practical recommendations for immigration/admissions policies *per se* that arise in a meaningful way from consideration of migrants' happiness. Considering the issue in a more holistic manner, however, one might perceive a sensible possibility connecting to the fact that, while migration might increase happiness for some migrants, it evidently does not do so for all. Migration is for some a matter of free choice among equally attractive alternatives; it is sometimes even a path to adventure and exploration, at least for those already enjoying security and comfort. But for others it is more a matter of desperation, particularly when one's livelihood is threatened by distant forces of globalization that come to have very local consequences. (That observation underpins the critique of a distinction between the forced migration of refugees and ostensibly voluntary 'economic' migration).

Migration in that latter mode, while often effective in improving migrants' wellbeing in an objective sense, seems less likely to improve migrants' happiness, especially when it puts migrants at the bottom rungs of destination societies. If so, then it might be better to focus one's attention on strategies that resolve would-be migrants' difficulties in ways that make migration unnecessary. As Joseph Carens argues (1992), migration is often 'epiphenomenal' to the more fundamental problems leading to migration that would otherwise not be desired or chosen by the migrants. Many migrants do not embrace migration for its own sake; they would prefer to stay with their families and communities if possible. More liberal admissions policies, while perhaps desirable on other grounds (cosmopolitan ethical principles, or simply the interests of destination countries themselves), are then not the best solution to migrants' problems – a point that is arguably reinforced by consideration of migrants' happiness as above. Instead, one should seek to fix the local difficulties that impel some people to perceive migration as an unwanted necessity (something far easier said than accomplished).

On the other hand, if one wanted to adopt admissions policies that might have better prospects for enhancing people's happiness, then one might consider a policy approach that goes very much against the grain of immigration policies prevailing in most wealthy countries. Many countries (e.g. Canada and Australia) have made strenuous efforts to attract migrants with abilities and characteristics (high levels of education, or significant amounts of capital/money for investment) that portend a high level of economic success. Migrants in this category were likely already enjoying quite favorable situations prior to migration, and if they were nonetheless dissatisfied ('frustrated achievers') then it seems unlikely that their happiness will improve via migration. Much better prospects for benefit would seem to arise from the migration of those living in quite desperate situations: benefit in an objective sense is perhaps the more fundamental issue, but given that individuals in desperate situations likely fall below the threshold

[7] One might at least insist on transcending the 'negative freedom' embraced by libertarians and address also the 'positive freedom' that requires capabilities and institutional solutions sometimes facilitated by the state.

condition for the Easterlin paradox, we could reasonably expect an improvement in happiness via their migration as well. Most very poor people do not migrate to another country (particularly to a wealthy country) – and so a policy approach motivated mainly by a desire to increase happiness via migration might include actively seeking out such people and even assisting their migration (if the individuals themselves wanted it), rather than waiting for them to arrive at the border. The merits of this approach are reinforced by the argument that trying to increase average happiness is less important than trying to alleviate the suffering of those whose suffering is particularly acute (Brülde 2010).

The point carries no prospect of adoption, however – not least because poor people living in very poor countries are perceived to have little to offer in wealthy destination countries. Here as well we can see a case for trying to address people's needs 'at home' rather than via migration. There is no novelty in the suggestion that development might moderate migration flows (though not in the short term), but the case for connecting the two topics in this mode is arguably strengthened via consideration of happiness among migrants. The point requires subtlety: just as migration sometimes increases happiness and sometimes does not, certain forms of development are likely to increase happiness while other forms will not. Most observers would likely not be surprised if research on the people who were forcibly relocated to enable China's construction of the Three Gorges Dam discovered that those people did not gain happiness via this particular episode of development (cf. McDonald et al. 2008). Particularly given Easterlin's recent work (in which he extends the claim that economic growth does not bring happiness even for quite poor countries), one would want to ensure that one's conception of development is not limited to conventional notions that equate it (reduce it) to economic growth.

There are some grounds for optimism on that score. Kenny (2011) reviews a wide range of research showing that quality of life for many people in poor countries has been increasing significantly even where economic growth rates are low; improvements especially for health and education are now much less costly than they used to be. Many people will no doubt continue to choose migration even if their needs and aspirations can be met locally. But to the extent that it becomes possible for people to meet their needs and aspirations in their country of origin, migration would be more a matter of genuine choice rather than of necessity. Of course, even then the choice of migration might not lead to greater happiness – we might still contend with the more general proposition that people's choices do not always result in greater happiness (Gilbert 2006).

A less sweeping and more precisely focused discussion of policy implications is likely more practical and realistic. To explore possibilities for more finely tuned policies regarding immigrants' happiness, we can recall some of the main determinants of happiness as established in existing research, with particular attention to how some factors might operate distinctively for immigrants. Some factors are not the business of governments at all: depending on context, religious faith and/or involvement might enhance happiness (Eichhorn 2012), but there is little if any scope for governments (at least in liberal countries) to try to foster religious faith or involvement (though perhaps they could try to remove any obstacles to religious engagement). Other factors, however, might be more amenable to policy interventions that would require attention to the distinctive elements of immigrants' situations. Successful integration usually depends heavily on immigrants' ability to use the language(s) dominant in the destination country. Employment prospects are obviously better for immigrants who can use the local language – and so public provision of language education could help immigrants avoid unemployment, and perhaps it would also enhance their ability to engage in social activities with natives (viz. Neto 1995). Language ability itself might contribute directly to immigrant happiness (Ying 1996; Amit 2010). Whether it is reasonable to *require* immigrants to learn the local language (as a condition for permanent residence rights, as

in the UK) is another question: imposing requirements of this sort might be counterproductive, in relation to happiness and other aspects of wellbeing. But providing public support for language education for those who want it might have some genuine potential to contribute to happiness, perhaps via its impact on other forms of wellbeing.

Policies that connect to immigrant happiness do not consist only of interventions on the immigrants themselves. One must also consider how natives (and the institutions of destination societies) relate to immigrants. Immigrants fare poorly when they feel marginalized and perceive that they are targets of discrimination (Vohra and Adair 2000; Berry 1997; Jasinskaja-Lahti et al. 2006). Governments sometimes exacerbate natives' negative perceptions and treatment of immigrants by engaging in policy discourses that construct immigration as a problem. Fomenting concern in this mode might be an effective way of winning votes, but it is a very unlikely path to happiness, for immigrants and natives alike.

Conclusion

Insofar as research on migration and happiness arises via consideration of the Easterlin paradox, the impetus for that research is pessimistic: it implies that migration might to some extent prove disappointing. That implication, even when supported by empirical research (as to an extent in the discussion of east-to-west migration in Europe, above), is best treated as a caution for consideration rather than as a robust data point with obvious policy implications. Even given doubts (arising in happiness studies) about the 'revealed preferences' assumption of conventional economics, there are good reasons not to gainsay the preferences and choices of migrants themselves: if an individual believes that his/her wellbeing will be improved by migration, then skepticism arising from happiness research should not become a resource for proponents of greater restrictions on migration (at least in liberal settings where individual autonomy is highly valued). Migration is already restricted on a wide range of grounds, not all of them good.

In addition, research on the connection between migration and happiness is still at an early stage, and there is a clear need for better data. Without data on migrants gained prior to their migration, we have only a limited ability to perceive changes in their happiness; we are also prevented from conducting certain forms of more sophisticated analysis that would provide better insurance against risks of mistaken conclusions that might be drawn from cross-sectional analyses. That point transcends the question of migration and happiness: panel data on migrants would improve research capabilities on a wide range of migration consequences for the migrants (cf. Bartram 2013c).

There would be some genuine challenges in any attempt to create such data. An effort of that sort cannot be initiated by destination countries, because they are not well placed to determine which residents of origin countries are going to become migrants – and if one begins data collection after migration has occurred it is already too late. A better strategy would start from the research activities of origin countries.[8] Particularly when countries already conduct their own panel surveys (e.g. Hungary and Poland), they could 'follow' emigrants to their destinations, rather than abandoning them to attrition. The challenges in doing this are surely not insurmountable, especially given the possibility of using email and various types of social networking. Coordination and support from international organizations would be useful; the prospects for conducting research of this sort on migrants who move within the European Union would seem favorable especially if the EU's research institutions can be enlisted for this purpose. For migration originating in poorer countries that do not have a well-developed research infrastructure, a more basic capacity-building effort would be necessary.

[8] Many countries both send and receive migrants; the point is to situate the research in the origin, prior to migration.

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Part V

Wellbeing in Nations and at Continents

Quality of Life and Wellbeing in North Africa – Algeria, Egypt, Libya, Morocco and Tunisia

22

Habib Tiliouine

Introduction

This chapter aims to give an overview of life in North Africa and the main challenges facing its populations. These regions are currently going through an unprecedented period of political and economic volatility. In such hard times, I hope that an overall examination of the state of quality of life and wellbeing of the populations will contribute towards understanding the real needs and lives of the people, paving the way to development of outcome indicators for future use in planning and delivering interventions or services. The issues considered here are intimately linked to the health, social development, and community sustainability of populations. The cultural nuances which characterize the conceptualization of quality of life and wellbeing and their associated strategies make agreement and consensus about their definition and interpretation difficult to obtain. In spite of this, quality of life and wellbeing have been legitimate universal concerns for individuals and communities across different historical and cultural contexts.

During the last decades, the constructs of quality of life and wellbeing have provided researchers with excellent frameworks for interdisciplinary and intersectoral research that addresses the determinants of the good life, health and happiness in a comprehensive and holistic way. These concepts allow also for overall and cross-sectional comparisons of populations worldwide (Land et al. 2012), as well as populations sharing specific issues (Estes and Sirgy 2013; Estes and Tiliouine 2013; Tiliouine and Meziane 2012).

The large overlap that exists between the two notions of quality of life and wellbeing seems unavoidable, as their indicators are difficult to disentangle. However, one way of categorizing the numerous indicators found in this area is the distinction between the objective and subjective indicators. The objective ones are more or less directly measured, such as standard of living or physical health. However, the subjective indicators have proved difficult to delimit because they deal with personal and psychological states, perceptions, views and feelings about life in general and its specific domains. So, assessing material property may be much easier than assessing the psychological value of any goods or assets. Quality of life researchers would prefer to use both indicators to evaluate quality of life, rather than relying on the ownership of only one. It can be concluded that satisfaction, happiness and so forth represent the wellbeing side, but when other objective domains are added, one can talk about quality of life. This distinction is important in the present discussion because, in North Africa, as everywhere, the profound value of life could be inherent in the way people view it, not simply how many facilities they are offered.

H. Tiliouine (✉)
Laboratory of Educational Processes & Social Context (Labo-PECS), University of Oran, Oran, Algeria
e-mail: htiliouine@yahoo.fr

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In this Chapter, I propose to start by defining the populations living in North Africa, then address the main historical periods, represented by the pre-Islamic and the Islamic period, and finally, the European colonial and post-colonial eras. Following that, I will give a detailed description of the characteristics of the current population of the region, and the region's economic and political conditions. The analysis will be complemented by reviewing a number of well-established international simple and composite indicators that address quality of life and wellbeing issues in this specific region. The outcome is expected to be a thorough analysis of the main challenges of this less stable region of the world which still lags behind in terms of development levels. An agenda for action will be proposed to help point out to major steps that should be followed by policy makers.

I acknowledge that my account is very limited regarding the heterogeneity of the populations we are dealing with. In addition, the field of study concerning quality of life studies and social indicators is relatively new and has not attracted many social scientists in Islamic countries to study quality of life issues with sufficient rigor (Tiliouine and Meziane 2012; Estes and Tiliouine 2013). My analysis and conclusions are thus based on scarce and limited data in a rapidly evolving context; one where, unfortunately, instability is reaching worrying scales. Although, a variety of primary bibliographic sources and international data are used, the accuracy of the data may be problematic, mainly because the sample countries generally lack proper research institutions for collecting such data. Nevertheless, my approach remains a holistic one and the diversity of the reviewed simple and composite indicators has the advantage of filling many gaps in the presented information.

Defining North Africa

Commonly, North Africa designates the region stretching from the Atlantic shores of Morocco in the west to the Suez Canal and the Red Sea in the east, and includes the countries of Morocco, Algeria, Tunisia, Libya and Egypt. The former main colonizing power of the region, France, would limit *l'Afrique du Nord* to the Arab Maghreb or Maghrib countries only: Morocco, Algeria and Tunisia (Julien 1980). Some sources would argue that Sudan, which with Egypt, makes up part of what is known as the Nile Valley, belongs to this region.

However, in the present chapter, Sudan is excluded because of its complex situation. For instance, in 2011 the country was officially divided into independent states: Northern and Southern Sudan. Separate data for each state is difficult to find. The other part of North Africa to be excluded too is the disputed Occidental Sahara and other Spanish-dominated territories. Occidental Sahara covers some 266,000 km^2, and has an estimated population of 513,000 inhabitants (Wikipedia 2013e; https://fr.wikipedia.org/wiki/Sahara_occidental accessed on July 24, 2013). It was freed from Spain in 1975, but large parts of it were soon occupied by Morocco. Since then, the referendum for its independence has been on the agenda of the United Nations, while thousands of Sahrawi refugees have continued to live in harsh situations since the 70s (Nations Unies 2013). Our account will, therefore, deal with the five countries on which there is some consensus as traditionally belonging to the North African region: Morocco, Algeria, Tunisia, Libya and Egypt.

Any atlas shows that North Africa links two important and disparate areas of the world: Europe and Africa (Fig. 22.1). In the north, the area is bordered by the Mediterranean Sea and in the south by sub-Saharan Africa. What is known as the Atlas chain of mountains extends about 2,500 km across the Maghreb countries. The mountains recede to the south and east, creating highly fertile valleys, before meeting again in the Sahara desert. The Atlas Mountains do not reach the Libyan Sahara, but some highlands are found further south. Egypt is predominantly desert and its lands link the Mediterranean Sea to the Red Sea. Its arable regions, and the most populated, remain those of the Nile Valley and Nile Delta. However, it should be stressed that three-quarters of the North African land is Sahara and is not as densely populated as the northern Mediterranean coastal areas.

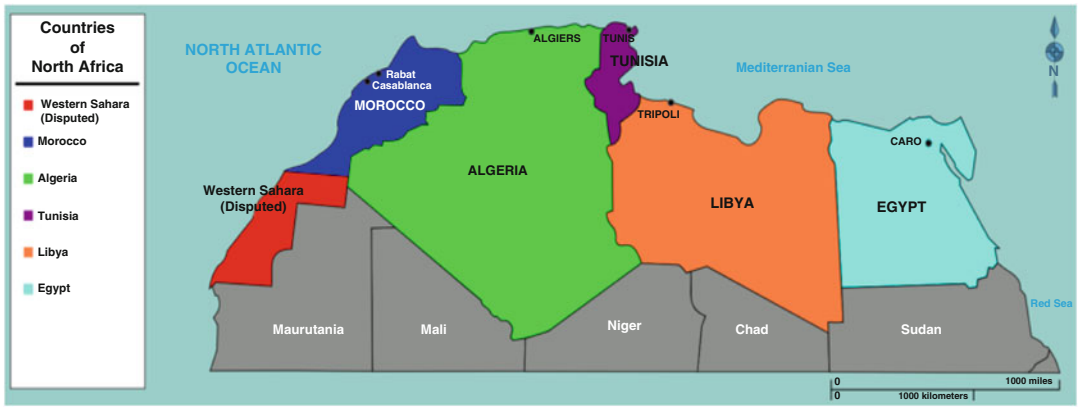

Fig. 22.1 Countries of North Africa

A Historical Perspective of Quality of Life in North Africa

North Africa in the Pre-Islamic Period

The population of North Africa is distinct from both the neighboring populations of Africa and Europe. The reasons behind its distinctiveness are twofold: natural and historic. The Sahara desert and the high chain of Atlas Mountains have been natural barriers, making communication between sub-Sahara and the north very difficult. On the other hand, the Mediterranean Sea has made the traffic to and from North Africa easier since very early times. So, the history of North Africa has been more closely linked to what was happening in the Mediterranean region than it was with the southern regions. However, these links seem to have occurred much later in history. Some evidence suggests that the present desert was a land of lakes and rivers about 130,000 years ago. Scientists assert that modern humans migrated between 130,000 and 40,000 years ago from these regions to populate other parts of the world (Science, 7 January 2011). Moreover, historians have shown that North Africa was occupied by hominin *Homo erectus* at least some 200,000 years ago (Wikipedia 2013a). The *man of Tighenifin* found in the West of Algeria is an example of such early occupants of this land.

While much of the ancient historical detail remains to be uncovered, North Africa has been at the heart of history since its beginnings. It has been inhabited by people from two main groups: Berbers and Arabs. Berbers or *Amazigh* are the indigenous ethnic group of the region west of the Nile Valley to the Atlantic Ocean and from the Mediterranean coasts to the Niger River (Wikipedia 2013a). In the prehistorically period, cave paintings dating back 12,000 years (found in the Tassili Mountains in Algeria, and in the Libyan Desert) suggest that early Berbers domesticated animals and developed techniques for subsistence agriculture. Some scripts, such as those found in Oran, indicate that they used alphabet letters of what is known as the Tifinagh language which was used across all North Africa in pre-modern history (Wikipedia 2013a).

Most of the great ancient civilizations attempted the seizure of North Africa. The Phoenicians (1550 BC–300 BC), who originated in modern Lebanon, came from a strong maritime trading culture and were known for their seafaring achievements. They occupied all North African coastal areas, but as was the case in most ancient invasions, did not reach interior areas where Berbers remained independent most of the time (Abun-Nasr 1987; Julien 1980).

Further to the east, where 'the Nile created Egypt', and the dynasties of pharaohs ruled ancient Egypt for more than 22 centuries (3100 BC–870 BC), a map of that period would show that the 18th Dynasty ruled large areas from where the Nile flows down to current Sudan in the south, to the Libyan shores in the west and up to the Syrian and Lebanese Mediterranean

coasts (Wikipedia 2013b). During this period the Pharaohs built one of the greatest civilizations of all times. Their building skills, medical techniques, and other technologies still amaze us today (Wikipedia 2013b). However, such a society remained highly hierarchical and oppressed many of its ethnic groups. The Pharaoh has been a synonym for the cruelest form of oppression in sacred books, such as the Qur-'an, which devoted two-thirds of its verses to the struggle of the Prophet Moses, the liberator, against the evils and the tyranny of the Pharaohs.

Persians, then Greeks under the leadership of Alexander III of Macedon, conquered Egypt and started a long rule over the country, between 305 BC and 30 BC. The Greek Hellenistic culture prospered in Egypt and integrated much of the Pharaohnic culture. But subsequent civil wars and unrest weakened them until the Roman Empire annexed Egypt as a Roman province (until 390 AD) following the defeat of the famous Queen Cleopatra by the Roman Emperor Augustus (Wikipedia 2013b). The Romans established a rigid system of hierarchy based on ethnicity where the Roman 'citizens' followed by the Greek citizens had the highest status. Locals from rural areas suffered the worst segregation and were subject to high rates of taxation (Wikipedia 2013b).

Occupying powers came also from Asian areas. For instance, the Sassanid Persians conquered Egypt again around 619 AD, but Islam ended the 975 years of Greco-Roman rule over Egypt with Alexandria becoming Islamic land in April 641.

One of the great civilizations of North Africa is that of Carthage (575 BC–146 BC). It is remembered for establishing a great hegemony throughout the Mediterranean as far as to what is now known as Spain. It was the center of trade and political influence throughout ancient times until the Romans destroyed the city after what is known as the Punic Wars. A map of 323 BC showed that Carthage shared the rule over North Africa with Numidia to the south and some other Berber tribes under the name of Mauretania to the south -west (Wikipedia 2013a).

Numidia is important in that it succeeded in unifying the Berbers under the rule of one kingdom and stimulated the development of agricultural techniques which led many nomadic tribes to settle down. However, after the death of the Berber leader, Massinissa, an ally of Rome, whose support helped defeat Hannibal in 202 BC, the kingdom was again divided and ruled separately by his sons.

A major intellectual figure of the Roman period in North Africa is Saint Augustine (354–430), the son of a Berber. He was appointed as a Christian bishop of present-day Annaba, Algeria. His writings and thoughts profoundly influenced the medieval worldview (Wikipedia 2013c).

To sum up, because of its proximity to ancient civilizations, North Africa has been at the center of major historic events and clashed frequently with rising powers. Undoubtedly, such a situation has enriched its historic capital and helped it contribute to human civilization as a whole.

Islam and North Africa

As mentioned earlier, a good part of present North African populations are Berbers, while others are of Arab origin. Arabs came to North Africa with the religion of Islam in the 7th Century AD and Islam has since become the dominant faith in the region and a part of the identity of its peoples.

History teaches us that in less than 70 years, Muslims conquered all North Africa from the Nile to the Atlantic Ocean, an unprecedented achievement in history for a young civilization and one that wrought with permanent changes. The local inhabitants fiercely resisted the Arab armies, sometimes under the leadership of women warriors such as Al-Kahina, a legendary figure who died sword in hand. Nevertheless, like other Berbers, her sons eventually accepted the new faith and became soldiers and commanders in the Muslim armies (History Today 2013). For example, Tariq bin Ziyad led the predominantly Berber army in 711 to the European continent. The Muslim armies overthrew the Visigoth rule, conquered what is Andalusia in present-day Spain and ruled until the year 1492. During this

long period, Andalusia formed an integrated part of the Islamic Maghreb and, from this time, North Africa and the new Islamic European land formed the southern alternative in Islamic religious sciences, jurisprudence, philosophy, literature, history, etc.[1] The central government in the Islamic Empire lost control of the Maghrib land (then called *Ifriqia*) after less than a century, even before ending the Islamization of the region (Abun-Nasr 1987; Julien 1980). Merchants and learned, pious Muslims played a determining role in converting the people of north and further in sub-Saharan Africa to Islam (more details are found in Abun-Nasr 1987: 32–40).

However, looking back at the quality of life of the people in this period remains a difficult task because of the lack of historic sources, and the little that we have remains unexploited by modern researchers. As an example, what is known in Arabic as 'Travel Literature' is a valuable source of information awaits careful study. Many notable writers, such as Ibn Jubayr (1145–1217[2]) and Ibn Battuta (1304–1369), described the people and the places which they visited extensively.

However, a brief historic review of that period reveals that North Africa had been ruled by many Royal dynasties since Islam was brought to this land (Table 22.1). Some of these dynasties had a short life and ruled small areas, such as Muhallabids, (22 years), Ikhshidids of Egypt, (34 years) or Tulunids in Egypt (37 years). In contrast, the Hafsids remained in power some 345 years, the Ziannids of Tlemcen some 321 years. The Husainids ruled Tunisia for 252 years and were only removed after the independence of Tunisia from France in 1957. The dynasty of the Alaouite has governed Morocco since about 1666 and is considered the oldest ruling dynasty in the world. Table 22.1 displays a list of the main ruling Muslim dynasties of North Africa and some of the characteristics of each period. Despite the fact that little information on the quality of life of the population is available, Table 22.1 reveals the continuous political dynamism and power-changing in the region. It also shows that the emerging European powers, mainly the Spanish, Portuguese, and British powers exerted a great deal of pressure on the Mediterranean region, leading to frequent clashes with the ruling dynasties, and in most cases, complete subjugation of these countries as colonies.

Twinning religion and politics along with tribal affiliations was a characteristic of the ruling dynasties of North Africa. Almost all the known dynasties defended an identity in which a distinct interpretation and understanding of the religion was linked, to a great extent, to their tribal origins. For instance, the Berber Fatimids (909–1171) defended a Shiite view of Islam and expanded eastward to seize control of large Abbassid territories, including the holy land in Arabia. They founded great libraries and colleges, such as the prestigious Al-Azhar University, whose function was to train missionaries to expand their religious view (Encyclopedia Britannica 2013a). Their subsequent opponents, the Almoravids (1054–1147), brought Islam southward as far as present-day Ghana, seized the main Saharan trade routes and controlled present-day Spain. Their religious preference was for Sunni Islam (Encyclopedia Britannica 2013b). However, Almohads (1147–1269) take the credit of unifying present-day Morocco, Algeria and Spain. The end of their rule is viewed by some thinkers (e.g., Bennabi 2005; Abun-Nasr 1987) as the real beginning of the decline of the whole Islamic civilization. However, it should be remembered that gradually the Sunni Islam ended by taking the lead and today dominates most of the Islamic world (Abun-Nasr 1987). The Maliki school,[3] which belongs to

[1] Interested readers can consult: http://www.muslimphilosophy.com.

[2] 'The travels of Ibn Jubayr' volumes as reviewed by William Wright (1907) can be found in: http://ia700208.us.archive.org/17/items/travelsofibnjuba05ibnjuoft/travelsofibnjuba05ibnjuoft.pdf.

[3] The **Mālikī** (Arabic: مالكي) madhhab is one of the schools of Fiqh or religious law within Sunni Islam. It was founded by Malik bin Anas and it considers the rulings from ulema from Medina to be sunnah [1]. Its adherents reside mostly in North Africa, West Africa, the United Arab Emirates, Kuwait, in parts of Saudi Arabia, Oman and many Middle Eastern countries, and parts of India [2]. The Maliki school of jurisprudence forms the official state legal codes of Kuwait, Bahrain and the United Arab Emirates. (Wikipedia. (2013d). Maliki. Retrieved August 15, 2013 from http://en.wikipedia.org/wiki/Maliki.)

Table 22.1 The ruling Muslim dynasties of North Africa

	Period	Ruled territories	Some achievements
Kingdom of Nekor, Salihids	710–1019	Rif, Morocco	Founded by *Salih,* an immigrant from Yemen by Caliphal grant. He converted the region of Rif to Islam and ruled it independently (http://en.wikipedia.org/wiki/Kingdom_of_Nekor accessed July 29, 2013)
Muhallabids	771–793	Ifriqiya[a]	Under their rule Ifriqiya enjoyed a period of prosperity. Agriculture was reinvigorated by the expansion of irrigation systems. The Muhallabids of Ifriqiya resisted the revolts of the Berbers against Arab rule, but failed to prevent the formation of Idrisids in Morocco and Rustamids in Algeria (http://en.wikipedia.org/wiki/Muhallabids, accessed July 28, 2013)
Aghlabids	800–909	Ifriqiya	Although they were independent rulers, they were partly subordinate to the Abbasid Empire of Baghdad. In addition to a highly active intellectual life, one of their great achievements was rebuilding the Grand Mosque of Tunis known as the Zaituna. They conquered Byzantine in 827 (Abun-Nasr 1987: 54–58)
Tulunids Dynasty	868–905	Egypt	First independent dynasty in Egypt after Islam reached the region. It broke away from the Abbasid Dynasty. Their rule was marked by economic and administrative reforms alongside cultural ones. Ahmad ibn Tulun changed the taxation system and aligned himself with the merchant community. He also established the Tulunid army. (http://en.wikipedia.org/wiki/Tulunids, accessed July 28, 2013)
Fatimids Dynasty	909–1171	Egypt	Took shape under the Berbers and expanded eastward to found Cairo as a capital city in 969. They ruled large parts of the Islamic World. (http://www.britannica.com/EBchecked/topic/202580/Fatimid-Dynasty accessed July 29, 2013)
Ikhshidid Dynasty	935–969	Egypt	Ruled Egypt on behalf of the Abbasid. Its first ruler was a Turkic slave soldier
Zirids Dynasty	973–1148	Ifriqiya	A Berber dynasty which became independent from the Fatimids in 1048. Its capital city was close to present Algiers. All agriculture, industry, trade, as well as both religious and secular learning flourished under their rule. It was finally destroyed by other Berber tribes of Almohads
Hammadids	1008–1152	Western Ifriqiya	Declared independence from the Zirids. Their new capital of current Bejaia was one of the most prosperous cities in the Mediterranean region. Shifted from the Shi'a to the Sunni Muslim rite. The forts which they constructed are still standing (Julien 1980)
Al Moravids	1040–1147	Morocco, Algeria and Spain	Ruled large parts of present Spain and Portugal, the whole of Morocco and parts of Algeria. They controlled the main routes of trans-Saharan trade and brought Islam deep to West Africa. Their territories adopted the Malikite rite. http://www.britannica.com/EBchecked/topic/16858/Almoravids
Al Mohads Dynasty	About 1147–1269	Morocco, Algeria and Spain	A Berber dynasty founded in the Atlas Mountains. After defeating the Almoravids, they ruled Andalusia. Among the famous intellectuals in their period was the influential Averroes. Many universities delivered high quality teaching under their rule. The main sites of Almohad architecture can be found in Seville (Spain), Marrakech, Fes and Rabat (Morocco) (Abun-Nasr 1987)
Ayyubid Dynasty	1171–1341	Egypt and the Middle East	Of Kurdish origin; based in Egypt and ruled the Middle East. One of the main achievements of its Sultan Saladin was his defeat of the Crusaders and the liberation of the holy Jerusalem. (http://en.wikipedia.org/wiki/Ayyubids accessed August 2, 2013)

(continued)

Table 22.1 (continued)

	Period	Ruled territories	Some achievements
Hafsid Dynasty	1229–1574	Ifriqiya	A Berber dynasty that broke away from Al Mohads. They built Tunis as the economic and cultural center of their empire. They gave refuge to Muslims fleeing the Spanish Reconquista. They developed trade with neighbours, including Europe, and undertook Mediterranean sea piracy. They also developed arts and cultural activities (Abun-Nasr 1987; http://en.wikipedia.org/wiki/Hafsid_dynasty accessed August 2, 2013)
Ziyyanids Dynasty	1235–1556	Tlemcen	After the fall of Al Mohads, this Berber dynasty ruled the northwest of Algeria. They fought the Marinids of Morocco and later fought the Spanish incursions. They finally became a protectorate of the Ottoman Empire (Abun-Nasr 1987)
Marinid Dynasty	f. 1244, r. 1269–1465	Morocco	A Berber dynasty which seized power in Morocco after the Almohads. They fought many wars with the Spanish armies and were overthrown by the Wattasids
Mamluk Sultanates	1250–1517	Egypt	These are two dynasties, the first known as the Bahri Dynasty (1250–1382) and the second, the Burji Dynasty (1382–1517) which ended after the Ottoman conquest of the region. They started as a special regiment in the Ayyubid palaces, and became rulers after defeating the crusaders and capturing Louis IX of France in 1249, effectively ending the crusades. The Ottomans ended their effective power in 1517. (http://en.wikipedia.org/wiki/Mamluk_Sultanate_(Cairo), accessed August 3, 2013)
Wattasid Dynasty	1472–1554	Morocco	Of Berber origin, they seized power from their cousins the Marinids, but were finally defeated by the Saadis
Saadi Dynasty	1554–1659	Morocco	They broke away from the Wattasid Dynasty to rule independently in the southern parts of Morocco. They succeeded in defeating the Portuguese army
Alaouite Dynasty	about 1666–present	Morocco	Took power after the Saadis. Ismail Ibn Sharif (1672–1727) organized and began the creation of a unified state (Abun-Nasr 1987; Julien 1980)
Husainid Dynasty	1705–1957	Tunisia	The Husainids are of Turkish origin. They ruled Tunisia under the suzerainty of the Ottoman until the French conquered them in 1881 and Tunisia became a French protectorate. Their last king was overthrown by Habib Bourguiba, who declared the Republic in 1957 (Abun-Nasr 1987)
Karamanli Dynasty	1711–1835	Libya	The Karamanlis are a series of Pashas of Turkish origin. They ruled present Libya. They controlled the Mediterranean shipping routes for a long time and fought wars, even with the US
Muhammad Ali Dynasty	1805–1952	Egypt	Known also as 'Khedival dynasty', Ali was sent by the Ottomans to fight Napoleon and succeeded in driving the French armies out of Egypt. The Khedivate's rule became merely symbolic after the British conquered Egypt in 1902. Among the factors leading to the 1952 revolution led by Gamal Abdel Nasser and the other free officers were widespread corruption and Arab discontent at losing the 1948 war leading to the creation of Israel

[a]*Ifriqiya* is an Arab adaptation of the Latin 'Africa'. This name was given by Arabs to the province of modern Tunisia and the East of Algeria

Sunni Islam, is followed in large parts of North Africa and the Arabic Peninsula.

Despite these differences, Islam has made a deep imprint on the social, cultural and economic life of these societies (Abun-Nasr 1987; Julien 1980). It has provided its followers with a distinct way of life, at the heart of which lie clear prescriptions for individual, family and other societal domains. Muslim societies enjoyed well-organized legal systems that continued to

resist the modern European law. Medicine was also much advanced and relied on solid knowledge and healing practices. The 11th century Ibn Sina's Canon presents an integrated view of surgery and medicine and was widely known in the Islamic world (Nacer et al. 2009).[4] This traditional system clashed with modern medicine and was one of the battles in the forefront of resistance to the European incursions later on (Turin 1983). However, this does not mean that medical sciences at that time were developed enough to eradicate the frequent epidemic outbreaks of that time. Social researchers are urged to turn their attention to this yet unknown area of the study of quality of life.

Islam has also a distinct view of human happiness. A good life, or simply happiness, has been construed as equilibrium between the yearnings of an earthly life and the recommendations for the life Hereafter (Tiliouine 2013a). Thus, from the outset, a human life is purposeful. From this perspective, true happiness is twofold: happiness in earthly life and happiness after death, in the hereafter. The following credo remains the prophet's popular saying: "Conduct yourself in this world as if you are here to stay forever, and yet prepare for eternity as if you are to die tomorrow". An ideal education in this faith system, therefore, would aim to prepare Muslims to live according to Islam's teachings and to fulfill these ends. Frequent worship gatherings and group prayers give Islam's followers a sense of belonging, and through giving or receiving alms (Zakat), individuals mark their social solidarity and help bridge income inequality.

Islam is based on the sacred book of the Qur'an and the Prophet's *Hadiths* (*Sunna*). Understanding and interpreting the words of God and His Prophet required an effort of life-long learning. Many institutions were gradually established to facilitate such an intellectual effort right from the beginning and a well-structured educational system developed (Heggoy 1984; Tiliouine 2013c). As the foundation of this system, were elementary schools (in modern terms) which were devoted to teaching the Qur'an and ensuring basic literacy. *Medersas*, the equivalent of intermediate and secondary schools in modern times, were gradually instituted to deliver a variety of religious and scientific subjects, such as advanced language sciences, mathematics, philosophy, Islamic law, etc. (Saadallah 1985; Heggoy 1984; Tiliouine 2013c). These institutions prepared students for the professions of Imams, clergymen, Islamic lawyers (*Kadis*), teachers, and other types of professions according to the expressed needs of the society. Though there is a dearth of information on exactly how this system evolved, many of the *Medersas* were linked to different traditional religious congregations (Zaouias) and *Sufi* methods and were financed mainly through people's donations.

This system required highly skillful teachers and scholars and also a strong intellectual life for their preparation. This is apparently how the first universities of the world saw the light. Al-Qarawiyyin in Fes Morocco was founded in 859 by Fatima Al-Fihri, a rich woman, and is considered to be the first university in the world. Al Azhar was established a century later in Cairo, Egypt (Esposito 1998; Tiliouine 2013c). These universities delivered diplomas in different scientific and professional disciplines in line with expressed societal needs. Their curricula were gradually enriched and their practices diversified (Saadallah 1985). Because this education system was relatively financially independent, and relied on the population's participation, we know that it could outlive the political unrest and the frequent change of ruling dynasties that characterized the region (Table 22.1).

The Ottoman presence in North Africa lasted in a long time: 1299–1922, and the Ottoman Dynasty took on the status of an empire after the seizure of Constantinople (the capital city of the Byzantine Empire) in 1453. After taking control of most of the Islamic-held land, its

[4] For a review of Ibn Sina's *Canon of Medicine, see: Nacer, M.* et al. *(2009).* Ibn Sina's *Canon of Medicine*: 11th century rules for assessing the effects of drugs. JRSM, Journal of the Royal Society of Medicine, 102 (2): 78–80, accessed in July 1 2013 **http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2642865/**

leader, Selim I, took the title of *Caliph* (i.e. Successor of the Prophet) in 1517. Ottomans controlled most of the Mediterranean area in the 16th century and maintained naval bases in southern France, Algeria and Tunisia. Only Morocco remained beyond their control (http://en.wikipedia.org/wiki/Mediterranean_Sea#History accessed August 2, 2013). The Ottomans governed North Africa after they were called in to help local populations fighting against the recurrent invasions by the emergent Spanish and Portuguese superpowers. The status of the Ottomans as colonizers is subject to much debate and disagreement by modern historians (Saadallah 1985). As a matter of fact, sources indicate that the Ottoman rule was characterized by authoritarianism and widespread violence against local populations (Saadallah 1985: 133–193).

Another point should be raised here with regard to slavery and slave-taking. In the Islamic legacy, slavery was not based on the color of the skin. Rather, it was a consequence of war captivity, and sea piracy was known as one of the main sources of slaves. Historians reveal that, between the 16th and the 19th centuries, pirates captured 1 million to 1.25 million Europeans as slaves (Davis 2004).

We can conclude that the North African culture was deeply reshaped by the arrival of Islam. It allowed for contact with other distant nations such as the Persians, the Kurds and the Turks. It strengthened the relationship with Sub-Saharan Africa and also with nations of Europe. Although little is known about the quality of life of people during those periods, this is a rich area for researchers' attention since there are many old writings and Arabic manuscripts that remain unexploited.

The European Colonial Experience and the Formation of Modern North African States

Before addressing the issue of quality of life and wellbeing in current North Africa, one should not ignore the importance of how modern national states were formed within their current borders. A prerequisite for dealing with this subject is a description of the European infiltration into the region during and after the nineteenth century (http://exploringafrica.matrix.msu.edu/students/curriculum/m16/activity3.php accessed 30 August 2013). The destruction of Muslim rule over Iberia led to the mass exodus to North Africa of the Andalusian populations around the year 1492. This exodus was followed by Spanish incursions and, in some places such as Algeria, the local populations who sought the help of the Ottoman Empire ended as an Ottoman protectorate until the French colonized the country in 1830. Tunisia had the same fate, becoming an Ottoman state, later a French protectorate, and finally gaining its independence in 1956. Morocco remained mostly under the rule of the Alaouites, and was a French protectorate until 1956, though Spain continues to control some Moroccan coastal enclaves even today.

Egypt was put under the rule of Napoleon (1798–1801) who was eager to secure the French trade interests and undermine British access to India (https://en.wikipedia.org/wiki/Napoleon%27s_campaign_in_Egypt accessed August 30, 2013). Mohammed Ali Basha himself, who was appointed by the Ottomans to fight Napoleon, became the sole ruler of Egypt and later on conquered Sudan. The rule of the Khedivians survived until 1952 when the revolution led by Jamal Abd Naceur and other independent officers took over. Libya's fate was different: it became an Italian colony after the Italo-Turkish war of 1911–1912, witnessing mass-killing of the Bedouin populations and a harsh fighting among European powers who aimed to rule the country (https://en.wikipedia.org/wiki/Libya#Italian_Libya accessed September 03, 2013).

Throughout the region, the European colonial era was characterized by frequent bloody struggles, in which teaching the local language, history or civilization were forbidden. Across the region, with some marked differences between the colonizing powers' policies, only a small proportion of the local population was schooled.

Feelings of bitterness and oppression among the natives of North Africa led to the liberation wars during which many atrocities were

committed, as in the case of Algeria between 1954 and 1962. The establishment of the state of Israel in 1948 in Arab land led to the birth of a local nationalism principally calling for political union of the whole Arab world and the return of the Palestinian refugees (currently estimated at six million people) to their land. A much larger movement was led by the Islamic nationalists who, among other things, called for the reinstitution of the Islamic *Khilafate* abolished by Kamel Ataturk in 1912. The pan-Islamic movements gained more popular support from Arab lands than pan-Arabism, mainly as a result of the repeated defeats fighting the Israeli occupation and the success of the Islamic revolution in Iran. However, the claim made by many extremist movements to belong to the faith of Islam and to fight under its name (Estes and Sirgy 2013; Tiliouine and Meziane 2012) has greatly damaged the image of this religion and its followers.

Characteristics of the Population of North African Countries

The population of the five selected North African countries represents 2.41 % of the 6,973.7 million world total population (Table 22.2) with a high population density on the Northern Mediterranean coastal areas. These countries vary greatly with respect to population size which ranges from 82.5 million for Egypt to as few as 6.4 million for neighboring Libya. Population growth rates in the region mostly exceed the world average, except in Tunisia (1.4 %), and are much higher again in Libya (2.1 %) and Egypt (2.0 %). This is reflected by the predominance of children 15 years of age or younger in nearly all North African countries (CIA World Factbook 2011). In some cases, these population growth trends are at considerable variance with those reported for both the Organization of Islamic Co-operation (OIC) on average, as well as those of the world as a whole (Estes and Tiliouine 2013). Obviously, the rapid population growth places a number of burdens on government budgets in order to meet necessities such as, schools, improved health care, improved housing, and employment opportunities. This in turn, may amplify social discontent, especially among the unemployed university graduates who are found in countries experiencing the most rapid population growth rates (Salehi-Isfahani 2010). The combination of high fertility rates and the rapid increase in the numbers of people aged 60 and over are leading to high levels of age-dependency. Involuntary joblessness is a problem shared by all Islamic countries and is especially high among the large

Table 22.2 Some Population-Related Indicators for North African countries

	Population (Millions)	Population growth rate	Age dependent population	Age dependent population		Infant mortality	Adult literacy rate (15+ years)
				<15 Years	>65 Years		
	2011	2011	2012	2011	2011	2012	2011
Algeria	36.0	1.2	28	5.2	73.1	27.7	69.9
Egypt	82.5	2.0	32	4.5	73.2	27.3	72.0
Libya	6.4	2.1	31	4.6	74.8	19.3	89.2
Morocco	32.3	1.1	28	6.1	72.2	36.9	56.1
Tunisia	10.6	1.0	24	7.5	74.5	22.6	74.3
Total	167.8						
Average	33.56	1.48	28.6	5.58	73.56	26.76	72.3
OIC Average		1.0	28.9	4.1	64.2	50.0	70.3
World (N = 162 Countries)	6,973.7	1.4	28.9	7.6	67.9	34.3	82.7

Source: Estes and Tiliouine (2013: 11)

population of young people below the age of 30 years and among women (ILO 2012). Both joblessness and under-employment contribute to a profound sense of *social anomie* which, not infrequently, spills over into social unrest and political discontent (Estes and Tiliouine 2013).

However, differences in average life expectancy rates across North Africa are small (average: 73.56 years), indicating a favorable change. They are substantially higher than their equivalent average in Islamic countries (64.2 years) and the world average as a whole, (67.9 years) (Estes and Tiliouine 2013).

The incidence of infant deaths per 1,000 live births (infant mortality rate) indicates the efficiency of health care systems and achievements in social progress. North African states are somewhat variable in this aspect of development with an average infant mortality rate of 36.76, which is much lower than 50.0 infant deaths per 1,000 live births in OIC and slightly higher than the average of the world as a whole of 34.3/1,000 (Table 22.2).

The efforts made by individual countries in extending to the most basic literacy skills in reading and writing to their populations may be reflected in the reported proportion of adult literacy rates. Here again, North African countries are some 10 points lower than the world's average of 82.7 %. Morocco lags behind with an average of 56.1 %.

Overall, North African states' performance on population indicators confirms that, with very few exceptions, they are underperforming on many indicators relative to the demographic achievements reported for the world as a whole.

The Economic Dimension of Quality of Life in North Africa

An examination of the North African states' performance on selected economic indicators (Table 22.3) also confirms that a high degree of economic heterogeneity exists within the region. Very few countries are succeeding on a limited number of these indicators, which proves that these states still have a long way to go if they are to achieve economic outcomes at levels realized by the world as a whole.

Taking the widely-used indicator of per capita gross domestic product (PCGDP) as a proxy variable for quality of life, the North African countries earned an average of only $9,259 with some variances from one country to another. For instance, people in Libya earn twice the amount earned by Algerians and about four times that of Moroccans. During the same year the world average earnings reached $12,000. This figure is in sharp contrast with the levels reported for the richest Islamic countries, such as Qatar ($98,900) or Kuwait ($41,700) (Estes and Tiliouine 2013). However, the wealthiest countries remain those oil-rich ones.

Table 22.3 Selected Economic-Related Indicators for North African countries

	PC GDP 2011	% Growth GDP 2011	Year	External debt as % GDP	Year	Unemployment rate	Year	Poverty rate	GINI coefficient 2000–2011
Algeria	$8,715	2.5	2011	2.0	2009	10.0	2011	23.0	35.3
Egypt	$6,324	1.8	2011	15.0	2009	12.0	2011	20.0	32.1
Libya	$16,855	6.3	2008	11.0	2009	30.0	2004	7.4	36.7
Morocco	$4,986	4.5	2011	50.3	2010	8.9	2011	15.0	40.9
Tunisia	$9,415	−1.8	2011	40.5	2010	19.0	2011	3.8	40.8
Average	$9,259	2.66		23.76		15.98		13.84	37.16
OIC average (N = 53)	8,625	4.6		47.9		17.4		**34.7**	38.6
World average (N = 162)	12,000	3.7		NA		9.1		22.4	39.0

Source: Estes and Tiliouine (2013: 15)

In the same vein, economic development of the region as a whole is further hindered when taking into consideration the very high levels of foreign indebtedness that exist for most of these countries, i.e., Morocco (50.3 %) and Tunisia (40.5 %). The heavy levels of external indebtedness that exist for the majority of the North African states limits their capacity to finance new development initiatives. However, Algeria has made early repayments of their external debt a priority with the result that Algeria now has the lowest external debt level in the region and the second-lowest level among OIC countries (International Monetary Fund 2012).

Similarly, average unemployment (and underemployment) levels in North Africa are generally high (15.98 %), some seven percentage points higher than that of the world as a whole (9.1 %). Joblessness among young people exceeds 25 % and is well above that for the OIC's women for whom joblessness is more the norm rather than the exception (ILO 2012). It should be mentioned that the figures may not fully reflect the reality on the ground because they are taken at different time periods and they preceded a period of tremendous changes in the region, mainly after what has been labeled the Arab Spring (Estes and Tiliouine 2013). Some enduring negative effects have already been observed in these countries' economies. Levels of poverty noticed before the Arab Spring were already worrying, reaching 23 % in Algeria and 20 % in Egypt, and the situation has certainly deteriorated after the turmoil in Egypt and Tunisia since tourism, an important driver of these countries' economies, has declined.

GINI Coefficients for North African states attest to increasing income inequality both within and between these countries, i.e., an average GINI score of 37,16 for North Africa as a whole which is not far from the 39.0 for the world community. Poverty alleviation efforts should be a priority in the future of the new democracies. However, civil unrest and political instability may hinder the prospects of improvements in the near future (Estes and Tiliouine 2013; Tiliouine and Meziane 2012; Estes 2012).

The Political Dimension of Quality of Life and State of Freedom in North Africa

The North African states are characterized by some variation with respect to a wide range of political indicators (Table 22.4). With the exception of Morocco, a constitutional monarchy, all

Table 22.4 Selected Political-Related Indicators for North African countries

	Type of Polity-2010	Head of State-2010	Political Freedom Index-2012	Civil Liberties Index-2012	Corruption Perceptions Index-2012	Failed State Index 2012	Parliamentary seats held by women-2011
Algeria	Republic	Executive	6	5	29	78.1	7.0
Egypt	Republic	Executive	6	5	29	90.4	NA
Libya	Republic	Ceremonial	7	6	21	84.9	7.7
Morocco	Constitutional Monarchy	Executive	5	4	37	76.1	6.7
Tunisia	Republic	Executive	3	4	41	74.2	23.3
Average			5.4	4.8	31.4	80.74	11.17
OIC average (N = 53)			**4.9**	**4.7**	**31.1**	**84.9**	**14.4**
World average (N = 162)			**3.6**	3.3	43.3	**70.9**	**20.3**

Source: Estes and Tiliouine (2013: 19–20)

the studied countries enjoy republican forms of government in which political participation on the part of all adult residents is encouraged. However, many changes are on the way following the Arab Spring revolts.

In terms of scores on the Political Freedom Index of 2012 which range from 1 (most free) to 7 (least free), all five North African countries, except Tunisia, attained scores lower than that of the world as a whole (Average: 3.6) and lower than the OIC member states average of 4.9 (Table 22.4) (Freedom House 2012).

However, the situation is changing in many North African countries: Tunisia is undergoing profound political changes after the fall of Benali's regime; Libya is also changing, following the fall of the Kaddafi regime, while Egypt is still in the midst of another counter-revolution with the return of Army to the political scene. The general situation of the majority of North African countries is evolving rapidly and time is needed for such changes to take an enduring shape.

While a score of 100 indicates the lowest possible level of public corruption on the Corruption Perceptions Index (Transparency International 2012), all North African countries scored just slightly higher than the world average of 43.3. The most corrupt of these countries identified on the index are Tunisia (41) and Morocco (37) (Table 22.4) (UNDP 2011, 2012).

With regard to the Failed State Index, OIC countries averaged 10 points lower on the index than the international average (70.9) and about 4 points higher than other Islamic nations of OIC. Significant social collapses are continuing in most of these countries and, because of the recent civil unrest, their performance in terms of political stability is not as solid as it was.

Lastly, advancing gender equality and encouraging active participation in public life is an important factor in the development of nations, especially in the ability of women to participate in political decision-making. The status of women in Islamic societies in North Africa continues to lag far behind that of men, with women holding an average of only 14.4 % of parliamentary seats; the average is 11.17 % in North African states compared with those held by women in other world regions where the average is 20.3 % and, certainly, in comparison with the percentage of seats held by men (UNDP 2005). In 2012, Algeria took some tangible steps to increase the number of women in parliament and other elected representatives. Since 2012, they have held 31.6 % of parliament seats, placing this country first amongst the Arab countries.

Quality of Life in North Africa in the Light of Selected Composite Measures

The Millennium Development Goals Index (MDGI)

Adopted by world leaders in the year 2000 and set to be achieved by 2015, the Millennium Development Goals (MDGs) aim to be both global and local to fit each country's specific development needs. They are the most broadly supported, comprehensive and specific development goals the world has ever agreed upon. These eight time-bound (by 2015) goals provide concrete, numerical benchmarks for tackling extreme poverty and enhancing equality in many dimensions. They include goals and targets on: (1) eradicating extreme poverty and hunger; (2) achieving universal primary education; (3) promoting gender equality; (4) reducing infant mortality; (5) improving maternal health; (6) combating HIV/AIDS and other diseases; (7) ensuring environmental sustainability, and (8) promoting global partnerships (United Nations 2012). The "gateway" for the United Nations system's work on achieving the MDGs is: http://www.un.org/millenniumgoals/bkgd.shtml. MDG achievements are considered in the present section as a way of assessing to what extent North African countries have succeeded in meeting the very basic needs of their populations. Satisfying these needs is considered a prerequisite to a better quality of life in the region, as elsewhere in the modern world.

The MDG achievement Index (MDGI) was adopted to measure the gap between the latest observed value and the expected value for the same year if the indicator was to meet the required target in 2015. It gives the percentage deviation of MDGs from the required targets for

selected indicators and countries. Twelve proxies were adopted to form the MDGI (The Arab United Nations & League of Arab States 2013: 73). The 12 indicators are quoted from the most recent Arab Millennium Development Goals Report which was released while finalizing the present chapter. Table 22.5 displays in percentage terms the 12 quantifiable MDG targets. They compare actual performance with the minimum required for the country to be on track towards achieving the goals. The report indicates that, overall, the Arab region has made significant progress in only some of the MDGs, such as primary school enrolment and literacy. Most countries are also succeeding in guaranteeing gender parity in enrolment in primary, secondary and tertiary education. On the other hand, these countries have achieved poorly in the important areas that are related to hunger, food insecurity, lack of access to water, lack of improved sanitation in rural areas, and child and maternal mortality. Political volatility and conflicts in the region since 2010 led hard-won gains on the goals to be halted or reversed, in some cases. Increased poverty levels are one of the direct consequences of widespread unrest (United Nations & League of Arab States 2013).

The Human Development Index (HDI)

HDI is a statistic produced by the United Nations to measure the level of 'Human Development' all over the world. It ranges from 0 to 1 and combines data from the areas of life expectancy, education levels, and per-capita Gross National Income (GNI). It produces an overall ranking of countries that are categorized as developed (high development), developing (middle development) or underdeveloped (low development).

One of the important findings of UNDP reports is the falling trends of fertility and child mortality which have important consequences in transforming family structures in most Middle East and North Africa (MENA) countries. Some other important advances are registered in health, education, and income (Table 22.5).

These achievements were praised by the 2010 United Nations Human Development Report (HDR) which named five Arab countries as the best performing nations in HDI and called them "unsung development miracles of our time". Surprisingly enough, a few months later, some of these countries, such as Tunisia, were the first to experience the 'Arab Spring' revolutions. This contradictory result led to re-examination of development policies pursued in the region. An important finding was the stunning inequalities in human development regionally, within each country and for specific demographic groups, most importantly for youth and women, a phenomenon that the HDI calculus does not adequately capture (Dhillon and Yousef 2009; Salehi-Isfahani 2010). Unemployment targets one in three young Arab persons, and gender bias against young women's university enrolment and labor participation is pervasive (Chaaban 2009).

Many interrelated issues were brought into the discussion: the characteristics of the labor market, the share of women in it, marriage and family formation, and illegal migration.

One of the shared characteristics of North African and all Middle Eastern societies is the well-recognized phenomenon of low productivity of education. Employment of youth is not straightforwardly linked to increasing education levels; for instance, secondary school graduates have the highest levels of unemployment (Salehi-Isfahani 2010). Further, compared to the rest of the world, the gap in the unemployment rate between these countries and other country groups was largest for tertiary workers, indicating a gap in productivity in this category, in comparison to the rest of the world.

Salehi-Isfahani (2010) argued that the Arab Human Development Report of 2004 viewed the problem of knowledge acquisition in the Arab countries in its broader social and political context, raising larger issues such as lack of democracy and inequality of wealth as barriers to efficient accumulation of human capital. At the same time, access to employment was linked to another factor which is the characteristics of

Table 22.5 MDGI for selected indicators of North Africa 1990–2011 (Percentages)

	Children under 8	Population undernourished	Net enrolment in primary education	(15–24) Literacy rates	GPI in primary education	GPI in secondary education	Under five mortality	Infant mortality	Maternal mortality	Births attended by skilled health personnel	People not using improved drinking water	People not using improved sanitation
Egypt	−1	NA	−1	−6	1	NA	49	40	28	12	76	70
Algeria	44	18	−1	−3	NA	NA	0	−21	−10	9	−100	31
Morocco	−65	−33	4	−14	NA	−3	13	4	17	8	−5	−6
Tunisia	44	NA	NA	1	NA	NA	26	23	−8	6	49	7

Source: The United Nations and League of Arab States (2013)
NA: Not available

the labor market: What are its expectations in terms of qualifications? What is its capacity to flourish continuously and produce new demands for both highly- and less-educated youth? Furthermore, there is an important dilemma that is worth observing when examining the peculiarities of the labor market in the region. On one hand, the existing education and training institutions are promoting acquisition of degrees at the expense of productive skills, and on the other, the main recruiter is the public sector, which is rigid and continues to favor holders of university degrees.

In order to understand how youth are affected, and hence the family structures in the whole of North Africa and the Middle Eastern region, let us consider what Salehi-Isfahani (2010) referred to as "marriage squeeze". The age at marriage in the region is higher than in other world regions, despite the fact that on all related accounts – fertility, education, and sexual relations before marriage – the opposite would be expected (Salehi-Isfahani and Dhillon 2008). This suggests that delay in marriage is in part involuntary. However, age imbalance in the marriage market known as "marriage squeeze" is an important determinant in creating a situation where age imbalances are as high as 25 %. This is due to the past high fertility, which increases the size of cohorts reaching marriageable age but at different speeds for men and women. The larger cohorts of women, born in the high fertility period of the 1980s, have in recent years reached marriageable age several years ahead of the corresponding larger cohorts of men. Because of the customary age difference of several years, these cohorts of women are matched against the smaller cohorts of men born a few years' earlier, causing big age imbalances (Salehi-Isfahani 2010) with negative repercussions for the wellbeing of youth as they are trapped between the desire to form a family and the lack of resources.

Moreover, North Africa is becoming a region of emigration, immigration and transit migration. Besides the departure of many skillful people from their lands to seek refuge and better employment conditions in Europe and elsewhere, this region is hosting huge numbers of refugees seeking to immigrate to Europe through the Mediterranean borders. These candidates of illegal immigration are creating a lot of pressure on the already fragile social and economic situation.

Estes' Index of Social Progress (ISP) and Changes over Time

Another proxy of social development and quality of life in general is Estes' Index of Social Progress (ISP). ISP consists of 41 social indicators that have been subdivided into the following ten sub-indexes: Education, Health Status, Women Status, Defense Effort, Economic, Demographic, Environmental, Social Chaos, Cultural Diversity, and Welfare Effort. One of the advantages of ISP is that it relies on all major sectors in assessing levels of development. The instrument also achieves balance with respect the range of positive and negative factors that are used to assess changes in social progress over time. It has been used in general social- and policy-focused research to assess social development in many occasions (Estes 2012).

In the present section, the results concerning over 40 years of social development in North Africa are extracted from a recent larger study by Estes and Tiliouine (2013) which targeted a sample of 53 countries, all members of Organization of Islamic Cooperation (OIC). Comparisons were conducted at four levels: the country, the region, the sub-region and all OIC countries' group levels.

An important finding was that, amongst the OIC's six identified sub-regions with the most favorable average WISP scores, only the North African (+7.5) and West Asian (+8.0) sub-regions experienced net gains in both their WISP scores and 10-year WISP rank positions over the last development decade. In comparison, the OIC sub-regions which registered the lowest average WISP scores were East Africa (WISP2011 Average: 32.0), Middle Africa (WISP2011 Average: 34.5), and West Africa (WISP2011 Average: 34.9) (Estes and Tiliouine 2013).

Table 22.6 North African States WISP Scores and rankings (N = 5)

	WISP 1990 (Rank)	WISP 2000 (Rank)	WISP 2011 (Rank)	% Change In WISP scores 2000–11 (Rank)
Tunisia	57 (1)	57 (1)	53 (1)	−7.7 (5)
Morocco	45 (4)	38 (5)	49 (2)	28.1 (1)
Algeria	50 (2)	42 (4)	49 (2)	16.1 (2)
Egypt	47 (3)	48 (2)	49 (2)	1.1 (3)
Libya	44 (5)	46 (3)	46 (5)	−1.4 (4)
World averages	48.1	48.5	48.7	0.4

Source: Calculated from Estes and Tiliouine (2013): 34–37

Furthermore, when OIC countries were divided into three clusters, those countries with the "highest", "lowest" and "middle level" performances on the WISP2011, Tunisia, Morocco, Egypt, and Algeria appear among the top OIC-performing countries on the WISP in 2011 and Libya in the middle level. The majority of the countries in the highest-performing cluster, to which most North African countries belong, had already achieved high WISP scores during the developmental decades that preceded 2000–2011 and, as a result, were able to continue building on their earlier social accomplishments. Among the other reasons favoring them are their location along the Mediterranean Sea and, in the case of Algeria and Libya, the large reserves of oil and natural gas (Estes and Tiliouine 2013). Table 22.6 shows the WISP scores and rankings of the five North African countries over time (1990–2011). It should be noted that for the past 40 years, Tunisia has been leading social progress in the region, despite the negative effects of the 2011 events. Morocco's gains in this aspect remain high with some decline over the first decade of present century. Both Morocco and Algeria escaped the Arab revolts to some extent because of calming measures which were hastily undertaken by local governments, such as the constitutional changes in Morocco and price cuts of widely-consumed products in Algeria. However, this latter country proved resilient after the devastating internal turmoil resulting from conflict between Islamic groups and the army during the 1990s (Tiliouine and Meziane 2012). The situation in Libya remains ambiguous. Though, the calculated WISP scores indicate some stability over the past decades, the fall of the Kaddafi regime, speeded by the allied intervention, and conflicts between armed factions and the present fragile ruling system have very harmful effects on social life in the present time, but may lead to a better situation in the future. Similarly, the emerging democracy of Egypt is going through very difficult time with the ousting of the democratically-elected president and the return of the military to occupy the political scene.

The Quality of Life Index (QLI)

The Quality of Life Index (QLI) of the independent Economist Intelligence Unit (EIU) quantifies a nation's livability for its average inhabitant since 2005. QLI is a composite of six sub-indexes, each describing one of the domains which are considered to influence the quality of life objectively: health, education, wealth, democracy, peace and environment (http://nationranking.files.wordpress.com/2011/03/2011-qli2.png). The QLI of 2011 is quoted here as a composite measure that puts stress on aspects that have not been highlighted in the previous sections of the present work.

As shown in Table 22.7, the best rank position in the group of North African states is achieved by Algeria in environment (36), followed by Morocco (44). The worst score was in democracy (134) by Libya, followed by Algeria (103) in the same sub-index. Generally, the worst combined scores of the North African countries are related to this latter sub-index, which agrees with the results of other indexes used.

Table 22.7 The Quality of Life Index (QLI) for North African countries (2011)

	QoL (Rank)	Health (Rank)	Education (Rank)	Wealth (Rank)	Democracy (Rank)	Peace (Rank)	Environment (Rank)
Algeria	0.548 (88)	0.600 (74)	0.639 (101)	0.563 (70)	0.272 (103)	0.510 (107)	0.702 (36)
Egypt	0.558 (85)	0.585 (77)	0.601 (102)	0.538 (78)	0.280 (99)	0.724 (49)	0.630 (61)
Libya	0.578 (79)	0.660 (61)	0.816 (67)	0.658 (49)	0.012 (134)	0.700 (55)	0.445 (98)
Morocco	0.533 (92)	0.604 (73)	0.422 (121)	0.480 (88)	0.401 (92)	0.691 (57)	0.679 (44)
Tunisia	0.601 (73)	0.641 (66)	0.771 (82)	0.587 (67)	0.163 (121)	0.770 (37)	0.610 (64)

Source: The Economist Quality-of-Life Index (2011)
(Between brackets): Country rank out of 137 world countries

The Subjective Dimensions of Quality of Life in North Africa

Data of the Arab Barometer

Large-scale data on the subjective quality of life and different kinds of attitudes of Arab people in general have hardly been addressed as a separate topic in the existing published literature. However, some large surveys have partially addressed this issue in a limited number of Arab countries. The first wave of surveys the Arab Barometer conducted in 2006–2008 (http://www.arabbarometer.org/) helped identify some of the personal concerns of the six countries (Jordan, Palestine, Algeria, Morocco, Lebanon and Yemen) where data were collected.

Concerning a question on how respondents rate the current overall economic condition of their respective countries, on the total, only 32.5 % considered it very good or good, compared to 64.7 % who evaluated it as bad or very bad. In Morocco, 49.4 % choose the positive direction as did 42.6 % of Algerians, in comparison to only 3.7 % of Lebanese and 13.6 % of Palestinians who felt positive.

Confidence in the future improvement of the economic situation was also limited. For instance, a total of only 43.2 % thought that the situation would improve, 19.4 % thought it would remain the same and 27.4 % believed it would worsen. In Yemen, where the worst figures were noted, only 29.4 % of respondents held a positive view; in Algeria 50.4 % and Morocco 54 %. However, 11.4 % of Algerian respondents expected the worst compared with 19.4 % of Moroccans.

Trusting others in one's country may be a good indicator of societal wellbeing. The Arab Barometer addressed this issue generally. Answers varied from one country to another, but on the whole, only 26.1 % agreed that most people could be trusted, while 69.7 % thought that one should be careful in dealing with people. Of Algerians, 17.8 %, compared to 19.6 % of Moroccans, had favorable views. The lowest figure was in Lebanon with only 16 %, and the highest, unexpectedly, was in Palestine where 39.3 % of respondents took a positive view.

Trust in one's country's institutions can indicate high feelings in belongingness. The Arab Barometer data indicated that many institutions of the region are not trusted by the natives of the country. As an example, answers indicated no trust at all in the following institutions: the prime minister (29.9 %), the courts (28.6 %), parliament (34.8 %), the police (22.1 %), political parties (47.4 %) percent. Among the most striking results was that more than a half of Algerians and Moroccans (51.3 % and 54.4 %, respectively) have no trust at all in their countries' political parties. The other figure that may be related to this is the low participation in any organizations or formal groups. The percentage of those who participate is as low as 12.9 % in Morocco and 21.1 % in Algeria. This may be indicating low social trust and poor social capital in these countries.

Satisfaction with the political situation in one's country and feelings of its positive effect on the people may be linked to societal wellbeing, too. With regard to this issue, the Arab Barometer data show that only one third (33.8 %) of the sampled population assess

positively the present political situation in their respective countries, while 47.1 % chose the opposite answer. Here too, Morocco took the lead with 43.3 % choosing the positive direction compared to 36.1 % of Algerians. Lebanon scored the lowest figure with only 2.9 % having such a positive attitude.

The feelings expressed about how government policies impact respondents' daily lives are a good indicator of high levels of social discontent. While only 20.1 % of respondents felt that they have a positive impact, a larger number (37.9 %) declare that they have either a negative or largely negative impact and 31.8 % believe that they have neither a positive nor a negative impact. One-third of both the Algerian and Moroccan respondents held this latter view, but about 16 % of them thought they had a positive impact on their life compared to only 29.4 % of Algerians and 34.6 % of Moroccans who felt that the impact was negative.

National pride can add value to quality of life feelings. This is rather high amongst the Arab population, with 76 % very proud of belonging to their country, and 15.6 % somewhat proud. The lowest figure on the very proud category was in Algeria (64.2 %) compared to Morocco (74.6 %). In comparison, Palestinians had the highest score of 90.2 %.

Respondents were also interviewed about how safe they felt in their respective cities/towns/villages. The general picture is discouraging, with on average, only 79.3 % of respondents choosing the 'Very Safe' and 'Safe' answers. Algerian and Moroccan reported percentages were lower, 75.6 % and 72.2 %, respectively. Furthermore, in response to the question about whether there had been an improvement to the situation in their city, town or village in the past few years (3–5 years), and whether they now felt more safe, less safe or the same as before, on the whole 31.1 % said more safe, 24.6 % less safe, 33.7 % same as before. Algerians and Moroccans, respectively, felt more safe, 54.4 % and 39.2 %; 13.8 % and 22.6 % less safe; and 19.3 % and 33.1 % the same as before.

Generally, these are crude figures that need updating and also need to be put within the particular contexts of the region. Nevertheless, they show that a large number of North Africans are not satisfied with the conditions of their daily life. Development policies that take these failures into consideration should be prioritized.

The 2012 Happy Planet Index (HPI)

The HPI is produced by the Centre for Wellbeing at the New Economics Foundation (NEF). It aims to explore the extent to which countries deliver long, happy, sustainable lives for the people that live in them. The index uses global data on life expectancy, experienced wellbeing and ecological footprint. The ecological footprint is a per capita measure of the amount of land required to sustain a country's consumption patterns, measured in terms of global hectares (g ha) which represent a hectare of land with average productive bio capacity (http://www.happyplanetindex.org/about/#sthash.6kJWgV8s.dpuf). The index ranks countries on how many long and happy lives they produce per unit of environmental input. Table 22.8 shows that Algeria and Tunisia appear on the list of the 40 first nations in terms of the general HPI, while Egypt has the worst score in North Africa. With regard to wellbeing experienced (a score from 0 representing the worst life, to 10 representing the best life, given by the respondent who is asked to imagine a ladder of life), Algeria is the again closest to the top score registered in Denmark, with Egypt having the worst wellbeing score. The effects of civil unrest resulting from the Arab revolts are clearly evident.

Happiness

Researchers have estimated happiness in many different ways. The most common way is using the average of responses to the common question of: 'Taking all together, how satisfied or dissatisfied are you with your life as a whole these days?' The scale used is generally an 11-point one with 0 as a minimum and 10 as a maximum score. It is apparent from Table 22.9 that the average score

Table 22.8 Happy Planet Index and Negative Experience Index values in North Africa

	HPI, 2012 (a)	Ranking out of 151 nations (a)	Experienced Wellbeing, 2012 (a)	Negative Experience Index Scores, 2011 (b)
Algeria	52.2	26	5.2	31
Egypt	39.6	91	3.9	39
Libya	40.8	81	4.9	–
Morocco	47.9	42	4.4	26
Tunisia	48.3	39	4.7	34
Highest scores	64.0		7.8	59
	(Costa Rica)		(Denmark)	(Iraq)
Lowest score	22.6		3.2	11
	(Botswana)		(Tanzania)	(Somaliland Region)

Source: (a) http://www.happyplanetindex.org/countries/algeria/
(b) http://www.gallup.com/poll/155045/middle-east-leads-world-negative-emotions.aspx#2

Table 22.9 Average happiness in North African countries (2000–2009)

	Average happiness (scale 0–10)	Happy life years	Inequality of happiness	Inequality adjusted happiness	Number of surveys
Algeria	5.4	38.6	2.56	41	2
Egypt	5.7	40.0	2.89	40	4
Libya	–	–	–	–	–
Morocco	5.4	37.9	2.22	43	3
Tunisia	5.9	43.3	1.86	51	1
Average North Africa	5.6	39.95	2.38	43.75	
Highest scores	8.5	66.7	1.42	73	
	Costa Rica	Costa Rica	Netherlands	Denmark	
Lowest scores	2.6	12.5	3.19	16	

Source: Veenhoven. R. Average happiness in 149 nations 2000–2009. World Database of Happiness. Rank report Average Happiness., http://worlddatabaseofhappiness.eur.nl/hap_nat/findingreports/RankReport_AverageHappiness.php, accessed 30 August, 2013

on happiness in the studied countries where data are available is 5.6 which is much lower than the highest score worldwide (8.5), but is also much higher than the minimum score worldwide (2.6).

Negative Emotions in North Africa

The situation mentioned above with relation to Egypt was echoed by the Negative Experience Index which measures respondents' levels of sadness, stress, anger, physical pain, and worry on the day before the survey. The findings in this analysis are based on Gallup interviews in 148 countries in 2011 (Gallup 2011). Egypt is placed fifth worldwide. Iraq, Palestine and Bahrain, all Arab countries experiencing turmoil, occupied the first ranks. Morocco had the lowest score of negative emotions, but remains far from the best score registered in the Somaliland Region (Table 22.8, column 5).

Personal Wellbeing Index (PWI)

Large-scale surveys of general populations' wellbeing in North Africa are rare. However, amongst the few published works on the region and, starting from 2003, the present author made a first attempt to measure subjective wellbeing of the Algerian population using, among other measures, the Personal Wellbeing Index, PWI

(Tiliouine et al. 2006). The PWI score is generally computed from the average satisfaction ratings across seven domains: standard of living, personal health, achievements in life, personal relationships, personal safety, community connectedness, and future security. An eighth domain concerning satisfaction with religiosity/spirituality was added (Tiliouine 2009a, b).

Later the same measure was used in a series of surveys that took place in an equal 18-month interval. The results indicate that since 2005 (Tiliouine 2013b) the population's PWI mean scores have been remarkably stable. This result was linked to the improving economic prospects and the stability in the country following the official steps of 'National Reconciliation' after the armed struggle of the 1990s which killed 200,000 people and caused billions of damage. The results support the vulnerability of populations' wellbeing when social turmoil dominates people's lives, as has been the case of Egypt and Tunisia mentioned earlier where positive affects are lower, and feelings of despair amplified (Gallup 2011).

The results indicated also that many other factors determine subjective wellbeing. Religious practice and satisfaction with Islamic religiosity/spirituality are closely linked with high wellbeing scores, mainly in middle age (Tiliouine et al. 2009; Tiliouine 2009b) and the state of health does not mediate such a strong relationship (Tiliouine et al. 2009). Religiosity has a buffering effect not only on subjective wellbeing, but also on psychological wellbeing or eudemonic wellbeing. In a sample of students, Tiliouine and Belgoumidi (2009) found that the importance of religion resides in the fact that it provides its followers with meaning in life, a frame of reference, or a philosophy in life.

More recently, Tiliouine (2012) investigated the relationship between subjective wellbeing (Satisfaction with Life (SWL), Personal Wellbeing Index (PWI), Positive Affect (PA) and Negative Affect (NA)), Psychological needs (Autonomy, Competence and Relatedness), Meaning in Life and Religious Practice in the Algerian population. He examined the distributions of these constructs in a large sample of 3,173 subjects (1,638 males and 1,535 females) who participated in the 4th Algerian Wellbeing Survey and estimated to what extent these constructs were affected by household incomes. He also estimated the mediating effect of demographic variables (gender, age, education and location) in the contribution of the studied constructs on each other.

The results indicated that these constructs were significantly inter-correlated and almost similarly distributed in the studied population. The results also showed that the demographic variables were all negatively affected by low incomes and proved that generally and beyond demographic factors, SWB measures predict better needs satisfaction, meaning in life and religiosity than the opposite direction (Tiliouine 2012).

When normative ranges of PWI in Algeria were calculated and compared to their counterpart normative ranges in Australia (Cummins 2012), the domain of community connectedness showed a similar trend; health was very close, but achievements in life and future security were much lower. Meanwhile, safety and personal relationships seemed to have a much larger magnitude in the Algerian case. It has been concluded that the sense of community belongingness remains similarly high in both countries, but problems linked to underdevelopment impinge on Algerians' perceptions of their future and have a cost on their personal relationships. However, the presence of a cultural bias effect, leading people to differ in their response style to survey questionnaires should not be excluded. For instance, Davey and Rato (2012) report a PWI normative range of 61.2–67.1 in China, which is much lower than in Australia (73.7–76.7). The Algerian range lies between those, but is narrower (66.4–68.8).

Further research on subjective quality of life should attract more attention on the part of North African social scientists. Its results would help gain solid knowledge on the dynamics of these societies and will certainly give way to much adapted strategies and policies to the real needs and aspirations of the people of this region.

Conclusions and Recommendations

Going back to where I began in this chapter would lead me to conclude that the North African region has been at the heart of world history since antiquity. Its relationships with Europe and Eastern nations were full of ups and downs, sometimes of complete subjugation to other powerful nations and at other times in a position of superiority over them. This situation enriched the cultural experience of these populations and solidified their contribution to human civilization as a whole. Moreover, when these countries gained their independence within the Islamic world, they played a leading role in reshaping Islamic culture, Arabic literature, philosophy, medicine, architecture and other fields of knowledge. The world's first universities also emerged in this region, including Al-Qarawiyyin in Fes, Morocco (859) and Al-Azhar in Egypt (970–972). In comparison, at that time, Europe was still in its medieval period (from the 6th to the 13th centuries), including the five centuries known as the 'Dark Ages'.

Internal conflicts and external factors, subjected these regions to the cruelest forms of modern colonialism with enduring effects on the peoples' identity and culture (Abun-Nasr 1987; Julien 1980). The subsequent painful independence revolutions and political struggles enabled them to regain some of the political independence within their current borders, which were initially set by the colonial presence.

However, the present situation and future prospects are not totally gloomy, for many reasons. These populations have much in common to facilitate the unification of their efforts to overcome the political differences among them. Most important is that they are a highly homogeneous group in terms of history and cultural heritage (same language, predominantly Muslims, common history). They also have a very important geographic situation, and an abundance of natural resources. Their populations are young and have high education levels. These common factors could lead to the adoption of common development policies and to stronger partnerships between them and other Islamic and world nations with the aim of improving the quality of life of their people.

Data presented earlier have shown that quality of life is currently challenged by high levels of income inequality (Estes 2012; Estes and Tiliouine 2013; Tiliouine and Meziane 2012), high proportions of poor people and high levels of unemployment among university-educated youth, women included. Education systems in the region are failing to adapt themselves to the evolving needs of the employment market, which further hinders the productivity of these systems (Chaaban 2009; Dhillon and Yousef 2009; Salehi-Isfahani 2010). A direct consequence of such a situation has been the recent widespread conflicts, the departure of highly skilled workers, and the illegal immigration of many youth.

The use of diverse composite indicators of quality of life has shown that the chief domains where the region as a whole is failing are: low political participation, restrictions on civil liberties, and widespread corruption. Here, efforts should be deployed to enhance popular participation in the making and shaping of the laws and policies by which the populations of these countries are to be governed (Estes and Tiliouine 2013). The role of the military should be strictly restrained, according to the law. Its interference in politics in most of the region's countries has resulted in the weakness of civil society and other state institutions.

The use of subjective indicators in assessing quality of life in this chapter has helped to clarify many as yet unknown aspects of people's lives in the region. For instance, the Arab Barometer data prove that a large number of people are unhappy with the economic and the political situations of their countries, feel less safe, and have little trust in institutions or of other people. Furthermore, low levels of happiness and frequent negative emotions in North African countries compared to advanced societies point to the urgent need for policies that take into account what people want and that strengthen the role of civil society organizations to work as partners with government in advancing positive patterns of social participation. Social research in the subjective

wellbeing areas is young but has proved its utility in providing indicators of the necessity for well-adapted social policies that enhance peaceful and psychologically gratifying strategies.

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Shadow of the Sun – The Distribution of Wellbeing in Sub-Saharan Africa

23

Benjamin J. Roberts, Steven L. Gordon, Valerie Møller, and Jarè Struwig

Introduction

A special issue of National Geographic magazine published in 2005 ran on its cover the title phrase "Africa: Whatever you thought, think again". This is a particularly apposite description of the sub-Saharan Africa region, a geographically vast and heterogeneous constellation of more than 50 nation states that has experienced and continues to exhibit profound demographic, socio-economic and political change. The prevailing imagery of the sub-continent conveyed in international media tends to dwell on the multiple burdens imposed by widespread impoverishment and social inequalities, disease and death, armed conflict and violence, and corrupt institutional practices. In many country contexts these issues admittedly represent persisting challenges that adversely affect the quality of people's lives, bringing untold deprivation and suffering. This reality is effectively communicated in Paul Collier's *The Bottom Billion* (2007), which identifies 58 countries with a combined population of approximately a billion people that in contemporary times are living in fourteenth century conditions due to a combination of different development traps – conflict, natural resources, being landlocked with bad neighbours, and being a small, poorly governed state. Of these countries, two-thirds (38) are located in sub-Saharan Africa (Collier 2007, 2009). Yet, the picture is not a static one, with significant progress being forged over the last two decades. Furthermore, one is constantly struck by the seemingly boundless resilience, optimism and vitality displayed by the population.

Parallel with the growing wave of decolonization that swept across Africa in the late 1950s and early 1960s, there emerged a growing international research interest in the fundamental qualities associated with the notion of a good society and the good life (Diener and Suh 1997; Veenhoven, Chap. 9, this volume). Recognizing the limits to economic growth as the basis for evaluating the wellbeing and progress of nations, new approaches to the conceptualization and measurement of quality of life and wellbeing were developed, focusing specifically on "objective" or social indicators as well as subjective wellbeing. The advancement of these traditions in recent decades has meant that the measure of a society's social wellbeing has come to encompass a range of components that comprise objective external living conditions, individual subjective evaluations of life experiences, or combinations of both (Glatzer 2012).

B.J. Roberts (✉) • S.L. Gordon • J. Struwig
Democracy, Governance and Service Delivery Research Programme, Human Sciences Research Council, Private Bag X07, Dalbridge, 4014 Durban, South Africa
e-mail: broberts@hsrc.ac.za; sgordon@hsrc.ac.za; jstruwig@hsrc.ac.za

V. Møller
Institute of Social and Economic Research, Rhodes University, Grahamstown, South Africa
e-mail: v.moller@ru.ac.za

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In many developing countries, the collection and compilation of household data has a relatively long history, yielding objective indicators which in some instances span a number of decades and allow the researcher to draw insight into the continental record since independence (Deaton 1997). By contrast, the subjective examination of quality of life in sub-Saharan Africa has tended to lag somewhat, with only a few notable exceptions such as South Africa and Nigeria possessing longer subjective time series data (Camfield 2012). Fortunately, during the last 15 years in particular, there has been a considerable expansion in the coverage and representation of African countries in cross-national surveys. This has begun to yield significant advances in our knowledge of quality of life and subjective wellbeing in Africa and the extent to which this approximates or diverges from other countries and regions. Yet there remains much scope for building on this initial engagement, particularly in regularly collecting and drawing together social, economic and subjective indicators to offer a fuller understanding of human quality of life and to further entrench a culture of evidence-based policy making in the region.

Out of necessity this chapter offers a fairly general depiction and description of certain aspects of quality of life in sub-Saharan Africa. The tremendous socio-economic, political, geographic and cultural diversity characterizing the region, taken together with the pace and complexity of social change as well as the steady proliferation of social statistics, ultimately translates into difficult choices regarding the framing and presentation of the distribution of wellbeing in the subcontinent. Nonetheless, it is hoped that the analysis presented will impart to the reader a sense of the current situation in this world region and the challenges that continue to confront its peoples in the pursuit of what they would consider a good life.

The analysis in the chapter proceeds from a recognition that any portrayal of contemporary patterns of quality of life in the subcontinent needs to appropriately consider the exploitation and depredations of pre-colonial and colonial histories, and how neopatrimonial politics and global power relations in the post-independence period continue to shape the developmental trajectories of nations and the lives of ordinary citizens. Our examination of objective indicators of wellbeing suggests that demonstrable progress has on average begun to be forged over the last 15 years by the region's member states in relation to a transformative social, economic and political agenda. Yet it is important that we do not overstate the case. Pervasive deprivation and inequalities between and within countries remain in spite of signs of improvement. Many countries still struggle with complex economic, health and educational challenges, political uncertainty and sporadic conflict, democratic ebbs and flows, as well as rapid demographic change and urbanization.

We show that these realities are mirrored in current personal evaluations of life satisfaction and contentment, with sub-Saharan Africa continuing to fare poorly from a comparative perspective. This discontent is nonetheless accompanied by an unwavering optimism. This is evident from the expectations of significant improvements in contentment in coming years. It is also apparent in the high reported level of positive feelings reported by individuals across the region, resulting in affect balance scores that exceed the average of other world regions and approximate those from Latin America. Such findings underscore the resilience of the region's citizens in the face of risk and vulnerability. The chapter also briefly considers the relationship between objective contextual factors and average levels of subjective wellbeing at the national level. Specifically, we examine the extent to which societal qualities such as material wealth, income inequality, political freedom, peace, good governance and the absence of corruption contribute to observed differences in subjective wellbeing in sub-Saharan Africa. This enables us to further reflect on the themes of resilience, optimism and adaptation.

The title of our contribution, "Shadow of the Sun",[1] was chosen as a metaphor that refers to

[1] This phrase originates from Ryszard Kapuściński's 2001 volume of African journalism of the same name.

the relative place of sub-Saharan Africa in the world of quality of life research. It begs the question of whether people within the region are currently more or less satisfied with their lives than their counterparts from other parts of the world. The title also serves as a commentary on the limited (though rapidly improving) coverage of Africa in global and regional social surveys aimed at providing a long-term account of changing societal and personal wellbeing. Finally, it speaks to the difficulties encountered by the region in overcoming historical legacies, realizing its natural potential and fulfilling the aspirations of its citizenry.

The remainder of the chapter proceeds as follows. The next section provides a brief discussion on the geographical delimitation of the sub-Saharan Africa region and its sub-regions. This is followed by an outline of some of the major themes in the region's pre- and post-colonial history, as a basis for contextualizing the contemporary challenges that inform human progress and wellbeing in contemporary sub-Saharan Africa. This leads into a section that provides an account of the current demographic, economic and political situation in the subcontinent. Patterns of quality of life in the region are then examined. We firstly provide a profile in the objective measurement tradition, using two commonly employed composite indices, after which the state of the region is observed through a subjective lens. This leads into a discussion of the influence of select objective contextual measures in shaping average levels of happiness. The chapter concludes with a discussion reflecting on some of the main findings emanating from the analysis.

Beyond Borders: A Note on the Subcontinent's Geography and Subregional Definitions

For the purposes of this chapter, we consider sub-Saharan Africa to consist of all countries of Africa with the exception of eight nations. Firstly, we exclude the North African states of Algeria, Egypt, Libya, Morocco, Tunisia, and Western Sahara. Apart from the latter self-governing territory, the patterning of quality of life in these countries is addressed by Habib Tiliouine in the preceding chapter. Secondly, we are also excluding from our analysis the small island states of Réunion and Mayotte, both of which are administratively overseas departments of France. The remaining 49 countries are located on a north–south axis that traverses a thick tropical core bounded by the temperate countries of North Africa and another temperate zone in the south. According to Jared Diamond in *Guns, Germs and Steel* (1999: 377), Africa's rich human diversity and poor economic position relative to other continents is, to a degree, a function of this diverse geography and long prehistory. Sixteen of the countries are landlocked and contain nearly a third (30 %) of the subcontinent's population, which creates problems of isolation due to high transport costs associated with accessing coastal ports and global trade.[2] The tropical climate present in many countries translates into low agricultural productivity due to poor access to rivers for irrigation and irregular rainfall patterns (Sachs et al. 2004). The high burden of disease in sub-Saharan Africa also has geographic basis, with endemic diseases such as malaria and sleeping sickness thriving in the consistently high temperatures and humid climate.

The population size of the region's nation states varies appreciably. The five most populous countries, namely Nigeria, Ethiopia, the Democratic Republic of Congo, South Africa and Tanzania, contain nearly half (47 %) of the total sub-Saharan Africa population of 926 million, while the ten largest countries account for close to two-thirds (65 %) (Annex Table 23.9). By contrast, 14 of the region's nations (more than a quarter) are small states, which we define as countries with a population of less than

[2] The 16 landlocked countries are Botswana, Burkina Faso, Burundi, Central African Republic, Chad, Ethiopia, Lesotho, Malawi, Mali, Niger, Rwanda, South Sudan, Swaziland, Uganda, Zambia, and Zimbabwe.

Table 23.1 Sub-Saharan Africa states by population size, economic classification and landlocked status

	Upper middle or high income	Lower middle or low income	
Microstates: <0.2 m	Seychelles[a]	São Tomé and Príncipe[a]	
Small states: <1.5 m	Equatorial Guinea[b/c]	Cape Verde[a]	
	Mauritius[a]	Comoros[a]	
		Djibouti[b]	
		Swaziland[c]	
Other small states: 1.5 m–2.5 m	Botswana[c]	Gambia, The[b]	
	Gabon[b]	Guinea-Bissau[b]	
	Namibia[b]	Lesotho[c]	
Medium sized states: 2.5 m–20.0 m	–	Benin	Mauritania
		Burkina Faso[c]	Niger[c]
		Burundi[c]	Rwanda[c]
		Central Afr. Rep.[c]	Senegal
		Chad[c]	Sierra Leone
		Congo, Rep.	Somalia
		Eritrea	South Sudan[c]
		Guinea	Togo
		Liberia	Zambia[c]
		Malawi[c]	Zimbabwe[c]
		Mali[c]	
Larger states: 20.0 m–50.0 m	Angola	Cameroon	Mozambique
		Côte d'Ivoire	Sudan
		Ghana	Tanzania
		Kenya	Uganda
		Madagascar	
Largest states: >50 m	South Africa	Congo, Dem. Rep.	
		Ethiopia[c]	
		Nigeria	

Sources: Population Reference Bureau (2013), World Bank (2013) World Development Report 2014
[a]Small island developing states
[b]Small coastal states
[c]Landlocked countries

2.5 million.[3] In their own right, these small countries are diverse in economic, demographic and geographic character (Table 23.1). Seychelles and São Tomé and Príncipe are small island microstates with a population of less than 200,000. A further six are small states with less than 1.5 million citizens, including the authoritarian, oil-rich Equatorial Guinea and the stable, upper middle income democracy of Mauritius, as well as the landlocked monarchy of Swaziland with the world's highest AIDS prevalence rate. The final six countries have between 1.5 and 2.5 million people and include Botswana, Namibia and Lesotho in the temperate south, as well as the coastal states of Gabon, Guinea-Bissau and The Gambia. As Jahan and Wang (2013) observe, small states face particular size-related constraints and vulnerabilities. These include a narrow production base focused usually on one or two goods or services, big government and high public expenditure relative to the size of their economies, a high degree of trade openness, risk of natural disaster

[3] In the literature on small states, the classification of a nation as "small" is frequency based on a population size threshold of 1.5 million. (Jahan and Wang 2013) We have slightly relaxed this criterion to allow countries such as Gambia, Gabon and Namibia to be categorised as small states.

(especially in the island states) and volatile economic growth.

One of the inherent difficulties faced in analyzing social indicators in sub-Saharan Africa is how to define the different sub-regions, and there is considerable variation in the definitions employed by various international organizations. Ultimately, we decided to make broad use of the United Nations geoscheme for Africa, which structures the subregions as follows:

- *Western Africa (n=16)*: Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, The Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone, and Togo.
- *Eastern Africa (n=18)*: Burundi, Comoros, Djibouti, Eritrea, Ethiopia, Kenya, Madagascar, Malawi, Mauritius, Mozambique, Rwanda, Seychelles, Somalia, South Sudan, Tanzania, Uganda, Zambia, Zimbabwe.
- *Central Africa (n=9)*: Angola, Cameroon, Central African Republic, Chad, Democratic Republic of the Congo, Equatorial Guinea, Gabon, Republic of the Congo, and São Tomé and Príncipe.
- *Southern Africa (n=5)*: Botswana, Lesotho, Namibia, South Africa and Swaziland.

The only deviation from this geographic scheme in our analysis is the classification of the Sudan as a nation in Eastern Africa rather than North Africa.

Historical Overview of the Region

In historical terms sub-Saharan Africa is a heterogeneous geographic region. It was European scholars, primarily in the nineteenth century, who sought to classify the region into a homogenous whole. These historians portrayed the region has having no history until the arrival of Europeans in the fifteenth century. Even in the 1960s, the prominent historian Trevor-Roper (1963, p. 28), in accordance with the famed German scholar Georg Wilhelm Friedrich Hegel, remarked that "there is only the history of Europeans in Africa. The rest is darkness . . .the unedifying gyrations of barbarous tribes in picturesque but irrelevant corners of the globe". More contemporary historians have debunked this thesis, recognizing the diverse and rich nature of pre-colonial history in sub-Saharan Africa.

Historical analysis does not exist in a political vacuum and the 'history-less' thesis fits a narrative that justified colonial occupation. During that the late nineteenth century period, during the period that became known as the 'Scramble for Africa', the region was partitioned by the European powers – primarily Britain, France, Germany, Portugal and Belgium – at the Conference of Berlin 1884–1985 (Wesseling 1996). The rhetoric of the day portrayed colonialism as beneficial for the region –a process that would promote modernization, market liberalism and Christianization. Following broadly similar colonial policies, the economies of sub-Saharan Africa were redesigned to serve the interests of the European metropole. By the early twentieth century, the economies of sub-Saharan Africa were primarily commodity-driven, often centered on a single or limited number of commodities. Although highly beneficial to the economies of Europe, this kind of development was less conducive to substantial economic and social development in sub-Saharan Africa.

Pre-colonial sub-Saharan Africa was dominated by political organizations – whether they be lineage groups, clans, villages, chiefdoms or more sophisticated kingdoms and empires – that were characterized by fluctuating and unstipulated frontiers and shifting allegiances. These political arrangements reflected the diversity, in religious, linguistic and ethnic terms, of the region (Iliffe 1995). Indeed, there are over 3,000 languages spoken on the continent. However, the drawing of colonial boundaries was primarily conditioned by the diplomatic and economic concerns of the European powers and often did not take into account local intergroup relations. In a number of cases, colonial administration sought to exploit and magnify intergroup hostilities. Belgium administrators in Rwanda and Burundi, for instance, favored the Tutsi as a 'superior race' and reinforced and expanded their historical domination over

the Hutu (with disastrous results for the future, see Mann 2005).

By the end of the Second World War the ideological basis for colonialism had been fundamentally weakened and the socio-economic power of European powers had deteriorated. Now the European powers, beginning with Ghana in 1957, started to decolonize their possessions in sub-Saharan Africa. New independent political leaders sought to steer their countries away from the old economic and political dependency, and embarked on ambitious projects aimed at promoting economic growth and social development. At independence, most sub-Saharan African nations faced severe challenges including rapidly growing populations, high levels of poverty and low literacy. Nevertheless, optimism for the newly independent states was high.

Decolonization proceeded at pace on the subcontinent throughout the 1960s. Often this process was peaceful but sometimes an unwillingness to concede political rights to indigenous black populations led to conflict. In the region Meredith (2011) calls the "White South", Europeans who had settled in Southern Africa (the so-called 'settler states' of South Africa, Zimbabwe and Namibia) during the colonial period resisted the political emancipation of black Africans, enacting racially oppressive legislation in the 1950s and 1960s (Iliffe 1995). There are other incidences of such conflict on the subcontinent (most notably in the former Portuguese colonies of Angola and Mozambique, see Chabal et al. 2002). These conflicts proved highly destructive to the economic and social base of the countries involved.

In the first two decades following independence, most states in sub-Saharan Africa adopted a single-party system and discouraged democratic opposition. Ostensibly this was defended on the basis of creating national unity and political harmony among disparate groups (Meredith 2011). However, the single-party state failed to deliver on political stability. In the five decades of independence, there were more than 106 military coups, averaging more than 20 a decade in the 1970s and 1980s (see Griffiths 1994, pp. 80–83). Foreign powers often played a prominent role –this was particularly true of France who launched 46 military operations in its former colonies between 1960 and 2005. Political instability often led to violent conflict on the continent, and during the period 1950–2002 there were 45 military conflicts in the region.

In January 1989 urban crowds, composed primarily of students and unpaid civil servants, marched in protest on the streets of Benin's cities. The Benin protestors, who eventually overthrew their authoritarian ruler Mathieu Kérékou, signaled a new phase in African history. Between 1989 and 1994, 38 sub-Saharan African states held competitive elections (Iliffe 1995, p. 299) and 33 of the region's 42 undemocratic states saw an increase in civil liberties in the period 1988–1992 (Ndulu and O'Connell 1999, p. 49). Military coups become less common on the continent –numbering less than ten during the 2000s – and elections more familiar. The racial oppression of the "White South" ended and political rights were finally obtained by the black Africans in Zimbabwe (1980), Namibia (1990) and South Africa (1994).[4]

Since the overthrow of Mathieu Kérékou, the subcontinent has been part of significant political transition away from authoritarianism. The region is part of what Samuel Huntington called the "third wave" of democratization, a period beginning in the late 1980s when many authoritarian regimes underwent a democratic transition (Diamond 2002). Democracy may play an important role as a determinant of life satisfaction. Dorn et al. (2007), using data from 28 countries, found a significant and positive association between happiness and democracy (even after controlling for factors as religion and income) (also see Frey and Stutzer 2000 who found that the more developed the institutions of direct democracy, the happier the individuals). The growth of political stability on the subcontinent suggests new and expanding opportunities for improving wellbeing in the region.

[4] For a brief description of this process, see Iliffe (1995, pp. 283–287) and Meredith (2011, pp. 265–283).

Life, Death, Growth and Democracy: A Regional Profile

A Dynamic Population[5]

Between 2013 and 2050 the African continent is projected to grow faster than any other global region, expanding from 1.1 to 2.4 billion in less than 40 years (Population Reference Bureau 2013). These projections suggest that the region will witness substantial demographic expansion over the next four decades. In 30 sub-Saharan African countries, the population is set to more than double by 2050 and in Niger, Zambia and Uganda the population will triple. Only South Africa, Lesotho and Botswana will not undergo dramatic increases in population size. Such rapid growth will increase the demand for social amenities, such as housing, healthcare and schooling, burdening government budgets for social development. Failure to meet such demands will fuel political discontent and instability – a concerning prospect given that those states that will experience rapid growth are those least able to provide social amenities.

Historically birth rates have declined slower in sub-Saharan Africa than in the rest of the world. High fertility rates prevail throughout the region and fell in only 18 countries between 1970 and 1990 (Griffiths 1994, pp. 136–137). In 2013, 25 sub-Saharan African nations had a fertility rate[6] of 5 or more and Niger and Chad reported total fertility rates of 7 and more. Only South Africa, Cape Verde and Botswana reported fertility rates that were closer to the international average of 2.5. The sub-Saharan Africa population has tended to grow at a rate exceeding the global average. Between 1960 and 1990, the annual population growth rate of the region was 2.8 % relative to a world average of 1.8 %, and 26 sub-Saharan African countries had growth rates exceeding 3 % for the 1980–1990 period. The result of this rapid growth is an overwhelming young continental population.

The current period of demographic growth could be highly beneficial for the region. According to 2012 Revision of the World Population Prospects Report, sub-Saharan Africa has the lowest ratio of 'working-age' (those between the ages of 15–64) and non-working-age population. An expansion of labor supply could, if labor markets are able to absorb new entrants, result in economic expansion on a per capita basis. Youth dependency in the region may hamper economic growth (Bloom et al. 1998, pp. 250–251). More than two-fifths of the region's population is less than 15 years of age, 17 points above the world average of 26. Countries with a significant Muslim population, such as Mali, Chad and Niger, report even more distorted population pyramids.

High population growth projections speak to the success of initiatives to improve child care on the continent. In 2013 sub-Saharan infant mortality rates averaged 73 deaths per 1,000 live births compared with an average of 108 in 1989 (Griffiths 1994, p. 137). Differences in infant mortality rates across the region are considerable, with 22 countries reporting a rate of less than 60 while seven countries report a rate of greater than 90. The dividend for life expectancy that we may except from this decline in infant mortality rates has been offset by the HIV/AIDS pandemic which continues to claim the lives of millions of sub-Saharan Africans. In 2011 there were 23.5 million persons living with HIV in sub-Saharan Africa (69 % of total cases) with prevalence particularly high in Southern Africa where four countries (Botswana, Lesotho, South Africa and Swaziland) are reported to have infections among 15 % of their populations.

Economic Development: Getting Ahead or Falling Behind?[7]

During the first decades of political independence, the aggregate record of economic

[5] See Annex Table 23.9 for selected population indicators for countries in the region.

[6] Total fertility rate is measured as the average number of children born to a woman during her lifetime.

[7] See Annex Table 23.10 for selected economic indicators for countries in the region.

performance in sub-Saharan Africa was considerably worse relative to other regions. Between 1960 and 2000, average annual growth rate of real GDP per capita has been estimated at a negligible 0.13 percentage points, while negative growth in the 1980s and early 1990s in particular produced a considerable divergence between Africa and other low-income developing countries in other parts of the world, especially those in East Asia and the Pacific (Collier and Gunning 1999; Ndulu et al. 2008). The broad pattern of stagnation witnessed in subsequent decades has been described in academic literature as "Africa's growth tragedy" (see Easterly and Levine 1997; Artadi and Sala-i-Martin 2003; Lawrence 2010).

Economic trends at the country level within the region have nonetheless been diverse. Many countries experienced at least one period of rapid growth after 1960, and a few select (small) countries, such as Mauritius and Botswana, were able to secure sustained economic success with growth rates that performed above the global average. In recent years economic growth has spread beyond these islands of prosperity, and the continent has managed to demonstrate a relatively greater degree of resilience in the face of the 2008 global economic crisis than many other world regions. Since the early 2000s, one of the major investors in this resurgent region is the People's Republic of China (Brautigam 2009) whose investments have fuelled an ongoing commodity-boom on the continent.

The demographic dividend may provide a significant boost to expanding economic growth in the region. In one of the first analyses of the African demographic dividend, Bloom et al. (1998) argue that many countries in the region have the potential to benefit considerably from a substantial demographic dividend. Despite pessimism on the part of economists in the 1990s, there is no evidence that sub-Saharan Africa is different from other regions in terms of the determinants of economic growth including the demographic change according to a study by Bloom et al. (2007). Given political stability and strong quality institutions, the economy of the region should experience a demographic dividend similar to that experienced by Asia during the 1970–2010 period (also see Bloom et al. 2013).

Evidence of the demographic dividend can be found if working-age population in the region is examined. In 2012 there were 492 million working-age people in sub-Saharan Africa according to an estimate by the International Labour Organisation (ILO), an increase of 137 million potential workers since 2000. This supposed demographic dividend is predicated on an assumption that new labor market entrants will be able to secure employment. Official unemployment levels in the region were 7.5 % in 2012 (only slightly above the global level of 6.1) representing a modest decline from 8.5 % in 2000 (International Labour Organization 2013, p. 91). However, these figures obscure the quality of employment of most jobs in the region (De Vreyer and Roubaud 2013) and large numbers of the employed on the continent are in vulnerable employment.[8]

In 2012, 19 sub-Saharan African states enjoyed economic growth rates above the global average of 6 %, with four (Sierra Leone, Niger, Liberia and Burkina Faso) recording annual growth above 10 %. This robust economic growth has again begun to precipitate a changing view of the continent, with Afropessimisim increasingly being supplanted by a more sanguine outlook and references to an "African century" and "Africa rising". Whether newfound confidence in the continent is premature is likely to be the source of much debate and speculation in coming years. However, from a quality of life perspective, considerable shares of the population in the countries of the sub-region continue to experience multiple

[8] Vulnerable employment refers to precarious work that places people at risk of economic hardship. The International Labour Organisation defines vulnerable employment as those in the labour market who are own-account workers (which is associated, particularly in developing countries, with subsistence agriculture and other activities such as petty trade) and contributing family workers (also known as unpaid family workers).

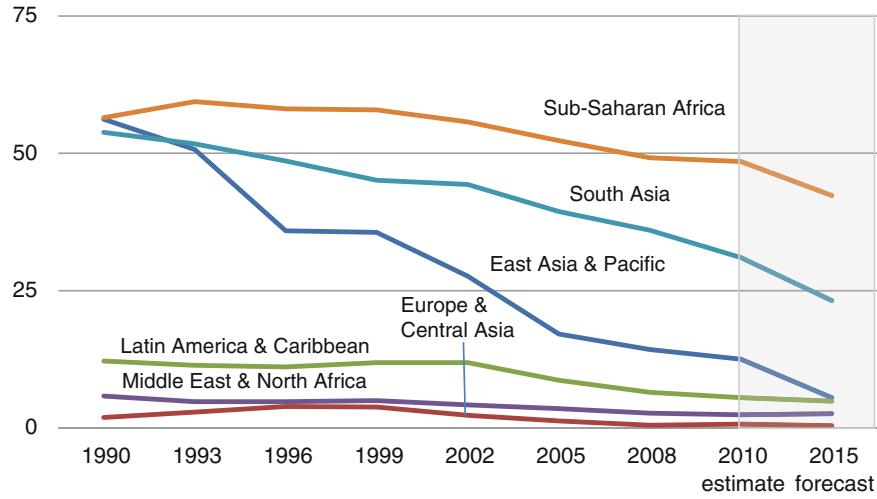

Fig. 23.1 Regional progress in reducing the incidence of extreme poverty since 1990 (percentage of people living on less than 2005 PPP $1.25 a day) (Source: World Bank (2013) World Development Indicators 2013)

deprivations that are likely to indelibly shape subjective evaluations of wellbeing.

Estimates suggest that the share of the sub-Saharan African population in poverty[9] remains at 48.5 % in 2010 although this represents a decline since 1990 when the regional share of poverty was 56.6 %. Further gains are expected in coming years if economic growth rates are maintained. Many countries in the sub-region have made slow progress in confronting poverty and creating decent jobs. In the cases of the Democratic Republic of Congo, Liberia, Burundi, Madagascar, Zambia, Nigeria and Tanzania more than two-thirds of the population continue to live below the international poverty line. Despite the slow improvement in the poverty rate, the absolute number of poor people in sub-Saharan Africa has increased from 290 million in 1990 to an estimated 414 million in 2010 (World Bank 2013) (Fig. 23.1). This is the only region in the world, where the number of materially deprived persons increased. The region currently accounts for approximately two-fifths of the global poor, indicating the scale of the economic challenge facing the continent.

A focus on poverty in sub-Saharan Africa disguises the extent of economic inequality in the region. Economic growth on the continent has been characterized by marked disparities with certain groups – the well-educated, the middle class – benefiting more than others from the region's recent economic boom. Some of the most unequal nations in the world are located in the region according to Gini Index data released by the World Bank (2013). Thirteen countries in the region have a Gini Index of 50 or greater and South Africa (63), Namibia (64), Comoros (64) and Seychelles (66) were ranked as the most unequal in the world. Higher income inequality, as Coburn (2000) argued in a popular article, leads to lowered social cohesion which in turn produces poorer health status and this suggests that wellbeing research should pay more attention to understanding the causes of income inequalities in the region.

Recognizing that human deprivation is a multidimensional phenomenon that extends beyond a lack of income, the UNDP launched the Multidimensional Poverty Index (MPI) in 2010 as a replacement for its Human Poverty Index (HPI) data series, which had been published annually

[9] These estimates are drawn from World Bank data which defines poverty as living on less than 1.25 dollars a day.

since 1997. The index was designed to better capture the multiple deprivations that people may experience as well as the extent of their overlap (UNDP 2010). It measures deprivation in the same three core areas of human development included in the Human Development Index (health, education and living standards) and relies on a set of ten social indicators. The results suggest that although South Asia has the greatest share of multi-dimensionally poor people, sub-Saharan Africa tends to exhibit the highest poverty incidence rates (Alkire and Santos 2010).

In sum, the economic prospects for the subcontinent look promising. As this subsection has shown, however, economic growth during this period has been unevenly distributed among the region's populace. The proliferation of infrastructure projects on the continent and the revival of the region's manufacturing sector have not benefited all. The rise of the sub-Saharan African middle class has coincided with substantial growth in income inequality. If growing inequality is not adequately addressed this could have a negative impact on political stability in the subcontinent.

Political Realities: Nasty, Brutish and Long?[10]

Sub-Saharan Africa, by the end of the 1980s, was well known for life-term presidents. In the period between 1970 and 1990, not a single sub-Saharan African head of state had allowed an election to remove him from office (Bratton and van de Walle 1997). However, beginning in 1991, multiparty democracy began to extend across the region and political stability became more widespread (Ndulu and O'Connell 1999). Although change was blocked by the more entrenched dictators, changes in political leadership became more common on the continent and governments more responsive to the needs of the citizenry. However reports on the political rights and liberties by international bodies such as US-based Freedom House and Fund for Peace reveal that many on the continent live without basic freedoms.

Democracy may play an important role as a determinant of life satisfaction. Dorn et al. (2007), using data from 28 countries, found a significant and positive association between happiness and democracy, even after controlling for factors such as religion and income (also see Suh and Oishi 2002). In order to measure political pluralism –particularly in the election process – and government functioning, the non-governmental organization Freedom House constructed the Political Rights Index (PRI). The PRI ranges from 1 to 7 with a score of 1 indicating a society with fair and free elections, political autonomy for citizens and projection for minorities and a score of 7 indicates an oppressive society lacking basic political rights.

Despite progress towards democracy in many parts of the region, however, 17 countries scored a 6 and above on the PRI. Freedom House also uses the Civil Liberties Index (CLI) which measures individual access to basic civil rights including freedom of the press, equal protection under the law and freedom of assembly. A range of 1 (most free) to 7 (least free) is used to score individual countries. Sub-Saharan Africa scores far better on the CLI than the PRI with only eight countries in the region receiving a score of 6 and above. The results of these measures indicate that, aside from some notable exceptions, access to political rights and freedoms in the continent is widespread.

Freedom of the individual can be compromised by a strong state but it can also be undermined by a state too weak to provide basic services and protection from violence (Schaeffer, Chap. 5, this volume). The think-tank Fund for Peace established the Failed State Index (FSI) in 2005 to measure the strength of government, and a high score on this indicator denotes a state with little control over its territory. A score of 100 on the FSI indicates a failing state while a score over 75 a state that is unstable.

[10] This title owes to Paul Collier's (2009) twist on Thomas Hobbes' well-know assertion that life is "nasty, brutish and short". See Annex Table 23.11 for selected political indicators for countries in the region.

In 2013, 35 states in the region scored above 75 with nine, including Nigeria one of the region's most populous and wealthiest states, scoring a 100 and above.

Beginning in the early 1980s, poverty on the continent was identified as a political problem linked with economic mismanagement and corruption. A majority of sub-Saharan African nations have signed up to anti-corruption initiatives on the continent such as the African Peer Review Mechanism. However the 2013 Corruption Perceptions Index (CPI) results, published by Transparency International, revealed that many nations on the continent are still viewed as highly corrupt. Using a scale of 0 (very clean) to 100 (highly corrupt), Transparency International found that 22 countries in the region scored below 30.

In order to measure the peacefulness of the region, the Australian-based Institute for Economics and Peace devised the Global Peace Index (GPI) which is composed of 22 indicators that measure safety and security in society. The results, scaled 1 (very high level of peace) and 5 (very low level of peace), reveal that sub-Saharan Africa as a whole ranks above the Middle East and North Africa, South Asia and Eurasia. The Democratic Republic of the Congo, the Central African Republic and Cote d'Ivoire, however, score much higher than the regional average. Armed conflicts in these countries have affected their scores as well as competition between ethnic groups and a general loss of central government control.

Politics and Mass Opinion

Individual wellbeing in sub-Saharan Africa has a strong link with political stability if not democracy. Given the importance of the current democratization trend in the region, the political attitudes of sub-Saharan Africans are an important indicator that should be considered in any study of quality of life in the region. In order to analyze such attitudes, the authors make use of the Afrobarometer survey series. Beginning with a modest 12 country coverage in 1999–2001, the Afrobarometer team has expanded coverage to include 29 nations in sub-Saharan Africa (representing 72 % of the region's citizens).[11] The results of this survey series allow a deeper understanding of the political dynamics of the continent.

Most sub-Saharan Africans prefer multiparty democracy to single-party system of the past. Of the total population covered by the Afrobarometer in 2012, the vast majority of those sampled disapproved of single-party rule, thought that leaders should be chosen in regular elections and believed that democracy is preferable to any other kind of government. Demand for democracy is often at odds with supply of democracy in the region. Two-fifths felt that their country was a full democracy, 37 % a democracy with minor problems and 29 % a democracy with major problems. Democratic legitimacy was unevenly distributed on the continent and reflected the uneven success of the third wave of democratization on the continent.

Satisfaction with political leadership may be a good indicator of societal wellbeing. If trust in the nation's ruling party is considered, it was found that almost 47 % reported low levels of trust. Even more concerning is that only 44 % felt that the last national election in their country was free and fair. However, the political legitimacy varies significantly from one country to another on the continent. Countries which have had recent disputed elections and have laws that restrict political expression and political oppression – such as Togo, Cameroon, Nigeria, Côte d'Ivoire and Zimbabwe – tended to have low levels of political legitimacy.

Political intimidation and violence were once common features of many sub-Saharan African states but in the current period such violence is far less common. Less than a fifth (17 %) of sub-Saharan Africans reported being very afraid of political intimidation and violence in their country with half indicating that they were not afraid at all. However, certain countries remain highly fearful indicating Kenya, Guinea, Côte

[11] Mattes (2008) outlined a range of difficulties with the sampling methodology, including the need for greater coverage in the countries sampled as well as larger sample sizes.

d'Ivoire and Zimbabwe who reported levels of fear twice that of the regional average. Feelings of neighborhood safety were high in many countries in the region and more than three-fifths (61 %) reported never feeling unsafe walking in their neighborhood. Those citizens who reported below this regional average were South Africa, Swaziland, Cameroon and Madagascar.

A sense of belonging is an important aspect of individual and societal wellbeing. Overwhelmingly sub-Saharan Africans report high levels of patriotic feeling −88 % stating that they are proud of their nation -a positive finding given that national pride has been identified as an important aspect of individual wellbeing. However, many sub-Saharan Africans feel that their ethnic group is treated unfairly, particularly in the highly diverse nations of Cameroon, Guinea and Kenya. However it is Nigeria which tends to display the highest level of inter-ethnic tension, with 46 % believing that their ethnic group is often or always treated unfairly.

An investigation of the political dimension in sub-Saharan Africa reveals that a region currently transitioning towards greater democratization and political stability. Attitudes towards politics on the continent are critical but not overwhelmingly negative and there many signs of hope among the region's citizenry. However the road to political stability remains fragile in the eyes of sub-Saharan Africans, many of whom are still distrustful of their leaders and governments. The results presented in this chapter capture the highly uneven character of the celebrated period of African democratization beginning in the 1990s. This is confirmed by the objective measures of political stability and freedom presented in the previous section.

The Objective Measurement of Quality of Life in Sub-Saharan Africa

Having provided an admittedly stylized overview of the historical and political economy context of sub-Saharan Africa, this section directs attention to the measurement of quality of life in the region in the objective measurement tradition. The emphasis is on some of the more commonly used multidimensional, multi-indicator indices of progress, most notably the Human Development Index (HDI) and the Weighted Index of Social Progress (WISP). The relative availability of African data over a considerable time interval for the former indicator is an advantage, with more partial coverage in relation to the WISP.

Human Development Index (HDI)

The United Nations first published the Human Development Index (HDI) in 1990 as a composite index to assess and rank the average achievement of countries according to three core dimensions of human development, namely a long and healthy life, the acquisition of knowledge, and a decent standard of living. These three core components are deemed as critical capabilities required for the attainment of human development in a society, and are related to the quality of life (Glatzer 2012). The latest formulation of the index, which was introduced in 2010 due to improved data availability, employs the following four indicators:

- *Health*: life expectancy at birth
- *Education*: expected years of schooling for school-age children and average years of schooling in the adult population.
- *Income*: Gross National Income per capita (PPP US$)

The data reveal that there has been unprecedented progress in human development in the global South in recent decades, with countries such as China, India, Brazil and Indonesia securing notable improvements in health, education and income levels. Although sub-Saharan Africa possesses the lowest HDI value of any region (0.475 in 2012 compared to a world average of 0.694), between 1980 and 2012 the overall HDI increased by nearly a third from 0.366 to 0.475, and broad-based improvements are evident in many of the region's nations (UNDP 2013). All experienced positive gains in human development between 2000 and 2012, which stands in

Table 23.2 HDI and components, ratio of high to low values within region and sub-regions, 2012

	Human Development Index (HDI)	Life expectancy at birth	Mean years of schooling	Expected years of schooling	Gross national income (GNI) per capita
	Value	(years)	(years)	(years)	(2005 PPP $)
	2012	2012	2010	2011	2012
Sub-Saharan Africa	2.7 *(0.806:0.304)*	1.5 *(74.3:48.1)*	7.8 *(9.4:1.2)*	5.9 *(14.3:2.4)*	70.8 *(22,615:319)*
Western Africa	1.9 *(0.586:0.304)*	1.5 *(74.3:48.1)*	5.6 *(7.0:1.3)*	2.6 *(12.7:4.9)*	7.5 *(3,609:480)*
Eastern Africa	2.5 *(0.806:0.327)*	1.5 *(73.8:49.4)*	7.8 *(9.4:1.2)*	5.9 *(14.3:2.4)*	53.3 *(22,615:424)*
Central Africa	2.2 *(0.683:0.304)*	1.3 *(64.9:48.7)*	5.0 *(7.5:1.5)*	1.9 *(13.0:6.8)*	68.0 *(21,715:319)*
Southern Africa	1.4 *(0.634:0.461)*	1.3 *(62.6:48.7)*	1.5 *(8.9:5.9)*	1.4 *(13.1:9.6)*	7.0 *(13,102:1,879)*

Source: Own calculations based on UNDP (2013) Human Development Report 2013
Note: figures in *brackets* represent high and low values within the region

contrast with the 1990s, when 12 sub-Saharan African states had reversals in their HDI values.[12] Lesotho and Zimbabwe were the only countries worldwide with lower HDI values in 2012 than in 1990, a reflection of the consequences of a high HIV/AIDS burden and political instability respectively. Average life expectancy in the subcontinent improved by around 16 years between 1960 and 2011, rising from 40 to 56 years. Strides have also been made in terms of education. For instance, access to primary education expanded from 53 % in 1990 to 77 % in 2011.[13] Over the same interval, there was a modest rise in both adult and youth literacy rates (from 53 to 60 % in the former case, and from 66 to 70 % in the latter instance).

While these represent significant gains, considerable intra-regional human development inequalities continue to exist (Table 23.2). The small island state of the Seychelles enjoys a very high level of human development, with an HDI value of 0.806, placing it alongside countries such as Argentina and Portugal. By contrast, the Democratic Republic of the Congo and Niger jointly possess the world's lowest HDI value (0.304), which is more than two-and-a-half times lower than the Seychellean average. Life expectancy remains below 60 years for all but ten countries, and the lowest life expectancy in the region (Sierra Leone, 48.1 years) is an alarming 26 years lower than the highest (Cape Verde, 74.3).

The mean years of schooling in sub-Saharan Africa is approximately half the global average (3.7 versus 7.4 in 2012), but the average number of years of education received by people aged 25 and older in countries such as Mozambique and Burkina Faso are more than seven times below that of the Seychelles or Botswana. The disparities are even starker in relation to the distribution of wealth. As the continent's poorest nation, gross national income among Congolese citizens is a meager US$319 per capita (2005 (PPP)), while the figure is approximately 70-fold that amount for the Seychellois. Similar patterns of variation are found across the different subregions, although the ratio between the countries with lowest and highest gross national income per capita tends to be substantially lower in Western and Southern Africa than Central and Eastern Africa.

In order to accommodate these profound inequalities that exist within regions and

[12] The countries are: Burkina Faso and Sierra Leone in Western Africa; Kenya, Zambia and Zimbabwe in Eastern Africa; Cameroon, Central African Republic, Congo and the Democratic Republic of Congo in Central Africa; and Lesotho, Namibia and Swaziland in Southern Africa.

[13] Adjusted net enrolment rate in primary education, using the World Bank's World Development Indicators database.

Table 23.3 Inequality-adjusted HDI by region, 2012

	HDI	Inequality-adjusted HDI (IHDI)		Inequality-adjusted life expectancy index		Inequality-adjusted education index		Inequality-adjusted income index	
	Value	Value	Overall loss (%)	Value	Loss (%)	Value	Loss (%)	Value	Loss (%)
	2012	2012	2012	2012	2012	2012	2012	2012	2012
World	**0.694**	**0.532**	**23.3**	**0.638**	**19.0**	**0.453**	**27.0**	**0.522**	**23.5**
Sub-Saharan Africa	0.475	0.309	35.0	0.335	39.0	0.285	35.3	0.308	30.4
Arab States	0.652	0.486	25.4	0.669	16.7	0.320	39.6	0.538	17.5
East Asia & Pacific	0.683	0.537	21.3	0.711	14.2	0.480	21.9	0.455	27.2
Europe & Central Asia	0.771	0.672	12.9	0.716	11.7	0.713	10.5	0.594	16.3
Latin America & Caribbean	0.741	0.550	25.7	0.744	13.4	0.532	23.0	0.421	38.5
South Asia	0.558	0.395	29.1	0.531	27.0	0.267	42.0	0.436	15.9

Source: UNDP Human Development Report 2013

countries and overcome concerns about the averaging effect of the HDI measure, the UNDP introduced the Inequality-adjusted HDI (IHDI) in the 2010 edition of the Human Development Report, coinciding with the twentieth anniversary of the development of the HDI. The IHDI is a multidimensional construct that measures the losses in human development that are attributable to inequality in all three dimensions of the HDI – health, education and material goods (UNDP 2010). It thus combines not only the average level of human development in any context but the distribution of the development across the HDI dimensions.

The average global loss in human development that is due to multidimensional inequalities (loss across *all* three domains) is estimated at 23 % in 2012, ranging from a low of 5 % in the Czech Republic to a high of 45 % in the cases of Angola and Namibia. Sub-Saharan Africa recorded the highest overall regional loss in human development due to inequality (35 %), followed by South Asia (29 %) and Latin America and the Caribbean (26 %) (Table 23.3).

Of the 36 countries within the sub-Saharan Africa region with 2012 IHDI data, all except for Mauritius and Gabon lost more than a quarter of human development to multidimensional inequality, while seven countries lost more than 40% of their HDI value. The greater losses in sub-Saharan Africa have been ascribed to the substantial inequality that exists in the subcontinent in all three dimensions of human development, with more than 30 % of the value in each of the health, education and income domains being lost to inequality (UNDP 2010). This stands in contrast to other world regions. For instance, the distributions in the three domains are relatively egalitarian in Europe and Central Asia, while elsewhere inequality in one specific domain tends to predominate. In South Asia and among Arab states, educational inequality is particularly high, while the highest level of losses in human progress due to income inequality is recorded in Latin America and the Caribbean.

Weighted Index of Social Progress (WISP)

One of the most comprehensive measures of objective wellbeing is the Index of Social Progress (ISP) - or the WISP as its statistically weighted version is known –developed by Richard Estes (Chap. 8, this volume). The ISP consists of ten sub-indexes encompassing a total of 41 individual social indicators. The aim of such a composite measure is to encompass all major aspects of societal economic development including educational status, health, gender equality, social welfare nets and cultural diversity. The use of such an index, which has been

Table 23.4 Weighted Index of Social Progress (WISP) in Sub-Saharan Africa, 2000–2009

		1970	1980	1990	2000	2009
1	Sudan	n.a	n.a	n.a	n.a	n.a
Western Africa						
2	Benin	14	17	8	19	19
3	Burkina Faso	3	11	8	3	23
4	Cape Verde	n.a	n.a	n.a	40	51
5	Côte d'Ivoire	24	24	16	12	6
6	Gambia	n.a	n.a	n.a	13	16
7	Ghana	22	18	16	26	29
8	Guinea	14	5	−1	5	9
9	Guinea-Bissau	n.a	n.a	n.a	−4	−3
10	Liberia	24	20	12	−6	−11
11	Mali	13	8	4	13	16
12	Mauritania	23	10	13	12	20
13	Niger	6	8	3	−4	9
14	Nigeria	6	26	11	14	4
15	Senegal	27	18	24	19	22
16	Sierra Leone	25	12	2	−10	0
17	Togo	9	13	17	14	11
Eastern Africa						
18	Burundi	5	8	18	3	10
19	Comoros	n.a	n.a	n.a	n.a	n.a
20	Djibouti	n.a	n.a	n.a	12	14
21	Eritrea	n.a	n.a	n.a	−15	−7
22	Ethiopia	4	−10	−10	−12	15
23	Kenya	27	26	24	12	24
24	Madagascar	30	31	23	19	24
25	Malawi	11	4	13	9	27
26	Mauritius	n.a	56	67	61	60
27	Mozambique	n.a	2	−4	4	11
28	Rwanda	17	18	21	19	24
29	Seychelles	n.a	n.a	n.a	n.a	n.a
30	Somalia	19	10	1	1	−4
31	South Sudan	n.a	n.a	n.a	n.a	n.a
32	Tanzania	12	20	15	20	22
33	Uganda	14	14	12	7	12
34	Zambia	27	25	28	22	21
35	Zimbabwe	32	29	37	24	23
Central Africa						
36	Angola	n.a	5	−3	−10	−4
37	Cameroon	23	22	21	15	14
38	Central African Rep.	10	12	9	2	3
39	Chad	3	−4	−2	−4	−7
40	Congo	n.a	22	27	22	17
41	Congo, Dem. Rep.	15	21	14	−2	2
42	Equatorial Guinea	n.a	n.a	n.a	n.a	n.a
43	Gabon	n.a	n.a	n.a	28	30
44	São Tomé & Príncipe	n.a	n.a	n.a	n.a	n.a
Southern Africa						
45	Botswana	n.a	n.a	n.a	44	50
46	Lesotho	n.a	36	36	36	46
47	Namibia	n.a	n.a	n.a	36	46
48	South Africa	51	43	44	52	51
49	Swaziland	n.a	n.a	n.a	37	33

Source: International Index of Social Progress (ISP) 1970–2009
Note: n.a. signifies that data is not available

collected since 1970, allows the researcher to measure the capacity of nations to provide for the basic social and material needs for their citizens.

In 2009 the vast majority of states on the subcontinent had WISP scores well below the global average of 49 (Table 23.4). If sub-Saharan Africa is analyzed regionally, significant differences are noted with the South (40) having much higher average WISP scores than the East (18), West (14) and Central (8). This represents a significant improvement over the last 10 years. Sub-Saharan Africa has scored consistently unfavorably in terms of WISP for the period 1970–2000. Social progress for much of the continent in fact declined between 1970 and 1980 and only began to rebound after 2000. This recovery has been profound enough for Estes (2012a, p. 439) to remark that "Africa's recent social gains [in the last 10 years] nonetheless are impressive" (also see Estes 2009).

Recent conflict in sub-Saharan Africa, particularly civil conflict, made it impossible for millions of Africans to pursue happiness and improve the quality of their lives. A recent study on failing states by Estes (2012b, p. 577) found that social development "requires peace, or at least minimum levels of positive social, political, and economic stability". Indeed, Estes further argues that a failing state will have a negative impact on the quality of life in neighboring states. As the results of this section will

show, those states that have become entrenched in civil conflict in the recent past tended to have low social development.

Civil strife was particularly common to West Africa during the 1990s and 2000s. A majority of West African countries experienced a decline in WISP between 1970 and 2000, and the sub-region average fell from 16 in 1970 to 10 in 2000, although some progress was made between 2000 and 2009 when WISP increased to 14. Those Western African countries (Chad, Sierra Leone, Liberia and Cote d'Ivoire) directly involved in civil war experienced extreme deteriorations in social progress in this period. Much of Middle Africa is also recovering from civil war in the 1990s and 2000s and the sub-region had a low WISP average of 8, with the Democratic Republic of the Congo, the Central African Republic and Angola scoring below this sub-regional average.

Most countries in sub-Saharan Africa who achieved greater political stability also experienced increased social development. Ethiopia, for instance, made significant improvements in social development, albeit from a low base and the country's WISP increased from −12 in 2000 to 15 in 2009. This was primarily caused by the end of the prolonged civil disorder of the authoritarian Mengistu era (James et al. 2002) in 1994 and the constitutional and agricultural reforms of the democratic Meles era. However, not all transitions to democracy coincided with increases in social progress. Nigeria, plagued by disputed elections since the transition from military rule in 1999 (Obiyan and Amuwo 2012), experienced a reversal of social development -declining from 26 in 1980 to 4 in 2009.

The case of Nigeria demonstrates that even when civil war is avoided, other factors can reverse social development. Estes (2009) suggests that other contributing factors are: the rapid spread of infectious and communicable diseases (such as HIV/AIDS), the underinvestment and, in some cases, declining investment in health, education, and social welfare by some countries as well as an inability to overcome serious infrastructure limitations, particularly within the region's landlocked states. Zimbabwe, for example suffered considerable economic (and subsequent social) decline following a poorly managed land reform program that destroyed the country's leading export-producing agricultural sector (Howard-Hassmann 2010). As a result Zimbabwe was the only country in the Southern African subregion to suffer a substantial decline in WISP (falling from a high of 37 in 1990 to 23 in 2009).

Half of a Yellow Sun[14]: Assessing Quality of Life Based on Subjective-Wellbeing Indicators

With the exception of South Africa and to a lesser degree Nigeria, research into subjective wellbeing in the subcontinent has lagged behind more objective analysis of quality of life during the post-independence period (Graham 2009; Camfield 2012). One of the earliest comparative studies of wellbeing in which Africa features is the 1965 study by Hadley Cantril, *The Pattern of Human Concerns*. Nigeria and Egypt were two of the 13 countries included in the study, which made use of an 11-point end-anchored ladder scale to examine life evaluations that are grounded on individual imaginings of the best and worst possible life. Given that many countries attained independence around this period and with advances in survey methodology and technology during the late 1960s and early 1970s, a number of micro-studies did begin to examine wellbeing in select countries in the region, mainly sponsored by North American and European universities. For example, Hayward (1979) presented findings from surveys conducted in six Ghanaian communities in 1970 and 1975, and observed that a sense of wellbeing was associated with political competence and political participation. Other such studies, each with different geographical coverage and relative emphasis on objective versus subjective

[14] The title derives from the novel by Nigerian author Chimamanda Ngozi Adichie in 2005, focusing on the human consequences of conflict through the lens of the Nigerian-Biafran War of 1967–1970.

indicators, can be found in Sierra Leone (Peil 1984), Nigeria (Oyebanji 1982), and South Africa (Hanf et al. 1981). In the latter case, survey work conducted in the mid-1970s on current and prospective happiness among South Africans served as the catalyst for a program of subjective evaluation of quality of life in the country that has recently entered its fourth decade.

Building on the work of Cantril, the Gallup-Kettering Global Survey of 1976 administered questions to representative samples in 60 countries that at the time accounted collectively for close to two-thirds of the world's population (Gallup 1976). Despite the small sample sizes involved,[15] sub-Saharan Africa was included in the survey through interviews conducted in Nigeria, Tanzania, Kenya, South Africa, Uganda, the Sahel, Cote d'Ivoire, Senegal and Zimbabwe (then Rhodesia). As one of the earliest cross-national surveys to be conducted, and certainly the most ambitious in terms of global and particularly African coverage, the results are illuminating for what they reveal about subjective wellbeing in the region. Of the African population sampled in this study, 31% reported that they were "not too happy", which compared unfavorably with North America (8 %), Australia (6 %) and Western Europe (18 %). Retrospective and prospective subjective wellbeing was investigated using the 11-step Cantril "Mountain Striving Scale".[16] Sub-Saharan Africa was found to score very low on the retrospective scale but much higher (3.7) on the prospective scale (6.1). This was the largest difference between current and prospective wellbeing scores of the world regions surveyed, indicating the high level of optimism that existed in the region in the mid-1970s. This remains one of the more enduring findings of subjective examinations of quality of life on the subcontinent, and is a point that we will be return to later in this section.

Following these influential cross-national undertakings of the 1960s and 1970s, progress in surveying subjective wellbeing in Africa proceeded at a rather slow pace until the late 1990s and early 2000s. The World Value Survey (WVS) series, established in 1981, has measured subjective wellbeing on a bi-decennial basis using a single-item overall life satisfaction question based on a ten-point scale. Only Nigeria and South Africa were included in the survey during the first three waves of the survey, though this increased to four countries with the fourth wave (1999–2004) and nine countries in Wave 5 (2005–2007). The latest round of interviewing (Wave 6, 2010–2012) has focused on dramatically increasing sub-Saharan African participation. Other global survey series that have gained prominence since the end of the twentieth century, such as the Gallup World Poll and the Pew Global Attitudes Surveys, are characterized by a greater representation of African countries, but relatively small sample sizes, sampling problems and inconsistent country participation are some of the limitations experienced to date. Similarly, at the regional level, the Afrobarometer survey series, which was established in the late 1990s, comprised 12 countries as part of its first wave (1999–2001) and managed to expand to at least 22 nations by its fifth round (2011–2013).[17] The series however does not contain a direct measure of subjective wellbeing, though analysts have attempted to overcome this by examining proxy measures such as lived poverty or optimism (Mattes 2008; Graham and Hoover 2007). Although these developments have resulted in significant advances in our understanding of social attitudes in Africa and the extent to

[15] Ranging from 15 cases in Zimbabwe to 377 cases in Nigeria, with a total sub-sample for sub-Saharan Africa of 914 interviews. This accounts for approximately a tenth of the total sample in the global survey, which consisted of 9072 interviews.

[16] The Mountain Striving Scale was somewhat different from the standard Cantril Ladder. In contexts where ladders were less commonly employed, Cantril experimented with a depiction of a mountain with 11 ascending steps. This was adopted by the Gallup-Kettering study.

[17] The expectation is that this will increase to up to 35 countries by the completion of the survey round.

Table 23.5 Ranked average life satisfaction in sub-Saharan African countries 2000–2009 (mean on a 0–10 scale)

Highest values	
Malawi (6.2)	South Africa (5.8)
Nigeria (5.7)	Djibouti (5.7)
Chad (5.4)	Namibia (5.2)
Ghana (5.2)	Zambia (5.0)
Sudan (5.0)	Mauritania (4.9)
Uganda (4.8)	Mali (4.7)
Botswana (4.7)	Central African Rep. (4.6)
Senegal (4.5)	Guinea (4.5)
Côte d'Ivoire (4.4)	Congo, Dem. Rep. (4.4)
Burkina Faso (4.4)	Rwanda (4.3)
Liberia (4.3)	Angola (4.3)
Ethiopia (4.2)	Cameroon (3.9)
Niger (3.8)	Mozambique (3.8)
Madagascar (3.7)	Kenya (3.7)
Congo, Rep. (3.7)	Sierra Leone (3.5)
Zimbabwe (3.0)	Benin (3.0)
Burundi (2.9)	Tanzania (2.8)
Togo (2.6)	
Lowest values	

Source: Veenhoven. R. *Average happiness in 149 nations 2000–2009*. World Database of Happiness. Rank report Average Happiness. Erasmus University Rotterdam, The Netherlands. Accessed on (2014-01-22) at: http://worlddatabaseofhappiness.eur.nl/hap_nat/findingreports/RankReport_AverageHappiness.php

which this approximates or diverges from other countries and regions, there remains much scope for building on this initial engagement.

Subjective Wellbeing Among Sub-Saharan African Nations

Overall Life Satisfaction

Data on overall life satisfaction for the region is generally less commonly available than other forms of happiness measures, particularly the Cantril-type best-worst life possible questions, though the World Database of Happiness has compiled available empirical evidence for 35 - sub-Saharan African nations, with a coverage that focuses predominantly on the 2000–2009 period. We find an appreciable spread in national averages, with the highest rating of 6.2 in Malawi nearly two-and-a-half times higher than the lowest rating of 2.6 in Togo (Table 23.5).

Globally, Togo was the lowest ranked of 149 nations in the database, while Costa Rica had the highest score (8.5). Another finding of note is the relatively few countries in the region that have mean scores above the scale midpoint (5.0). In this instance, only Malawi, South Africa, Nigeria, Djibouti, Chad and Namibia fall into this category. The overall average level of satisfaction for the set of sub-Saharan African countries with available data is 4.4, which is below that of North Africa (5.6) and the world average (5.9).

Contentment with Life

The most commonly used measure of happiness in the region asks respondents to rate their life on an 11-step ladder scale that ranges from what they perceive to be the worst possible life (0) to the best possible life imaginable (10). This best-worst possible life evaluation question derives from the formative cross-national work of Cantril (1965). In Fig. 23.2 we present ranked averages for 35 sub-Saharan African countries based on the latest available data from the Gallup World Poll. This specific happiness measure corresponds theoretically to the comparison theory view of happiness as 'a cognitive judgment involving an estimate of the difference between actual and ideal life' (Rojas and Veenhoven 2013: 416).

In terms of the pattern of responses within the region, we again find a considerable degree of variation in contentment, ranging from a low of 2.9 in the case of Togo to a high of 5.6 in Angola. Only Angola, Mauritius and Nigeria have a mean score exceeding the midpoint of the scale, while 11 countries have an average score that is below four on the 0–10 scale. A simple mean score was calculated for all the countries as well as for each of the four sub-regions. The lowest score was found in Western Africa (4.08), followed by Central and Eastern Africa (4.30 and 4.41 respectively), with a moderately higher average in Southern Africa (4.92).

The Gallup data also include retrospective and prospective evaluations, with the national averages again displayed in Fig. 23.2. It is immediately apparent that there exists considerable

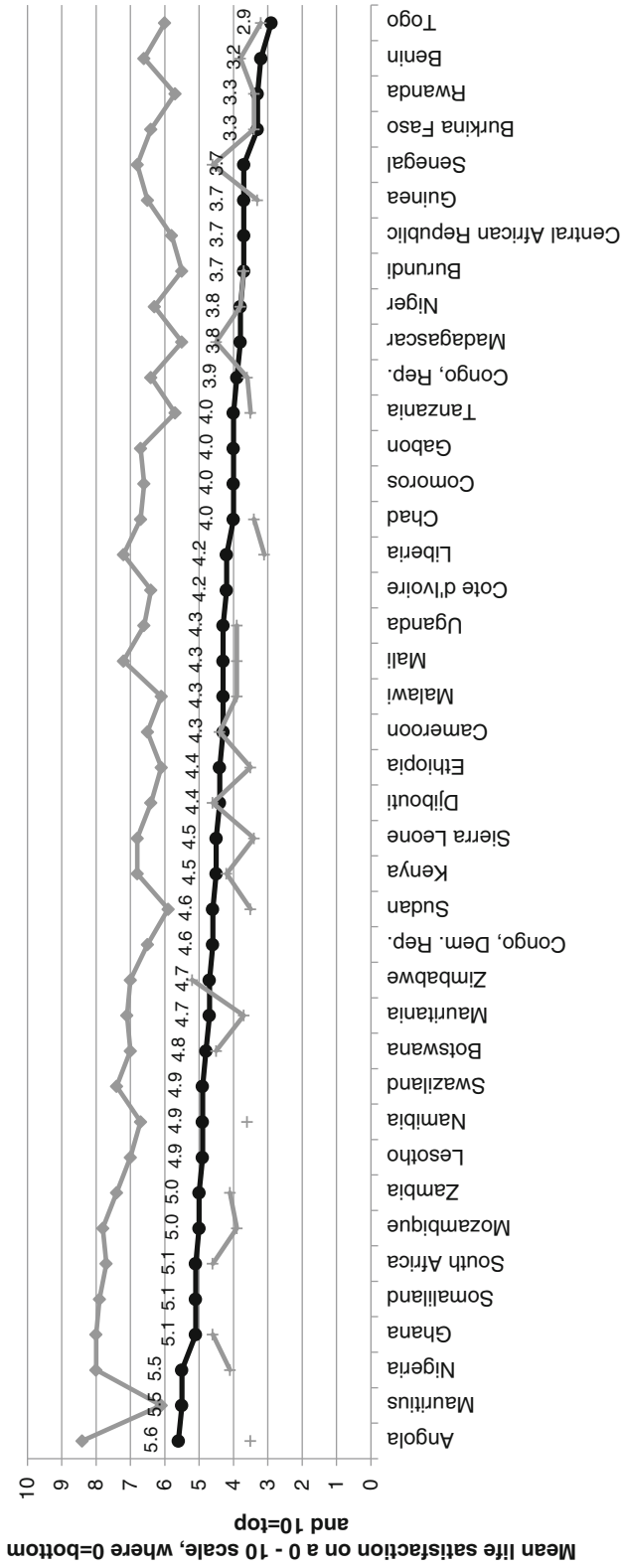

Fig. 23.2 Average contentment for select sub-Saharan African countries, ranked by current life ratings (Source: Gallup World Poll 2007, 2009 and 2011, 2012). Note: *1* Life today, Life 5 years ago and Life in 5 years are measured using the Cantril ladder questions with respondents asked to choose a rung on the 0–10 ladder. *2* All countries use data from Gallup 2011 except indicated for *(2007) and †(2009). *3* All data weighted to nationally representative

optimism among sub-Saharan African countries concerning life improvements in the medium term. Contentment in the region, based on simple all-country averages, is expected to rise from the present 4.4–6.7 over the 5-year interval, an increase by more than 50 %. Based on these future evaluations, only two nations have an average score below the midpoint of the ladder, with 14 countries reporting a value of seven or above. It is interesting to note that the largest anticipated gains are found among countries characterized by low present scores and perceived reversals in recent years. This is especially true of the Western African states of Togo, Benin, Burkina Faso and Senegal, as well as Rwanda in Eastern Africa. The Togolese example is perhaps most telling. As with overall life satisfaction, the country possesses the lowest level of contentment worldwide based on 2012 Gallup data, and although citizens generally felt marginally more contented in the past (3.2 compared to 2.9), there is an expectation of a substantive reversal, with the mean country rating jumping to more than double its current level (6.0) by the end of a 5-year period. It is this 'happiness in hardship' (Veenhoven 2005) that strikes one in the comparative examination of happiness in the subcontinent; the remarkable resilience that is encountered in the face of considerable personal and societal adversity (Møller 2005).

Affect Balance

The Gallup World Poll has also fielded a series of questions concerning the positive and negative feelings experienced by respondents on the day prior to interviewing. From the results, a positive experience index is constructed based on the respondents reported wellbeing yesterday with regard to feeling well-rested, being treated with respect all day, smiling or laughing a lot, learning or doing something interesting, experiencing enjoyment or love, feeling proud about something that they did, and expressing a general desire for more days like yesterday. Gallup also constructs a negative experience index based on the reported experience of physical pain, worry, sadness, stress, anger and depression. In accordance with Rojas and Veenhoven (2013), an affect balance score can be constructed by subtracting the negative affect score from the positive affect score. Examining affective experience as opposed to the cognitive evaluations of life as the measure of happiness, we find that the share reporting positive emotions exceeds the share with negative feelings for all 34 sub-Saharan African countries with available data. As such, all affect balance scores for these nations are positive, with a regional mean of 42.1, ranging from 16 in Togo to 59 in Lesotho (Fig. 23.3).

From a comparative perspective, the region has an average affect level that exceeds that found in South Asia (31.9), the Middle East and North Africa (33.6) and Europe and Central Asia (35.1). The highest affect balance scores are found in East Asia and the Pacific (50.5) and Latin America and the Caribbean (49.3). Sub-Saharan Africa therefore has a higher average affect balance score than one might expect given the multiple social challenges that continue to beleaguer the subcontinent. This, like in Latin America, is buoyed partly by a fairly high level of positive feelings reported among the region's population. Nearly two fifths of the sub-Saharan African countries (13 out of 34) had a positive experience score exceeding 70, with the highest scores evident in Nigeria (78), Lesotho (77) and Malawi (76), while only two African countries (Togo and Madagascar) feature in the bottom ten countries in terms of positive emotions worldwide. In addition, the lowest ranking world regions contain instances where countries face lower than average positive affect coupled with a high degree of negative emotion. This is true of nations such as Iraq (−9),[18] Palestine (16) and Egypt (19) among the Arab states, Pakistan (22), Iran (23) and Afghanistan (29) in South Asia, as well as Armenia (12), Serbia (16) and Turkey (19) in Europe and Central

[18] Iraq has the lowest affect balance score of 148 countries in the 2011 Gallup World Poll, and is the only case with a negative overall score. This is attributable to an exceptionally high level of negative affect (59), in contrast with a relatively low experience of positive emotion (50).

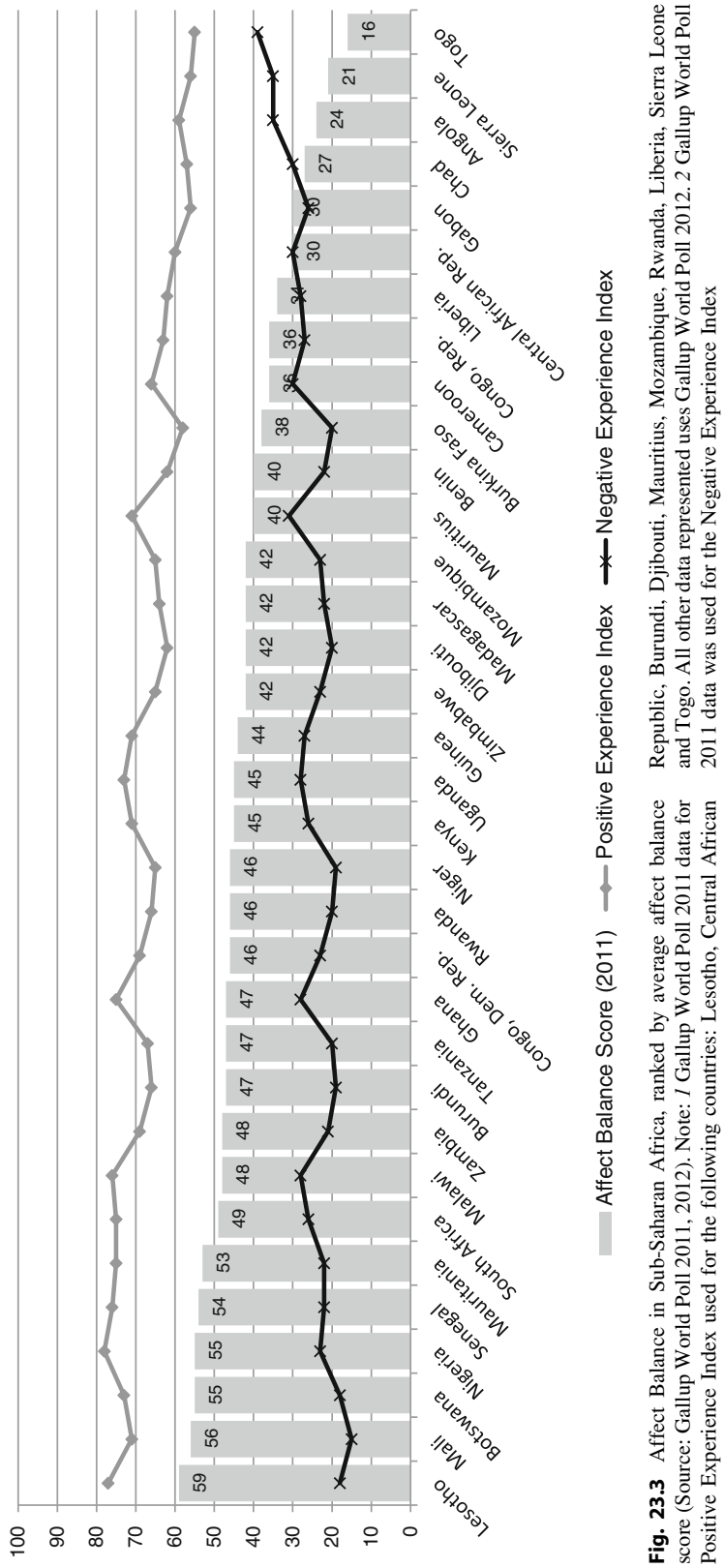

Fig. 23.3 Affect Balance in Sub-Saharan Africa, ranked by average affect balance score (Source: Gallup World Poll 2011, 2012). Note: *1* Gallup World Poll 2011 data for Positive Experience Index used for the following countries: Lesotho, Central African Republic, Burundi, Djibouti, Mauritius, Mozambique, Rwanda, Liberia, Sierra Leone and Togo. All other data represented uses Gallup World Poll 2012. *2* Gallup World Poll 2011 data was used for the Negative Experience Index

Table 23.6 Zero-order correlations between life satisfaction, contentment and affect balance among select sub-Saharan African countries

	Life satisfaction	Contentment	Affect balance	Positive affect	Negative affect
Life satisfaction	1.00				
Contentment	0.48	1.00			
Affect balance	0.36	0.28	1.00		
Positive affect index	0.50	0.46	0.87	1.00	
Negative affect index	−0.07	0.05	−0.79	−0.39	1.00

Sources: Overall life satisfaction data derives from Veenhoven. R. *Average happiness in 149 nations 2000–2009*. World Database of Happiness; contentment and affect balance data is from the Gallup World Poll

Asia. Individuals living in Togo, Angola and Sierra Leone are similarly predisposed towards experiencing a high level of negative emotion on a daily basis, and all three are in the top quartile of the negative emotion distribution. The resilience of Sub-Saharan Africans to social and economic hardship is evidently demonstrated by the Positive and Negative Experience Index data.

Inter-correlations

In terms of the zero-order correlations between overall life satisfaction, contentment and affect balance measures, we find a moderately high association between life satisfaction and contentment (+0.48) and a slightly lower coefficient (+0.36) between life satisfaction and affect balance (Table 23.6). We have also included the correlations for positive and negative affect indices. While there is a reasonably high association between positive affect and both life satisfaction and contentment, negative affect does not appear to have any real bearing on these happiness measures. The absence of an association between negative affect and the measures of overall life satisfaction and contentment is interesting, since it seems to suggest that the prevalence of negative experience on average may not dampen feelings of satisfaction or contentment. This is again consistent with the findings of other studies concerning a deep-rooted resilience and optimism that exists among sub-Saharan African nations, particularly its poorer citizens (Møller 2005; Graham and Hoover 2007; Roberts 2012). Although we find lower correlation coefficients than those reported by Rojas and Veenhoven (2013) using Gallup data for all countries irrespective of world region, the patterns remain largely the same when focusing exclusively on sub-Saharan Africa. We continue to find that contentment has a higher positive correlation with life satisfaction than affect, and we also find the positive correlation between contentment and affect.

Happiness Trends

There are unfortunately few studies available that shed light on trends in happiness in the sub-Saharan Africa over a period covering more than a decade. This is due mainly to limitations on the availability of subjective wellbeing data across the subcontinent prior to the turn of the millennium. Even critically important attitudinal times series such as Afrobarometer do not include direct measures of happiness, opting instead for indicators of 'lived poverty' as a proxy (Mattes 2008). The two notable exceptions are South Africa, which has been regularly collecting and monitoring wellbeing and quality of life for more than three decades (Møller 2013; Møller and Roberts 2014), as well as Nigeria (Easterlin and Sawangfa 2010). This serves as an impediment to more fully understanding patterns of individual and national wellbeing in the context of changing circumstances across the subcontinent in recent decades.

Nigeria was one of only two African nations included in Cantril's (1965) inquiry into the hopes and fears of citizens around the world,

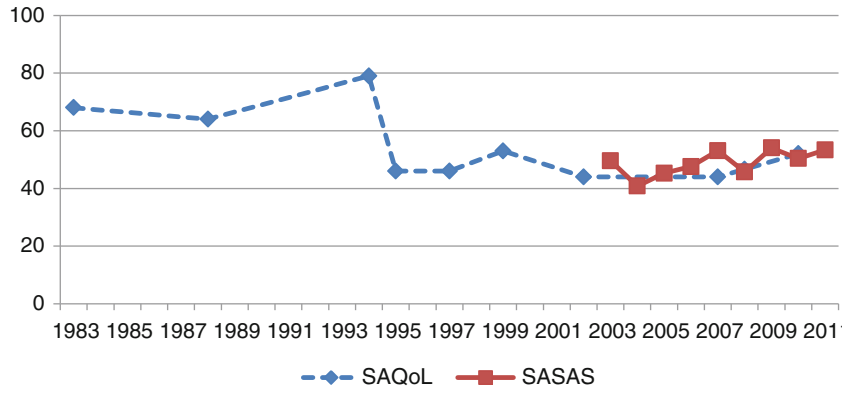

Fig. 23.4 Life satisfaction in South Africa, 1983–2011 (Sources: South African Quality of Life Trends Project (SAQoL, 1983, 1988, 1994, 1995, 1997, 1999, 2002, 2007, 2010); HSRC South African Social Attitudes Survey (SASAS) 2003–2011. Møller (2013); Møller and Roberts (2014)). Note: All data weighted to be nationally representative. The question is phrased as follows: 'Taking all things together, how satisfied are you with your life as a whole these days?', with responses captured on a five-point satisfaction scale

the other being Egypt. With fieldwork conducted in 1963, the results offer an unique glimpse of the aspirations and life evaluations of Nigerians shortly after achieving independence in 1960. The personal hopes of a considerable majority of Nigerians centered on economic and family-related concerns (mentioned by 90 and 76 % of respondents respectively), which was dominated by expected gains in standard of living and opportunities for one's children. Improvements in one's health and the health of family members were notable secondary aspirations. Personal fears and worries also tended to concentrate on economic, health and family matters (Cantril 1965). The use of Cantril's ladder of life scale by organizations such as Gallup to evaluate patterns of wellbeing around the world means that we can determine the scale of change in happiness in Nigeria over a period of five decades. In 1963, the mean score in response to the best-worst possible life question was 4.79 on a 0–10 scale. The Gallup world poll of 2002 showed that this average had increased to 5.84, an absolute increase of +1.05. In the five assessments that have been conducted since, this mean score has demonstrated a fluctuating tendency, so that the mean score of 5.20 reported in 2011 represents a decline of −0.64 between 2002 and 2011, thus reducing the gain in happiness to +0.41 relative to 1963. While the long-term trend remains positive, the Nigerian example reveals how quickly gross national happiness can alter over time.

Subjective wellbeing researchers in South Africa have been tracking satisfaction with life and happiness since the early 1980s, allowing us to observe how individual subjective wellbeing responds to large scale political and social change. Although South Africa is the richest and most developed nation in the region, the country serves as a 'social laboratory' for studying subjective wellbeing on the continent. Like other countries across the subcontinent, South Africa is a culturally heterogeneous nation characterized by significant inequalities in wealth and infrastructure, as well as widespread material deprivation. The cross-sectional South African Quality of Life Trends Study (SAQoL) (Møller 2007), has measured happiness, life satisfaction and expectations for the future in nine waves conducted between 1983 and 2010 using nationally representative samples (Fig. 23.4).

The trends depicted in the graph show that between 1983 and 2010, average life satisfaction in the country fell from 68 to 52 %, which represents a considerable decline in personal wellbeing. The upswing in 1994 corresponds to the euphoria surrounding the first democratic elections in the country, with four out of five reporting being satisfied with life overall. The 'transition event' therefore acted as a great leveler of life satisfaction, with both rich and poor South Africans reporting similar levels of wellbeing for the first time (Møller 1999). However, this broad-based happiness proved transitory in nature. Satisfaction levels fell substantially between 1994 and 1995, and have fluctuated in a fairly narrow range during the intervening 15 years. The time series has revealed that better-off South Africans express greater happiness but less optimism in contrast with the most disadvantaged and marginal groups in societies, who are inclined to be dissatisfied with life but retain a positive outlook on the future (Møller 2007, 2013; Møller and Roberts 2014). Since the millennium, small pockets of an emergent black economic elite score above-average on both current and prospective subjective wellbeing.

The multidimensional Personal Wellbeing Index (PWI, Cummins et al. 2003) has been fielded in South Africa on an annual basis since 2009 as part of the nationally representative South African Social Attitudes Survey (SASAS) conducted by the Human Sciences Research Council. The only other country on the continent to have similar PWI trend data is Algeria (Tiliouine, Chap. 22, this volume). In both countries, those satisfaction domains with a material basis, notably standard of living, life achievements, and future security, tend to receive the lowest scores while spirituality-religion, personal relationships, health and community connectedness received the highest evaluations. This speaks to the importance of religion, family and community ties as noteworthy sources of social insurance and contributors to wellbeing. In addition, it re-emphasizes the various economic concerns and fears that underlie unhappiness. It would therefore appear that South Africans and Algerians today share similar patterns of hope and concern as Nigerians did during the early years of independence 50 years ago.

Suffering and Smiling: Conditions for Happiness at the Aggregate Level[19]

In this section, we return to some of the objective contextual factors discussed earlier in the chapter to briefly examine the association between material wealth, income inequality, political freedom, peace, good governance and absence of corruption and subjective wellbeing in the sample of sub-Saharan African nations. We are therefore concerned with what Veenhoven (Chap. 9, this volume) terms the 'livability of nations', which encompasses the societal qualities that may explain differences in happiness across countries. While there has been a proliferation in the comparative empirical literature concerning the relationship between objective conditions and subjective wellbeing, the focus has been on understanding patterns of variation among nations across world regions. Relatively few examples exist that examine country level differences within the subcontinent specifically.

Income, Inequality and Happiness

There continues to be vigorous debate about the existence of the nature of the relationship between income and happiness four decades after Easterlin (1974) identified his paradox. Several studies have challenged Easterlin's finding that average reported levels of happiness did not rise as nations grew wealthier over time. Veenhoven and Hagerty (2006), Deaton (2008), Stevenson and Wolfers (2008) and Lora (2008) for instance produced analyses that suggested the paradox did not exist and that increases in

[19] The 'suffering and smiling' phrase draws inspiration from the Fela Kuti album "*Shuffering and Shmiling*" and the Patrick Chabal (2009) volume "Africa: *The Politics of Suffering and Smiling*".

Table 23.7 Zero-order correlations happiness and select economic indicators

	Life satisfaction	Contentment	Affect balance	Positive affect	Negative affect
GDP per capita 2012 (constant 2005 US$)	0.33	0.41	0.01	0.07	0.08
Average annual growth rate of real GDP per capita 2007–2012	0.13	0.28	−0.03	0.08	0.16
GINI Index, most recent value 2010–2012	0.35	0.34	0.26	0.34	−0.08

Sources: Overall life satisfaction data derives from Veenhoven. R. *Average happiness in 149 nations 2000–2009*. World Database of Happiness; contentment and affect balance data is from the Gallup World Poll; economic indicator data derives from World Bank (2013) World Development Indicators 2013

income tended to be accompanied by self-reported happiness at individual and national level. The results of Graham and Pettinato (2002) and Graham (2009) suggest a more intermediate position. Although happiness levels are clearly higher in developed relative to developing countries, there is no discernible pattern between income and happiness within each cluster of nations. In response, Easterlin (Chap. 12, this volume) summarizes available evidence and reasserts that long term trends in subjective wellbeing and economic growth are not related, but shows that there is a positive association between short-term fluctuations in happiness and income. The contention is that many critics of the Easterlin paradox may be making inferences about the longer term happiness-income relationship based upon these shorter-term observations.

As discussed in the preceding section on trends in happiness in sub-Saharan Africa, times series data on subjective wellbeing covering a range of nations on the subcontinent over a period of more than 15 years is exceedingly rare. Therefore, it needs to be recognized that any analysis on the association between income and happiness within the region is likely to suffer from the shorter-term cross-sectional limitations that Easterlin (Chap. 12, this volume) refers to. Within the region, we find fairly strong positive correlations between real GDP per capita and both life satisfaction ($r = +0.33$) and contentment ($r = +0.41$), though there is no apparent relationship between income and affect balance (Table 23.7). In addition, there is a negligible association between economic growth and life satisfaction and affect balance, and a moderate positive correlation with contentment (+0.28).[20]

In many African countries the distribution of income remains highly skewed, to the extent that sub-Saharan Africa contains some of the world's most unequal societies. While the region has enjoyed impressive rates of economic growth in recent years, fundamental questions remain about the extent to which these gains have been equitably distributed. Given this situation, it is important to reflect on whether income inequality in Africa moderates average levels of happiness. Existing cross-national evidence on the effects of income inequality is somewhat mixed. Both Veenhoven (1984) and Alesina et al. (2004) found an inverse relationship between inequality and happiness based on data from the 1970s in the former case and the mid-1970s to early 1990s in the latter. Other studies have concluded that no relationship between income inequality and happiness exists (Veenhoven 2002; Fahey and Smyth 2004; Bjørnskov et al. 2008). In one of the most recent cross-national studies, based on 119 countries, Veenhoven (2010) finds little support for an association between the level of inequality in nations and average levels of life satisfaction based on zero-order correlations (−0.08). However, once national wealth was controlled for using partial correlations, a slight positive correlation (+0.28) was observed. Similar modest positive effects

[20] Economic growth was measured in terms of the average annual growth rate of real GDP per capita between 2007 and 2012. The same pattern applies when a longer interval is applied, covering 2000–2012.

Table 23.8 Zero-order correlations happiness and select law and order indicators

	Life satisfaction	Contentment	Affect balance	Positive affect	Negative affect
Global Peace Index 2013	−0.06	−0.10	0.02	−0.03	−0.07
Change in Global Peace Index Score, 2008–2013	−0.32	−0.22	0.21	−0.35	0.35
Failed State Index 2013	−0.09	−0.20	−0.15	−0.21	0.03
Change in Failed State Index score, 2008–2013	0.04	0.02	0.33	0.25	−0.30
Corruption Perceptions Index 2013	0.33	0.13	0.38	0.36	−0.25

Sources: Overall life satisfaction data derives from Veenhoven. R. *Average happiness in 149 nations 2000–2009*. World Database of Happiness; contentment and affect balance data is from the Gallup World Poll; Institute for Economics and Peace (2013) The Global Peace Index 2013; The Fund for Peace (FFP) (2013) The Failed States Index 2013 (http://ffp.statesindex.org/rankings-2013-sortable); Transparency International (2013) Corruption Perceptions Index 2013

were found in the partial correlations for contentment and affect (+0.14 and +0.12 respectively).

In the sub-Saharan African context (Table 23.7), the zero-order correlation between inequality and life satisfaction for the 35 nations with data is +0.35, with a similar coefficient for contentment (+0.34) and a lower association for affect balance (+0.26). Controlling for the influence of differences in national wealth, the partial correlation for overall satisfaction remains virtually unchanged at +0.34, falls somewhat in the case of contentment (+0.24) and rises marginally for affect (+0.29). These results confirm that more unequal nations in Africa tend to exhibit a slightly higher overall level of happiness, contentment and mood, a finding that holds even after national wealth is controlled for.

Political Freedom

Do sub-Saharan Africa nations characterized by greater political freedom on average display more happiness? To address this question we make use of cross-national ratings of political rights and civil liberties released by Freedom House. Each country is assigned a numerical rating from 1 to 7 for both political rights and civil liberties, with 1 representing the most free and 7 the least free. Using data from 2013, we constructed a combined index of political freedom by adding together and reversing the two scores to yield a scale ranging from 2 (most unfree) to 14 (most free). In sub-Saharan Africa, political freedom is found to have a negligible zero-order correlation with overall life satisfaction (+0.04) and relatively weak associations with both contentment (+0.19) and affect balance (+0.24). There is nonetheless a stronger correlation between political freedom and positive affect (+0.36). While the citizens of African countries with a greater record of respecting political rights and civil liberties do not tend to be more satisfied with life in general than those with lower levels of freedom, they do appear to be moderately more contented and display a more positive mood. The robust positive effect of political freedom on contentment (+0.55) observed at a global level by Veenhoven (2008) is to some degree present when examining trends across nations in sub-Saharan Africa exclusively, though the association is weaker and varies based on the measure of happiness employed.

Law and Order

The multi-indicator Global Peace Index (GPI) produced by the Institute for Economics and Peace ranks nations based on their level of peace, drawing on three domains: (i) level of safety and security in society, (ii) the extent of conflict, and (iii) degree of militarization. Across the region, we find that happiness does not go together with levels of peace. The 2013 GPI score produced negligible zero-order correlations with overall life satisfaction, contentment and affect balance (Table 23.8). A stronger association is found when looking at change in peace scores over the last 5 years. The GPI scores range from 1 (very high state of

peace) to 5 (very low state of peace), so that an inverse relationship means that a worsening in the peace situation across nations is associated with lower happiness. A relatively strong coefficient (−0.32) is found in relation to life satisfaction, with a more moderate association for contentment (−0.22). The positive coefficient for affect balance is intriguing as it implies that a worsening national peace situation yields a higher affect balance. We can see from the coefficients on positive and negative affect that a decline in peace produces less positive emotional experiences and more negative emotional experiences. However, overall it appears that the positive mood outweighs the negative. This latter finding again seems to fit the narrative of a positive or optimistic predisposition in times of hardship and adversity.

The Failed State Index is another composite measure that assesses the vulnerability of nations to violent conflict or collapse, based on a set of 12 social, economic and political pressures with scores ranging from 0 (most stable) to 120 (least stable). From Table 23.8, it can be seen that this measure yields a weak to negligible association with happiness. The zero-order correlation coefficients range from −0.09 in the case of life satisfaction, to −0.15 for affect balance and −0.20 for contentment. Examining change in the Failed State Index scores over a short-term (5-year) interval, we find that citizens in sub-Saharan African countries that experienced increased state fragility across did not exhibit lower life satisfaction or contentment in general. We again find that greater increases in state vulnerability are accompanied by moderately higher affect balance scores (+0.33).

Corruption has the potential to undermine subjective wellbeing by indelibly influencing the quality of government and by undermining the accountability, equality and transparency of the state (Gilley 2006; Tavits 2008; Ott 2010). Using World Values Survey data, Helliwell and Huang (2008: 617) conclude the effects of good government remain critical in explaining cross-national differences in wellbeing. To examine the role of perceived corruption on happiness at the aggregate level in the subcontinent, we make use of Transparency International's Corruption Perceptions Index (CPI) data, which as discussed in an earlier section ranks level of corruption on scale from 0 (highly corrupt) to 100 (very clean). Table 23.8 indicates that there are reasonably strong correlations observed between perceived level of corruption and overall life satisfaction (+0.33) and affect balance (+0.36), but a weak association is evident in relation to contentment (+0.13). The finding suggests that, to some degree, the effectiveness of governments in controlling corruption may be important for helping to increase average happiness among nations in sub-Saharan Africa.

Towards a New Dawn: Concluding Reflections

The aim of this chapter was to provide an overview of objective quality of life and subjective wellbeing in sub-Saharan Africa based on available empirical evidence. Such an undertaking is rendered difficult by the sheer geographic, cultural, linguistic and ethnic diversity of the region, the breadth of the themes that one could invariably include that relate to quality of life, as well as data constraints in respect of country coverage and the availability of subjective wellbeing measures. As such, difficult choices often had to be made regarding the content, and our hope is that the chapter adequately captures and conveys some modicum of the complex realities, challenges and indeed paradoxes that characterize quality of life in the region.

The historical and contemporary record in sub-Saharan Africa is one that has been variously shaped by histories of colonial era exploitation, oppression and deprivation. In spite of the euphoria that accompanied the early years of independence, many countries have in the intervening decades failed to achieve the promise of economic development and have stagnated and fallen behind. So a country like Sierra Leone, which once had poverty levels that were lower than India and China has followed a trajectory that has seen it remain among the least developed nations (Collier 2007). Considerable health burdens, conflict and social unrest, poor governance and geographic constraints have all played

a contributory role. Social progress has been forged over the last two decades in particular in areas such as health, education, social welfare and poverty reduction. These gains, combined with robust economic growth in recent years and the emergence of new trade partners such as China and India and much-discussed possibilities of a demographic dividend, has begun to promote a more positive narrative about the region's prospects in the medium to longer term. Yet many of the objective indicators of quality of life outlined in the chapter still speak of considerable impoverishment, inequality and suffering that that continue to prevail in many countries.

Reflecting these often harsh socio-economic and political conditions, sub-Saharan Africa is a region characterized by considerable levels of unhappiness. Around three-quarters of the 35 countries with available life satisfaction data have national averages that fall below the mid-point of the 11-point scale, a situation that is again reflected in levels of current contentment. Yet, it would be a grievous injustice to leave the story unfinished. For in spite of the suffering, there exists an astonishing resilience and sense of hope for the future. Average future life ratings on the Cantril ladder scale are uniformly higher than current evaluations across all countries, with the percentage increase in future expectations higher than average among some of the least contented nations. As for more emotional or affective assessments of wellbeing, the share reporting positive experiences on a day-to-day basis consistently exceeds negative experiences. This is true even in countries falling at the bottom of the league table, such as Togo, Sierra Leone and Angola, with their history of conflict and political instability. It may be, as Graham (2009) reflects, that this optimism functions as a coping strategy to help the poor survive in unfavorable and insecure circumstances. Therefore, while a sense of realism tends to pervade evaluations of life at present, with lower mean scores relative to other regions and the world average, this does not overshadow feelings of respect, pride, love and joy or the hopes and dreams of a better tomorrow.

The chapter also examined the influence of a select number of objective conditions on subjective wellbeing at the macro-level. We found within the region a positive association between national income and the more cognitive measures of life satisfaction and contentment. Affective assessments however show no discernible relationship with national income, which at least partially supports the notion of an income-happiness paradox. Graham and Chattopadhyay (2012) found similar results in Afghanistan and concluded that Afghans remain broadly cheerful or have downwardly adjusted their expectations despite the realistic appraisal that they offer of their life circumstances in a comparative sense. By equal measure, it would seem that citizens in poorer sub-Saharan African countries are able to maintain a cheerful predisposition, even though materially better-off nations in the region are on average happier based on short-term cross-sectional evidence. Another paradoxical finding is the positive association between inequality and happiness, particularly the life satisfaction and contentment measures, even after controlling for national wealth. As additional trend data becomes available, the validity of these observations will be able to be more thoroughly tested.

While elections in the region remain commonplace, progress in the consolidation of democracy remains slow and relatively uneven and human rights violations remain widespread (EIU 2013). Surprisingly, we found that political freedom was not strongly associated with overall life satisfaction, which could be taken as further corroboration of resilience and optimism across the subcontinent. Citizens in societies with a better track record in terms of civil liberties and political rights were however moderately more likely to report positive emotions and express contentment with life. War and violent conflict has decreased in the region in recent decades. However, recent coups in the Central African Republic, Guinea-Bissau and Mali (both 2012), as well as ongoing political instability in countries such as South Sudan and Somalia underscore the fragility that continues to beleaguer parts of the region and its citizens. Though national peace levels were not significantly related to subjective wellbeing, countries with improving peace situations were more inclined

to have higher average life satisfaction and positive affect scores. Also, national stability based on the Failed States Index demonstrated little effect on average happiness using various measures. The only notable exception was the tendency of higher affect balance scores among countries with greater reductions in levels of vulnerability. Good governance, accountability and the control of corruption are seen as critical priorities in the African context, due to the damaging effect that their absence can impose on the legitimacy of the state and human welfare. The finding of a strong inverse association between perceived level of corruption and both life satisfaction and affective mood (though not for contentment) is of particular importance. It serves as a telling reminder to countries in the region with poorer governance performance of the societal gains that can be achieved over time by focusing on basic improvements in technical quality (Ott 2010).

Turning to more methodological considerations, the analysis in the chapter is based on available objective and subjective data for the region. There has been an impressive expansion in surveys across the developing world over the last quarter century, and agendas for action such as the Millennium Development Goals and Poverty Reduction Strategy Papers have precipitated a culture of evidence-based policy-making from Cape to Cairo. These have tended to priorities more objective quantitative indicators over the subjective, though this is increasingly changing. A 1967 Social Indicators Research article observed that "it is a pity that systematic surveys of public opinion are not being continuously conducted in sub-Saharan Africa during the current period of apparently rapid social change: the data could be part of the historical record and would be most relevant to the cross-cultural testing of theories" (Doob 1967: 414). Nearly 50 years on, it would be fair to state that substantive progress has been forged towards ensuring regular, broad-based assessments of subjective wellbeing in the subcontinent, both in terms of the growing representation of Africa in global comparative research as well as the emergence of important regionally focused series such as Afrobarometer. Nonetheless, in line with Graham (2009) and Camfield (2012), we acknowledge that the available data remain incomplete, with inconsistent coverage, sample concerns, and limited use of a range of single- and multi-item happiness questions. The need for further expansion of research to reliably measure and monitor subjective quality of life in the region is underscored by the current economic, political and demographic change that is currently sweeping the subcontinent and the opportunities (as well as inherent risks) this poses for development and human wellbeing.

Annexure

Table 23.9 Population data for sub-Saharan Africa by county and region

		Population (millions)	Projected population (millions)	2050 population relative to 2013	Infant mortality rate	Total fertility rate	Age dependent population		Life expectancy at birth (years)	Percent urban
		2013	2050		2013	2013	<15 years 2013	65+ years 2013	2013	2013
	WORLD	**7,137**	**9,727**	**1.4**	**40**	**2.5**	**26**	**8**	**70**	**52**
	Africa	**1,100**	**2,431**	**2.2**	**68**	**4.8**	**41**	**4**	**59**	**40**
	Sub-Saharan Africa	**926**	**2,185**	**2.4**	**73**	**5.2**	**43**	**3**	**56**	**37**
1	Sudan	34.2	69.5	2.0	56	4.6	42	3	62	33
	Western Africa	**331**	**812**	**2.5**	**82**	**5.7**	**44**	**3**	**54**	**45**
2	Benin	9.6	23.1	2.4	70	5.2	43	3	59	45
3	Burkina Faso	18.0	48.3	2.7	73	6	46	2	56	27
4	Cape Verde	0.5	0.7	1.3	18	2.4	31	6	74	63
5	Côte d'Ivoire	21.1	44.1	2.1	68	5	42	3	50	51
6	Gambia	1.9	5.0	2.6	81	5.8	46	2	58	57
7	Ghana	26.1	46.0	1.8	53	4.2	39	4	61	52
8	Guinea	11.8	24.6	2.1	67	5.1	43	3	56	35
9	Guinea-Bissau	1.7	3.4	2.1	96	5	42	3	54	44
10	Liberia	4.4	10.7	2.4	63	5.7	43	3	60	48
11	Mali	15.5	37.2	2.4	58	6.1	48	3	54	35
12	Mauritania	3.7	7.6	2.0	73	4.8	40	3	61	41
13	Niger	16.9	65.8	3.9	51	7.6	50	3	57	18
14	Nigeria	173.6	440.4	2.5	97	6	44	3	52	50
15	Senegal	13.5	31.5	2.3	51	5	44	3	63	47
16	Sierra Leone	6.2	10.5	1.7	128	4.9	42	3	45	41
17	Togo	6.2	13.1	2.1	69	4.7	42	3	56	38

	Eastern Africa	**362**	**872**	**2.4**	**58**	**5.1**	**44**	**3**	**59**	**24**
18	Burundi	10.9	28.6	2.6	89	6.2	44	2	53	11
19	Comoros	0.8	1.6	2.1	69	4.3	42	3	60	28
20	Djibouti	0.9	1.5	1.6	58	3.7	34	4	61	77
21	Eritrea	5.8	13.0	2.3	46	4.9	43	2	62	21
22	Ethiopia	89.2	177.8	2.0	52	4.8	44	3	62	17
23	Kenya	44.2	96.8	2.2	54	4.5	42	3	60	24
24	Madagascar	22.5	54.6	2.4	39	4.6	43	3	64	33
25	Malawi	16.3	41.1	2.5	89	5.6	46	3	54	16
26	Mauritius	1.3	1.3	1.0	12.9	1.4	21	7	73	42
27	Mozambique	24.3	63.3	2.6	64	5.9	45	3	50	31
28	Rwanda	11.1	24.0	2.2	51	4.7	45	2	63	19
29	Seychelles	0.1	0.1	1.1	9.8	2.4	20	7	73	54
30	Somalia	10.4	26.8	2.6	83	6.8	48	3	54	38
31	South Sudan	9.8	21.4	2.2	81	5.1	43	3	54	18
32	Tanzania	49.1	129.1	2.6	52	5.4	45	3	60	27
33	Uganda	36.9	113.9	3.1	54	6.2	49	2	58	16
34	Zambia	14.2	47.8	3.4	69	5.9	47	3	56	39
35	Zimbabwe	13	27.7	2.1	41	3.8	41	4	56	39
	Central Africa	**138**	**356**	**2.6**	**100**	**6.1**	**45**	**3**	**51**	**42**
36	Angola	21.6	61.1	2.8	98	6.3	48	2	51	59
37	Cameroon	21.5	52.6	2.4	62	5.1	43	3	54	52
38	Central African Rep.	4.7	9.7	2.1	116	6.2	40	4	49	39
39	Chad	12.2	35.4	2.9	106	7	49	2	50	22
40	Congo	4.4	10.4	2.4	66	5	42	3	58	64
41	Congo, Dem. Rep.	71.1	181.8	2.6	111	6.3	45	3	49	34
42	Equatorial Guinea	0.8	1.6	2.1	65	5.1	39	3	52	39
43	Gabon	1.6	3.2	2.0	43	4.1	39	5	63	86
44	São Tomé & Príncipe	0.2	0.4	2.3	44	4.6	42	4	66	63

(continued)

Table 23.9 (continued)

		Population (millions)	Projected population (millions)	2050 population relative to 2013	Infant mortality rate	Total fertility rate	Age dependent population		Life expectancy at birth (years)	Percent urban
							<15 years	65+ years		
		2013	2050		2013	2013	2013	2013	2013	2013
	Southern Africa	**61**	**75**	**1.2**	**46**	**2.5**	**31**	**5**	**57**	**58**
45	Botswana	1.9	2.6	1.4	33	2.7	34	4	47	24
46	Lesotho	2.2	3.0	1.4	65	3.1	37	4	48	28
47	Namibia	2.4	3.9	1.6	36	3.2	37	3	63	38
48	South Africa	53	63.6	1.2	45	2.4	30	5	58	62
49	Swaziland	1.2	1.8	1.5	68	3.5	38	3	49	21

Source: Population Reference Bureau (2013). 2013 World Population Data Sheet

Note: *1* Total Fertility Rate is measured as average number of children born to a woman during her lifetime. *2* Infant Mortality Rate is measured as infant deaths per 1,000 live births

Table 23.10 Selected economic indicators for sub-Saharan Africa by county and region

		GNI PC, (US$, Atlas method)	GDP per capita average annual growth (%)				Gini Index[a]	Population below $1.25 a day (PPP) (%)[a]
		2012[a]	2012	1980–1989[b]	1990–1999[b]	2000–2010[b]	2000–2011	
	World	**10.012**	**2.2**			**2.7**		**20.6**
	Sub-Saharan Africa	**1,355**	**4.2**	**2.2**	**2.1**	**4.8**		**48.5**
1	Sudan	1,450	−10.1	3.4	4.4	6.5	35.3	19.8
Western Africa								
2	Benin	750	5.4	3.1	4.5	4.2	38.6	47.3
3	Burkina Faso	670	10.0	3.7	5.1	5.6	39.8	44.6
4	Cape Verde	3,810	4.3	6.4	5.2	7.1	50.5	21.0
5	Côte d'Ivoire	1,220	9.5	−0.2	2.6	0.7	41.5	23.8
6	Gambia	510	6.0	3.9	3.1	4.6	47.3	29.8
7	Ghana	1,550	7.9	2.0	4.3	5.7	42.8	28.6
8	Guinea	460	3.9	4.5	4.3	2.6	39.4	43.3
9	Guinea-Bissau	550	−1.5	2.9	2.0	1.9	35.5	48.9
10	Liberia	370	10.8	−4.5	1.2	10.1	38.2	83.8
11	Mali	660	−1.2	0.8	3.6	5.5	33.0	50.4
12	Mauritania	1,110	7.6	2.2	2.9	4.6	40.5	23.4
13	Niger	370	11.2	0.0	1.9	4.0	34.6	43.6
14	Nigeria	1,430	6.6	0.9	3.1	6.4	48.8	68.0
15	Senegal	1,040	3.7	2.4	2.7	4.0	40.3	29.6
16	Sierra Leone	580	15.2	1.1	−4.3	9.2	35.4	53.4
17	Togo	500	5.6	2.6	2.6	1.9	39.3	28.2
Eastern Africa								
18	Burundi	240	4.0	4.3	−1.4	3.0	33.3	81.3
19	Comoros	840	3.0	2.7	1.6	2.0	64.3	46.1
20	Djibouti	1,030		. . .	−2.0	3.6	40.0	18.8
21	Eritrea	450	7.0	. . .	8.1	0.8	. . .	. . .
22	Ethiopia	410	8.5	2.4	2.7	8.3	33.6	30.7
23	Kenya	850	4.6	4.2	2.2	3.8	47.7	43.4
24	Madagascar	430	3.1	0.4	1.6	3.0	44.1	81.3
25	Malawi	320	1.9	1.7	4.1	4.5	43.9	73.9
26	Mauritius	8,570	3.2	4.3	5.2	4.3	. . .	. . .
27	Mozambique	510	7.4	0.4	5.6	7.2	45.7	59.6
28	Rwanda	***560***	8.0	3.2	2.1	7.6	50.8	63.2
29	Seychelles	11,640	2.9	2.1	4.9	2.5	65.8	<2
30	Somalia	. . .		1.7	−1,5	. . .	. . .	. . .
31	South Sudan	650	−55.8	. . .	. . .	4.3	45.5	. . .
32	Tanzania	570	6.9	3.8	3.3	6.5	37.6	67.9
33	Uganda	440	3.4	3.0	6.9	7.1	44.3	38.0
34	Zambia	1,350	7.3	1.4	0.4	5.4	57.5	68.5
35	Zimbabwe	680	5.0	5.2	2.9	−4.4	50.1	. . .
Central Africa								
36	Angola	4,580	6.8	4.2	1.0	10.6	42.7	54.3
37	Cameroon	1,170	4.7	4.0	0.4	3.4	38.9	9.6
38	Central African Rep.	490	4.1	0.9	1.3	1.1	56.3	62.8

(continued)

Table 23.10 (continued)

		GNI PC, (US$, Atlas method)	GDP per capita average annual growth (%)				Gini Index[a]	Population below $1.25 a day (PPP) (%)[a]
		2012[a]	2012	1980–1989[b]	1990–1999[b]	2000–2010[b]	2000–2011	
39	Chad	740	5.0	5.4	2.2	8.8	39.8	61.9
40	Congo, Rep.	2,550	3.8	6.8	0.8	5.0	47.3	54.1
41	Congo, Dem. Rep.	220	7.2	1.8	−5.5	3.9	44.4	87.7
42	Equatorial Guinea	13,560	2.5	0.9	20.2	17.7	. . .	. . .
43	Gabon	10,070	6.1	1.9	2.5	1.9	41.5	4.8
44	São Tomé & Príncipe	1,320	4.0	. . .	. . .	5.8	50.8	28.2
Southern Africa								
45	Botswana	7,430	3.7	11.5	5.9	4.3	61.0	31.2
46	Lesotho	1,380	4.0	2.2	4.1	3.9	52.5	43.4
47	Namibia	5,640	5.0	1.1	4.1	4.6	63.9	31.9
48	South Africa	7,610	2.5	2.2	1.4	3.6	63.1	13.8
49	Swaziland	2,860	−1.5	8.6	4.9	2.2	51.5	40.6

Source: (a) World Bank (2013) World Development Indicators 2013. (b) World Bank (2013) African Development Indicators 2013

Table 23.11 Selected political indicators for sub-Saharan Africa, by county and region

		Failed States Index (2013)	Political Rights Index (2013)	Civil Liberties Index (2013)	Corruption Perceptions Index (2013)	Global Peace Index (2013)
1	Sudan	111.0	. . .	. . .	. . .	. . .
Western Africa						
2	Benin	77.9	2	2	36	2.2
3	Burkina Faso	90.2	5	3	38	2.1
4	Cape Verde	73.7	1	1	58	0.7
5	Côte d'Ivoire	103.5	5	5	27	2.7
6	Gambia	81.8	6	6	28	2.1
7	Ghana	69.1	1	2	46	1.9
8	Guinea	101.3	5	5	24	2.3
9	Guinea-Bissau	101.1	6	5	19	2.4
10	Liberia	95.1	3	4	38	2.0
11	Mali	89.3	7	5	28	2.4
12	Mauritania	91.7	6	5	30	2.3
13	Niger	99.0	3	4	34	2.4
14	Nigeria	100.7	4	4	25	2.7
15	Senegal	81.4	2	3	41	2.1
16	Sierra Leone	91.2	2	3	30	1.9
17	Togo	87.8	5	4	29	2.0

(continued)

Table 23.11 (continued)

	Failed States Index (2013)	Political Rights Index (2013)	Civil Liberties Index (2013)	Corruption Perceptions Index (2013)	Global Peace Index (2013)
Eastern Africa					
18 Burundi	97.6	5	5	21	2.6
19 Comoros	84.0	. . .	. . .	. . .	. . .
20 Djibouti	85.5	6	5	36	1.9
21 Eritrea	95.0	7	7	20	2.3
22 Ethiopia	98.9	6	6	33	2.6
23 Kenya	99.6	4	4	27	2.5
24 Madagascar	82.7	6	4	28	2.1
25 Malawi	89.2	3	4	37	2.0
26 Mauritius	44.5	1	2	52	1.5
27 Mozambique	82.8	4	3	30	1.9
28 Rwanda	89.3	6	6	53	2.4
29 Seychelles	64.0	3	3	54	-
30 Somalia	113.9	7	7	8	3.4
31 South Sudan	110.6	. . .	. . .	. . .	. . .
32 Tanzania	81.1	3	3	33	1.9
33 Uganda	96.6	5	4	26	2.2
34 Zambia	86.6	3	4	38	1.8
35 Zimbabwe	105.2	6	6	21	2.7
Central Africa					
36 Angola	87.1	6	5	23	2.1
37 Cameroon	93.5	6	6	25	2.2
38 Central African Rep.	105.3	5	5	25	3.0
39 Chad	109.0	7	6	19	2.5
40 Congo	90.0	6	5	22	2.2
41 Congo, Dem. Rep.	111.9	6	6	22	3.1
42 Equatorial Guinea	86.1	7	7	19	2.1
43 Gabon	72.9	6	5	34	2.0
44 São Tomé & Príncipe	74.6	2	2	42	. . .
Southern Africa					
45 Botswana	64.0	3	2	64	1.6
46 Lesotho	79.4	2	3	49	1.8
47 Namibia	70.4	2	2	48	1.8
48 South Africa	67.6	2	2	55	2.3
49 Swaziland	85.6	7	5	39	2.1

Source: Corruption Perceptions Index (2013), Global Peace Index (2013), Freedom House (2013)

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Wellbeing in Canada

24

Simon Langlois

Canada was a pioneer in building a composite index measuring wellbeing in a developed society. Wellbeing involves an array of economic, social, cultural, and environmental factors and it captures essential aspects that contribute to the good life in society. In this perspective, *The Canadian Index of Wellbeing* (CIW) is a composite measure that includes eight dimensions pertaining to what constitutes the good life in Canada. Specifically, the dimensions cover aspects of social life in the following themes: the living standards of households, health, community vitality, democratic engagement, leisure and culture, time allocation, education and the environment. The dimensions of the CIW are the sum of headline indicators that measure the most important elements in each theme. In total, the CIW comprises 64 indicators.

A multidimensional index has many advantages. In the same way that a cake is not only the sum of five ingredients (eggs, flour, sugar, butter and milk), but a reality *sui generis*, the index gives a synthetic measure of what matters for ordinary citizens beyond economic measures like the Gross Domestic Product (GDP). But contrary to the cake in the dining room, the composite index offers the possibility of tracking the components through time. Accordingly, in addition to examining the overall measure, an analyst may also observe separately the trends of the dimensions and indicators.

The CIW reflects a pragmatic approach. It includes common sense indicators that were chosen according to available research and their ease of comprehension by the general public. Consequently, the CIW is relevant to a wide audience of experts, administrators, elected officials and laymen. The indicators of the index are reliable, politically unbiased, periodically updated and comparable across jurisdictions. The index contains not only measures of objective aspects like income or the unemployment rates, but also subjective indicators scientifically measured with sophisticated approaches like the social representation of housing appraisals or the self-reported health status. Some indicators reflect inputs (expenditures in education) or outputs (student performance in standardized tests). Some are considered positive (income) while others negative (specific health problems).

Each dimension of the Canadian Index of Wellbeing relies on a conceptual framework used to identify the key aspects therein. Let us review three examples. The dimensions for the living standards not only include the after-tax median income of families and other indicators characterizing the heterogeneity of experience, but also macroeconomic data like the distribution of resources in the society measured with a poverty index and a ratio of the top to bottom quintile of after tax family income. Some indicators refer to the current situation (real income) and others identify trends for the future (like the housing

S. Langlois (✉)
Department of Sociology, Laval Université, Québec City, QC, Canada
e-mail: simon.langlois@soc.ulaval.ca

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affordability index). The health dimension measures different aspects of health status (self-reported health levels, self-reported diabetes), as well as lifestyle and behavior (smoking) and the life expectancy. This dimension also distinguishes between physical, mental and functional health. The community vitality dimension emphasizes vitality as the capacity to thrive and change in the pursuit of individual and social wellbeing. Measures of social relationships (civic participation, volunteering, and number of close relatives) and measures of social norms and values (trust, respect for diversity) are the two groups of indicators of this dimension.

The CIW is an unweighted index. Even if we can argue that one dimension is more important than another for wellbeing, it is difficult to formulate a justifiable reason to assign a precise weight to the indicators. It is the absence of such a reason that justifies the equal treatment of all indicators. "The technical problem of constructing a one-dimensional scale to reasonably represent a multidimensional construct of human wellbeing is solved by creating a mean of percentage change rate ratio scale".[1]

The CIW started in 1994 and is updated every year. The selection of this particular year was motivated by the availability of a certain amount of data, notably health statistics drawn from the National Population Health Surveys.

The Overall Wellbeing in Canadian Society

Latest data available of the Canadian index covers the period 1994 to 2010. During this period, the Gross Domestic Product (GDP) grew by 29 %, a large increase, but the improvement in Canadian wellbeing measured by the CIW was only by 5.7 %. "When Canada's economy was thriving, Canadians saw only modest improvements in their overall quality of life, but when the economy faltered our wellbeing took a disproportionate step backward".[2]

As the CIW is multidimensional, we can analyze the ebb and flow of each construct though time. Overall, six dimensions increased during the 14-year period while two decreased. One of the most important improvements between 1994 and 2008 were the living standards that increased by 26 %. However, the context of the recession put an end to this 14-year progress with a sharp 14.3 % decrease in 2010. On average, Canadians are better off in terms of income and wealth, but income and wealth inequality has increased. "The gap in real after-tax average income between the richest and the poorest grew by over 40 % between 1994 and 2009" states the CIW report.[3] Some progress has been made on reducing poverty, but frayed social safety net provides less support for the disadvantaged population (Graph 24.1).

Canada is one of the most educated countries in the world. Education is the area in which Canada has made the most progress since 1994 (+21.8 %). The University graduation rate and the high school completion rate are increasing. But some indicators in this domain reveal troubling signs. Student debts are soaring and underemployment of graduates is growing.

Community vitality increased by 10.3 %. Violent crime and property crime are at their lowest level since 1994 and the percentage of Canadians who feel safe walking after dark in cities reached its highest level yet. Volunteering in local communities also reached its highest level at the end of the period of interest. Community vitality continues to grow despite a pessimistic outlook since the 2008 recession.

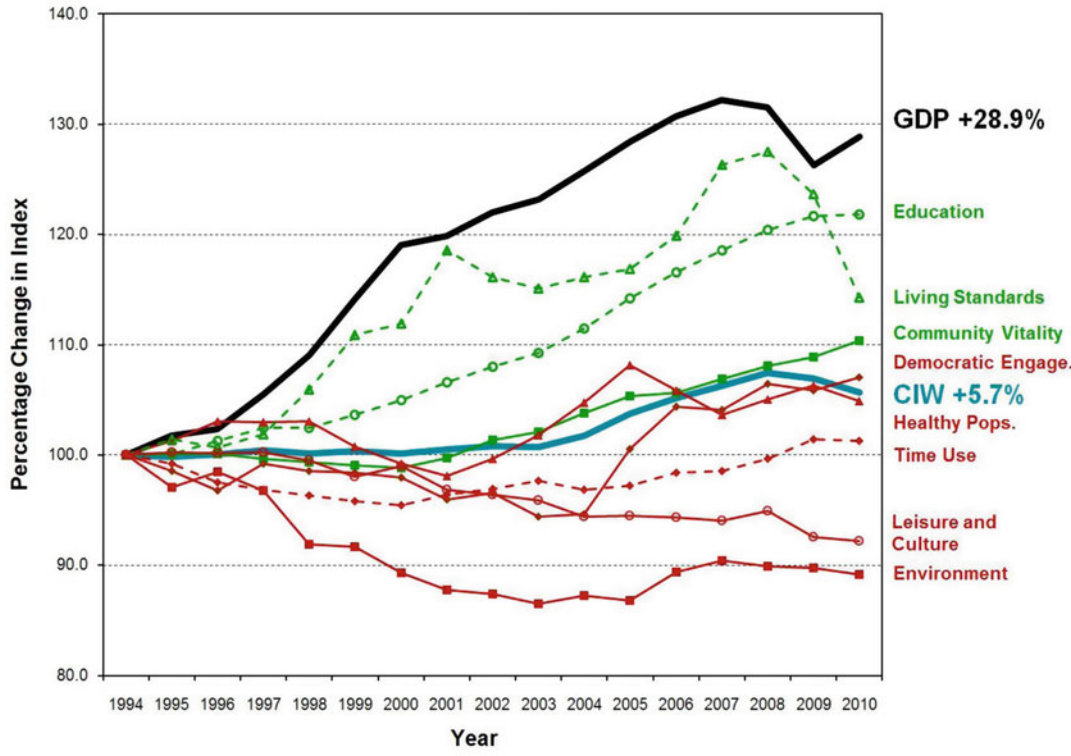
Democratic engagement follows with an increase of 7 % in 14 years. While having increased during the 1990s, the confidence level for the federal parliament (House of Commons and Senate) has been in decline since the 2000s. More women are involved in politics but the public confidence in politicians is declining.

The overall percentage change in the health dimension improved by 4.9 % between 1994 and 2010. Canadians are living longer and a high

[1] Michalos et al, (2011, p. ii).

[2] CIW (2012, p. 1).

[3] Idem p. 6.



Graph 24.1 Trends in the eight domains of the Canadian index of wellbeing from 1994 to 2010

proportion of them consider Canada's public health services as excellent or very good. But some indicators showed negative trends like rising diabetes (self-reported) and rising depression.

Canadians continue to feel high levels of time pressure and the dimension remained almost unchanged (+1.3 %). However, commuting to and from work requires more time, an increase of 20 % in 14 years.

Two dimensions of the CIW have declined since 1994. The environment dimension has deteriorated the most over the period (−10.8 %). Greenhouse gas emissions have soared, mainly due to transportation and the fossil fuel industries. Despite a population increase, total household emissions have declined and Canadian households contribute for only 6 % of greenhouse gas emissions. One indicator in this dimension showed that respiratory diseases related to air pollutants account for a significant number of all hospital visits. The ecological footprint of Canadians is one of the biggest in the world and it is still on the rise.

Finally, the trend in the leisure and culture dimensions has deteriorated during the economically prosperous period (−7.8 %). This decline has accelerated after 2008 due to the decrease of total household expenditures for culture and recreation.

Conclusion

Canada has a wealthy and prosperous economy. Its population is growing fast (35 million in 2014) and the public debt is among the lowest in developed societies. But the CIW suggests the economic growth as measured by the GDP is not sufficient to improve the wellbeing of its population. The growth of the GDP was robust at the turn of the century while improvements in Canadian wellbeing over the same period saw only a small increase. When the economy faltered and

was facing trouble after the 2008 crisis, wellbeing took a step backward.

The advantage of the Canadian Index of Wellbeing is to go beyond the mean trend and to identify negative and positive developments. Income inequality and long-term unemployment are deteriorating but violent and property crime is declining. Education performs well while some aspects like student debts are a cause for concern. Economic growth is undoubtedly important, but the purpose of the index of wellbeing is to raise attention to other aspects of public and individual life that are also significant. The index is a valuable instrument to hold both federal and provincial governments to be accountable and preoccupied with what matters most to the population.

Tocqueville suggested that happiness depends less on levels than on changes. Measuring wellbeing in developed societies should track not only levels at one time but also the evolution over a certain period. The Canadian Index of Wellbeing offers a good example of what a transversal and longitudinal perspective can contribute to public policy in order to improve the wellbeing of families and individuals in a developed society.

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Quality of Life in the United States

25

Rhonda Phillips

Context

The United States is a large, diverse country of over 317 million people, as of 2013 (U.S. Bureau of the Census 2013). It is the third most populous country in the world, after China and India. Its geographic scope is immense, and is one of the largest globally in terms of land area with physiographic characteristics ranging from tropical, arid, to arctic. It is the largest economy in the world. As a democracy with a capitalist system, it has strong centralized and national level functions in areas such as defense and some social security programs. Other functions are decentralized with more emphasis given at the state and local government levels to such concerns as land use planning and development, housing, education, transportation, other domains impacting residents directly on a day-to-day basis. Policies, regulations, and outcomes vary widely among the states and regions within the US, making it difficult to have a "typical" quality of life experience. The lack of highly centralized functions by the national government in many areas impacting community and individual wellbeing leads to wide variation in distribution of quality of life experiences. Other factors influence quality of life, such as "geographic inequalities in employment opportunities and income, as well as other non-monetary environmental factors accumulate to shape the individual's quality of life" (Rebhun and Ravesh 2005, 1).

Population variation in the US is a factor too. Rural areas tend to dominate the top of poverty indexes, and may lack access to support services. At the same time, there are areas of high poverty within urban areas, compounded by high unemployment rates and lack of affordable housing. Density varies widely, with older cities of the Northeast having higher population in central areas, and more dispersion in the newer cities of the West. The percent of population by region is as follows.

Region	Percent of total population (%)
South	37.4
West	23.5
Midwest	21.4
Northeast	17.7

Overall Quality of Life in the US

The Organization for Economic Cooperation and Development (OECD) is an international organization of many of the world's most industrialized countries. They track a variety of indicators, many aimed at economic dimensions, across countries to aid in policy decisions. Their *Better Life Initiative* provides comparisons across 36 countries in 11 categories: income, jobs, housing, education, safety, community, environment,

R. Phillips (✉)
Dean, Honors College and Professor, Agricultural Economics, Purdue University, West Lafayette, IN, USA
e-mail: rphillips@purdue.edu

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civic engagement, health, work-life balance, and overall life satisfaction. The objective of this project is to consider what is most important for wellbeing, and by including both traditional objective measures along with more subjective measures, it strives to show the overall quality of life picture by country. The OECD describes the intent as,

> What matters most when it comes to people's wellbeing? But wellbeing varies among individuals and thus cannot be captured only by measures at national level. So the OECD has also focused on measuring inequality between groups in society for the different wellbeing outcomes. This shows how wellbeing, whether in terms of income, education, health or general satisfaction with life is shared across society, for instance what difference gender makes. The wide range of comparable wellbeing indicators in *How's Life*? makes it possible to identify relative strengths and weaknesses in countries' wellbeing. This, in turn, can help governments when drawing up their policy agenda. But there is no clear wellbeing champion across all the wellbeing dimensions and policy priorities in wellbeing may differ among OECD countries. (OECD 2013, 5)

Most of the countries tracked over the last 20 years have made progress in wellbeing domains, with the exception of jobs and voting (civic engagement). Further there is tremendous diversity between and within countries. The US has the highest average household disposable income among the 36 countries on the list at $38,000 a year; thus much higher than the OECD average of $23,000. It also ranks near the top of the listings for housing conditions. When all 11 categories are equally weighted, the US holds the place for number one. The following lists all categories, ranked by the order in which the US appears in the list of 36 countries.

Category	Ranking
Income	1
Housing	4
Health	8
Jobs	9
Safety	9
Civic engagement	9
Education	10
Environment	11
Life satisfaction	12
Community	14
Work-life balance	15

It is interesting to note that factors considered more subjective or important to a sense of wellbeing in terms of belonging and participation rank much lower – community, work-life balance, civic engagement. Combining community, work-life balance, civic engagement along with life satisfaction (presumably some of the factors that do influence overall life satisfaction) yields an overall ranking of 16. It is clear to see that standard of living as reflected in income alone does not describe the overall situation. However, how fair is it to rank a diverse country of 317 million against countries with a few million? Looking at the four other countries in the index with populations over 100 million, the US ranks highest on the measures. The following chart shows these comparisons.

Comparisons of US with other large countries

Country	Civic engagement	Community	Life satisfaction	Work-life balance
US	9	14	12	15
Brazil	31	31	27	33
Japan	22	21	23	29
Mexico	35	35	28	35
Russian Federation	34	30	30	28

Limitations Through Time in Measuring Wellbeing and Quality of Life

Measuring wellbeing and quality of life is not a new issue. For example, measurement of social indicators has been a subject of study since the early 1900s in the US. In 1910, the Russell Sage Foundation began conducting surveys in communities; these surveys were designed to measure industrial, educational, recreational, and other factors. The Foundation used over two thousand local surveys taken on education, recreation, public health, crime, and general social conditions to assess social conditions (Cobb and Rixford 1998). The first survey was conducted in Pittsburgh, Pennsylvania. It is interesting to note

that in the late 1990s, Pittsburgh has again embraced measuring wellbeing and quality of life, with its *Sustainable Pittsburgh Goals and Indicators Project*. The Foundation relied heavily on partner organizations to administer the surveys, such as chambers of commerce and committees of residents. These surveys yielded social trends indicators and were popular until the Great Depression and World War II, when economic measures such as the gross domestic product or gross national product indicators took greater precedence (Phillips 2003). Kuznets and colleagues developed the US national account system (Fox 2011); later, in 1942 the gross national product measure was developed leading to reliance on economic driven data. Given the social unrest of the 1960s, "interest in social trends emerged again during the social unrest of the 1960s when indicators – especially those that measured demographics, quality of life factors, and environmental quality – were thought to reveal more about communities than traditional indicators could yield" (Phillips 2003, 3).

It was during this decade that the federal government began to lead efforts in measuring wellbeing and quality of life. Departments such as the U.S. Department of Health and Welfare produced extensive studies on the topic. By the 1970s, researchers were contributing a number of indicator-based and wellbeing studies including Andrews and Withey's early 1970s work on developing measures of life quality (Andrews and Withey 1974) as well as seminal work on ideas of income and happiness (Easterlin 1973). Campbell et al. (1976) raised awareness of subjective indicators during this time as a means to assess overall life as a whole, while conducting work showing weaker links among social indicators and subjective wellbeing.

Local and regional government began to address approaches as part of their policy governance efforts; such as the City of New York's 1973 *Scorecard Project*. This project, financed by the Fund for the City of New York, reviewed a number of indicators that influence social wellbeing, such as education, health, and wellbeing (Phillips 2003). Newer efforts include a 2003 project for providing data on key social and economic indicators, the *New York Social Indicators Project* providing map-based data about New York City and the state developed by the Lewis Mumford Center for Comparative Urban and Regional Research (2003). Several states initiated projects, such as "California's Office of Planning and Research published *Putting Social Indicators to Work: An Annotated Bibliography* in 1977. . .this work reviewed current research and indicators projects in an attempt to encourage local organizations and governments in California to identify and assess social indicators in their communities" (Phillips 2003, 3). In 1980, a report of President Carter's commission for a National Agenda for the Eighties investigated quality of American life. Measuring progress towards quality of life and examining prospects for wellbeing improvement was the focus of this report (1980). However, interest declined in many of the efforts to gauge wellbeing by the early 1980s as "as policy analysts found indicators unable, through the descriptive statistical approach prevalent at the time, to adequately explain social phenomena" (Cobb and Rixford 1998, 11).

During the late 1980s and into the 1990s, interest emerged in the ideas of overall quality of life and community wellbeing, although there were obvious limitations to measuring nonmarket activities such as these (Hagerty et al. 2001; Land 1983). Relying heavily on community indicators to gauge wellbeing and quality of life overall, a high level of interest in sustainable development accelerated. The idea that community wellbeing could be measured across a spectrum of indicators rather than just isolated factors has made the difference in the recent past. The sustainable development interests have drawn attention to considering not only traditional economic or social factors (which tended to be objective in nature), but also those that are subjective in nature and are inclusive of all domains impacting sustainability – ecological, economic, and equity (social). Subjective wellbeing continues to be an issue among researchers, with various perspectives keeping the debate lively (Diener et al. 1999; Dolan et al. 2008; Kahneman and Deaton 2010; Kahneman and Krueger 2006; Stevenson and Wolfers 2008).

Despite increasing attention to indicators for measuring wellbeing, many of these are still utilitarian in nature which has limitations. Quality of

life and wellbeing are consistent with the concepts of a good life or a good society, which is based upon utilitarianism. This is defined as that "which holds that individuals maximize their quality of life based on the available resources and their individual desires" (Diener and Suh 1997, 190). Given this definition, many major indices of quality of life (and for that matter, newer measures of happiness and wellbeing) appear to be utilitarian in nature. For example, rankings are commonplace in the US, particularly gauging which city or state is "the most" in whatever category of interest. Unfortunately, these rankings typically assume that those offering the most resources offer the highest quality of life. "For example, a resident of a city ranked high on *Money's* most livable-city list may experience a lower quality of life because the city's transit network does not allow the resident access to a high-paying job or the city's cultural district (Phillips 2003, 4). The mere presence of resources does not ensure access or use of those resources. Measuring quality of life is thus no easier with the utilitarian approach.

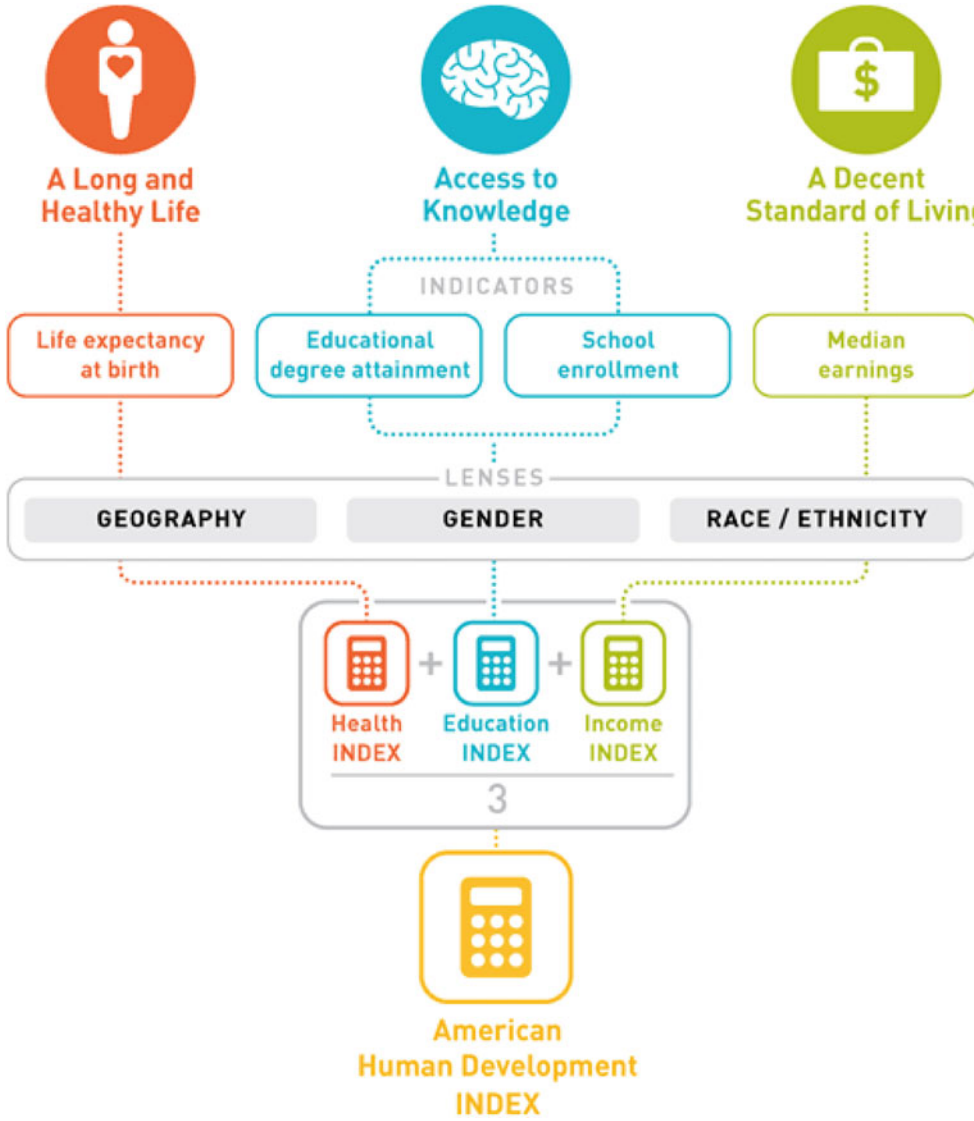
The limitations have been addressed by various researchers, yet there is not an efficient way to measure them in a country as diverse and complex as the US. Too many variations in accessibility, equity, affordability, and mere geographic scope impede consistent quality of life or wellbeing impacts. The default to traditional, objective measures pervades, especially with more recent rankings popularized by the media. It is also vital to recognize that quality of life is subjective and normative yet there may be more objective, evolutionary reasons behind it (Costanza et al. 2006). However, recognizing the limitations is important and it is worth repeating the passage as follows, to show that the need to devise better measures has been considered for many decades. Further, this passage, now considered a classic, shows the limitation of measurement approaches with emphasis on objective, traditional economic measures.

> Too much and for too long, we seemed to have surrendered personal excellence and community values in the mere accumulation of material things. Our Gross National Product, now, is over $800 billion dollars a year, but that Gross National Product – if we judge the United States of America by that – that Gross National Product counts air pollution and cigarette advertising, and ambulances to clear our highways of carnage. It counts special locks for our doors and the jails for the people who break them. It counts the destruction of the redwood and the loss of our natural wonder in chaotic sprawl. It counts napalm and counts nuclear warheads and armored cars for the police to fight the riots in our cities. It counts Whitman's rifle and Speck's knife, and the television programs which glorify violence in order to sell toys to our children. Yet the gross national product does not allow for the health of our children, the quality of their education or the joy of their play. It does not include the beauty of our poetry or the strength of our marriages, the intelligence of our public debate or the integrity of our public officials. It measures neither our wit nor our courage, neither our wisdom nor our learning, neither our compassion nor our devotion to our country, it measures everything in short, except that which makes life worthwhile. And it can tell us everything about America except why we are proud that we are Americans. (Kennedy 1968)

While significant advances are evident in the recent past for measuring economic, environmental, social wellbeing, much remains to be achieved in regards to improving measurement of more subjective dimensions of wellbeing. Another facet of measuring wellbeing of extreme interest is that of happiness, with various indices introduced with such studies as *The World Happiness Report* (Helliwell et al. 2013). Graham, building on work by Easterlin, further explores happiness with "the paradox of happy peasants and miserable millionaires" (Graham 2009).

Distribution of Quality of Life

As noted in the prior section, there are numerous limitations to ensuring more consistent measurements for wellbeing and quality of life. In the US, it is particularly confounding as aggregates at the national or state levels cannot fully capture variations. Even with measures at the city or metropolitan area, it is difficult to convey variations. *The Human Development Index*, pioneered by Mahbub Haq and Amartya Sen and used by the United Nations, is a commonly accepted model for gauging wellbeing across countries. A modified version, *The Measure of America*, uses similar standard measures calibrated for the US. It also is useful to help gauge regional variations. The following graph shows the model construct:



Source: Measure of America, www.measureofamerica.org/human-development, 2013.

The American Human Development Index (2013) provides a measure of wellbeing, disaggregated by state and congressional district, as well as by gender, race, and ethnicity (Measure of America 2014). Data are obtained from US government sources. The three major components include a long and healthy life. This is measured by life expectancy at birth. The second component, access to knowledge, is considered a vital determinant of long-term wellbeing and is essential to individual freedom, self-determination, and self-sufficiency (p. 1). School enrollment and educational degree attainment is used to measure. The third component is income to measure standard of living by median personal earnings of persons 16 years and older. This index is particularly enlightening because it illuminates the distribution of disparities and opportunities within a single country (Burd-Sharps et al. 2011).

The Measure of America 2013–2014: Key Findings presents astounding data on the

variation of wellbeing and quality of life experiences throughout the US, and incorporates the American Human Development Index. The following describes the findings of the most recent study (Source: *The Measure of America* 2013–2014, www.measureofamerica.org/human-development).

Change Over Time

- Michigan, the only state with a 2010 HD Index score lower than its 2000 score, saw the greatest decline in human development over the past decade.
- While the Great Recession undoubtedly pulled wages downward, the trend in declining earnings started before the financial collapse. From 2000 to 2005, wages stalled or declined in thirty-nine states after four decades of slow but continuous national progress in earnings.
- Resources like natural gas enabled states such as New Mexico, Montana, and West Virginia to avoid the earnings losses most other states faced between 2000 and 2010. But their HD Index rankings remained low; valuable natural resources do not automatically fuel improvements in people's well-being.
- Progress in the life expectancy of the five major U.S. racial and ethnic groups over the past decade was greatest among African Americans. They saw a nearly three-year increase in life span, albeit from the lowest starting point. Native Americans were the only racial or ethnic group whose life expectancy did not increase over the decade.
- The five metro areas that greatly increased their Index scores from 2008 to 2010, Baltimore, Washington, D.C., San Antonio, Dallas, and Boston, did so largely on the strength of improvements in health:. San Antonio, although it ranked last in 2008 and second-to-last in 2010, is gaining ground comparatively quickly.
- The only five metro areas whose Index scores declined from 2008 to 2010 were Detroit, Portland, Atlanta, Miami, and Tampa – the same cities that lost the most ground in terms of earnings over that period.

Race and Ethnicity

- The top-scoring racial/ethnic group on the American HD Index is Asian Americans (7.21), followed by whites (5.43), Latinos (4.05), African Americans (3.81), and Native Americans (3.55).
- Asian Americans score highest in each of the three components of the Index: at the national level, they live the longest, have the most education, and earn the most.
- Latinos have the second-longest life span, outliving whites, on average, by nearly four years.
- African Americans have the shortest lives, but their educational outcomes and earnings exceed those of both Latinos and Native Americans.

U.S. States

- The top five states on the American HD Index are Connecticut, Massachusetts, New Jersey, the District of Columbia, and Maryland.
- The bottom five states are Alabama, Kentucky, West Virginia, Arkansas, and Mississippi.
- Residents of Mississippi have life spans and earnings on par with those of the typical American in the late 1980s.
- In no state do African Americans or Latinos have well-being levels above those of whites or Asian Americans.

25 Largest Metropolitan Areas

- The metro areas that perform best on the HD Index are, starting from the top: Washington, D.C., San Francisco, Boston, Minneapolis–St. Paul, and New York. Workers in the top-ranked Washington, D.C. metro area make over $14,000 more than the typical American wage-earner, are more than twice as likely to have a graduate degree as other Americans, and live 2.2 years longer.
- The metro areas with the lowest levels of well-being are Detroit, Houston, Tampa, San Antonio, and, in last place, Riverside–San Bernardino. In Riverside–San Bernardino, one in five adults over age 25 did not graduate high school. Earnings are about $2,000 less per year than the national median.

- Consistent with the state-level analysis, in no major U.S. metropolitan area do either African Americans or Latinos have well-being levels that equal or exceed those of Asian Americans or whites.

Other approaches to measuring wellbeing and quality of life vary, depending on the organization and purpose. For example, several states conduct research and analysis to provide data for supporting policy decisions. Influencing or monitoring policy so that an area's status can be directed, stabilized, or improved is often an underlying motivation (Phillips et al. 2013). Another motivation for conducting such research is to increase awareness of and access to key issue data by the public. There are numerous examples and analysis of studies designed to track patterns, measure progress towards shared visions and goals, and provide insight into areas of life for residents (Besleme and Mullin 1997; Dluhy and Swarz 2006).

While some researchers and organizations include subjective data, many studies on quality of life and wellbeing focus on descriptive, objective data. For example, *Quality of Life in Hawai'i* is an excellent source of information and helps disseminate information to residents on key issue areas (University of Hawai'i, 2009). Many other sources abound of this type, particularly for ranking states against each other on a variety of measures. An example of this type research is a recent contribution by Consumer News and Business Channel (CNBC) on "America's Top States for Quality of Life". This news channel focused on ten categories of competitiveness to measure to rank states for business quality of life including crime, health care, local attractions and environmental quality (Cohn 2013). They list the following top five states:

#1. Hawai'i (citing low rates of cancer and heart disease as well as beautiful climate)
#2. Vermont (low crime rates and pollution as well as being a very healthy state)
#3. Minnesota (clean environment and healthy state)
#4. Nebraska (improving health, clean environment and lower stress lifestyles)
#5. Maine (lowest crime rate in nation, low pollution)

Gallup is a private polling company that conducts surveys in wellbeing and quality of life arenas. Their wellbeing index is now widely used as a source of information across geographic areas. Using surveys of residents, a wellbeing composite score is calculated for each state, as well as a score for each of six sub-indices including life evaluation, emotional health, physical health, healthy behavior, work environment and basic access (Gallup-Healthways 2013). The poll includes questions about life evaluation, emotional and physical health as well as work environment and health behaviors. With the exception of a few studies on topical issues such as income inequality by the Congressional Budget Office and the General Social Survey (Marsden 2012), there is a paucity of comprehensive index of wellbeing at the national government level. Several researchers have filled the gap through the years with studies such as Michalos' comparative study of quality of life in the US and Canada (Michalos 1980 and 1982). The Gallup information provides a source providing across the spectrum analysis for the US. The following lists the communities and states with the highest composite wellbeing scores.

Top States

1. Hawaii
2. Colorado
3. Minnesota
4. Utah
5. Vermont
6. Montana
7. Nebraska
8. New Hampshire
9. Iowa
10. Massachusetts

It is not surprising to see these states listed among the best. Most of them are pristine environments, low crime, and healthy behaviors by residents.

The largest cities with the highest wellbeing composite scores are listed below, followed by rankings for the smallest cities. It is interesting to note the regional variations, and that only a few coincide with the highest ranked states.

Largest Cities

1. Washington-Arlington-Alexandria, DC-Virginia-Maryland-West Virginia
2. San Francisco-Oakland-Fremont, California
3. San Jose-Sunnyvale-Santa Clara, California
4. Denver-Aurora, Colorado
5. Minneapolis-St. Paul-Bloomington, Minnesota-Wisconsin
6. Raleigh-Cary, North Carolina
7. Salt Lake City, Utah
8. Seattle-Tacoma-Bellevue, Washington
9. Boston-Cambridge-Quincy, Massachusetts-New Hampshire
10. Austin-Round Rock, Texas

Smallest Cities

1. Burlington-South Burlington, Vermont
2. Barnstable Town, Massachusetts
3. Charlottesville, Virginia
4. Bellingham, Washington
5. Sioux Falls, South Dakota
6. Billings, Montana
7. Prescott, Arizona
8. Medford, Oregon
9. Topeka, Kansas
10. Yakima, Washington

It is interesting to see that the top ranked cities and states all seem to have distinguishing features of well-designed communities and/or lovely geographic settings. In many cases, strong economies are evident in these areas, often related to technology intensive enterprise. Healthy living and low pollution environments seem to dominate as well. In other words, great places seem to imply great living and quality of life.

Summary

As noted, the US is highly complex, with variation of income, behaviors, conditions, and other factors across states, cities, and within communities. Gauging overall wellbeing and quality of life is possible with aggregate data, including heavy reliance on objective, descriptive data as seen in many studies ranking various components or factors. Subjective data are included in some approaches by researchers including Diener, Dolan, Kahneman and others, and organizations such as Gallup where residents are surveyed directly. While there is a lack currently of emphasis on measuring wellbeing and quality of life at the national government level, there is increasing interest from researchers and organizations. Given the interest in these subject matters, it is likely that more defined responses will emanate from both national and regional levels. Regional variation is a strong theme in the US, and approaches to fully capturing these variations will continue to be of interest.

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Argentina's Economic Development and Life Satisfaction Revisited – 1984–2012

26

Martin Tetaz, Pablo Schiaffino, and Miguel Braun

Introduction

Traditional welfare analyses have mostly focused on the evolution of Gross Domestic Product (GDP) as the only measure of economic achievement. However, after Easterlin (1974) seminal paper it seems clear that this framework is not enough. This chapter begins describing the economic evolution of Argentinian economy in the last 30 years, pretty much in the old fashion way; focusing on GDP growth as well as education and health outcomes. Then it takes a subjective wellbeing approach and looks to describe the evolution of life satisfaction as well as its determinants between 1984 and 2012. The focus of this chapter is to take account of objective as well as subjective characteristics of the development process, trying to provide a complete story that includes the two.

While the well cited and famous Easterlin Paradox states that income does not correlate with happiness neither over time nor across countries, more recent findings (cf. Kahneman 2011) suggest that the key to happiness may not be income but the alternative allocations of personal time. The case in which this chapter is based, is a well extension of the original work due to Schiaffino and Tetaz (2015) who use 28 years of Argentina's life satisfaction and happiness data to test the Easterlin Paradox, and find out the actual determinants of happiness for Argentina. Argentineans are happier now when compared to 1984, documenting the highest improvement in Buenos Aires City, being the only region with a monotonic rise over time. Both Greater Buenos Aires and the rest of the country fell in 1995, but recovered later. Those trends do not correlate with households' changes in the satisfaction with their financial situation over time. In the cross-section analysis, Schiaffino and Tetaz (2015) find that life satisfaction indeed depends on the satisfaction about the economic situation of households, but the satisfaction with family life and the time spent with loved ones have a higher explanatory power.

The key message there is that, although economic growth shall play an important part in the Argentinean economic-social living, it is not a sufficient condition to guarantee high standards of life satisfaction. Indeed, this chapter

M. Tetaz (✉)
C.E.D.L.A.S., Universidad de La Plata, Buenos Aires, Argentina
e-mail: martin.tetaz@econo.unlp.edu.ar

P. Schiaffino
Department of Economics, Universidad de Palermo, Buenos Aires, Argentina

Deparment of History, Universidad Torcuato Di Tella, Buenos Aires, Argentina
e-mail: plschiaffino@gmail.com

M. Braun
Department of Economics, Universidad de Buenos Aires, Buenos Aires, Argentina

Fundación Pensar, Buenos Aires, Argentina
e-mail: braunmiguel@gmail.com

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documents the importance of different kinds of domains that explain high standards of life satisfaction but also presents stylized facts of economic development within this period. Along this chapter, we cover three big topics for Argentina: the evolution of economic development, the evolution of life satisfaction and the determinants of life satisfaction.

Therefore, we attempt to comment over the micro determinants of life satisfaction by using two different data sets from Argentina: (1) the well-known World Value Survey, covering five waves (1984, 1991, 1995, 1999 and 2006); and (2) the three waves of Gallup-Universidad de Palermo survey (2011, 2011 and 2012). While the first data-set allows us to study the relation between many socioeconomic outcomes and life satisfaction, the second survey provides additional information on the perceived determinants of subjective wellbeing and its relation to people's use of time. We report the econometric results presented in Schiaffino and Tetaz (2015).

Brief Description: Argentina and Its Economic Circumstances

Argentina is a middle income country with a per capita GDP of around $18,000, the highest in Latin America together with Chile, similar to Hungary, Poland and Croatia, and around half the level of OECD countries such as France, Finland and Japan. With a population of 40 million citizens and a land area of 2.7 million km^2, it is a large, sparsely populated country.

Argentina is often cited as a case of economic and institutional failure. The reason is that the country was among the richest and most democratic in the world at the start of the twentieth century, but its poor economic performance and political instability – a succession of *coups d'etat* between 1930 and 1983 meant that there was no succession of a democratically elected president by another for over 50 years – made it stagnate and lose positions relative to other comparable countries such as Canada and Australia. However, since 1983 Argentina has enjoyed uninterrupted democracy, and its economic performance has improved, despite high volatility and enduring challenges regarding poverty and income distribution. Argentina's GDP per capita[1] was 74 % higher in 2012 compared to 1983, implying an average annual growth rate of 1.9 %. Not spectacular, but better than the previous decade, in which the economy actually shrank, and better than the average Latin American country, where growth was 51 % over the same period.

In Fig. 26.1 we can see that Argentina's economic performance was very volatile during the period 1983–2012. The country suffered two severe crises, a hyperinflation in 1989 and a balance of payments and debt crisis in 2001. Both crises followed periods of stagnation, and were followed by periods of rapid growth.

The Big Macroeconomic and Social Picture

In the next section we tackle the classical relationship between happiness and income for Argentina, but before that, we find it useful to give the reader a short story of the macroeconomic evolution of Argentina's economy. In addition, this information will help us to put in context the microeconomic relation between happiness and income. The return of democracy in 1983 happened in a weak economic environment. The country had accumulated debt during the 1976–1982 military dictatorship. In an international context characterized by the abundance of liquidity following the oil shocks, the military government followed a policy of financial liberalization combined with a fixed exchange rate regime, which resulted in a strong real exchange rate appreciation, and a dramatic rise in both public and private sector external debt. Public sector debt reached a level of almost 40 % of GDP.[2] In 1982, following the Mexican default, Argentina became another victim of the international debt crisis and also defaulted. The democratic government elected in 1983 started its mandate with a serious debt problem and an

[1] GDP per capita, PPP (constant 2005 international dollars). Source: IMF.

[2] See Calvo (1986) for a description of economic policy during the military dictatorship.

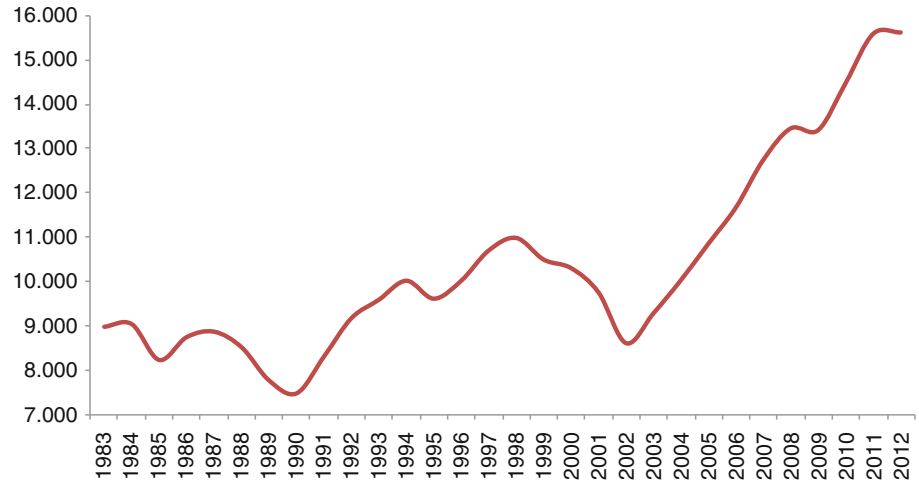

Fig. 26.1 Argentine GDP per capita, PPP (constant 2005 international dollars) (Source: World Development Indicators, World Bank)

unfavorable international context. Table 26.1 divides the evolution of the Argentine economy since the return of democracy into four periods: 1983–1989 and 1995–2002 are generally unfavorable periods, in which external conditions were challenging for the country, growth performance was very poor and fiscal policy, debt and social conditions worsened. Both periods ended in severe crises. On the other hand, 1990–1994 and 2003–2010[3] were favorable periods with excellent external conditions, robust growth and improvements in fiscal policy, debt and social conditions, except for the strong increase in unemployment during the early 1990s.

The Argentine economy declined during the first years of democracy, with per capita income falling at an average rate of −2.4 % per year. However, the average decline falls to −1 % per year if we exclude 1989, the year of the hyperinflation, from the calculations. Argentina was a closed, highly regulated economy, with a large participation of the state in economic activities ranging from oil production, trains, electricity generation, telephones, road building and other public works. The 1980s were bad years for Latin America following the debt crisis generated by Mexico's default in 1982. Interest rates were high, access to credit was limited and terms of trade were low for Argentina. The economic decline and the lack of access to credit led the government to continue to monetize growing fiscal deficits, resulting in high inflation and eventually hyperinflation in 1989. Poverty increased sharply during the period, but unemployment did not, due to highly regulated labor markets and a large state involvement in production and employment, acting as an employer of last resort.

Following the hyperinflation in 1989, Carlos Menem was elected president in 1989 and the first part of his administration was characterized by various attempts to control inflation. The depth of the economic crisis had created an unusual opportunity for audacious, orthodox reforms in line with the international recommendations crystallized in the "Washington Consensus". Indeed, an ambitious program of structural reforms was implemented during the first part of the 1990s that brought about a remarkable performance in terms of growth, increased productivity, and direct foreign investment. After a couple of unsuccessful stabilization attempts, Domingo Cavallo was appointed Finance Minister in 1991, and implemented a strict currency board arrangement known as the Convertibility Law.

[3] We leave aside in this "year- period characterization" the recent 2011 and 2012 years as the Argentine economy has evidence a new paradigm shift characterized by low growth and high inflation among other things.

Table 26.1 Four periods in recent Argentine economic history

	1983–1989	1990–1994	1995–2002	2003–2010
External conditions	Aftermath of the debt crisis: very limited access to credit	Very favorable access to capital markets for emerging markets following the Brady plan	Volatility following the Mexican peso crisis, Asian crisis, Russian defaults.	Favorable conditions: low interest rates, high commodity prices and strong global growth.
	Terms of trade average: 96 (1993 = 100)	Terms of trade average: 96 (1993 = 100)	Terms of trade average: 104 (1993 = 100)	Terms of trade average: 127 (1993 = 100)
Macroeconomic policy	Volatile monetary and exchange rate policy	Currency board	Reforms stall in the wake of Menem's second reelection bid	Flexible exchange rate
	Financial repression	Financial and trade liberalization	Fiscal outcomes worsen due to higher interest rates and the cost of the pension reform	Twin surpluses
	Large fiscal deficit, high inflation, eventually hyperinflation	Deregulation and privatization	Low inflation/Default, devaluation, banking crisis	Increased government intervention (price controls, taxes, export controls, etc)
		Fiscal consolidation (including pension reform)		Moderate inflation
		Low inflation		
Economic and social outcomes	Per capita growth: −2.4 %	Per capita growth: 5.3 %	Per capita growth: −1.6 %	Per capita growth: 6.6 %
	Poverty: strong increase (3.9 % in 1980 to 18.6 % in 1988)	Poverty: moderate reduction (17.1 % in 1994)	Poverty: strong increase (45.5 % in 2002)	Poverty: strong reduction (23.2 % in 2010)
	Unemployment: moderate increase (4.4 % in 1986 to 5.6 % in 1988)	Unemployment: strong increase (12.3 % in 1994)	Unemployment: strong increase (17.9 % in 2002)	Unemployment: strong reduction (8 % in 2010)

Source: IMF, CEDLAC (CEDLAS and World Bank). Notes: per capita growth refers to average annual rates. Poverty refers to % of individuals with income below $4 per day (CEDLAC). Poverty data for 2010 refers to Gasparini and Cruces (2010)

This law pegged the value of one Argentine peso to one dollar, and called for 100 % reserve backing for the monetary base. This arrangement implied that fiscal discipline was a necessary ingredient of the macroeconomic program, since the traditional resort to inflationary finance of deficits was no longer a policy option. This led to several efforts to improve fiscal outcomes, such as a tax reform focused on increasing VAT and income tax collection, a massive privatization program, a reform of the pension system to improve long-term fiscal solvency. Also several fiscal pacts with the provinces, and the implementation of an ambitious reform in the federal budget process known as the Ley de Administración Financiera (LAF) were consequences. Per capita income grew at an annual average of 5.3 % during the period, but unemployment increased rapidly, attributable in part to a combination of privatization, liberalization and structural reform that changed the relative price of labor and capital and left a large number of workers without a job and without the skills to compete in a more open economy.[4] The sharp reduction in inflation contributed to a moderate decline in the poverty rate, despite the increase in unemployment.

[4] See Gasparini (2003).

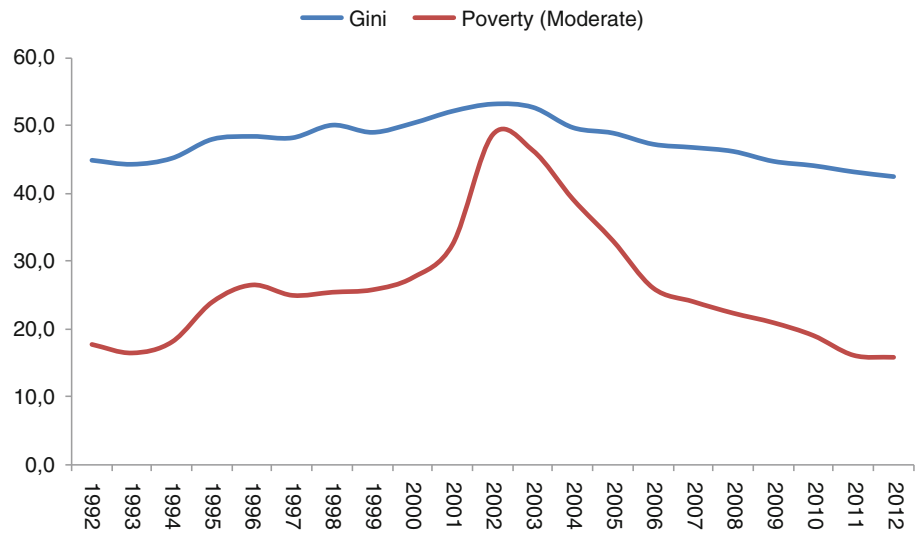

Fig. 26.2 Moderate poverty rates (% of population) and Gini Coefficient, 1992–2012 (Source: CEDLAS-FCE-UNLP. *Note*: Moderate poverty refers to individuals with monetary income below the amount necessary to buy a broad basket of goods. See www.indec.gov.ar for methodology)

Starting in 1995 with the Mexican peso crisis, Argentina suffered the consequences of a series of international financial crises, which undermined investor confidence in emerging markets, and particularly in those with fixed exchange rate regimes. The "sudden stop" (Calvo et al. 2003) of capital inflows contributed to a recession starting in 1998. Moreover, the Brazilian devaluation in 1999 further deteriorated the economic environment and expectations, as the Argentine currency overvalued *vis a vis* the country's principal trading partner. Furthermore, Argentina lost competitiveness elsewhere as a direct consequence of the US dollar appreciation. This combination of factors made the fixed exchange rate unsustainable. As credibility in the peso eroded, a bank run forced the government to forbid the withdrawal of money from the banks in late 2001. This caused violent protests in the streets of Buenos Aires and ultimately ending with the resignation of President De la Rua from the Alianza government that had succeeded Carlos Menem, the collapse of the Convertibility regime and the largest default of sovereign debt in history in 2001–2002.

During the 1995–2002 period, per capita income once again declined at an average of −1.6 % per year, although the period was heterogeneous, with rapid growth in 1996–97, stagnation in 1998–2001 and a collapse of −11.7 % in per capita income in 2002. Unemployment and poverty increased strongly, reaching record levels following the collapse in 2002 (Figs. 26.2, 26.3).

Following the 2001–2002 crisis, the economy rapidly recovered, fuelled by the rapid increase in terms of trade due to strong demand for commodities, the rapid growth of Argentina's trading partners and the jump in competitiveness produced by the post-crisis devaluation. The Kirchner governments implemented heterodox policies which aimed at capturing a large proportion of additional incomes for the state via increased taxation and applying this government revenue to fuel aggregate demand via increased wages, social transfers and subsidies to energy and transport. Furthermore, export taxes helped to keep the domestic price of certain foodstuffs low. Growth in per capita incomes averaged 6.6 % per year in the period 2003–2010, poverty recovered its pre-crisis levels and unemployment fell to 8 %, a level it had not seen since the 1980s.

Health and education indicators, on the other hand, improved more consistently throughout the period. Figure 26.4 shows the decline in infant mortality, which went from around 30 deaths per

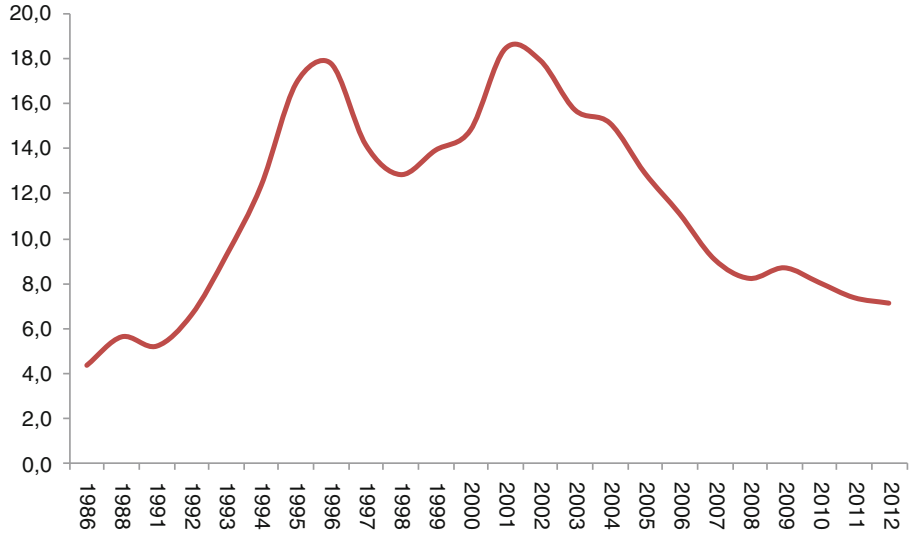

Fig. 26.3 Unemployment rate (% of active population), 1986–2012 (Source: CEDLAS, based on INDEC – EPH)

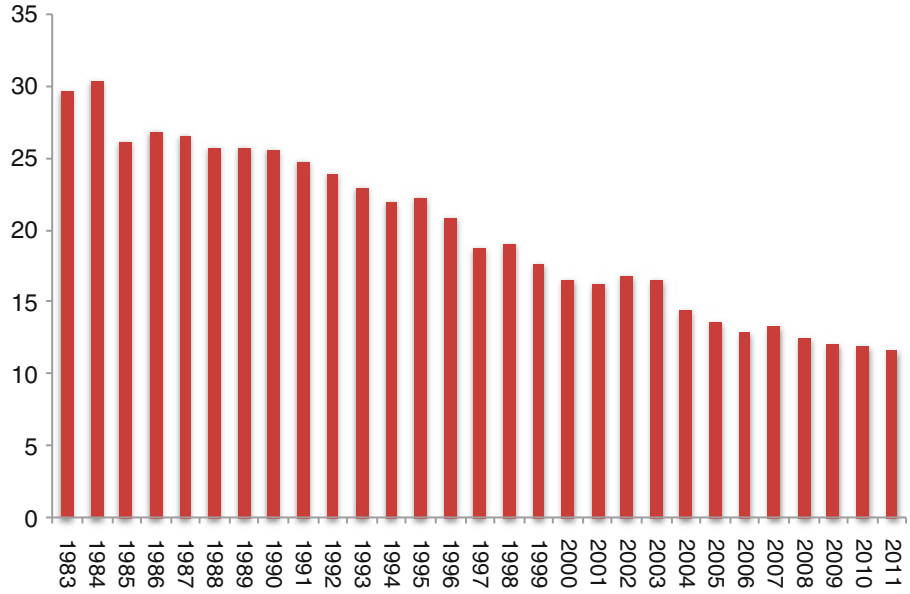

Fig. 26.4 Infant mortality 1983–2012 (per 1,000 live births) (Source: World Development Indicators, World Bank)

1,000 live births in 1983–84 to 11.7 deaths per 1,000 live births in 2011.

Educational indicators also show improvement. While gross secondary school enrollment increased from 60 % in 1983 to around 90 % in 2010 (Fig. 26.5), average years of education jumped from 8.2 in 1980 to 11.1 in 2010. These are, however, only partial indicators and might show only one side of the coin. For example, Secondary School Enrollment and Average hours of education can be considered as an input variable which actually increased (Fig. 26.5). However, other output variables, like the Programme for International Student Assessment (PISA), shown more mediocre results. While in this assessment Argentina

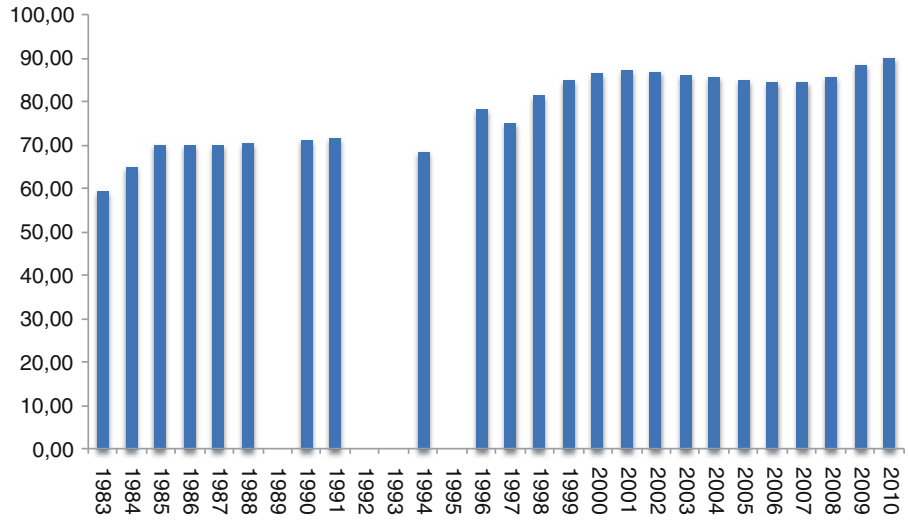

Fig. 26.5 Secondary School Enrollment (gross, %)

scored a total of 418 point in 2000, in 2009 this scored decreased up to 398. Similar mediocre results presents the 2012 assessment, with a 388 score.

While some educational attainments shown positive values in the last 28 years and positive prospects, some others do not. Like opening the black box, the present state of affairs resembles some possible disruptions in Argentine education system. This a curious result steaming from the fact that Argentina's education expenditure in term of GDP nears the 6 % in the last couple of years, a bigger value compared to those highly developed countries like Germany or Canada (c.f. Word Bank Data Indicators).

Overall, the Argentine economy experienced moderate growth during the 1983–2012 period, with income per capita increasing at 1.9 % per year on average, but with very high volatility and mixed performance in terms of poverty and unemployment. The country suffered two extreme crises during the period, a hyperinflation in 1989 and a balance of payments and debt crisis in 2001–2002. Unemployment was 7.1 % in 2012, compared to 4.4 % in 1986, but reached peaks of 18 % in 1995 and 2001–2002. Poverty was at similar levels in 2012 and 1992, but also reached peaks around 50 % in 2001–2002.

The Evolution of Life Satisfaction (and the Role of Income): 1984–2012

To start analyzing the evolution of life satisfaction, Fig. 26.7 plots the average response to the question "In general, taking all in, how satisfied are you with your life in a 10 point scale, where 1 is dissatisfied and 10 is fully satisfied?" in all of the surveys mentioned above. It also displays the 95 % confidence intervals, so it can easily tell when there is a significant difference between two average values (not intervals overlapping) and otherwise (Fig. 26.6).

At a simple look, it seems that there is no statistically significance difference in life satisfaction between 1984 and 1995, neither is there any noticeable discrepancy between 1991 and 1999. The contrast between 2006 and 2011 depends on the 2011 wave taken into consideration, but the ambiguity disappears when the comparison is made between 2006 and 2012: no statistically significant difference arises. On the other hand, there is indeed an upward trend from 1995 to 2001 and a similar increase between 1999 and 2006.

However, a closer look at the five World Value Survey waves suggests differences in

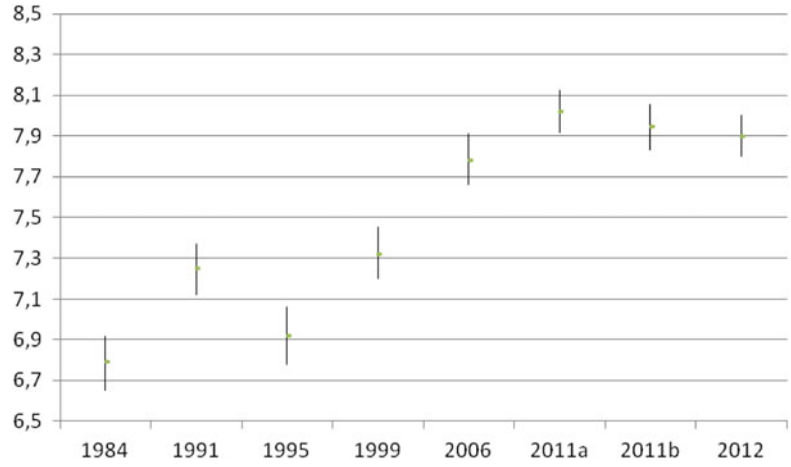

Fig. 26.6 "Taking all in, how satisfied are you with your life?" (Source: own calculations based on World Value Survey (2005) and Gallup-Universidad de Palermo) (Bars represent 95 % confidence intervals)

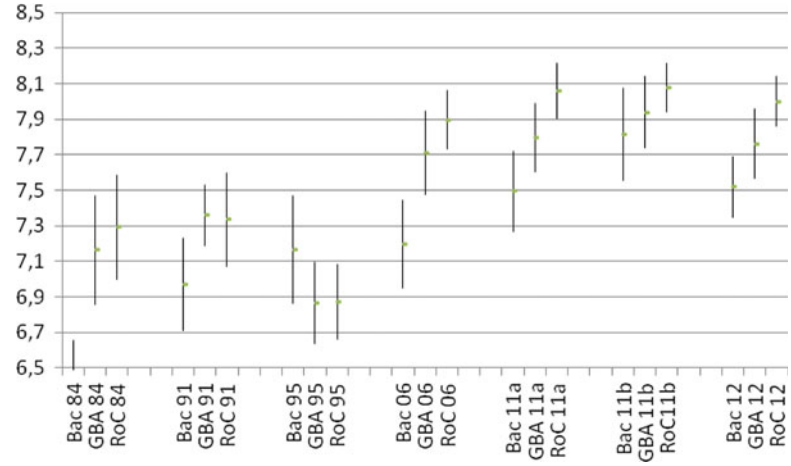

Fig. 26.7 "Taking all in how satisfied are you with your life", by region (Source: own calculations based on World Value Survey (2005) and Gallup-Universidad de Palermo) (Bars represent 95 % confidence intervals)

sampling strategies among them, rendering simple average comparisons problematic. For example, the weights of all three regions in the sample (Buenos Aires City, Buenos Aires Outskirts and Rest of the Country) were not the same across waves. These regions do not have the same education level and therefore, average education varied accordingly. In order to get a more appropriate picture of what actually happened from 1984 to 2012, it is more useful to split the data according to three different Argentinean regions; namely Buenos Aires City, Greater Buenos Aires and the Rest of the Country and use sampling weights within each region to account for socioeconomic differences and control for education. The evolution of life satisfaction over time is presented in the following glimpse at Fig. 26.7. Particularly, in 1999, the survey did not discriminate geographically, between Buenos Aires City and the rest of the economy, that's why values for 1999 are missing.

In Fig. 26.8, regional averages are grouped by year of survey. The first 95 % confidence interval bar within each year always represents Buenos Aires City, while the second one belongs to Greater Buenos Aires. The last one accounts for the Rest of the Country interval. Once again, overlapping between two different surveys' confidence intervals for the same region means the absence of statistically significant differences, whereas the opposite indicates otherwise.

Buenos Aires City's life satisfaction jumped from 1984 to 1991, remained steady up to 2006 and depending on the 2011 wave analyzed, either

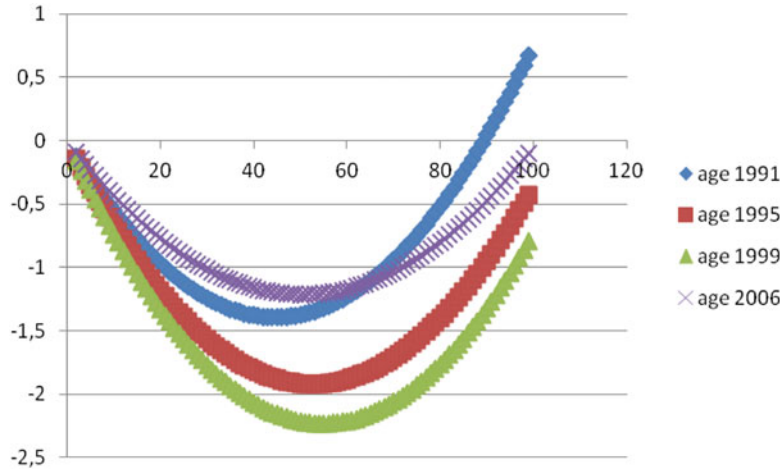

Fig. 26.8 The relation between life satisfaction and age (Source: own calculations based on World Value Survey 2005)

rose again or stayed about the same. However, the ambiguity disappears when 2012 wave is taken into consideration; no statistically significant difference arises then, between 2006 and 2012. On the other hand, life satisfaction in the outskirts of Buenos Aires City (GBA) did not improve in 1991 (from 1984) and actually fell in 1995, recovered in 2006 and stayed basically the same since then. Finally, average answers in the Rest of the Country showed a similar path to that described for Greater Buenos Aires (GBA).

Those life satisfaction patterns are consistent with the structural changes in the Argentinean economy during the period of time we described in section "The Big Macroeconomic and Social Picture" For example, the over valuation of local currency during the 1990s inflicted a huge damage on the industrial sector of the country, basically located at Greater Buenos Aires. This sector strongly recovered thanks to the devaluation in 2002. The Rest of the Country, in turn, took advantage of the beneficial terms of trade for the last 7 years, because the countryside specializes in agricultural production.

Odd as it may seem, this is consistent with the Easterlin Paradox. Those changes had to do more with short run oscillations, having a huge impact in terms of unemployment, rather than with long term differences in per capita income. According to the information in section "The Big Macroeconomic and Social Picture", per capita income rose at an annual rate of 1.68 % between 1995 and 2006, but it did so at an astonishing 5.6 % per year since then. Happiness, on the other hand, rose steadily between 1995 and 2006, but stayed about the same since then – even when per capita income rose higher than in the past. Unemployment, in contrast, fell sharply between 1995 and 2006 (it went first from 16.6 % in 1995 to 20.4 in 2003 and then returned to 8.7 % in 2006), whereas in 2011 it was at 6.7 %.We conclude that, in the long run, there is no relation between per capita income and happiness (the Easterlin Paradox) but there is a short run employment effect.

As to the question about the existence of an Easterlin Paradox for Argentina, Schiaffino and Tetaz (2015) argue that Easterlin appears to be vindicated, because they find no relation between changes in income and modifications of happiness (see Table 26.2). To summarize the lack of relation between changes in income (proxy) and changes in happiness, the authors show that out of 9 cases (3 regions times 3 years), there is just one (Rest of the Country in 2006) where there was a joint rise in both income and happiness. For 1995 there was a fall in income in Greater Buenos Aires and a rise in happiness, while in the Rest of the Country region, there was the same fall in income but no change in happiness whatsoever.

In accordance with Easterlin seminal paper, Schiaffino and Tetaz (2015) show that improvements in happiness did not correlate with the satisfaction of the financial situation in

Table 26.2 The relation between changes in income and changes in happiness over time (documented by Schiaffino and Tetaz 2015)

Buenos Aires City	Change in "income"	Change in happiness
Year 1991	0	Ambiguous
Year 1995	0	0
Year 2006	1.084	Ambiguous
Greater Buenos Aires		
Year 1991	−0.827	Ambiguous
Year 1995	−0.897	Positive
Year 2006	0	Positive
Rest of the country		
Year 1991	0	0
Year 1995	−1.183	0
Year 2006	0.661	Positive

Source: Schiaffino and Tetaz (2015)

households. Financial satisfaction did not rise in Buenos Aires City until the 2006 survey, fell in Greater Buenos Aires in 1991, stayed the same during the 1990s, but was not fully recovered in 2006. Only for the Rest of the Country sample, data seem to support the hypothesis of a positive relation between income and life satisfaction.[5]

Life Satisfaction and Its Fundamentals

Apart from the relative importance of income and its impact over life satisfaction, previous literature have come across other various effects, such as the "age effect" (Blanchflower and Oswald 2004a, b); gender effects (Stevenson and Wolfers 2008); interaction effects between both of them (Easterlin and Plagnol 2008); and many other socioeconomic effects (see Veenhoven 1994 for a review). Boyce et al. (2013) analyzes the influences of changes on "the Big Five" personality traits,[6] coming to the conclusion that they matter even more than socioeconomic factors, while Aknin et al. (2012) focus on the way money is spent rather than the actual levels of income. They find that pro-social behaviors increase happiness more than money. In this section, we address the relation between life satisfaction and age, geographical effects, social status, marriage, being socially active, sex and pills.

Age and Geographical Effects

The "U" shape effect of age such as the "age effect" (Blanchflower and Oswald 2004a, b) on life satisfaction is a common result in existing literature, and it is also present for Argentina data analysis. There is no respondents in the 1984 survey, but data available for 1991 as well as the remaining for the 1995, 1999 and 2006 surveys (shown in Fig. 26.8), the age effect has a negative impact on life satisfaction until somewhere between 45 and 55 years of age (depending on the wave analyzed).

Much recent evidence, like in the surveys conducted in 2011 (two surveys) and 2012,

[5] Schiaffino and Tetaz (2015) suggest a positive and (almost always) highly significant effect of financial satisfaction on life satisfaction in the cross-section analysis. This result may appear to conflict with the confirmation regarding the Easterlin effect. Nevertheless, it is noteworthy to say that within a society at any particular time there may exist indeed an effect whereby the richer feels happier –even when across different countries or societies that effect is absent, as shown by Easterlin.

[6] The Big Five personality traits (Emotional Stability, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness)

shows that age effects remain stable under any estimation strategy, confirming the accordance with the international results. Older subjects are less satisfied although the effect diminishes as people age (cf. Schiaffino and Tetaz 2015).

Regarding geographical effects, in 1984 people living in Buenos Ares City felt less satisfied with life compared to those in the Rest of the Country and the effect remained until 1991, although at a lower level than in 1984. In contrast to previous waves, for 1995 there is no evidence of geographical effects while for 1999 the wave does not have any geographical information. In 2006, there is a negative Buenos Aires City effect and a negative impact on life satisfaction, while in 2011 people living in Greater Buenos Aires are less satisfied than those in the rest of the Country, but inhabitants of Buenos Aires City are even less satisfied. This result is also present for 2012; again living in Buenos Aires City seems to be a handicap in terms of life satisfaction.

This persistent penalty for Buenos Aires City, may have to do with insecurity issues, although this should be true for Grate Buenos Aires as well. According to a survey carried out by the Crime Laboratory of Di Tella[7] University, 36.7 % of households in urbanizations of more than 500,000 inhabitants suffered a crime in the last 12 month, in contrast to just 15.6 % of those living in smaller cities (up to 100,000 inhabitants).

A relative income effect can also be a possibility. According to Lora and Chaparro (2008) people not only care about their incomes, but about the distance to their reference group average income as well. Cruces et al. (2012) confirms this effect in a household survey in Buenos Aires Metropolitan Area, and according to the last census (2010) whereas in the whole country just 14.33 % of people aged 15–64 have university education, the percentage raises to 34.23 in Buenos Aires city. Thus, for the median citizen (with no diploma) living in Buenos Aires is more usual to see people with more education (and incomes), than for those living elsewhere and it is also more likely that those with higher education belong to the reference group of the median citizen.

[7] Refers to June, 2013: http://www.utdt.edu/download.php?fname=_137409543034294800.pdf

Last but not least, we show below (c.f Schiaffino and Tetaz 2015) that having been stressed in the last 12 month reduces life satisfaction by almost 0.30 points. Then stress is more common in bigger cities where congestion, roadblocks and employment turnover are normally higher.

Therefore, since Buenos Aires City is both, more insecure, unequal and stressful than the rest of the country, perhaps that's part of the reason why people living there feel always less satisfied.

On top of that, media coverage of crime focuses more on the metropolitan area of Buenos Aires, producing "availability bias" (see Kahneman 2011), and skyscrapers of the wealthiest city neighborhood, Puerto Madero, where a property may cost up to 8,000 U$ s/m^2, can be seen from almost anywhere, as if they were a reminder of the huge distance between the average Buenos Aires citizen and those living there.

Summing up, "U" shape age effects are always present and Buenos Aires citizens feel less happy.

Social Class

In 1991, the relation between social class and life satisfaction (no information available 1984) shows that those belonging to the lower step (Class D) claimed not to be as happy as those in Class C1 (the omitted dummy variable for medium class). But much richer information can be find at 1995, where the World Value Survey provides information on income deciles and the positive and statistically significant coefficient indicates a positive (though small) relation with life satisfaction. In 1999 and 2006, there are data on income which allow analyzing the impact of money on happiness. The coefficient is positive but not significant at all, but people having completed higher education claim indeed to feel more satisfied with their lives, compared to those with secondary education omitted. The extremes of social classification in 2011s and 2012 data, presents a logical pattern whereby high class individuals (ABC1) feel happier and conversely low class respondents (D2E) are less satisfied with their lives. It is less likely to be "not very happy" if

someone belongs to high class (ABC1) and, on the other hand, typically a subject from a low class family it is more likely to fell either "not very happy" or "not happy at all". What the social class effect is saying is that a good position is useful to avoid sadness rather than to assure happiness, but perhaps more notable is the fact that belonging to high class (in contrast to medium class) does not provide more satisfaction with the economic situation. The opposite is true for those belonging to low class.

This is consistent with those results that show that income does not matter unless you cannot cover the basics. Another remarkable point is that people expecting an improvement in their income feel less satisfied with their economic situation right now, whereas those with the opposite expectation (lower income) are more satisfied with their current economic conditions. One possible interpretation is that those with expectations of a rise perceive their income as lower than they should be and feel the current situation is somewhat unfair.

Marital Status

Evidence about the relation between life satisfaction and being married vs. being divorce, separated, or otherwise, can be somewhat controversial. For example; in the 1984 wave, those either living together or divorced reported higher levels of satisfaction compared to married ones, while there is a sadness effect for separated people. For 1991 data, widowed were significantly less happy than married people (we do not have data on widowed for all the waves). In 1995 and 1999, separated and those living together were less satisfied than married ones. As to the 2006 wave, separated and divorced people felt less happy than married. Similar results were present in 2011 where single and widowed interviewed report lower levels of life satisfaction (relative to married ones).

Summarizing, separated couples are always less satisfied with life than married ones. Divorce effect, on the other hand is ambiguous over time (positive in 1984, but negative in 2006). The same happened for people living together (positive in 1984 but negative in 1995). Divorce effect's differences may have to do with the legalization of that practice in 1987. Until then, getting effectively divorced was almost impossible, therefore those who could actually get divorced may have felt successful in doing so, whereas in the aftermath of the new bill, divorce was just the final proof of the marriage failure. People living together, in turn, may have felt happier before the Divorce Bill, because the exit cost of getting married was so high that being "just together" could have been thought as being married with a "divorce option contract". Once divorce was facilitated by the law, the value of that "divorce option contract" vanished and happier couples living together got more likely to marriage.

Social Activity

Socially active Argentinean people who frequently go out were more satisfied with their lives. Particularly, religious activity and studying are important to avoid sadness at least for Argentina evidence. The second survey of 2011, asked people how active they were in several domains, providing useful and non-conventional information. Responses were grouped in a dichotomy variable whereby those either "very active" or "quite active" were considered "active". The results show that those active in their family life, socially active and who frequently go out felt more satisfied with their lives. In the 2012 survey, family satisfaction and the satisfaction with the economic situation of the subjects are highly significant indicators of life satisfaction. The latter effect is three times higher than the former, meaning that a point increase in satisfaction with family (measured in a 1 to 10 scale) rises life satisfaction by 0.20 points. Relationship satisfaction and friendship satisfaction are also significant. Therefore, people socially active, who frequently go out and have a harmonious family relation were more satisfied with their lives. As a peculiarity, evidence shows that religious activity and studying were fundamental to escape extreme sadness (cf. Schiaffino and Tetaz 2015).

Sex

The 2011's second survey also presents "taboo data-information", for example, dating out with someone and having sex. In this case, dating and sexual activity levels were divided in four different groups; those active sexually but not very active in other aspects of their romantic relationships; those active in their couple lives, but not very active sexually. A third class includes people active as well in their relationships and sexual life – A fourth group of those neither have active sexually nor in any other aspect of a romantic relationships (this particular group was the omitted variable, so results should be interpreted as relative to be in this class of people; cf. Schiaffino and Tetaz 2015). The best case scenario was being active in dating someone and having sex frequently, followed by just dating someone actively, though without a very active sexual life. Kahneman et al. (2003) remark the importance of sexual activity over happiness and some evidence due to Blanchflower et al. (2004a) show that sex is strongly and positively associated with happiness. Interesting at that might be, our results here show some caveats over the sex-happiness relation, stating that people very active in their sexual lives – but not romantically involved – did not report higher levels of life satisfaction than those neither dating nor having sex (cf. Schiaffino and Tetaz 2015). Being active in a relationship is important, but coupling that with a lot of sex is paramount, even when sex itself does not make any difference whatsoever.

Mental Health and Pills

This survey also included some questions on mental health, the consumption of medication for mental stress and sleeping pills and different kinds of therapies. According to our evidence, none of them had any impact on happiness, although it may be the case that former unhappy people are more prone to consult a Psychiatrist and both the therapy and the pills have actually the effect of just reversing the patient's mood to the mean.

On the other hand, having been stressed in the last 12 month, indeed reduces life satisfaction by almost 0.30 points.[8]

Besides of the known negative effect of stress in terms of neurotransmitters depletion, which in turn increases depression symptoms, Mullainathan and Shafir (2009), find stress to be responsible of working memory functionality impairment, causing non optimal saving and consumption patterns, as well as poor quality decisions in general (for example regarding time administration, and relationships management). Following that link it's easy to conclude that the negative correlation between stress and happiness may even has nothing to do with stress *per se*, but with the pervasive consequences of stress on economic wellbeing, that in turn impact negatively in overall happiness.

Be that as it may, scientific evidence seems to indicate that the pill for happiness is yet to be discovered.

Conclusion

At the end of 1983, Argentina returned to democracy. This chapter show that the end of the military dictatorship and the return of democracy in Argentina brought better economic and development results as wells as an improvement in the levels of happiness and life satisfaction. Despite that Argentina suffer from high volatility in its economic cycle over the past decades, the country GDP per capita was 74 % higher in 2012 compared to 1983, implying an average annual growth rate of 1.9 %. This value is better than the average Latin American country, where growth was 51 % over the same period. Poverty and income distribution are still one of the main

[8] Certainly people see a psychiatrist when they have some rather serious mental issue, but sometimes they just see a psychologist as a superior consumer good. The positive coefficient on those having had a panic attack in the last 12 month looks quite odd. A plausible interpretation is that "panic attack" is not randomly distributed across the whole population, but rather concentrated in the high class subjects, who are happy nevertheless.

country's challenges, but along the period of analysis in this chapter this indicators as well as health and education ones, notably improved after time intervals of decadence and compared to 1983/84.

This "hardcore values" coincides with the fact that Argentineans are happier now than in 1984 with the highest improvement in Buenos Aires City, being the only region with a monotonic rise over time (although not always statistically significant). Both Greater Buenos Aires and the rest of the country fell in 1995 and recovered later.

Although the improvement in these indicators also implies more Economic Development – which in turn affects happiness –, this chapter analyzes the fundamentals of the happiness-trend of Argentinean people. In line with previous literature, those trends do not correlate with households' changes in the satisfaction with their financial situation over time, but the satisfaction with family life and the time spent with loved ones have a higher explanatory power. Socially active Argentinean people who frequently go out were more satisfied with their lives and religious activity as well as studying was important factors to avoid sadness. Having sex itself does not make any difference whatsoever and consumption of medication for mental stress or sleeping pills has no direct impact on happiness (but stressed people report low levels of life satisfaction). Finally, high social class members do not always increase the chances of being happy, but low class certainly makes people sadder.

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Multiple Modes of Wellbeing in Asia

27

Takashi Inoguchi

Introduction

The definition of wellbeing depends primarily on subjective assessment about how you feel about yourself in society. Especially the adjective, well, is bound to be highly subjective. Thus when we discuss wellbeing, multiple modes of wellbeing is a natural phrasing. Hence, wellbeing is defined by how positively or negatively an individual feels about her/his existence in society, whether it is about happiness, health, prosperity, accomplishment, or whatever other area is under consideration. This definition is quite appropriate when I examine wellbeing in Asia. Asia is not only demographically dense but also economically dynamic. But most important here is the diversity of wellbeing in Asia. And this is why I titled my essay multiple modes of wellbeing.

Multiple wellbeings might remind one of multiple modernities. Multiple modernities contain the dimension of time and evolution. The idea is that modernity is not a singular evolution of society that commences with the liberation of art from Christianity (e.g., Rafael), science (e.g., Gallilleo), politics (e.g., Reformation) through the industrial revolution and democratization as experienced in Western Europe. There must be many distinctive paths observed in reaching modernity. Also, modernity is defined in so many ways. Hence, the ascendance of the concept of multiple modernities has gained a general acceptance (Eisenstadt 2002, 2006). In a similar vein, multiple wellbeings should be examined. One of the most important features of multiple wellbeings is that it can be specified not only at the national level but also at the individual level. This feature distinguishes itself from multiple modernities. That multiple wellbeings can be specified at the individual level enables this concept to be amenable to scientific empirical testing of the strictest kind. The concept of multiple modernities is also amenable to scientific empirical testing (Bates et al. 1998). But it is not of a strict kind. It is more by the case study or systematic comparative method. In this respect multiple wellbeings allow one to be used as a pluri-potent concept: Pluri-potent is most frequently used in relation to a stem cell that has multiple potentials in its growth. This stream of analysis includes individual wellbeing, group wellbeing, national wellbeing, supra-national wellbeing (regional wellbeing, wellbeing by religion, wellbeing by beliefs, wellbeing by gender, wellbeing by race, wellbeing by class, wellbeing by income level, wellbeing by educational level, wellbeing by language, etc.).

T. Inoguchi (✉)
Emeritus Professor, President and Chairman of the Board, University of Tokyo, Tokyo, Japan

Emeritus Professor, President and Chairman of the Board, University of Niigata Prefecture, Niigata, Japan
e-mail: inoguchi@ioc.u-tokyo.ac.jp

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Multiple Wellbeings as Prioritized Life Aspects

In the AsiaBarometer Survey (Inoguchi 2012; Inoguchi and Fujii 2012) that we executed annually between 2003 and 2008, we posed five questions in areas that impact the respondents' perception on quality-of-life and lifestyle. Life aspects include such items as health, home, job, family, income, being devout, and medical care, and workplace success. We have 52,215 observations in the AsiaBarometer Survey. We simply count the number of chosen priorities in all of Asia and by country.

Question: Of the following lifestyle aspects or life circumstances, please select the five that are most important (Table 27.1). (Twenty lifestyle aspects or life circumstances are listed in the surveys in 2003, 2004, and 2005. Twenty-five lifestyle aspects or life circumstances are listed in the surveys in 2006, 2007, and 2008. The selection of "none of the above" and "don't know" responses are listed.)

Table 27.1 Lifestyle aspects each respondent asked to choose five from among those listed below

Lifestyle aspects	Important	Not mentioned
1. Appreciating art and culture	**1**	**0**
2. Being able to live without fear of crime	**1**	**0**
3. Being devout	**1**	**0**
4. Being famous	**1**	**0**
5. Being healthy	**1**	**0**
6. Being on good terms with others	**1**	**0**
7. Being successful at work	**1**	**0**
8. Contributing to your local community or to society	**1**	**0**
9. Don't know	**1**	**0**
10. Dressing up	**1**	**0**
11. Earning a high income	**1**	**0**
12. Enjoying leisure	**1**	**0**
13. Expressing your personality or using your talents	**1**	**0**
14. Freedom of expression and association[a]	**1**	**0**
15. Having a comfortable home	**1**	**0**
16. Having a job	**1**	**0**
17. Having access to good medical care if required	**1**	**0**
18. Having access to higher education (beyond compulsory schooling)	**1**	**0**
19. Having enough to eat	**1**	**0**
20. Having pleasant community to live[a]	**1**	**0**
21. Having safe and clean environment[a]	**1**	**0**
22. Living in a country with a good government[a]	**1**	**0**
23. None of the above	**1**	**0**
24. Owning lots of nice things	**1**	**0**
25. Raising children[a]	**1**	**0**
26. Spending time with your family	**1**	**0**
27. Winning over others	**1**	**0**

[a]Aspects numbered 21 through 25 were added to surveys in 2006, 2007, and 2008

Asia-wide refers to the regions of East, Southeast, South, and Central Asia. For the countries within these regions, the most highly prioritized life aspects or domains are in the following order: health, home, diet, job, and family.

National diversity is our focus. To better and more parsimoniously handle national diversities, we have factor-analyzed country by country, with a varimax rotation, prioritized life aspects or domains (for details, see Inoguchi and Fujii 2012). Three factors have emerged: the materialist factor, the post-materialist factor, and the public sector dominance factor. The materialist factor is determined by such priorities as housing, standard of living, household income, health, education, and job. The post-materialist factor is characterized by such priorities as friendships, marriage, neighbors, family life, leisure, spiritual life, and public safety. The public sector dominance factor is composed of such priorities as condition of the environment, social welfare system, and democratic system. The materialist factor is also called the QOL-sustaining factor, whereas the post-materialist factor is called the QOL-enriching factor and the public sector dominant factor is called the QOL-enabling factor. It is worth remembering that, when the factor analysis was applied Asia-wide to all the 29 countries, the first factor's eigenvalue is 5.4, compared to the second factor's value of 1.0 and the third factor's eigenvalues of 0.5. Thus, from an Asia-wide perspective, the materialist factor is dominant. The post-materialist and public sector dominance factors are auxiliary. Here, it is important to note that: (1) the materialist factor is not always the most important in life; (2) the post-materialist factor is not always the second most important factor, which develops after the materialist factor is met in life; and (3) the public sector dominance factor is not always the least important of the three factors. National diversity is pronounced. That is determined by the configuration of life prioritizing of individuals and many other factors that are above individual preference and also beyond individual control.

To view national diversity, we factor-analyzed life aspects or domain priorities country by country. Here, it is very important to note at the outset that not all countries exhibit an overwhelming dominance of the materialist factor. If we look at the first two factors only and categorize country types on how the three factors are deemed important in terms of the size of eigenvalues country by country, the following life priority types can be listed: Ab, Ac, Ba, Bc, Ca, Cb (Table 27.2).

Table 27.2 Generating society typology through life aspect prioritizing from bottom (factor dimensions after varimax rotation)

	1	2
Ab	Materialism	Post-materialism
Ac	Materialism	Public sector dominance
B	Post-materialism	Materialism
Ca	Post-materialism	Public sector dominance
Cb	Public sector dominance	Materialism

Because there is empirically no Bc type, the distinction between Ba and Bc is not necessary. Therefore, we use B, and not Ba or Bc. Hence, there are five life priority types empirically: Ab, Ac, B, Ca and Cb. Which countries fit one of these types?

Ab five societies: Japan, Indonesia, Afghanistan, Uzbekistan, and Tajikistan.

Ac ten societies: China, South Korea, Taiwan, Cambodia, Laos, Myanmar, Bangladesh, India, Nepal, and Mongolia.

B five societies: Hong Kong, Malaysia, Thailand, Vietnam, and Kyrgyzstan.

Ca six societies: Brunei, the Philippines, Bhutan, Pakistan, Sri Lanka, and Kazakhstan.

Cb two societies: Singapore and the Maldives.

Ab refers to the materialist factor dominance, followed by the auxiliary post-materialist factor. The following five countries belong to the Ab type: Japan, Indonesia, Afghanistan, Uzbekistan, and Tajikistan. Ac refers to the materialist factor dominance, followed by the auxiliary public sector dominance factor. The following ten countries/societies are of the Ac type: China, South Korea, Taiwan, Cambodia, Laos, Myanmar, Bangladesh, India, Nepal, and Mongolia. B refers to the post-materialist factor dominance, followed by the auxiliary materialist factor. The following countries/societies belong to the B type: Hong Kong, Malaysia, Thailand, Vietnam, and Kyrgyzstan. Ca refers to the post-materialist factor dominance, followed by the auxiliary public sector dominance factor. The following six countries/societies are of

Ca type: Brunei, the Philippines, Bhutan, Pakistan, Sri Lanka, and Kazakhstan. Cb refers to the public sector dominance factor, followed by the auxiliary materialist factor. The following countries/societies are of the Cb type: Singapore and the Maldives.

The above life priorities based typology and its "membership" may not be familiar to some readers. To other readers, materialism and post-materialism are familiar from the immensely influential writings of Ronald Inglehart (1977, 1990, 1997, 1989; Inglehart and Welzel 2005). However, his meaning of these two concepts is very different from our meaning of the terms. Here, materialism refers to QOL-sustaining and post-materialism refers to QOL-enriching. In addition to materialism and post-materialism, prioritized life aspects also reflect those public sector dominant societies. This is called the public sector dominance factor or the QOL-enabling factor, because without public sector infrastructure and public policy management, people's lives are sometimes unsustainable. The use of these two terms are very clearly differentiated from Inglehart's use of materialism and post-materialism. Due to the lack of better concepts, we use materialism and post-materialism in a very different sense. Our use is justified because our concepts are based on prioritized life aspects in Asia, much closer and broader concepts of life preference patterns. It is very critical to note at this point that these types are rooted in a comprehensive, systematic, and empirical analysis of the daily life priorities as reported by 52,215 respondents throughout Asia (Inoguchi and Fujii 2012; cf. Kato 2012). The picture that emerges of these countries/societies represents, in a sense, a snapshot from below. In other words, the result is an evidence-based typology of societies.

Profiles of Countries/Societies as Seen from Below

Ab Type: Weak State-Strong Society

The Ab type social system includes Afghanistan, Indonesia, Japan, Taiwan, Tajikistan, and Uzbekistan. Let me examine each country one by one. Lifestyle priorities in Afghanistan are: diet, health, home, being devout, and job in this order. It is significant to note the high priority given to diet and being devout. The life domains that weigh heavily on the materialist factor are: marriage, standard of living, household income, health, education, job, and neighbors. The valuable point in this data is the high priority given to marriage, capped by the materialist factor. The life domains that are prominent on the post-materialist factor are: housing, friendships, family life, and spiritual life. The life domains that figure heavily on the public sector dominance factor are: condition of the environment, social welfare system, democratic system, and leisure.

Let me turn to Indonesia. Lifestyle priorities in Indonesia are: health, diet, home, being devout, and job in this order. In this country study, the significance of the data is the high ranking given to being devout. The life domains that emphasize heavily on the materialist factor are: housing, standard of living, household income, education, and job. The life domains that rise to prominence for the post-materialist factor are: friendships, marriage, health, neighbors, public safety, family life, and spiritual life. The life domains that are significant in the public sector dominance factor are: condition of the environment, social welfare system, democratic system, and leisure.

In Japan, lifestyle priorities in are: health, family, job, home, others in this order. It is worth noting that others receive a high priority in Japanese society. Attention to others is very much a matter of social survival (Inoguchi 2011; Nakane 1970). The life domains heavily featured on the materialist factor are: housing, standard of living, household income, education, and job. The life domains highly valued in the post-materialist factor are: friendships, marriage, health, family life, leisure, and spiritual life. The life domains that played prominently in the public sector dominance factor are: neighbors, public safety, condition of the environment, social welfare system, and democratic system. The prioritized life aspects in Japanese society appear to be roughly harmonious with Inglehart's materialism and post-materialism.

This convergence is natural as Inglehart deals primarily with advanced industrial democracies, and Japan is one of them in Asia.

In Taiwan, lifestyle priorities are not available as life priorities were not measured there. The life domains expressed heavily in the materialist factor of Taiwan are: standard of living, household income, health, job, leisure, and housing. The value placed on leisure on the materialist factor for Taiwan is significant. The life domains highly appreciated in the post-materialist factor are: friendships, marriage, neighbors, family life, and spiritual life. The life domains valued heavily in the public sector dominance factor in Taiwan are: public safety, condition of the environment, social welfare system, and democratic system.

In Tajikistan, lifestyle priorities are: health, diet, home, job, and income in this order. The valued life domains that emerge from the materialist factor are: housing, standard of living, household income, health, education, job, democratic system, leisure, and spiritual life. It is important to note that such life spheres as democratic system, leisure, and spiritual life play heavily on the materialist factor. The life domains that rise to prominence in the post-materialist factor are: friendships, marriage, neighbors, public safety, and family life. It is significant that public safety is part of the leading life aspects in the post-materialist factor. The life domains that are particularly valued in the public sector dominance factor are: condition of the environment and social welfare system.

In Uzbekistan, lifestyle priorities are: health, home, income, job, diet in this order. The life domains that stood out in the materialist factor are: housing, standard of living, household income, health, education, job, neighbors, leisure, and spiritual life. It is important to note that neighbors, leisure, and spiritual life are included in this category. They are associated closely with survival (Dadabaev 2006). The life domains that determined the post-materialist factor are: friendships, marriage, and family life. The life domains heavily loaded on the public sector dominance factor are: public safety, condition of the environment, social welfare system, and democratic system.

It is not too odd to characterize Afghanistan, Indonesia, Japan, Taiwan, Tajikistan, and Uzbekistan as a weak state, but strong society. A strong society is exemplified by the heavy emphasis given to certain life priorities on the materialist factor, such as neighbors, others, spiritual life, family life, and public safety. Chie Nakane's (1970) account of Japanese society, Takeshi Matsui's (2011) account of Pushtun tribal communities, and Timor Dadabaev's account of Uzbekistan neighborhood communities roughly corroborate this feature of the Ab type social system. The societal picture that emerges in the next section reveals similarities with societies not conventionally associated with the picture that emerged in the above section, most notably by regime type (Dahl 1971; Linz 2000; Gunther et al. 2002; Blondel 2012).

Of the five countries/societies, Japan and Indonesia are noted for their weak state-strong society pattern. In another survey-based study (Blondel and Inoguchi 2006), which focused on Asia and Europe, citizens' identities, citizens' confidence in the state, and citizens' satisfaction in the performance of the state in 18 countries/societies are examined. Canonical correlation analysis of those responses has yielded the countries/societies types on a diagram in which Japan and Indonesia are spatially similar in their location. Both countries/societies are noted for weak identity, weak confidence in the state, and weak satisfaction in the state's performance.

Afghanistan arguably has no state of which to speak. It has strong tribal communities (Matsui 2011). Tribal groups have a very strong sense of self-identity. They reside and move as their herds search for new grass growing on the plains. Their group solidarity and fierce spirit to fight tenaciously against what they consider to be intruders are well known. The Pushtuns and Baluchis are two such groups that anthropologist Matsui (2011) portrays vividly. The capital city of Kabul is dependent on foreign assistance and resources.

Uzbekistan and Tajikistan are states of the former Soviet Union. Now separate from their

twentieth-century legacy, these states do not exercise very much authoritarian power vis-à-vis society. Rather ethnic groups are strong in community development and protection (Dadabaev 2010).

Let us turn to the Ac type social system. It amounts to ten societies with four subtypes. Let us examine Ac1, Ac2, Ac3, Ac4 one by one.

Ac Type: Strong Society – Strong State

Ac1 includes China and South Korea Lifestyle priorities in China are: health, home, job, medical care, and low crime rates. The life domains greatly appreciated by the materialist factor in China are: housing, standard of living, household income, education, and job. The life domains in the public sector dominance factor in China are: public safety, condition of the environment, social welfare system, democratic system, and leisure. The life domains readily apparent in the post-materialist factor in China are: friendships, marriage, health, neighbors, family life, and spiritual life.

Lifestyle priorities in South Korea are: health, home, family, job, and income. The life domains heavily favored in the public sector dominance factor in South Korea are: housing, standard of living, household income, health, job, leisure, and spiritual life. The life domains that stand out in the public sector dominance factor in South Korea are: public safety, condition of the environment, social welfare system, and democratic system. The life domains strongly appreciated in the post-materialist factor in South Korea are: friendships, marriage, neighbors, and family life.

The common dominant features of China and South Korea are strong society and strong state. A strong society is defined by individualism and clan organization. Individualism sometimes verges on anarchism in pursuit of wealth and the clan's defense. In contrast, the state recruits and develops privileged elite corps by a sort of meritocracy, within which a strong state apparatus is forged. Hence, a strong society and a strong state (Wright 2010; Henderson 1968).

Ac2 includes Cambodia, Laos, and Myanmar Lifestyle priorities in Cambodia are: diet, health, home, job, and income. The life domains strongly valued in the materialist factor in Cambodia are: housing, friendships, marriage, standard of living, household income, health, education, job, neighbors, and family life. The life domains appreciated in the public sector dominance factor in Cambodia are: public safety, condition of the environment, social welfare system, and democratic system.

Lifestyle priorities in Laos are: health, diet, home, job, and family. The life domains valued in the post-materialist factor in Cambodia are: leisure and spiritual life. The life domains emphasized in the materialist factor in Laos are: housing, standard of living, household income, health, education, job, and family life. The life domains heavily supported in the public sector dominance factor in Laos are: neighbors, public safety, condition of the environment, social welfare system, and spiritual life.

Lifestyle priorities in Myanmar are: health, diet, being devout, home, and job. It is important to note that being devout is highly ranked as a life priority. Myanmar is a strongly Buddhist society. The life domains rated prominently in the post-materialist factor in Laos are: friendships, marriage, and leisure. The life domains heavily preferred in the materialist factor in Myanmar are: housing, friendships, standard of living, household income, health, education, and job. The life domains greatly supported in the public sector dominance factor in Myanmar are: neighbors, public safety, condition of the environment, family life, leisure, and spiritual life. The life domains valued in the post-materialist factor in Myanmar is: marriage (Fave and Knoop 2012).

Common to Cambodia, Laos, and Myanmar is a strong presence of continental Indian civilization in Southeast Asian states. Common to all three systems is the blurred distinction of what is normally regarded as the public and the private. Both co-mingle, serving the daily life of people. Hills, floods, and contesting tribal groups prevent the state from being too heavily intrusive on

society. In other words, the state exercises power where the society maintains its hold. An extreme example is the dominant Burman ethnic group of Myanmar who controls the federal state and must cope with armed ethnic minorities (Steinberg 2009; Taylor and Hlaing 2005).

The Ac3 Type Social System Includes Bangladesh, India, and Nepal

Lifestyle priorities in Bangladesh are: health, medical care, low crime rates, being devout, and home. The life domains that are heavily favored in the materialist factor in Bangladesh are: housing, friendships, standard of living, household income, health, education, and job. The life domains strongly preferred in the public sector dominance factor in Bangladesh area: neighbors, public safety, condition of the environment, social welfare system, and democratic system. The life domains robustly chosen in the post-materialist factor in Bangladesh are: marriage, family life, leisure, and spiritual life.

Lifestyle priorities in India are: health, home, diet, job, and family. The life domains valued in the materialist factor in India are: housing, friendships, marriage, standard of living, household income, health, education, job, and neighbors. The life domains that emerged in the public sector dominance factor in India are: public safety, condition of the environment, social welfare system, and democratic system. The life domains that are valued in the post-materialist factor in India are: family life, leisure, and spiritual life.

Lifestyle priorities in Nepal are: health, diet, job, work, and low crime rate. The life domains that ranked highly in the materialist factor in Nepal are: housing, standard of living, household income, health, education, job, leisure, and spiritual life. The life domains strongly favored in the public sector dominance factor in Nepal are: public safety, condition of the environment, social welfare system, and democratic system. The life domains strongly endorsed in the post-materialist factor in Nepal are: friendship, marriage, neighbors, and family life.

Bangladesh, India, and Nepal have an Indianized state structure of British colonial bureaucratic authoritarianism in which society never yields. In other words, the penetration of the state is shallow. Takashi Inoguchi (2004) reveals, by factor analysis applied to the perception of trust in ten Asian countries, that British colonial legacy looms large, second to the perception of human nature (good vs. evil), and followed by communist systemic influence (cf. Inoguchi et al. 2007).

The Ac4 type system includes Mongolia - Lifestyle priorities in Mongolia are: health, home, diet, job, and medical care. The life domains heavily selected in the materialist factor in Mongolia are: standard of living, household income, health, education, job, family life, leisure, and spiritual life. The life domains strongly supported in the public sector dominance factor in Mongolia are: public safety, condition of the environment, social welfare system, and democratic system. The life domains that receive high ratings in the post-materialist factor in Mongolia are: neighbors, housing, friendships, and marriage. A pronounced feature of the Mongolian system is the absolute importance of family, geography, geology, and climate along with its neighbors, Russia and China. The state comes in to sustain lives (Humphrey and Sneath 1999).

The B type system has five societies: Hong Kong, Malaysia, Thailand, Vietnam, and Kyrgyzstan Lifestyle priorities in Hong Kong are: not available as they have not been measured.

The life domains heavily favored in the post-materialist factor in Hong Kong are: friendships, marriage, health, education, family life, leisure, and spiritual life. The life domains in the materialist factor in Hong Kong are: housing, standard of living, household income, and job. The life domains that emerged in the public sector dominant factor in Hong Kong are: neighbors, public safety, condition of the environment, social welfare system, and democratic system.

Lifestyle priorities in Malaysia are: health, home, diet, family, and job. The life domains highly endorsed in the post-materialist factor in

Malaysia are: friendships, marriage, neighbors, family life, leisure, and spiritual life. The life domains that are greatly valued in the materialist factor in Malaysia are: housing, standard of living, household income, health, education, and job. The life domains heavily favored in the public sector dominant factor in Malaysia are: public safety, condition of the environment, social welfare system, and democratic system.

Lifestyle priorities in Thailand are: health, diet, home, job, and family. The life domains highly endorsed in the post-materialist factor in Thailand are: housing, friendships, marriage, neighbors, family life, leisure, and spiritual life. The life domains valued in the public sector dominance factor in Thailand are: standard of living, household income, health, education, and job. The life domains strongly rated in the public sector dominant factor in Thailand are: public safety, condition of the environment, social welfare system, and democratic system.

Lifestyle priorities in Vietnam are: health, job, diet, home, and work. The life domains frequently selected in the post-materialist factor in Vietnam are: friendships, marriage, education, family life, leisure, and spiritual life. The life domains widely supported in the materialist factor in Vietnam are: housing, standard of living, household income, health, and job. The life domains valued in the public sector dominance factor in Vietnam are: neighbors, public safety, condition of the environment, and social welfare system.

A common quality among Hong Kong, Malaysia, Thailand, and Vietnam is that all four places are more or less havens for new settlers where competition and coexistence must be well handled among near-strangers. Post-materialist features are salient and materialist features are just as strong. However, state power is receding. A Vietnamese proverb aptly depicts the situation: state power is up to the bamboo gate (Woodside 2006). The proverb is especially suitable for northern Vietnam, but is not necessarily applicable to central and southern Vietnam, where state power has limited penetration of the markets of settlers and strangers.

Lifestyle priorities in Kyrgyzstan are friendships, house, and living standard along with spiritual life. The life domains frequently selected in the post-materialist factor in Kyrgyzstan are friendships, marriage, education, neighbors, family, leisure and spiritual life. The life domains salient in the materialist sector are living standard, household income, health, and job. The life domains pronounced in the public sector dominance are public safety, conditions of the environment, social welfare system, and democratic system.

Ca type: Societies where post-materialist features are dominant; include Brunei, the Philippines, Bhutan, Pakistan, Sri Lanka, and Kazakhstan Lifestyle priorities in Brunei are: health, home, diet, family, and job. Lifestyle priorities in Bhutan are: health, home, diet, job, and workplace success. The life domains emphasized in the public sector dominant factor in Brunei are: job, neighbors, public safety, condition of the environment, social welfare system, family life, and leisure. The valued life domains in the materialist factor in Brunei are: standard of living, household income, health, and education. The important life domains in the post-materialist factor in Brunei are: education, friendships, and marriage.

Lifestyle priorities in the Philippines are: diet, health, home, job, and family. The life domains appreciated in the public sector dominant factor in the Philippines are: public safety, condition of the environment, social welfare system, and democratic system. The life domains heavily esteemed in the materialist factor in the Philippines are: housing, standard of living, household income, health, education, and job. The life domains valued in the post-materialist factor in the Philippines are: friendships, marriage, neighbors, family life, leisure, and spiritual life.

Lifestyle priorities in Bhutan are housing, education, spiritual life, and pray. The life domains salient in the public sector dominance factor are neighbors, public safety, conditions of the environment, social welfare system, democratic system, and spiritual life. The life domains

pronounced in the materialist factor are housing, living standard, household income, health, education, and job. The life domains frequently selected in the post-materialist factor are friendships, marriage, family, and leisure.

Lifestyle priorities in Pakistan are: health, diet, home, being devout, and income. The leading life domains in the public sector dominant factor in Pakistan are: public safety, condition of the environment, social welfare system, and democratic system. The life domains prominent in the materialist factor in Pakistan are: housing, friendships, standard of living, household income, health, education, and job. The life domains valued in the post-materialist factor in Pakistan are: marriage, neighbors, family life, leisure, and spiritual life.

Lifestyle priorities in Sri Lanka are: health, diet, home, family, and job. The life domains most cherished in the public sector dominant factor in Sri Lanka are: public safety, condition of the environment, social welfare system, and democratic system. The life domains deemed important in the post-materialist factor in Sri Lanka are: housing, friendships, standard of living, household income, health, education, and job. The life domains valued most in the materialist factor in Sri Lanka are: marriage, neighbors, family life, and spiritual life.

Lifestyle priorities in Kazakhstan are: health, job, home, medical care, and income. The life domains most appreciated in the public sector dominant factor in Kazakhstan are: public safety, condition of the environment, social welfare system, and democratic system. The life domains most important in the materialist factor in Kazakhstan are: housing, standard of living, household income, health, and job. The life domains strongly valued in the post-materialist factor in Kazakhstan are: friendship, marriage, education neighbors, family life leisure, and spiritual life.

A common feature of Brunei, the Philippines, Bhutan, Pakistan, Sri Lanka, and Kazakhstan is the domineering behavior of state. However, in each country it is a weak state domineering among a centrifugal society, with each component of society asserting itself sporadically. Pakistan represents a dominating state and a strong society, which has prompted one of the authors about Pakistan to title his book, *Pakistan: A hard country* (Lieven 2012).

The Cb Type System Includes Singapore and the Maldives

Lifestyle priorities in Singapore are: health, home, job, family, and diet. The valued life domains in the public sector dominant factor in Singapore are: public safety, condition of the environment, social welfare system, and democratic system. The life domains heavily favored in the post-materialist factor in Singapore are: housing, marriage, neighbors, family life, leisure, and spiritual life. The life domains strongly appreciated in the materialist factor in Singapore are: standard of living, household income, health, education, and job.

Lifestyle priorities in the Maldives are: diet, medical care, low crime rates, health, and job. The life domains most selected in the public sector dominant factor in the Maldives are: standard of living, household income, health, education, job, neighbors, public safety, condition f the environment, social welfare system, and democratic system. The life domain valued in the materialist factor in the Maldives is: family life. The life domains most appreciated in the

Table 27.3 Society typology through life aspect priorities from bottom (factor dimensions after varimax rotation)

Ab type materialism followed by post-materialism
Weak state/strong society
Japan, Indonesia, Afghanistan, Uzbekistan, Tajikistan
Ac type materialism followed by public sector dominance
Strong society/strong state
Ac1 China, South Korea (East Asia)
Ac2 Cambodia, Laos, Myanmar (Southeast Asia)
Ac3 Bangladesh, India, Nepal (South Asia)
Ac4 Mongolia (Central Asia)
B type post-materialism followed by materialism
Hong Kong, Malaysia, Thailand, Vietnam, Kyrgyzstan
Ca type Brunei, the Philippines, Bhutan, Pakistan, Sri Lanka, Kazakhstan
Post-materialism followed by public sector dominance
Cb type public sector dominance followed by materialism
Singapore, the Maldives

post-materialist factor in the Maldives are: housing, friendships, and marriage.

A common feature to Singapore and the Maldives is that the state is really dominant. The society is seemingly compliant and docile. However, outside the framework of regulation and imposition by the state, society is more vibrant in Singapore (Koh and Ling 2000).

Conclusion

Guided by the notion of multiple modes of wellbeing, I have constructed a typology of societies based on life priorities. The strength of this method is that it is evidence-based in that each respondent's responses to life priorities are nationally aggregated by factor analysis with varimax rotation and that the combination of two of the three large factors, materialism, post-materialism and public sector dominance, enables me to have eight society types in Asia as summarized in Table 27.3.

The definitions of materialism, post-materialism, and public sector dominance are in other words, quality-of-life-sustaining, quality-of-life-enriching, and quality-of-life-enabling factors. They are somewhat different from those used by Inglehart. However, our use of these concepts are more encompassing of various life priorities and thus more widely and universally applicable. Our deliberations of these concepts are more systematically evidence-based. I have also examined a large body of literature concerning typology of societies, especially in relation to the state. Although my examination was not done systematically and thoroughly for all 27 societies in Asia in this article, it is safe to say that basic validity of my proposed typology is justified.

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The Distribution of Quality of Life in Australia

28

Melissa K. Weinberg and Robert A. Cummins

Overview

By many global standards of wellbeing and life quality, Australia performs remarkably well. GDP per capita is about $40,200 which places it 13th in comparison to all other countries (International Monetary Fund 2011). Australia achieves an overall placing of 2nd on the Human Development Index, a measure that provides a composite ranking based on three fundamental features of human development as life expectancy, years of schooling and education, and Gross National Income per capita. Australia also ranks highly on most of the 11 aspects of Life Quality as assessed by the OECD Better Life Index (2012a), particularly with regard to civic engagement and community participation.

In recent times, Australia also managed to weather the impact of the Global Financial Crisis better than most other economically developed countries. Over the past 5 years it has sustained financial growth whilst maintaining unemployment at about 5.6 % (Australian Bureau of Statistics; ABS 2011a).

Australia is a relatively young country. First colonized by Britain in 1788, the population has now grown to over 22 million, many of whom are migrants or the progeny thereof. The majority of the Australian population resides on the east coast of the country, such that the states of New South Wales, Victoria and Queensland are home to more than 75 % of Australians (ABS 2012a). Largely as a result of the substantial immigration, almost 20 % of Australians speak a language other than English at home (ABS 2011a), though English is the only official language. Further, despite substantial immigration, the population grew by only 1.6 % from 2011 to 2012 (ABS 2012a). This value considers the population growth by nature (number of births minus deaths) as well as by immigration and is indicative of an overall ageing population.

In terms of longevity, a baby boy born in Australia in 2010 could be expected to live for 79.5 years, with a baby girl's life expectancy at 84 years (ABS 2012b). Notably, these figures represent the quantity of life without consideration for its quality. According to the Australian Institute for Health and Welfare (AIHW 2009), these life expectancy data place Australia among the top 3 (for females) or 4 (males) countries in the world. However, these figures are considerably lower for Indigenous Australians, with Aboriginal or Torres Strait Islander males at 67.2 years, and females at 72.9 years. These lower life expectancy rates reflect the higher incidence of health concerns within this group together with a higher infant mortality rate (ABS 2012b). They are indicative of specific disadvantage within the Indigenous community.

M.K. Weinberg (✉) • R.A. Cummins
School of Psychology, Deakin University, Melbourne, VIC 3125, Australia
e-mail: melissa.weinberg@deakin.edu.au; robert.cummins@deakin.edu.au

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The Australian Indigenous Community

Indigenous Australians are acknowledged as the earliest inhabitants of the Australian continent, whose traditional culture and lifestyle has endured despite the British influence of Western culture. Indigenous Australians now comprise just 2.5 % of the Australian population, yet they remain a very disadvantaged subgroup. The 2008 National Aboriginal and Torres Strait Islander Social Survey reported that just one in five Indigenous Australians had completed year 12 or equivalent, and the subsequent unemployment rate in the Indigenous community was as high as 16.5 %. They report higher rates of psychological distress than non-Indigenous Australians, and are more likely to self-report their health as being 'fair/poor' as opposed to 'excellent' or 'very good' (ABS 2008). Despite these disadvantages, the objective circumstances of the Indigenous community have improved over the past decade, driven by the increased attention towards achieving better outcomes for this group.

Key Resources – Social Support and Income Distribution

Amongst the general Australian population, almost half of all citizens (48.7 %) are married, and the divorce rate has remained relatively stable over the past 5 years, with a crude divorce rate in 2011 of 2.2 divorces per 1,000 people (ABS 2011b). Partly as a result of the divorce rate, single-parent families comprise 15.9 % of all families in Australia. A large proportion of such families have both low income and low wealth, as defined by the ABS Survey of Income and Housing (2003–2004). Further, about one quarter of Australians live alone, a figure that is projected to increase in coming years as a by-product of the aging population (ABS 2010a).

Though the average Australian earns more income relative to the citizens of most other OECD nations (OECD 2012b) the distribution of income within Australia is negatively skewed. Income inequality is represented by the Gini coefficient, which provides an indication of the degree of income inequality between 0 (perfect income equality) and 1 (perfect income inequality). Australia's Gini coefficient rose from 0.30 in 1997–98 to .33 in 2009, an increase of almost 10 % (OECD 2012b). Thus, the national distribution of income is gradually shifting to the richest people and away from the poorest (ABS 2008). In current terms, the 'richest' top 20 % of the population earns five times more than the bottom 20 %. The highest mean incomes of Australian residents are reported by people living in the Australian Capital Territory (ACT), with a reported average income 27 % above the national average. This likely reflects the greater proportion of employed people and the high-earning political/government environment in which they are likely to be employed by virtue of them living in and around the nation's capital.

Crime Rates and Levels of Trust in Australia

One of the key features of Australia's wellbeing is prominence in terms of civic engagement and community participation, as identified by the OECD Better Life Index (2012a). These factors indicate high social capital at the community level (Putnam 2000) and reflect a well-functioning society that embodies values of trust and mutual cooperation between citizens. This conclusion is reinforced by comparably low levels of corruption and crime. Moreover the crime victimization rate is reducing, with the rate since 2010 lower than for previous years. Despite this, in 2010 an estimated 16.4 % of Australians were victims of an actual or attempted break-in and/or physical or threatened violence (ABS 2012c). Nevertheless, the General Social Survey (ABS 2010b) found that about half of respondents (54 %) felt that 'most people' could be trusted, and they were even more likely to trust their doctor (89 %) and local police (75 %). The high level of trust in authorities is a major factor underpinning social stability in this highly multi-cultural society. While it has been reported that 20 % of Australians report having experienced race-hate talk (Dunn and

Nelson 2008), the 2010 General Social Survey revealed that 80 % of Australian adults endorsed the statement "It is a good thing for a society to be made up of people from different cultures".

All of these factors contribute to the generally high life quality in Australia. A different measure of life quality is provided by subjective measures of wellbeing, and here Australians also rank highly. Wellbeing described in this way refers to subjective perceptions that individuals make about the quality of their life. There are many different ways to assess subjective life quality, but the most important and global measure is Subjective Wellbeing (SWB).

Measuring Subjective Wellbeing

The first systematic measures of SWB in Australia were made by Headey et al. (1984) and Headey and Wearing (1989). Members of their Victorian Quality of Life Panel were interviewed five times between 1981 and 1989. Their findings gave rise to the 'dynamic equilibrium model' to account for their findings that SWB is relatively stable but can shift in response to strong life events. However, this model has been criticized for failing to adequately account for how equilibrium is restored (see Cummins et al. 2014). A more comprehensive account of SWB is provided by Homeostatic Theory (Cummins 2010). This theory extends the set-point notion of SWB and explicitly describes the mechanisms that work to regulate SWB. The Homeostatic theory of SWB is discussed in more detail in Chap. 10. In order to measure national changes in SWB, two Australian surveys were established in 2001 and continue to this day. These are the Household, Income and Labour Dynamics in Australia (HILDA 2012) Survey and the Australian Unity Wellbeing Index (AUWBI 2012).

The HILDA Survey

The HILDA survey is a government-funded initiative that began its initial wave panel by surveying almost 20,000 adults in over 7,500 households. It is longitudinal in design, so panel members are followed up in subsequent waves. The most recent release from HILDA reported on the 11th wave of data collection and was released in December 2012. The HILDA dataset mainly focuses on economic wellbeing, but has also included an item assessing subjective wellbeing in the form of general life satisfaction. In comparison, the Australian Unity Wellbeing Index focuses specifically on Subjective Wellbeing, and its findings will be central to the remainder of this chapter. Where appropriate, findings from the HILDA surveys will be incorporated to support the AUWBI results.

The Australian Unity Wellbeing Index

In 2001, a partnership was established between Australian Unity, a health, finance services and retirement living company, and Deakin University, with the aim of monitoring the wellbeing of the Australian population. Comprising the Personal Wellbeing Index (PWI; International Wellbeing Group 2006) and a similar National Wellbeing Index, the Australian Unity Wellbeing Index has now completed 28 iterations. The first survey was conducted in April 2001 with the most recent in October 2012. A separate, geographically representative random sample of about 2,000 Australians is generated for each survey, bringing the total number of respondents to date to approximately 56,000. For every survey a new report is constructed that updates the wellbeing of the nation. These reports, the statistics and the raw data can be obtained from the Australian Centre of Quality of Life (ACQOL) website at Deakin University (http://www.deakin.edu.au/research/acqol/reports/auwbi.php).

The Personal Wellbeing Index and the National Wellbeing Index

The Personal Wellbeing Index measures Subjective Wellbeing as the average level of satisfaction across seven domains of life as: standard of living, health, achieving in life, personal

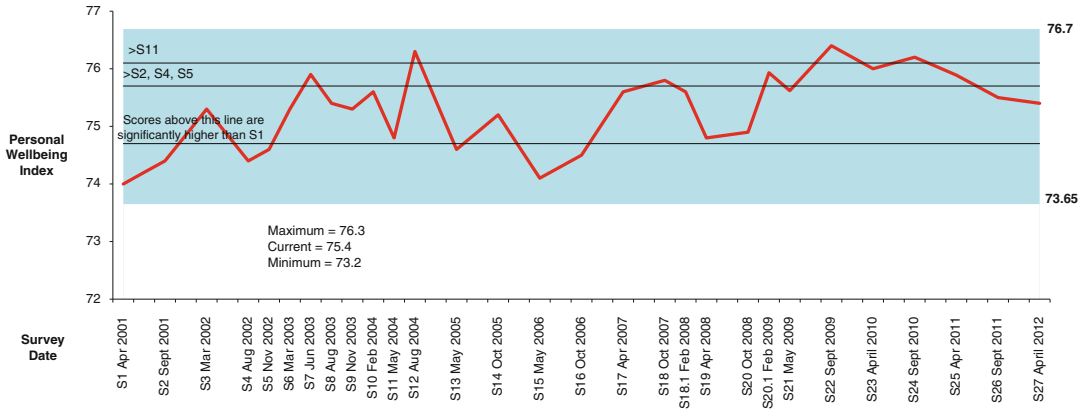

Fig. 28.1 Personal Wellbeing Index over time (reproduced from Cummins et al. 2012)

relationships, feelings of safety, community connectedness and future security. Its construction is purposeful and systematic and follows set rules. It is described in more detail in Chap. 10. The PWI is designed as the first level deconstruction of the single item "How satisfied are you with your life as a whole?" This single question, devised by Andrews and Withey (1976) is the most commonly used measure of SWB. A variant of this question, "All things considered, how satisfied are you with your life?" is used in the HILDA surveys. These questions possess the desirable characteristics of being both highly personal and abstract, which are ideal as they are argued to form the essence of the SWB construct (Cummins 2010).

The National Wellbeing Index has similar properties to the PWI. It is calculated as the average level of satisfaction across six domains of national life: the economy, the environment, social conditions, governance, business and national security. These domains of life contribute to the prediction of general satisfaction with life in Australia.

Both the PWI and NWI have 11-point end-defined scales, such that respondents rate each item on a 0–10 scale (Jones and Thurstone 1955) traditionally anchored by 'completely dissatisfied' and 'completely satisfied'. In recent years, the anchors have been amended to reflect a unipolar, rather than a bipolar scale. Accordingly, the scale is presently anchored by 'not satisfied at all' to 'completely satisfied'. The decision to switch to a unipolar scale reflects modern theoretical development and is supported by the results of a study revealing that scores evaluating life satisfaction and dissatisfaction are reciprocal when a unipolar, but not bipolar, scale is used (Davern and Cummins 2006). The scores for each domain are combined to yield an overall score for the Index, which is adjusted to have a range of 0–100. The formula for this conversion is provided in the PWI manual.

The most remarkable feature of the mean scores derived from 28 surveys is their stability. As shown in Fig. 28.1, the mean PWI values from surveys 1–27 lie within a range spanning just 3 percentage points, from 73.7 to 76.7. This stability supports the idea of Subjective Wellbeing Homeostasis (discussed in Chap. 10) that will guide the interpretation of the results reported herein.

The Survey Methodology of the AUWBI

Each Australian Unity Wellbeing Index survey involves a fresh, geographically representative national sample of people aged 18 years or over and who are fluent in English. Surveys are conducted over the telephone in a 7–10 min interview and the duration of data collection typically spans a 2-week period. In order to achieve an even age distribution, interviewers ask to speak to the person in the household who

had the most recent birthday and is at least 18 years old. This method also achieves a representative gender split by stratifying the recruitment according to Australian Bureau of Statistics (ABS) data.

On average, about 4,500–5,000 calls connect with an eligible respondent until 2,000 agree to complete the survey. This gives an effective response rate of about 42 % (completes/refusals and completes). This rather low rate reflects, in part, the methodological constraint that an even geographic and gender split is maintained at all times during the survey. Thus, some willing respondents are eliminated due to their gender being different from the one required at the time a caller makes contact. The reason behind this strict procedure is to ensure that if a major event occurs during the data collection period, its impact can be analyzed using representative pre- and post-event data.

Data Treatment

The data are screened prior to analysis. This process involves checking for numbers outside the possible range of scores and also identifying respondents who have consistently scored at the top (10) or bottom (0) of all the PWI domains. These respondents are eliminated prior to further analysis, as they either represent a response set or an acquiescent response style typical of people who do not understand the questions (Rosen et al. 1974; Sigelman et al. 1981; Sudman and Bradburn 1974). The proportion of respondents eliminated in this manner is about 1 %. While their inclusion would have little impact in analyses of the whole sample, in breakdown samples where the number of respondents per cell become much smaller, the impact of such aberrant responses can be considerable.

Unlike gender, the age composition of the sample is not actively managed. However, a breakdown similar to that of the national population as determined by the ABS is normally achieved (Cummins et al. 2003, Report 5.0).

Presentation of Results and Type of Analysis

In the presentation of results to follow, the statistically significant data trends have been established by analysis of variance and post-hoc analyses conducted using Tukey's HSD test. In situations where the assumption of homogeneity of variance was not met, Dunnett's T3 post-hoc test was applied to allow for such violation. Where t-tests were used, the SPSS option for significance when equality of variance cannot be assumed was used. Bonferroni corrections to a criterion of $p < .01$ are also applied where appropriate. More detailed analyses are presented in the survey reports and are freely accessible via the ACQOL website. As already explained, all satisfaction values are expressed as the strength of satisfaction on a scale that ranges from 0 to 100 % with the formula for conversion available in the PWI administration manual.

The changes in the PWI over the 27 surveys to April 2012 are shown in Fig. 28.1. The temporal spacing between surveys is shown along the horizontal axis and generally involves intervals of either 3 or 6 months.

The first survey was conducted in April 2001 and the most obvious trend in Fig. 28.1 is the rise in SWB at the 2nd survey, following September 11. This rise took the population SWB to a significantly higher level than it had been when recorded at the first survey, and this higher level is generally maintained. In maintaining this determination, a lot of responsibility rests on the first measure being a reliable indicator of the pre-September 11 population wellbeing. However, several lines of enquiry have led us to regard this single estimation as being reliable. These are as follows:

1. The results have been carefully checked
2. Not all of the domains that comprise the PWI have changed over the surveys (Cummins et al. 2008). If this rise was caused by some general sampling phenomenon or method effect then all of the domains would be expected to rise together.

3. There is no methodological reason to expect the data from Survey 1 to be different from the next two surveys. The data were collected by the same call center using the same operating procedures and verbal instructions to the respondents.

One plausible reason for this rise, if it is correctly attributed to September 11, is the sense of threat experienced by the Australian population. Even though very few Australians were directly affected by the event, it represented an attack on a strong ally for Australia – the United States of America. The two countries have a long and stable relationship of defense agreements and trade. For example, the USA-Australia alliance under the ANZUS Treaty (Department of External Affairs 1951) binds both countries to recognize that an armed attack in the Pacific area on either one of them endangers the peace and safety of the other. A second alliance, in the form of the Australia-United States Free Trade Agreement (Australian Government – Department of Foreign Affairs and Trade 2005), ensures a preferential trade agreement between the two countries.

While the details of such agreements are of little concern to the majority of the population, the general view of America as a powerful ally is widely held. Thus, the attack on the World Trade Centre had a far greater impact on the public psyche than an equivalent attack in Russia or China. If it happened in America then, quite conceivably, it could also happen in Australia. Moreover, to reinforce the impact of the event on the public, Australian television played the terrible images of planes hitting the Twin Towers over and over again. The print media and radio were also full of speculations about motives and future scenarios. So, a new idea took shape – that terrorist attacks on such a scale were not just conceivable, but real. People had a new source of fear.

When groups are threatened from the outside, they tend to become internally stronger. They engage in behavior conducive to the creation of bonding social capital (Putnam 2000). This concept was defined originally by Bourdieu (1986) as 'the aggregate of the actual or potential resources which are linked to – membership in a group – which provides each of its members with the backing of the collectively owned capital' (p. 249). This describes the intuitively appealing idea that social networks provide their members with access to the group's shared social and material resources. Thus, social capital is enhanced by circumstances where cooperative relationships are likely to facilitate solutions to collective problems (e.g. Durlauf 2002; Requena 2003). Through this agency, terrorist threats to collective wellbeing may engender bonding social capital, which in turn promotes higher SWB (see Groot et al. 2007).

The increase in wellbeing following threatening events was further apparent following natural disasters in the states of Victoria and Queensland in 2009 and 2011. In the final week of January 2009, the state of Victoria experienced a severe heat wave, with three consecutive days recording temperatures above 43 °C. On Saturday February 7 2009, the temperature again reached the low 40s and was accompanied by strong winds. These weather conditions, coupled with several underlying causes for the origins of the fires, resulted in one of Australia's worst natural disasters. One hundred and seventy-three lives were lost, and thousands of homes and buildings were destroyed.

In Queensland, a series of floods devastated much of the state over the period of December 2010 through January 2011. The flooding began with heavy rainfalls over South East Queensland, resulting from unusual tropical cyclone activity in the Coral Sea. By January 2011, a number of towns were declared as disaster zones, and the areas of Condamine, Theodore, and Bundaberg were completely evacuated. Over 200,000 people had been affected by the floods. The rains and flash floods continued through January, with more towns evacuated as the devastation spread through more of the state. Tropical cyclone Yasi in early February hit the areas of Mission Beach, Cardwell, Tully, Tully Heads, Innisfail and Ingham, and necessitated the evacuation of hospitals, with significant structural damage occurring to the Cassowary Coast region. Thirty-five people died as a result of flood-related incidents during this period.

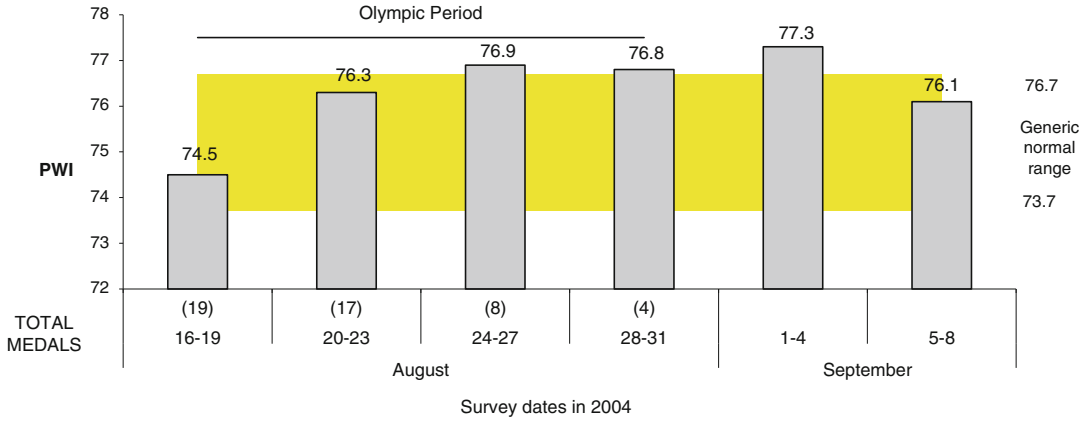

Fig. 28.2 Personal Wellbeing during the 2004 Athens Olympics

Early in 2012, the Australian Unity Wellbeing Index surveyed people who continued to live in the disaster-affected areas (Weinberg and Cummins 2012). Overwhelmingly, residents of the most damaged towns in Victoria and Queensland reported feeling greater satisfaction with their Safety and their Community. Whilst it might seem counter-intuitive for people to report feeling safer following disasters of such magnitude, both of these disasters triggered an outpouring of support and assistance to the affected communities. Moreover, Government initiatives have ensured new systems of early warnings and preventative measures that likely enhance the future safety of residents. This support, combined with the experience of shared trauma and neighborhood cooperation, forged a common bond among residents and likely enhanced their sense of connection to their community. Thus, it could be argued that social capital was enhanced at the community level, culminating in higher scores on these two SWB domains.

However, threatening events are not the only apparent cause of the rise in wellbeing of Australians. Figure 28.1 reveals that one of the highest levels of population wellbeing was attained in August 2004, at the time of the Athens Olympics (Survey 12). This finding has not been replicated in other Olympic years, and is probably unique to the timing of the data collection for that survey. Normally, we collect data sometime after an event, though on this occasion the period of data collection spanned the Olympic period and the results over the days of data collection can be seen in Fig. 28.2.

Australia achieved great success at the Athens Olympic Games, winning a record number of gold medals. After the USA, China and Russia its medal tally ranked fourth. It is evident from Fig. 28.2 that the Personal Wellbeing Index rose during the Olympic period and then slowly decreased shortly afterwards. These patterns are statistically weak ($p = .078$ and $p = .017$ respectively), but achieve significance with a one-tailed test.

Although both threat and enhancement events appear to be related to an increase in wellbeing, the reason for each rise should be different. The reason for the increase in wellbeing in response to threat has already been described in relation to social capital facilitating an adaptive reaction to the threatening event. However, the rise in response to nationally enhancing events has no such adaptive links. Rather, it may be more simply explained in the vicarious pride engendered by being associated with a winning team.

If this interpretation is correct, then there should be a major difference between these two event types, in that the influence of a threat event should be longer lasting. It may be adaptive to maintain a sense of threat for a long period after the event, thereby maintaining alertness to detect

a new source of harm and the resources to deal with it. Enhancement events, on the other hand, may be most adaptive by being transitory. Elevated positive mood inhibits careful information processing (Schwarz 1990; Forgas 2007) and is therefore undesirable as a chronic condition. If this is so, then the euphoria of Olympic success should be soon submerged within the cauldron of current life realities and other local or international sports carnivals (e.g. Football grand finals in September). This is consistent with the trend in Fig. 28.2 showing an apparent return of SWB to lower levels soon after the conclusion of the Athens Games. In contrast, the influence of the threat events has apparently been much longer lasting.

In summary, it appears that both positive and negative events have acted to raise the wellbeing of the Australian population. So, how can the SWB of the population be further characterized? One technique is to examine the internal composition of the PWI to see which domains are the strongest contributors to General Life Satisfaction.

The Domains of the PWI

Consistent with the idea that external threats and national successes affect SWB through social capital, it would be predicted that the domains most influenced by such events would be those concerned with interpersonal relationships. Two of the seven PWI domains concern connections with other people. One is 'How satisfied are you with your relationships?' and the other is 'How satisfied are you with feeling part of your community'. The general pattern of each of these domains over the period of the 27 surveys to April 2012 generally follows that of the overall PWI, though these domains only share 53 % of variance with each-other. So, there is evidence of independent influence from each source.

In support of the influence of Community and Relationship satisfaction to subjective wellbeing, the Department of Planning and Community Development released a report in 2010 highlighting the indicators of 'strong' communities in Victoria, a state in the south-east of Australia (DCPD 2011). Within this report, they focused on factors that are characteristic of strong communities, using a social capital framework. The framework implicated close 'bonding' social relationships between family members and friends, more broad 'bridging' networks generated by engagement with the community, and governance networks that connect the communities to policy-makers as being important for positive community and individual outcomes. The report claims that the benefits of 'bonding' networks involve the acquisition of material goods, contacts and emotional support that can improve health and wellbeing at the individual level. 'Bridging' connections are important at the community level, as they help to generate norms of positive social practices that facilitate community growth and participation (DCPD 2011). The important of governance networks lies in its ability to facilitate participation and action at a level more external than the community.

The report further highlights the key roles played by networks and participation in community activities for individual and community wellbeing. For individuals, the range of positive outcomes includes improved health, success at school and positive aging. For communities, benefits range from sharing information, the establishment of appropriate and positive social norms to reducing crime and increasing feelings of safety (DCPD 2011).

Thus, in addition to Community connectedness and Relationships, satisfaction with Safety should also follow the pattern of the PWI fairly closely over time. Indeed, survey mean scores for the domain of Safety correlate at $r=0.66$ ($p<.01$) with the PWI. Another domain theoretically linked to Safety is satisfaction with Future Security which also correlates very highly ($r=0.80$, $p<.001$) with the PWI, yet it retains its independent contribution, and is in fact more strongly predictive of overall life satisfaction in the Australian population than Safety.

Another domain that follows the PWI very closely is satisfaction with Standard of Living. The trend for Standard of Living in comparison to PWI scores over the 27 surveys to April 2012 is shown in Fig. 28.3.

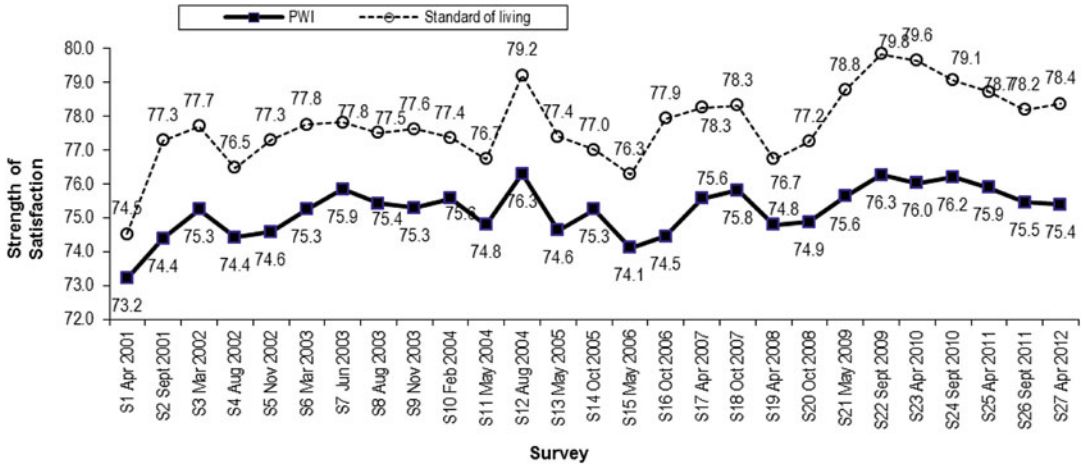

Fig. 28.3 Satisfaction with Standard of Living and the PWI (reproduced from Cummins et al. 2012)

Satisfaction with this domain rose immediately following S1. This rise has been sustained despite various economic setbacks, such as a sharp rise in petrol prices just prior to Survey 14 and a rise in interest rates just prior to Survey 15. The reason for the sudden increase in this domain and its continued elevation is uncertain. While the Australian economy had remained strong throughout this entire period, with low interest rates and low unemployment, these factors cannot explain the strong initial rise following September 11.

The remaining two domains, Satisfaction with Health and Achieving, do not follow the pattern of the overall PWI to a reliable degree. Satisfaction with Health remains fairly stable over the period of the surveys, only correlating with the PWI at $r=0.44$ ($p<.05$). An even lower correlation is reported between Achieving in Life and the PWI ($r=0.37$, n.s.). However, the changes in this domain have been contaminated by a change in wording of the item. From Survey 1 to Survey 10, the question asked "How satisfied are you with *what you achieve in life*?" and the mean scores barely changed over these surveys. Then, in Survey 11, the wording changed to "How satisfied are you with *what you are currently achieving in life?*" This change was made to ensure that the question referred to the present rather than to a perception of past achievements.

The effect of this word change has been to significantly reduce the score for this domain. The average value over Survey 1 to Survey 10 is 74.42 ($SD=0.56$). The average value over Survey 11 to Survey 27 is 73.11 ($SD=0.64$). So, it appears to remain a highly reliable measure that has stabilized about 1.3 points below the original and no different from Survey 1.

Based on the patterns following the PWI, it is evident that satisfaction with Health and Achieving in Life are influenced little by world events. This is interesting for a couple of reasons. The first is that is adds validity to the other changes that have been recorded. It is clear that the domains within the PWI have not simply fluctuated as a block, as would be expected if some general method effect was responsible for these changes.

Secondly, the lack of significant change in health satisfaction presumably indicates that this domain is under tighter control than the domains that have changed. Maybe when faced with an external threat, it is adaptive to have a heightened sense of one's physical powers, and this may cause satisfaction with Health to be maintained. Alternatively, it could be argued that the domain of Health satisfaction is particularly sensitive to individual circumstances, and people generally have a fairly good idea as to their health status as it is easier to monitor. It is therefore less likely to be affected by more broad, worldly events. A further explanation could be that perceived health may be under

more chronic threat than the other domains. Almost everybody has some source of health concern and, thus, the homeostatic devices that maintain health satisfaction are already working overtime, such that another source of external threat has little additional impact. Further research is needed to address these speculations, but the stability of Satisfaction with Health is supported by data from the HILDA surveys in which scores on this domain were identified as some of the most persistent (HILDA 2012).

Another way to consider the SWB distribution of the Australian population is to explore the demographic circumstances that are most associated with higher or lower wellbeing. The next part of this chapter will consider the effects of gender, age, household income, marital status, work status, and household composition on subjective wellbeing. These findings are based on cumulative results from the 27 surveys of the Australian Unity Wellbeing Index to April 2012.

Demographic Characteristics and Subjective Wellbeing in Australia

Gender and Wellbeing

In general, Australian females report higher wellbeing than males, and these findings are corroborated by the HILDA surveys. Over the course of the 11 years of surveys, this difference was consistently found between 2001–2005. Between 2006–2010 the gender difference dissipated, and at one point even reversed, with males reporting higher wellbeing than females in April 2008. More recently, female wellbeing has again risen above that of males, a steady trend over the 2011–2012 period. Figure 28.4 reveals the patterns of male and female wellbeing from 2001 to 2012.

Although the reasons behind this trend for females to generally report higher wellbeing than males is not known, examination of the domains of the PWI reveals that females generally report higher satisfaction with the two interpersonal domains – relationships and community connectedness. The portion of Fig. 28.4 that reveals little differences in the PWI scores between males and females (e.g. Surveys 13 through 22) coincides with surveys where non-significant differences were evidenced on these domains. Social relationships and community connectedness are key to wellbeing and resilience. Social relationships provide a resource that can help to facilitate the management of SWB by providing emotional support. Typically, females are thought to be more astute at maintaining supportive social networks which might explain their generally higher wellbeing evidenced throughout the AUWBI surveys.

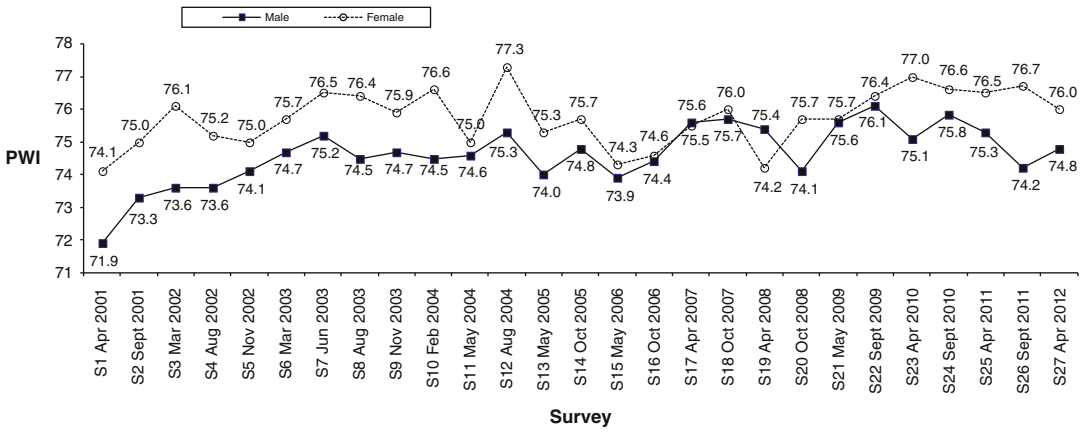

Fig. 28.4 Gender and the Personal Wellbeing Index over time (reproduced from Cummins et al. 2012)

Age and Wellbeing

Older Australians report the highest wellbeing, following a decline in middle age. Again, this finding is consistent with the subjective wellbeing for older people recorded in the HILDA surveys, with their 65+ age group reporting the highest overall life satisfaction (HILDA 2012). Despite ailing health resulting in lower satisfaction with this domain, older people report greater satisfaction with other areas of their lives and so their overall wellbeing goes up accordingly. This is good news for Australians, with the most recent data from the Australian Bureau of Statistics (ABS 2012d) revealing that people aged 65 and over now account for 14 % of the population. Further, the ABS report that over half of this older population are married and another quarter are widowed. Accordingly, the majority of Australians manage to avoid the decreased wellbeing that can accompany a failed marriage or never having married. The specific impact of marital status on wellbeing will be considered shortly.

Income and Wellbeing

Subjective wellbeing increases with increasing income, but this relationship plateaus after a gross household income of about AU $100,000 is achieved. So, once enough money is earned to cover basic needs and finances, subjective wellbeing does not continue to rise with increased income. This relationship between income and wellbeing supports the idea that the power of money in relation to wellbeing is that it can be used as a valuable resource to 'make life easier' by staying away negative occurrences. For example, a person who has sufficient money can pay somebody to do a task that they would rather not do themselves, thereby offsetting the negative mood that would accompany that activity and leaving them with more time to do the things that they enjoy.

Marital Status and Wellbeing

The power of relationships to sustain subjective wellbeing is difficult to contend. Australians who are married report the highest levels of subjective wellbeing, followed closely by those in de facto relationships. By contrast, the dissolution of a marriage is a difficult time, with separated people reporting the lowest wellbeing. There are two obvious advantages to being married that explain the higher wellbeing of this group. First and foremost, married people have a close and intimate relationship with another person, fulfilling their basic need for comfort and company. Second, married people frequently benefit from having two incomes at their disposal.

Separated people in Australia report lower wellbeing than all other marital groups, including widows. Although the death of a partner is a traumatic experience, the dissolution of a marriage as experienced by separated people would generally be more recent. Thus, widowed people would have had a chance to adapt to their new situation and their wellbeing recovered.

Work Status and Wellbeing

Most people spend about a third of their lives working, and so work should have a significant impact upon wellbeing. However, there is little difference in SWB between those Australians engaged in full-time work and those engaged in other full-time obligations (e.g. Full-time home duties or full-time study). It is actually those who do not work who form the extremes of the SWB spectrum. On one end of the distribution, those Australians who volunteer full time, or are full-time retired report the highest wellbeing. Whether the act of volunteering makes people happier, or whether happy people tend to volunteer more is not clear, but the impact of volunteering upon SWB can be interpreted through the lens of social capital, mentioned earlier. At the community level, groups with higher social capital are more likely to engage with each other, and contribute proactively to the betterment

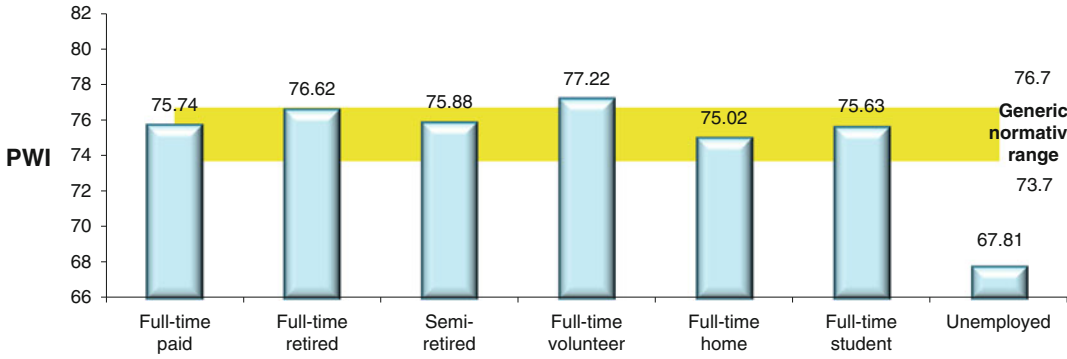

Fig. 28.5 Wellbeing and work status

of the community as a whole. Volunteering for community services is seen as favorable by-product of belonging to a community with high social capital. For Australians who are full time retired, they have likely spent most of their lives working and their higher wellbeing reflects that they have now reached an age where they can enjoy having the time, and probably the money, to do the things that they enjoy in life. By contrast, those who do not work due to unemployment report significantly lower wellbeing, the extent of which is shown in Fig. 28.5.

Clearly, unemployment generally overwhelms homeostatic control, but it is especially challenging for Australian males, whose wellbeing is commonly more dependent upon work status than it is for females. The negative effect of unemployment can be ameliorated by marriage, likely due to one's partner being able to provide a supportive source of emotional comfort as well as a backup income.

Household Composition and Wellbeing

Australians who live with their partner only, report the highest wellbeing in this demographic grouping. By contrast, those who live with their children only report the lowest wellbeing. For these sole parents, their lower wellbeing is likely driven by their lack of social support as well as lower income. Sole parents are likely to have suffered either separation from their partner or widowhood, and coupled with a single income, are greatly challenged in many areas of their lives.

Other Factors Affecting the Wellbeing of Australians

Each survey of the Australian Unity Wellbeing Index has provided a limited scope to explore other areas of interest relating to Subjective Wellbeing. These include, but are not limited to, the impacts of terrorist attacks on the wellbeing of Australians (specifically September 11, the Bali bombings), the impact of national disasters (e.g. The Victorian bushfires and Queensland floods mentioned earlier), the impact of other lifestyle factors (such as alcohol, smoking, gambling, pets) and the impact of more national, political concerns like climate change, home loans, and federal electorate divisions on Subjective Wellbeing.

Recent Findings to Emerge from the Australian Unity Wellbeing Index

In recent years, the AUWBI has explored Internet use, chronic health problems, and the quality and quantity of sleep in relation to SWB. Regarding internet use and wellbeing, the results of Survey 25 of the AUWBI (April 2011; Cummins et al. 2011a) revealed that the 20 % of males who did not use the internet reported lower wellbeing than males who did use the internet. Of these 20 %, a larger proportion than expected was widowed, and so the lower wellbeing of these widowers is more attributable to their lack of companionship than their lack of internet use.

However, if these men were encouraged to use the internet to engage with other people, perhaps their wellbeing could recover.

The 26th AUWBI survey (September 2011; Cummins et al. 2011b) focused on the impact of chronic health conditions on Subjective Wellbeing. About 38 % of the sample reported that they had a chronic health condition that made them visit the doctor on a regular basis. Of these, the majority had medical conditions (70.3 %) followed by injuries (16.4 %) and psychological conditions (13.3 %). Compared to people with other medical conditions, participants in the survey who had cancer or blood pressure problems reported the highest levels of Subjective Wellbeing, and those with Diabetes reported the lowest. While those with blood pressure problems can likely regulate their condition so that it does not impact upon their everyday lives, most of the participants who reported having Cancer had experienced this condition in the past and were now 'survivors'. Their sense of relief at having overcome a potentially life-threatening illness was probably the reason for their elevated wellbeing.

Finally, and most recently, the focus of the 27th AUWBI survey (April 2012) was Sleep. This survey exposed the relationship between sleep, dreams and SWB. Participants who reported that they received less than 6 h, or more than 10 h sleep, experienced lower SWB. In addition, people who reported having bad dreams also reported significantly lower SWB than those who only had pleasant dreams. While it was fairly common to remember having bad dreams, SWB only fell below the normal range for people who had bad dreams on a weekly or more frequent basis.

Groups with the Highest and Lowest Wellbeing

In 2007 a special report provided a summary of the groups of Australians with the highest and lowest wellbeing, based on the first 15 surveys of the AUWBI (Report 16.1; Cummins et al. 2007a). This report aimed to consider combinations of the aforementioned demographic characteristics to identify the circumstances of the groups of Australians who are faring best and worst with regard to SWB. While not every combination of demographic variables could be tested due to limitations of cell size, the total number of combinations analyzed was 3,277. The SWB of each of these groups was calculated and screened for meeting the criterion for an extreme score. Extreme group mean scores were initially defined as lying either above 79 points or below 70 points. Both of these values are at least five standard deviations beyond the mean and standard deviation calculated by using survey mean scores as data, thus deeming them 'extreme'.

The report concludes that features common to the groups of people with the highest wellbeing were having a higher household income and being married. The features common to the groups of people with the lowest wellbeing were low income, lack of a partner, and unemployment. These findings further attest to the importance of money and relationships to Subjective Wellbeing.

Following this report, a special report (Cummins et al. 2007b) was commissioned to explore the subjective wellbeing of informal carers. This special survey included over 4,000 carers and they reported the lowest wellbeing score of all groups measured thus far as part of the Index (Mean PWI = 58.5). This is an alarming result, as caring for others is typically believed to be experienced as fulfilling and rewarding. To the contrary, the results show that caring takes a deep toll on the SWB of carers, and drew attention to the need for more support to be directed towards the wellbeing of those caring, not just to those being cared for. Figure 28.6 reveals the wellbeing of carers and considers them in comparison to other groups with low wellbeing.

To further compound the drastic extent of the low SWB scores, the distribution of depression amongst the caring population was also shown to be disproportionately high compared to the general population. This was determined through the completion of the Depression Anxiety Stress Scale (DASS; Lovibond and Lovibond 1995). Based on an average score on the Depression scale of 38.2, and the recommended cut-off

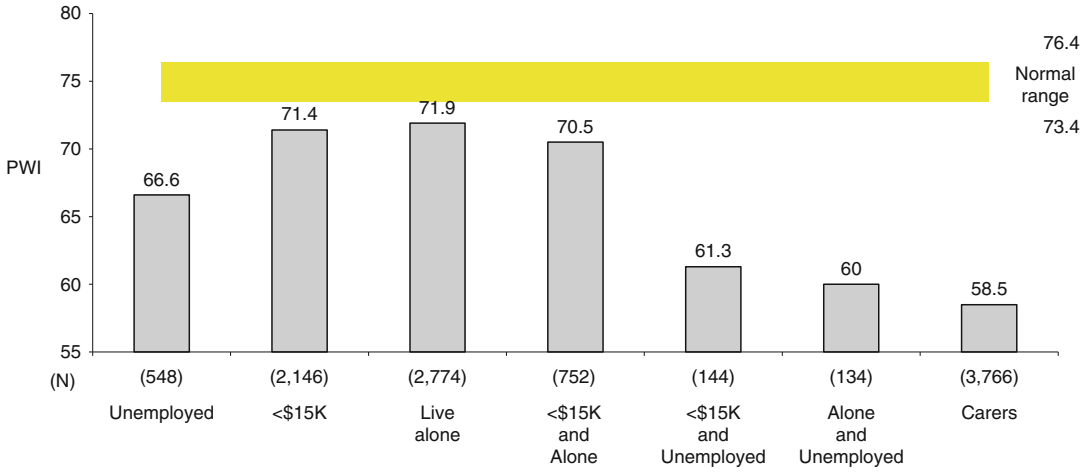

Fig. 28.6 The lowest Wellbeing groups in Australia

points provided by the authors of the scale, the average carer in Australia experiences moderate levels of depression. Further, whilst only about 6.0 % of the general Australian population are estimated to be depressed (Commonwealth Department of Health and Aged Care 2000; National Survey of Mental Health and Wellbeing, ABS 2007), more than half of the carers in the 2007 report scored in the depressed range (Cummins et al. 2007a).

Looking Towards the Future

The Australian Unity Wellbeing Index has now completed 28 iterations. In addition to these standard surveys, special surveys have also been conducted to explore the wellbeing of particular subgroups of Australians. The Household Income and Labour Dynamics in Australia survey has now completed 11 iterations. Both of these datasets comprise data collected both cross-sectionally and longitudinally, providing a valuable source of information that captures the wellbeing of the Australian population. The data collected for each of these surveys are publicly shared and freely accessible online. They form a basis upon which continued measures of Subjective Wellbeing should be founded.

Summary of the Wellbeing of Australians

Australians have a generally high level of wellbeing. Besides their generally fortunate objective circumstances, subjective wellbeing is positive and relatively stable. These effects have been demonstrated using two large samples – The Australian Unity Wellbeing Index and the Household, Income, Labour and Dynamics in Australia survey. Since both of these surveys were initiated, there has been little by way of national events to insinuate change in wellbeing. The economy has remained strong and stable, and no significant terrorist activities or disease epidemics have threatened the population. So, in the face of such constancy it may seem reasonable that some domains (healthy and achieving in life) have not reliably changed. Thus, although the overall level of wellbeing remains fairly stable, certain domains of wellbeing are more resistant to change than others and there are certain subgroups of the population that experience higher wellbeing than others.

Whilst wellbeing indicators in Australia are advanced and contemporary, more work needs to be done to further identify national indicators that are most conducive to higher wellbeing.

This would enable more reliable prediction of the nature and strength of factors that influence population wellbeing in this country.

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An Overview of Quality of Life in Europe

29

Daphne Ahrendt, Hans Dubois, and Erika Mezger

Introduction

With the economic crisis affecting the lives of millions of Europeans, the need to monitor progress with measures that capture more than the wealth of a nation and its economic growth has become greater than ever before. It is now widely accepted that indicators of quality of life complement GDP as a measure of people's welfare and are indeed the appropriate tools for monitoring social progress.

There have been several developments over the past decade that raised the importance of monitoring quality of life in Europe. After some national initiatives and the establishment of the European System of Social Indicators (see below), in 2003, the European Union Agency for the Improvement of Living and Working Conditions in Europe – Eurofound – published a conceptual framework on monitoring quality of life in Europe (Eurofound 2003) and fielded the first EQLS – the European Quality of Life Survey (see Fig. 29.1 for a timeline). Three years later, the European Sustainable Development Strategy cited the wellbeing of present and future generations as its central objective and subsequently, Eurostat commissioned work in 2007 to scope the feasibility of wellbeing indicators at the European level. In 2007, the European Commission launched the 'Beyond GDP' agenda, in which wellbeing features as the central theme. This culminated in the 2009 EC Communication *GDP and Beyond* which provides a road map for new areas of measurement and concludes "*ultimately, national and EU policies will be judged on whether they are successful in delivering [social, economic and environmental] goals and improving the wellbeing of Europeans*." That year also saw the publication of a set of widely-heeded recommendations in the report of the Stiglitz-Sen-Fitoussi Commission, put in place by then French President Nicolas Sarkozy, and headed by Noble prize winning economist Joseph Stiglitz. Most notably, the Commission called for a '*shift in emphasis from measuring economic production to measuring people's wellbeing*' (Stiglitz et al. 2009, p. 12). The Commission concluded that it is now possible to collect meaningful and reliable data on subjective as well as objective wellbeing (European Commission 2009). In September 2010, the European Statistical Services Committee Sponsorship Group on Measuring Progress, Wellbeing and Sustainable Development agreed to work further on the conclusions of the Stiglitz Commission and a year later the measurement of quality of life was earmarked as an area in which progress would be pursued with priority. The official source of European social statistics – SILC – now has a wellbeing module and most

D. Ahrendt (✉) • H. Dubois
Living Conditions and Quality of Life Unit, Eurofound (European Foundation for the Improvement of Living and Working Conditions), Wyattville Road, Loughlinstown, Dublin 18, Ireland
e-mail: dap@eurofound.europa.eu; http://www.eurofound.europa.eu

E. Mezger
Eurofound (European Foundation for the Improvement of Living and Working Conditions), Wyattville Road, Loughlinstown, Dublin 18, Ireland

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Fig. 29.1 Measuring quality of life in the EU: timeline of developments

recently the European Statistical Office published a set of Quality of Life indicators which it will use to measure and monitor social progress across Europe (Eurostat 2013).

Documenting Quality of Life in Europe

Quality of Life is a broad concept that incorporates a number of dimensions of human existence that are essential for a rounded human life that go beyond living conditions. While these are important, people need to be given the opportunity to achieve their desired goals. The opportunities open to people as well as the choices they make are critical: they take place in specific policy and institutional settings, and in the context of an economy, community and society. People's quality of life does not only depend on their personal characteristics and on their family and work life, interactions with others and the quality of society they live in also matter.

This multidimensionality has long been underlined in European research on quality of life. An inventory of initiatives in European countries as part of Eurofound's 2003 conceptual framework on monitoring quality of life for instance identified that the Swedish approach to measuring 'Levels of Living' distinguished 9 dimensions, that 14 domains were included in the German 'system of social accounts', while the UK's Office for National Statistics identified 12 domains in its 'Social Trends' reports. At EU level, 13 distinct life domains were covered by the 'European system of social indicators'. Eurofound has identified 12 domains as its starting point for monitoring quality of life in 2003 (Eurofound 2003).

The EQLS has since become a widely established tool for documenting and analyzing quality of life in the European Union. The survey allows for analysis of the relationship between subjective and objective measures, between reported attitudes and preferences on one side, and resources and living conditions on the other. It has been repeated in 2007 and 2011, making it possible to examine trends over time, particularly changes in views and experiences since the onset of the crisis in Europe.

Over the years, the conceptual framework for monitoring quality of life has remained robust even if the subject matter changes to reflect new developments and insights. The third EQLS includes new questions to expand coverage of issues such as work-life balance and community participation and public services. Furthermore, the survey has adjusted to developments in time, with for example an increased importance of on-line activity within several of the relatively stable general dimensions. The survey has also learned from past findings. For example, the second EQLS showed that people turn to friends and family rather than to service providers when in need of moderate amounts of money. So, when investigating payment problems, besides the

usual arrears in formal bills and debts, the third EQLS now asks for payment problems with regard to loans from friends and relatives (Eurofound 2013f).

Much progress has been made in Europe in developing indicators used to measure the multi-dimensional nature of quality of life. Comparing the various activities across Europe reveals a great degree of synergy. Eurostat's approach is drawn largely from the Stiglitz-Sen-Fitoussi, which identified nine domains of wellbeing. The indicators to measure social progress are now as clear and appealing as GDP and have been integrated into the decision-making process and taken up by public debate at EU and national levels in the European Union.

The subsequent sections of this chapter examine subjective wellbeing in detail and then provide a brief overview of several other dimensions of quality of life covered on the EQLS: (1) living standards and deprivation, (2) work, private life, and work-life balance, (3) home, housing and local environment, (4) public services, healthcare and health and (5) quality of society.

Subjective Wellbeing in Europe

Subjective wellbeing reflects the ways in which people respond and feel about their lives across a wide spectrum of quality of life domains (Eurofound 2012a) which on the third EQLS are captured by 26 items.[1] The Dynamic Model of Wellbeing, developed by the New Economics Foundation(nef), aids to conceptualize these 26 items (Michaelson et al. 2008). This model distinguishes between eudaimonic, hedonic and evaluative wellbeing. The first – 'the sense of meaning and purpose in life, or good psychological functioning' (OECD 2013) is seen as a direct outcome of the interaction between one's external conditions, personal resources and social relations. Particularly when framed as the ability of individuals to meet their psychological needs, eudaimonic wellbeing is theorized to lead to hedonic wellbeing. Individuals' experiences of hedonic wellbeing, and their ability to flourish, can then be expected to determine how they respond to evaluative wellbeing questions (Eurofound 2013d). In addition to three single item indicators (two measures on life satisfaction and happiness and a measure on loneliness), the EQLS wellbeing items have been grouped together into 5 composite indicators of wellbeing (see the blue circles in Fig. 29.2).

Evaluative Wellbeing

Life Satisfaction

Life satisfaction measures people's overall evaluation of life as a whole, after taking all life circumstances into consideration. As explained by Pavot et al. (1991), this type of evaluation involves constructing a "standard" that people perceive as appropriate for themselves and then comparing the circumstances of their life to that standard. As such, the evaluation can be viewed as a person's measure of their success life (Eurofound 2012a).

The EQLS shows that on average, people in the 28 Member States of the European Union rate their overall satisfaction with life at 7.1 on a scale from 1 to 10. Across the EU, life satisfaction ranges from 5.5 in Bulgaria to 8.4 in Denmark which reflects the great variation across countries. This variation has been relatively constant, in 2003, 2007 and 2011 consistently being highest in the Nordic EU Member States and lowest in Bulgaria and Hungary (Fig. 29.3) (Eurofound 2009, 2012a).

In their work for Eurofound, researchers from **nef** (New Economics Foundation) in London and Statistics Austria (Abdallah, Stoll and Eiffe, referenced to as Eurofound 2013d) looked at how life satisfaction levels vary across the clusters of countries in the welfare regime typology developed by Esping-Andersen (1990) and then complemented by Whelan and Maître (2010). The clusters consisting of economically more disadvantaged countries (the post-socialist corporatist and post-socialist liberal clusters of Central Europe, the accession cluster with the

[1] Table 29.4 in the technical annex lists the 26 items.

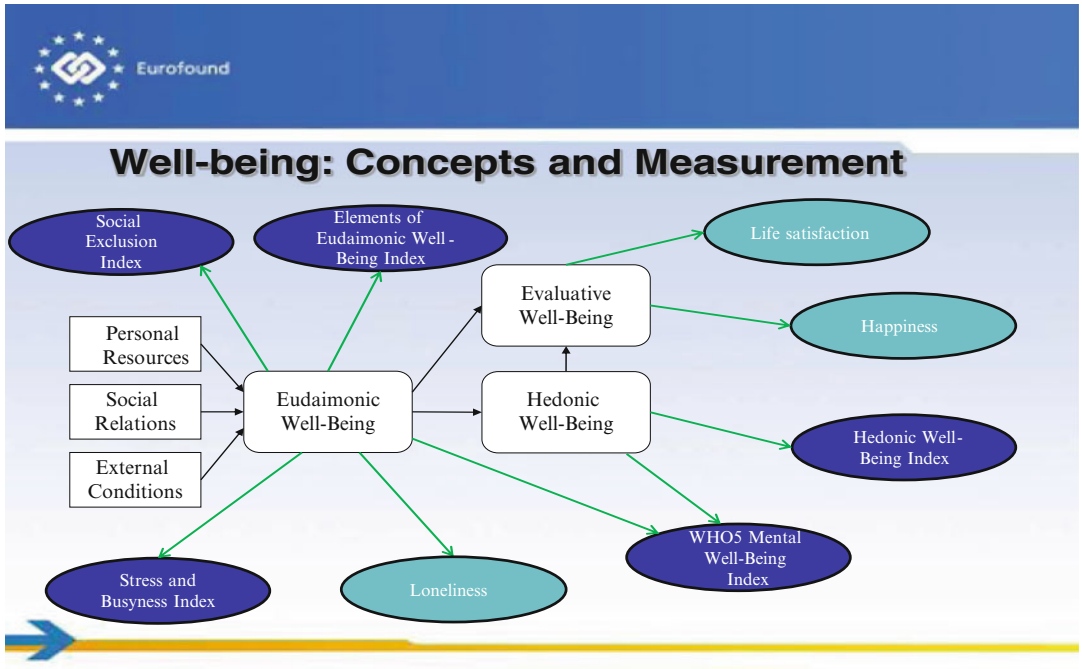

Fig. 29.2 Model for the measurement of subjective wellbeing on the EQLS

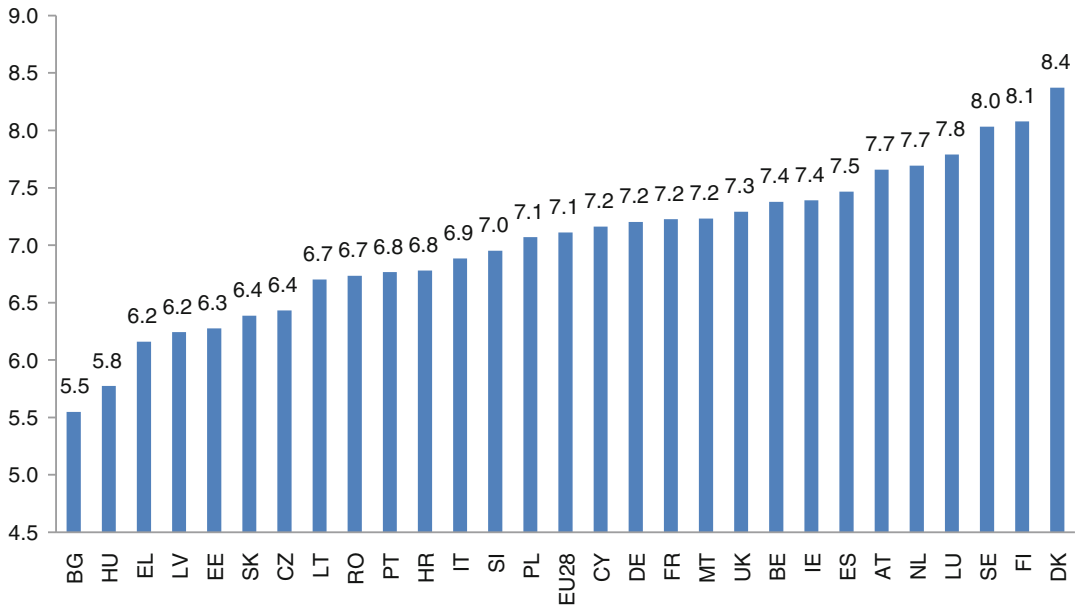

Fig. 29.3 Average life satisfaction in the European Union Member States (scale 1–10) (*Note*: Q30 – All things considered, how satisfied would you say you are with your life these days? Please tell me on a scale of 1 to 10, where 1 means very dissatisfied and 10 means very satisfied). The EQLS questionnaire can be found at http://www.eurofound.europa.eu/surveys/eqls/2011/questranslation.htm

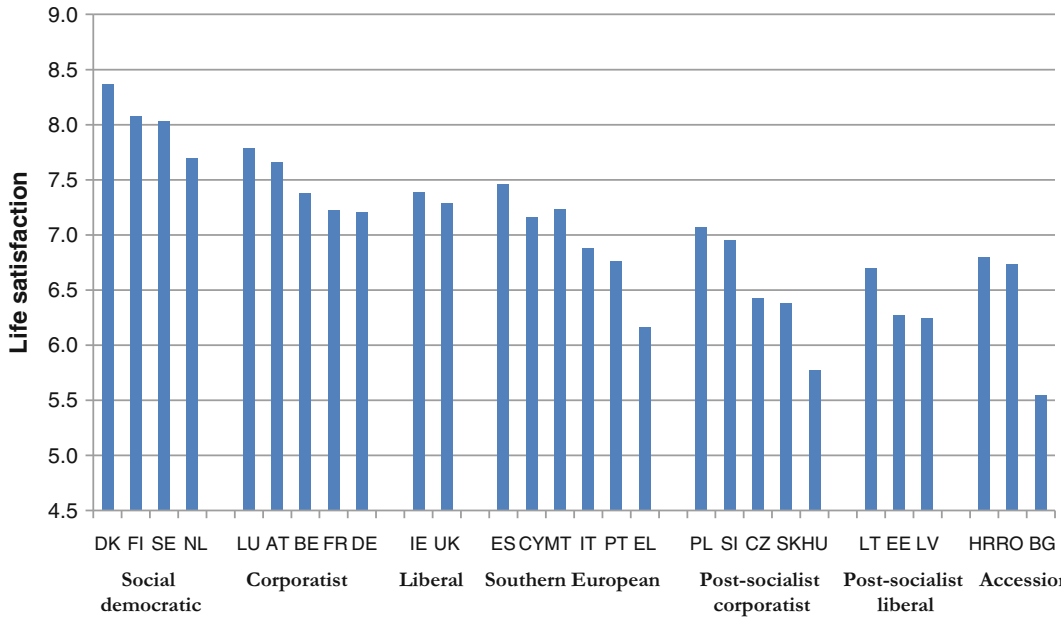

Fig. 29.4 Life satisfaction, by the Welfare Regime Typology country clusters (*Note*: Q30 (for question wording see note to Fig. 29.3))

newest Member States and the Southern European cluster) have lower levels of life satisfaction, whilst the Western European clusters (social democratic, liberal, and corporatist) have higher life satisfaction. The analyses show that while there is plenty of overlap between the social democratic cluster and the two other Western European clusters in terms of GDP per capita, when it comes to life satisfaction however, the social democratic cluster clearly performs better. The only 'non-social democratic cluster' country to have higher life satisfaction than any social democratic country is Luxembourg, which scores above the Netherlands (Fig. 29.4) (Eurofound 2013d).

On the whole, there is not much variation in life satisfaction within clusters. The exceptions are Greece in Southern Europe, Hungary in the post-socialist corporatist cluster and Bulgaria in the accession cluster, which all score much lower. Greece's average life satisfaction of 6.2 contrasts with an average of 7.1 for the rest of Southern Europe overall; Hungary's 5.8 contrasts with an average of 6.9 for its peers in the post-socialist corporatist cluster; whilst Bulgaria appears to have little in common with Romania and Croatia in terms of life satisfaction (5.5 vs. 6.7 and 6.8).

Abdallah and colleagues closely examined the relationship between life satisfaction and GDP per capita. They found that while GDP explains a lot of the variation in life satisfaction, the relationship is not perfect (0.66)[2] in that life satisfaction is sometimes lower than one would expect on the basis of GDP and vice-versa. For instance, as Fig. 29.5 shows, Hungarians on average are richer, per capita, than residents in Poland, and yet Hungary has a 1.3 point lower

[2] This is a Pearson correlation coefficient, which is used throughout the chapter. Only statistically significant correlations are shown. Correlation coefficients can have values between −1 and 1, where a value of 0 indicates no correlation, a value of −1 indicates a perfect inverse relationship, and a value of 1 indicates a perfect direct relationship. Values between 0.1 and 0.3 are considered weak correlation, 0.3 and 0.5 indicate medium, and 0.5 to 1.0 indicate strong correlation. Correlation does not prove causality.

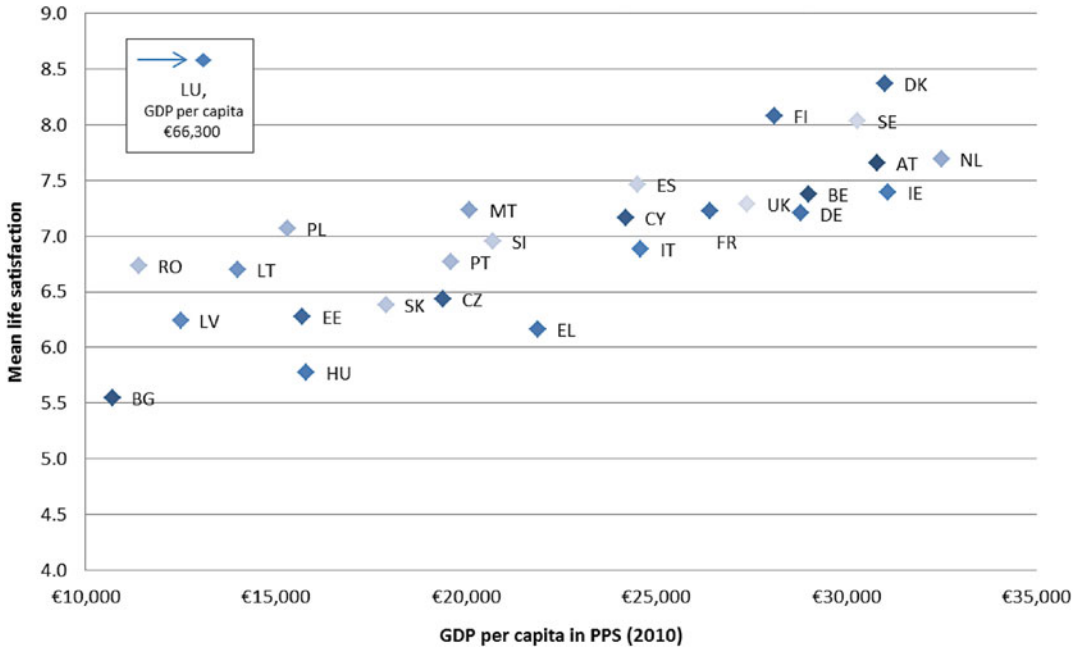

Fig. 29.5 Correlation between life satisfaction and GDP per capita (*Note*: Q30 (for question wording see note to Fig. 29.3). Croatia is not included; *Source*: GDP data from Eurostat)

mean life satisfaction. Romania's per capita GDP is only slightly higher than Bulgaria's, and yet it has a 1.2 point higher life satisfaction. At the other end of the scale, Denmark – consistently the European country with the highest levels of life satisfaction – is not quite the richest – Ireland and the Netherlands both have higher GDP on average. Finland has higher levels of life satisfaction than Austria, despite having lower GDP per capita (Eurofound 2013d, p. 23).

As Fig. 29.6 shows, using median equalized net household income instead of GDP removes some of these discrepancies. For example, median household income in Denmark is the highest in the EU, with the exception of Luxembourg. Meanwhile, despite Poland having a lower GDP per capita than Hungary, it has a higher median income, lifting the mean income there.

The Pearson coefficient (0.84) confirms that median equalized income is more strongly correlated with life satisfaction than GDP is, suggesting that not only the magnitude, but also the spread of income within a country matters for quality of life.

Life Satisfaction Inequalities

In the "GDP and Beyond" communication, the European Commission (2009) stressed the need for more accurate reporting on distribution and inequalities. Concern with social inequalities is also reflected in a range of other European policy strategies, including the Gender Equality Strategy 2010–2015, the Disability Equality Strategy 2010–2020 and in the European Parliament's 2011 resolution on health inequalities. The importance of public action to tackle social inequalities has been highlighted in the context of the 2020 Poverty and Social Exclusion targets. Concern with social inequalities at the European level is further underpinned by a body of standards on equality and human rights (Eurofound 2013b).

To examine wellbeing inequalities, techniques are applied that reveal the distribution of wellbeing within a country in the same way that the GINI coefficient provides useful summary statistics of the inequality of income in a country (Abdallah 2012). The first technique computes the difference in life satisfaction for the 20 % of respondents with the highest life satisfaction and the 20 % with the lowest life satisfaction in each country.

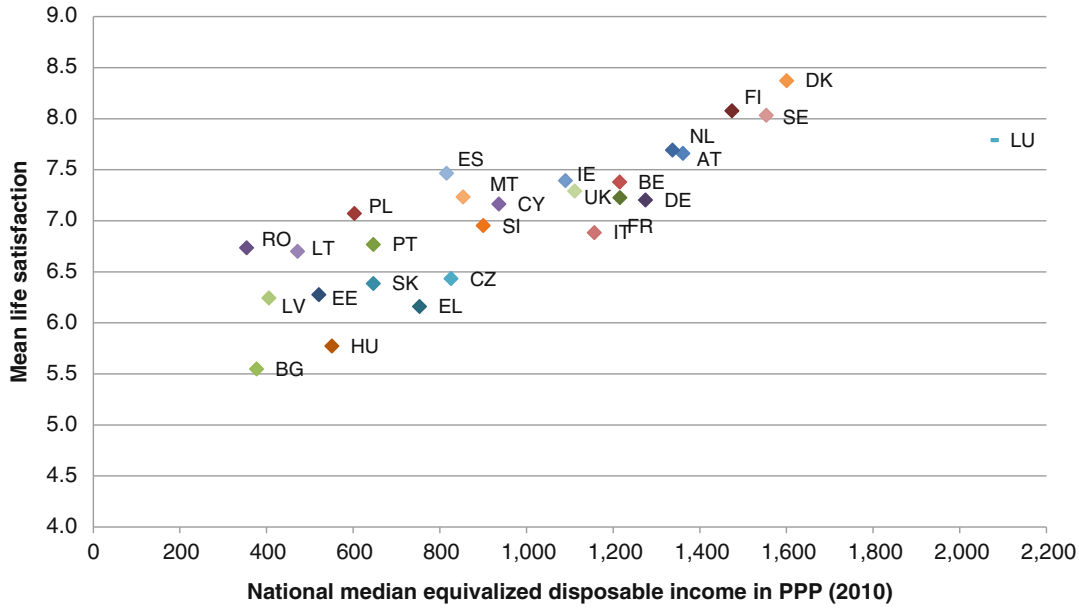

Fig. 29.6 Correlation between life satisfaction and national median equalized net household income (*Note*: Q30 (for question wording see note to Fig. 29.3). Croatia is not included; *Source*: Median equalized household net income data from Eurostat)

Figure 29.7 shows the European Union Member States, ranked according to the quintile difference measure (the blue dot in the middle of each line is the country's mean life satisfaction).

This analysis reveals large wellbeing inequalities within countries. In Romania, the most unequal country in terms of life satisfaction, the difference in life satisfaction on a 1–10 scale between the least satisfied quintile and the most satisfied quintile is 6.6 points with Croatia not far behind (6.5 point difference). However, several Western European countries – the UK, Austria and Germany – also have differences of more than 6 points between the least and most satisfied quintile, and even in Denmark, the country with the highest average life satisfaction scores, there is a difference of 4.9 points.

The second technique used to look at wellbeing inequality is the mean pair distance, which is the average distance in life satisfaction between two individuals chosen at random.[3] This technique also shows the negative correlation between inequality and life satisfaction. Figure 29.8 presents these scores plotted against mean life satisfaction. It shows that Belgium, Italy and Portugal stand out as having relatively equal wellbeing distributions considering their average levels of life satisfaction, whilst Cyprus, the UK and Austria all display relatively unequal wellbeing distributions despite their levels of life satisfaction being above the EU average (Eurofound 2013d).

The Social Determinants of Life Satisfaction in Europe

For European policy-makers it is important to know what conditions determine people's wellbeing and to understand why people might have lower and higher wellbeing than might be expected as tools for identifying priority areas for policy. Wellbeing data provide a rigorous assessment of where to focus efforts in order to secure better outcomes (Wallace and Schmuecker 2012).

When it comes to explaining life satisfaction the general consensus is that "a relatively small number of key structural variables appear to explain a large fraction of differences in

[3] In computational terms, this measure is similar to the GINI coefficient, and one can be converted to the other relatively simply (Abdallah 2012). See the technical annex for methodological details.

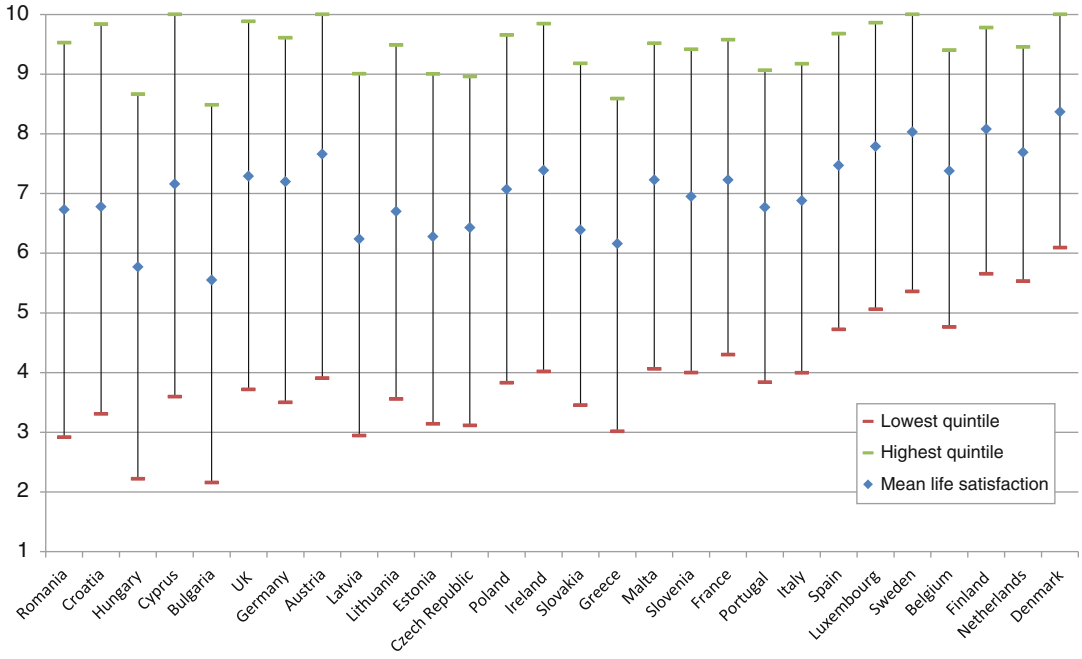

Fig. 29.7 Life satisfaction inequality in the European Union Member States (*Note*: Table 29.5 in the Technical Annex shows the data for each of the indicators of life satisfaction inequality)

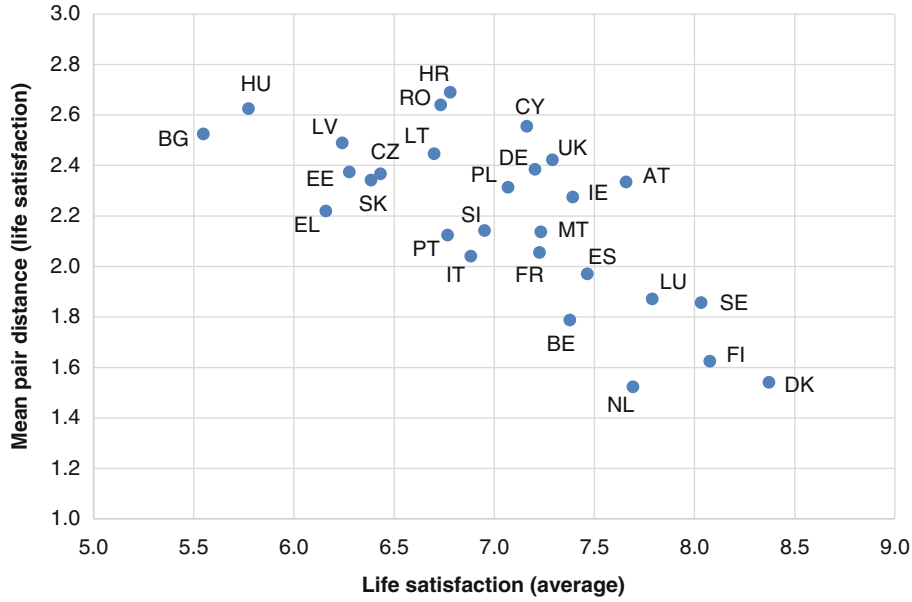

Fig. 29.8 Mean pair distance for life satisfaction versus average life satisfaction in the European Union Member States (*Note*: Table 29.5 in the technical annex shows the data for each of the indicators of life satisfaction inequality)

subjective life evaluations around the world" (Helliwell et al. 2010, p. 321). The EQLS provides a useful source to test these hypotheses, particularly now that data is available to capture Europeans' perceptions during difficult economic times.

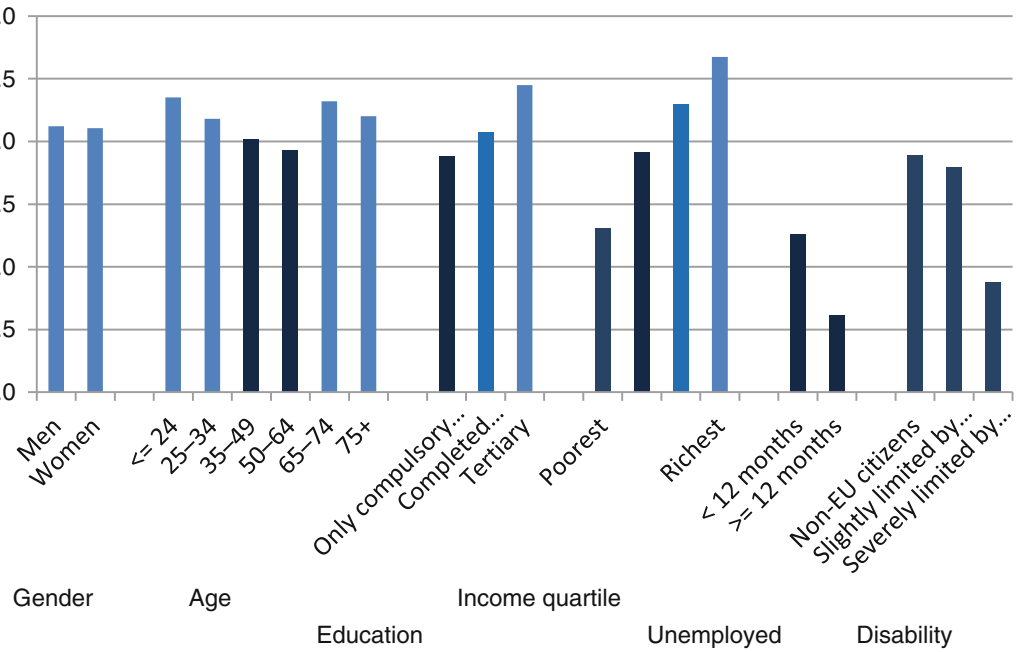

Fig. 29.9 Life satisfaction for selected socio-demographic groups in the European Union (*Note*: Q30 (for question wording see note to Fig. 29.3))

Regression analyses show that, in line with previous research on the key predictors of wellbeing (Stoll et al. 2012; Blanchflower and Oswald 2011; Dolan et al. 2008), the EQLS variables that explain most of the variation in life satisfaction levels are:[4]

1. Material deprivation (Q59a–f)[5]
2. Self-assessed health (Q42)
3. Ability to make ends meet (Q58)
4. Public service satisfaction (Q28a–f)
5. Work-life balance (Q12a–c)

Looking more specifically at socio-demographic factors shows that unemployment and reporting to be limited by a disability or health problems have the greatest independent significant effect on life satisfaction. The mean life satisfaction score for both is 5.9 out of 10. Figure 29.9 below also highlights the plight of Europeans on low incomes, those with lower levels of education as well as that of the middle-aged (between 35 and 64).

The 'U-shaped' relationship between age and wellbeing has been well documented by previous wellbeing evidence (Eurofound 2012a; Stoll et al. 2012; Dolan et al. 2006). However, note must be taken that with older age, factors that reduce wellbeing appear, such as poor health or becoming widowed, which signals a word of caution to policy-makers not to be too quick in accepting the conclusions about subjective wellbeing being U-shaped (Chapple 2010).

Analyses of the EQLS by Abdallah and colleagues show that in some countries these differences are more pronounced than in others (Eurofound 2013d, p. 46). The countries

[4] The regression model explains 32 % of the total variance in life satisfaction. Further details about the regression analyses can be found in Eurofound's Subjective wellbeing report, Annex 3, Table A6 (Eurofound 2013d).

[5] Material deprivation concerns the inability to afford items that are considered essential. On the EQLS, it is measured by asking respondents if their household is able to afford six basic items. This measure captures financial strain better than income as it looks at what people currently cannot afford, no matter what they own and how much they earn. Figure 29.20 lists the exact wording of the items.

Table 29.1 Average EU28 satisfaction levels for different aspects of life (scale 1–10)

	Your family life	Your accommodation	Your present job	Your health	Your social life	Your education	Your present standard of living
EU28 Average	7.8	7.7	7.4	7.3	7.3	7.2	6.9

Note: Q40 Could you please tell me on a scale of 1 to 10 how satisfied you are with each of the following items, where 1 means you are very dissatisfied and 10 means you are very satisfied?

recording large significant differences between particular socio-demographic groups are[6]:

- *Bulgaria* – large wellbeing differences between the top and bottom income quartiles, and between the eldest and the rest.
- *Hungary* – large effect on wellbeing associated with unemployment.
- *Slovakia* – large effect on wellbeing associated with suffering severe limitations from disability or health problem, and large wellbeing inequalities associated with age and income.
- *Cyprus* – large gender inequality in wellbeing, and one of the countries with the highest wellbeing inequality, despite a respectable average.
- *The UK* –large effect on wellbeing associated with disability and low income.

Finally, it is important to note the considerable implications of low life satisfaction: nine out of ten Europeans who rate their life satisfaction point 4 or lower on the scale from 1–10 suffer from at least one of the following:

1. Material deprivation (not being able to afford 2 or more items)
2. Low education (lower secondary-level or less)
3. Being limited by illness/disability
4. Having housing problems (2 or more)
5. Being in arrears (2 or more)
6. Being unemployed
7. Being separated/divorced
8. Having no close support

Noting that two out of three of these Europeans unable to afford at least two items on the material deprivation index – twice the European average (66 % vs. 33 %) – highlights just how much impact material deprivation has on life satisfaction.

Satisfaction with Aspects of Life

When we look more specifically at various aspects of life, we see that in the European Union people are on average most satisfied with their family life (7.8), followed by their accommodation (7.7), and the least satisfied with their standard of living (6.9) (Table 29.1).

Figure 29.10 below shows the extent to which each of the seven specific aspects of life satisfaction predicts overall life satisfaction. As can be seen, satisfaction with the standard of living is the strongest predictor of life satisfaction, followed by social life and family life (Eurofound 2013d).

Happiness

On the EQLS, happiness is measured by asking respondents how happy they are, taking all things together.[7] The word 'happy' would make one think that the question measures hedonic wellbeing. However, as Abdallah et al. point out, because respondents are asked to take all things together, the question is phrased more evaluatively (Eurofound 2013d).

In comparison to overall life satisfaction, the question on happiness is more emotionally driven and less determined by the standard of living (Eurofound 2009). People tend to rate their level of happiness higher than their level of satisfaction with life in general. Yet, the two indicators are highly correlated (0.65) and the country pattern

[6] These are differences between respondents scoring 10 out of 10, and those scoring 1–4 out of 10 on the life satisfaction scale, which were chosen in order to have similarly sized proportions. Around 12 % of respondents rated their life satisfaction as 10 out of 10. Chi-square tests were used to test for significance.

[7] Q41. Taking all things together, on a scale of 1 to 10, how happy would you say you are? Here 1 means you are very unhappy and 10 means you are very happy.

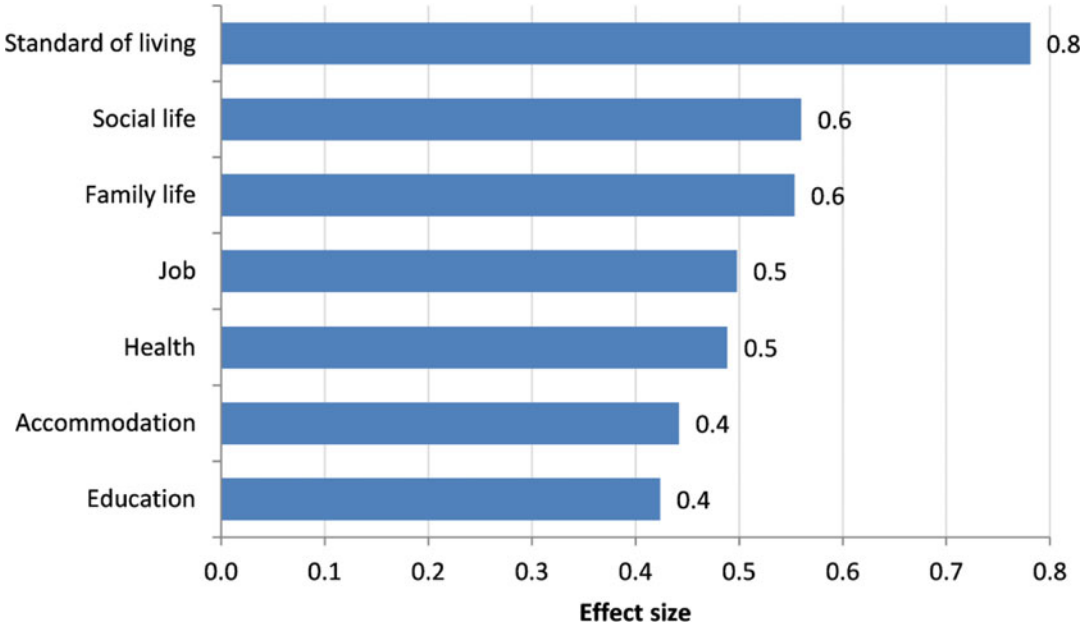

Fig. 29.10 Independent effect sizes of domain satisfaction on life satisfaction (*Note*: See Technical Annex for calculation methods)

for happiness is similar to that noted for life satisfaction. As with life satisfaction, for happiness the highest levels are noted in Denmark (8.2) while it is lowest in Bulgaria (6.3).

Hedonic Wellbeing

Hedonic wellbeing refers to people's day-to-day feelings and moods and includes both positive and negative feelings. Using EQLS questions, two synthetic indicators of what is also referred to as affective wellbeing are available for analysis: the hedonic wellbeing index and the WHO-5 mental wellbeing index.[8] Both indices run from 0 to 100 and the higher the score, the better is a person's hedonic or mental wellbeing.[9]

The Hedonic Wellbeing Index

The index shows that people in Southern Europe tend to have lower hedonic wellbeing than life satisfaction. The only exception within Southern Europe is Portugal, which rises up the rankings for hedonic wellbeing relative to life satisfaction. The results also shows that Bulgaria, Slovakia and the Czech Republic in particular all fare much better in terms of hedonic wellbeing than in terms of life satisfaction. Conversely, France and Luxembourg follow a pattern similar to Southern Europe, whereas Ireland, for instance, is similar to the Northern European countries in terms of hedonic wellbeing. Hedonic wellbeing not only correlates less strongly with life satisfaction, the correlation with GDP is more

[8] The hedonic wellbeing index is constructed of 4 EQLS questions (Q45a–b; Q46a, c); the WHO-5 mental wellbeing index is constructed of 5 EQLS questions (Q45a–e). Q45a and b are thus included on both indicators. Furthermore, the WHO-5 index measures a mix of hedonic and eudaimonic wellbeing. Q45a and b are hedonic; the two vitality items (Q45c–d) fall into both categories; Q45e is eudaimonic.

[9] More details about the composition of the synthetic indicators can be found in the Technical Annex.

than 40 % lower than the correlation between life satisfaction and GDP (Eurofound 2013d, p. 26).[10]

Figure 29.11 shows the average scores on the hedonic wellbeing index in the 28 Member States of the European Union. The mean score for the EU28 as a whole is 70 on the scale of 0–100, with scores ranging from 55 in Greece to 80 Denmark.

The role that health and material deprivation plays is just as applicable to hedonic wellbeing as it is to life satisfaction. People who are able to afford all of the items on the deprivation scale score 74 on the 0–100 hedonic wellbeing scale whereas those able to afford 2 items or less score below 55 on the hedonic wellbeing scale. Europeans who rate their health as very bad score 44 on the hedonic wellbeing scale, which compares starkly to the score of 78 for those who rate their health as very good.

The WHO-5 Mental Wellbeing Index

Quoting the World Happiness Report, "Mental health or psychological wellbeing makes up an integral part of an individual's capacity to lead a fulfilling life, including the ability to study, work or pursue leisure interests and to make day-to-day personal or household decisions about educational, employment, housing or other choices" (Helliwell et al. 2013a, p. 39). As such, mental wellbeing is an important element not only of hedonic wellbeing but of a person's overall quality of life.

The EQLS measures mental wellbeing using the World Health Organisation's mental wellbeing index (WHO-5). The index is based on how often a person experiences the following over the 2 weeks preceding the interview: feeling cheerful and in good spirits, feeling calm and relaxed, feeling active and vigorous, waking-up feeling fresh and rested, feeling that daily life is filled with things of interest to the respondent.

On average, people in the EU have a mean WHO-5 score of 63. However, as already seen for the hedonic wellbeing index, this masks large differences between Member States, with scores ranging from 56 in Latvia to 70 Denmark (Fig. 29.12).

Mental wellbeing varies largely with income, with people in the bottom income quartile having a score on the WHO-5 index that is nearly nine points below that of people in the top income quartile (57 vs. 66). Very large differences are noted depending on a person's health, with those reporting to be in very good health scoring 73 on the index, compared to 34 for those who report to be in very bad health.

Eudaimonic Wellbeing

The third element of subjective wellbeing – eudaimonic wellbeing – focuses on meaning and self-realization. It is seen as a direct outcome of the interaction between one's external conditions, personal resources and social relations. As noted above, three of items on the WHO-5 Index items already measure eudaimonic wellbeing. We focus here on social exclusion and loneliness, which are two other measures of eudaimonic wellbeing.[11]

Perceived Social Exclusion

The EQLS measures social exclusion with four items that capture the sense of connectedness, recognition of one's activities, as well as a sense of barriers to participation in wider society either due to complexity or as an outcome of a person's social standing. These items together form the Social Exclusion Index, with scores running on a scale from 1 to 5. The higher the score, the higher is a person's sense of social exclusion.[12]

In the European Union, people in Denmark (1.6), Germany (1.8), Austria and Sweden

[10] The Pearson correlation is 0.38 for hedonic wellbeing, versus 0.66 for life satisfaction.

[11] The EQLS includes several other measures of eudaimonic, including the stress and busyness index (Q29c and d, Q45b, Q46a) and three questions on optimism, feeling worthwhile and autonomy that loaded together into a single factor (Q29a–c; together these items represent the 'Elements of eudaimonic wellbeing index'. Abdallah et al. analysed these measures in Eurofound's 2013 Subjective wellbeing report (Eurofound 2013d).

[12] More details about the composition of the synthetic indicators can be found in the Technical Annex.

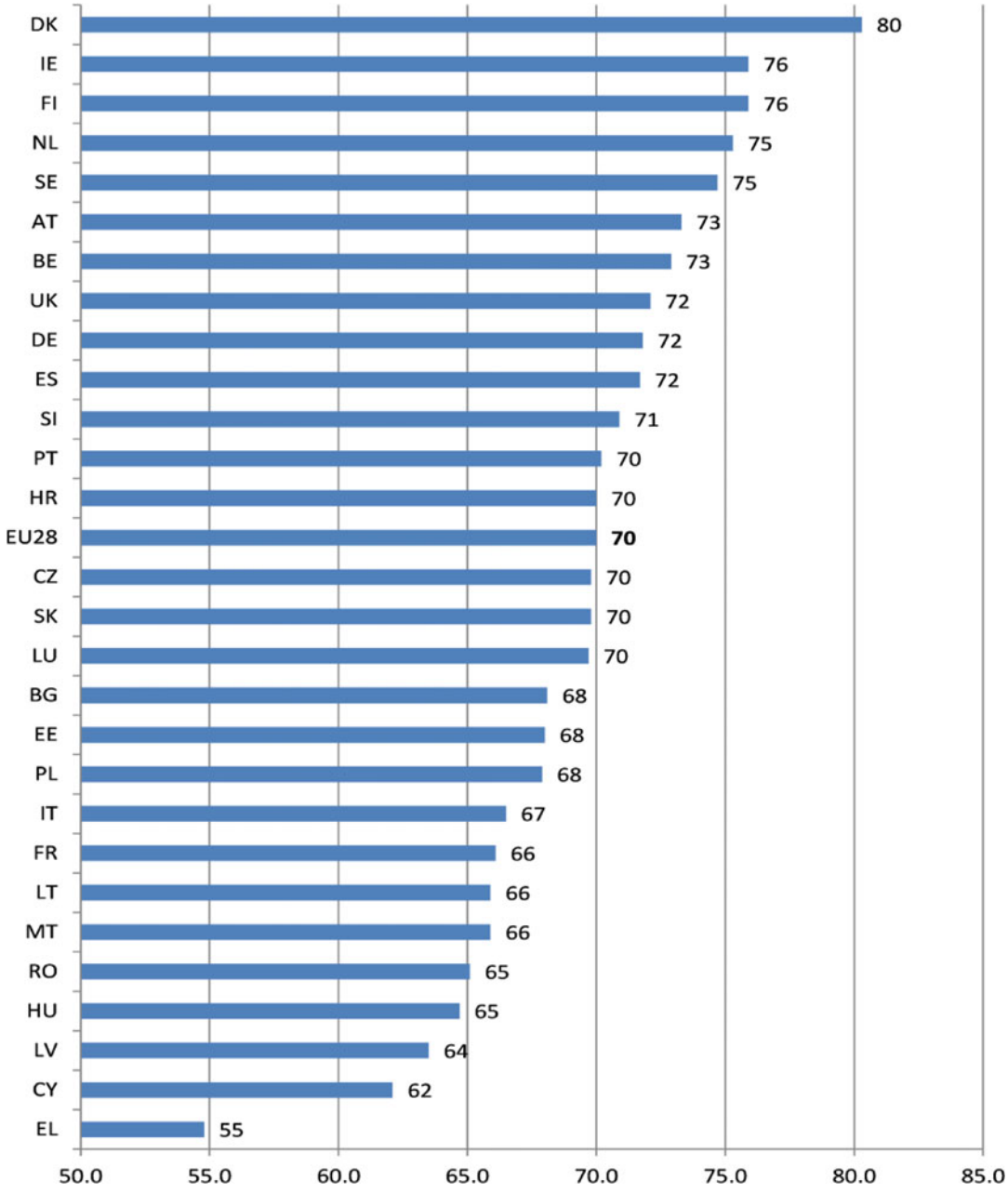

Fig. 29.11 Mean hedonic wellbeing in the European Union Member States (scale 0–100) (*Note*: See Technical Annex for information about the index)

(both 1.9) least frequently feel socially excluded. Social exclusion is highest in Cyprus (3.0), Bulgaria (2.7), Greece and the Czech Republic (both 2.5) (Fig. 29.13).

Abdallah and colleagues point out that when it comes to understanding differences in perceived social exclusion, the welfare regime clusters – unlike evaluative and hedonic wellbeing – do not

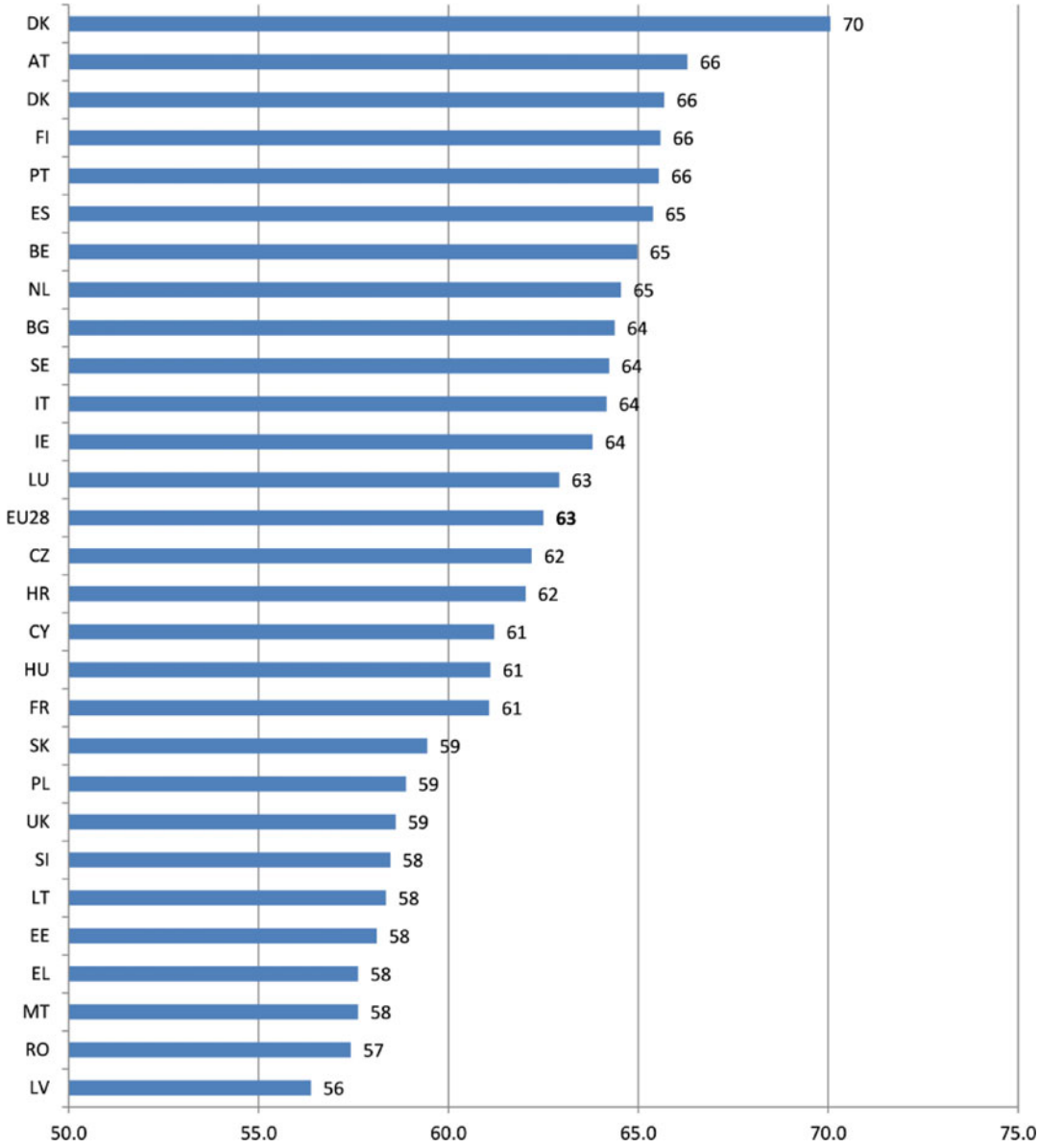

Fig. 29.12 Mean WHO-5 mental wellbeing index scores in the European Union Member States (scale 0–100) (*Note*: See technical annex for information about the index)

seem to be a useful guide. While Cyprus and Greece have some of the highest social exclusion levels, other countries in the Southern cluster (Spain and Portugal) exhibit some of the lowest scores. Some of the post-socialist corporatist countries of central Europe do well – Slovenia, Hungary and Slovakia. But their more northerly neighbours the Czech Republic and Poland only do marginally better than Greece. Meanwhile, Germany and Austria come second and third

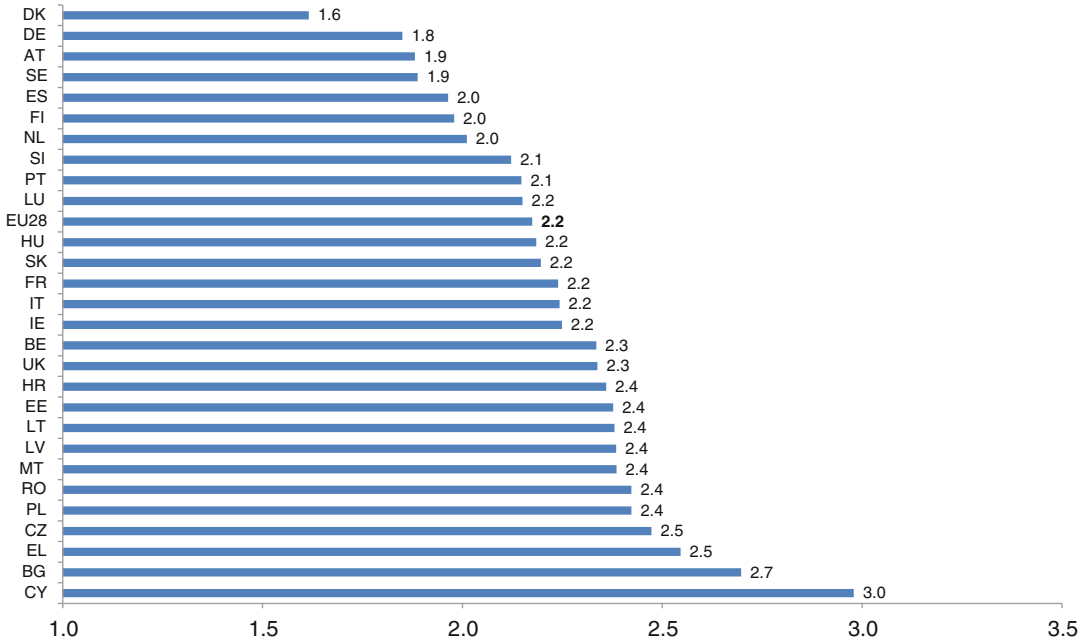

Fig. 29.13 Mean social exclusion index scores in the European Union Member States (scale 1–5) (*Note*: Q29e–h – Respondents were asked to what extent they agreed or disagreed with four statements (strongly agree/agree/neither agree nor disagree/disagree/ strongly disagree). See Technical Annex for further information about the index)

best respectively, behind Denmark, but ahead of the other social democratic countries (Eurofound 2013d, p. 29).

Earlier EQLS analyses indicate that comparisons between the countries that joined the European Union prior to 2004 (EU15) and those that joined since 2004 prove more insightful. Low educational attainment, for instance, has a stronger negative effect in the countries that joined the EU since 2004 countries than in the 15 pre-2004 countries. In the post-2004 countries, the less educated feel worse off in comparison to the rest than is the case in the EU15. Equally, elderly Europeans living in the post-2004 countries tend to report a somewhat higher social exclusion than average in this group of countries, and in the EU15 countries, social exclusion tends to be less widespread among the elderly than average. Nevertheless, on many dimensions the distinction between post- and pre-2004 Member States has become less relevant, besides in particular housing and living conditions of older people where the distinction generally maintains its relevance (Eurofound 2012a).

Loneliness

Loneliness is measured on the EQLS with a single item that asks respondents how often they felt lonely over the last 2 weeks (Fig. 29.14).[13]

The welfare regime clusters are equally not very informative when it comes to understanding differences in feelings of loneliness. While Denmark again has the best scores, Sweden, for example, only ranks 8th. The liberal cluster (Ireland and the UK) does quite well, and better than the corporatist countries. Greece and Italy do least well, Italy being a surprising outlier (Eurofound 2013g).

Comparing social exclusion and loneliness seems to indicate that liberal countries do better in terms of loneliness and corporatist ones do better in terms of social exclusion. The lower levels of social exclusion in corporatist countries may reflect a greater effort by society to be inclusive; however

[13] Scores are reported on a scale of 0–5, where 0 means 'feeling lonely all of the time', and 5 means 'feeling lonely at no time'.

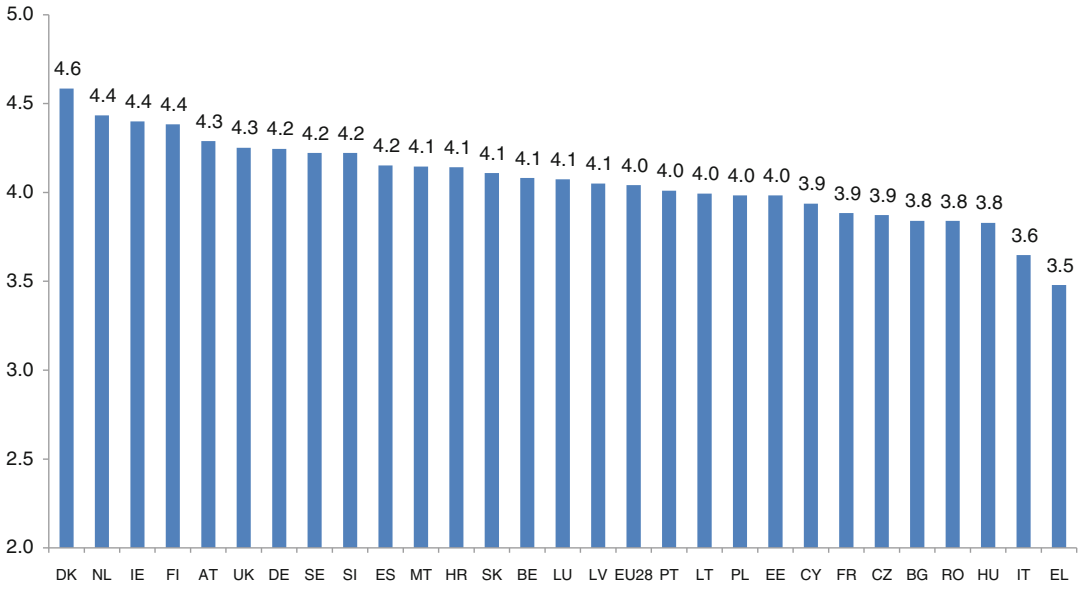

Fig. 29.14 Average loneliness levels in the European Union Member States (scale 0–5) (*Note*: Q46b – Please indicate for each of the statements which is closest to how you have been feeling over the past two weeks? I have felt lonely.)

it is not clear why loneliness was particularly high in some of those same countries.

Subjective Wellbeing in Other European Countries

The third EQLS also surveyed six non-European Union countries, namely Iceland, Kosovo, Macedonia Montenegro, Serbia and Turkey. This section briefly looks at the situation in these countries for each of the three elements of subjective wellbeing.

Evaluative Wellbeing

Apart from Iceland, with similar high scores as the EU Nordic countries, life satisfaction is below the EU average in these countries, yet not as low as the level reported in Bulgaria (5.5) and Hungary (5.8) (Fig. 29.15).

Happiness ratings in the none-EU countries range from 6.3 in Kosovo to 8.3 in Iceland, where the score is above that of the highest EU country (Denmark: 8.2). In all countries except Iceland, people rate their happiness higher than their satisfaction with life in general. The difference is largest in Serbia (0.8).

Hedonic Wellbeing

The score for Iceland on the hedonic wellbeing index is the same as in Denmark, which has the highest score in the EU. Conversely, the results for Turkey and Serbia match some of the less well scoring Member States, even if they are not as low as those noted in the two worst-scoring EU countries (Greece and Cyprus) (Fig. 29.16).

When it comes to the WHO-5 mental health index, the best scores are again observed in Iceland, followed by Macedonia and Montenegro. Mental wellbeing is lowest in Serbia and Turkey, which have scores that are well below the average recorded for the EU28 (Fig. 29.17).

Eudaimonic Wellbeing

Apart from Iceland – which has one of the lowest social exclusion levels of all the countries covered by the EQLS – in the other non-EU countries social exclusion is more extensively reported than on average in the European Union (Fig. 29.18).

Loneliness in the six non-EU countries is most widely present among people in Turkey and Kosovo, where scores are similar to Greece, Italy and Hungary. The similarities between

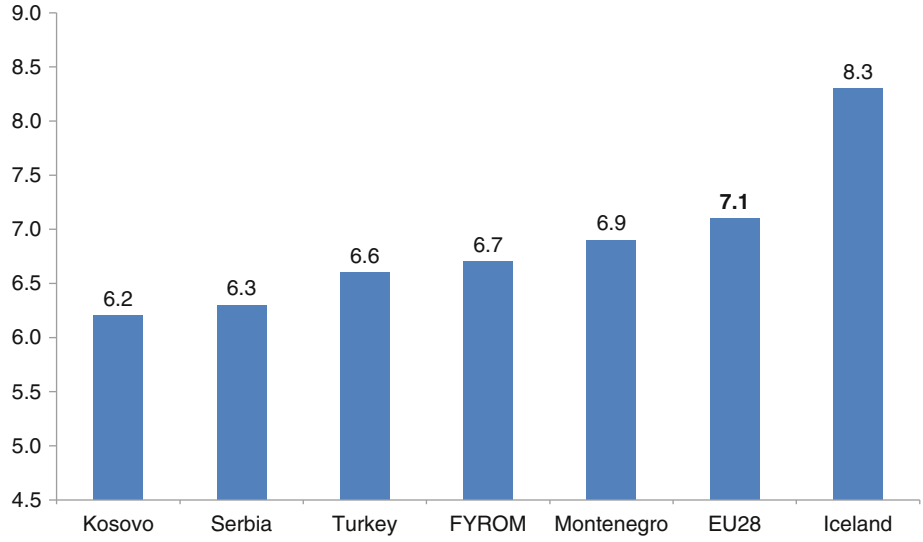

Fig. 29.15 Average life satisfaction in 6 non-EU countries (*Note*: Q30 (for question wording see note to Fig. 29.3))

Fig. 29.16 Mean hedonic wellbeing index scores in 6 non-EU countries (scale 0–100) (*Note*: See Technical Annex for information about the index)

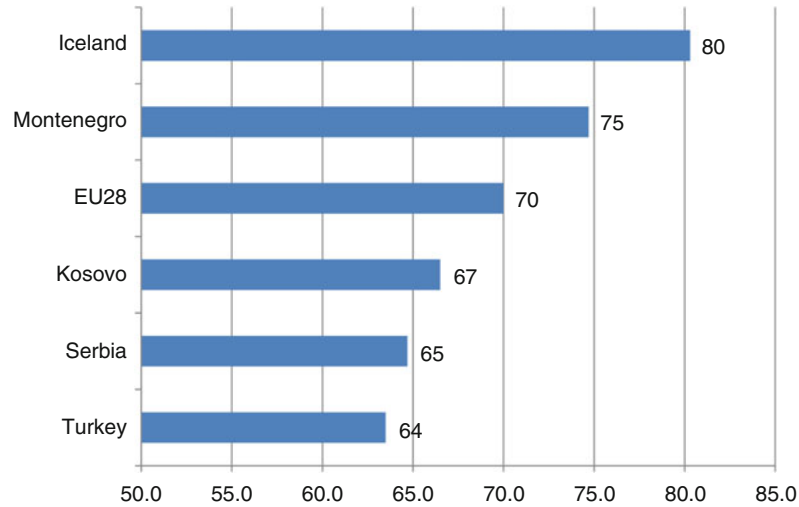

Fig. 29.17 Mean WHO-5 mental wellbeing index scores six non-EU countries (scale 0–100) (*Note*: See Technical Annex for information about the index)

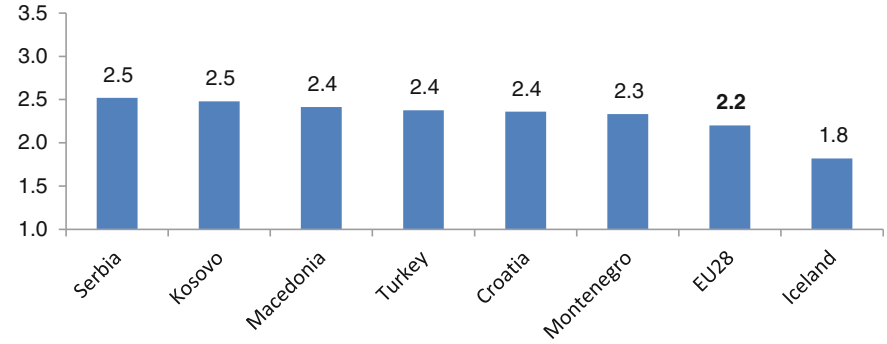

Fig. 29.18 Mean social exclusion index scores in six non-EU countries (scale 1–5) (*Note*: Q29e–h (for question wording see note to Fig. 29.13). See Technical Annex for further information about the index)

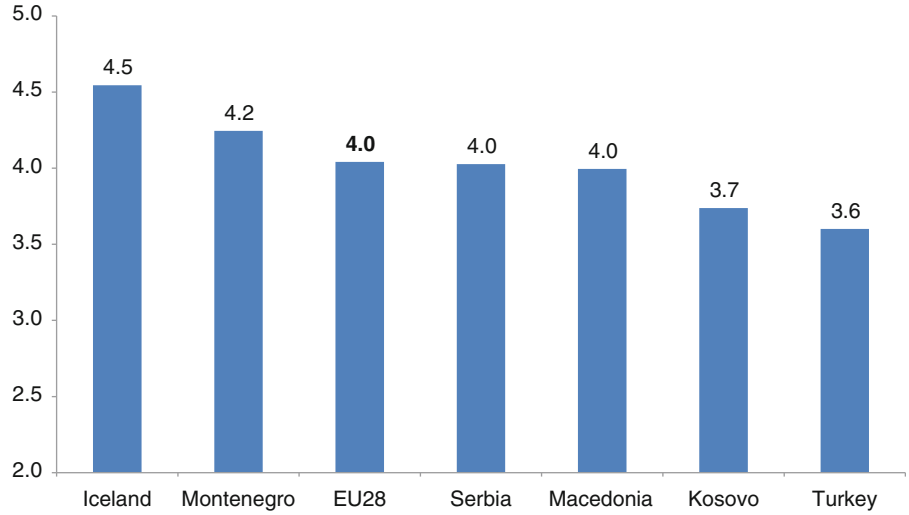

Fig. 29.19 Average loneliness levels in 6 non-EU countries (scale 0–5) (*Note*: Q46b (for question wording see note to Fig. 29.14))

Iceland and Denmark (both have a score of 4.6) are again apparent (Fig. 29.19).

Living Standards and Deprivation

Difficulty Making Ends Meet

When thinking about the household's total monthly income, 7 % of European Union residents report 'great difficulties' making ends meet. In all Member States in the European Union there are people who experience great difficulties making ends meet, but there are large differences, with proportions of people reporting great difficulties making ends meet ranging from 22 % in Greece to 1 % in Finland.

Overall, 45 % of European Union residents report to have 'some' to 'great' difficulties making ends meet. On average this proportion is lower for older people, with 38 % of people over 65 reporting difficulties making ends meet. This average masks the fact that older people in the countries that joined the EU after 2004 relatively often have difficulties making ends meet (70 % for 65+ and 54 % for 25–34 year olds), while the situation in the EU15 is reverse (31 % for 56+ and 46 % for 25–34 year olds).

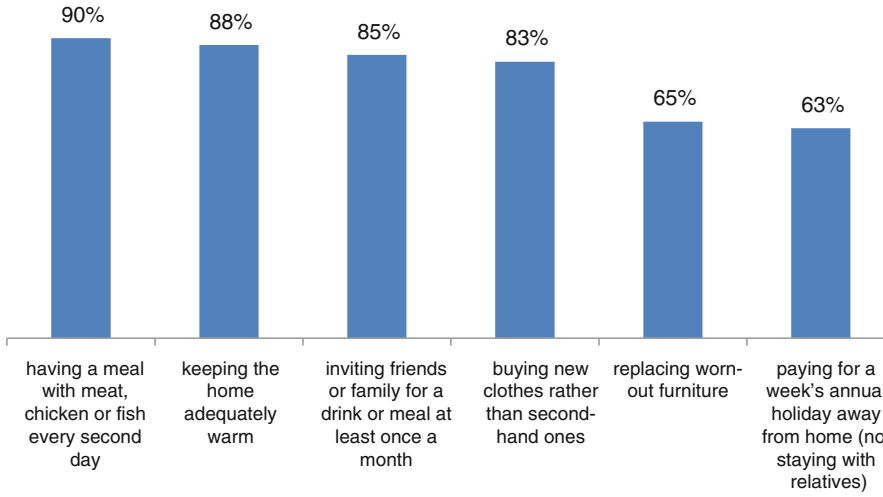

Fig. 29.20 Material deprivation in the European Union (% able to afford) (*Note*: Q59 There are some things that many people cannot afford, even if they would like them. For each of the following things on this card, can I just check whether your household can afford it if you want it?)

Nevertheless, one should be careful to conclude that older people are not struggling also in the EU15. For example, a recent study by Eurofound (2012c) highlights that also in the richer EU Member States, a group of retirees is only able to make ends meet because of the income they receive from paid work to top-up their pensions.

Material Deprivation

We already noted that in the EQLS material deprivation is the strongest predictor of life satisfaction. It is measured by the number of items, out of the six listed in Fig. 29.20, people report their household cannot afford. The figure shows the proportion of EU residents that say they **can afford** each of the six items measured on the EQLS.

On average, just over one European in two (55 %) reports being able to afford all these items, while only 3 % report not being able to afford any of them. Material deprivation is greatest in Bulgaria and Hungary, where the mean number of items that people cannot afford is close to 3. In several Northern European countries, the mean is close to 0 (0.3 in Luxembourg, 0.4 in Austria, Denmark and Sweden). Nevertheless, even in the richest Member States, a group of people reports not being able to afford three or more of these items (3 % in Luxembourg, and 6 % in Austria and Sweden).

Material Hardship in the EU's Newest Member State

While Croatia became a Member State of the EU on 1 July 2013, Eurofound's European Quality of Life Survey (EQLS) has been covering Croatia since 2007. From the survey findings a picture emerges of a country in transition, and one with marked generational differences in terms of outlook and attitudes. Material hardship is a key issue for many people: almost a third of people have difficulties making ends meet. While it is especially difficult for those aged between 40 and 49, younger people find it much easier. This same pattern is found in the other countries that were formerly part of Yugoslavia. This suggests that the consequences for people joining the labor market in times of crisis (in this case the Balkan wars of the 1990s) are large, negative and persistent.

Debts

The EQLS also looked at defaults on payments, expressing the situation where households were actually unable to make ends meet, or were only able to do so by defaulting on payments.

About one in ten (11 %) people in the European Union report to have been unable to pay scheduled rent or mortgage payments. Defaults on utility bills are more common (15 %). Defaults on payments related to consumer credit were also investigated. Such credit can be used to buy electrical appliances, a car, furniture, etc. It includes credit card overdrafts, which can also potentially be used to cover utility bills and rent or mortgage payments. Overall, 10 % of EU residents report defaults on consumer credit.

When asked whom people would turn to when urgently needing to raise money, 14 % report they would turn to a service provider, institution or organization whereas most (80 %) would turn to a family member, relative, friend, neighbor, or someone else. It might thus well be deceptive to only focus on defaults to formal credit providers and utility companies. Informal loans might well play a role as well. EQLS is the first EU-wide survey which investigates this issue, asking people if they have been unable to pay back as scheduled informal loans from friends or relatives not living in their household. It resulted to be a relevant indicator, with 8 % of respondents reporting to have been unable to payback such loans as scheduled in 2011, and the measure is related to various aspects of quality of life (Eurofound 2013b, f).

The type of debt problems households are struggling with differ across income groups. For low income groups, debt problems relatively often mean accumulated utility bills and rent payments. In 2011, arrears in rent payments are five times as common among the bottom income quartile (10 %) as among the top income quartile (2 %) in the EU28. Arrears in utility bills were three times as common among the bottom income quartile (24 %) as among the top income quartile (8 %). Arrears in payments related to consumer credit are twice as common among the bottom income quartile (14 %), compared to the top income quartile (7 %). The same is true for arrears in informal loans from friends and family with people in the bottom income quartile twice as likely (12 %) to report such arrears than those in the top income quartile (6 %) (Eurofound 2013f). Arrears in mortgage payments are stable across income groups, at around 2 %.

These patterns can be explained by various reasons, besides the low income in itself. Firstly, lower income groups do have limited access to formal credit, and thus are more often confined to borrowing from friends and family or default on payments. Secondly, if they have access to credit, they are often restricted to expensive forms of credit such as credit card overdrafts and money lending. Third, in the low income groups, for long term unemployed an additional factor is that they spend much time at home and thus are likely to have higher utility bills, with 39 % reporting arrears on utility bills. Fourth, renting is relatively common among low income groups, while ownership with a mortgage is uncommon among this group, explaining the equally low rate of defaults in mortgage payments across income groups. Lastly, the fact that overall defaults in rent and mortgage payments are lower than any of the other type of defaults can be explained that households will go to great length in protecting the roof above their heads. They are likely to default on payments with less severe consequences until running into rent or mortgage arrears (Eurofound 2012b, 2013f).

Work, Private Life and Work-Life Balance

The EQLS points to large differences in work-life balance in the European Union. On average, 30 % of people in the European Union say that it has been difficult to fulfill their family responsibilities because of their time on the job, but this proportion ranges from less than one in five in Denmark (17 %), Finland and the Netherlands (both 18 %) to over half in Croatia and Latvia (both 56 %).

Table 29.2 Level of work-life balance conflict by family type and distribution of work, EU28

	Second EQLS (2007)			Third EQLS (2011)		
	No or weak conflict (%)	Either work or home conflict (%)	Both work and home conflict (%)	No or weak conflict (%)	Either work or home conflict (%)	Both work and home conflict (%)
Lone parent, working	44	44	12	30	48	21
Lone parent, living with relatives	23	58	19	52	38	10
Couple family, two earner	49	41	11	42	44	14
Couple family, one earner	46	41	13	38	43	19
Couple family, with relatives, multiple earners	38	42	20	40	44	17
Couple family, with relatives, one or no earners	29	51	20	40	39	22
All families	**47**	**41**	**12**	**40**	**44**	**16**

Note: Q12a–c – See Technical Annex for question wording and Eurofound 2014a for further details

A combined indicator on strain-based conflict (Eurofound 2012a) reveals that 13 % of Europeans feel work-life balance related stress both at work and at home. Again, this varies greatly by country, with the proportion of people feeling stress either at home or at work, or both, ranging from 5 % in the Netherlands and Denmark to 25 % in Poland and Latvia.

While European women continue to suffer more work-life balance strain than men (15 % vs. 12 %), table 29.2 above furthermore shows the pressures European families with children face. 16 % of these families report strain-based conflict. This figure is even higher for lone parents in work, of whom 21 % report suffering from work-life balance related stress both at work and at home. What is particularly striking is that work-life balance strain has nearly doubled since 2007, when 12 % reported this (Eurofound 2014a).

People who care for elderly or disabled relatives particularly often report both work and home conflicts (21 %), while the proportion of people who report such conflicts is also relatively high among people who care for (grand) children (16 %) (Eurofound 2014b).

The EQLS also provides information on preferred working hours. On average people in employment in the EU work 40 h per week, but would prefer to work 36. These are averages, but on the whole 44 % would like to decrease their working hours, while 14 % would like to increase them. About two-fifth (42 %) of workers are happy with their working hours.

Almost all people who are unemployed would prefer to be involved in paid work (98 %), regardless whether they have difficulties making ends meet or not, indicating that work is an important aspect of quality of life not only for financial reasons. For the unemployed below 50 years of age, the average hours they want to work is similar for those who are able to make ends meet (35) to those who have difficulties making ends meet (36). Nevertheless, for people aged 50 or over the preferred number of hours is considerably lower for those who are able to make ends meet easily (32) than for those who have difficulties making ends meet (35) (Eurofound 2014b).

Home, Housing and Local Environment

The quality of the immediate environment is an important aspect of people's living conditions. The EQLS investigates dimensions of quality of

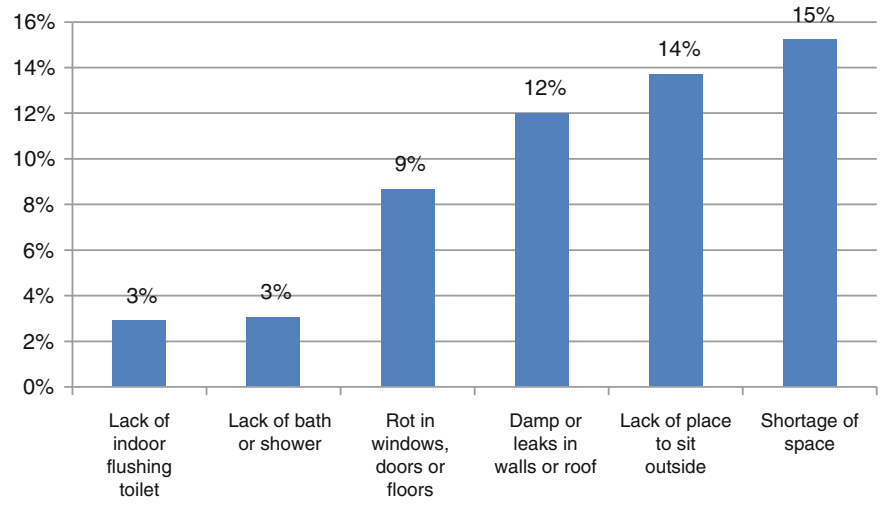

Fig. 29.21 Problems with accommodation in the European Union (*Note*: Q19 Do you have any of the following problems with your accommodation?)

the local neighborhood and about access to local neighborhood services, but also of one's dwelling and housing more broadly.

Housing Quality

On average, people in the European Union rate the satisfaction with their accommodation at 7.7 out of 10. A common problem experienced by respondents is lack of space, in general (15 %) or to sit outside (14 %). Damp or leaks (12 %) and rot (9 %) are also relatively common (Fig. 29.21). Few people do not have an indoor flushing toilet (3 %) or bath or shower (3 %), but in some countries the lack of these basic facilities is relatively common. People in Romania (25 %), Bulgaria (18 %) and Latvia (18 %) often do not have a flushing toilet. A bath or shower is often lacking in Romania (24 %), Latvia (20 %) and Estonia (15 %).

These problems do not necessarily come with dissatisfaction with one's accommodation. Nevertheless, people whose accommodation has multiple of these problems, generally are less satisfied with their accommodation (Eurofound 2012a). Furthermore, not all of the problems are equally reflected in satisfaction ratings. Satisfaction with one's accommodation is particularly low among people who experience lack of space or rot (Eurofound 2012a).

Quality of the Local Environment

In the European Union, one in every three people report major or moderate problems with litter or rubbish on the street (33 %). The same holds true for problems with noise (33 %), with crime, violence or vandalism (33 %), but the proportion of people experiencing 'major' problems is lower (respectively 7 % and 6 %) than for problems with litter or rubbish on the street (8 %).

Problems with traffic congestion are somewhat less common (31 %), but a relatively large proportion of EU28 residents experience these problems as 'major' (9 %). About one in four people report problems with the air quality (26 %), and one in five report problems with quality of the drinking water (21 %).

There are large country differences: problems in the quality of the local environment are most widely perceived in Malta, Bulgaria and Italy whereas these problems are least common in Finland, Denmark and Slovenia. Overall, in the European Union, all these problems are more common in urban than in rural areas (Fig. 29.22), but there are different patterns (Eurofound 2012a). There is a group of Member States where there are relatively few problems overall, but problems are considerable in urban areas (Slovenia, Portugal, Austria). A second group of Member States has a high mean number

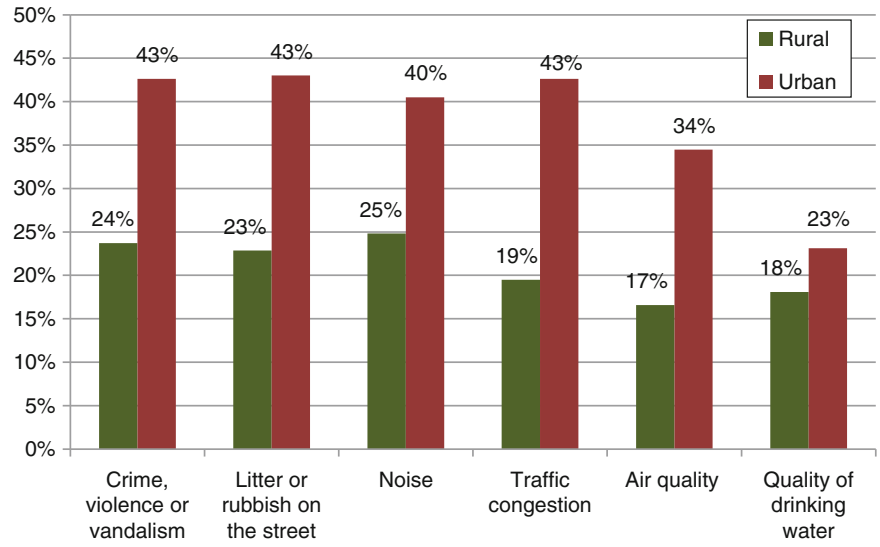

Fig. 29.22 Problems in the local neighborhood in the European Union (*Note*: Q50 Please think about the area where you live now – I mean the immediate neighborhood of your home. Do you have major, moderate or no problems with the following?)

of neighborhood problems, especially stemming from problems in urban areas (Bulgaria, Greece, Czech Republic).

There are indications that low quality of the local environment is related to bad health outcomes (Eurofound 2012a). For each income quartile, people who report none of the above mentioned neighborhood problems are more satisfied with their health than people who experience at least one of these problems. This holds true both for rural areas and for urban areas.

Access to Neighborhood Services

While the quality of the neighborhood is generally considered better in rural areas in the European Union, access to neighborhood services is better in urban areas (Fig. 29.23). Access to public transport and to cinemas, theatres or cultural centers is particularly problematic in rural areas. For banking services, and in particular for postal services, the difference between rural and urban areas is less pronounced. While these observations concern neighborhood services, the next section will deal with public services more generally.

Public Services, Healthcare and Health

Public Services: Access and Quality

When asked to rank various public services on a scale from 1 to 10, people in the European Union on average give their public transport systems a 6.4, education systems a 6.3 and child care services a 6.2. Europeans are less positive about long-term care services (5.8), social housing services (5.4) and in particular state pension systems (4.8).It is interesting to note that people who have experience with using the services generally give higher ratings (Eurofound 2012a).

Healthcare

People in the European Union rate public healthcare services in their country at 6.3 out of 10, on average. There are large differences between Member States, though, with highest rankings in Austria and Belgium and lowest in Romania and Bulgaria.

Access to healthcare services is not as easy for everybody, in every Member State. More than two

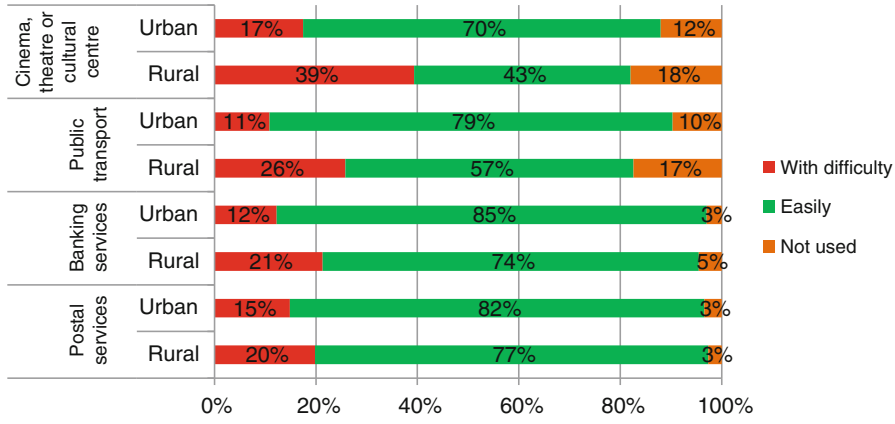

Fig. 29.23 Access to neighborhood services, rural versus urban areas in the European Union (*Note*: Q51 Thinking of physical access, distance, opening hours and the like, how would you describe your access to the following services? Can you access....)

of every five people in the EU (42 %) report waiting time made it difficult to see a doctor on the day of the appointment, and delays in getting an appointment made it difficult for 39 %. There are country differences in the relative prevalence of factors making it difficult to see a doctor. For instance, cost made it more often difficult for people to see a doctor than waiting times in Cyprus and Ireland, and equally frequently in Lithuania and Romania. Cost makes it difficult or very difficult for 30 %. In terms of reported intensity of the difficulties experienced, the proportion of people reporting cost make it very difficult for them to see a doctor is highest in Greece (31 %), Cyprus (28 %), Italy (23 %) and Poland (21 %). Also within countries there are differences. After controlling for a number of variables, in some countries, problems due to cost are larger in urban areas (Bulgaria and Latvia), while in others (Czech Republic and Slovenia) the opposite was true. In Austria, Bulgaria, Poland and Slovakia women reported more problems than men. In most countries, older people reported fewer or equal access problems as young people, but in the Czech Republic, Bulgaria, Croatia, Poland, Lithuania, Latvia and Slovakia, older people reported more problems (Eurofound 2013g).

Health

On average, people in the European Union rate their health at 7.3 out of 10. Nevertheless, this varies largely among income quartiles. People in the bottom income quartile in their country rate their health on average at 6.7, while those in the top income quartile rate theirs at 7.8. Almost one respondent out of ten (9 %) reports to have bad or very bad health. Again, it is more common for people in the bottom income quartile to report bad health (17 %) than for people in the top income quartile (5 %) (Eurofound 2013g). Among the bottom income quartile, 38 % reported to have a chronic (long-standing) physical or mental health problem, illness or disability, and 23 % among the top quartile. This income difference holds across age groups, but is most pronounced among 50–64 year olds, with 53 % reporting a disability or health problem among bottom quartile, compared to 29 % among the top income quartile.

Quality of Society

In this section we examine three widely used indicators of quality of society: trust in people, trust in public institutions and social tensions that are also included on the EQLS. These aspects of quality of life go beyond individual circumstances that, particularly in Europe's current economic climate, are important to track.

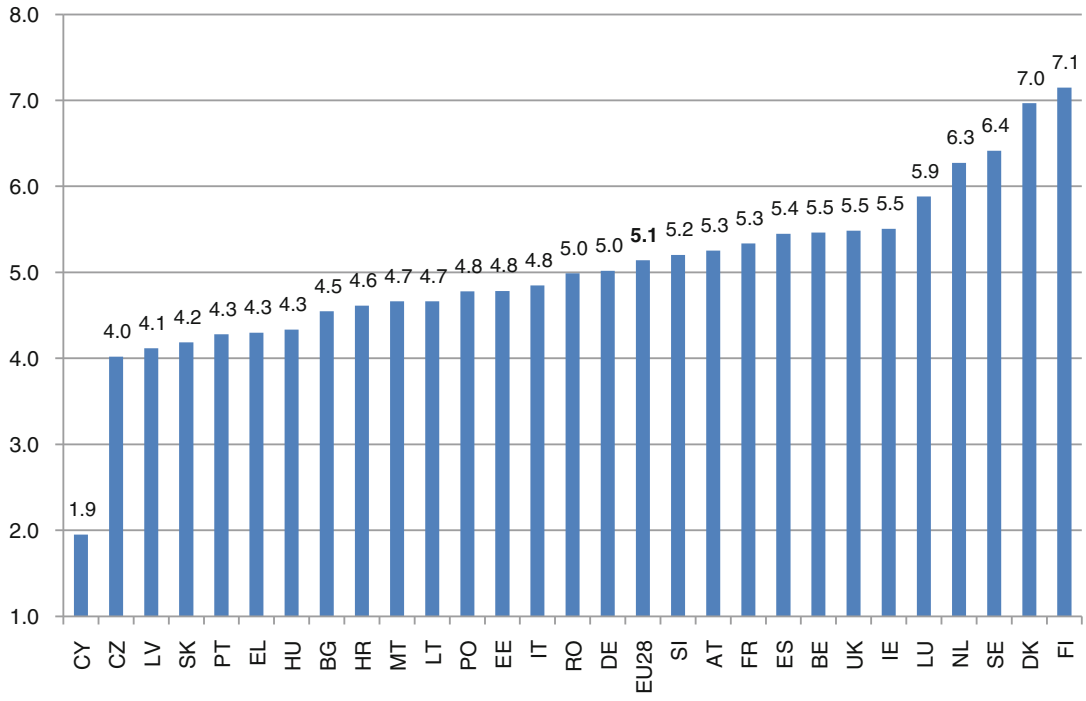

Fig. 29.24 Average trust in others in the European Union Member States (scale 1–10) (*Note*: Q24 Generally speaking, would you say that most people can be trusted, or that you can't be too careful in dealing with people? Please tell me on a scale of 1 to 10, where 1 means that you can't be too careful and 10 means that most people can be trusted)

Trust

There is strong evidence that the economic crisis has severely impacted on Europeans' trust in political institutions as governments have been challenged by a variety of economic and political difficulties across Europe (Roth et al. 2011; Stokes 2012; Eurofound 2013e).

As an important indicator for social capital, and a necessary requirement for the overall democratic legitimacy of a system, trust in political institutions reflects quality of governance and informs the climate for citizen support and involvement. Trust in other people is another key indicator social capital. The importance of this measure as a determinant of wellbeing has been well documented in the literature (e.g. Helliwell 2013b; Sarracino 2010).

The EQLS shows that trust in others is highest in Finland and Denmark and by far the lowest in Cyprus, followed at a significant distance by the Czech Republic, Lithuania and Slovakia (Fig. 29.24).

The extent to which people trust each other is more evenly distributed across age groups in the countries that joined the European Union before 2004 than it is in the Member States that have joined the European Union since. Based on evidence from the EQLS that precariousness has a depleting effect – being unemployed or unable to work is characterized by lower trust levels – this may point to a more precarious situation of older people in these newer countries (Eurofound 2012a).

Overall the EQLS shows that people in the European Union are more trusting of each other (5.1) than they are in the legal system (4.8) and in political institutions (4.1 and 4.0) though trust in others is not as high as trust in the police (6.0) and trust in local authorities (Table 29.3).

Table 29.3 Average trust in others and in different institutions in the European Union (scale 1–10)

	Police	Local authorities	People	Legal system	National parl.	National gov.
EU28	6.0	5.2	5.1	4.8	4.1	4.0

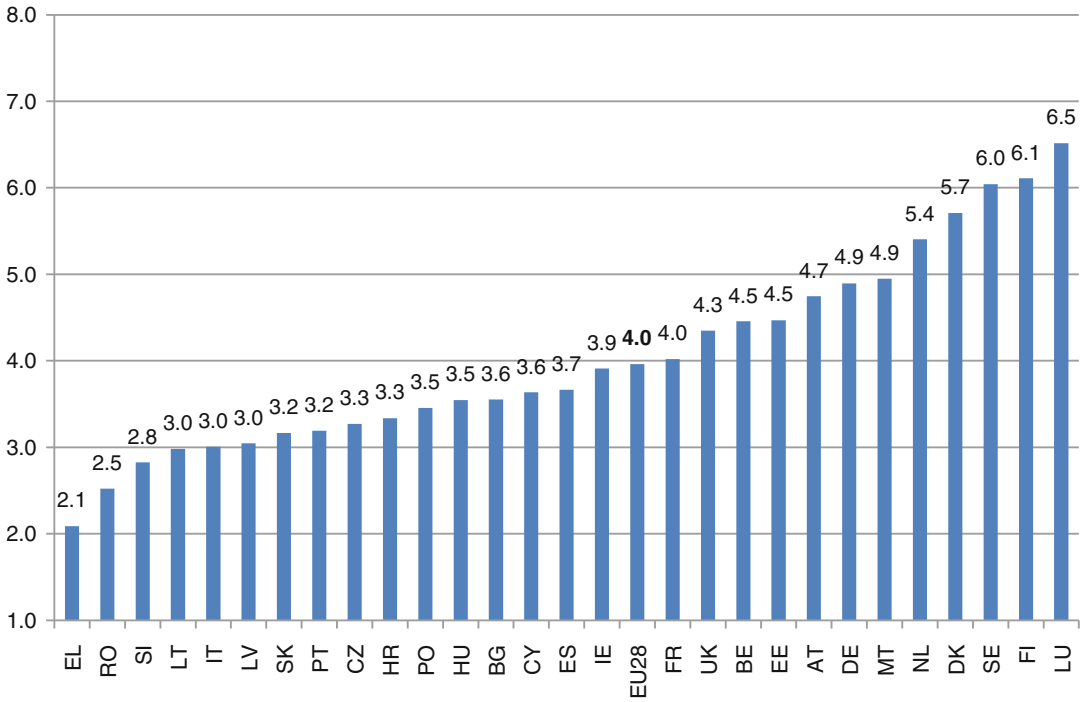

Fig. 29.25 Average trust in the national government in the European Union Member States (scale 1–10) (*Note*: Q28e. Please tell me how much you personally trust each of the following institutions. Please tell me on a scale of 1 to 10, where 1 means that you do not trust at all and 10 means that you trust completely)

Of the trust items, trust in the police and trust in local authorities are the strongest predictors of life satisfaction, whereas trust in the parliament is not important. This suggests that people are more affected by those institutions with which they have a more direct experience (Eurofound 2013d).

Figure 29.25 shows the average level of trust in the national government in each Member State. The ranking of countries is similar to the one found for trust in other people, as shown in Fig. 29.24. The two measures are strongly correlated (0.67) (Fig. 29.25).

Nevertheless, as Fig. 29.26 below shows, there are some discrepancies: Luxembourg scores ahead of the Nordic countries in trust in government, while Cyprus, despite its low trust in others, shows moderate trust in the national government.

The figure also shows that trust in national governments tends to be lower than trust in others. This is particularly the case in Romania, Slovenia and Greece. Apart from Cyprus, Luxembourg is the only Member State where trust in government is higher than trust in others, though the difference (0.63) is much smaller in Luxembourg than it is in Cyprus (1.69).

When it comes to trust in the national government, analyses show that people in the European Union who volunteer are more likely to express trust than those who do not volunteer and that the act itself is more important than the frequency with which they volunteer. People who volunteer on a monthly basis for social organizations or political parties or trade unions are most trusting of their national government, scoring 4.8 on a scale of 1 to 10, while trust is lowest, at 3.9, among respondents who never volunteer for any

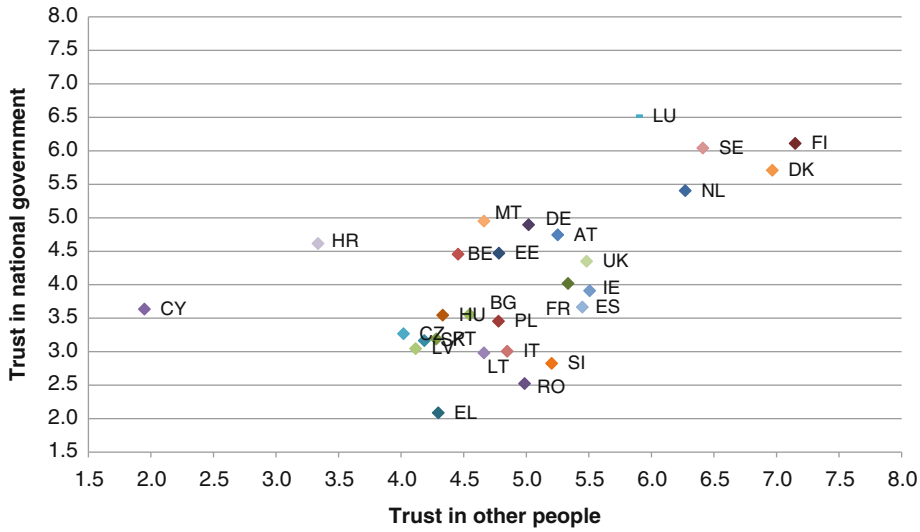

Fig. 29.26 Correlation between trust in national government and trust in other people (*Note*: Q24 and Q28e (for question wording see notes to Figs. 29.24 and 29.25))

kind of organization (Eurofound 2013e). A recent study by Sivesind et al. (2013) shows that people encounter well-functioning institutions through volunteering (in fields where public sector and voluntary organizations have common interests) and that this experience increases their institutional trust.

Furthermore, the quality of governance influences average trust in national public institutions. It is well-known that trust in institutions is strongly associated with a perception of corruption (Eurofound 2012a). In addition, research shows that trust is positively affected by satisfaction with the economic situation in a country (Roth et al. 2011; Muñoz et al. 2011). The biggest impact, however, comes from citizen satisfaction with the quality of public services (Eurofound 2013e). As Fig. 29.27 below shows, a 1-point increase in satisfaction with public services raises the average trust in institutions from 4.85 to 5.22.

Social Tensions

Another aspect of quality of society is the level of social cohesion. The EQLS examines the extent to which a variety of social tensions affect this quality. It shows that in the European Union the greatest social tension is perceived between different racial and ethnic groups and between poor and rich people, followed by tensions between management and workers. While over a third of people in the European Union perceive such tensions, slightly lower tension levels are found between different religious groups.

At country level, perceived tensions between racial and ethnic groups are most widely reported in the Czech Republic, Hungary and France; they were reported to be lowest in Lithuania, Latvia and Estonia. There are two Member States with particularly large proportions of people reporting a lot of tensions between poor and rich people: Hungary (71 %) and Lithuania (60 %) and these two countries inflate the EU mean. Interestingly, perceived tensions in the Netherlands are very low for differences in wealth and job position but much higher for tensions between groups with different race, ethnicity and religion. Tension between management and workers is perceived to be highest in Hungary, Greece and Slovenia and lowest in the Nordic countries while tensions between religious groups are seen to be highest in France, Belgium and Cyprus (Eurofound 2013a).

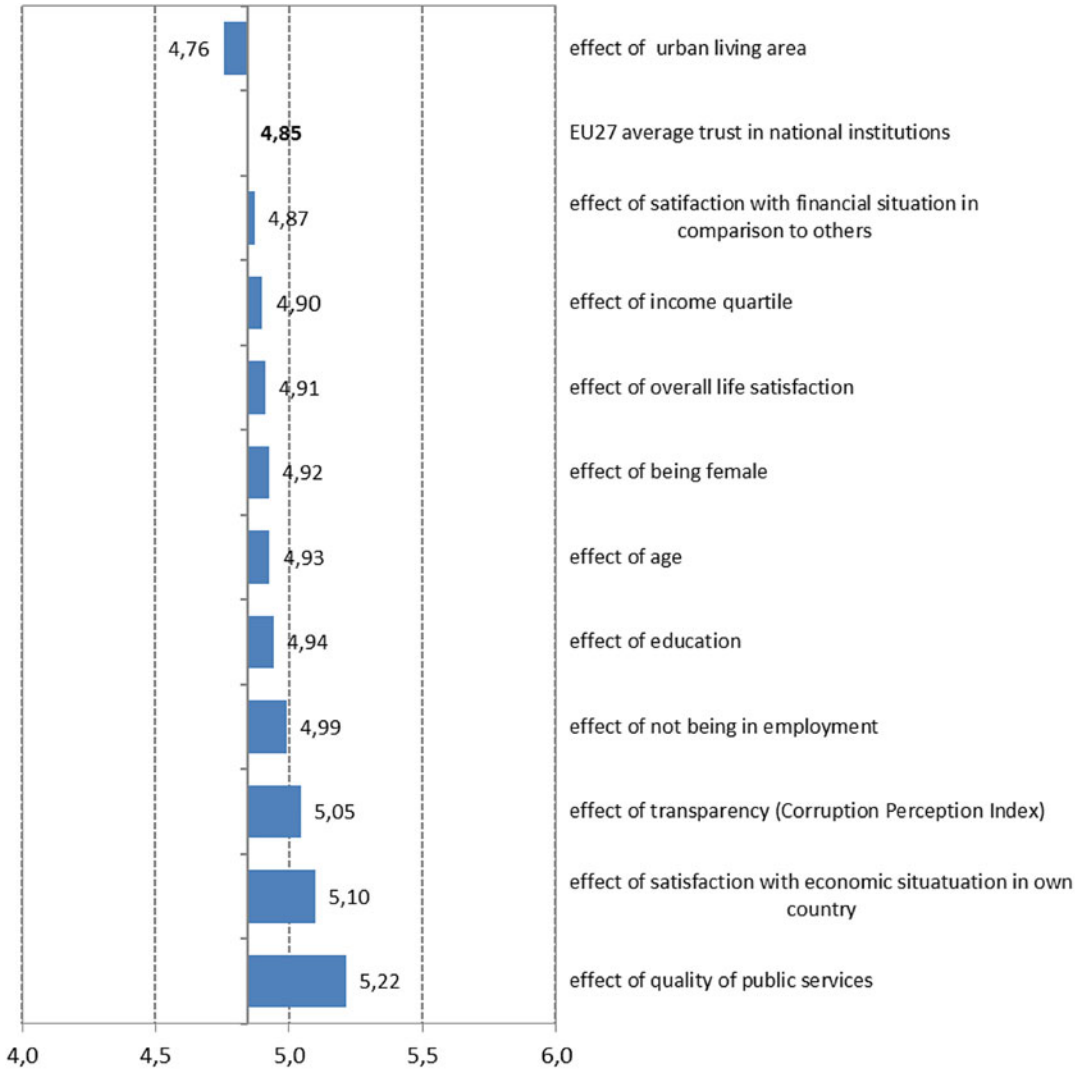

Fig. 29.27 Determinants of trust in national public institutions, EU27 (*Note*: Q28 a., b., d., e. and f (for question wording see note to Fig. 29.25). See Technical Annex for methodological details)

The Impact of the Economic Crisis on Quality of Life in Europe

The measurement and monitoring of quality of life is particularly relevant in this period of rapid social and economic change and of growing social inequalities. Dolan and Metcalfe (2012) have highlighted how measures of subjective wellbeing can provide additional information about who is doing well or badly in life, and may be particularly useful when deciding how to allocate or prioritize scarce resources. Systematic information could contribute to a broader reflection on policy measures to respond to a crisis which has "disproportionately hit those who were already vulnerable and has created new categories of people at risk of poverty" (European Commission 2011). Other recent research, for example by the ILO (Vaughan-Whitehead 2012), have likewise argued that the crisis has deepened inequalities in Europe,

affecting more damagingly, for example, workers on temporary contracts and young people. The information from the quality of life indicators can clearly help in monitoring and mapping the experiences of people in different social groups but as Dolan and Metcalfe also emphasize such information can also contribute to informing policy design and policy appraisal. While the crisis does not explain all changes between the 2007 and 2011 EQLS – some are linked to long-established trends in demography and society – the results point to a rather strong deterioration in the economic situation of many Europeans, and in particular those who were already in more vulnerable positions.

Life Satisfaction

- Despite the economic bleakness, life satisfaction has remained relatively high for the EU as a whole, and it appears that the life satisfaction indicator is fairly resistant to changing economic conditions. Between 2007 and 2011, it only increased slightly from 7.0 to 7.1. However, patterns differ depending on the country. The eight countries with the highest average life satisfaction in 2007, all saw drops in 2011. In four cases (Sweden, Finland, the Netherlands and Malta), these drops were significant despite the relatively benign economic climate in these countries. However, at the same time, many countries that previously had lower levels of wellbeing (Bulgaria, Hungary, Latvia, Portugal, Lithuania, Romania and Italy) have seen their life satisfaction increasing. In some newer member states (for example, Latvia, Lithuania, Poland and Bulgaria), this represents the continuation of a trend that had begun before 2007. In the cases of Italy and Portugal, as well as Spain (which also saw a significant increase in life satisfaction), the rise happened despite apparently severe economic difficulties (Fig. 29.28).

Material Hardship and Deprivation

- The proportion of people who report difficulties or great difficulties making ends meet increased almost in every Member State between 2007 and 2011. It went up from 13 to 17 % in the European Union as a whole and also increased in each income quartile. The increases have been most marked in urban areas, and in particular in the bottom income quartiles.
- The proportion of people reporting they cannot afford at least one of the six items has increased from 39 to 45 %. In Greece, the proportion of individuals in work reporting that they are deprived in at least one domain of material deprivation increased from 48 to 74 % (26 percentage points) over the period 2007 to 2011. For the unemployed in Greece, the prevalence rates in 2011 were at even higher levels (Eurofound 2013b).

Housing Quality and Security

- Housing quality has generally improved as part of a long-standing trend. Space has increased and facilities, such as having an indoor flushing toilet, have improved. There have been improvements in these regards also between 2007 and 2011. Nevertheless, the crisis may have put a strain on maintenance. There has been a sharp decline in people who report they can afford replacing worn-out furniture (from 71 % in 2007 to 65 % in 2011) and in people who report they can afford keeping the house adequately warm (from 91 to 88 %). In combination with the worsening statistics with regard to households' financial situations described above, this suggests that the crisis has put at risk home maintenance. It may well appear that average quality of the accommodation has been affected in the forthcoming fourth wave of EQLS, in particular with regard to damp and rot.
- With regard to housing security, there has been an increase from 4 to 6 % of the proportion of people in the European Union who find it likely that they need to leave their accommodation because they can no longer afford it. This apparently small increase amounts to over 5.6 million additional EU28 residents (to a total of 27.7 million in 2011) who find

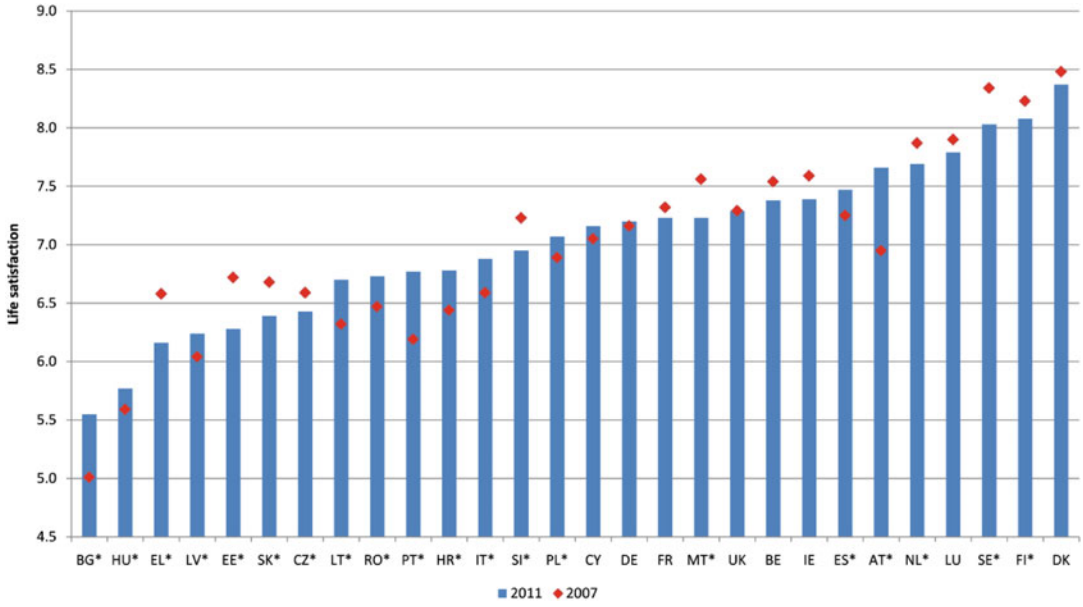

Fig. 29.28 Life satisfaction in the European Union Member States in 2007 and 2011 (scale 1–10) ((*Note*: Q30 (for question wording see note to Fig. 29.3); * represents statistically significant changes since 2007 ($p = 0.05$))

it likely their households would need to leave their accommodation in the next 6 months because they can no longer afford it.

- Feelings of 'absolute housing security' have also decreased (Eurofound 2013b): the proportion of people reporting they find it very unlikely they need to leave their accommodation because they can no longer afford it dropped from 82 % in 2007 to 80 % in 2011. This decline in feelings of absolute security has come mostly from people who are in the second highest income quartile with a drop of 5 %-points, from 85 % in 2007 to 80 % in 2011.

Social Exclusion

- The proportion of individuals who reported feeling "left out from society" increased from 9 to 11 % over the period 2007 to 2011 in the European Union on average. At the individual country level, there were increases in the proportion perceiving themselves to be left out of society in a number of Member States, including an increase from 8 to 23 % (14 percentage points) in Cyprus; from 8 to 17 % (by 9 percentage points) in the Czech Republic; from 12 to 18 % (6 percentage points) in Greece, and from 7 to 10 % (3 percentage points) in Germany. Other significant increases occurred in Denmark, Estonia, Spain, France and Luxembourg. Among subgroups, increases were notable amongst both men and women as well as amongst those in work and those aged 35–49 and 50–64.

Physical and Mental Health

- The crisis has resulted in particular in increased prevalence of mental health problems. Reasons include job and housing insecurity, as well as unemployment and evictions. There is also evidence that increased epidemics and decreased access to healthcare may turn easily treatable conditions into emergency situations. Nevertheless, there are also reasons to believe the crisis has resulted in healthier life styles for some, because of decreased resources available for smoking, eating out and drinking, and to less road accidents (see Eurofound 2013g for an overview of the literature).

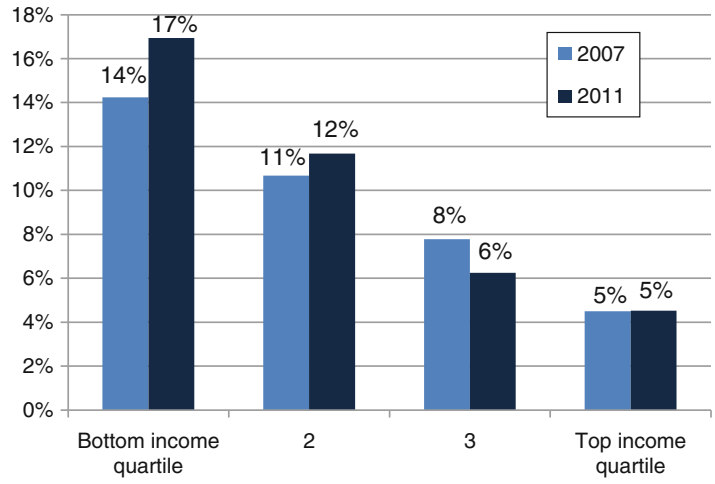

Fig. 29.29 Bad health and income in the European Union in 2007 and 2011 (*Note*: Q42. In general, would you say your health is . . . *1* Very good, *2* Good, *3* Fair, *4* Bad, *5* Very bad, 98 (Don't know), 99 (Refusal). Percentages refer to the proportion of people who report 'bad' or 'very bad' health; *Source*: Eurofound 2013g, page 8)

- Overall, health satisfaction has stayed constant in the EU28, at 7.3. Nevertheless, the proportion of people reporting to be in good or very good health decreased from 67 to 64 % (Eurofound 2013g). People in the bottom income quartile already more often reported to have bad health in 2007, but their situation had deteriorated even further in 2011, while that of higher income quartiles had stayed similar or even improved (Fig. 29.29). Additional demand for healthcare services can thus be expected to have come particularly from low income groups, which generally experience more difficulties in accessing healthcare (Eurofound 2013g).
- With regard to health conditions, worsening of mental health is the most obvious consequence of the crisis. It is thus all the more worrying that access to mental health services has particular barriers, such as stigma, which can be even more pronounced than those for access to other services. The mental health of people is considered to be at risk if their Mental Wellbeing Index (WHO-5) is below 42. There was no significant change in the percentage of the individuals at risk of poor mental health in the EU over the period 2007 and 2011, but higher rates were observed among people who face housing or job insecurity (Eurofound 2013g). Furthermore, this overall average figure obscures considerable variation in the magnitude and direction of changes between different countries. Some countries experienced significant increases in the proportion of people with mental health problems and in suicides, most notably Greece (Eurofound 2013g). The average figure also obscures differences among population groups. When comparing age groups, the most marked significant increases in the proportion identified as indicating for WHO-5 depression are observed to be for 18–24 year olds (+3 percentage points) and 50–64 year olds (+2 percentage points). As already noted, being made unemployed is often regarded as a risk factor for increased likelihood of poor mental health (particularly amongst men). Our findings here are in line with other research evidence highlighting the severe adverse effects of the financial crisis and economic downturn on youth in many European Union countries. The findings suggest that these severe adverse effects on young adults are not limited to employment and income but also extend into other critical areas of life – with far-reaching impacts on socio-psychological stress and mental health.
- In trying to balance public budgets, cuts have been made in public expenditure on healthcare. At the same time the need for some services has increased. Nevertheless, this is not equally true for each Member State and there are also differences between various types of services. In the EQLS,

people are asked whether certain factors made it difficult for them to access a doctor or medical specialist the last time they needed one. Factors which were included both in 2007 and 2012 are: distance to the service provider, waiting times at the day of the appointment, delay in making an appointment and cost. Overall, the proportion of people reporting these factors made it very or a little difficult to access a doctor did not increase over this period in the EU28 overall. Nevertheless, difficulties have increased in several Member States which are most affected by the crisis, and among certain groups. Furthermore, in some Member States access seems to have worsened only after 2011 (Eurofound 2013c).

Trust

- There is declining trust in public institutions, particularly in countries most affected by the economic crisis. Trust in government declined most, from 4.6 in 2007 to 4.0 in 2011. Trust in parliament declined almost equally, from 4.6 to 4.1. Smaller declines were observed with regard to the legal system (from 5.2 to 4.8), the press (from 4.6 to 4.4) and especially the police (from 6.1 to 6.0). Trust in public institutions is particularly low for people with difficulties making ends meet and who are in arrears (Eurofound 2013b). This group has increased in size during the crisis, and since the crisis their level of trust has declined even further (Eurofound 2013e).
- Despite the economic crisis, trust in people on average only slightly decreased from 2007 to 2011. Trust in people therefore seems to be less affected by the economic crisis than trust in institutions. However, this is not true for all countries. In Cyprus and Estonia, declines of 0.6 are noted, while the Czech Republic registered a drop of 0.5 since 2007.
- When we analyze the interrelationship between trust in institutions and trust in people, developments tend to vary. In Greece, for instance, trust in institutions decreased while trust in people was strengthened. One possible explanation for this development is that people experience solidarity in times of economic and government crisis, increasing the social cohesion within society (Eurofound 2013a). However, in Cyprus, both trust in people and trust in institutions fell, which raises the question as to why social cohesion did not seem to act as a mitigating factor there. The increased perception of social exclusion in Cyprus, noted earlier, further points to how the response here may differ from developments in Greece.

Social Tensions

- The economic crisis and growing inequalities seem to have contributed to rising tension between rich and poor citizens across the European Union. Perceived tensions between ethnic groups also increased between 2007 and 2011. This rise is largely attributable to sharp increases in particular countries, with the Czech Republic and Hungary having the highest rates (Eurofound 2013c).

Concluding Remarks

The EQLS documents and analyses the multidimensional nature of quality of life of Europeans, with the 2011 results documenting the social situation of EU residents during a period of profound economic and labor market downturn.

Quality of life is determined by factors such as material wellbeing, health, income, employment status, family circumstances but also depends on where people live. The European Union is marked by large differences in conditions and resources between countries and between urban and rural areas. Within countries, the distribution of these conditions and resources differs systematically between social groups.

The economic crisis appears not to be affecting everyone's quality of life equally, and the period between 2007 and 2011 is marked by

consistent increases in social inequalities across the range of quality of life domains. Quality of life in Europe has deteriorated most for those Europeans living in vulnerable situations, i.e. the lowest income quartile, the long-term unemployed, older people in central and eastern Europe and lone parents.

Overall, Europeans now report a lower quality of life. While the indicators of quality of life show that it remains highest in Northern Europe, people in these countries are now less satisfied, whereas quality of life in some of the eastern countries improved.

Technical Annex

Calculation of Means for Quintiles

For the life satisfaction scale, Abdallah and colleagues calculated the mean for quintiles (Eurofound 2013e). Since there are only 10 possible responses on the life satisfaction scale, it is rarely the case that response categories fit neatly into 20 % bands. For example, if 15 % of respondents respond 1–5, and 10 % respond 6, then the mean life satisfaction of the bottom

Table 29.4 Subjective wellbeing items in the third EQLS questionnaire

Item	Concept	Wellbeing category
Q29a – I am optimistic about the future	Optimism (general)	Eudaimonic
Q29b – I generally feel that what I do in life is worthwhile	Feeling worthwhile	Eudaimonic
Q29c – I feel I am free to decide how to live my life	Autonomy	Eudaimonic
Q29d – In my daily life, I seldom have time to do the things I really enjoy	Time pressure	Eudaimonic
Q29e – I feel left out of society	Social exclusion – left out of society	Eudaimonic
Q29f – Life has become too complicated today that I almost can't find my way	Social exclusion – life is too complicated	Eudaimonic
Q29g – I feel the value of what I do is not recognised by others	Social exclusion – not recognised	Eudaimonic
Q29h – Some people look down on me because of my job situation or income	Social exclusion – looked down upon	Eudaimonic
Q29i – I feel close to people in the area where I live	Neighbourhood belonging	Eudaimonic
Q30 – All things considered, how satisfied would you say you are with your life these days?	Overall life satisfaction	Evaluative
Q40a – How satisfied you are with each of the following items? Your education	Education satisfaction	Evaluative
Q40b – How satisfied you are with each of the following items? Your present job	Job satisfaction	Evaluative
Q40c – How satisfied you are with each of the following items? Your present standard of living	Standard of living satisfaction	Evaluative
Q40d – How satisfied you are with each of the following items? Your accommodation	Accommodation satisfaction	Evaluative
Q40e – How satisfied you are with each of the following items? Your family life	Family satisfaction	Evaluative
Q40f – How satisfied you are with each of the following items? Your health	Health satisfaction	Evaluative
Q40g – How satisfied you are with each of the following items? Your social life	Social life satisfaction	Evaluative
Q41 – Taking all things together, how happy would you say you are?	Overall life (happiness)	Evaluative
Q45a – I have felt cheerful and in good spirits	Positive emotion (cheerful)	Hedonic

(continued)

Table 29.4 (continued)

Item	Concept	Wellbeing category
Q45b – I have felt calm and relaxed	Positive emotion (calm and relaxed)	Hedonic
Q45c – I have felt active and rigorous	Vitality (active)	Hedonic/ Eudaimonic
Q45d – I woke up feeling fresh and rested	Vitality (rested)	Hedonic/ Eudaimonic
Q45e – My daily life has been filled with things that interest me	Engagement	Eudaimonic
Q46a – I have felt particularly tense	Negative emotion (tense)	Hedonic
Q46b – I have felt lonely	Loneliness	Eudaimonic
Q46c – I have felt downhearted and depressed	Negative emotion (downhearted)	Hedonic

quintile needs to be the average of those responding 1–5 and half of those responding 6.

Therefore, to calculate the mean, all respondents in each country were ordered by life satisfaction. Respondents with the same life satisfaction scores were ranked randomly. The rank function was used in SPSS to assign respondents into equally sized quintiles for each country. This was done with within-country weightings. In this way, all the quintiles for each country had the same N+−1. Mean life satisfaction scores were then calculated for each quintile for each country.

Mean Pair Distance

The mean pair distance is a measure of inequality within a population. For any given variable (for example life satisfaction), it is the average difference between two randomly selected people within the population. It can be calculated with a basic frequency table, simply working out all the differences between each pair of respondents, summing them all up, and dividing that by the number of possible combinations of respondents.

As is mentioned in section "Life Satisfaction Inequalities", it is related to the Gini coefficient, which is widely used with income distributions. To calculate the mean pair distance from the Gini coefficient, one must simply multiply the Gini by twice the mean of the population. So if the Gini coefficient of income for a country is 0.3, and the mean income is €15,000, then the mean pair distance is €9,000. That means that if any two people in the population are selected, the average difference in income between them would be €9,000.

As discussed in Abdallah (2012), the mean pair distance is more appropriate for a measure such as life satisfaction because it is not a ratio measure. It is meaningful to say that €400 is twice as much as €200, but it is not meaningful to say that a life satisfaction score of 4 is twice as much as 2.

Calculation of Independent Effect Sizes of Domain Satisfaction on Life Satisfaction

At Fig. 29.10, the mean domain satisfaction was entered into a regression, together with the difference variables (e.g. difference between family life satisfaction and mean domain satisfaction).

The effect size is the change in life satisfaction associated with a one-point difference in the independent variable in question, based on a linear regression model. So, an increase in satisfaction with social life of one point is associated with an increase in life satisfaction of 0.6 points.

Multilevel Model for Determinants of Trust in Institutions

At Fig. 29.27, using multilevel analysis with grand mean centering, the model takes into account the individual and country-related

Table 29.5 Wellbeing inequality indicators

	Lowest quintile	Q2	Q3	Q4	Highest quintile	Q1–Q5 difference	Mean pair distance	Mean life satisfaction
Romania	2.9	5.8	7.3	8.1	9.5	6.61	2.64	6.73
Croatia	3.3	5.4	7.1	8.3	9.8	6.53	2.69	6.78
Hungary	2.2	4.7	6.0	7.3	8.7	6.45	2.62	5.77
Cyprus	3.6	6.2	7.6	8.5	10.0	6.41	2.55	7.16
Bulgaria	2.2	4.5	5.7	6.9	8.5	6.32	2.52	5.55
UK	3.7	6.5	7.8	8.5	9.9	6.17	2.42	7.29
Germany	3.5	6.6	7.8	8.5	9.6	6.11	2.38	7.2
Austria	3.9	7.3	8.0	9.1	10.0	6.10	2.33	7.66
Latvia	2.9	5.1	6.5	7.7	9.0	6.06	2.49	6.24
Lithuania	3.6	5.4	7.0	8.1	9.5	5.93	2.45	6.7
Estonia	3.1	5.3	6.5	7.5	9.0	5.86	2.37	6.28
Czech Republic	3.1	5.5	6.8	7.8	9.0	5.84	2.37	6.43
Poland	3.8	6.2	7.4	8.2	9.7	5.83	2.31	7.07
Ireland	4.0	6.7	7.9	8.5	9.8	5.82	2.27	7.39
Slovakia	3.5	5.2	6.5	7.6	9.2	5.72	2.34	6.39
Greece	3.0	5.5	6.4	7.3	8.6	5.57	2.22	6.16
Malta	4.1	6.6	7.7	8.3	9.5	5.45	2.14	7.23
Slovenia	4.0	6.1	7.2	8.0	9.4	5.41	2.14	6.95
France	4.3	6.6	7.5	8.1	9.6	5.27	2.05	7.23
Portugal	3.8	5.9	7.0	8.0	9.1	5.22	2.12	6.77
Italy	4.0	6.2	7.0	8.0	9.2	5.17	2.04	6.88
Spain	4.7	6.8	7.7	8.5	9.7	4.96	1.97	7.47
Luxembourg	5.1	7.3	8.0	8.7	9.9	4.80	1.87	7.79
Sweden	5.4	7.5	8.1	9.2	10.0	4.64	1.86	8.03
Belgium	4.8	6.9	7.7	8.1	9.4	4.64	1.79	7.38
Finland	5.7	7.8	8.2	9.0	9.8	4.12	1.62	8.08
Netherlands	5.5	7.2	8.0	8.3	9.5	3.92	1.52	7.69
Denmark	6.1	8.0	8.5	9.2	10.0	3.91	1.54	8.37

factors that determine trust in institutions (which is the average of responses to items Q28 a., b., d., e. and f.). The dependent variable is the level of trust in institutions. Using grand mean centering techniques for the explanatory variables, the estimated effect of an explanatory variable raises or lowers the level of trust in institutions. See Eurofound 2013a, p. 70 for more information.

Construction of Synthetic Indices Used in the Chapter

Hedonic Wellbeing Index
Q45a – I have felt cheerful and in good spirits
Q45b – I have felt calm and relaxed
Q46a – I have felt particularly tense
Q46c – I have felt downhearted and depressed
Each of the items has six-scale answering categories, ranging from 'all of the time' (0) to 'at no time' (5). The joint scores to these 4 questions can thus amount to a maximum of 20, which is then multiplied by 5 to get to a maximum of 100. The higher the score on the index, which goes from 0 to 100, the better is a person's hedonic wellbeing.

WHO-5 Mental Wellbeing Index
Q45a – I have felt cheerful and in good spirits
Q45b – I have felt calm and relaxed
Q45c – I have felt active and vigorous

Q45d – I woke up feeling fresh and rested
Q45e – My daily life has been filled with things that interest me

Each of the items has six-scale answering categories, ranging from 'all of the time' (0) to 'at no time' (5). The joint scores to these five questions can thus amount to a maximum of twenty five, which is then multiplied by four to get to a maximum of hundred. The higher the score on the index, which goes from 0 to 100, the better is a person's mental wellbeing.

Social Exclusion Index
Q29e – I feel left out of society
Q29f – Life has become so complicated today that I almost can't find my way
Q29g – I feel that the value of what I do is not recognised by others
Q29h – Some people look down on me because of my job situation or income

Scores on the perceived social exclusion index are the average total scores of the four statements, where 1 = 'strongly disagree' and 5 = 'strongly agree'.

Work-Life Balance Conflict Indicator
Q12a – I have come home from work too tired to do some of the household jobs which need to be done
Q12b – It has been difficult for me to fulfill my family responsibilities because of the amount of time I spend on the job
Q12c – I have found it difficult to concentrate at work because of my family responsibilities

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Wellbeing in Slovakia

30

Jozef Džuka

Wellbeing in Slovakian Research: Definition and Measurement

Definition of Wellbeing and Measurement of Wellbeing Using the Berne Questionnaire on Adolescents' Wellbeing

To our knowledge, the English word "wellbeing" was not used before 1993 neither in the psychological research in Slovakia nor translated into Slovak. Its meaning was introduced to professional circles in the form in which this construct was defined and measured in Berne Questionnaire on Adolescents' Wellbeing (Grob et al. 1991) (see Džuka et al. 1993). The beginning of wellbeing research was characterized by two features, i.e. by the sporadic publication in domestic journals of research findings obtained by Berne Questionnaire on Adolescents' Wellbeing, and by occasional reference to the properties of the questionnaire. For this reason, it should be noted that the authors of Berne Questionnaire on Adolescents' Wellbeing considered three sources as the theoretical basis for the derivation of indicators which constitute wellbeing: Firstly, the cognitive approach which describes the discrepancy between the assessment of the existing state and the state which a person seeks to achieve as a measurement of satisfaction or dissatisfaction (Cantril 1965). Secondly, they name the affective approach, (Bradburn 1969) which emerges wellbeing as a result of the difference between positive and negative emotions. The two-dimensional theory of wellbeing by Headey et al. (1984) claims that wellbeing is composed of two independent dimensions – wellbeing and ill-being. The third source is also the theoretical basis for the design of the instrument. To operationalize wellbeing indicators, the items of the already existing instruments (Affectometer by Kammann and Flett 1983, Affect-Ballance-Scale by Bradburn 1969, Worries by Headey et al. 1984 and Self-esteem/Self-fulfilment also from Headey et al. 1984) were used. Using factor analysis (Grob et al. 1991), six first-order factors were extracted: positive attitudes towards life, awareness of problems, somatic complaints and reactions, self-esteem, depressive mood and the joy of life. Using second-order factor analysis, the two-dimensional structure of subjective wellbeing, as authors claim, was confirmed: two factors were obtained, the first one was named satisfaction (consisting of a positive attitudes towards life, self-esteem, joy of life and inverse rating of depressive mood), and the other one negative mood (consisting of the awareness of the problems and somatic complaints and reactions).

While the original Slovak contribution to the conceptualization of wellbeing did not exist prior

J. Džuka (✉)
Faculty of Arts, Institute of Psychology, Prešov, Slovakia
e-mail: dzukaj@unipo.sk

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to 1997, the verification of psychometric properties of the Slovak translation of Berne Questionnaire on Adolescents' Wellbeing provided space for formulating proposals for its theoretical foundations. There were three proposals (Džuka 1995): (1) Because the theoretical underpinnings of the questionnaire were diverse, without an integrating theoretical framework it appeared to be improper to count scores of the first-order factors within the overall score according to the results of factor analysis of the second order. (2) Integration of the scale of self-esteem to the wellbeing questionnaire seemed to be inadequate, because self-esteem as a relatively stable personality trait has the nature of the factor which correlates with the wellbeing rather than as one of the variables which conditions wellbeing. (3) Theoretically the question of the stability of the measured construct was not considered (for example, whether it is a state or a trait), although the authors of Berne Questionnaire on Adolescents' Wellbeing are inclined to the view that the features of wellbeing are not perfectly stable.

Five of six Slovak translations of Berne Questionnaire on Adolescents' Wellbeing scales (the scale joy of life was not included in the verified version due to the low internal consistency of the original scale alpha = .52; Grob et al. 1991) were analyzed using the exploratory factor analysis (N = 655 students of grammar schools, age 15–18 years). The results of factor analysis of the Slovak translation of Berne Questionnaire on Adolescents' Wellbeing confirmed the expected five-factor structure and showed that the percentage of variance explained by each factor is similar to that of the original questionnaire (the original questionnaire: 17.1; 7.6; 5.9; 4.7; 4.2; 3.8; six factors taken together explain the 43.3 % of variance, and the Slovak version: 20.1; 7.4; 5.5; 5.0; 4.0; total 42 % of the variance). From a contextual point of view it was possible to consider the Berne Questionnaire on Adolescents' Wellbeing and 4 of its 5 scales, compared to other instruments, as a relatively complex means of measuring wellbeing – its scales are related to the physical and psychological aspects of wellbeing. The questionnaire allows, by using the 4 scale, viz. positive attitudes towards life, awareness of problems, current somatic complaints and reactions and habitual depressive mood (scored inverse), to identify three components of wellbeing: habitual psychological wellbeing (positive attitudes towards life and depressive mood), current psychological wellbeing (awareness of problems), and current physical wellbeing (somatic complaints and reactions). Inclusion of the scores of individual scales into the total score appeared to be both theoretically and methodologically inadequate and therefore it was not recommended. The self-esteem scale, which is more of a correlate than a component of wellbeing, was recommended not to be interpreted as an indicator of wellbeing.

In conclusion, in the last 20 years, a significant amount of research into wellbeing carried out in Slovakia was conducted using the Berne Questionnaire on Adolescents' Wellbeing.

An Attempt to Contribute to the Definition of Wellbeing: Proposing a Processual Model of Current and Habitual Wellbeing

A Slovak contribution, or more accurately, an attempt towards a contribution to the conceptualization of wellbeing, appeared in 1997 (Džuka and Dalbert 1997). The proposed model (Fig. 30.1) considers emotions, moods, physical sensations and "emotionally neutral periods" as primary components of wellbeing. The model also takes the processual nature of wellbeing into account and recognizes the existence of current subjective wellbeing in its particular point of time and of habitual subjective wellbeing which is often experienced by a person. The model integrates factors which participate in the determination of wellbeing and classifies them into four groups: environmental variables, personal variables and variables of moderating and mediating nature.

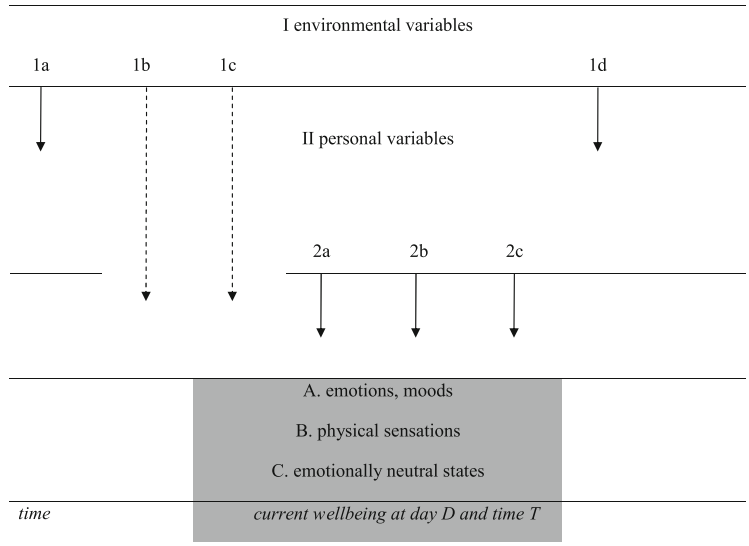

Fig. 30.1 A processual model of current and habitual wellbeing including the influencing variables (Notes: full line – direct influence of the environment variable upon a person, or of the personal variable upon wellbeing dotted line – influence of the environment variable upon wellbeing through a moderator, or a mediator)

Examples of variables that may affect wellbeing:

I. I environmental variables
   1a. Danger radiation several years ago.
   1b. Potential conflict with others which a person managed to avoid.
   1c. Current conflict with another person moderated by a received social support.
   1d. Expectation of a successful graduation from a school.

II. personal variables
   2a. Perceived social support
   2b. Physical movement
   2c. Positive self-image

Habitual subjective wellbeing is seen in this model as a re-experience of the current subjective wellbeing. Therefore it is not possible to visualize it in the model. Obviously, the model of wellbeing is a simplification and its primary purpose is to draw attention to the simplification of the definition of wellbeing.

Description of Components of Wellbeing and Factors Affecting Wellbeing

(A) Emotions and moods. The problem of specific emotions and conditions in which they may represent subjective wellbeing goes beyond the possibilities of the present paper, and so it is not given any attention here. For the starting point, a classification of 23 specific emotions (Ortony et al. 1988) was chosen and was supplemented by Mees (1991) with 11 further emotions. Although this number (34 emotions in total) is not exhaustive, it can be considered as sufficiently representative because other types of emotions are variations of these types (Mees 1991). Moods differ from emotions in two characteristics: they lack intentionality, hence they do not apply directly to things or events (see Frijda et al. 1991, or Becker et al. 1989), and are usually of low intensity.

(B) Physical sensations. As stated by Frijda et al. (1991), "There exist, however, feelings that one would not classify as emotions, such as those evoked by mild sensory pleasure or displeasure. . ." (p. 196). Into the category of physical sensations that represent the physical component of subjective wellbeing we may include: feelings mediated by the sensory organs (taste, smell, tones, colors and skin sensations), physiological conditions associated with satisfying the primary physical needs (the feeling of hunger or satiety, thirst, etc.), and feelings coming from proprioceptors (pain, physical weakness, physical energy, etc.). Within the structure of subjective wellbeing, physical sensations mediate solely the subjective perception of the state of one's own body, "which is individually

perceived, experienced and assessed as positive" (Frank 1991, p. 72). Such a broad understanding of the physical component of wellbeing is appropriate also because it allows the clarification of its relative independence from physical health or from physical condition. For example, we may observe that the handicapped persons can also experience the joy and pleasure of physical movement.

(C) "Emotionally neutral states". While in the case of emotions, moods and physical sensations it can be assumed that their positive valence also represents (positive) subjective wellbeing, it is difficult to determine the place of emotionally neutral experiencing of wellbeing. For example, Pekrun (1988) remarks: "Emotions are temporally limited. This implies that they have a beginning and an end. What happens in the meantime is, however, open" (p. 118). He refers to the research by Diener and Iran-Nejad (1986) who claim that emotions can be classified in terms of valence and can be distinguished between "positive, negative and neutral emotions" (Pekrun 1988, p. 135).

The assumption that emotionally neutral experiencing is a justified construct that can be considered as a structural component of subjective wellbeing was arrived at on the basis of our research (Džuka 2001) in which the existence of emotionally neutral states appeared to be probable. The research used a time sampling diary which over the period of 1 month tried to detect persons' subjective state of mind and in which people were, among other things, asked to answer, six times a day at randomly selected moments, the question "How do I feel right now?". We identified the following structure of descriptions: specific emotional responses ("angry", "sad", "joyful", etc.), physical sensations ("I'm hungry", "my body hurts all over", "I guess I have eaten too much", "I feel sick", "I'm tired", etc.), and emotionally neutral descriptions: "normal", "nothing happens", "totally neutral", "neither good nor bad". Further, when asked to decide on the valence of these "neutral states" on a five-point scale (from 1 = "very good" to 5 = "very bad"), persons ranked them as 'good' (2) among positive, or assigned them grade 3 ("I cannot decide"). In no case a negative rating of 4 or 5 was made. This empirical finding offered three explanations: First, an emotion was present, but because of its low (threshold) intensity it was not registered by a person. Second, none or low and hence neglected intensity of emotions results in energy efficiency, which ultimately demonstrates itself in the form of positive affect. In phases when a person is emotionally unresponsive – he is not in a state of any particulate emotion, or intensity of emotions is so low that the person is unable to provide information about it, in accordance with Solomon's theory (1980), very little energy is consumed. This manifests itself in the form of positive experiencing. Finally, persons could not really decide how they feel at the given moment.

The model differentiates between current, subjective wellbeing at some particular point of time, and habitual, frequently experienced subjective wellbeing by a person. Current wellbeing can be explained also by means of one particular emotion, mood or physical sensation; for example, if a person is experiencing joy, he may experience it as wellbeing, or sadness as ill-being. However, habitual wellbeing is most likely not the result of the prevalence of positive emotions and moods over negative ones and its determination is more complex. The complexity of determination of habitual wellbeing is related to the assumed complexity of the structure of wellbeing and to the diverse conditions of actualization of these components – emotions are conditioned differently than are physical sensations, positive experiencing emerges under different conditions than emotionally neutral state, etc. The way in which these different components are "blended" into wellbeing is still waiting for clarification.

The model integrates factors involved in the determination of wellbeing. The classification of factors affecting wellbeing is specifically related with the different determination of individual structural components of subjective wellbeing (emotions and moods, physical sensations and

emotionally neutral states). For the purposes of the present model, we restrict ourselves to only a general classification of variables that affect wellbeing: I. environmental variables, which can be divided into situational specific (physical and social variables with dimensions of intensity, duration, frequency and predictability) and culturally specific (culturally conditioned definitions, expected styles of response and behavior, etc.), and II. personal variables, which can be divided into psycho-physiological (physiological activation patterns) and psychological (self-image, self-esteem, etc.). As to the features of variables which can be moderators or mediators and whose participation in wellbeing determination is probable, the conceptual and statistical principles of these two types of variables were described by Baron and Kenny (1986): "The central idea in this model is that the effects of stimuli on behavior are mediated by various transformation processes internal to the organism." (p. 1176). This means that the direct impact of the independent variable itself is zero or negligible, but due to the mediation by the mediator it becomes important.

In conclusion it can be stated that, although the proposed model has not yet been empirically verified, it has become one of the theoretical bases for the construction of instrument for assessing the emotional component of wellbeing, which is described below.

Slovak Contribution to Measuring Wellbeing: The Development of Scales of Emotional Habitual Subjective Wellbeing (SEHW)

To measure the emotional component of wellbeing we found it appropriate to use as items the descriptive words that represent emotions and physical sensations, and we preferred the detection of frequency and not the intensity of their experiencing. See Diener et al. (1991, p. 136): "... affective wellbeing can be equated with the relative amount of time a person experiences positive versus negative affect. Frequent positive affect is both necessary and sufficient for experience..." of the emotional habitual subjective wellbeing. If we use the detection of the frequency of experienced emotions in measuring emotional habitual wellbeing, it is important to set a time interval over which the interview applies. In our view, this interval should not be determined precisely (days, weeks). On the contrary, using time-neutral formulation it should encourage recalling concrete experienced emotions and physical sensations in the recent period of time. Time-neutral formulation allows better concentration on the past experiencing without the person's need to focus on additional, and possibly interfering, consideration of the time interval when a person experienced the given emotion. By emotional habitual experience we understand, unlike Diener (1994) who uses the term to refer to a high proportion of personal potential for experiencing certain emotions or moods, the frequency of positive or negative experiencing. The frequency of positive or negative experiencing may be conditioned by three factors: (1) By the tendency, or a personal disposition, to experience certain psychological or physical feelings relatively frequently: some persons are predisposed to be happy while others are unhappy, which may be caused, as Brebner (1998) claims, by personal characteristics such as extraversion. (2) By situational factors – the higher frequency of positive state of mind is associated with desired events, while the higher frequency of adverse experiencing with undesired events (Bolger et al. 1989). (3) By the interaction of both factors. Our objective was to choose, from a larger number of descriptive words which are used to name discrete emotions and physical sensations, those which are capable of describing the two end-points of the pleasant-unpleasant scale, and that are unequivocal and efficient: the frequency of positive experiencing (rather than "pleasant" we use the neutral terms "positive" and "negative") and the frequency of negative experiencing (we use the word "experiencing" to mean that the experiencedpositive or negative state can represent both emotion and physical sensation). Given that both poles are in the case of habitual subjective

wellbeing detected from the viewpoint of their occurrence over a long period of time, we assume their independence. This means that the frequent occurrence of positive experiencing does not preclude the frequent occurrence of negative experiencing (their statistical correlation will be insignificant and negative).

Theoretical Postulates – A Summary

1. Emotional component has in the structure of wellbeing a priority status. It is represented by discrete emotions and physical sensations such as fatigue, hunger, pain, enjoyment, relaxation and feelings fresh, which indicate the satisfaction of basic needs (Veenhoven 1997). We assume that the chosen nouns will form two scales and that descriptors will contain both discrete emotions and physical sensation.
2. The frequency of occurrence of experienced emotions and physical sensations in a long period of time is more appropriate for the measurement of emotional habitual wellbeing than that of the intensity. The frequency depends both on the personal characteristics of a person as well as on the frequency of positive and negative experiences caused by external living conditions and interaction of both. In contrast with this, the intensity of experiencing is more dependent on the personal characteristics. The coefficients of stability of our scales are therefore expected to be lower than those of other scales which measure the intensity of emotional experiencing.
3. Higher correlations of both scales with other similar construct are expected, such as the scale for measuring the cognitive component of subjective wellbeing (life satisfaction) and scales, which also measure emotional habitual subjective wellbeing. Personality dispositions extraversion and neuroticism – which we consider construct distant, will correlate with the habitual emotional wellbeing moderately.

In accordance with the theoretical postulates, we first collected descriptors that represent discrete emotions and physical sensations. In the first research, we compiled two scales out of a higher number of items to measure emotional habitual subjective wellbeing. As a basis for selecting items we used the classification of 34 types of emotions completed by Mees (1991) and the findings from our own research that we conducted using the time sampling diary among the unemployed youth (Džuka 2001). In accordance with the approach that wellbeing includes also physical sensations (Becker 1991), we selected from our study (Džuka 2001) those words which describe physical sensations. It was possible to assign 22 selected descriptors in total to a positive or negative experiencing. Specifically, positive experiencing was described using the concepts of enjoyment, love, peace, feelings fresh, pride, joy and happiness. Negative experiencing was represented by the descriptors of anger, stress, guilt feelings, physical fatigue, envy, drowsiness, shame, contempt, laziness, fear, jealousy, boredom, hatred, pain and sadness. These 22 concepts formulated in the form of nouns were randomly arranged in the first version of the questionnaire. The answers were given on a scale ranging from 1 = "almost never" to 6 = "almost always". For example, I experience anger: almost never – hardly ever – sometimes – often – very often – almost always. This format of questioning encourages reflection of persons on the frequency of their experiencing emotions without taking into account a clearly defined time interval.

The Scales of emotional habitual subjective wellbeing (SEHW) were administered to seven different samples. In the case of students, the instruments were administered in classrooms, in the case of adults and seniors, the instruments were administered individually. In total, the data from 1,125 persons were acquired.

Factor Structure, Reliability and Validity of the Scales of Emotional Habitual Subjective Wellbeing (SEHW)

In order to identify the expected components of the emotional habitual wellbeing – positive and negative experiencing, responses from 97 persons to 22 items were subjected to exploratory factor analysis (PCA with the subsequent Varimax rotation). The result was a solution with two

Table 30.1 Factor loadings after Varimax-rotation and percentage of variance of Scales emotional habitual wellbeing (SEHW) in seven different samples

	Research 1 (n = 97)		Research 2 (n = 109)		Research 3 (n = 201)		Research 4 (n = 212)		Research 5 (n = 183)		Research 6 (n = 169)		Research 7 (n = 154)	
	NE	PE	NE	PE	NE	PE	NE	PE	NE	PE	NE	PE	NE	PE
Shame	.77		.69		.64		.53		.64		.77		.77	
Guilt	.75		.72		.67		.63		.57		.81		.73	
Fear	.74		.68		.69		.74		.60		.73		.75	
Sadness	.69		.67	−.36	.73		.72		.62		.58		.64	−.32
Pain	.54		.59		.77		.64		.64		.35	−.42	.59	
Anger	.45		.46		.36		.54		.61		.41		.46	
Joy		.87		.85		.83		.82		.81		.80		.75
Happiness		.83		.83		.77		.80		.81		.75		.82
Enjoyment		.68		.76		.53		.71		.65		.65		.74
Fresh		.66	−.38	.60		.75		.62	−.41	.49		.60		.70
Variance %	27.8	23.9	34.7	18.0	27.7	21.1	30.1	17.2	29.0	16.3	27.6	19.7	30.6	20.9

Note: Presented are only loadings > .30
NE negative experiencing, *PE* positive experiencing

factors on the basis of the criteria of simple factorial structure. The following ten items were extracted: positive experiencing – joy, happiness, enjoyment and feelings fresh; negative experiencing – shame, guilt feelings, fear, sadness, pain and anger (see Appendix). This factor solution was in the subsequent six studies replicated on various samples. Table 30.1 summarizes the results of the factor analysis of all the seven studies.

Each descriptor has a high primary loading in its own factor; the secondary loading on the second factor is acceptably low – with five exceptions it is lower than .30. These exceptions have a factor loading of the opposite value. It can be stated that nouns found using factor analysis may be considered as suitable descriptors of their own factors.

Scales of Emotional Habitual Subjective Wellbeing (SEHW) Reliability

The average value of the internal consistency of both scales from the seven samples is, due to the low number of items, sufficiently high: the frequency of positive experiencing is alpha = .74, the frequency of negative experiencing is alpha = .72. The retest reliability was assessed on a sample of 97 university students with an interval of 10 weeks. The following correlations were found: positive experiencing r = .63 and negative experiencing r = .66.

Scales of Emotional Habitual Subjective Wellbeing (SEHW) Validity

The average value of inter-correlations between the positive experiencing and negative experiencing of all pieces of research equals −.23, which can be interpreted in the sense that the two scales are relatively independent. The two scales of emotional habitual wellbeing in all samples correlated highly with the scales that have similar content. Both scales had expectably high convergent correlations with the construct related scales, and all correlations are in the desired direction: positive experiencing correlates to the highest degree with the level of mood (from .45 to .75; M = .60), the second highest correlation was found with the scale of overall life satisfaction (.38 to .66; M = .51) (both scales are taken from HSWBS; Dalbert 1992). Negative experiencing correlated moderately and negatively with both construct related scales, but on average correlations are lower than those of the positive experiencing (−.28 with the level of mood, or − .24 with the life satisfaction). SEHW correlations with construct different scales which measure personality traits (extraversion scale and the neuroticism scale are taken from the Freiburg Personality Inventory FPI-k, Fahrenberg et al. 1978) were favorable: the range of positive experiencing correlated moderately positively with extraversion (mean

correlation .36), negatively and moderately highly with neuroticism (−.29). The scale of negative experiencing correlated positively and strongly with neuroticism (.51), and negatively but only slightly with extraversion (−.18).

Summary

1. The results of the factor analyses confirmed the expected structure of the selected descriptors of emotions and provided a well-interpretable solution for the two identified factors: positive experiencing and negative experiencing.
2. Internal consistency of the scale of positive experiencing and the scale of negative experiencing is for all seven studies satisfactory, and retest reliability of both scales confirms the expected stability of the measurement.
3. The created scales can be interpreted as a quasi-independent. The expectation formulated in the third postulate, viz. that extraversion and neuroticism will correlate with emotional habitual wellbeing slightly and lower than in the case of scales that measure the intensity of experiencing, can be considered as confirmed. Emmons and Diener (1985), who used a very laborious and time-consuming measurement process, arrived at the similar results: in their research, positive affect (before the slash) correlated comparatively with extraversion on a similarly large sample, similar to our scale of positive experiencing (after the slash, the given values are average correlations) – with extraversion = .31/.36; with neuroticism = −.31/−.29. Correlations of negative experiencing from our research are also comparable with those by Emmons and Diener (1985): with extraversion − .05/−.18, with neuroticism .61/.51.

We can conclude that, since its publication (Džuka and Dalbert 2002), Scales of emotional habitual subjective wellbeing (SEHW) has been used as well in the Slovak as the Czech research (see the WOS Database). The Scales of emotional habitual subjective wellbeing research version was used in the comparative research of wellbeing among Slovak youth and German youth in 1998. The results of this comparison are described in the following section.

Wellbeing in the Eastern Part of Europe After 1992: Slovak Youth in Comparison With the Swiss, Austrian and German Youth

Introduction

On 1 January 1993, Czechoslovakia split into two countries: Slovakia and the Czech Republic.[1] Comparative studies of wellbeing concerning the countries of the former Soviet bloc, where Czechoslovakia belonged prior to 1989, are rare. One exception was the analysis of research data made by Diener et al. (1995). The data were collected in several stages before 1990 on a sample of approximately 120,000 people (mostly students) from 55 countries around the world, including Hungary, Poland, East Germany and Russia. Slovakia, as a part of Czechoslovakia prior to 1993, was not included in the analysis. The findings of Diener et al. (1995) demonstrate that only four predictors have a strong relationship to subjective wellbeing: "...people in industrially developed nations (with high levels of income, individualism, equality, and human rights) report greater SWB than people in less developed societies." (p. 862).

Comparative data on wellbeing of youth from the former socialist bloc countries and the so-called Western countries, obtained immediately after 1989, were published in two studies. Balatsky and Diener (1993) made a comparison of research data collected in 1990 from 116 students of two universities in Russia, and Grob et al. (1999) published the results of research conducted in 1990 in which they compared the subjective wellbeing of adolescents

[1] The Slovak Republic and the Czech Republic had been two parts of a single country called Czechoslovakia from 1918 to 1992.

from six post-socialist countries (Bulgaria, Czechoslovakia – Slovakia was at that time a part of the common state of Czechs and Slovaks, Hungary, Poland, Romania and Russia) and six Western countries (Finland, France, Germany, Norway, Switzerland and the USA). To measure wellbeing, they used two scales of the Berne questionnaire on adolescent's wellbeing (Grob et al. 1991): the scale of positive attitudes towards life and the scale of self-esteem, from which they calculated the total score. Their assumption was that living conditions in the post-socialist countries differ from those in Western Europe and in the USA. Using multiple regression analysis they verified functions of the basic factors (gender, age, belonging to cultural context and subjective difficulties) and secondary factors (subjective control and coping orientation). Their results showed that belonging to the post-socialist countries or to the Western countries explained only a small percentage of the variance of subjective wellbeing (4 %), and that is in disadvantage of the post-socialist countries, independently of age and gender. They offer the following interpretation of their research findings: "Because the economic situation in these two macro contexts was very different at the time of the study with the economies of Eastern European countries being much weaker than those of Western countries, we regard this finding as further support for the assumption that subjective wellbeing of adolescents is also linked to the income levels or wealth of the country where they live (Diener et al. 1995). The few exceptions to this rule (e.g. French sample) suggest that other macro level factors than economic affluence have an impact on the levels of subjective wellbeing in adolescents. These factors are difficult to trace in the present study, but further research could shed on this question" (Grob et al. 1999, p. 127).

In 1992, two years after the research by Grob et al. from 1990, the author of the present paper began a comparative research of wellbeing of Slovak and Swiss youth, and later of the youth from Austria and Germany. The acquired results provide the possibility of a reanalysis of the findings and their confrontation with the conclusion that emerged from the research by Grob et al. (1999) and from Veenhoven (1991) regarding the relativity of wellbeing. The basic expectations were summarized in the following hypotheses:

1. The wellbeing of Slovak youth will be worse in the period of 3, 5, or 9 years (1992, 1994, 1998) after the change of the political and economic systems in Slovakia in 1989 when compared to the wellbeing of Swiss, Austrian and German youth. It is conjectural because during the research period the Slovak youth grew up and lived in conditions that were worse as far as the satisfaction of their personal needs is concerned.
2. In line with the research findings of Costa and McCrae (1980) we formulated an alternative hypothesis. The differences in subjective wellbeing will not be connected with different economic levels of the countries in which the compared youth lived but with the difference in personal (gender) and personality variables (extraversion, neuroticism). In other words, absolute differences in economic levels of the compared countries will not stand for possible differences in subjective wellbeing but its value will be made relative rather by the personality characteristics of the researched persons.

The Compared Groups and the Instruments

The comparison of Slovak and Swiss youth in 1992, i.e. two and a half years after the societal change and half a year before the dissolution of the Czechoslovak Federal Republic into two independent states, the Slovak Republic and the Czech Republic

The Slovak sample consisted of 105 secondary school students from Eastern Slovakia aged between 16 and 17 years ($M = 16.08$, $SD = .49$) (see summary Table 30.2). For the purposes of comparison, from the representative survey of adolescents of the same age, viz. secondary school students in Switzerland, 529 peers were selected (Note: the Swiss sample

Table 30.2 Sample summary: Slovak, Swiss, Austrian and German Youth in 1992, 1994 and 1998

	1992		
	girls	boys	total
Slovakia	69	36	105
Switzerland	256	273	529
	1994		
Slovakia	353	302	655
Austria	99	84	183
Germany (eastern part)	63	61	124
	1998		
Slovakia	104	76	177
Germany (western part)	107	101	208

was interviewed during April to June 1990, the data for the purposes of comparison were given by A. Grob, the author of Berne Questionnaire on Adolescents' Wellbeing). To measure the life satisfaction, we used the scale of positive attitudes to life, which comes from the Berne Questionnaire on Adolescents' Wellbeing (Grob et al. 1991). An example of an item: "I have more joy than most other people." Subjects responded to the items on a 6 point Likert-type scale ranging from 1 = " totally false" to 6 = "totally true." The second scale which was used in our 1992 research was the scale of self-esteem, which also comes from Berne Questionnaire on Adolescents' Wellbeing. It was a 5-item scale with the same answer format as that of the positive attitudes towards life scale. An example of item: "I can do things just as well as most other people."

Comparison of Slovak, Austrian and (Eastern) German youth in 1994 – four and a half years after the change and a year and a half after the establishment of the independent Slovak Republic

In this case, the sample (see the summary Table 30.2) consisted of the students of grammar schools in Eastern Slovakia (N = 655), in Lower Austria (N = 183) and in Eastern Germany (Saxony) (N = 124). The cities where the schools are located have approximately the same population. Even in this case adolescents aged 15 to 17 years (M = 16.07, SD = .76) were researched. The research instruments were identical to those of the first study of 1992: to measure life satisfaction we again used the positive attitudes to life scale, which comes from the Berne Questionnaire on Adolescents' Wellbeing (Grob et al. 1991), and also the self-esteem scale.

Comparison of Slovak and (Western) German youth in 1998 – nine years after the change, and five years since the establishment of the independent Slovak Republic

The comparison was made during May to July 1998 on the sample (see the summary Table 30.2) of 177 students of grammar schools from Eastern Slovakia (age: M = 16.09, SD = 1.15) and of 208 students of grammar schools of the same age (M = 17.11, SD = 1.00) from the southwest part of Germany (Baden-Wuerttemberg and Rhineland-Palatinate). In this study the cognitive component of wellbeing was measured with the 7-item General Life Satisfaction Scale (Dalbert et al. 1984) describing satisfaction with one's present and past life and with one's future perspectives (Slovak Sample alpha = .76; German Sample alpha = .89; item e.g.: "I am satisfied with my life"). Subjects responded to items on a 6-point Likert-type scale ranging from 1 = "totally disagree" to 6 = "totally agree". To measure the affective component of subjective wellbeing, we used the Scales of emotional habitual subjective wellbeing (Džuka and Dalbert 2002), which consists of ten items which measure the frequency of a positive and negative experience (see the Appendix). By summing up positive and negative items a score can be obtained which expresses the frequency of positive experiencing (Slovak Sample alpha = .67; German Sample alpha = .73) and the frequency of negative experiencing (Slovak Sample alpha = .68; German Sample alpha = .71). For the purposes of our analysis, we used the difference between the frequency of the positive and negative experiencing and called it affective balance. To control the expected impact of personality variables we used two scales from the Freiburg Personality Inventory (FPI-k, Fahrenberg et al. 1978), viz. the extraversion scale and the neuroticism scale. To measure self-esteem, we used the scale from the questionnaire for measuring self-esteem (Deusinger 1986). An example of an item: "When I compare myself with other people of

my age, I can compete quite well." The answer format is identical with that of the General life satisfaction scale.

Statistical Analysis

We used the analysis of variance (ANOVA) to statistically verify the research hypotheses. To control the effects of personality we used the analysis of covariance (ANCOVA) so that the country and gender featured as factors in the analysis (independent variables), and personality variables (extraversion, neuroticism, or self-esteem) as covariates. The amount of possible factor effects, or interactions, was evaluated using the coefficient Eta^2. To determine the direction of covariate, we calculated the regression coefficient B.

Results

As the dependent variable, only life satisfaction was tested in 1992 and 1994, in 1998, two variables represented the wellbeing, viz. life satisfaction (cognitive component) and affective balance as the difference frequency of positive and negative affect (affective component).

Life Satisfaction in 1992, 1994 and 1998 Without the Control of the Effect of Personality Variables

Based on the testing of the significance of differences of the averages, we can make conclusions about the first hypothesis about the dependence of wellbeing upon the degree of economic development of the country. All three comparisons confirm that Slovak adolescents had lower life satisfaction than the Swiss adolescents (1992), or than Austrian and German adolescents from eastern part of Germany (1994), or even than German adolescents from the western part of Germany (1998). The data indicate that the assumption of the impact of the economic level on the country's life satisfaction (Grob et al. 1999 or Veenhoven 1991) was confirmed – the cognitive component of wellbeing was not dependent on the relative comparison of the persons examined and appeared to be determined by the options that the life in the given country provides to meet basic life needs.

Table 30.3 Covariance analysis for the life satisfaction and affective balance depending on the nationality (Slovakia and Germany – western part, 1998), gender and covariates extraversion, neuroticism and self-esteem

	Life satisfaction	Affective balance
Source	F (Eta^2)	F (Eta^2)
Country (C)	11.12** (.03)	14.59** (.04)
Gender (G)	7.60** (.02)	0.03 (.00)
Extraversion (E)	20.78** (.06)	14.26** (.04)
Neuroticism (N)	8.79** (.03)	51.62** (.13)
Self-esteem (S)	45.94** (.12)	112.04** (.25)
C × G	4.48** (.01)	6.21** (.02)

Note: In brackets Eta^2 – the percentage of variance, *p < .05, **p < .01

Life Satisfaction and Affective Balance in 1998 with the Control of the Effect of Personality Variables

To confront the validity of the conclusion above with the findings, which presuppose a significant proportion of personality variables in life satisfaction (Costa and McCrae 1980), we included into the tested model the covariate of self-esteem, extraversion and neuroticism. Table 30.3 offers the ANCOVA results with covariates of self-esteem, extraversion and neuroticism, and both subjective wellbeing variables, life satisfaction and affective balance.

Table 30.3 shows that the values of life satisfaction were influenced by the economic level of the country only partially (3 % of variance). Gender (2 %), extraversion (6 %), neuroticism (3 %) and self-esteem (12 %) were identified as further significant factors. The influence of the country was not direct but moderated. When we statistically eliminated the effect of personality variables on the life satisfaction, it has been shown that the effect of nationality was moderated by gender (significant interaction): Slovak boys (M = 4.21) and German boys (M = 4.23), who had about the same values, reached in comparison with German girls (M = 4.66) statistically significant lower scores in the life satisfaction. Further, also Slovak girls

(M = 4.31) had lower values of life satisfaction than German girls. In other words, nationality alone did not explain the differences in life satisfaction, so even our second research did not support the assumption of the determination of this variable by the economic level of the country.

As with the life satisfaction, also in the case of affective balance we tested the effect of the covariate of personality. The ANCOVA results presented in Table 30.3 demonstrate that the personality variables were proven to be significant predictors of positive affective balance of the researched persons: extraversion participated in the positive affective balance by 4 % of the variance, neuroticism by 13 %, and self-esteem by as much as 25 %. Personality factors as a whole explained 42 % of the total 48 % of variance of all the variables tested. This composition of results is similar to the findings which were obtained in the case of the life satisfaction. Besides the nationality (4 %), the interaction of gender and country (2 % of variance) had statistically significant influence on the affective balance. Similar to life satisfaction, even in this case was the influence of the country moderated. When the impact of personality variables on the affective balance is statistically eliminated, the effect of nationality was moderated by gender: it was again German girls (M = 1.43), as in the case regarding life satisfaction, who scored highest in the affective balance, although this difference was statistically significant only in comparison with the Slovak girls (M = 0.94). German (M = 1.24) and Slovak boys (M = 1.13) were not statistically significantly different as to the affective balance.

We can again state that the assumption of the determination of subjective wellbeing by the economic level of the country, its affective component in this case, was not confirmed. If nationality was that variable which determines the subjective wellbeing, then there would also be a significant difference between German and Slovak boys. Regarding the impact of the personality variables on affective balance, based on the non-standardized regression coefficients it was possible to determine its attributes: the higher the extraversion of the researched persons, the higher their achieved score in the difference of positive and negative affect (B = .27, B = regression coefficient); the more emotionally unstable the persons were, the lower was the score they achieved in affective balance (B = −. 45), and the higher their self-esteem, the higher they scored in affective balance (B =. 42).

Summary

When the effect of personality variables – extraversion, neuroticism, or self-esteem, was statistically controlled, different material standards of living (Slovakia vs. Germany) of the researched adolescents proved to be an insignificant factor in life satisfaction and affective balance. Positive values of subjective wellbeing in the cognitive and affective components were to a decisive measure conditioned by personality variables, particularly by high self-esteem, high levels of extraversion and low neuroticism of the researched persons, and that is irrespective of their gender and nationality.

If we confront these findings with the hypotheses we formulated on the basis of Veenhoven's (1991) research findings, we can state the following:

1. Regarding the cognitive component of wellbeing, when the personality effect was not controlled, Slovak youth after the change of the political and economic system in Slovakia reached a lower score than the Swiss, Austrian and German youth. When the impact of extraversion, neuroticism and self-esteem was statistically controlled, a moderating effect of gender was identified: Slovak boys (M = 4.21) and German boys (M = 4.23) had approximately the same values, and in comparison with the German girls (M = 4.66) they had statistically significantly lower scores in life satisfaction. Slovak girls also had lower levels of life satisfaction than German girls. Such structure of results does not support the claim that growing up and living in conditions that were, and are,

worse as far as the satisfaction of personal needs (Slovakia) is concerned means at the same time a devaluation of one's own life satisfaction (Veenhoven 1991). Our findings point to the fact that, in the case of young people, depending on positive values in life satisfaction is substantially more complex: it can be concluded that, first of all, it is very closely related to the personality variables and gender of the researched persons.

2. It was relevant whether such a picture of research results would be confirmed also in the case of the affective component. With reference to Veenhoven (1991) it was expected that the cognitive component is more relative, and that it may reflect not the actual condition of satisfying needs. Rather than that, it is the effect of comparing the research persons with others living in the same economic conditions; this may result in a tendency to distort the true level of wellbeing and, ultimately, lead to artifacts on the wellbeing of the interviewed persons. Affective assessment is, in the opinion of the quoted author, independent from the comparing oneself with others, and therefore the differences in subjective satisfaction with meeting their needs should be clearly manifest in it. When we compared the Slovaks who can be expected to live in relatively poor material conditions when compared with those of the Germans (1998), we found in the affective balance (affective component) a similar pattern of results as it was the case with life satisfaction: when personality variables were not controlled, the influence of the state appeared to be unequivocal, and that is to the disadvantage of the Slovaks. When we statistically controlled the impact of personality variables, the influence of country was moderated by gender of the researched persons – only German girls differed significantly in the affective balance from the Slovak girls who achieved lowest score. At the same time, the differences between Slovak and German boys were insignificant, and, similarly, the difference between German boys and Slovak girls was also not significant. Not even in this case was the assumption of the determination of wellbeing by the material aspect of life in the researched persons' country confirmed; also, it was demonstrated that the adolescents' personalities played a decisive role in their affective balance. In the second hypothesis we formulated an alternative assumption that differences in subjective wellbeing will not be caused by a different economic level of the compared countries but by the differences in personal (gender) and personality variables (extraversion, neuroticism and self-esteem). Our research has confirmed that it was not the absolute differences in the economic levels of the compared countries which caused the difference in wellbeing but rather its values were relativized by the personality attributes of the researched persons. Being an extrovert, having a high level of self-esteem and not being a neurotic means high levels of wellbeing, and that is regardless of the country in which young people live, of its material wealth and of the related resources to meet their needs.

Conclusion

If we consider life satisfaction (cognitive component) and the predominance of positive over negative experiencing (affective component) as components of wellbeing, then information about wellbeing without the control of personality variables seems to be insufficiently documented. In the studies in which we controlled personality variables (extraversion, neuroticism and self-esteem) it was demonstrated that it were these variables that had a significant relationship to the values of wellbeing, and not the researched persons' nationality. It is important to add that life satisfaction and the frequency of positive experiencing were assessed using the scales with the verified reliability and not simply by asking a single question, which is usual for global research and wellbeing analyses. The results of comparisons with the use of a single question are described in the third section.

Slovakia as a Part of the Global Comparison of Wellbeing and the Distribution of Wellbeing in the Selected Groups

In 2003, a year before its admission to the EU (2004), Slovakia became a part of the monitoring the quality of life within the European Quality of Life Survey (EQLS). The European Quality of Life Survey (EQLS) was carried out in 2003, covered 28 countries and involved interviewing 26,000 people. The main findings were published in a series of analytical reports which provide a unique insight into the quality of life in 28 European countries http://www.eurofound.europa.eu/surveys/eqls/. The instrument of questionnaire that is used within this survey is comprehensive and covers a wide range of life regarding interviewed people: "It looks at a range of issues, such as employment, income, education, housing, family, health and work-life balance. It also looks at subjective topics, such as people's levels of happiness, how satisfied they are with their lives, and how they perceive the quality of their societies". In 2002, an Australian instrument The Personal Wellbeing Index (PWI) (International Wellbeing Group 2006) was translated into Slovak which allows evaluating satisfaction with life with the help of 7-item and a single global item, which does not belong to the scale. This single item detects satisfaction with life as a whole, similar to EQLS (we use the title the Satisfaction with life as whole, "SWLW", in this text). The existence of available data from a representative interview within EQLS and the results of interviews using PWI and SWLW of two specific groups of people from the Slovak Republic offered the opportunity of comparing the results of both types of collected data and space for interpretation of the findings.

The aim of this section is to compare the results of partial studies by Cummins et al. (2003) and Gurkov et al. (2012), which concerned the cognitive component of wellbeing – satisfaction with life of the selected groups of people (students, nurses) with the results of a representative interviewing within the European Quality of Life Survey (EQLS) in 2003 and 2011.

Wellbeing of Students of Grammar Schools and Secondary Vocational Schools and the Results of a Representative Interviewing Within the European Quality of Life Survey (EQLS) in 2003

We compared the results obtained within the European Quality of Life Survey (EQLS) that come from interviewing a representative sample of the population of Slovakia in 2003, namely by asking the question which concerned the satisfaction with life, with the results of our two studies. The first research concerned life satisfaction of students of grammar schools, the second one the students of two types of secondary vocational schools. In both cases the interviewing was non-representative, and as a research tool the Slovak version of The Personal Wellbeing Index (PWI) and the Satisfaction with life as whole (SWLW) (Cummins et al. 2003) was used. Figure 30.2 presents the results of the measurement of satisfaction with life in general, which was measured on a 10 point scale (one = "very dissatisfied" and 10 = "very satisfied") within the representative interviewing the European Quality of Life Survey (Böhnke 2005). Figure 30.2 shows mean satisfaction values for all 28 countries.

The interviewed people in 28 countries responded to the question: "All things considered, how satisfied would you say you are with your life these days?" (p. 14). As can be seen in Fig. 30.2, the inhabitants of Slovakia expressed their satisfaction on the 10 point scale with the average value of 5.7. In absolute terms, this value is very close to the mean of the ten-point scale (5.5). On the basis of the answers by Slovaks interviewed in 2003 it can be said that they are "neither satisfied nor dissatisfied". Compared with other countries such as the neighbouring Austria (AT = 7.7), Slovaks show a lower level of life satisfaction (Böhnke 2005).

A similar question about global life satisfaction that is in the European Quality of Life Survey (EQLS) was answered in our study by 135 students of grammar schools in the eastern

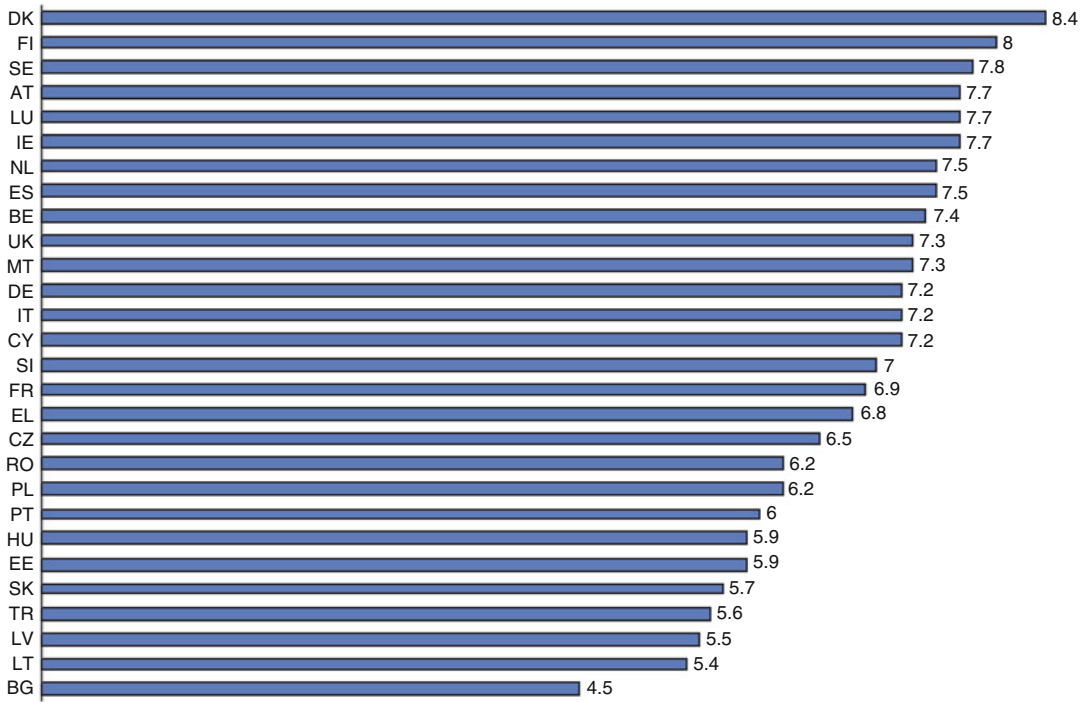

Fig. 30.2 Life satisfaction in Europe, 2003 (Böhnke 2005, p. 14)

part of Slovakia.[2] "Thinking about your own life and personal circumstances, how satisfied are you with your life as a whole?" (SWLW) (scale from zero to 10: zero = "completely dissatisfied" and 10 = "completely satisfied"). The students of grammar schools also responded to 7 questions of Personal Wellbeing Index (scale from zero to 10) which were related to the satisfaction with seven specific areas of life: Standard of Living, Personal Health, Achieving in Life, Personal Relationships, Personal Safety, Community-connectedness, Future Security. The seven domain scores can be summed to yield an average score which represents "Subjective Wellbeing" (see Manual Personal Wellbeing Index, International Wellbeing Group 2006). The manual recommends converting the acquired mean score into the standard 0-100 scale format (shifting the decimal point to the right) and provides a guidance on how to proceed in case of a need to compare Personal Wellbeing Index scores with other data – data that have been derived from different response scales: $(X - k^{min}/k^{max} - k^{min}) \cdot 100$.[3] Figure 30.3 provides a graphical representation of the acquired values of European Quality of Life Survey (EQLS), Satisfaction with life as whole (SWLW) and Personal Wellbeing Index (PWI), all were converted into the standard 0-100 scale.

The values obtained from the grammar school students and from a representative sample of Slovaks (EQLS) differ from each other: the average score of seven responses in PWI scale by students of grammar school after being converted into a standard scale from 0 to 100 has a value of 72, which is, when compared

[2] 56 male, 80 female, mean age 16.4 years.

[3] X = the score or mean to be converted, k^{min} = the minimum score possible on the scale, k^{max} = the maximum score possible on the scale.

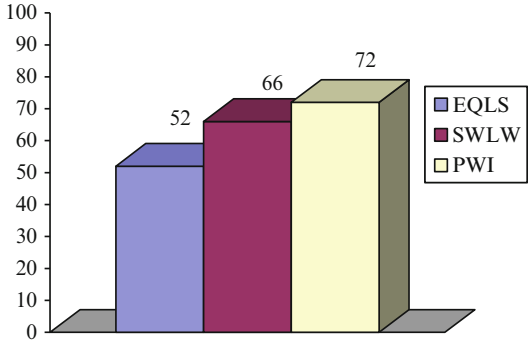

Fig. 30.3 Life satisfaction of a representative sample of Slovaks (EQLS 2003) and research sample of students of grammar schools in 2003 (n = 135) (The score of all three values was converted into the standard 0–100 scale: EQLS representative sample: 5.7 (5.7 − 1/10 − 1)·100 = 52; Satisfaction with life as a whole (SWLW) of students of grammar school: 6.6 = 66; Personal Wellbeing Index (PWI) students of grammar school: 7.2 = 72)

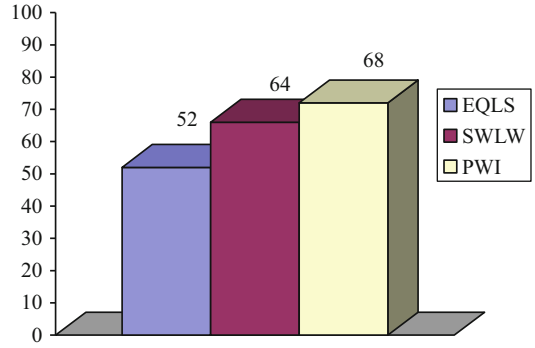

Fig. 30.4 Life satisfaction of a representative sample of Slovaks (EQLS 2003) and a research sample of students of two secondary vocational schools in 2003 (n = 97) (The score of all three values was converted into the standard 0–100 scale: EQLS representative sample: 5.7 (5.7 − 1/10 − 1)·100 = 52; Satisfaction with life as whole (SWLW) of students of two secondary vocational schools: 6.4 = 64; Personal Wellbeing Index (PWI) of students of two vocational schools: 6.8 = 68)

with the normative population range for Western countries (International Wellbeing Group 2006) a value lying within the norm (70–80). The value of the answer to the question about satisfaction, viz. "Satisfaction with Life as a Whole" (SWLW), which the authors of PWI do not consider a part of the instrument due to its low reliability because of the answer to one question, is significantly lower (66). The answer to the question from EQLS research shows that life satisfaction of a representative sample of Slovaks is very low (52).

We carried out the same comparison in 2003 also in the case of the selected set of students of two types of secondary vocational schools, viz. secondary medical school and secondary technical school. The question "Thinking about your own life and personal circumstances, how satisfied are you with your life as a whole?" (SWLW) was answered by 97 students of both types of secondary vocational schools in the eastern part of Slovakia,[4] who also responded to 7 PWI questions which were related to the seven specific areas of life. In Fig. 30.4 we present a graphical representation of the acquired values of European Quality of Life Survey (EQLS), Satisfaction with life as whole (SWLW) and Personal Wellbeing Index (PWI) which were converted to the standard 0–100 scale.

The values obtained from students of two secondary vocational schools and a representative sample of Slovaks (EQLS) differ from each other: the average score of seven responses in PWI scale by students of secondary grammar schools after conversion to a standard scale 0 to 100 has a value of 68, which is on the basis of the comparison with normative population range for Western countries (International Wellbeing Group 2006) a value lying slightly below the standard range (70–80). The value of the answer to the question about "Satisfaction with Life as a Whole" (SWLW) is significantly lower than the standard range (64). The answer to the question of EQLS research shows that life satisfaction of a representative sample of Slovaks is very low (52).

[4] 39 male, 58 female, mean age 17.8 years.

Discussion

The fact that in the representative EQLS interviews Slovaks reached the fifth lowest score (5.7 on a 10-point scale, or 52 on a 100-point scale) from among 28 countries mean that they are, when compared with other countries, much worse as to their life conditions: "The higher the mean value of life satisfaction in a country, the more satisfied a nation's population is with the general living conditions" (Böhnke 2005, p. 14). This interpretation is undermined by the following two observations: (1) With the use of the answers to a single question it is premature to conclude that the information about the satisfaction of the country with the general living conditions was obtained. (2) Based on the answer to a single question it is premature to infer that the Slovaks are less satisfied with their lives than those who scored in the interviews higher. If we compare the EQLS results with the results of interviews with two specific groups of people obtained by a different instrument, we can see that grammar school students achieved the PWI score 72 which is comparable to that of the Western countries, while the students of secondary vocational schools scored only slightly lower (68). It is probably related to the fact that the PWI score allowed for the evaluation of a greater variety of aspects and provided a summarized answer.

The overall rating using one question was lower (64) but still different from the score which was obtained from the representative interviewing (52). However, it must be admitted that this argument has a weakness: it is a specific group of people, i.e. students who do not need to consider their living conditions as negative as other groups interviewed in Slovakia. It remains open, however, whether this difference in interviewing between EQLS and PWI will be detected even if a different group of people is interviewed, or at a different time. Such a comparison is enabled by the data collected in 2011 from the PWI and SWLW research conducted in Slovakia among nurses.

Results of a Representative Interviewing Within the European Quality of Life Survey (EQLS) in 2011 and Wellbeing of Nurses

In 2011 the third data collection within EQLS was conducted (Fig. 30.5). Including available data about nurses could be administered by Personal Wellbeing Index (PWI) (Gurkov et al. 2012).

The question "Thinking about your own life and personal circumstances, how satisfied are you with your life as a whole?" (SWLW) was answered by 552 nurses from a non-representative sample from the Slovak Republic,[5] who also was responded to 7 PWI questions, which were related to the satisfaction with seven specific areas of life. Figure 30.6 below shows EQLS and PWI values which were converted into the standard 0–100 scale.

The obtained values of nurses and a representative sample of Slovaks (EQLS) in 2011 differ from each other considerably less than in the case of a comparison of a representative sample of the Slovak population and grammar school students, or students of two types of secondary vocational schools in 2003. The average score in Personal Wellbeing Index (PWI) for nurses after conversion into the standard 0–100 scale has the value of 63, which is a value lower than the normative population range for Western countries (International Wellbeing Group 2006) (70–80). The value of response to the question regarding satisfaction "Satisfaction with Life as a Whole" (SWLW) is, however, higher than PWI score (67 resp. 63), and is approaching the norm of Western countries. The comparison showed that, when compared with the representative population, nurses

[5] 9 males, 543 females, mean age 39.5 years.

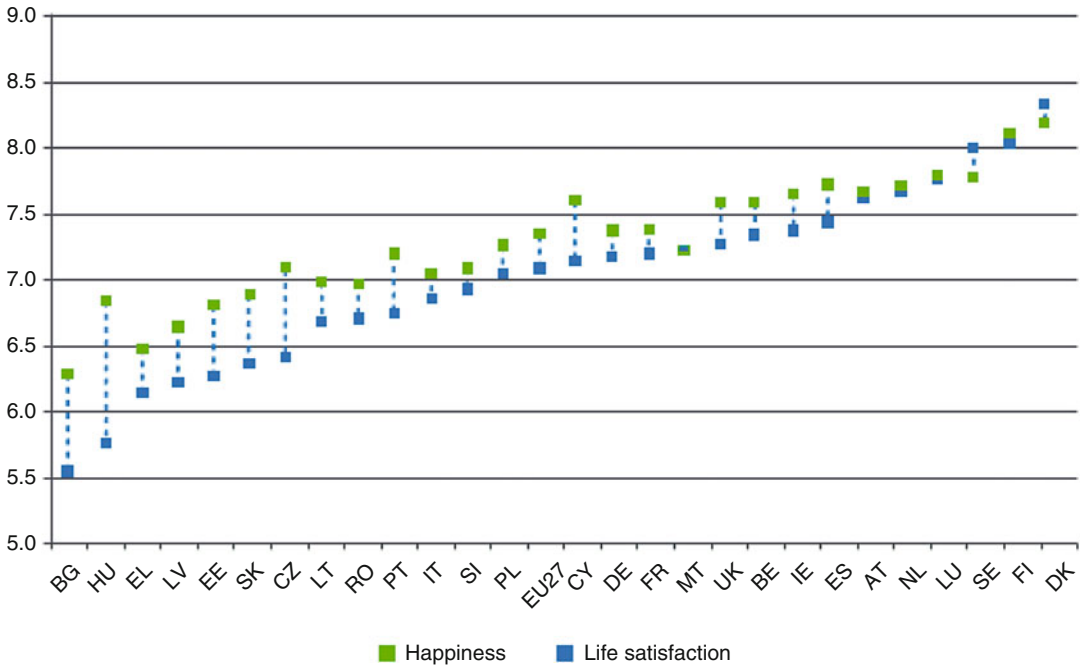

Fig. 30.5 Life satisfaction and happiness in Europe, 2011 (Anderson et al. 2012, p. 17) (Notes: *Dotted lines* show high–low range. Life satisfaction: "All things considered, how satisfied would you say you are with your life these days? Please tell me on the scale of 1 to 10, where 1 means very dissatisfied and 10 means very satisfied". Happiness: This value is not compared with our data.)

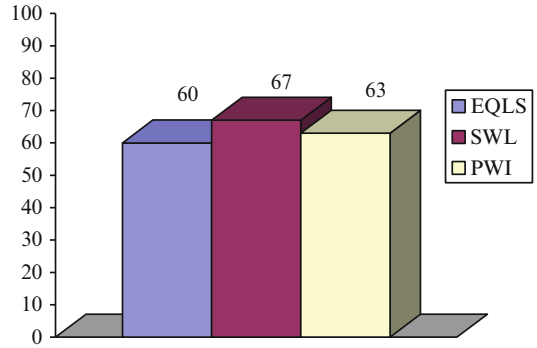

Fig. 30.6 Life satisfaction of a representative sample of Slovaks (EQLS 2011) and a research sample of nurses in 2011 (n = 552) (Scores of all three values were converted into the standard 0–100 scale: EQLS representative sample: 6.4 (6.4 − 1/10 − 1) ·100 = 60; Satisfaction with life as whole (SWLW) nurses: 6.7 = 67; Personal Wellbeing Index (PWI) nurses: 6.3 = 63)

demonstrate higher satisfaction with life if they answer to a single-item question. When the score of seven PWI items was calculated, EQLS and PWI values differed little.

Discussion

If the answer to the question about the overall life satisfaction in EQLS survey made on a representative sample of the Slovaks in 2003 reached the

value of 52 on a standard scale from 0 to 100, in 2011 this same value was 60. The answer to a similar question about satisfaction with life as a whole (SWLW) that comes from Personal Wellbeing Index (PWI) in research among nurses in 2011 reached the value of 67, but the score calculated from responses to 7 PWI questions was 63. While in 2011 the Slovaks were in terms of life satisfaction (score 60) considerably far below the standard (70–80) which is characteristic of Western countries, nurses, which are almost without exception of feminine gender and whose work is considered strenuous and insufficiently appreciated, reached in the global assessment the score which is close to standard (67). When asked to answer 7 specific questions about satisfaction with various aspects of life (PWI), the score was close to the evaluation from the representative EQLS survey among all Slovaks (63).

Conclusion

While the global research into wellbeing has a multidisciplinary character and is often associated with the research of quality of life (sometimes the two concepts unacceptably overlap), in Slovakia wellbeing was imported as a psychological construct.

The first part of the paper presents a process model of wellbeing which, unlike other models, considers as essential components, in addition to emotions or moods, physical sensations and "emotionally neutral states." The cognitive component is not considered in this model as the primary unit of wellbeing analysis. The model takes into account the duration of the wellbeing, distinguishes between the current and habitual wellbeing and integrates factors which participate in the determination of wellbeing. This section also presents a description of the development of two short scales for measuring the emotional component of the habitual wellbeing, the scale comprising four items of positive experiencing (enjoyment, happiness, joy, feeling fresh) and the scale comprising six items of negative experiencing (anger, guilt feelings, shame, fear, sadness, pain). The inter-correlation of the scales allow to interpret them as independent, and stability coefficients point to the fact that the frequency of positive and negative experiencing is not clearly determined by stable personality dispositions. The values of correlations among six different samples with construct close and construct distant scales confirm the convergent and divergent validity of Scales of emotional habitual subjective wellbeing (SEHW).

The second part presents the results of three comparative studies in which the cognitive component of wellbeing (life satisfaction) was examined, and in one of them also the cognitive and emotional components of wellbeing (positive and negative experiencing) among the youth in Slovakia, Switzerland, Austria and Germany. As an important finding of this research we can consider the fact that if the effect of personality variables – extraversion, neuroticism, self-esteem was statistically controlled, different material standards of living (Slovakia vs. Germany) proved to be an insignificant factor in life satisfaction and affective balance. This finding is a reminder of the fact that simple interviewing without additional control variables produces a different result, and that the control of other factors which have a bearing on wellbeing in comparative studies cannot be omitted.

The third part describes a complicated picture of the results when using a single question to the assessment of the wellbeing and without a control of personality factors, which is the usual procedure in wellbeing comparisons in different countries. We refer to the comparison made in 2003 and 2011. In the first analysis (2003), the representative European Quality of Life Survey (EQLS) results of Slovaks were used, who reached in the response to the question about life satisfaction

the fifth lowest score (52 on a 100-point scale) from among 28 countries. If we compare this result with the response to the same question by the non-representative sample of students of grammar school and secondary vocational schools in our study which was conducted in the same year (2003), the students reached the score of 68 or 64 points. In the summary score for satisfaction with life scale (7 questions of PWI) they reached 72 or 68 points (all on a 100-point scale), which are the values within the range, or slightly below the normative range for Western countries (70-80 points, Manual PWI, International Wellbeing Group 2006). This result pointed out to the fact that the specific groups reached other scores from that of the representative sample. Mainly to the fact that interviewing with the use of a scale provides different results from those acquired by using a single question only. A different situation arises in the case of representative EQLS interviews of Slovaks in 2011 and of our 2011 research among nurses. The score of a representative sample in 2011, when compared to that from 2003, increased (52, or 60), yet the differences caused by the manner of interviewing were not confirmed.

Experience with assessing wellbeing in comparative studies that point to the importance of controlling personality variables and to taking into account the ambiguity of the findings related to the wellbeing evaluation using one question and a scale can be used as a stimulus for future research procedures in the analysis of wellbeing in intercultural comparative surveys.

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Appendix: SEHW

People are able to utter what they experience and how they usually feel. Please, now attempt at describing with the help of the descriptive words contained in the presented list how often you experience the state described.

Mark your answers by making a cross in the respective box.

I EXPERIENCE						I EXPERIENCE					
almost always	*very often*	*often*	*some-times*	*hardly ever*	*almost never*	*almost always*	*very often*	*often*	*some-times*	*hardly ever*	*almost never*
1. **anger**						6. **fear**					
❐	❐	❐	❐	❐	❐	❐	❐	❐	❐	❐	❐
2. **guilt feelings**						7. **pain**					
❐	❐	❐	❐	❐	❐	❐	❐	❐	❐	❐	❐
3. **enjoyment**						8. **joy**					
❐	❐	❐	❐	❐	❐	❐	❐	❐	❐	❐	❐
4. **shame**						9. **sadness**					
❐	❐	❐	❐	❐	❐	❐	❐	❐	❐	❐	❐
5. **feeling fresh**						10. **happiness**					
❐	❐	❐	❐	❐	❐	❐	❐	❐	❐	❐	❐

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From Dissonance to Well-Being and Adaption? Quality of Life in Switzerland Over the Past Decades

31

Christian Suter, Katia Iglesias, and Jehane Moussa

Introduction

Switzerland, the small country in the heart of Europe with a population of eight million inhabitants, is known for its economic prosperity, its high standard of living, the excellent quality of life as well as for its cultural diversity and political stability. The country regularly occupies a top position in the global rankings of the various measures, indices and indicator systems of quality of life, standard of living and well-being. This comparatively high level of quality of life is highlighted in Table 31.1, which lists the most recent rankings of Switzerland, together with the three top countries, in several of these indices and measures. Switzerland shows by far the best average rating on the 11 selected well-being measures (average position of Switzerland is 3.6), followed by Sweden (average position of 5.1) and Norway (average position of 5.8).

As noted by Glatzer (2012) in his comparative analysis of several quality of life indices concerning developed countries, the small North European countries (Norway, Sweden, Island and Denmark) are usually the countries showing particularly high average values on most of the global well-being indices. He attributes the ranking of these countries to two factors: country size (smaller countries rank higher, particularly regarding subjective well-being scales, due to a higher degree of homogeneity) and the welfare state model (the social democratic welfare state of Northern Europe, i.e. the impact of social policy reducing social disparities and strengthening social cohesion). While the first factor, the small country size, seems to apply to Switzerland, the second is not applicable at all, since the Swiss welfare state is usually characterized as a liberal or a hybrid model. And even the apparently coherent country size explanation is, at a closer look, less convincing: despite its small size Switzerland is rather heterogeneous, not only regarding its well-known cultural diversity with its four language regions, high immigration (from rather divers regions of origin) and mixed religious denominations, but also regarding the economic and political spheres.

The high quality of life in Switzerland was already noted in the early 1960s by Luc Boltanksi (1966). In his study on *The Swiss Happiness* (le bonheur suisse) he even diagnosed what he called "excessive well-being" of the Swiss. According to Boltanski, the (too) obvious material prosperity and the hedonistic attitudes inevitably conflict with the traditional work-centered, ascetic values and virtues attributed to and generally accepted by the Swiss. He concluded that "economic prosperity is really a universal palliative measure, which without banishing the illness raises the patient's threshold

C. Suter (✉) • K. Iglesias • J. Moussa
University of Neuchâtel, Neuchâtel, Switzerland
e-mail: christian.suter@unine.ch

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Table 31.1 Ranking of Switzerland in 11 selected global indices of well-being, quality of life, and economic and social progress

	Countries ranking on 1st to 3rd position			Ranking of top 3 countries		
Well-being index	1st	2nd	3rd	CH	SWE	NOR
HDI 2012[1]	Norway	Australia	USA	9	7	1
Legatum Prosperity Index 2013[2]	Norway	Switzerland	Canada	2	4	1
Global Competitiveness Index 2013-2014[3]	Switzerland	Singapore	Finland	1	6	11
GDP per capita 2012[4]	Luxembourg	Norway	Switzerland	3	7	2
Happy life years 2000-2009[5]	Costa Rica	Iceland	Switzerland	3	5	6
Healthy life years 2011[6]	Malta	Sweden	Norway	11	2	3
Human Capital Index 2013[7]	Switzerland	Finland	Singapore	1	5	7
Life satisfaction 2013[8]	Switzerland	Norway	Iceland	1	4	2
Better Life Index 2009[9]	Australia	Sweden	Canada	5	2	4
Wealth per capita 2012[10]	Switzerland	USA	Japan	1	11	26
Progress Index 2000–2008[11]	Norway	Switzerland	Sweden	2	3	1
Mean ranking on all indicators				3.6	5.1	5.8

Sources: 1. Malik et al. (2013, 156), 2. Gedmin (2013, 3), 3. Annoni et al. (2013, 15), 4. World Bank (2013), 5. Veenhoven (2013), 6. Eurostat (2013), 7. Zahidi et al. (2013, 12), 8. OECD (2013a), 9. OECD (2013b). 10. Brandmeir et al. (2013, 80), 11. Bergheim (2010, 5)

Note: For the Better Life Index, all indicators are equally weighted. Country abbreviations: *CH* Switzerland, *NOR* Norway, *SWE* Sweden

of resistance and makes him wisely forget his very sweet misfortune" (Boltanski 1966, 165).[1] Boltanski thus diagnosed a "malaise Suisse": the "the misfortune of being happy" (le malheur d'être heureux).

Adopting a longitudinal perspective, this chapter explores the apparently exceptional level and the puzzling pattern of Swiss quality of life and happiness over the past decades in more detail. The chapter proceeds as follows: starting point is Boltanski's paradox of Swiss happiness (section "The Malaise of Swiss Happiness"). Many observers – including Boltanski – related the Swiss pattern of welfare and quality of life explicitly or implicitly to Swiss exceptionalism, i.e., to the conceptualization of Switzerland as a special case; the main arguments in the (Swiss and international) literature are presented in section "Swiss Exceptionalism and Its Demystification", together with an overview of the early quality of life research in Switzerland evolving during the 1980s within the context of the first poverty studies. Based on results of recent Swiss social sciences research and on data from various quality of life studies, sections "The Quality of Swiss Society: Well-Being and Quality of Life in Switzerland at the Societal Level" and "Individual Quality of Life and Subjective Well-Being Across Life Domains" present and explain the Swiss pattern of quality of life and subjective well-being across the different life domains, both on the societal level (section "The Quality of Swiss Society: Well-Being and Quality of Life in Switzerland at the Societal Level") and the individual one (section "Individual Quality of Life and Subjective Well-Being Across Life Domains"). Empirical evidence on the evolution of subjective well-being and happiness issues in Switzerland is still scant. Based on the data from the Swiss Household Panel study (SHP), section "Subjective Well-being and Satisfaction Since 2000", therefore, presents our own analysis of subjective well-being over the past 12 years in Switzerland. Section "Conclusions", finally, summarizes the most important results and develops the conclusions drawn.

[1] Original in French, translated by the authors into English.

The Malaise of Swiss Happiness

The first empirical study on "Swiss happiness" and the "Swiss way of life" dates back to the early 1960s. For the preparation of the first Swiss national exhibition of the postwar period (held in Lausanne in 1964), a representative survey on the level of the four language regions of the country was carried out in 1962. This first empirical quality of life study aimed to provide information on everyday life in Swiss society in the early 1960s and was illustrated and shown to the visitors of the exhibition in the form of the "Swiss path" (la voie suisse).[2] The 1,240 respondents were questioned about the image of Swiss society, their self-perception as Swiss, the ideals of the Swiss national character, as well as about several core areas of everyday life and well-being, notably work, education, family, religion, political participation, leisure and activities in associations.

The French sociologist, Luc Boltanski, who was mandated to write a report based on this survey, analyzed in detail the facets of Swiss identity and happiness. He documented the prime importance of traditional work- and duty-related values, i.e., the generally adopted image of the Swiss ideal as hard-working, persevering, serious, tidy, clean, thrifty, prudent, and family-oriented. He noticed that wives received more recognition for their sense of order and organization than for their physical beauty and that the qualities of a teacher were described by the respondents in terms of authority and discipline, rather than of knowledge and personality. In his interpretation of "Swiss happiness" Boltanski focused on the paradox of normative asceticism and high de facto material prosperity, i.e., the inconsistency between the puritanical virtues and the economic prosperity with comfortable living conditions, as evidenced by the preference for consumption over saving, the possession of and striving for consumer goods of contemporary comfort, as well as the importance of leisure activities, particularly among the middle classes. Of the different social classes analyzed by Boltanski, only the peasantry seemed to still conform to the traditional ascetic norms of the Swiss way of life. Thus, according to the report, 58 % of blue-collar workers went on vacation the year before; for employees this proportion varied between 70 % (lower and middle range positions) and 82 % (senior employees) of which more than a third traveled abroad (Boltanski 1966, 106, 189).

In his conclusion Boltanski argued that Switzerland suffers from an excess of comfort and wealth and that the discrepancy between the traditional norms demanding a puritanical lifestyle and actual living conditions provokes anomic tension within Swiss society (manifesting itself in high suicide and divorce rates). In order to illustrate his diagnosis of a "Swiss malaise" Boltanksi quoted from the then famous Swiss-German cartoon periodical *Nebelspalter*, caricaturing an unhappy Swiss lamenting in the midst of a starry prairie: "I live in the most beautiful country in the world, I have a good stable job, I am insured against sickness and I have a pension fund, I own a new car, a radio and a tv set, my own house, and have a wife who can cook well, my health is excellent. Alas! Why can't I be happy?" (*Nebelspalter* cited in Boltanski 1966, 157).[3] The diagnosis of a specific Swiss affluenza – i.e. the combination

[2] The organizers of the Swiss national exhibition planned to conduct the same survey among the visitors to the exhibition. The visitors' answers were to be immediately computerized, summarized and presented to the public as the "actual way of life" in Swiss society. This visitors' survey, the "Gulliver survey", was a big success with more than 500,000 persons participating. The Federal Council, however, intervened, since it considered several questions to be inappropriate (notably those on abortion, conscientious objection, the Swiss Army, state monopoly in radio and television, and the relationship between the EEC and Switzerland). Several of these questions had to be removed and the Federal Council prohibited the publishing of the survey results (Poget 2012; Levy 2000). The data from the scientific pre-study, too was thought to be lost. Only recently a part of the data was found in the United States, stored on microfilm. This data has been repatriated to Switzerland and is today archived at FORS, the Swiss Foundation for Research in the Social Sciences of the University of Lausanne (Levy 2000).

[3] Original in French, translated by the authors into English.

of good objective living conditions and low subjective satisfaction (due to work- and duty-related, rational values) – has been observed by several other authors and contemporaries of the "trentes glorieuses", the economic boom period between the 1950s and early 1970s. Illustrations of this can be found in the Swiss literature, for example Max Frisch's novel, *Homo Faber*, or the song "Why are you looking so sad" by Mani Matter, the famous Swiss folk singer of those days.

Reflecting on the Swiss paradox of happiness Boltanski pointed to several contradictions and inconsistencies. A first aspect concerns the "aristocratic" character of the educational system, where low levels of tertiary education result in high intergenerational reproduction of educational inequalities and corresponding barriers for lower- and middle-class groups to access high-status professions. Secondly, the economic prosperity and the high standard of living are, according to Boltanski, perceived as fragile due to their dependency on massive immigration of low-skilled workers (from Southern Europe). Immigration moreover contributes to a process of "understratification" and is associated by the Swiss population with various social problems. In fact, immigration itself was perceived in the public debate of the 1960s and 1970s as a "social problem," the so-called "foreign workers problem" (*Fremdarbeiterproblem*) and several initiatives attempted to limit the number of foreigners. A third paradox refers to the considerable structural (economic and social) inequalities and the low level of (open) conflict. Boltanski, finally, pointed to substantial gender inequalities, particularly the lack of women's right to vote; astonished by the large proportion of 40 % of both female and male respondents who rejected women's suffrage in the survey, he characterized Swiss society as being "impregnated by masculine values" (Boltanski 1966, 26).

Boltanski's interpretation of Swiss happiness in the early and mid 1960s as a mismatch between objective situation and subjective interpretation corresponds to the pattern of dissonance of Wolfgang Zapf's typology of quality of life constellations. Combining objective and subjective dimensions Zapf (1984) distinguishes between the constellations of (1) good objective living conditions and good subjective well-being (called "well-being"), (2) good objective living conditions and bad subjective well-being ("dissonance"), (3) bad objective living conditions and good subjective well-being ("adaptation"), and (4) bad objective living conditions and bad subjective well-being ("deprivation"). Before addressing the issue of how this Swiss pattern of dissonance evolved and changed over the past decades, we deal with the literature linking Swiss quality of life to Swiss exceptionalism.

Swiss Exceptionalism and Its Demystification

Economic prosperity, peace and a high level of quality of life – or, in Boltanski's analysis the puzzling combination of happiness and sadness – have often been referred to and interpreted within the broader context of the conceptualization of Switzerland as a special case ("Sonderfall" or "Sonderweg"), both within Switzerland and by outside observers. Although the focus of this strand of early comparative literature that evolved from the 1960s onwards was on the characteristics of the economic and political success model of Switzerland, it provides interesting insights into the structural foundation of the Swiss model of well-being and quality of life.

The emphasis on the difference and divergence between Switzerland, on the one hand, and the "others" (Europe, the world), on the other hand, not only refers to a country outside the norms; for some (mostly outside) observers Switzerland serves as a role model (de Rougement 1965; Segalman 1986; Steinberg 1996), whereas for others (from Swiss nationalistic and right-wing populist groups) Switzerland is simply not comparable to other countries and the preservation of its uniqueness is a matter of survival (Blocher 2000).

The conceptualization of Swiss exceptionalism highlights various economic, political, social and cultural aspects, especially the long and stable economic prosperity of the postwar period with the consequent high per capita income, the low unemployment rates (Schmidt 1985) which remained below 1 % until the early 1990s, and the political culture and its unique institutional setting (de Rougement 1965; Deutsch 1976). Main aspects of the latter are notably the political participation in the context of direct democracy with the right of initiative and referendum,[4] a militia-based army ensuring (armed) neutrality, humanitarian tradition, political stability and concordance based on a liberal model of corporatist consensus (whereby governments on all levels are made up of a coalition of all main parties, and, therefore, political conflicts are generally solved by a compromise agreed by the political forces; Katzenstein 1984), trust in political institutions, low level of social and political conflicts, the Swiss federalism, i.e., the division of competence between the federal state, cantons and communes, resulting in strong local community structures and correspondingly high levels of civic engagement (Segalman 1986). Cultural diversity as well as the above-mentioned traditional and conservative work-centered values are also often mentioned as key components of Swiss exceptionalism.

Although the historical roots of this conceptualization of Swiss exceptionalism go back to the nineteenth century or even earlier, it was the external threat of German Nazism and Italian fascism during the 1930s and the subsequent World War II, on the one hand, and the Cold War of the 1950s and 1960s on the other hand, which fueled in particular the debate on, and the identity construction of, Switzerland as a special case (see the contributions in Eberle and Imhof 2007). Despite the disappearance of this external threat after the fall of the Berlin Wall the stereotype of Swiss exceptionalism has survived the past twenty years. This can be attributed to the politicization of new cleavages, articulated by the (right-wing) populist parties and movements, notably the cleavages between openness/cosmopolitanism and isolation/"isola elvetica" (Meier-Dallach et al. 2003) as well as between "winners" and "losers" of globalization; these new cleavages particularly concern the issues of immigration and international relationships (e.g., between Switzerland and the European Union; see Rothmayr 2004; Giugni and Sciarini 2009). This more recent debate on Swiss exceptionalism concentrates on particularities of the Swiss political system and institutional setting. Regarding quality of life and standard of living issues, Switzerland no longer seems to be "different," except for certain achievements in the public services area (e.g., public transportation, postal service, water supply).

This normalization and "ordinarization" of Swiss exceptionalism became increasingly apparent during the 1980s and 1990s (e.g. Lempen 1985). Economic recessions and crises demonstrated that Switzerland is affected by global business cycles and is no longer an island of economic prosperity. As a result of the deep and protracted economic recession of the early 1990s, the country's most pronounced recession of the postwar period, Switzerland lost much of its formerly privileged economic position in comparison to the other European and OECD countries (notably regarding unemployment, economic growth, economic competitiveness, welfare dependency, precariousness). This process of normalization and Europeanization of standard of living and lifestyles in Switzerland has been described and documented by a rapidly growing literature (see the volumes of Kriesi et al. 2005; Eberle and Imhof 2007; Suter et al. 2009; Bühlmann et al. 2013).

By demonstrating that poverty, although often hidden, is not merely a temporary phenomenon but is rather widespread and more durable than expected in this rich country, the first Swiss

[4] Right of initiative: Changes to the constitution can be encouraged by a so-called popular initiative, whereby 100,000 signatures from people who are entitled to vote are to be collected within a period of 18 months for the initiative to come about. Right of referendum: Federal laws, generally binding decisions of the federal state as well as indefinite treaties are subject to the so-called facultative referendum. A popular vote will take place if 50,000 citizens demand this with their signatures within a period of 100 days following the publication of a decree.

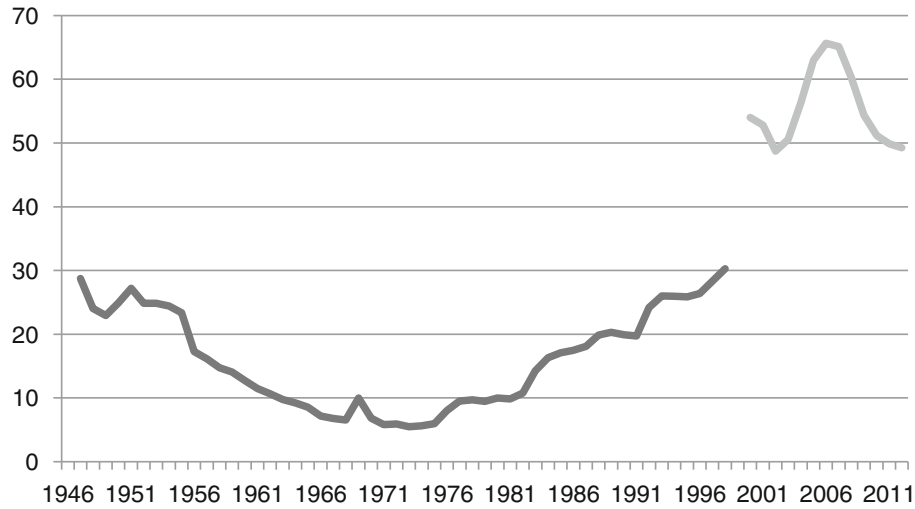

Fig. 31.1 Evolution of welfare aid dependency in the city of Zurich, 1946–2011 (*Notes*: 1946–1997: number of cases of welfare aid per 1,000 inhabitants (one case may include more than one person); 1999–2011: number of persons receiving welfare aid per 1,000 inhabitants. *Sources*: 1946–1997: Eisner (2000, 174); 1999–2011: Stadt Zürich (2013))

poverty studies, carried out against the background of the economic slump of the mid 1970s and early 1980s, played an important role in the demystification of Swiss exceptionalism. According to the (only) national poverty study of Leu et al. (1997), between 5 and 11 % of the Swiss population (or 400,000–700,000 inhabitants) were affected by income poverty in the early 1990s. Similarly, various cantonal and communal poverty studies – about half of the Swiss cantons examined their poverty situation in the 1980s – concluded that a considerable proportion of their population (around 15 %) lived in poverty.[5]

The emergence of poverty as a (new) social problem in Switzerland from the early 1980s onwards is also documented by rising social assistance spending at the communal and cantonal and cantonal level, especially in the larger cities. Thus, as demonstrated in Fig. 31.1, while after World War II welfare dependency steadily declined until the mid-1970s, the economic recessions of 1975–1976, 1982–1983, 1991–1995 and 2002–2003 resulted in a marked increase in the number of welfare recipients. Although this number leveled off after the end of each recession, it did not substantially decline during subsequent economic upswings (except after the two most recent crises of 2002–2003 and 2008–2009). This evolutionary pattern of stepwise increases in welfare dependency and poverty related to business and unemployment cycles (with a time lag of approximately 2 years) has characterized the Swiss economy and society over the past 30 years.

These studies on welfare and (hidden) poverty eventually resulted – for the first time in Switzerland – in the evolution of systematic empirical research on (objective) quality of life issues. While the cantonal studies limited themselves to monetary, income-based poverty analyses (i.e., to the objective, material

[5] Due to substantial methodological differences, the results of the various cantonal poverty studies are hardly comparable (poverty rates vary between 5 and 25 % across cantons, but more than half of this variation has to be attributed to differences in study design and methodology). It is symptomatic of Swiss federalism that cantonal poverty studies – each of them applying its own design and methodology – were carried out first (in the 1980s), i.e., before the federal government finally decided to conduct a large nationwide survey (carried out in 1992 and published in 1997; see Leu et al. 1997; Leu and Burri 1999). Due to the high quality of its data and methods (combination of interview data with tax data and data on social transfer payments on the federal, cantonal and communal levels), this survey is still a reference study for poverty and quality of life research in Switzerland.

situation),[6] the national survey of Leu et al (1997) systematically investigated objective living conditions and subjective well-being across different life domains (such as housing, employment and working conditions, income and standard of living, education, health, social relations and networks). This research, therefore, also represents the first comprehensive quality of life study for Switzerland.

The Quality of Swiss Society: Well-Being and Quality of Life in Switzerland at the Societal Level

Quality of life and well-being are not just individual characteristics. As stressed by Noll (2002, 52), the quality of *societies* – encompassing freedom, equity and equal opportunity, solidarity, social cohesion and trust – matters, too, since it significantly impacts on individual quality of life. This societal dimension of well-being should, therefore, be included in quality of life analyses.

There is one empirical study on Switzerland that explicitly investigated societal and individual components of well-being. Based on the Swiss part of the Euromodule survey, a representative survey carried out in Switzerland in 1999–2000, Suter and Iglesias (2005, 22) found an individual and a societal dimension of subjective well-being. Interestingly, it was also possible to distinguish these two dimensions in other European countries included in the Euromodule survey (namely Austria, Germany, Spain and Slovenia). The factorial analysis of nine domain-specific satisfaction and subjective well-being scales,[7] revealed two factors: a first dimension composed of indicators of subjective well-being which directly touch the individual level (like health, education, income, and standard of living), and a second factor that concerns quality of life and well-being of the broader societal context (notably the environmental situation, neighborhood and public safety). With a mean index score of 7.2 (on the scale between 0 = completely dissatisfied to 10 = completely satisfied) the level of societal well-being was highest in Switzerland, closely followed by Austria (index value of 7.0), whereas Germany showed a surprisingly low level of only 6.1.[8] Most remarkable are the large differences between the societal and individual dimensions: scores for individual well-being in Switzerland are considerably higher (overall index value of 7.9) than those for societal well-being.[9]

Based on these results and the conceptual framework provided by Noll (2002), the subsequent analysis considers seven key areas of Swiss societal quality of life in more detail: freedom, social security and welfare state, equity, fairness and social inequalities, political trust, social cohesion, public safety and public services, as well as sustainability (in the sense of quality of life for future generations).

Freedom

Freedom, liberty and self-determination in the context of direct democratic, federalist structures are essential elements of the Swiss national identity construction. The stereotype of a free Alpine republic does, as stressed by Deutsch (1976), nevertheless have some real historical roots, insofar as the Swiss peasantry succeeded in escaping feudal control and being disarmed

[6] With the notable exception of the poverty study of the canton of Berne, which utilized a comprehensive quality of life approach (see Ulrich and Binder 1998).

[7] Satisfaction with one's apartment, satisfaction with one's current job, satisfaction with one's standard of living, satisfaction with one's household income, satisfaction with one's health, satisfaction with one's education, satisfaction with one's neighborhood, satisfaction with public safety, and satisfaction with the environmental situation.

[8] Eastern Germany in particular suffered from a low level of societal well-being (index value of 5.5), but Western Germany (index value of 6.1) also ranked clearly below Switzerland and Austria.

[9] Interestingly, Eastern Germany shows a similar pattern with even larger differences than Switzerland. In Austria, on the contrary, this "cleavage" between individual and societal well-being is much less pronounced (see Suter and Iglesias 2005, 24).

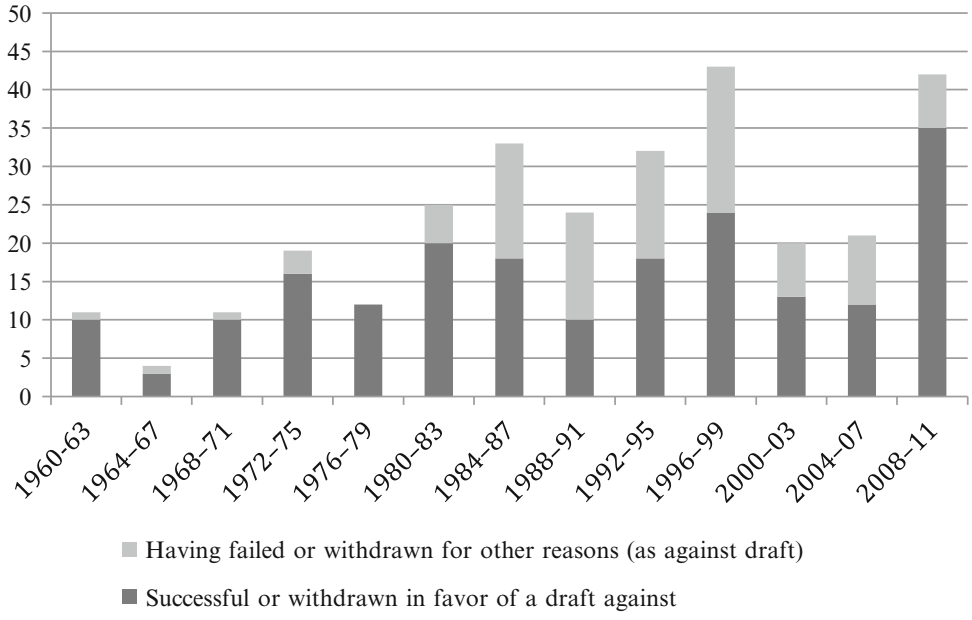

Fig. 31.2 Number of popular initiatives by parliamentary term 1960–2011 (*Source*: Bühlmann et al. 2013, 189)

during the high and late Middle Ages. Until today this is symbolized by the soldiers' right (and obligation) to keep their army weapons at home (and the right to retain the weapons after the end of military service) which contributes to the fact that Switzerland has one of the highest rates of gun ownership worldwide.[10]

The notion of freedom refers not only to political rights (e.g., the right to vote) but also to the basic civil liberties and human rights (like freedom of opinion and expression, religious freedom) as well as economic and social rights (i.e., the "second generation" of human rights). In a comparative perspective the degree of civil liberties and political rights in Switzerland is effectively rather high. This is evidenced by the top ranking of Switzerland on the Freedom House indices. Similarly, economic freedom and economic rights are well established in Switzerland, which is confirmed by the top position that the country occupies on the index of economic freedom (fifth rank in 2013, see Heritage Foundation 2013). With the constitutional revision adopted in 1999, social rights, notably those linked to social security and equal opportunity, were explicitly included in the constitution.

The specific direct democratic political rights, the popular initiative and the optional (facultative) referendum, are being increasingly used. Since their introduction in the late 1890s, 405 popular initiatives were launched, but only 18 of these were eventually adopted. Figure 31.2 shows that the number of initiatives at the federal level steadily rose from the late 1960s onwards and peaked in the 1990s. During the early 2000s their number dropped significantly, but increased again in the last 5 years. This is partly explained by the fact that government parties themselves increasingly use initiatives.

Despite the generally high level of political and economic freedom in Switzerland, there have been some deficits and shortcomings. First and most important is the long time it took until women's right to vote could be established. Not until 1971 did the (male) population accept women's suffrage on the federal level and an equal rights amendment to the constitution was

[10] A public debate on this issue has emerged only recently, provoked by several crimes and suicides, including the worst mass murder in Switzerland, the assault on the parliament of the Canton of Zug in 2001, where 14 persons, among them several politicians, were killed by a Swiss citizen using his military gun.

introduced only in the early 1980s.[11] Even after that, some reluctant cantons continued to resist, and it was not until 1990 that the last canton (Appenzell Innerrhoden) – forced by the Federal Supreme Court – had to recognize women's right to vote on cantonal and communal level as well.

The second problem concerns the absolute obligation of (male) Swiss citizens to serve in the army. Conscientious objection, even for religious beliefs, was severely punished under military law (unconditional imprisonment for several months). Switzerland, therefore, was criticized by human rights organizations for violating human rights and for being one of the few Western countries having political prisoners. The number of conscientious objections considerably increased from the early 1970s onwards and peaked in the mid-1980s with up to 800 sentences per year. Finally, with the introduction of a constitutional amendment in 1992 offering an alternative in civil defense, this conflict was settled.[12]

A third problematic aspect concerns immigrants' rights. Under some types of permits, the economic and social rights of immigrants were considerably restricted, notably under the so-called seasonal permit, which included restrictions in residence, occupational choice and family status. The seasonal permit, established in the 1950s to recruit Italian and Spanish workers, was finally abandoned in 2002, not least due to pressure from the European Union. Regarding political rights, several attempts to improve the status of immigrants (e.g., simplified naturalization of the second and third generations of migrants, voting rights) have been rejected in popular votes. However, some cantons, particularly in French-speaking Switzerland, have granted certain political rights to immigrants at the communal and/or cantonal level. More recently the situation of asylum seekers and undocumented immigrants has increasingly become an issue of concern (e.g., forced expulsion, delay in asylum decisions). Finally, several popular initiatives, such as the successful initiative of 2010 demanding a ban on the construction of minarets, are in conflict with international civil liberties and human rights standards.

Social Security and Welfare State

The principles of social security are laid down in the Swiss Federal Constitution of 1999. The goal of welfare is already mentioned in article 2 (aims) of the general provisions. Article 12 then stipulates the "right to assistance when in need" and, finally, article 41 ("social objectives") states explicitly that "every person has access to social security" and health care, and that "the Confederation and Cantons shall endeavor to ensure that every person is protected against the economic consequences of old-age, invalidity, illness, accident, unemployment, maternity, being orphaned and being widowed" (Federal Constitution 1999).[13]

As noticed by several observers (Tschudi 1989) the Swiss welfare state developed rather slowly, despite some early regulations (e.g., on child work in the early nineteenth century). The Swiss social security system is not based on a systematic comprehensive scheme, but evolved step-by-step over the past 150 years, leading to a patchwork pattern of rather diverse social security institutions. This is illustrated by the chronological establishment of the various institutions, but also by the considerable time lag between political decision (usually in

[11] The constitutional equal rights amendment stipulates equal rights and equal treatment of men and women particularly in work and training, notably equal pay for equal work.

[12] Before, several initiatives demanding civil defense as an alternative to military service were rejected by the voters.

[13] It is important to add that the last paragraph of article 41 restricts these social rights by stating that "no direct right to state benefits may be established on the basis of these social objectives." The Swiss model of social security, therefore, still reflects the paradox of public welfare mentioned by Simmel (1908) in his sociology of poverty, namely that the obligation of the modern state to help the poor does not correspond to an individual right of the poor to be helped.

popular votes on constitutional and/or legal amendments) and implementation.[14]

Thus, the first social security institution on the national level, the military insurance, was established as early as 1902, followed by accident insurance (1913), health insurance (1913/mandatory in 1996), old age and survivors insurance (1st pillar: 1948, 2nd pillar: 1985, 3rd pillar: 1987), invalidity insurance (1960), unemployment insurance (1984), maternity insurance (2005), and child allowances (2009).[15] In addition to these institutions at the national/federal level, there are important welfare state and social security institutions at the cantonal and communal level too. This concerns notably social assistance and health insurance premium reductions,[16] as well as various additional means-tested transfer payments (such as infant subsidies, scholarships, housing benefits).

Between the mid-1960s and 2000 considerable expansion of social security benefits occurred, especially regarding old age insurance. Most important was the establishment of the "three-pillar model" by a constitutional amendment in 1972, i.e., a combined government and private sector retirement provision model. The first pillar, based on a pay-as-you-go scheme, is the mandatory basic provision by the state, the so-called public old age and survivors insurance (AHV), the second pillar is the mandatory private retirement provision, based on private and public pension funds, the so-called vocational provision (funded scheme), and the third pillar is a voluntary private retirement provision with tax advantages (based on a funded scheme, offered by banks and insurance companies only). The first pillar is to provide the basic means of existence. The second and third pillars aim to maintain the individuals' existing standard of living by supplementing the guaranteed minimum subsistence of the first pillar.

Due to this particular pattern of welfare state evolution, it is difficult to place the Swiss model within the common welfare state typologies. Esping-Andersen (1990) classified Switzerland as a liberal welfare regime (together with the United States, Australia and Great Britain), whereas other authors stressed conservative components (e.g., Albert 1991; Merrien 2002). According to Armingeon and Beyeler (2004, 139) the Swiss welfare state is characterized by a "liberal core with significant social democratic and conservative elements".

This hybrid nature of the Swiss welfare state model has been demonstrated by analyses comparing the different key institutions of the Swiss social security system (for instance regarding their degree of solidarity or de-commodification). Even within a particular social security branch rather diverse models of solidarity may coexist. This can be illustrated by the three pillars of the old age pension scheme with a public, universalistic and highly redistributive first pillar ("social democratic" model), a mixed (public-private) particularistic and corporatist second pillar ("conservative" model), and a third private pillar ("liberal" model). In a recent empirical analysis Nollert (2007) showed that between 1980 and 2000 Switzerland moved from a "liberal" model to a "European continental" model with conservative and social-democratic characteristics.

This process of "normalization" or "Europeanization" of the Swiss welfare state is confirmed by the evolution of welfare spending. Up to the early 1990s Switzerland had one of the lowest rates in social expenditure in Europe, a fact that has been often attributed to Swiss exceptionalism (Segalman 1986). According to data presented by Bonoli (2004), Switzerland ranked 16th out of 18 European countries (EU-15 countries, Island, Norway and Switzerland) in 1980 with social spending amounting to only 15 % of gross domestic product, a rate clearly below the European average. By the turn of the century, however, Switzerland had surpassed

[14] Implementation usually lasted more than 20 years, as was the case in the old age and survivors insurance. The most extreme case was maternity insurance, with a time lag of over 50 years.

[15] The dates refer to the year when the laws have come into effect (at the federal level).

[16] Contrary to what is the case in most developed countries, the health insurance is not funded through social security contributions or the income tax: it is an out-of-pocket expense, except for low-income families who can get a subsidy from the local authorities.

most European countries: it is now ranked in sixth position with a rate of up to 30 %, only slightly below the Nordic countries like Sweden (Bonoli 2004; SFSO 2011b, 67; Bühlmann et al. 2013, 139). This marked increase can be explained by demographic ageing, the economic recession of the early 1990s with growth below average compared to other European countries, and especially by the maturing of the Swiss social security system. As social security was introduced and expanded rather late in Switzerland, particularly regarding the old age pension, the number of new recipients of welfare provision is growing faster than in countries with more mature, i.e., older, social security systems.

As noticed by Bonoli (2004), Swiss welfare policy still focuses on passive rather than active measures of integration (like measures supporting labor market integration and improving the work-life balance). The Swiss welfare state is characterized by comparatively high spending on old age, invalidity and health, and low support for families, youth and women. One advantage of the Swiss "patchwork model" of social security is its flexibility. Adjustments in one or the other direction on the level of individual social security instruments are possible, without having to change the system as such. This is of great importance, considering that the particularities of the Swiss political system (federalism, referendum democracy) make substantial and quick changes rather difficult. More recently, this has been demonstrated by the strong resistance to welfare state reforms and retrenchment. Since 2004 several revisions intending to reduce the costs of the old age pension scheme failed, both in the parliament and the national plebiscite. Contrary to most other countries, the Swiss welfare state has therefore not (yet) experienced a significant retrenchment trend, particularly regarding the core area of old age insurance.

Equity, Fairness and Social Inequalities

Equality among human beings together with fairness in selection processes and in the distribution of, and access to, highly valued and desired material and nonmaterial social goods and rewards are important components contributing to good quality modern societies. Equality of opportunity in particular – which, however, does not necessarily guarantee equality of outcome – is a core principle of contemporary meritocratic societies. Social inequalities implying systematic advantages and disadvantages in living conditions and life chances, therefore, impair societal and individual quality of life and well-being. Social inequalities are a multifaceted phenomenon and concern not only economic resources and assets (like income, wealth and material living conditions), but also organizational and occupational resources (labor market status and occupational position), as well as cultural and educational resources (like educational attainment). Ascriptive inequalities, i.e., gender, age, and race and ethnicity, are particularly disturbing, since they function as barriers to social mobility and are often not based on performance and meritocratic criteria.

Research on social and economic inequalities in Switzerland suggests a high persistence of inequality structures and mechanisms in several dimensions and areas, especially regarding income, earnings and wealth, but also with respect to gender, occupational, educational and health inequalities, and to the intergenerational reproduction of social inequalities (see Levy et al. 1997; Stamm et al. 2003; Sousa-Poza 2004; Tillmann and Voorpostel 2012; Liebig et al. 2014). The persistence of inequality structures is partly due to the rather low redistribution effects of the social security and the tax system, as well as of other state policies (see Suter and Mathey 2002; Künzi and Schärrer 2004).

Regarding income inequality, the core dimension of the social stratification system, it is rather difficult to find good quality data sets in Switzerland that allow the calculation of consistent time series before the end of the 1990s. The only historical time series available is the one provided by Dell et al. (2007), which, however, is limited to top incomes. Unlike other high-income countries (such as the United States, France, Great Britain) the share of top incomes did not significantly decline in Switzerland during the 1914–1945 period.

This resulted in a comparatively high income and wealth inequality during the early postwar period. Several studies, which however are not based on time series, concluded that inequality decreased slightly between the early and late 1970s and then slightly increased again during the 1980s and most of the 1990s (Buchmann and Sacchi 1995; Leu et al. 1997; Ecoplan 2004). A recent time series analysis by Grabka and Kuhn (2012) and Crettaz et al. (2013) based on data from the Swiss Household Panel, the Swiss Household Budget Survey and the Swiss Survey on Income and Living Conditions found decreasing income inequalities between the late 1990s and the mid-2000s, a slight increase until 2007 and again a decline in the aftermath of the global financial crisis of 2008–2009 (see also SFSO 2011b, 42). This cyclical pattern over the past 30 years suggests that periods of growth lead to an increase in income inequality while recessions generally translate into lower inequality (see also Flückiger 2000; Stamm and Lamprecht 2004). Due to this long-term stable degree of inequality, and against the background of rising inequalities in most other countries, the "relative" inequality position of Switzerland has improved. Thus several countries, like Germany (see Grabka and Kuhn 2012), which traditionally showed lower income inequality, surpassed Switzerland in the past decade.

Political Trust

Trust in political and public institutions is fundamental for the functioning and legitimacy of modern societies and the stability of the political system. Traditionally, the level of trust in the government and in political institutions is very high in Switzerland – a characteristic also attributed to Swiss exceptionalism. Empirical data on political trust is available from the mid-1970s onwards. These figures show that trust remained stable on a rather high level until the late 1980s: a vast majority of the population (70 % or more) declared being content with the performance of the federal government (Suter 2000, 191).

In the early 1990s, however, trust in political institutions considerably declined – in 1995 only 40 % of the Swiss population still trusted in the federal government and in the national parliament (see Suter 2000, 191, 2009, 127). Most remarkable is a corresponding shift in political trust from the (traditionally state supportive) center-right groups to the center-left; the erosion of political trust thus foremost concerned right-wing-oriented persons. These developments were associated with fundamental transformations in the Swiss party system: the right-wing populist Swiss People's Party (SVP) gained considerably in strength (by increasing its voter share in national council elections from 11 % in the late 1980s to over 25 % in the early 2000s). Moreover, the federal government lost several important votes (notably the referendum on Switzerland's membership of the European Economic Area in 1992). In addition, the Swiss economy experienced a deep recession with long-lasting economic stagnation and comparatively high unemployment during the early 1990s, accompanied by economic adjustment processes, restructuring of firms, public administration reforms (e.g., New Public Management programs) and cuts in public spending contributing to rising poverty. The more critical attitude towards politics and authorities may, therefore, also be related to a certain disintegration of the old "contrat social" that seems to be no longer valid.

During the early 2000s trust in political institutions quickly recovered (Suter et al. 2009, 126) without, however, attaining the very high levels of the early postwar period, particularly as concerns trust in government and parliament. This may be partly attributed to the general decline of traditional authority in modern individualizing and pluralizing societies. Still, compared to most other central European countries (like Germany, France, and the UK), the level of political trust is high in Switzerland, especially regarding trust in tribunals, the parliament or politicians (Bühlmann et al. 2013, 180).

Social Cohesion

Social cohesion refers to societal integration, solidarity, and the strength of social ties and connectedness within and between communities. Two important dimensions of social cohesion concern the strength of interpersonal relations (within and outside the family) and activities in, and commitment to, associations and voluntary work.[17]

Interpersonal Relations Like in other European countries, the proportion of one-person households has considerably risen in Switzerland over the past decades. This increase concerns all age groups and women as well as men; living as a single before living with a partner and/or a family has become common for young adults, for middle-aged people separation and divorce have become more frequent, and women in particular tend to remarry less often than men after a divorce. Among the elderly higher life expectancy and the fact that widows remain in their own homes for a longer time contributed to the increase in single-person households. Living alone does not necessarily mean having few contacts and feeling isolated. Thus singles do not have fewer social contacts outside home than people living in households with several members, nor do they less often have a confidant, with whom they can discuss intimate and personal matters. As demonstrated by Suter et al. (2009, 102) and Bühlmann et al. (2013, 134) the proportion of people with few social contacts outside home is rather low in Switzerland, lower than in other European countries, particularly for the elderly.

Volunteering Voluntary work may take place within the framework of associations (formal voluntary work) or without such organizational structures (informal volunteering). Another important aspect of solidarity deals with financial donations to organizations and associations. These activities are rather widespread in Switzerland. As demonstrated by Freitag and Stadelmann-Steffen (2009) there are marked regional differences within Switzerland, with higher voluntary commitment in German-speaking Switzerland than in the French- or Italian-speaking part of the country. Compared to other countries voluntary commitment is rather high in Switzerland, notably regarding donations and informal volunteering (Suter et al. 2009, 108–111; Bühlmann et al. 2013, 142–145).

Social cohesion of a society is particularly strengthened by social ties between members of different socioeconomic and sociodemographic groups. This "bridging" capacity between social groups, however, seems to be much less developed in Switzerland than the "bonding" capacity within groups. Thus, regarding intergenerational relationships, research demonstrates strong intrafamilial solidarity in Switzerland, both economically and socially (Bühlmann et al. 2013; Perrig-Chiello et al. 2008). Extrafamilial social relationships and solidarity, on the contrary, are rare: A large majority of young adults has no friends or acquaintances among the elderly outside the family. Likewise, extrafamilial friendships of the elderly with young adults exist only very rarely. A recent Swiss report on intergenerational relationships therefore concluded that, outside family relations, the different generations are living apart, although this mere "coexistence" has not (yet) turned into a generational conflict (Bühlmann et al. 2013).

Public Safety and Public Services

Public safety as well as the access to and the quality of the various public services are important aspects of societal quality of life.

Public Safety Compared to other countries, Switzerland has comparatively high levels of burglary and theft – partly related to the high level of wealth – but low levels of assault and threat. However, whereas crimes against

[17] Other important components of social cohesion concern equality, solidarity and general trust; these aspects have been separately treated in this chapter (see the respective sections above).

property have been relatively constant during the past 30 years, crimes of violence and other crimes directed against human beings have tended to increase. Nevertheless, studies on feelings of insecurity show that the Swiss feel more secure (or less insecure) than people in most other countries, particularly regarding feeling unsafe when walking alone after dark (Bühlmann et al. 2013, 153).

Public Services The Swiss population benefits from a high standard of public services, for instance in public transportation, but also energy, water and communication. As a result of the increasing spatial separation of home and workplace and with increasing mobility for leisure activities and holidays, the volume of traffic has dramatically increased (quadrupling between 1960 and 2010). While the share of public transportation diminished between the 1960s and 1980s, it has increased again during the past 15 years, particularly with regard to rail travel. This can be attributed to the expansion of rail services in urban and peri-urban networks as well as between the larger cities. Despite some inconvenience (e.g., overcrowding during rush hours) satisfaction with transportation is generally high.

Sustainability

Like other countries, Switzerland has committed itself to the principles of sustainability, the aim being to move from an exploitative to an environmentally sound use of natural resources and to protect these resources and the quality of life for future generations. Environmental damage and risks have been extensively discussed in public in particular from the 1970s onwards and the Swiss general public has been very concerned with these issues. This changing relationship between society and environment is not only due to an objectively more threatening situation, but also to a changing, postmaterialist evaluation, increasingly receptive to ecological issues (Sacchi 1992). Despite a decrease in environmental concerns since the late 1980s, ecological commitment and ecological awareness has not declined (Diekmann and Meyer 2008).

As demonstrated by various sustainability indicators, it was possible to reduce environmental damage in different areas thanks to the political measures introduced, particularly concerning waste management and recycling, water pollution, and air quality. In other areas a certain degree of stabilization has been achieved, notably concerning energy consumption and greenhouse gas emissions – which however are still above the levels agreed in Kyoto (cf. Suter et al. 2009; Bühlmann et al. 2013). As a result, the ecological footprint, which significantly increased up to the early 1970s, stabilized and it currently amounts to roughly 5 global hectares per capita. With this number Switzerland is less unfavorably placed than other European and OECD countries. However, due to the increasing settlement density, Switzerland's biocapacity has steadily declined.

This ecologization of Swiss society was triggered and supported by ecological movements which succeeded in introducing their concerns into the political arena. The federal administration, the cantons and municipalities, but also economic and civil society actors, have considerably improved their environmental capacity and their potential for promoting ecological behavior (Knoepfel 2000).

Individual Quality of Life and Subjective Well-Being Across Life Domains

As stressed by many quality of life scholars, individual quality of life includes both objective material and non-material living conditions and the subjective assessment and evaluation of these circumstances. While there has been – as documented above – a growing interest in, and research on, material living conditions and objective indicators of quality of life in Switzerland from the 1980s onwards, subjective well-being across life domains has been less treated. Systematic empirical evidence in particular has not been available until very recently. Thanks to several new empirical data sets which included subjective well-being measures, notably the Swiss Household Panel initiated in the late

1990s, research on individual quality of life and subjective well-being has increasingly emerged in the Swiss social sciences over the past 10 years (see Frey and Frey Marti 2010; Budowski and Tillmann 2013).

This research relates mainly to three topics: Firstly, the "direct democracy makes happy" research and hypothesis which received considerable attention in the international scholarly debate; this hypothesis was advanced by Frey and Stutzer (2002) who argued that direct democratic institutions positively impact on happiness; secondly, employment, especially regarding job satisfaction and the negative impact of unemployment on subjective well-being (e.g., Winkelmann 2009; Oesch and Lipps 2013) and thirdly, the impact of (relative) income and deprivation on well-being (Suter and Paris 2002).

Adopting the conceptual framework of existing international indicator systems – namely Gesis's (2013) European System of Social Indicators and the OECD (2013b) Better Life Index – individual quality of life in Switzerland will be presented in combination with subjective assessments across the various life domains. We consider the following seven life domains: education, employment and work, income and poverty, housing, health, leisure, and political participation.

Education

Education plays an important role in individual quality of life as it provides the skills, knowledge, and capabilities, as well as the independence and autonomy, to fully participate in society and the economy. A good education provides good opportunities on the labor market and for a professional career, protecting against unemployment. Finding a job and earning a good salary in order to have a satisfactory life is, therefore, strongly associated with educational attainment. Two core aspects of quality of life and well-being in the domain of education refer to educational attainment and to the satisfaction with, and trust in, the educational system.

Educational Attainment The share of young people who receive post-compulsory education is quite high in Switzerland (up to 90 %) and this has increased considerably over the past decades. Women in particular have improved their level of educational attainment: they have caught up with men and even surpassed them at the college level ("matura") which provides access to university. Vocational training, as well as higher education is, however, still characterized by strong horizontal gender segregation. Due to its dual educational system (with parallel vocational training and higher education) the level of tertiary education is lower in Switzerland than in most other European countries. The Swiss educational system is characterized by early tracking, which contributes to a high level of educational inequality and processes of educational inheritance and reproduction. Empirical research on educational success demonstrated that these origin-based educational inequalities are not counterbalanced by the school system, but rather reinforced by it (cf. Kronig 2007).

Satisfaction with Education Despite these shortcomings subjective satisfaction with education is relatively high in Switzerland. According to the national poverty study of Leu et al. (1997, 216) over 80 % of the Swiss population was satisfied with their education in the early 1990s. Similarly, Suter and Iglesias (2005) found high average satisfaction with education in the early 2000s with an average index value of slightly under 8 (on an 11-point scale from 0 to 10). This is somewhat lower than average satisfaction scores in other life domains (particularly health and standard of living), but higher than educational satisfaction in neighboring countries (mean score for Austria was 7.4 and for Germany 7.2). This positive evaluation of education is confirmed by the more recent Gesis (2013) data indicating that Switzerland achieved the highest satisfaction value for education (83 %) among European countries in 2008.

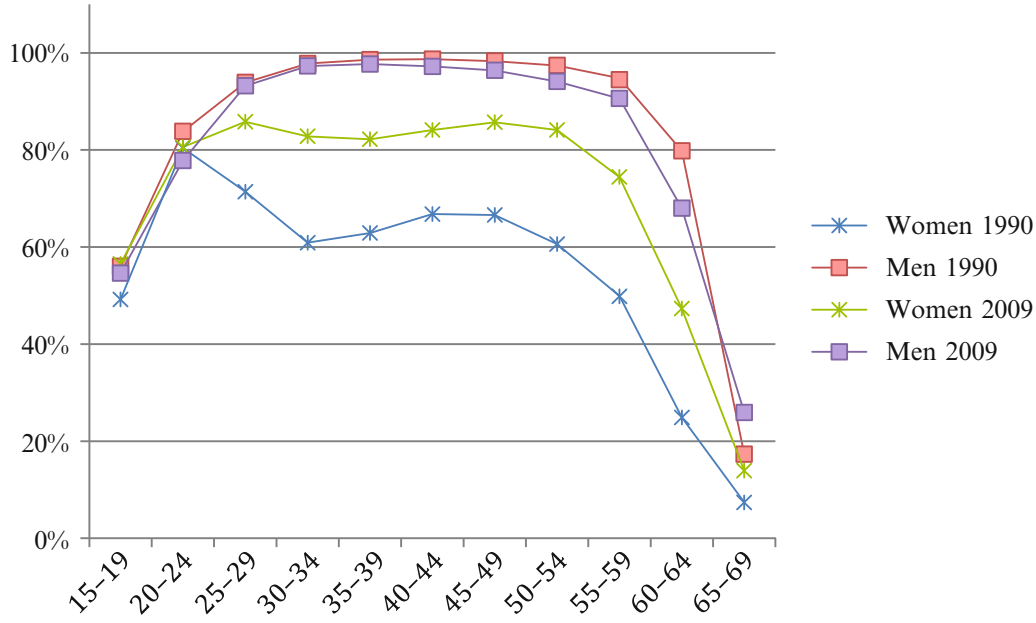

Fig. 31.3 Employment rate by sex and age, 1990 and 2009 (*Source*: Bühlmann et al. 2013, 39)

Employment and Work

Employment and work are a basic component of individual quality of life. Work gives access not only to income, consumption and standard of living, but also contributes to integrating the individual into society. Three aspects are of particular importance for quality of life in the sphere of work: labor force participation, unemployment, and also employment and working conditions.

Labor Force Participation Due to its strong economy, employment rates for men and women in Switzerland are rather high. Thus, in 2011 labor force participation amounted to 83 % – this is not only considerably above the average rate of the EU-27 countries (with 71 %), but also higher than in Sweden or Germany (based on Gesis 2013).

Over the past 30 years employment rates of men (both Swiss and immigrants) have slightly decreased, whereas women's labor market participation rate has considerably increased (from about 50 % in the early 1980s to almost 70 % in 2011), although temporary (slight) decreases during times of crises are also visible (particularly in the early 1990s). This marked increase in female labor market participation is demonstrated in Fig. 31.3 which also shows that women increasingly withdraw from the labor market at a later age (although still earlier than men). Despite the increasing labor force integration of women, significant gender differences in occupational trajectories persist. Thus the Swiss pattern of female labor force participation still shows an early (and lasting) reduction in female employment due to maternity and childcare obligations. Moreover, a very high (and increasing) proportion of female employees are working part-time: only 40 % of Swiss women are working full-time (compared to almost 90 % of men). A drastic drop in female full-time employment occurs in the group aged 25–39 years.

Unemployment Unemployment was very low in Switzerland until the crisis of the 1990s. Between the 1950s and the early 1980s a shortage of labor, rather than unemployment, put pressure on the labor market. As demonstrated in Fig. 31.4, unemployment rates constantly remained under 1 % after World War II until 1991. This Swiss miracle of full employment was, as noted by Schmidt (1985), a paradox, since full

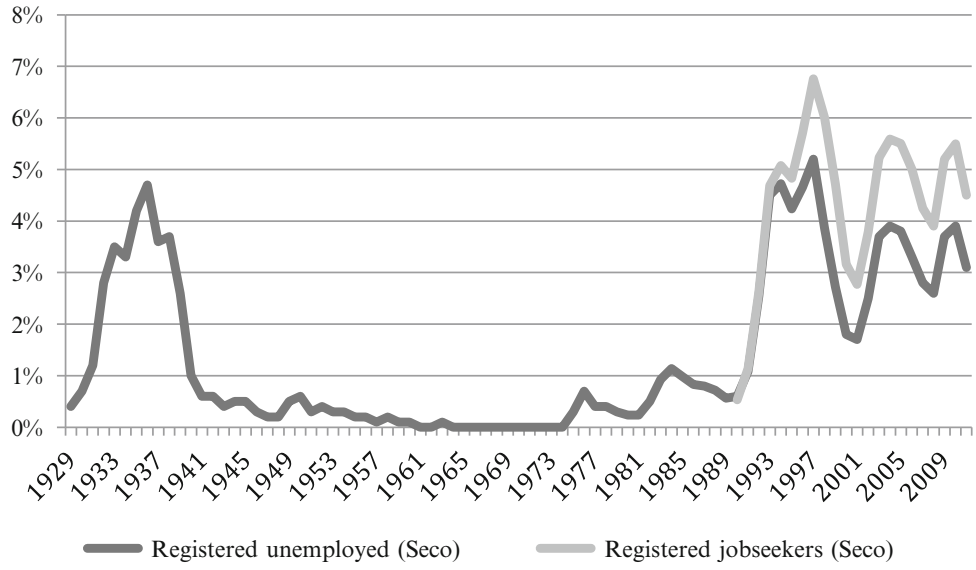

Fig. 31.4 Unemployment rate, 1929–2011 (*Notes*: Unemployment to 1970 as a percentage of wage and salary earners, from 1971 onwards as percent of labor force. *Sources*: 1929–1982: Schmidt (1985); 1983–2011: Bühlmann et al. (2013, 47))

employment was achieved despite high wage levels, low inflation, restrictive monetary policy and passive economic policy, as well as weak trade unions and social democratic parties. The surprisingly low impact of the economic recessions of 1975–1976 and 1982–1983 on unemployment resulted from the high flexibility of the Swiss labor market, which rapidly adapted (reduced) labor supply in times of economic crises, notably by returning migrants to their countries of origin and by the labor market withdrawal of women (Flückiger 2000).

This situation significantly changed from the mid-1980s onwards and became manifest in an increase of unemployment rates to 4–6 %, with significantly higher than average unemployment rates for women and immigrants in the wake of the deep economic crisis of the early 1990s. Although unemployment rates in Switzerland are still low in comparison to other countries – and the EU countries in particular – unemployment has never dropped below 2 % during the past 25 years. Furthermore, as demonstrated by Fig. 31.4 the evolution of unemployment became closely linked to the business cycle from the 1990s onwards, with a marked rise in unemployment rates after each recession (after a two-year time lag), even in the case of the rather mild downturns of 2002–2003 and 2008–2009. During economic upswings the reduction of unemployment is rather slow and the phase of low unemployment very short.

Unemployment considerably impairs on quality of life and subjective well-being. Swiss research confirms this well-known strong impact of job loss on subjective well-being (Winkelmann 2009; Oesch and Lipps 2013).

Working Conditions The Swiss labor market has always been characterized by a rather liberal model, even before flexible capitalism became dominant worldwide from the 1980s onwards. As a result of the crisis and the economic restructurings of the 1990s, atypical and precarious employment conditions, i.e., fixed-term work, temporary jobs, and work on-call, increased. Young adults (below 30 years of age) and women are particularly affected by precarious employment conditions (Bühlmann et al. 2013, 40; Baechtold and von Mandach 2007; Crettaz 2011; Vlase and Sieber 2013).

Despite these adverse developments, working conditions are in general positively evaluated. The empirical application of Paugam's (2000) typology of precarious work to Switzerland and other selected countries for 1997 and 2005 found high levels of "assured integration" with both high employment security and high satisfaction at work for Switzerland (Suter et al. 2009, 42). In comparison to other countries Switzerland showed better working conditions and a higher level of satisfaction at work. The very high and stable level of satisfaction at work is confirmed by the results reported by Leu et al. (1997) for the early 1990s, Branger et al. (2002) for the late 1990s and our own analysis of the 2000s (see below section "Subjective Well-Being and Satisfaction Since 2000"). Thus, only 9 % of the active population was not satisfied with their working conditions in 1992, and the average index value for satisfaction at work remained stable at a value of around 8 (on a scale between 0/1 and 10). Research on subjective well-being at work in Switzerland also confirmed the importance of job satisfaction for job turnover (Sousa-Poza and Sousa-Poza 2007).

Income and Poverty

Income and consumption increased considerably during the postwar period in Switzerland – real wages, adjusted for inflation, trebled between 1939 and 2011 (nominal wages have been multiplied by 22). Wage increases were particularly marked during the 1960s but slowed from the 1980s onwards (Bühlmann et al. 2013, 52). Despite the severe economic downturn in the 1990s Switzerland still ranks among the richest countries of the world. The subjective evaluation of income and the financial situation is also rather positive, at least on the level of the whole population. As will be shown in more detail below, average index values for satisfaction with the financial situation are over 7 (on an 11 point scale between 0 and 10) and have remained very stable over time.

As already showed above (see section "Swiss Exceptionalism and Its Demystification"), poverty, which did not completely disappear during the economic boom of the "trente glorieuse," became a major problem in Switzerland from the early 1980s onwards.

Data on the evolution of poverty rates is presented in Fig. 31.5.[18] Switzerland does not know an official poverty line, but guidelines are provided by the Swiss Conference on Social Welfare (SKOS) for the cantons and municipalities to calculate welfare aid and these are considered as an informal poverty level.[19] Using these guidelines the poverty rate for the 20 to 59-year-old population amounts to about 8 % and the rate of working poor to about 5 %.

As a result of the economic recession of the early 1990s, there is an increase in poverty between 1994 and 1996 (by about 3 percentage points). During the second half of the 1990s poverty rates remained on a high level and did not decline to the pre-crisis level until the early 2000s. Between 2003 and 2006 there was a slight increase again, followed by a slight decrease

[18] Data on the long-term evolution of poverty in Switzerland is still scarce and inconsistent. Unfortunately, the national poverty study of 1992 with its high quality data has not been repeated since. Until recently the "official" poverty statistics provided by the Swiss Federal Statistical Office (SFSO) were based on the Swiss Labor Force Survey (SLFS); this data has been also used for Fig. 31.5. Since this data refers to the economically active population, poverty rates for the elderly cannot be calculated. Moreover, the SLFS is based exclusively on survey data, whereas the national poverty study also included administrative register data (tax statistics, statistics on welfare payments). Calculating the poverty rates for the economically active population for 1992 by comparing the national poverty study with the SLFS data shows differences of 2 percentage points (6 % according to the national poverty study, 8 % according to the SLFS data). This suggests an overestimation of poverty rates by the SLFS data. Moreover, due to measurement changes, levels of poverty spells based on SLFS data are not strictly comparable over time. Doubts concerning the reliability and validity of income data of the SLFS have, therefore, prompted the SFSO to remove information on income from the SLFS and to rely, from 2007 onwards, on the new SILC survey.

[19] Due to the Swiss federalist structure, welfare aid is administrated on the cantonal and local level. The SKOS guidelines, however, are recommendations and are not binding for the decisions made by the cantons and municipalities.

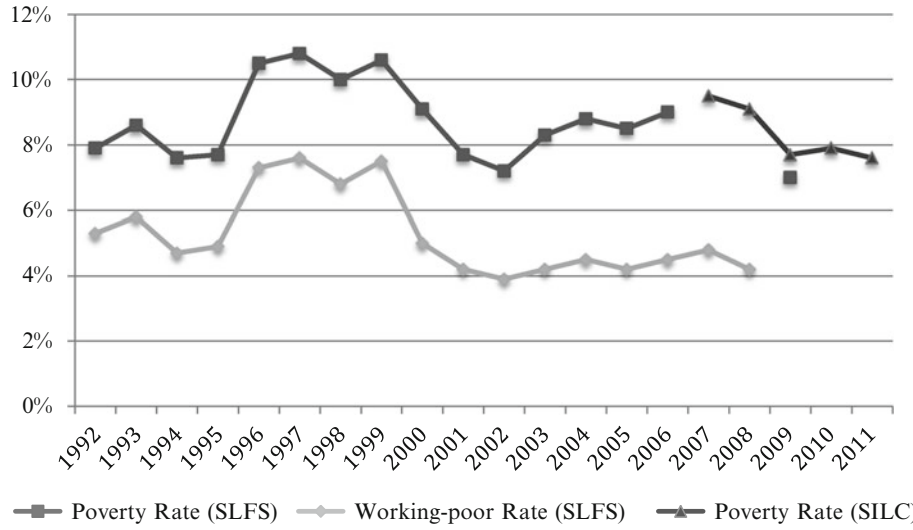

Fig. 31.5 Poverty rates in Switzerland, 1992–2011 (*Notes*: poverty rate: share of population aged 20–59 who are below the poverty line defined by the Swiss Conference on Social Welfare (SKOS); working-poor rate: share of population aged 20–59 who are economically active and who lives below the SKOS poverty line; poverty rate (SLFS): calculation based on data from the Swiss Labor Force Survey; Poverty rate (SILC): calculation based on data from the Swiss Statistics on Income and Living Conditions. *Sources*: poverty rate (SLFS) and working-poor rate (SLFS): Bühlmann et al. (2013, 141); poverty rate (SILC): SFSO (2013))

from 2007 onwards. This cyclical pattern in the evolution of poverty corresponds with the above-mentioned cyclical dynamic linked to the business cycle (the deep recession of the early 1990s with high unemployment rates between 1993 and 1998, and the comparatively mild crises of 2002–2003 and 2008–2009). Interestingly, effects of the recent global financial crisis are not (yet) visible. This can be explained by the usual time lag (of up to 3 years) but also by the only moderate impact of the crisis on the Swiss labor market.

As from the late 1990s the traditional analysis of monetary poverty based on income data has been complemented by research on material living standard and material deprivation. A comparative analysis of relative deprivation showed that Switzerland has a lower degree of deprivation than comparable central European countries (like Austria, or West Germany) and that deprivation is less concentrated on the lowest income quintile (Suter and Paris 2002; Suter and Iglesias 2005). The evolution of relative deprivation over the past decade is presented in Fig. 31.6. The higher level of deprivation indicated by Fig. 31.6 (23–27 %), as compared to the level of monetary poverty (see Fig. 31.5), is due to the measurement of the deprivation index which includes also very slight levels of deprivation (i.e. not being able to afford one out of nine items). The share of the population affected by material deprivation fluctuates parallel to the poverty rate and inversely to GDP growth. In contrast to the evolution of the poverty rate, there seems to be a (very) slight temporary impact of the 2008–2009 crisis. Over the whole decade the data indicate a slight decrease in material deprivation, a result which is confirmed by recent research (Gazareth and Suter 2010).

Like in other countries, poverty and material deprivation in Switzerland massively impairs well-being. Poverty affected groups show lower satisfaction and lower subjective well-being (both regarding domain-specific and general life satisfaction) and suffer more often and much more from other problems (like housing, health, social isolation) in addition to low income. Moreover, research in Switzerland points to strong impacts of adaptive preferences on subjective well-being. Based on SHP data

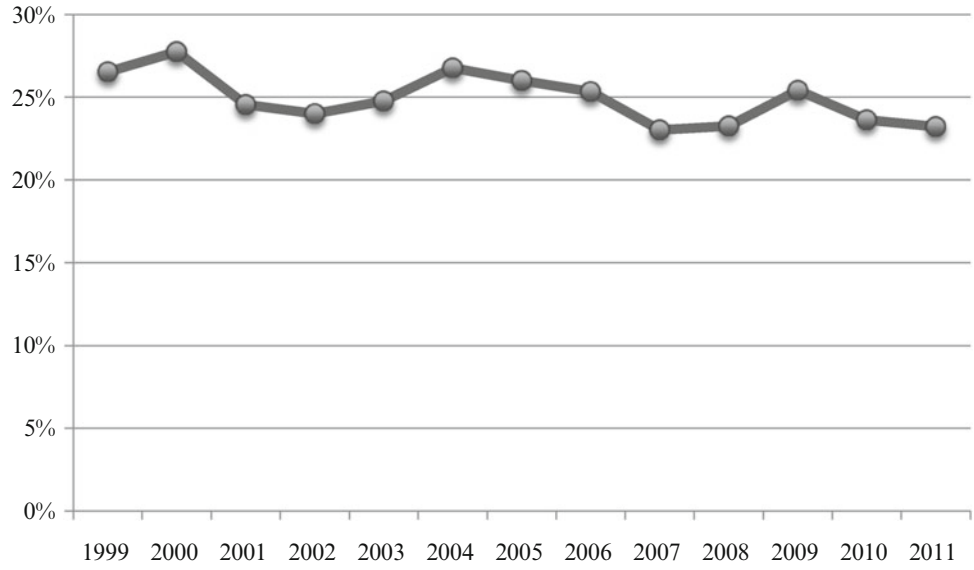

Fig. 31.6 Proportion of the Swiss population affected by relative deprivation, 2000–2011 (Notes: Relative deprivation is measured using Halleröd's (1994) Proportional Deprivation Index (PDI), which gives a weight to each deprivation item that equals the proportion of respondents who think that un item is necessary to lead a decent life (see Gazareth and Suter 2010). The PDI calculated for Fig. 31.6 is based on nine deprivation items (washing machine in home or for exclusive use, color TV, computer, car, dishwasher, private pension plan, take out family for dinner once a month, invite friends for dinner once a month, capacity to afford 1 week's annual holiday away from home). The proportion of households affected by relative deprivation includes all households with a PDI > 0. Source: Swiss Household Panel, cross-sectional weighting, own calculations)

Crettaz and Suter (2013) found that individuals and household affected by monetary poverty and material deprivation lower their expectations and adapt their aspirations and preferences to their material and financial constraints. Similarly, Vlase and Sieber (2013) report downward adaption processes for households in precarious living conditions.

Housing

Housing is a basic requirement of a decent life. Home often constitutes the center of one's life and should be a place where people feel safe and secure, with enough space for all members of the household, where time can be spent with friends or the family, but also for recovering from a tiring day. The most important dimensions of housing quality concern access to housing, housing space, amenities and expenses.

A detailed analysis of housing conditions in Switzerland has been provided by Leu et al. (1997) for the early 1990s, as well as by Suter and Paris (2002) and Suter and Iglesias (2005) for the early 2000s. These studies show that quality of housing is generally on a high level: the large majority of households dispose of more than one room per person, and average housing space per person increased over the past decades.[20] Almost all households are equipped with basic facilities like indoor flushing toilets, bathroom/shower, kitchen, washing machine, refrigerator, stove, oven, and balcony, terrace or access to a garden. Moreover, most households are able to afford basic consumer durables like a

[20] According to Leu et al. (1997) the average number of rooms per person was 1.6 in 1992. Own calculations based on the Swiss Household Panel data show that this rate increased continuously during the 2000s and amounted to about 1.9 in 2011.

phone, television, radio, hi-fi system, vacuum cleaner. Further commodities, like dishwashers, new furniture, video recorders (1990s), computers (2000s), cameras, bicycles or cars are also present in the majority of households (60–85 %).

This high level of quality of life in housing is confirmed by subjective indicators. Thus, the average index value for satisfaction with housing amounts to about 8.3 (on a 10 or 11 point scale between 0/1 and 10) and seems to be quite stable over time.[21] In 1992 only 10 % of the Swiss population was not satisfied with their housing conditions; recent analysis based on Swiss SILC data indicates a quite similar share of people dissatisfied with housing (Bühlmann et al. 2013, 136).

Despite this general satisfaction, specific problems with housing conditions are often mentioned. Thus according to Leu et al. (1997) 38 % of the Swiss population mentioned at least one housing problem in 1992 (like coldness, humidity, noise, pollution, vandalism in the neighborhood) and 19 % two or more problems. Our own analysis of the Swiss Household Panel data showed a quite similar proportion for the year 2011: 39 % of households mentioned at least one problem and 14 % two or more problems. As noticed by Leu et al. (1997) immigrants particularly suffer from bad housing conditions.

Other problems often mentioned related to housing are the tight housing market and the correspondingly high expense (especially for apartments). In the early 1990s 20% of the households considered their housing to be too expensive. Immigrants, single-mother households, families, young people and low income households are particularly affected (Leu et al. 1997).

[21] According to Leu et al. (1997) the average satisfaction with housing amounted to 8.3 in 1992. For 1998 Branger et al. (2002) report a mean score of 8.6. Own calculation based on SHP data showed almost identical index values fluctuating between 8.2 and 8.4 (data are available for the years from 2000 to 2004).

Health

Personal health is a core pillar of individual quality of life and well-being. Due to its close relationship to the other quality of life domains – notably education, work, income and standard of living, interpersonal relationships as well as leisure – it is often considered as the most important component of well-being. Health research usually distinguishes between physical, psychological and subjective health.

Physical Health The most commonly used indicator of physical health is life expectancy, either in its traditional form (i.e., life expectancy at birth, or at a specific age), or in one of the modified, more refined versions (i.e., healthy life expectancy, happy life years). According to the most recent OECD (2013c) figures, Switzerland has become the country with the longest life expectancy (82.8 years), surpassing the previous leader Japan. Life expectancy in Switzerland has steadily increased over the past 50 years (from 70 years in the late 1950s to over 75 years in the early 1980s; cf. Weiss 1993). Several factors contribute to this comparatively high life expectancy in Switzerland, notably the economic prosperity and the high standard of living, the high quality (and the high expense) of the health care system, health prevention as well as individual health behavior and lifestyles.

Psychological Health According to a recent report 5–20 % of the Swiss population complain of psychological health problems, depending on the indicator used and the degree of impairment. Thus, 16 % report mild depression and 3 % strong symptoms (Schuler and Burla 2012). Young women and inhabitants of Italian-speaking Southern Switzerland are more likely to report symptoms of depression. The proportion of persons with psychological health problems seems to have remained quite stable over the past years.[22]

[22] Based on comparisons between 2002 and 2007. Unfortunately, there are no consistent long-term time series on psychological health problems available.

Subjective Health Perceived health status and satisfaction with health are two indicators for subjective health. According to the recent figures provided by the OECD (2013c) 81 % of the Swiss population rate their health as good or very good. This proportion has remained fairly stable over the past 20 years: Leu et al. (1997, 229), who used the same item in their study of 1992, report a share of 78 % of Swiss adults considering themselves to be in good or very good health. This high level of subjective health as well as its high stability is confirmed by Branger et al. (2002) and our own analysis of satisfaction with health based on the Swiss Household Panel data: On the 11-point scale from 0 (completely dissatisfied) to 10 (completely satisfied) the mean index value varied between 7.8 and 8.1 (between 2000 and 2011; see Table 31.2 below).[23]

As in other countries individual health is strongly related to social inequalities. The substantial differences in physical, psychological and subjective health between the various socio-economic and sociodemographic groups are increasingly being dealt with in recent Swiss research on health inequalities (cf. Leu et al. 1997; Zimmermann and Weiss 2004; Budowski and Scherpenzeel 2005; Meyer 2009). Thus, people with a tertiary educational level have a longer and healthier life expectancy, report less physical and psychological health problems and are more satisfied with their health.

Leisure

It is well known that leisure and free time is important for subjective well-being. Like in other developed countries, average working hours have been reduced and leisure time has expanded considerably in Switzerland over the past decades. As demonstrated by various studies the previous "working society" has been substituted by a "leisure time and event society" – not only regarding time use and the activities carried out, but also on the level of identity construction and values (Lalive d'Epinay 1990; Sacchi 1992; Gross 1994; Buchmann and Eisner 1998). However, compared to other European countries, people in Switzerland still tend to work more hours per week and, therefore, spend less time on leisure.

There is a high diversity of leisure activities, as preferences and the intensity of these activities vary considerably across the types of activity (e.g., media consumption, sports activities, vacation and travelling, cultural consumption and practices, religious and spiritual practices) but also between sociodemographic and socioeconomic groups.[24] Thus, a considerable amount of time daily is spent on media consumption (television, radio, newspapers, internet), and sport activities are also very common. Cultural activities, i.e., the consumption of culture and especially active cultural participation, however, are less often practiced (Bühlmann et al. 2013). Hence, only a minority of the Swiss population is culturally active, for example, with playing music and singing (around 12 % of the population in 2008), whereas photography, drawing and painting, writing and doing handicrafts are even less practiced (4–7 %). As regards sports activities, more than 50 % of the Swiss population were active or even very active (data for 2008). The most practiced sports in Switzerland are cycling and hiking (regularly practiced by up to 30 %); these activities are not only carried out during leisure time, but also serve as a means of transport and locomotion in daily life. In third and fourth place of sports activities are swimming and skiing (20 %); performance-related sports (jogging, aerobics,

[23] The satisfaction rating seems to be highly reliable since the difference between two large independent surveys (Swiss Household Panel and the Euromodule survey) using the same question in 2000 is minimal (8.05 and 8.06; cf. Suter and Iglesias 2005, 24).

[24] Cultural capital (educational level) in particular, but also age/generation and gender are important structural determinants of leisure activities (Lamprecht and Stamm 1994; Modetta et al. 2004; SFSO 2011a; Moeschler 2013).

strength training) are less often practiced (Bühlmann et al. 2013, 100).[25]

The subjective evaluation of leisure time and activity is quite positive in Switzerland (Branger et al. 2002). As demonstrated in more detail below, average satisfaction with leisure is high, and remains very stable over time, even in times of economic recession and crisis: mean scores (on the 11-point scale from 0 to 10) only varied between 7.2 and 7.4 between 2000 and 2011 (see section "Subjective Well-Being and Satisfaction Since 2000").

Political Participation

Political participation refers to the last important dimension of individual quality of life. At the societal level, participating in political activities and decisions strengthens social and political integration and the legitimacy of the political system. At the individual level, political commitment is often perceived to have a positive impact on subjective well-being and happiness. Due to its federalist structure and direct democratic institutions Switzerland offers an interesting case for investigating the relationships between political participation, quality of life and well-being.

Regarding institutional forms of political participation, especially participation in voting and elections, Switzerland shows significantly lower participation rates than most other European and OECD countries. During the twentieth century voter turnout in national elections steadily declined from about 80 % at the beginning of the twentieth century to about 40 % at the end of the century. Only very recently (since the late 1990s) did voting and election participation start to rise slightly again (Suter et al. 2009; Bühlmann et al. 2013). A similar pattern, although less pronounced, seems to exist in other political activities like signing a petition, working in a political party, contacting a politician, participating in demonstrations and boycotts etc. Thus, despite (or because of) direct democracy, the level of political activity is lower than in most other countries.

Several scholars have argued that political participation, and direct democratic institutions in particular, are positively associated with subjective well-being. This "democracy makes people happy" hypothesis originally initiated by Frey and Stutzer (2000, 2002) has received much attention in the past few years, both in and outside Switzerland (Dorn et al. 2007, 2008). Recent research presented by Stadelmann-Steffen and Vatter (2012) based on Swiss cantons, however, found neither a strong relationship between the degree of direct democracy and happiness, nor between satisfaction with democracy and satisfaction with life in general. However, there seems to be a relation between the degree of democracy and the degree of satisfaction with democracy.

Subjective Well-Being and Satisfaction Since 2000

There is only scant empirical research on the evolution of subjective well-being and happiness in Switzerland over time. The few studies available, notably those of Vettiger and Walter-Busch (1993) and Walter-Busch (2000) who examined the assessment of quality of life of young male adults between 1978 and 1987, found little change in well-being over time. In what follows we shall present some own descriptive evidence on subjective well-being and satisfaction in Switzerland based on our analysis using the longitudinal data from the Swiss Household Panel study (SHP) between 2000 and 2011.

Based on the evidence regarding the multidimensional structure of subjective well-being, notably the distinction between societal and individual well-being as discussed in section "The Quality of Swiss Society: Well-Being and Quality of Life in Switzerland at the Societal Level", we attempted in the first step to reproduce this two-dimensional structure with the SHP data. This data set contains several questions evaluating the satisfaction of respondents across different life domains, as well as a question on general life satisfaction. As in other surveys (including the Euromodule

[25] The most important passive sport consumption in Switzerland refers to football, tennis, and skiing.

Table 31.2 Subjective well-being in Switzerland 2000–2011: General life satisfaction, index of individual well-being, and satisfaction with democracy

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
General Life Satisfaction	8.17	8.08	7.98	8.00	8.05	7.95	7.91	7.95	7.96	7.95	7.97	7.93
Index of Individual subjective well-being	7.62	7.60	7.57	7.60	7.62	7.57	7.49	7.46	7.48	7.46	7.45	7.47
Working conditions	7.88	7.89	7.88	7.91	7.92	7.85	7.78	7.76	7.79	7.79	7.73	7.75
Financial situation	7.22	7.22	7.13	7.16	6.99	6.96	6.97	6.99	7.02	7.02	7.04	7.05
Health	8.05	8.03	7.98	7.98	8.10	8.06	7.85	7.85	7.86	7.78	7.79	7.77
Leisure	7.28	7.27	7.29	7.36	7.42	7.39	7.33	7.23	7.23	7.24	7.22	7.27
Satisfaction with Democracy	6.12	6.08	6.05	5.91	5.90	6.05	6.18	6.12	6.21	6.11	n.a.	6.22

Source: Swiss Household Panel, cross-sectional weighting, own calculations
Notes: mean values on 11-point scales (from 0=completely dissatisfied to 10=completely satisfied); index of individual subjective well-being: unweighted mean of satisfaction with working conditions, with financial situation, with health and with leisure; n.a.: no data available.

survey reported above) satisfaction is measured by an 11-point scale from 0 (completely dissatisfied) to 10 (completely satisfied).[26] Unfortunately, the life domains of these SHP satisfaction scales are not identical with those of the Swiss Euromodule survey, particularly concerning the societal dimension of well-being. Thus, there is no question on satisfaction with public safety or with the environmental situation. There is however an interesting question on satisfaction with democracy, an item that also contains "collective" aspects of well-being (although more oriented towards the political system and less towards social structures). We therefore expect it to at least partially cover the dimension of societal well-being.

We analyzed the dimensionality of subjective well-being on the basis of the following five satisfaction scales: (1) satisfaction with free time, (2) satisfaction with health, (3) satisfaction with the financial situation, (4) satisfaction with the working conditions, and (5) satisfaction with the functioning of democracy. Contrary to the results of the Euromodule survey data of 1999–2000, our factor analysis revealed only one dimension. However, since the goodness of fit did not reach acceptable levels, we had to discard the satisfaction with democracy item, which was only weakly correlated with the other four items. The remaining four satisfaction scales showed acceptable fits and the one-dimensional structure (excluding satisfaction with democracy) was confirmed for all of the 12 years (2000–2011).[27] This single factor, composed of satisfaction with health, the financial situation, working conditions and leisure, clearly represents the individual dimension of subjective well-being. We therefore call the index which we constructed based on these four items "individual subjective well-being".[28] The democracy item which is not included in this index may be considered to reflect societal aspects of well-being.

The mean values of the individual subjective well-being index are presented in Table 31.2, together with the scores for its components, as well as the average values of general life satisfaction and satisfaction with democracy. All well-being measures show high stability between 2000 and 2011. Moreover, the yearly figures in Table 31.2 indicate that level and evolutionary pattern of the individual well-being index and general life satisfaction are quite similar. The highest satisfaction scores can be found for satisfaction with health and for general life satisfaction

[26] The exact wording of these satisfaction questions is as follows: How satisfied are you with your state of health (the amount of free time/your financial situation/your working conditions/your life in general/the way in which democracy works), if 0 means "not at all satisfied" and 10 "completely satisfied."

[27] The detailed results of this analysis are presented in Iglesias et al. (2015).

[28] The index value has been calculated as unweighted mean of the four satisfaction items, since all four items show a similar correlation with the common factor; the newly constructed index, therefore, is also highly correlated with the common (latent) factor (r = .98).

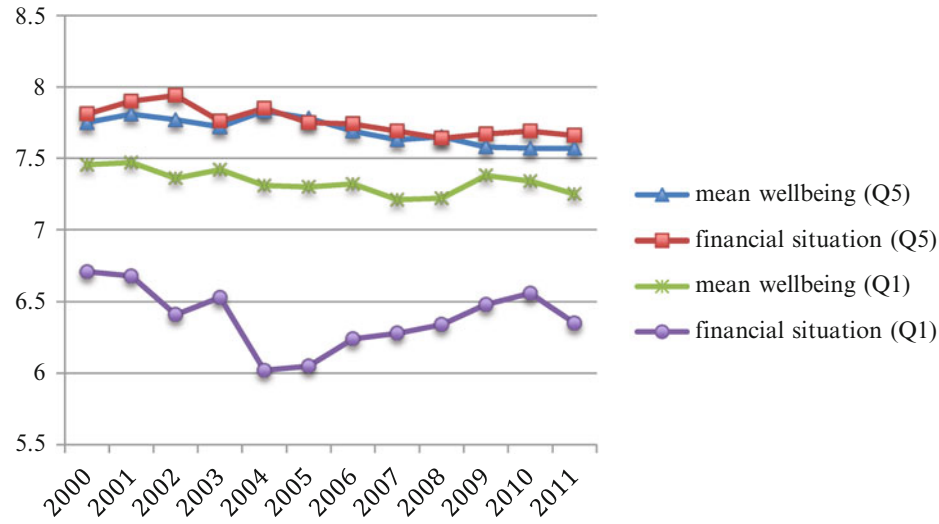

Fig. 31.7 Index of individual subjective well-being and satisfaction with financial situation for highest and lowest income quintile, 2000–2011 (Notes: index of individual subjective well-being: unweighted mean of satisfaction with working conditions, satisfaction with financial situation, satisfaction with health and satisfaction with leisure; index values between 0 (completely dissatisfied) and 10 (completely satisfied); Q5: highest income quintile; Q1: lowest income quintile. Source: Swiss Household Panel, cross-sectional weighting, own calculations)

(mean scores between 7.8 and 8.2). Satisfaction with working conditions amounts to 7.7–7.9 and the composite index of individual well-being to 7.5–7.6. Satisfaction with leisure varies between 7.2 and 7.4 and satisfaction with one's financial situation between 7 and 7.2. By far the lowest level of well-being items – although still on the positive side – can be found for satisfaction with democracy, scoring between 5.9 and 6.2.

As demonstrated in the preceding sections, research has pointed to several core factors impacting on subjective well-being, in particular relative income and deprivation, unemployment, social policy (welfare state model), health status as well as social capital and social cohesion. We examined these relationships for Switzerland for the 2 years 2000 and 2011 by computing multiple linear regressions on our index of individual subjective well-being.[29] The results of this analysis highlight three core predictors of individual well-being for both 2000 and 2011: firstly, health status, secondly relative deprivation and financial precariousness, and thirdly, labor market status, notably unemployment. These three factors explain almost 20 % of the variance for the models of both years.

The importance of these core factors for subjective well-being can be demonstrated by comparing the highest and lowest income groups, employed and unemployed, deprived and non-deprived population groups. As already mentioned, the level of these well-being measures remains fairly stable within groups over time. Between the different socioeconomic groups, however, there are significant differences in well-being. Figure 31.7 presents the yearly

[29] The following predictors and independent variables have been included in our regression models: gender, age, education, occupation type, income, financial precariousness, relative deprivation, status on the labor market, state of health, working conditions, vandalism, participation in associations, interest in politics and trust in institutions as determinants. A stepwise selection method was used for the model selection. The analysis of the 2 years 2000 and 2011 showed identical results, both concerning the predictors and the explained variance (22 % in 2000 and 27 % in 2011). Detailed information on the regression models are presented in Iglesias et al. (2015).

mean scores of the individual well-being index and those for financial satisfaction for the highest and lowest income groups. In the highest income quintile the level of individual well-being and of financial satisfaction fluctuates around 7.8–7.9, whereas the corresponding value for the lowest income quintile amounts to 7.4 (for the index of individual well-being) and 6–6.7 (for financial satisfaction). An even higher discrepancy can be found between employed and unemployed concerning financial satisfaction, with scores of 7–7.2 for employed and scores of only 4–5 for unemployed; people suffering from unemployment thus show high dissatisfaction with their financial situation (but not with their life in general). Figure 31.7 also demonstrates that the well-being of underprivileged income groups fluctuates considerably over time, inversely related to the evolution of unemployment, poverty and deprivation.

Conclusions

> . . . we live in an environment that is healthy, that is safe, it is beautiful, we have a beautiful country. We have money. . . life is beautiful. For me life is beautiful. . . it is like it is, but it is. . . that's good. I am very, very happy. Voilà![30]

Our analysis of the quality of life in Switzerland on the societal and individual levels across different life domains and over time confirms the high level of welfare and well-being enjoyed by the Swiss population. The empirical evidence presented in the previous sections on the developments in the various key areas and life domains of societal and individual well-being and quality of life from the mid-1960s – the time when Boltanski published his analysis on Swiss happiness and the Swiss malaise – to the present (2011/2012) is summarized in Table 31.3. It shows that there is no unidimensional and unidirectional change over time. Rather, developments vary considerably across key areas and life domains, and the changes are characterized by different evolutionary patterns. Thus, while quality of life and well-being improved in some areas (freedom, social security, education, income, health, leisure), it remained unchanged in others (inequalities, social cohesion, subjective well-being), or even deteriorated (sustainability). In addition to these linear changes, there are U-shaped evolutions (political trust, employment and work), logarithmic patterns (i.e., improvement and stabilization; freedom, social security) or inversely proportional developments (deterioration and stabilization on a lower level; political participation, poverty). Considering all these developments together leads to the conclusion that quality of life levelled off during a first phase (between the early 1970s and the crisis of the early 1990s) and then increased again, particularly regarding individual quality of life and well-being.

An important factor behind these developments was the deep and protracted economic recession of the early 1990s which became a focal point of different economic, social, political and cultural changes with long-term impacts. These transformations contributed to an increasing normalization of previous Swiss exceptionalism. Social and cultural changes affecting traditional Swiss happiness and identity construction (as described by Boltanski) play a key role in this normalization process. Contemporary Switzerland is no longer a "working society" impregnated by ascetic values. Instead, pluralization of values, including hedonistic and postmaterialist orientations, individualization and a greater diversity of life styles and biographies have emerged. The pattern of dissonance observed by Boltanski in the early 1960s, i.e., the contradiction between high material well-being and ascetic norms and values, has been moderated by both a levelling off of material prosperity – together with a rising awareness of

[30] A statement from Céline, 2013, living in an urban area in French-speaking Switzerland under precarious living conditions with an income of about 3,000 Swiss francs per month (Vlase and Sieber 2013).

Table 31.3 Stylized pattern of long-term changes in quality of life across domains on societal and individual levels between since the mid-1960s

Societal well-being		Individual well-being	
Freedom		Education	
Social security		Employment	
Equity, fairness, Social inequalities		Income	
		Poverty	
Political trust		Housing	
Social cohesion		Health	
Public safety		Leisure	
Sustainability		Political participation	
		Subjective well-being	
Total		Total	

Note: stylized patterns based on the empirical evidence presented in sections "The Quality of Swiss Society: Well-being and Quality of Life in Switzerland at the Societal Level", "Individual Quality of Life and Subjective Well-Being Across Life Domains" and "Subjective Well-Being and Satisfaction Since 2000". The graphs represent a time continuum between the mid-1960s and 2011/2012. The gradient of the curves should not be interpreted as a continuous, but as an ordinal scale (increasing, stable, declining well-being)

vulnerability to potential prosperity losses – and a softening of the moral concepts underlying happiness and subjective well-being. As evidenced by the consistently high rating of subjective well-being and satisfaction across various life domains over the past years, Switzerland has been gently moving from "dissonance" towards "well-being" and "adaptation."

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Living Conditions and Perceived Quality of Life Among Indigenous Peoples in the Arctic

32

Birger Poppel

Introduction to the Arctic

During the last decade all the Arctic States developed Arctic strategies, and all the Arctic states neighboring the Arctic Ocean (the Arctic Five: United States of America, Canada, Denmark/Greenland, Norway and the Russian Federation) have been engaged in research to substantiate extended continental shelf claims. China, Italy, Japan, South Korea, Singapore and India applied for and received status as permanent observers to the Arctic Council in 2013, whereas the application from the European Union was put on hold because of the EU sealskin ban. Oil exploration has started in Greenland waters and north of the Russian coast; at the same time, the Norwegian government has dropped some of its Arctic oil exploration following the argument by a major oil company that the risk of drilling was too big and safety procedures were insufficient. The Arctic Ocean has become more accessible and an increasing number of vessels pass through north of Russia and through the Northwest Passage. Naval maneuvers have also increased in recent years, in number, as well as in complexity of naval vessels participating. These few examples – and many more might be listed – contribute to the notion of 'the Arctic as a hot spot'.

All the above-mentioned episodes and incidents have hit the headlines recently (2013). However, headlines in international media seldom reveal to their readers that the circumpolar Arctic is inhabited. Sparsely populated, it is true, but the Arctic is home to both a number of indigenous peoples all over the Arctic and to settlers that have moved north either permanently or for a shorter period of time.

The major changes indicated above impact people, and they are accelerated by a changing climate:

> Coastal erosion, thawing permafrost, and changing sea-ice conditions (such as thickness, extent, and age), when combined with non-cryospheric drivers of change (such as increased economic activity, socio-economic development, demographics, governance, and the health and well-being of the Arctic society and people) will result in multi-faceted and cascading effects. (Hovelsrud et al. 2011b:10.2)

The rapid changes that have already taken place and the expected changes in the Arctic, as well as the ongoing activities among the Inuit, Saami and other indigenous peoples of the circumpolar north raise a number of questions about human development and how these changes affect the living conditions, the subjective wellbeing and the quality of life of the Arctic peoples. What consequences do climate and other changes have and how do the indigenous peoples respond? Are the effects and responses across the Arctic similar to those among peoples

Assessed and analyzed by The Survey of Living Conditions in the Arctic: SLiCA.

B. Poppel (✉)
Department of Social Sciences, Ilisimatusarfik, University of Greenland, Nuuk, Greenland
e-mail: bipo@uni.gl

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with a shared culture but living in different political-economic settings? How are people whose lifestyles have been closely tied to the land and sea impacted, and how are they adapting? And, last but not least: Can the Arctic indigenous peoples' experiences down the road inspire indigenous peoples and others elsewhere in their quest to enhance quality of life?

In 1997 a group of Arctic social scientists in partnership with Inuit, Saami and other indigenous experts and organizations set out on a journey to try to answer these questions, not least of all, the basic question: Why do people stay in communities where life might be harder and living standards most likely lower than in more southern regions? The aim of this chapter is to give some answers – and probably raise a few more questions.

The Arctic has, for a number of years (especially since the 1980s), inspired a growing interest for geopolitical, industrial, logistical and environmental reasons. Since the last decade of the old millennium, the Arctic has been a focus of interest as 'the canary in the coal mine' because global warming is impacting climate and the cryosphere in the Arctic so rapidly in the circumpolar regions. As a result, the impacts of these changes on humans and societies are experienced more swiftly here than in other parts of the world (ACIA 2005; AMAP 2011; Hovelsrud et al. 2011a).

The increasing focus on the Arctic during the 1980s reached a (first) peak in 1987 when Mikhail Gorbachev (then General Secretary of the Communist Party of the Soviet Union) made a speech in Murmansk about Arctic collaboration on reducing military activity, increasing economic collaboration and on advocating joint efforts in research and environmental protection. The 'Murmansk Speech' initiated the so-called Rovaniemi process that led to the formation of the Arctic Environmental Protection Strategy (AEPS) in 1991 and eventually the foundation of the Arctic Council (AC) in 1996 (Young 1998).

The Arctic Council was founded as a high-level intergovernmental forum to provide a vehicle for cooperation on, among other issues, sustainable development and environmental issues, coordination and interaction among the eight Arctic states (Canada, USA, the Russian Federation, Finland, Sweden, Norway, Denmark /Greenland/Faroe Islands and Iceland). The Arctic Council further included the indigenous peoples of the Arctic as Permanent Participants[1] in the Arctic Council. This signaled an acknowledgement of the growing activity and significant political impact of indigenous peoples and their organizations in the changing regional political landscape in the Arctic.

The Declaration of the Foundation of the Arctic Council (Ottawa, September 19, 1996) introduced and stressed wellbeing of the indigenous peoples and other residents of the Arctic in addition to other key elements in the agenda of what has been called 'The Age of the Arctic' (Osherenko and Young 2005).

> AFFIRMING our commitment to the well-being of the inhabitants of the Arctic, including recognition of the special relationship and unique contributions to the Arctic of the indigenous people and their communities;
>
> AFFIRMING our commitment to sustainable development in the Arctic region, including economic and social development, improved health conditions and cultural well-being;
>
> AFFIRMING concurrently our commitment to the protection of the Arctic environment, including the health of Arctic ecosystems, maintenance of biodiversity in the Arctic region and conservation and sustainable use of natural resources;
>
> . . ..
>
> RECOGNIZING the traditional knowledge of the indigenous people of the Arctic and their communities and taking note of its importance and that of Arctic science and research to the collective understanding of the circumpolar Arctic;
>
> DESIRING further to provide a means for promoting cooperative activities to address Arctic issues requiring circumpolar cooperation, and to

[1] The six Permanent Participants of the Arctic Council are: Aleut International Association, Arctic Athabaskan Council (AAC), Gwich'in Council International (GCI), Inuit Circumpolar Council (ICC), Russian Arctic Indigenous Peoples of the North (RAIPON) and Saami Council (http://www.arcticportal.org/arctic-council - accessed October 28, 2013). The Permanent Participants represent the estimated 500,000 indigenous people of the circumpolar region in the Arctic Council.

> ensure full consultation with and the full involvement of indigenous people and their communities and other inhabitants of the Arctic in such activities. (Arctic Council 1996)[2]

Historically and to date, scientific research in the Arctic has been dominated by the different disciplines of the natural sciences. From the first polar expeditions to today's research into, for example climate change, the overwhelming amount of research funding has been funneled to the natural sciences, whereas resources for research into human development, living conditions and quality of life has been modest and the studies carried out by researchers from the social and human sciences have primarily been community-based studies.

The increased focus on the Arctic as a distinct region created a requirement for data, facts, knowledge and scientific research in order to assess and monitor human development in the circumpolar north, to monitor regional impacts of global processes on people, peoples and societies, as well as monitor the local and national consequences of different countries' specific strategies and policies.[3] Several internationally concerted efforts have been launched in recent years with the Fourth International Polar Year 2007–2008 organized under the auspices of the World Meteorological Organization (WMO) and the International Council for Science (ICSU) as the most eminent example (see Krupnik et al. 2011). The Arctic Council, AC, and its working groups (see www.arctic-council.org) have been instrumental in both initiating and endorsing assessments as well as in research projects. The Sustainable Development Working Group, SDWG of the AC has, in keeping with its overall goals, endorsed a number of assessments, reports and research projects focusing on different aspects of measuring, assessing and analyzing human development in the circumpolar Arctic (see the Arctic Human Development Report (AHDR 2004))[4]; the Economies of the North project (Glomsrød and Aslaksen 2006, 2008), and the Arctic Social Indicators project (Larsen et al. 2010, 2014). The Survey of Living Conditions in the Arctic, SLiCA was adopted as an Arctic Council project in 2000.[5]

Some Social Characteristics of the Arctic

For thousands of years the circumpolar Arctic has been inhabited by peoples who survived in an environment that is often called unfriendly and a climate that is characterized by extreme low temperatures in the long winters and midnight sun in the short summers.

The arctic and sub-arctic parts of Fennoscandia (Norway, Sweden, Finland, Russia: the Kola Peninsula, and Karelia) have, for at least 5,000 years, been inhabited by the Saami peoples (archeological findings even seem to document that ancestors of the Saami already hunted and gathered food in the region around 10,000 CE).

The Saami representatives in the first Sami Parliamentarian Conference[6] stated that

> we Sami are one people united through our common history, culture, language and land areas, and as a confirmation that the borders of our nations shall not or cannot break our solidarity, (http://www.sametinget.se/1433)

Since roughly 4500 BCE, a number of migrations departing from eastern Siberia populated parts of the North American continent and parts of Greenland. The Saqqaq culture was followed by the Dorset culture that disappeared around 1500 CE. The last migration, the Thule

[2] http://www.arcticportal.org/arctic-council. Accessed 28 October 2013.

[3] In the Arctic Human Development Report II, Rautio et al. refer to a number of projects and studies focusing on social indicators and different aspects of health and wellbeing (Rautio et al. 2014).

[4] A follow-up: Arctic Human Development Report II will be published in 2014.

[5] SLiCA was adopted as an Arctic Council project under the auspices of the Sustainable Development Working Group, SDWG at the Ministerial meeting in Barrow, October 2000 and included in the Sustainable Development Plan, SDAP 2004–2006, 2006–2008, 2008–2010/2011.

[6] The first Saami Parliamentarian Conference took place in Jokkmokk, 24 February 2005 and concluded in 'Declaration from the First Sami Parliamentarian Conference Jokkmokk', 24 February 2005

culture, originated from Alaska and the Thule peoples are the forefathers of the Inuit who now live in the Arctic and define their homeland 'Inuit Nunaat', Land of the Inuit ('Inuit' meaning 'human beings' in the mother tongue of the Inuit).

In the 'Circumpolar Inuit Declaration on Sovereignty in the Arctic' the Inuit Circumpolar Council explains the relation between the indigenous inhabitants of the Circumpolar North and the Arctic region in the following way:

> Inuit live in the vast, circumpolar region of land, sea and ice known as the Arctic. We depend on the marine and terrestrial plants and animals supported by the coastal zones of the Arctic Ocean, the tundra and the sea ice. The Arctic is our home.
>
> From time immemorial, Inuit have been living in the Arctic. Our home in the circumpolar world, Inuit Nunaat, stretches from Greenland to Canada, Alaska and the coastal regions of Chukotka, Russia. Our use and occupation of Arctic lands and waters pre-dates recorded history. Our unique knowledge, experience of the Arctic, and language are the foundation of our way of life and culture. (Inuit Circumpolar Council, ICC 2009)

For thousands of years, the Russian Arctic, ranging from Fennoscandia to the Bering Strait, has been inhabited by herders, hunters, gatherers and fishermen. The first migrations across the Bering Strait had their point of departure in the eastern part of Siberia and the ancestors of the Aleut and Yupik that migrated to the North American continent had their roots in what is now Chukotka and Kamchatka.

Having struggled through the twentieth century with environmental, health, economic and legal problems, the almost 30 indigenous peoples of the Russian Arctic established, RAIPON, the Russian Association of Indigenous Minorities of the North, Siberia and the Far East[7] stating that:

> We, the indigenous peoples of the North, Siberia and Far East of the Russian Federation, believe that: −The Air, the Land and Water are blessed; −Nature is the source of life; −Man is but a drop in the whirlpool of life; −The river of time is but a reflection of the past, present, and future and that how our ancestors lived in the past is how we now live and how our offspring will live in the future... (RAIPON 1990)

The statements from associations representing the majority of the indigenous peoples of the Arctic[8] present concordant perceptions stressing the indigenous peoples' history dating back thousands of years, the connectedness to and the dependency on nature/the natural environment.

The indigenous peoples account for approximately 500,000 people[9] out of a total circumpolar population of 4 million[10] (AHDR 2004).

Despite the basic agreement reflected in the statements above, the livelihoods and living conditions of the indigenous peoples have varied significantly with the economic systems and modes of production that have prevailed at different times in different regions; whereas most of the indigenous peoples of the Arctic were originally nomadic or semi-nomadic, according to the Arctic Human Development Report (Ibid.), only approximately 15,000 people in the Russian Arctic (mostly Nenets in Yamal) are still semi-nomadic.

[7] RAIPON was established in Moscow, March 1990. http://ansipra.npolar.no/english/Index.html. Accessed 28 October 2013.

[8] The Permanent Participants in the Arctic Council representing the indigenous peoples of the Arctic includes the Aleut International Association, Arctic Athabaskan Council (AAC), Gwich'in Council International (GCI). http://www.arcticportal.org/arctic-council. (Accessed 28 October 2013).

[9] http://www.arcticportal.org/arctic-council#permanent-participants. The uncertainty is due to different definitions in official statistics around the Arctic: in Spmi (the homeland of the Saami in the northernmost parts of Norway, Sweden and Finland) residents are not registered by ethnicity; in the Russian North the following peoples are identified in the censuses: Saami, Nenets, Khanty, Sel'kup, Enets, Nganasan, Dolgan, Evenk, Even, Yukagir, Chukchi, Chuvanc and Eskimo/Inui-Yupik; in Greenland the distinction is between residents born in and outside Greenland; in Alaska the US census includes Americans and Alaskan natives; and Canada defines Inuit, North American Indians and Metis as indigenous (AHDR 2004:29).

[10] There are different definitions of the Arctic and the total population varies accordingly. The delimitation used here is defined by the Arctic Monitoring and Assessment Program (AMAP) and used in most assessments and reports developed under the auspices of the Arctic Council (AHDR 2004:18–19) – see Map 32.1: SLiCA regions below.

In many ways the Arctic is a region of contrasts, not least when the focus is on economic development and its impact. Rapid economic development – especially since World War II, and in some regions in Arctic Canada for instance, even later – has characterized the circumpolar Arctic. There have been a variety of motives for the regional modernization processes in the Arctic. Exercising sovereignty over the different Arctic states' northernmost regions was definitely a significant driver during the Cold War. The Nordic countries were, at least to some degree, motivated by an ambition to implement the Nordic welfare model in the Arctic regions as it was considered an embarrassment to the Nordic parliamentarians when the state of health and socio-economic conditions were far below the standards in the southern parts of the respective countries. Analyzing a number of basic socio-economic indicators[11] in all Arctic regions, Duhaime and Caron found patterns corresponding to three societal models (with some variations): 'The North American model', 'The Scandinavian model' and 'The Russian model'. Their overall conclusion is that economic growth is prioritized in all regions but with very different outcomes: 'for all the models, the relationship between the proportion of women[12] and disposable income[13] can be used as a key indicator to diagnose the state of health of the economy and society' (Duhaime and Caron 2008:21). Another major driver has been and still is the abundance of resources: renewable (especially fish and shellfish) and particularly the non-renewable resources. Extraction of oil and gas became a major economic activity in the last part of the twentieth century (AMAP 2007) – not least in the Russian Arctic where extraction was often followed by environmental problems due to oil spills (Forbes 2005; Stammler and Forbes 2006). Oil extraction started in Alaska in the 1970s, later north of the Norwegian coast and, at the end of 2013, also north of the Russian coast. The history of systematic mineral extraction in Greenland dates back to the middle of the eighteenth century (graphite mining) and since then, has been conducted periodically (Fægteborg 2013; Sejersen 2014). The Alaskan-Yukon gold rush took place in the 1890s and mineral extraction in Siberia started in the 1930s, but was generally modest in most other Arctic regions before World War II. Since then, mineral extraction has attracted major companies to the Arctic and mining and hydrocarbon production are now major contributors to gross regional products (GRP) and to the national economies, not least in the Russian Arctic, Alaska, Canada and Norway. It is important though, to stress that these activities do not necessarily benefit local communities or regional economies in terms of GDP as the economic results might be transferred to companies and shareholders outside the Arctic (Duhaime 2004; Duhaime and Caron 2006). The cash economy and wage labor were introduced in the Arctic regions at different times: in Greenland as early as in the middle of the eighteenth century, shortly after the Danish colonization (Marquardt 2005) and in the circumpolar north, generally after World War II. The traditional harvest- and herding-based subsistence economy thus developed into a mixed economy where subsistence still contributes significantly to the food supply and different living conditions (see e.g. Poppel 2006a; Poppel and Kruse 2009) of most Arctic indigenous households and plays a role in many non-indigenous households.

[11] The six socio-economic indicators are: female proportion, life expectancy, infant mortality, tertiary education, disposable income and dependency rate (Duhaime and Caron 2008:13).

[12] Share of women in the total population.

[13] Average personal disposable income.

The Survey of Living Conditions in the Arctic, SLiCA

The Basic Research Question and Overall Goals

A survey of living conditions in Greenland conducted by Statistics Greenland in 1994 provided useful data on different aspects of livelihoods, living standards and other living

conditions but also raised a number of questions that quite obviously could not be answered applying conventional social indicators used in standard surveys. One of the most puzzling questions was why markedly different – and lower – living standards (e.g. income, housing conditions, education and work status) among people living in settlements (up to 500 inhabitants) than people living in towns did not eventually result in massive outmigration from the settlements (McDougall 1998; Andersen 2004; Andersen and Poppel 2002; Kruse et al. 2008; Poppel 2006b, 2010, 2014b).[14]

The hypothesis resulting from these considerations was that important welfare priorities were not reflected in the 1994 survey. Statistics Greenland thus decided that a follow-up survey should explore these and other priorities that the conventional battery of social indicators did not identify, and that the need for a new research design for studying living conditions and wellbeing among the indigenous peoples of the Arctic should be explored (Ibid.). Following careful deliberations, major objectives of the SLiCA-project were developed (Andersen and Poppel 2002):

- To develop a new research design for comparative investigations of the living conditions of the Inuit and Saami peoples in the Arctic (See Map 32.1 and Table 32.9). This included developing partnerships between researchers and the respondents and their organizations.
- To map the living conditions among the Inuit and Saami and the indigenous peoples of Chukotka and the Kola Peninsula in the Arctic.
- To conduct a comparative dynamic social analysis of the causal relations between different individual resources and between individual wellbeing and different political, economic, cultural and technological settings.
- To improve the basis for decision-making in relation to policy planning and implementation.
- To establish an interdisciplinary network of researchers and research institutions engaged in living conditions research in the Arctic.
- To increase the knowledge among the indigenous peoples of their own and other indigenous peoples' history and living conditions.
- To educate and involve post-docs, PhD students, candidates and undergraduates in the SLICA project (Andersen and Poppel 2002).[15]

SLiCA Findings for Indigenous Peoples in the Arctic

As mentioned above, according to the 1994 Greenland Survey of Living Conditions, many Greenlanders did not leave their communities in favor of potentially higher living standards in larger towns. This finding was a major driver for defining a suite of indicators to account for subjective wellbeing among Arctic indigenous peoples.

The same concerns and deliberations about the underlying priorities that made some Greenlanders stay in more remote parts of Greenland were expressed in the conclusion of the Arctic Human Development Report (AHDR 2004)[16]:

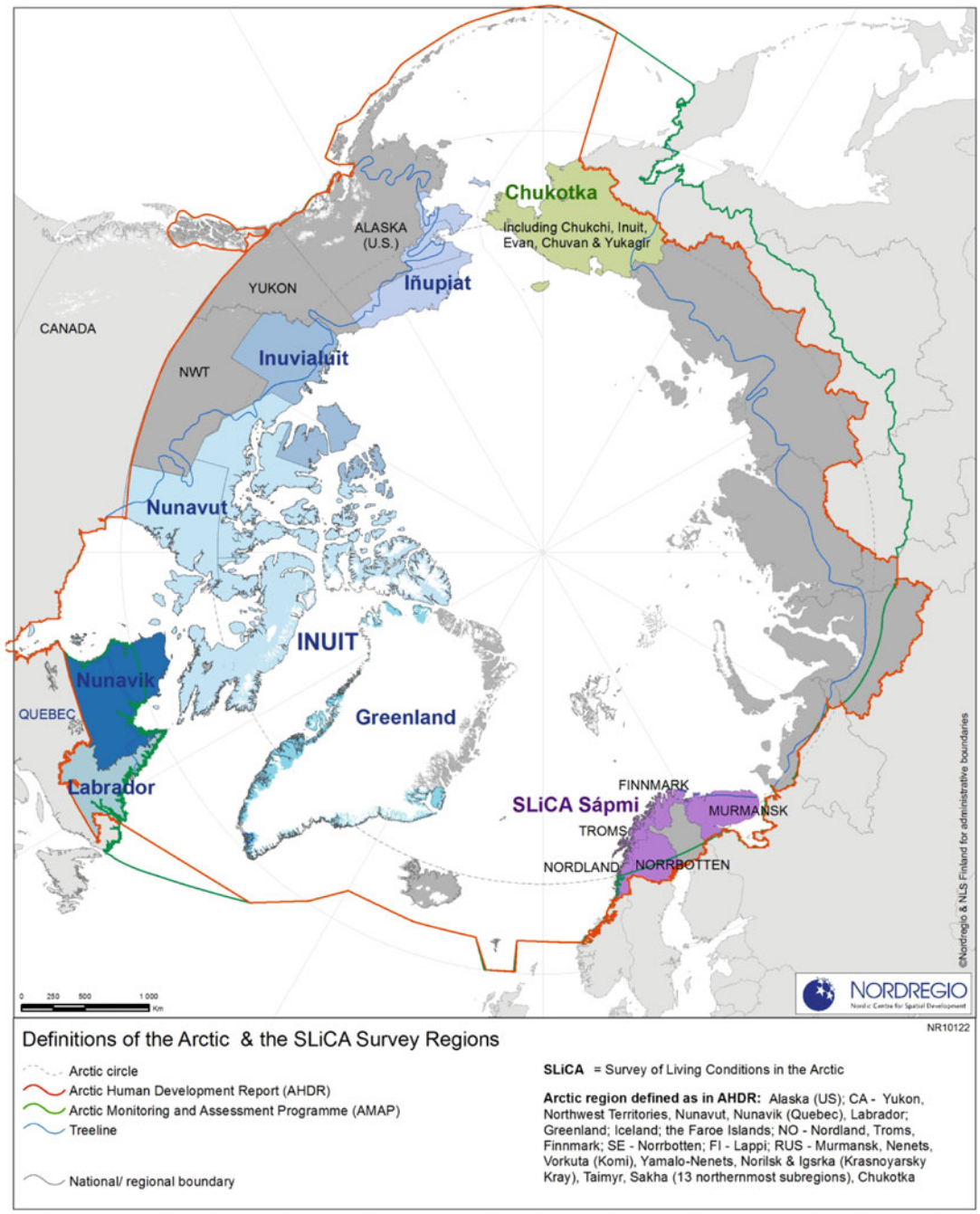
> Residents of the Arctic – settlers as well as indigenous peoples – regularly emphasize the importance of at least three dimensions of human development over and above those included in the HDI[17]:
>
> - Controlling one's own destiny
> - Maintaining cultural identity
> - Living close to nature. (AHDR 2004:240)

[14] This question, of course, only makes sense if people are able to move which was and is the case. The observed fairly stable population figures in the Greenlandic settlements until roughly 2005 have recently, for a number of reasons (including government policies focussing on a few growth centres), changed into a decline of the population in the settlements.

[15] For more thorough descriptions and comments see the project web site: www.arcticlivingconditions.org and McDougall 1998; Andersen and Poppel 2002; Andersen 2004; Kruse et al. 2008; Poppel 2010, 2014b; Eliassen et al. 2012.

[16] The Arctic Human Development Report was endorsed by the Arctic Council's Sustainable Development Working Group (SDWG) and published in 2004.

[17] The United Nations' Human Development Indicator is an index including indicators of health, education and living standard (the latter measured by GDP).



Map 32.1 Definitions of the Arctic and the SLiCA survey regions

The Arctic Human Development Report recommended a more thorough assessment of potential indicators for all Arctic residents (indigenous as well as settlers/immigrants to the Arctic) which was followed by an Arctic Social Indicator initiative.[18] The first report on Arctic Social Indicators probed for appropriate

[18] This initiative was – like SLiCA and the AHDR – endorsed by the Arctic Council's SDWG.

indicators within the six domains (the UN's HDI indicators as well as the three mentioned above) that fulfilled a number of specific criteria (Larsen et al. 2010) and the second report included case stories and applications to the Arctic Social indicators selected in the first report (Larsen et al. 2014).

When the first SLiCA analysis was published in 2007 (Poppel et al. 2007) it included almost 600 tables[19] reflecting the different living condition dimensions in the focus of the SLiCA research interest. Acknowledging the conclusions and recommendations of the Arctic Human Development Report, these tables were categorized within the three dimensions of the United Nations' Human Development Index:

- Health
- Education
- Living standards/Material success

and the three domains suggested by the AHDR and identified for SLiCA purposes:

- Ties to nature
- Cultural continuity
- Control of destiny

This categorization and five research themes (importance of mixed economy, social relations, social problems, outside influences and policies, see above) suggested by our indigenous partners (Kruse et al. 2008) has been the point of departure for a large part of the research that has been carried out based on the SLiCA data (see Annex 2, Table 32.10, for more details on different SLiCA indicators). The three 'new' domains as well as the overall subjective wellbeing and quality of life is further investigated below following answers to a number of SLiCA questions that in some ways 'set the scene' and introduce the above-mentioned domains.

SLiCA findings within the three domains: 'ties to nature', 'cultural continuity', 'control of destiny' and findings focusing on subjective wellbeing/quality of life will be presented and documented below, following the introduction of a few SLiCA findings within the dimensions of health, education and living standard.

United Nations' Human Development Indicators Adapted to and Measured in an Arctic Context

Health

It is well-documented that life expectancy dropped dramatically in Russia after the collapse of the Soviet Union at the beginning of the 1990s and health care conditions – especially in more remote regions – suffered as some regional health care services were abolished. Most results from the answers in the health section in the SLiCA questionnaire point to a health status that is generally worse in Chukotka and the Kola Peninsula ('diagnosed but untreated medical problems' is just one example). Medical research has substantiated that 'self-rated health' is a fairly good predictor of life expectancy (DeSalvo et al. 2006). The results on 'self-rated health' present a very diverse picture: between less than 50 % (Chukotka) and 95 % (Greenland) of the indigenous residents perceive that their health is 'good', 'very good' or 'excellent'. At the same time the results show that one out of five in all regions/countries (except Canada and Greenland) rate their health 'poor or fair'.

Education – Formal and Informal

Formal education (which the UN's HDI also measures) has become a still more important parameter in the circumpolar region with the increasing focus on self-determination and the ability of Arctic communities and regions to benefit from increasing economic activities, including resource extraction and the industrial activities following it. Roughly eight out of ten people attended post-secondary school (high school or a vocational school/college) in Norway, Chukotka, Alaska and the Kola Peninsula. The percentage is somewhat lower in Greenland, and just 15 % of the Swedish Saami (this might be, at least partly, because of the age composition of the Swedish Saami sample).

As subsistence harvest activities are still important to the indigenous peoples in the Arctic,

[19] The SLiCA database and table section on www.arcticlivingconditions.org have been developed by Jack Kruse and Marg Kruse.

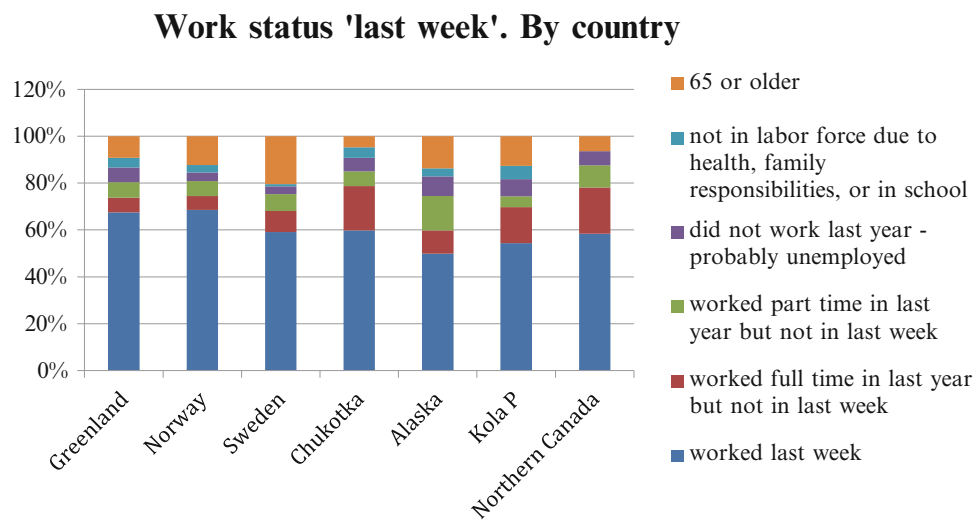


Fig. 32.1 Work status 'last week' in the SLiCA survey regions. (Source: www.arcticlivingconditions.org & SLiCA database)

knowing about the continued intergenerational transfer of traditional knowledge is important. SLiCA respondents were asked about traditional education skills learned as a child and the skills learned or improved since childhood. A majority among the Inuit and Saami in Norway, the Kola Peninsula and Chukotka said that they learned 11 or more traditional skills and more than 8 out of 10 indigenous residents in all regions/countries stated that they have learned or improved traditional skills since childhood.

Living Standards

The ambition of SLiCA and the recommendations of the Arctic Human Development Report (AHDR 2004) to add value of information and insight to the United Nations' Human Development Index included a focus on living standards, education and health and several clusters of questions were directed towards these dimensions. The conventional questions within these dimensions were supplemented with necessary and contextually developed questions about, for instance, traditional education, which is necessary for subsistence activities.

The development of mixed economies in the circumpolar region and communities (see for instance Wolfe and Walker 1987), together with regions becoming still more dependent on global economic, political and cultural forces has increased the necessity for stable employment and a cash income. Figure 32.1 shows the work status in the different survey regions: between half (in northern Alaska) and two-thirds (in Greenland and northern Norway) of the adult population were employed in the week prior to the interview and a minority (up to 10 %) were either not in the labor force or were unemployed in the previous week.

Comparing personal and household incomes[20] (Swedish data are not available) reveals major differences as indigenous individuals and households in Chukotka and the Kola Peninsula have considerably lower incomes than households in Greenland, northern Alaska and northern Norway, with the income level in Norway ranking highest.

Whereas the UN HDI measures Gross National Income per capita, the SLiCA project measures individual and household income as well as income inequalities and poverty. Income differences in the Arctic not only exist between regions and countries but also within regions and

[20] The incomes include all sources of income: wages, earnings from self-employment and transfer income. The income figures are measured in USD and PPP-adjusted.

Table 32.1 Households receiving traditional food from others by country

	Canada	Greenland	Chukotka	Alaska	Norway	Sweden	Kola Peninsula
Received traditional food from others	100 %	77 %	29 %	92 %	65 %	62 %	68 %
Received traditional food in exchange for assisting others	5 %	39 %	40 %	51 %	41 %	31 %	26 %
Received traditional food in exchange for other traditional food	*	23 %	41 %	55 %	39 %	16 %	34 %
Received gift of traditional food	90 %	90 %	89 %	88 %	80 %	62 %	87 %
Shared traditional food with households in other places	*	66 %	*	85 %	78 %	53 %	*
Paid for traditional food in last 12 months	19 %	71 %	46 %	17 %	56 %	68 %	71 %

Source: http://www.arcticlivingconditions.org/SLiCA Results Report/Tables – Ties to Nature
*Data not available

countries. Both relative[21] and absolute[22] poverty was measured based on detailed self-reported income information. 40–50 % of households in Greenland, Alaska, Chukotka and the Kola Peninsula are relatively poor (with incomes below 60 % of the median income). The largest proportion of relatively poor (53 %) is in Chukotka, whereas less than two out of ten Norwegian Saami can be counted as relatively poor (data are not available from Canada and Sweden). Using an absolute poverty level reveals very large discrepancies between indigenous households in Chukotka and the Kola Peninsula (roughly three out of ten households live in absolute poverty) at one end of the scale, and Norway and northern Alaska (less than one household out of ten) at the other end of the scale. Indigenous households in Greenland and northern Canada range between with 15–18 % of the households in absolute poverty.

There seems to be a relation between income differences (measured as 'part of population in poverty') and satisfaction with standard of living. Between seven and eight indigenous Chukotkans and residents in the Kola Peninsula state that they are somewhat or very dissatisfied with their standard of living. One in ten Norwegian Saami and roughly every fourth Inuit in Greenland and Inupiat in northern Alaska are dissatisfied with living standards.

An overall assessment of living standards measured by cash income must include the subsistence harvest (as commented on in more detailed elsewhere in this chapter), including what is shared and received from/given away to family and fellow community members (see Table 32.1), contributes significantly to the food supply of many households and thus compensates for food that otherwise would have been bought in a local grocery or supermarket. At the same time, SLiCA data from the Inuit survey regions documented that subsistence activities not only depend on cash, but also that, where there is any correlation between cash income and subsistence activities, individuals with higher incomes take part in more subsistence activities (Kruse et al. 2008).

The answers to the question about the households' ability to make ends meet economically reflected the same economic reality and the perceptions referred to above: 85 % of the indigenous residents in both Russian SLiCA survey regions reported that they are only able to make ends meet with some or great difficulty.

The SLiCA Specific Indicator Clusters

Ties to Nature (Contact with Nature)

Historically, Arctic societies have fed, sheltered, and clothed themselves and maintained their well-being in large part through a close relationship and interdependence with the natural environment.

[21] Relative poverty was measured using the definition of EuroStat on households: 'the households earning less than 60 % of the median income'.

[22] To measure absolute poverty, the US definition and standard was applied.

> Arctic human-environment interactions fulfill the physical needs for food and shelter and also ground humans spiritually in their cultural worlds.
>
> . . .
>
> Contact with nature, albeit a somewhat intangible attribute of human development and therefore difficult to measure, is nonetheless central to the legacy and contemporary state of well-being in Arctic societies.
>
> . . .
>
> Therefore one logical path toward developing indicators for contact with nature would be finding ways to measure participation in different livelihood activities. (Crate et al. 2010:109)

The quoted passages from the first Arctic Social Indicator Report (Larsen et al. 2010) present a few condensed statements about some key relations not only between the indigenous peoples but also between other Arctic residents and the natural world.

In all survey regions (the question was not asked in Canada) more than nine out of ten Inuit and Saami found 'the way I view nature' as a very important or important identity marker. Nature and wild-life activities like 'hunting and fishing' and 'harvesting of wild berries and plants' ranked high among indigenous identity markers. These identity markers substantiate the meaning of 'ties to nature' as a human dimension domain focusing on important aspects of wellbeing for Arctic indigenous peoples (see Table 32.3 for more details).

Subsistence Activities

From the very beginning of the SLiCA research process, subsistence activities[23] were the focus of the discussions between researchers and indigenous experts as the assumption was that the mixed cash and subsistence harvest economy was still a prevailing 'mode of production' in many Arctic communities and regions. Based on SLiCA data for the Inuit homelands, Poppel and Kruse conclude that subsistence harvest is not just a matter of 'meat on the table', although 'food security' has become an even more significant issue in Arctic communities recently. Subsistence encompasses a number of aspects:

- the economic aspect – the importance to the economy of the household;
- the nutritional aspect – part of the diet of the household (more nutritious than store-bought food);
- the social aspect – including intergenerational transfer of knowledge;
- the socio-cultural aspect – principles of sharing and community relations;
- the identity aspect – markers of identity related to subsistence;
- the integration aspect – the mix of subsistence and cash activities (Poppel and Kruse 2009)

Including the Saami survey regions confirmed that subsistence activities are as important in Spmi as in the Inuit-populated regions.

The overall finding was that the vast majority of the Inuit and Saami have participated in several subsistence-, and thus nature-related activities over the last 12 months.[24]

Subsistence Harvest and Consumption of Traditional Food

Table 32.2 shows the proportion of meat and fish consumed by the household that people perceive as also being harvested by a household member. The consumption of traditional food harvested by one or more household members is significant in all regions, although with variations (Poppel 2006a; Poppel and Kruse 2009; see also footnote 25).

The proportion of meat and fished consumed by the household and also harvested by a household member not only provides information about the composition of the diet and the economic significance of nature (to which degree the household's own harvest substitutes store-bought

[23] We defined subsistence activities as harvesting local resources: hunting, fishing, herding, husbandry, gathering, and other harvest activities that people conduct as a non-market activity with the primary purpose of contributing harvest products to the household, to share with family and community members (including 'meat gifts') or to sell locally outside the market economic sector. A 'Household Production Model' was developed to be tried out as a part of the research effort (see Usher et al. 2003; Kruse et al. 2008).

[24] Unpublished paper: *Are Subsistence Activities, Harvest of Renewable Resources and Herding Important to Indigenous Peoples in Modern Arctic Economies and Cultures?* Presented by Poppel, B. at the IPY Oslo Science Conference 2010. June 8–12.

Table 32.2 Proportion of meat and fish consumed and also harvested by household traditional food by country

	Canada	Greenland	Chukotka	Alaska	Norway	Sweden	Kola P
None	*	25 %	18 %	8 %	6 %	14 %	42 %
Less than half	*	38 %	38 %	31 %	37 %	44 %	35 %
About half	*	15 %	27 %	25 %	17 %	43 %	22 %
More than half	*	21 %	17 %	36 %	40 %		
	*	100 %	100 %	100 %	100 %	100 %	100 %

Source: www.arcticlivingconditions.org (Table 26) and SLiCA database
*Data not available

food) but also indicates a relation to (and dependency on) surrounding nature (Table 32.2).

Respect for Nature

To elucidate the strength of traditional values, a number of questions were asked about 'satisfaction with community's promotion of indigenous values' of which one was 'respect for nature' (for more details see subsection about 'cultural continuity' below). A vast majority of indigenous residents in five out of seven Arctic regions and countries (there are no data for Canada) reported that they were very or somewhat satisfied with the promotion of 'respect for nature'. Only in Chukotka a majority of 57 % was 'somewhat or very dissatisfied' with the promotion of 'respect for nature'. As the vast majority of Inuit in Greenland, Chukotka and Alaska confirmed that they apply 'traditional values in their lives' it seems reasonable to interpret the answers about satisfaction with a community's promotion of 'respect for nature' as supporting the assumption that nature is important to the indigenous people.

Infrastructure projects (e.g. hydropower stations), extractive industries and climate change are just a few, but manifest, examples of human activities with huge environmental impacts. If contact with 'nature' and nature-based activities are important to people, the way nature changes and the impact of access to and use of nature and its resources would seemingly also be a concern. Following that, it seems fair to assume that the influence people have on these changes would be of vital importance. The SLiCA project thus included questions about the environmental concerns of the Arctic indigenous peoples in the survey regions as well as perceptions of influence on 'the management of fish and game' and 'the development of oil, gas and minerals' (Poppel et al 2011).

A majority cited the following problems in the region where they live: contamination of local sites, pollution of local lakes and streams, and pollution from industrial development. Most Greenlanders perceive pollution from other countries as a problem whereas erosion of coastal areas and river banks are a concern for the majority of indigenous people in Alaska, Chukotka and the Kola Peninsula. Three out of four cited climate change as a problem in their communities (Poppel et al. 2011).

There are marked differences from region to region: the vast majority and a considerably larger part of the indigenous peoples of Chukotka and the Kola Peninsula respectively are concerned with the above-mentioned problems. This might be a response to a number of environmental disasters in the wake of the rapid development of oil, gas and mineral exploitation in the Russian Arctic (Forbes 2005; Stammler and Forbes 2006).

The identification of and concern with different environmental problems and their assumed impact on 'ties to nature' is not generally paralleled by a high score on satisfaction with influence on the 'drivers for change'. Only in northern Alaska more than half of the indigenous population is somewhat or very satisfied with the influence indigenous people have on renewable resources, non-renewable resource development and on reducing environmental problems. The Saami – especially in Sweden – rate their influence very low. The indigenous people of the two Russian regions also score very low. At the same time they (see above) are the ones most concerned with the environmental problems they identify (Poppel et al. 2011).

Cultural Continuity (Cultural Vitality)

In the preamble and in a number of articles (especially articles 11–16), the United Nations Declaration on the Rights of the Indigenous Peoples (UN 2007) lay down the cultural rights of the indigenous peoples: rights to cultural traditions and customs; rights to spiritual and religious traditions; rights to histories, languages and oral traditions; rights to provide education in their own language; rights to dignity and diversity, and rights to own media. As an example, Article 11.1 states that

> Indigenous peoples have the right to practice and revitalize their cultural traditions and customs. This includes the right to maintain, protect and develop the past, present and future manifestations of their cultures, such as archaeological and historical sites, artifacts, designs, ceremonies, technologies and visual and performing arts and literature.

And Article 13.1 further states that

> Indigenous peoples have the right to revitalize, use, develop and transmit to future generations their histories, languages, oral traditions, philosophies, writing systems and literatures, and to designate and retain their own names for communities, places and persons. (UN 2007)

The quotes and the subject examples above very closely reflect the input to the discussions provided by the indigenous partners in the SLiCA questionnaire development process that concluded in a broad social goal entitled 'cultural continuity'. Cultural activities and cultural values as well as how they are transferred from generation to generation (for instance mastery of language, traditional values and self-identification, spirituality, participation in cultural events and use of media – and how they are valued (e.g. satisfaction with communities' promotion of traditional values and the individual application of traditional values in personal life) are embedded in several living condition dimensions but all aspects are considered to be resources and are assumed to affect quality of life. A few SLiCA findings on self-perceived identity and language will be introduced below as examples of the strength of 'cultural continuity' and cultural wellbeing (see also Schweitzer et al. 2010).

Self-Perceived Identity Among Arctic Indigenous Peoples

All SLiCA respondents were asked whether, and if, to what degree a number of activities and customs were important in maintaining their indigenous identity (see Table 32.3).

Table 32.3 Activities and customs important/very important to maintaining indigenous identity, by country

	Canada	Greenland	Chukotka	Alaska	Norway	Sweden	Kola Peninsula
Traditional food	*	95 %	98 %	96 %	84 %	79 %	*
Hunting and fishing	*	79 %	99 %	95 %	72 %	77 %	*
Naming kinship relationships	*	87 %	100 %	90 %	96 %	87 %	*
Harvesting of wild berries and plants	*	75 %	98 %	89 %	78 %	80 %	*
Occupation or profession	*	87 %	77 %	87 %	76 %	56 %	*
Preservation of traditional foods	*	85 %	89 %	96 %	78 %	85 %	*
Use of indigenous language	*	98 %	84 %	84 %	90 %	63 %	*
Participation in traditional cultural events	*	71 %	81 %	85 %	83 %	64 %	*
Childhood upbringing	*	96 %	98 %	94 %	93 %	89 %	*
Clothes worn	*	78 %	71 %	76 %	60 %	58 %	*
Contacts with other indigenous people	*	95 %	58 %	93 %	91 %	88 %	*
Indigenous poetry and literature	*	79 %	61 %	73 %	58 %	40 %	*
Religious and spiritual beliefs	*	79 %	66 %	81 %	57 %	33 %	*
View of nature	*	97 %	98 %	96 %	92 %	96 %	*
Meeting expectations of family and indigenous friends	*	88 %	81 %	94 %	82 %	78 %	*

Source: www.arcticlivingconditions.org (Table 142) & SLiCA database
*Data not available

Table 32.4 Language: fluency in indigenous language = understand, speak, read and write (very or relatively well)

	Canada	Greenland	Chukotka	Northern Alaska	Northern Norway	Northern Sweden	Kola Peninsula
Understand	92 %	97 %	61 %	54 %	84 %	34 %	65 %
Speak	89 %	96 %	55 %	45 %	75 %	28 %	56 %
Read	70 %	88 %	42 %	29 %	62 %	19 %	36 %
Write	73 %	84 %	40 %	22 %	44 %	12 %	26 %

Source: www.arcticlivingconditions.org (Table 91) and SLiCA database (Poppel et al. 2011)

The results across the Arctic are strikingly alike. More than three out of four (with only two exceptions) of the Arctic indigenous peoples in the SLiCA survey regions find the same activities and customs important or very important to their identity: 'view of nature', 'eating traditional food',[25] 'preservation of traditional food', harvesting of wild berries and plants', 'language use' as well as 'naming kinship relationships', 'childhood upbringing', 'contacts with other indigenous people' and 'meeting expectations of family and indigenous friends'. Whereas these values all point to the living conditions dimension of 'cultural continuity' (and many also relate to 'ties to nature'), the latter identity markers also highlight the importance of family and friends, close interpersonal relationships and social networks. Despite many similarities, there are also significant differences between the regions – for example, when it comes to 'use of indigenous language' and 'religious and spiritual beliefs'.

Language Retention

Indigenous peoples' right to speak and write their mother tongue and to use the indigenous language as the language of instruction has been a major issue in most, if not all, indigenous peoples' fights for recognition as peoples and for self-determination. Following this, one of the traumas, both individually and collectively, for many indigenous peoples is the way many children were sent to boarding schools for several years, far from their families, and restricted and sometimes forbidden from speaking their mother tongue. In the Arctic this was the situation in, for instance, Alaska, Canada and among the Saami in the 1950s and the following decades (Smith 2009).

Table 32.4, 'Language retention', is based on individual, self-perceived language abilities and contains several findings and indicates a number of relationships. First of all, there are significant differences in the ability to understand, speak, read and write the indigenous language: the Swedish Saami rank lowest, not only among the Saami but also compared to the other indigenous groups. Twice as many of the Kola Saami and almost three times as many of the Norwegian Saami perceive their language abilities as very good or relatively good compared with the Swedish Saami. Among the Inuit, the Greenlanders rank highest in all four categories of language management as almost everyone stated that they understand and speak Greenlandic very or relatively well and more than eight out of ten reported that they read and write Greenlandic very or relatively well. The self-perceived language skills in Greenland rank somewhat higher than those of the Canadian Inuit and considerably higher than the language skills of the Inupiat in northern Alaska.

The language abilities are reflected in 'current use of indigenous language in household'. The three regions where language skills are perceived to be highest – Greenland, Arctic Canada and northern Norway – are also the regions where the largest part of the indigenous people reported that they speak the indigenous language most or all the time in the household (see Table 32.5).

[25] 'Traditional food' (in the English-speaking regions often called 'country food') is the overall term for meat, fish, herbs and vegetables harvested locally/regionally and either prepared traditionally (e.g. boiled, fried, dried or fermented), eaten raw or prepared according to more modern recipes (see e.g. Poppel and Kruse 2009). The term 'Traditional food' was not used as such in the questionnaire but related to what is considered 'traditional' in the different regions. For example: 'Inupiat/Yupik' food in northern Alaska and 'Kalaalimernit' in Greenland.

Table 32.5 Currently use indigenous language in household

	Northern Canada	Greenland	Chukotka	Northern Alaska	Northern Norway	Northern Sweden	Kola Peninsula
All the time	50 %	82 %	17 %	14 %	40 %	*	15 %
Most of the time	22 %	11 %	11 %	16 %	16 %	*	8 %
Some of the time or less	28 %	8 %	73 %	70 %	44 %	*	77 %
Total	100 %	101 %	101 %	100 %	100 %	*	100 %

Source: www.arcticlivingconditions.org (Table 110) and SLiCA database (Poppel et al. 2011)
*Data not available

What seems substantiated, using Greenland as an example, is that public policy over a longer period[26] and a concerted effort can enhance an overall goal 'despite all odds', or 'what might at a first glance look like mission impossible' confronted with the fact that many languages of small-numbered indigenous peoples are either on the verge of extinction or threatened.

Control of Destiny (Fate Control)[27]

> Arctic regions have long been resource peripheries and internal colonies of the states that encapsulate them. Political decisions made in far-flung nation-state capitals and economic decisions made in corporate boardrooms in distant metropolises have determined the trajectories of development that Arctic regions have experienced. Arctic residents are dependent on their homelands, the health of their ecosystems, and the right to use those ecosystems. Yet their power over the use and protection of these territories and resources have has been compromised by outside forces. Thus fate control is of critical importance to the sense of well-being and human development in Arctic areas. (Dahl et al. 2010:129)

One of the common points of departure for Arctic societies is a history of colonialism. Recent developments, including devolution and implementation of new political structures, can – to different degrees – be seen as attempts by the southern nation states to meet the demands of indigenous peoples and other Arctic residents in the northern regions of these states for political power to make their own decisions and to control their own destinies. The political authority that has been transferred and the forms of government that have been implemented in the Arctic region represent a broad variety of attempts to decolonize, ranging from transfer of more specific decisions to the local level (for instance, in the Saami regions) to home rule and self-government arrangements in, for example, Nunavut and Greenland respectively.

The struggle of the indigenous peoples of the Arctic for self-determination has been paralleled by an increasing international focus on indigenous peoples' rights that, based on decades of efforts by indigenous peoples' organizations, resulted in the foundation of United Nations Permanent Forum on Indigenous Issues in 2002 and, 5 years later, in the adoption of the Declaration on the Rights of

[26] During the colonial and postcolonial period (1721–1979) the Greenlandic language was used among Greenlanders, by the missionaries and by media (the first Greenlandic newspaper published in 1861; and Greenland Broadcasting in 1958) and was used in education with an increasing preference of the Danish language in the post-war decades of modernization. The agreement between the Danish state and Greenland about Greenlandic self-governance, followed by both parliaments' passage of legal acts that came into force June 21, 2009, states that the Greenlandic language is the official language of Greenland and that Danish shall still be taught. Since the introduction of Home Rule in 1979, the Greenlandic language has been prioritized. Some argue 'at the expense of learning the Danish language', a view, which the SLiCA figures on 'foreign language skills by age groups' cannot refuse.

[27] The Arctic Human Development Report (AHDR 2004) recommended social indicators developed within a human development dimension: 'controlling one's own destiny'. Following this recommendation, the term 'Control of destiny' is applied in the organization of SLiCA tables in SLiCA Results (www.arcticlivingconditions.org). The Arctic Social Indicators Report (Larsen et al. 2010) uses the term 'Fate control'. In this chapter the two terms are used synonymously.

Indigenous Peoples (adopted by the United Nations September 13, 2007). The Annex to the Declaration recognizes and reaffirms

> that indigenous peoples possess collective rights which are indispensable for their existence, well-being and integral development as peoples. (United Nations 2007)

An important acknowledgement of the significance of the Arctic indigenous peoples is the inclusion of indigenous representation in the Arctic Council as Permanent Participants of the Council and its working groups (www.arctic-council.org).

Measuring Control of Destiny/Fate Control

Control of destiny/fate control can, according to Dahl and his co-authors, be measured using indicators within the following categories: 'political power and political activism', 'decision-making power', 'economic control', 'knowledge construction' and 'human rights' (Dahl et al. 2010:131). Many indicators within these categories might be found in publicly available assessments and reports at an aggregate level. The same availability of data does not generally exist if the research focus is the individuals' evaluation of, for instance, distribution of power and influence on decision-making. SLiCA opens a window to cast some light on some aspects of individuals' perceptions about political knowledge and influence.

Importance of Political Decisions, Interest in and Knowledge About Politics

Most Inuit, Saami and indigenous people in Chukotka and the Kola Peninsula find 'decisions made by government' important or very important to their own lives, ranging from 74 % in the Kola Peninsula to 91 % in Chukotka.

A majority in all survey regions also indicates an interest in 'politics in general'. The variation in responses to this question is larger though, as between 50–60 % in the Kola Peninsula say they are interested or very interested, whereas more than 80 % of the Saami in northern Norway and northern Sweden declare an interest in politics in general (Fig. 32.2).

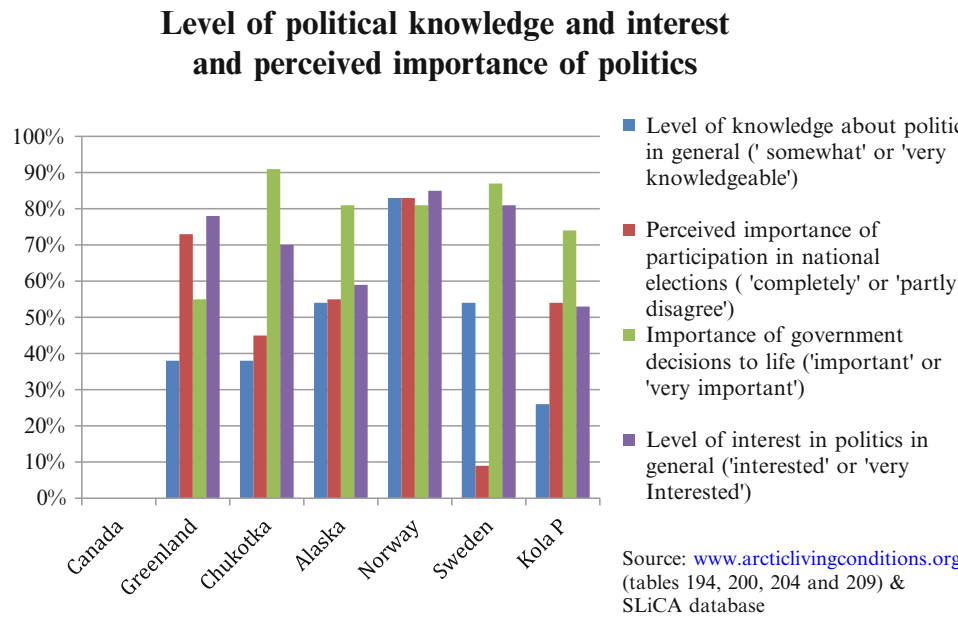


Fig. 32.2 Level of political knowledge and interest and perceived importance of politics

The interpretation of the answers to the question 'how knowledgeable are you about politics in general' and to the perceived importance of the individual's own vote in national elections[28] is more difficult because of the distribution of answers.

Generally, the Norwegian Saami are interested, declare that they are also knowledgeable, and find government decisions important to them, but disagree on the statement that their own vote is not important. At the other end of the spectrum of perceptions related to interest in and knowledge of politics, roughly half the indigenous people of the Kola Peninsula expressed interest in politics but only every fourth found her/himself knowledgeable about politics. Almost half of the indigenous people of the Kola Peninsula agreed with the statement that it did not matter what she or he voted. Still, three out of four found government decisions important.

The survey results from the other regions do not provide a clear picture immediately. Including other findings on, for instance, votes at elections and factors of social cohesion did not present a clearer picture but merely pointed to the need for further in-depth research into the political development of the Arctic regions.

Power, Influence and Governance on Resource Exploitation and the Environment When Climate and Environmental Conditions in the Arctic Change Rapidly

There are several reasons for the Arctic being center stage in discussions at conferences and in international fora, but a fundamentally important one is certainly that global warming and the resulting climate change manifests itself more rapidly in the circumpolar regions than elsewhere, thus affecting people's livelihoods, living conditions, subjective wellbeing and quality of life (Nuttall et al. 2005; Hovelsrud et al. 2011a, b; Rasmusssen 2011; Arctic Council 2013).

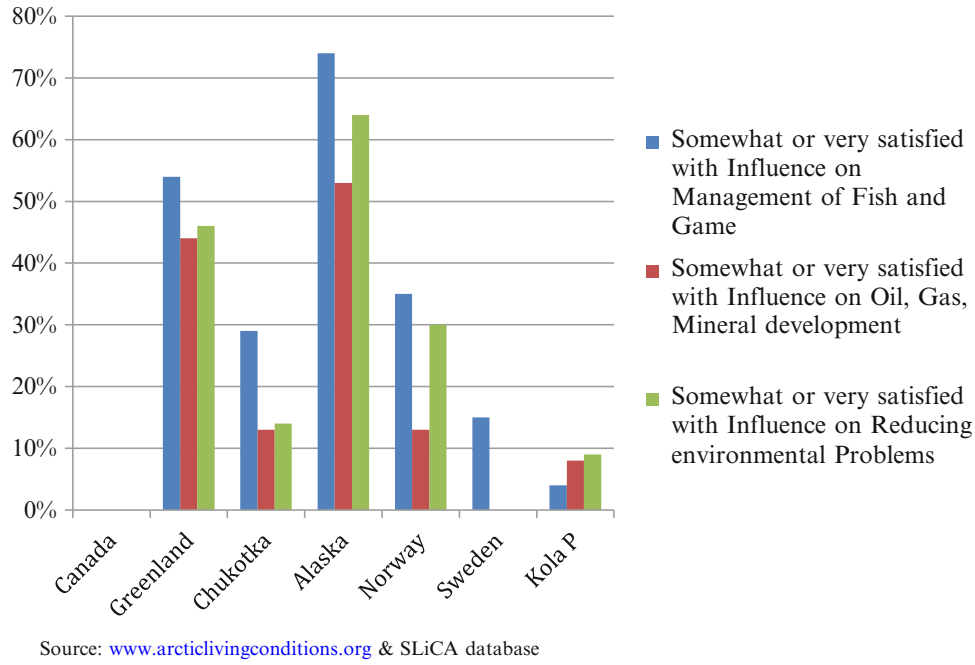
Whereas Inuit and Saami across the circumpolar Arctic and the indigenous peoples of Chukotka identify a number of environmental problems in their community, their satisfaction with the influence of indigenous people to reduce environmental problems is, at best, modest (see Fig. 32.3). Only in Alaska more than half (62 %) is somewhat or very satisfied, whereas the percentage in Greenland is 46 %, in northern Norway 30 and in the two Russian regions, 15 % in Chukotka and 10 % in the Kola Peninsula (Poppel et al. 2011) (Fig. 32.3).

The picture is very much the same when the focus is on evaluating the influence indigenous people have on management of non-renewable natural resources like oil, gas and minerals. The most significant difference is that only 10 % of the Norwegian Saami are somewhat or very satisfied with their influence. This is the same level of satisfaction with influence as reported among the indigenous people in Chukotka and a little higher than in the Kola Peninsula (ibid). The Alaskan Inupiat are an exception as they report a higher degree of satisfaction with influence over the management of natural resources.[29]

The importance of different aspects of 'control of destiny' (including influence on, for example, the environment) on 'satisfaction with quality of life' and 'quality of life in this community' seems to be supported by the findings in section "Subjective Wellbeing and Quality of Life". The significant results about lack of influence on different resources can thus be seen as an important message to local, regional, national and international decision makers to ensure the inclusion of the indigenous peoples in decision-making. Not least environmental issues, exploitation of natural resources and adaptation to change call for 'inclusive governance'. This seems to be particularly significant, taking into account the importance to subjective wellbeing of nature and subsistence activities (see above for further discussions about the significance of

[28] The wording of the question was: 'How much do you agree or disagree with the following statement: So many people vote in a national election that it does not make any difference if I vote or not.'

[29] See Kruse (2010) for a comparative study of living conditions and quality of life among Inupiat in 1973 and 2002/2003, before and after oil extraction started.



Source: www.arcticlivingconditions.org & SLiCA database

Fig. 32.3 Satisfaction with influence over the management of natural resources like fish, game, petroleum and mining, and over reduction of local environmental problems

these activities) (Nuttall et al. 2005; Hovelsrud et al. 2011a, b; Poppel et al. 2011).

Subjective Wellbeing and Quality of Life

People are in the best position to evaluate their own living conditions, including how satisfied they are with life as a whole. This approach has been a leading principle throughout the SLiCA project. It was embedded in the research question and was the point of departure for the research design, including the partnering with indigenous peoples at the local, regional, national and international level. As a consequence it also affected the living conditions dimensions, the indicators and thus the questionnaire.

The SLiCA team defined living conditions in the tradition of Allardt as:

> Individual possession of resources in the form of money, goods, services, mental and physical energy, social relations, physical security etc. that the individual person may control and consciously direct insofar as the necessary arenas are available. (Allardt 1975)

Still following Allardt, the ultimate objective of measuring living conditions is *"to learn about the well-being of the individual"* (Ibid.).

The individual's perception of his/her subjective wellbeing and quality of life is thus an inclusive concept as it deals with both quantitative and qualitative living conditions – physical possessions as well as mental aspects – and the interaction of these. At the same time, the concept is complex as it covers the individual's evaluation of all aspects of life as experienced by the individual (Andersen and Poppel 2002; Poppel 2014b).

Among the almost 250 questions in the SLiCA core questionnaire, roughly every tenth focused on satisfaction with different aspects of life and living conditions as well as the respondent's satisfaction with life as a whole and quality of life in the respondent's

community. The SLiCA questionnaire asked about satisfaction with life in two different ways [30]:

- The question generally asked in subjective wellbeing, quality of life and happiness research to identify subjective wellbeing and the individual's perception of quality of life ('satisfaction with life as a whole') was only asked in Greenland, northern Alaska and northern Sweden.
- The question concerning quality of life in the community was asked in all regions and thus provides the possibility for broader comparisons.

Whereas the first question provides insight into the individual's subjective evaluation of her or his overall quality of life, the latter approach tells about balancing two evaluative approaches and understandings: one is the individual's perception of the quality of life in and of the community and thus the wellbeing and quality of life 'on average' or 'in general' of all community members, including the respondent. The other understanding is 'the quality of life in this community for me'. The analysis presented below seems to support the assumption that there is a mix of the two approaches and that it is not an either/or.

Satisfaction with Life as a Whole – Greenlanders, Inupiat and Swedish Saami

More than nine out of ten Inuit in Greenland, Alaska and Sweden reported that they were somewhat or very satisfied with their life as a whole.[31] When the sums of the positive values are broken down into the two 'satisfied' categories ('very satisfied' and 'somewhat satisfied') major differences occur as the percentage that was very satisfied was more than twice as high in Alaska and Sweden as in Greenland (roughly 55 % and 23 % respectively); a follow-up survey needs to explore the differences[32] more thoroughly.

Looking into potential differences according to age and gender in the different survey regions, the most striking observation is that the dissatisfied or neither dissatisfied nor satisfied groups among the youngest (16–24 years old) in all three regions are, on average, twice as big as most other age groups. It is thought-provoking that it is in this age group that a higher percentage has, in the last year, thought seriously about committing suicide.[33]

There are gender differences too, in satisfaction with life as a whole, but they do not constitute a trans-Arctic pattern. In Greenland roughly the same proportion of women and men indicate different levels of (dis)satisfaction; in Alaska, twice as many women as men are dissatisfied or neither dissatisfied nor satisfied with their overall

[30] The exact wording of the two questions were: 'How satisfied are you with the quality of life as a whole?' and 'How satisfied are you with the quality of life in this community?' respectively. Response categories to both questions, as well as to the other questions related to satisfaction, were: very dissatisfied; somewhat dissatisfied; neither satisfied nor dissatisfied; somewhat satisfied; very dissatisfied.

[31] Coding the answers with the values from 1 to 5 results in an average score of 4.2 in Greenland, 4.4 in Alaska and 4.5 in Sweden.

[32] Possible explanations were discussed during the development of the first review of SLiCA, including differences among respondents to rate themselves 'very satisfied'. One hypothesis was that the inclination among Greenlanders to use the Greenlandic word for 'very satisfied' might be smaller than using 'very' in English.' (Kruse et al 2008:133). A similar hypothesis might be put forward on the different use of superlatives in towns and settlements: whereas the overall distribution of the Greenlandic Inuit being satisfied (somewhat or very) were alike at both the national and the regional level, there were differences between the part of Greenlanders in towns and settlements that were 'very' and 'somewhat' satisfied. Seemingly, the differences are not reflected in the two groups that had thought about/had not thought about moving during the last 5 years, nor among those who identified social problems. There are significant differences, though, in living standards, job opportunities and satisfaction with different public facilities, which might contribute, to different levels of satisfaction with life as whole between Greenlanders in towns and settlements.

[33] Suicide rates among indigenous peoples in the Arctic are among the highest in the world. The SLiCA questionnaire asked about suicide ideation. Data are analyzed e.g. in: Kruse et al. 2008 and Broderstad et al. 2013.

quality of life, and in Sweden the situation is the reverse, with men being more dissatisfied.

A regression analysis was conducted in an attempt to answer the question: Which are the factors contributing the most to satisfaction with life as a whole? And, not least: Are there significant differences between the indigenous peoples in the different Arctic regions?

All indicators[34] resulting from questions focusing on 'satisfaction with ...' were tested for their explanatory power and thus as independent variables in regression models where the dependent variable was 'satisfaction with life as a whole'.

Generally, satisfaction with 'standard of living', 'personal health', 'opportunities to hunt and fish' and 'combination of productive activities' are the variables that explain the larger part of 'satisfaction with quality of life as a whole'. In Greenland and Alaska more than half, and in Sweden at least one-third is explained by these independent variables.

It is significant that 'opportunities to hunt and fish' is part of the Quality of Life-equation in all three regions/countries. Mostly in Alaska, where satisfaction with 'the availability of fish and game', 'a healthy environment' and 'recreational facilities' also contribute substantially to overall quality of life. In Greenland, on the other hand, 'job opportunities' and 'income' are important explanators, probably indicating a difference in both public discourses and actual development policy. In Greenland, the overall economic policy since World War II, both the Danish (post-) colonial policy in the 1950s and 1960s and the Greenlandic policy after introduction of Home Rule (1979) and not least after the introduction of Self-Governance (2009), has emphasized the importance of industrial development of the fisheries sector, the construction sector and, most recently, a mining sector. Alaska has also experienced economic development, especially with an expanding oil industry, but all the time with a focus on subsistence activities which seem to have been crucial in the Alaskan development and a hallmark for the legislation regulating ownership and use of large territories, primarily fleshed out in the Alaska Native Claims Settlement Act (ANCSA) passed in 1971 and the Alaska National Interest Lands Conservation Act (ANILCA) passed in 1980 (Huntington 1992). Furthermore the right to 'subsistence leave' is included in many job contracts, which makes it possible to combine wage work with using the land, fishing and hunting (Kruse 2010).

[34] In Greenland the number of indicators was 24, in Alaska 23 indicators and in Sweden 17 indicators. 'Satisfaction with life in this community' is not included in the regression models as it might be impacted the same independent variables that explain overall satisfaction with quality of life.

Satisfaction with Life in this Community – Inuit, Saami and the Indigenous Peoples of Chukotka and the Kola Peninsula

As mentioned above, the question 'How satisfied are you with life in this community?' that was asked in all regions reveals the individual's perception of the quality of life in and of the community and thus the wellbeing and quality of life on average/in general of all community members, including the respondent, as well as quality of life for the respondent in the community.

The overall results (see Table 32.6) reflect major differences between the SLiCA survey regions. The Inuit and Saami in most regions are somewhat or very satisfied with life in their community: more than eight out of ten in Canada, Alaska, Norway and Sweden and two out of three in Greenland. At the other end of the spectrum we find the two Russian survey regions where fewer than two out of ten are somewhat or very satisfied with life in the community.

As the focus of this question is on the community, it seems relevant to investigate whether there might be a relation between satisfaction and perceived social problems. The obvious assumption would be that being satisfied with quality of life in the community would, at least to some

Table 32.6 How satisfied are you with life in your community?

	Northern Canada	Greenland	Chukotka	Northern Alaska	Northern Norway	Northern Sweden	Kola Peninsula
Very or somewhat satisfied with the quality of life in community	92 %	68 %	14 %	81 %	86 %	85 %	12 %
Have **not** considered moving away during last five years	71 %	64 %	71 %	58 %	63 %	*	71 %

Source: www.arcticlivingconditions.org, SLiCA Results and SLiCA database

Table 32.7 Percentage of adults perceiving social problems in their community

	Northern Canada	Greenland	Chukotka	Northern Alaska	Northern Norway	Northern Sweden	Kola Peninsula
Unemployment	87 %	84 %	100 %	83 %	63 %	*	99 %
Alcohol abuse	78 %	80 %	100 %	84 %	77 %	*	99 %
Suicide	70 %	69 %	95 %	60 %	33 %	*	93 %
Drug abuse	79 %	70 %	91 %	70 %	26 %	*	92 %
Family violence	69 %	64 %	93 %	52 %	23 %	*	85 %
Sexual abuse	61 %	61 %	88 %	34 %	30 %	*	76 %

*Question not asked in Sweden
Source: www.arcticlivingconditions.org, SLiCA Results and SLiCA database

degree (and depending on whether moving is at all possible), decrease the inclination to move. Furthermore, it seems fair to assume that perceiving social problems (see Table 32.7) might encourage people to consider moving away from community.

The first assumption[35] seems to be supported by the information provided by indigenous residents in the Inuit settlement regions (apart from Chukotka) and in northern Norway as the general tendency in these regions is that people who are dissatisfied with quality of life in community are more likely to consider moving and vice versa. The situation in Chukotka and the Kola Peninsula seems quite different: at the same time that a huge majority is dissatisfied with quality of life in their community, almost as large majority has not considered moving and thus there is no correlation between the dissatisfied and those who considered moving.

The second assumption[36]: a relationship between those perceiving social problems and those considering moving away is only supported by data from Chukotka and the Kola Peninsula as a larger number of the indigenous people in these regions report different social problems and a larger number express dissatisfaction with quality of life in the community. In the other regions, data do not substantiate a close relationship and the Canadian figures demonstrate that there is no one-to-one correspondence between being somewhat or very satisfied with life in one's community and identifying key social problems in that community. Without going into much detail, it should be mentioned that a large number of the indigenous people in all regions mentioned that 'belonging to community' contributes to satisfaction with quality of life (not least, because of family and social networks, attachment to nature in the settlements, and jobs as well as education facilities in towns).

[35] The conclusions are based on analyses of survey data from the SLiCA database. The analyses are not yet published.

[36] The conclusions are based on analyses of survey data from the SLiCA database. The analyses have not yet been published.

Table 32.8 Variables significantly contributing to explaining 'satisfaction with life in this community'**

*Explanatory factors****	Northern Canada	Greenland	Chukotka	Northern Alaska	Northern Norway	Northern Sweden	Kola Peninsula
Satisfaction with:							
standard of living	*		x	x	x	*	x
healthy environment				x		x	
degree of influence indigenous people have on the management of natural resources like oil, gas and minerals	*	x	x				
influence indigenous people have to reduce environmental problems in your area	*	x	x			*	
quality of education in your community	*	x		x			
opportunities to hunt and fish	*	x	x	x			
quality of health services in your community	*		x	x		x	
recreational facilities in your community	*	x	x		x		x
cost of living in your community	*	x			x	*	x
availability of goods in local stores	*	x		x	x		
transportation to and from your community	*	x	x	x	x	x	x

Source: www.arcticlivingconditions.org, SLiCA Results and SLiCA database
The following independent variables did not significantly explain the dependent variable: satisfaction with: 'quality of housing'; 'household income'; 'satisfaction with job'; 'satisfaction with courts'; 'personal health'; and 'satisfaction with you sex life' (this variable was only included in the Greenlandic questionnaire)
*Data not available
**Regression models were developed for all regions/countries including a number of independent variables (Greenland: 23 independent variables; Sweden: 17 and the other regions/countries (except Canada): 22 independent variables) to test whether they contributed significantly to the explanation of variation in 'satisfaction with life in this community'
***Six independent variables were included in only one regional/country regression model: satisfaction with: 'amount of fish and game available locally'; 'management of fish and game'; 'job opportunities in your community'; 'combination of productive activities'; 'how well the national government is dealing with needs in your community'; 'public safety'

Quality of Life in This Community – Some Explanatory Factors

As the question about 'quality of life in this community' was asked in all survey regions it is possible to look at differences in what is important in the different regions.[37] Through regression analysis, the explanatory power of satisfaction with different aspects of respondents' life in community, livelihoods and living conditions were tested in relation to quality of life in the community. The overall results are included in Table 32.8.

Satisfaction with transportation to and from community was important in explaining satisfaction with life in community in all regions/countries. Satisfaction with standard of living as well as satisfaction with recreational facilities was important in explaining satisfaction with life in this community in four regions/countries.

Four independent variables: 'opportunities to hunt and fish', 'quality of health services', 'cost of living' and 'availability of goods in

[37] The question about quality of life in this community was also asked in Canada, but as the Canadian data (gathered und the act of Statistics Canada) are archived at Statistics Canada, it has not been possible to include Canadian test results on this topic.

local stores' significantly contributed to the explanation of satisfaction with life in this community in at least three regions/countries. Finally, 'quality of education', as well as three independent variables related to the local environment and influence on the environment and local resource use have significant power to explain satisfaction with life in community in Inuit settlement regions.

Concluding Remarks

The Arctic has been homeland for a number of indigenous peoples for thousands of years. They survived only because they were able to adapt to harsh weather conditions, climate change and to variations in migration patterns of the wild life that was the precondition to sustaining life 'on the margin'.

For centuries, the Arctic has also been the destination for explorers, colonizers, traders and missionaries, as well as whalers and fishermen who went for the abundance of living resources in the polar waters. During the twentieth century, the Arctic attracted further settlers (not least in the Russian Arctic). Today, the increased access due to global warming, and the status of the circumpolar North as a reservoir of oil, gas and mineral resources and in consequence, the increasing strategic importance, has singled out the Arctic as 'a hot spot'.

Major changes of context and shifts in national strategies impact livelihoods and living conditions and thus subjective wellbeing and quality of life of both indigenous peoples and other Arctic residents. The changes definitely affect the environment and the possibility of continuing a mode of production characterized by a mix of traditional and market activities. The changes also challenge sustainable human development, including environmental, economic and socio-cultural elements. Furthermore local, regional, national and international ways of governing are challenged. Devolution has been one response, with the establishment of different home rule and self-governance arrangements and another response has been the development of regional fora like the Arctic Council and the Barents Euro-Arctic Council.

The assessment of human development and how people perceive the massive changes is important both as a documentation of impacts of change and for others to learn from; potentially, studies of small communities – via socially insightful 'scaling' – can inform and inspire larger communities.

SLiCA is based on international and interdisciplinary collaboration between a diverse group of Arctic social scientists and indigenous experts in regional, national and international partnerships – including international indigenous peoples' organizations, the Arctic Council and a number of funding institutions and international quality of life experts. What particularly made SLiCA unique were the partnerships with the indigenous peoples and the impacts of these partnerships in all phases of the project.

The Survey of Living Conditions in the Arctic can be seen as a small contribution to such documentation, a base line study of living conditions and quality of life for some of the indigenous peoples of the Arctic.

The point of departure for the study was a curiosity about reasons for indigenous residents remaining in remote areas with documented lower living standards (e.g. poorer housing facilities, unemployment and lower cash incomes) instead of moving to places with higher living standards. The research question following can be answered briefly: 'there are other reasons for staying in remote communities, and thus other contributing factors to quality of life than what can be measured in money terms'. It has to be mentioned though, that some 'stayers' do not move because of obstacles to moving.

Some of the main results of the study comparing Inuit, Saami and the indigenous peoples of Chukotka and the Kola Peninsula are that

- despite huge differences, the indigenous peoples included in the SLiCA survey share and agree on a number of *identity markers* such as speaking the indigenous language, eating traditional food and their connectedness to nature.

- *subsistence harvesting* (hunting, fishing, herding, gathering) is important, not only for nutritional and economic reasons, but also for social and cultural reasons.
- the indigenous peoples also identify common *problems in their community*: unemployment, suicide, domestic violence and alcohol abuse are problems that indigenous people in all regions identify.
- there are huge differences between regions and within regions when it comes to *income, income distribution and other living standard indicators*. Incomes are generally lower in Chukotka and the Kola Peninsula than in the rest of the regions/countries. This result is reflected in a larger degree of dissatisfaction with income and larger problems 'making ends meet' among the indigenous people in the two Russian survey regions.
- *self-perceived health* is rated low in Chukotka, not only relative to other regions and countries but also in absolute terms, as more than half perceive personal health as poor or fair.
- *closeness to nature* encompasses a number of activities, perceptions and attitudes and, no matter the focus, the relation to nature (subsistence activities, perceptions of and closeness to nature) is important to identity and subjective wellbeing.
- *cultural continuity*: the results not only substantiate the assumption that traditional values mean something to most indigenous residents in the survey regions but also that the identity markers that almost all identify as important are related to the cultural background, for instance, 'speaking the indigenous language', 'eating traditional food' and 'relation to nature'.
- *control of destiny/fate*: in all regions, indigenous residents find that politics is important to their lives, but they generally question the influence they have. Most regions/countries seem to agree on the perceived importance of government decisions and election turnouts, with Greenland as an exception. Most indigenous people find that they have little influence on the local environment and on development of renewable and non-renewable resources. Alaska is an exception here.
- *satisfaction with quality of life a whole* was only asked in Greenland, Alaska and Sweden.
  - More than nine out of ten Inuit reported that they were somewhat or very satisfied with their life as a whole. Younger indigenous people were especially dissatisfied with quality of life. This is the same age group that experiences the highest number with suicide ideations.
  - Generally, satisfaction with 'standard of living', 'personal health', 'opportunities to hunt and fish' and 'combination of productive activities' are the variables that explain the larger part of 'satisfaction with quality of life as a whole'.
- *satisfaction with quality of life in this community*: despite the shared perceptions of social problems, a majority of indigenous people in the survey regions are somewhat or very satisfied with quality of life in their community: more than eight out of ten in northern Canada and northern Alaska and among Saami in northern Norway and Sweden, and almost seven out of ten Greenlanders are satisfied. The indigenous people of Chukotka and the Kola Peninsula constitute an exception as less than two out of ten are satisfied with quality of life in community.
  - A more detailed analysis indicates that satisfaction with 'transportation to and from community', with 'standard of living' and with 'recreational facilities' are important factors in explaining 'satisfaction with life in this community' in all/most regions/countries.
  - Furthermore, 'opportunities to hunt and fish', 'quality of health services', 'cost of living' and 'availability of goods in local stores' significantly contribute to the explanation of satisfaction with life in this community in several regions/countries.

The increased focus on the Arctic and the rapidly changing livelihoods and living conditions in the circumpolar regions have identified

gaps of knowledge in most spheres related to human development. Consequently, there is a growing need to develop consistent, coherent and comparative statistics, and a battery of social indicators needs to be established. Monitoring and assessing important conditions for and aspects of human development is not possible without solidly founded data and time series. Understanding people's perceptions of change and the impacts of change – including changing policies – on living conditions, subjective wellbeing and quality of life demands surveys focusing on exactly these questions.

Measuring living conditions and quality of life among Inuit and Saami, the SLiCA project constitutes a baseline and a starting point for a developing a study of the wellbeing and quality of life of Arctic indigenous peoples. This starting point might be developed geographically and expanded to include the non-indigenous Arctic residents. Furthermore – to make measuring quality of life in the Arctic more economically feasible – a smaller questionnaire could be used to measure changes in quality of life over time and thus be a vital and important supplement to the development of social indicators to assess human development in the circumpolar region.

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The data, tables and graphs in this chapter all originate from the SLiCA database constructed and developed by Jack and Marg Kruse.

Annexes

Annex 1: SLiCA Sample Summary

Table 32.9 Sample summary including details about interview periods and population sizes

SLiCA: population[a], sample[a] and respondents[a]						
Inuit settlement region	Indigenous peoples in the survey	Period of interviewing	Total number of adults in population	Sample size (N)[a]	Response rate	Respondents (n)
Northern Alaska	Iñupiat; Yupiit	2002–2003	11,000	700	84 %	650
Chukotka	Inuit; Chuckchi; Evan; Chuvan; Yukagir	2005–2006	14,000	600	85 %	500
Canada	Inuit	2001	22,000	5,650	83 %	4,700
Greenland	Inuit	2004–2006	36,000	1,450[b]	83 %	1,050
Inuit homelands/ regions/countries			83,000	8,400	83 %	6,900
Sweden	Saami	2006–2008				200
Norway	Saami	2006–2008		800	56 %	450
Kola Peninsula	Saami	2006–2008	1,500			300
Sapmî			50,000[c]			950

Source: www.arcticlivingconditions.org, Poppel (2014b) and AMAP (1998).

Note:

[a]Rounded (to nearest '50'/'100').

[b]In Greenland also the non-indigenous population was part the survey. In this article only the Inuit (the Greenlanders) are part of the analysis.

[c]Estimate for Nordic Saami (incl. Finland - excl. Kola Peninsula) (AMAP, 1998).

Annex 2

Table 32.10 SLiCA indicators within the six domains adapted to the Arctic context

Domain	SLiCA indicators
Health and Population	Self-rated health
	Satisfaction with life as a whole in this community
	Satisfaction with quality of life in this community
	Satisfaction with life as a whole
Material wellbeing	Household income (from the main sources of both the formal and the informal economy)
	Relative poverty
	Absolute poverty
	Ability to make ends meet
	Satisfaction with household economy
	Satisfaction with standard of living
	Satisfaction with jobs
	Satisfaction with job opportunities
Education	Level of education
	Traditional skills: learned in/improved since childhood/still use
	Still use traditional skills today
	Satisfaction with different conditions/ circumstances related to education
Cultural continuity and cultural vitality	**Identity markers:**
	Activities and customs important or very important to maintaining indigenous identity
	Language retention (self-reported):
	Language ability
	Language use
	Participation in cultural activities;
	Satisfaction with local support of different cultural activities and values
	Religious beliefs (both traditional Inuit and Saami and Christian beliefs)
	Sense of belonging (reflected in several questions e.g. about thoughts within last five years of moving away from the town/settlement, where respondent live)
Contact with nature	Consumption of local food
	Harvest of local food (proportion of meat and fish harvested by household)
	Participation in subsistence activities
	Satisfaction with availability of fish and wildlife
Fate control	Political participation; political influence; knowledge about politics; language retention
	Satisfaction with influence on specific matters like renewable resources
	Power and political activism
	Satisfaction with influence indigenous people have on management of natural resources like fish and game
	Satisfaction with influence indigenous people have on management of natural resources like oil, gas and minerals
	Language retention (commented above - see 'cultural wellbeing')

Source: Poppel (2014a)

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Part VI

Social Reporting on Wellbeing in Supranational Organizations

Wellbeing and Quality of Life Reporting at the OECD

33

Romina Boarini

The OECD

The Organization for Economic Co-operation and Development (OECD) was created in 1961 "to promote policies designed to achieve the highest sustainable economic growth and employment and a rising standard of living in Member countries, while maintaining financial stability, and thus to contribute to the development of the world economy; and to contribute to sound economic expansion in member as well as non-member countries in the process of economic development [. . .]".[1]

Today the OECD comprises 34 countries: Australia (AUS), Austria (AUT), Belgium (BEL), Canada (CAN), Chile (CHL), Czech Republic (CZE), Denmark (DNK), Estonia (EST), Finland (FIN), France (FRA), Germany (DEU), Greece (GRC), Hungary (HUN), Iceland (ISL), Ireland (IRL), Israel (ISR), Italy (ITA), Japan (JAP), Korea (KOR), Luxembourg (LUX), Mexico (MEX), Netherlands (NLD), New Zealand (NZL), Norway (NOR), Poland (POL), Portugal (PRT), Slovak Republic (SVK), Slovenia (SVN), Spain (ESP), Sweden (SWE), Switzerland (CHE), Turkey (TUR), United Kingdom (GBR) and United States (USA). In addition, the OECD works with many other partners in the world, most notably with the Russian Federation (who is in the accession procedure to become a member country) and with Brazil, China, India, Indonesia and South Africa, countries in a process of "enhanced engagement" with the OECD. Moreover, the OECD co-operates with more than 100 other countries in the world on a variety of issues and policy areas.

Social Monitoring at the OECD

It Took Almost Two Decades to Develop the First OECD Set of Quality of Life Indicators

The OECD has a long-standing tradition in Social Monitoring. The OECD was indeed the first international organization to initiate an indicator development program in the area of quality of life back in the 1970s.[2] The OECD Social Indicators Programme was launched after a ministerial declaration in 1970 that stressed that "growth is not an end in itself, but rather an instrument for creating better conditions of life".[3] The Program started with the identification of a list of social concerns of sufficient common interest to the Governments of OECD countries. This phase of the work was completed in 1973 with the publication of the "List

[1] OECD Convention, Article 1. http://www.oecd.org/about/history/

R. Boarini (✉)
Head of the Wellbeing and Progress Section, Statistics Directorate, OECD, Paris, France
e-mail: Romina.BOARINI@oecd.org

[2] The first OECD Programme of Social Indicators was officially endorsed by the OECD council in 1976.

[3] OECD Ministerial Declaration, 1970.

W. Glatzer et al. (eds.), *Global Handbook of Quality of Life*, International Handbooks of Quality-of-Life,
DOI 10.1007/978-94-017-9178-6_33,

of Social Concerns Common to most OECD Countries". At that time, the list of social concerns was considered as "a step towards a workable, albeit partial, definition of what is meant by quality of life".[4] The creation of a first set of Social Indicators to monitor wellbeing and quality of life was building on the work of an Expert Group who had identified 8 dimensions of quality of life, corresponding to the social concerns common to most OECD countries. These dimensions included: health, education and learning, employment and wellbeing in the workplace, time and leisure, command over goods and services, physical environment, personal safety and social environment.

In parallel, the OECD organized a series of events to stimulate the discussion around the issue of measuring wellbeing. Of a particular interest, and a remarkable modernity, was the 1972 seminar on "Subjective Elements of Wellbeing" that aimed at undertaking a comprehensive review of psychological indicators of social change, their theoretical substance and validity, their ability to capture important subjective trends; of exploring new areas of survey measurement of subjective or psychological phenomena, including attitudes, values, aspirations, satisfactions, etc.; developing a pragmatic mapping of research priorities in this field. The main conclusions of this seminar were that "situational approaches" (i.e. approaches focusing on objective living conditions) to measuring welfare ought to be complemented by theoretically valid measures of psychological variables. Measuring welfare beyond objective living conditions was deemed important because (a) people differ and change in the way *they perceive* a given situation and past trends; (b) even people in similar situations *differ as to their needs or wants*; (c) people differ and change in the way they react to and are able to cope with given levels of satisfaction or dissatisfaction. The consequences of a discrepancy between goals and perceived realization may range from goal reduction and perceptual distortion to impairment of self-esteem, depression and finally mental illness. Based on these premises, the seminar discussed the main contributions of subjective wellbeing measures in understanding welfare and made the following proposals:

- Use subjective indicators in social reporting to supplement the conventional statistics of income and living standards;
- Systematically implement surveys on subjective wellbeing with representatively selected cross-sections of adults;
- Conceptualize Subjective Wellbeing and, in particular, link measures of satisfaction in the various life domains with other measures of adaptation or their reverse (expectations, stress, depression, etc.);
- Link Subjective Wellbeing to Environment (intended as 'Objective Living Conditions'), Person and Behavior to enhance our theoretical understanding of social structure and change, to draw early warning signals (e.g. on mental illness), to understand how personal dissatisfaction translate in dissatisfaction with the government, institutions, etc.

Following the preliminary conceptual work outlined in the List of Social Concerns, the OECD published its first explicit list of social indicators in 1982. The list comprised 33 indicators[5] selected to be output-oriented or to describe a final social outcome; be relevant to policy; be applicable over a long period of time; apply to conditions of individual wellbeing, excluding a number of "indivisible public goods" (e.g. general administration, national defense, etc.); be part of a comprehensive grid portraying all areas of social concerns; correspond closely to the social concern to which they relate; form an integrated framework of definitions, specifications, statistical guidelines and disaggregations which should be compatible

[4] Measuring Social Wellbeing, OECD Publishing, 1976.

[5] These indicators included: Life Expectancy; Perinatal Mortality Rate; Short-term Disability; Long-term Disability; Regular Education Experience; Adult Education; Literacy Rate; Unemployment Rate; Involuntary Part-time work; Discouraged workers; Average Working Hours; Travel Time to Work; Paid Annual Leave; Atypical Work Schedule; Distribution of Earnings; Fatal Occupational Injuries; Work Environment Nuisances; Free Time; Free Time activities; Distribution of Income; Low Income; Material Deprivation; Distribution of Wealth; Indoor Dwelling Space; Access to Outdoor Space; Basic Amenities; Proximity of Selected Services; Exposure to Air Pollutants, Exposure to Noise; Suicide Rate; Fatal Injuries; Fear for Personal Safety.

with other important sets of social and demographic statistics.

As a part of the OECD Social Indicators Programme, the OECD also designed a questionnaire for a multi-purpose survey, known as the OECD Comprehensive Survey Questionnaire. At the end of the 1970s six countries (Austria, Finland, Japan, New Zealand, Norway and Sweden) were making extensive use of this survey. However, given the significant amount of resources involved by such a Survey and the limited number of countries that could implement new dedicated Surveys on Quality of Life, the OECD decided to use a "careful selection of existing social statistics" as a pragmatic vehicle to populate its list of indicators. The list of social indicators was purposely flexible so that national statistical agencies could integrate these indicators into their systems with the idea of moving towards "gradual convergence. . .() with Member countries adopting the indicator framework as circumstances would permit". Therefore the list contained a combination of ideal guidelines for collecting indicators (i.e. specific definitions, specifications, disaggregations etc.) and an inventory of data sources among Member countries.

It is only in 1986 that the OECD released the set of social indicators ("Living conditions in OECD countries - A Compendium of Social Indicators"), including more than 60 comparable tables for around 20 countries, i.e. the largest international attempt to provide comparative information on the 8 dimensions of quality of life presented above.

From the Compendium of Living Conditions to Society at a Glance

The important leg of the OECD Social Indicators Programme in the 1970s was further capitalized with a new OECD publication, "Society at a Glance", first published in 2001 and since then regularly coming out every other year or so. "Society at a Glance" is by far the most systematic OECD effort to monitor social trends in OECD countries and its scope and depth of analysis has been expanding and deepening over time. However, Society at a Glance has only focused on the social pillar of the quality of life framework proposed by the OECD Social Indicators Programme, because this work intended to inform *social policies* in particular. Society at a Glance is done by the OECD Directorate for Employment, Labour and Social Affairs.

The main innovation brought by "Society at a Glance" was the introduction of an organizing framework for social indicators, the so called "Pressure-State-Response" (PSR) framework. This framework distinguished between indicators that are informative on:

- Social context – comprising variables that are not the direct target of policy or that can be seen as policy objectives only in the long term (e.g. the dependency ratio).
- Social status – a description of social situations that are highly relevant to policy actions (e.g. poverty rate).
- Societal response – indicating what the society is doing that may affect social status indicators.

Social context and social status indicators are supposed to describe the social conditions of the population while response indicators broadly inform on how policies are effective in changing social outcomes.[6]

Status and response indicators were further classified in indicators falling into four broad fields or objectives of social policies:

- Self-sufficiency: understood as the autonomy of individuals and families in securing adequate living standards and achieved by promoting active participation in the economy and the society, as well as self-sufficiency in activities of daily living.
- Equity: mainly referring to equity of outcomes which is measured by the access of households to economic resources.

[6] "Confronting response indicators with status indicators provides a first-order indication of policy effectiveness. It is not intended that there should be a "one-for-one" relationship between societal response and social status indicators. But merely to consider that if the indicators have been chosen well and the measures of societal response are high compared to average and the indicators of social status low, then there is a justification for questioning why there is an apparent anomaly" (Society at a Glance 2001).

- Health in particular, the objective of health care systems to improve health status beyond an emphasis on disease and its cure.
- Social cohesion: which refers to the extent to which people participate in societal life or in some way reflect the strains put on family relationships and relationships between different groups within the society.

Various indicators were included in the six editions of "Society at a Glance" published so far, each edition showing between 30 and 45. These indicators were not chosen to monitor the same set of issues over time but rather to shed new light on varying emerging issues, which are considered politically relevant and topical. Also starting from 2006, Society at a Glance has included thematic chapters on selected social topics (wellbeing in 2006, leisure in 2009, unpaid work in 2011 and the crisis in 2014) which offer an in-depth analysis of either measurement or policy issues in each of these areas.

For each social indicator, "Society at a Glance" discusses in short measurement and definitional issues and provides a snapshot of the main cross-country and within-country differences for each indicator (See Box 33.1). "Society at a Glance" also provides a useful summary picture of the main social conditions in OECD countries by a traffic light dashboard, which indicates the relative performance of each country in each of the indicators (Table 33.1). "Society at a Glance" does not aggregate the indicators into a composite index as these indicators do not necessarily reflect policy performance in each area and may notably translate a country's preferences vis-à-vis given policy objectives. These preferences may be implicitly seen as the weights that are set by the political and societal process and that, together, shape the common notion of *overall* social wellbeing.

Moving from Social Monitoring to Wellbeing Monitoring

While the work on social indicators has represented for years a core aspect of the OECD work on social policy, in the mid-2000s the Organization started a broader, more ambitious reflection on the need to expand available welfare measures beyond the narrow economic lens of Gross Domestic Product (GDP). Instrumental to this reflection has been the OECD project "Global Progress of Societies" as well as the various OECD World Fora on Measuring and Fostering the Progress of Societies, that launched a global debate and movement on "Beyond GDP".

The Beyond GDP movement emerged from the increasing recognition that macroeconomics statistics such as the GDP do not portray the right image of what ordinary people perceive about the state of their own conditions. Measuring societal progress requires not only looking at the functioning of the economic system but also at the diverse experiences and living conditions of people.

It is under these premises that the OECD launched in 2011 its "Better Life Initiative", which aims at measuring and monitoring wellbeing across OECD countries and over time. The "Better Life Initiative" has been launched on the occasion of the OECD's 50th anniversary when the mission of the Organization became that of helping governments to promote "Better Policies for Better Lives". In this way measuring and fostering wellbeing have become crucial goals for the Organization as a whole and an important pillar of many horizontal projects across the house.

Because of this cross-cutting nature, the OECD work on wellbeing has gone beyond the boundary of "social indicators" as wellbeing indicators encompass a larger set of economic, social and environmental measures. In this respect the OECD work on wellbeing is very consistent with the conceptual framework of the OECD Social Programme of the 1970s that was already looking at quality of life from a multidimensional perspective. An important novelty of the OECD work on wellbeing with respect to the work of the 1970s is the explicit consideration of issues of *sustainability and future wellbeing*. Indeed, the wider debate on Going Beyond GDP has largely built on the Sustainable Development literature of the 1980s and 1990s. The notion of sustainability of wellbeing has thus been put at the core of the OECD Better Life Initiative, which stresses the importance of measuring wellbeing beyond "here and now" to

Box 33.1: An Example of Society at Glance Analysis of Social Indicators

3. GENERAL CONTEXT INDICATORS

Fertility

The total fertility rate indicates the number of children an average woman would have if she were to experience the exact age-specific fertility throughout her life. Allowing for some mortality during infancy and childhood, the population is replaced at a total fertility rate of a little over two.

In 2011, fertility was well below the replacement level in most countries, averaging 1.70 across the OECD (Figure 3.3, Panel A). The highest rate was recorded in Israel, where women had almost one child more than in the second country, New Zealand. Israel was in fact the only OECD country with a level above the replacement fertility rate (2.1 children per woman). Anglophone and Nordic countries were typically at the higher end, while continental Europe (France being the one major exception) reported low fertility, along with even lower fertility rates in Japan and South Europe. Fertility rates were notably low in Hungary and Korea, with two parents replacing themselves in the next generation by little more than one child, on average.

Persistent economic uncertainties can reduce the number of children women may have over their reproductive life. **During the crisis years (i.e. between 2008 and 2011), fertility rates fell in more than two-thirds of the OECD countries (Figure 3.3, Panel B)**: by almost two decimal points in the United States (a relatively high fertility country) and by one decimal point in five European OECD countries (Denmark, Estonia, Hungary, Iceland and Spain) and New Zealand and Turkey. The US rate fell to an all-time low in 2011 at 1.89, down from 2.12 in 2008.

Over the last 50 years, fertility declined dramatically across OECD countries, falling on average from 3.3 children per woman of childbearing age in 1960 to 1.7 in 2011 (Figure 3.4, Panel A). The reasons were postponement of family formation and a decrease in desired family size. Rising female education and employment, insufficient support for families juggling work and children, a need to generate a secure job and income, or growing housing problems may have all also played a role. Falls were especially pronounced – by at least four children per woman on average – in Korea, Mexico and Turkey.

Before the crisis, there was a moderate recovery in average fertility rates between 2000 and 2008. However, trends have been quite heterogeneous (Figure 3.4, Panel B). Fertility rates remained stable in Austria, Japan and Switzerland – all low fertility countries. Fertility was more likely to rebound in countries with higher initial fertility rates, and even exceeded the replacement level in New Zealand and Iceland. This fertility rebound stalled in many OECD countries in 2009, possibly as a consequence of the economic crisis.

Fertility rates are generally higher in emerging economies; rates are above replacement levels in Argentina, India, Saudi Arabia and South Africa. While fertility increased in Russian Federation by one decimal between 2008 and 2011, fertility decreased in other emerging economies (except Brazil).

Definition and measurement

The total fertility rate is the expected number of children born to each woman at the end of her childbearing years (i.e. if the likelihood of her giving birth to children at each age was the current prevailing age-specific fertility rates). It is computed by summing up the age-specific fertility rates defined over five year intervals. Assuming there is no net migration and mortality remains unchanged, the total fertility rate of 2.1 children per woman ("replacement") ensures broad population stability. Data typically come from civil population registers or other administrative records. These are harmonised according to United Nations and Eurostat recommendations. The exception is Turkey, where fertility data are survey-based.

Further reading

OECD (2013), "SF2.1 Fertility rates", *OECD Family Database*, *www.oecd.org/social/family/database*.

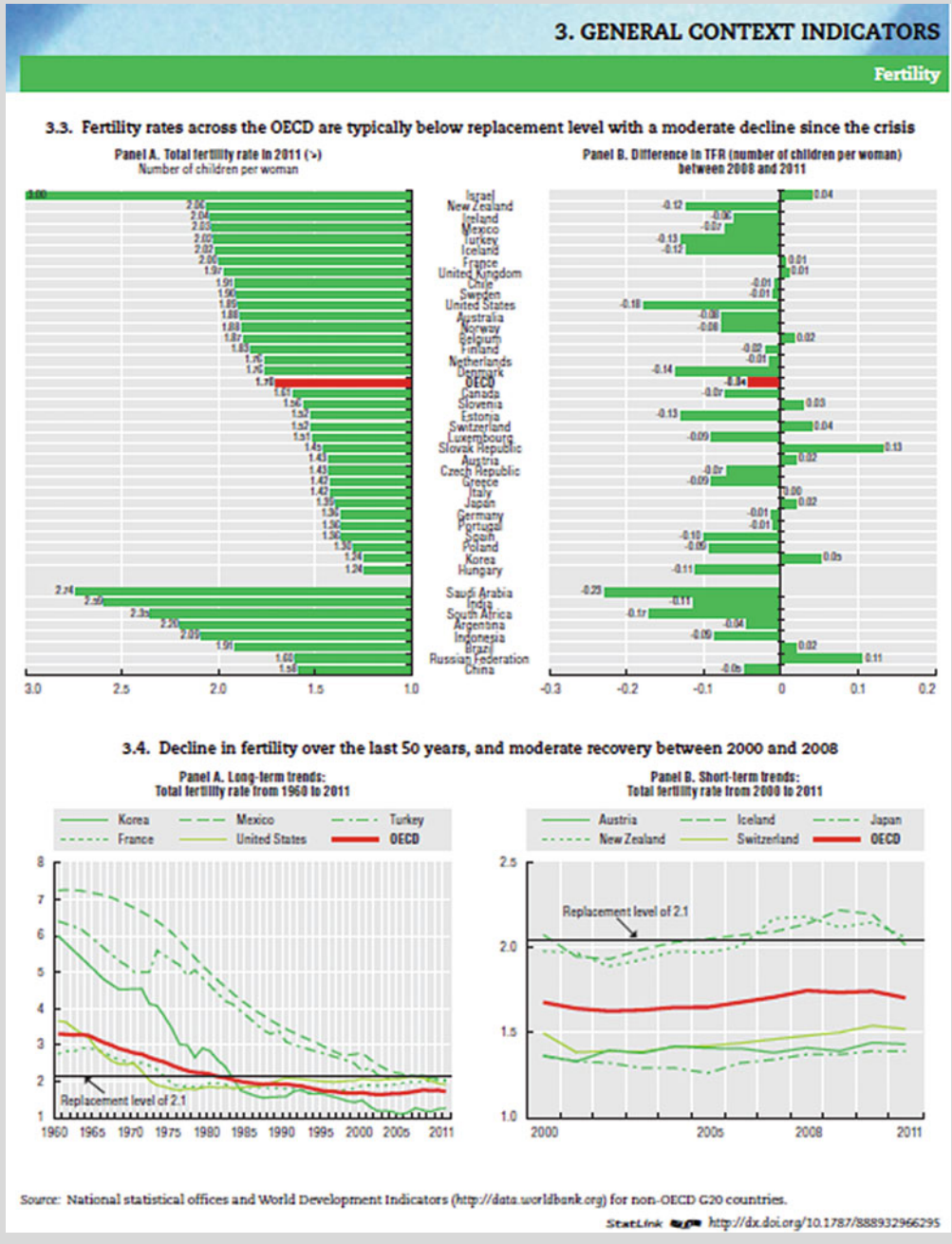
Figure note

Figure 3.3: 2010 instead of 2011 for Chile.

Information on data for Israel: http://dx.doi.org/10.1787/888932315602.

(continued)

Box 33.1 (continued)



Source: National statistical offices and World Development Indicators (http://data.worldbank.org) for non-OECD G20 countries.

StatLink http://dx.doi.org/10.1787/888932966295

Table 33.1 Overview of the social situation in OECD countries

"Green circles" denotes countries are in the top two deciles, "red diamonds" those in the bottom two deciles and "yellow triangle" those in the six intermediate deciles

	GE1	SS1	SS2	SS3	EQ1	EQ2	EQ3	EQ4	HE1	HE2	HE3	HE4	CO1	CO2	CO3	CO4	CO5
	Median equivalised household income, in USD PPPs	Employment to population ratio for population aged 15 64	Unemployment rate for the population aged 15-64	PISA mean scores on the reading literacy scales	Gini coefficient of income inequality	Poverty rate	Percentage finding it difficult or very difficult to manage on current income	Percentage of average gross wage to reach a poverty threshold of 60% of median income for lone	Life expectancy at birth	Infant mortality rate	Rate of positive experience	Percentage of persons satisfied with water quality	Percentage of people expressing high level of trust in others	Corruption index	Pro-social behavior	Voting rates	Tolerance of diversity
	2007	2009	2009	2009	2007/8	2007/8	2010	2009	2008	2008	2009	2009	2007/8	2010	2010	9 or most rec	2010
Australia	●	△	△	●	△	△	△	●	●	△	△	△	△	●	●	●	●
Austria	△	△	●	..	△	●	●	△	△	△	△	●	△	△	△	△	△
Belgium	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	●	△
Canada	●	△	△	●	△	△	△	△	△	△	●	△	..	△	△	◆	●
Chile	◆	◆	△	◆	◆	◆	◆	..	△	◆	●	△	◆	△	△	●	△
Czech Republic	△	△	△	◆	●	●	△	◆	◆	△	◆	△	△	◆	△	△	◆
Denmark	△	●	△	△	●	●	●	●	△	△	●	●	●	●	△	●	△
Estonia	◆	△	◆	△	△	△	◆	◆	◆	△	◆	◆	△	△	◆	△	◆
Finland	△	△	△	●	●	△	●	△	△	●	△	●	●	●	△	△	△
France	△	△	△	△	△	△	△	△	●	△	△	△	△	△	△	△	△
Germany	△	△	△	△	△	△	△	●	△	△	△	●	△	△	△	△	△
Greece	△	△	△	△	△	△	◆	△	△	△	△	◆	◆	◆	◆	△	△
Hungary	◆	◆	◆	△	△	●	◆	△	◆	◆	◆	△	△	◆	◆	△	△
Iceland	●	●	△	△	△	●	△	◆	●	●	●	●	..	△	△	●	●
Ireland	●	△	◆	△	△	△	△	●	△	△	●	△	△	△	●	△	●
Israel	△	◆	△	◆	◆	◆	◆	△	△	△	◆	◆	△	◆	△	△	◆
Italy	△	◆	△	△	△	△	△	△	●	△	△	◆	..	◆	△	△	△
Japan	△	△	●	●	△	◆	△	●	●	●	△	△	△	△	◆	△	◆
Korea	△	△	●	●	△	◆	△	△	△	△	◆	△	◆	△	△	◆	◆
Luxembourg	●	△	●	◆	△	△	●	◆	△	●	△	△	..	△	△	●	△
Mexico	◆	◆	△	◆	◆	◆	◆	..	◆	◆	●	◆	◆	△	△	◆	△
Netherlands	△	●	●	●	△	●	●	△	△	△	△	△	●	●	●	△	●
New Zealand	△	●	△	●	△	△	△	△	△	△	●	△	△	●	●	△	●
Norway	●	●	●	△	●	△	●	△	△	△	△	●	●	△	△	△	△
Poland	◆	◆	△	△	△	△	△	△	◆	◆	△	◆	△	△	△	◆	◆
Portugal	△	△	◆	△	◆	△	△	△	△	△	△	△	◆	◆	◆	△	△
Slovak Republic	◆	△	◆	◆	●	●	△	△	◆	◆	◆	△	△	△	◆	◆	△
Slovenia	△	△	△	△	●	△	△	..	△	●	△	△	△	◆	△	△	△
Spain	△	△	◆	△	△	△	△	◆	●	△	△	△	△	△	△	△	●
Sweden	△	●	△	△	●	△	●	△	●	●	△	△	●	●	△	△	△
Switzerland	●	●	●	△	△	△	..	◆	●	△	△	●	●	●	●	◆	△
Turkey	◆	◆	◆	◆	◆	◆	◆	△	◆	◆	◆	◆	◆	△	◆	●	◆
United Kingdon	●	△	△	△	◆	△	△	●	△	△	△	△	△	△	●	△	△
United States	●	△	△	△	◆	◆	△	◆	△	◆	△	△	△	△	●	◆	△

Source: Compilation from OECD Social Indicators in Society at a Glance 2011 (www.oecd.org/els/social/indicators/SAG).

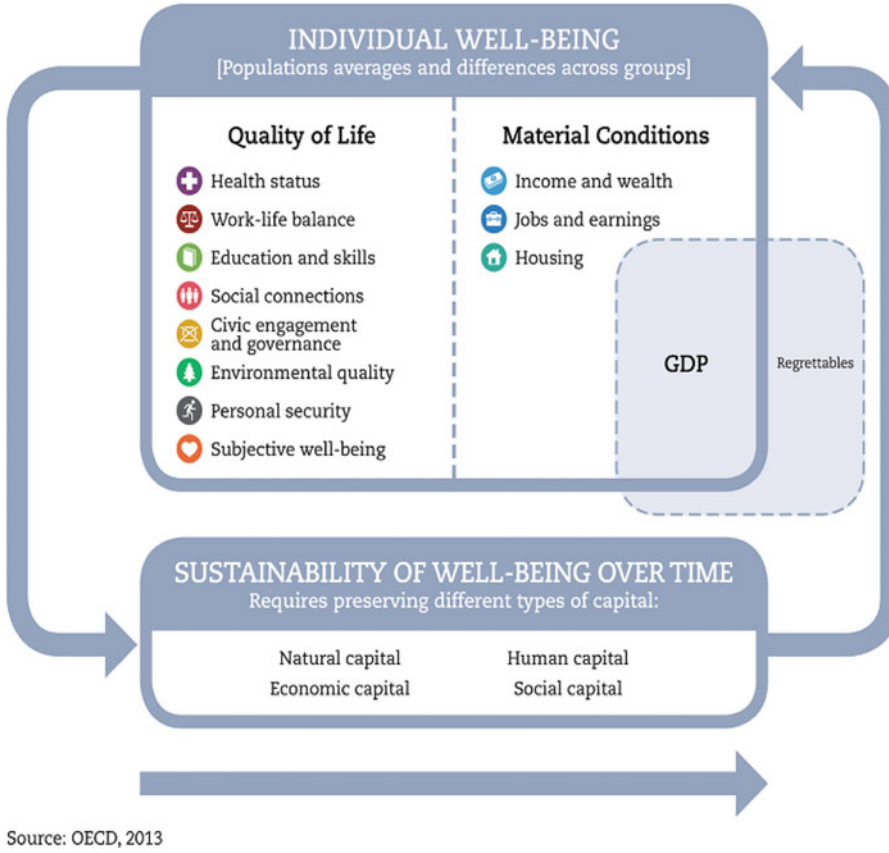


Fig. 33.1 The OECD wellbeing framework

take into account the " later and elsewhere" wellbeing dimensions.

The main substantive pillar of the OECD Better Life Initiative is the report "How's Life? Measuring Wellbeing", a bi-annual publication released for the first time in 2011.[7] This report is carried out by the OECD Statistics Directorate, which is responsible for the OECD broader activities on measuring wellbeing and progress.

A Framework for Measuring Wellbeing

The "How's Life?" report measures wellbeing in the 34 OECD countries and in a few emerging economies. The main goal of the publication is to compare wellbeing performance across countries, across various subgroups of the population within the same countries, and progress (relatively to other countries and within-country) over time.

Figure 33.1 above presents the conceptual framework used by the OECD to define and measure wellbeing in its Better Life Initiative. The framework distinguishes between current and future wellbeing. Current wellbeing is measured in terms of outcomes achieved in the

[7] The second pillar of the Better Life Initiative is the Better Life Index, an interactive web-based tool that aims at informing citizens on the wellbeing indicators and engage them in a public debate on wellbeing and social progress. The Better Life Index allows on-line users to build their own composite index of wellbeing by choosing the weights to assign to the 11 wellbeing dimensions of the OECD framework. The Index can be shared with social networks and with OECD, and from May 2014 the weights will be visible in a dedicated platform.

two broad domains: material living conditions (income and wealth, jobs and earnings, housing conditions) and quality of life (health status, work-life balance, education and skills, social connections, civic engagement and governance, environmental quality, personal security and subjective wellbeing). Future wellbeing is assessed by looking at some of the key resources that drive wellbeing over time and that are persistently affected by today's actions: these resources can be measured through indicators of different types of "capital". This framework relies on the Stiglitz-Sen-Fitoussi Report, consultations with international experts and with National Statistical Offices, as well as on existing best practices around the world for measuring wellbeing and quality of life.

The OECD wellbeing framework for measuring current wellbeing has four distinctive features:

- First, it focuses on people (i.e. individuals and households), their situation and how they relate to others in the community where they live and work. Focusing on people, rather than on the economy, is important as there may be differences between the economy-wide assessment of a country and the wellbeing experience of individuals and households.
- Second, it concentrates on wellbeing outcomes as opposed to wellbeing inputs or outputs, as outcomes provide direct information on people's lives. For instance it focuses on people's satisfaction with water rather than how much has been spent on providing clean water or how many miles of water pipe have been laid.
- Third, it considers the distribution of wellbeing in the population alongside average achievements, in particular disparities across age groups, gender and individuals' socio-economic backgrounds.
- Lastly, it looks at both objective and subjective aspects of wellbeing, as personal experiences and assessments of life circumstances provide important supplementary information to more objective measures of these circumstances.

As mentioned above, material living conditions and quality of life are broken down into 11 dimensions, namely: income and wealth; jobs and earnings; housing; health status; work-life balance; education and skills; social connections; civic engagement and governance; environmental quality; personal security; and subjective wellbeing. The rationale for selecting these dimensions is as follows:

- **Income and wealth** measure the economic resources that people can use today or in the future to satisfy various human needs and wants and that protect against vulnerabilities and risks of various types.
- Both the **availability and quality of jobs** are relevant for people's wellbeing, not only because quality jobs increase people's command over resources but also because these jobs offer the opportunity to fulfill one's own ambitions, to develop skills and abilities, to feel useful to society and to build self-esteem.
- **Access to housing and its quality** satisfy people's basic needs. Beyond their intrinsic importance, they are also important determinants of health and subjective wellbeing, as well as of social connections and access to jobs and public services.
- **Physical and mental health** is important in itself for people's wellbeing but also because they allow them to perform a range of personal and social activities that contribute to their wellbeing.
- **Work-life balance** is important for people's wellbeing in terms of family life; more generally, the amount of time that people can devote to leisure, personal care and to other non-work activities help individuals remain healthy and productive.
- **Education and skills** can be seen as both a basic need and an aspiration of all humans, as well as being instrumental to achieve many other economic and non-economic wellbeing outcomes.
- **Social connections** are valuable in themselves as many people report that the most pleasurable activities are performed with others; but they are also instrumental in

achieving a number of other important goals such as finding a job, or support in case of need.

- **Civic engagement** matters, as having political voice in the society where people live allows them to have a say in political decisions that affect their lives and to contribute to deliberations that shape the wellbeing of communities; similarly, good governance is needed to translate people's voice into policies that support their aspirations for a good life.
- The quality of the **natural environment** where people live and work is important in its own right but it also matters for people's health and their ability to undertake a number of activities (e.g. raising children, social life, etc.).
- For the same reasons, living in a **secure environment**, i.e. where the risks of being robbed or assaulted are low, is important to generate wellbeing.
- Finally, besides objective aspects of living conditions and quality of life, it is crucial to consider how people feel about their life and experience – i.e. their **subjective wellbeing**.

The 11 dimensions described above can be considered as universal, i.e. as relevant to people living in all societies. However, their relative importance will vary among individuals and countries. People living in different countries and communities may attach varying importance to different dimensions, reflecting their own priorities.

More importantly, the selection of indicators used to monitor achievements in these dimensions may also differ to reflect specific country conditions, history and challenges. In other terms, the framework proposed above is not meant to be a straitjacket for countries willing to pursue their own national initiatives in this field. Rather it should be viewed as a framework that provides a benchmark for meaningful international comparisons.

In terms of measuring future wellbeing, the OECD framework suggests that four types of capital stocks should be examined: economic, natural, human and social:

- **Economic capital**: refers to both produced capital (man-made tangible assets and knowledge assets) as well as financial capital.
- **Natural capital**: refers to aspects of the natural environment. It can include individual assets such as minerals, energy resources, land, soil, water, trees, plants and wildlife. It also includes broader ecosystems (i.e. the joint functioning of different environmental assets).
- **Human capital**: can be defined in many ways but typically refers to aspects such as knowledge, skills, competencies and health of individuals;
- **Social capital**: refers to the social norms, trust and values that foster co-operation within or among different groups in the society. Some definitions of social capital also include aspects of governance and institutions.

Selecting Wellbeing Indicators in How's Life? Measuring Wellbeing

The OECD wellbeing framework shown in Fig. 33.1 has guided the selection of the indicators. How's Life? distinguishes between headline indicators, i.e. indicators that are deemed to be of sufficiently good quality and can be used for monitoring wellbeing over time and across countries, and secondary indicators that provide complementary evidence (e.g. indicators covering more specific aspects of the dimension at hand, with more limited country coverage, or based on sources that were deemed to be less reliable than in the case of headline indicators). Most of the indicators are based on data from official statistics while a small number is based on data from non-official statistics.

The headline indicators have also been chosen so as to fulfill standard statistical requirements, such as face validity (i.e. they should offer an intuitive measure of the concept at hand); focus on summary outcomes (rather than to more specific components); being amenable to change and sensitive to policy interventions; being comparable across countries; being commonly used

and accepted as wellbeing measures within the statistical and academic communities; providing large country coverage; and being based on data collection that are fairly frequent and timely (see OECD 2011b, for more details on these criteria). While the current How's Life set of indicators generally meets the above criteria, it is the intention of the OECD to improve the selection as better statistics become available.

The headline indicators for each dimension include:

- Income and wealth: Household net adjusted disposable income per person; Household net financial wealth per person.
- Jobs and earnings: Employment rate; Long-term unemployment rate; Average gross annual earnings of full-time employees; Job insecurity.
- Housing conditions: Number of rooms per person; Dwellings lacking basic facilities; Housing costs;
- Health status: Life expectancy at birth; Self-reported health status.
- Work-life balance: Employees working very long hours; Time devoted to leisure and personal care.
- Education and skills: Educational attainment; Students' cognitive skills; Education expectancy; Adult competencies.
- Social connections: Social network support.
- Civic engagement and governance: Voter turn-out; Consultation on rule-making.
- Environmental quality: Air quality; Satisfaction with water quality.
- Personal security: Intentional homicides; Self-reported victimization.
- Subjective wellbeing: Life satisfaction.

Few Results on Current Wellbeing Patterns and Its Drivers

The following pictures illustrate the main findings of the How's Life? dashboard of wellbeing indicators. Wellbeing performance (measured in this case as wellbeing of the average household in each country) may be the result of various and often interrelated factors and in general countries display different strengths and weaknesses in the various wellbeing dimensions (see Figs. 33.2, 33.3 and 33.4).

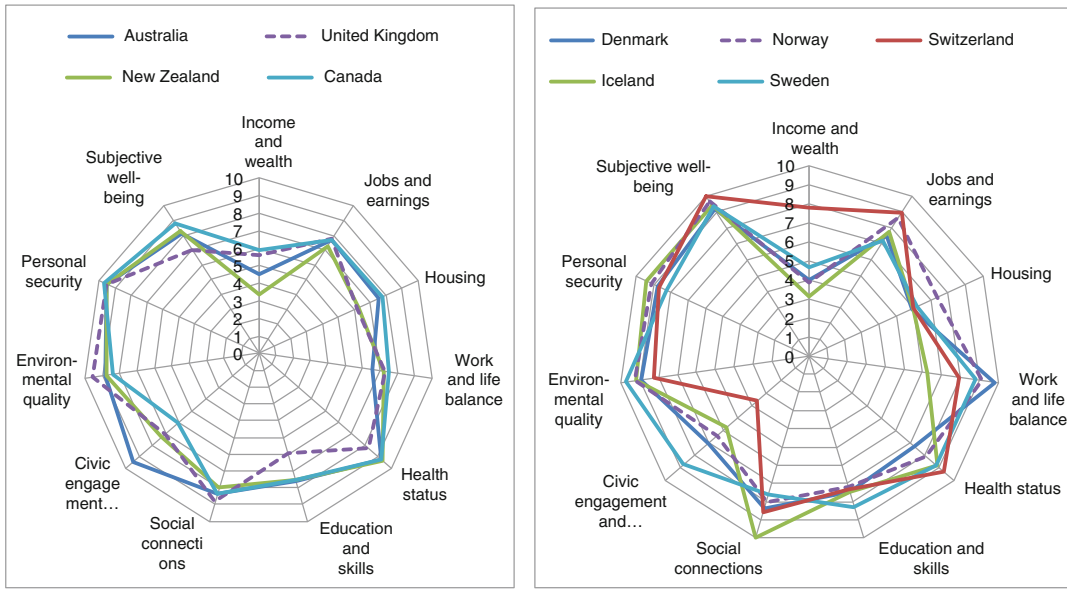


Fig. 33.2 Countries with high wellbeing performance

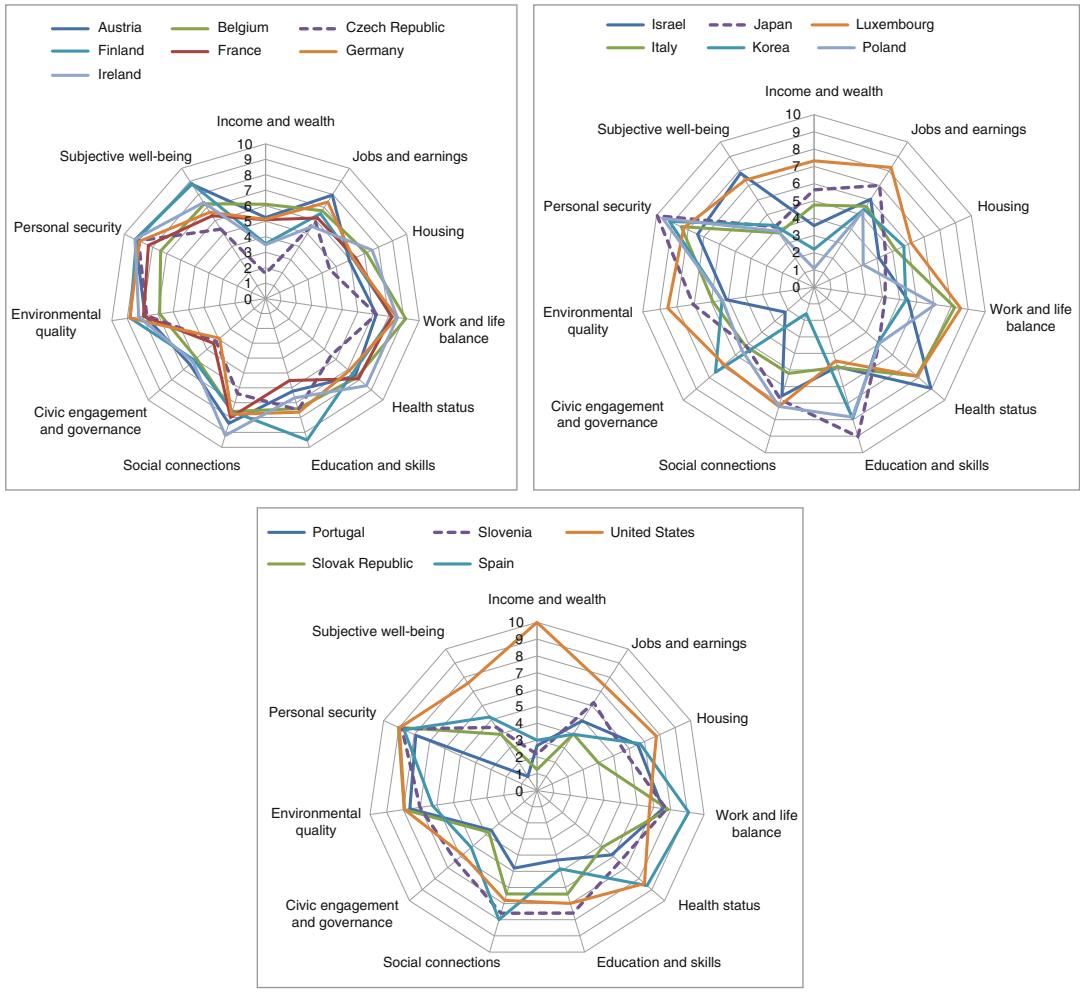


Fig. 33.3 Countries with average wellbeing performance

Countries may achieve an equally good overall wellbeing performance by performing well (or not) in different dimensions. For instance Australia and Canada do very well overall, yet Australia does better than Canada in the civic engagement and governance dimension but less so in income and wealth and in work-life balance. Similarly, Nordic European countries are champions in work-life balance and health status, but do less well than Switzerland and Canada in terms of income and wealth. Countries with the same overall wellbeing performance (i.e. with more than one third of orange lights in Table 33.1) can also differ in terms of performance in the various wellbeing dimensions. For instance, Germany appears to do better than France in education and skills but performs less well in health.

An illustrative analysis shows that behind this diverse performance there may be common patterns:

- Countries that perform relatively better on health status, subjective wellbeing, civic engagement and governance, jobs and

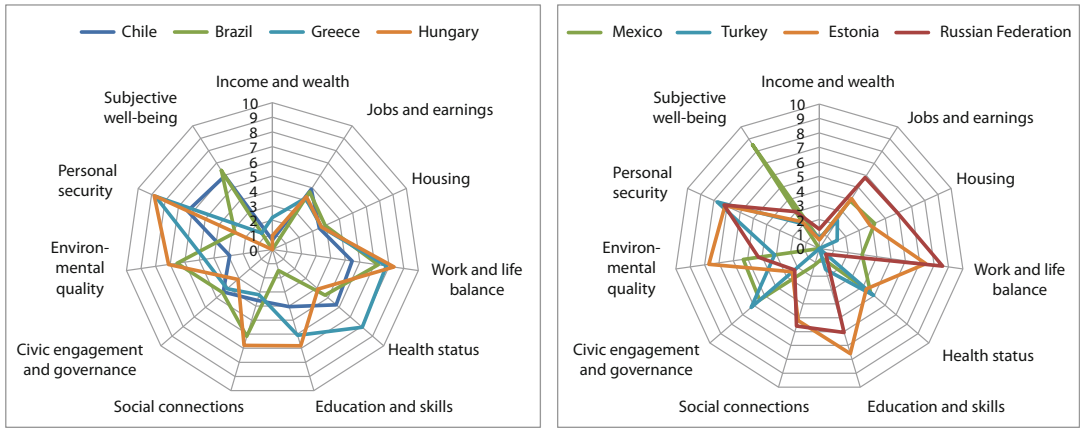


Fig. 33.4 Countries with low wellbeing performance (Note: Figs. 33.2, 33.3, 33.4: These charts show normalized performance in the 11 wellbeing dimensions of How's Life?. Performance is calculated as simple average of the headline indicators included in each dimension and shown in Table 33.1. These values are then normalized with the ratio-scale transformation to re-express all values in a scale between 0 and 10) (Source: *How's Life?* 2013)

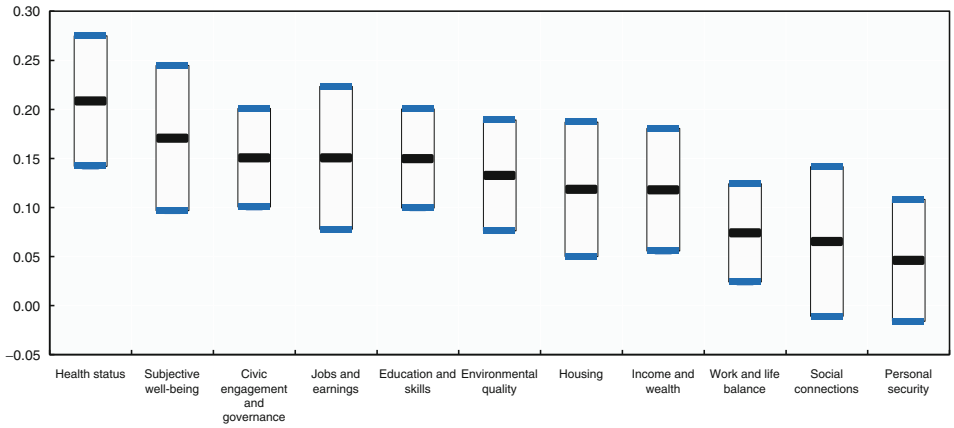


Fig. 33.5 Dimensions that count the most for overall wellbeing performance (Note: The chart shows the elasticities (i.e. the coefficients) of overall wellbeing performance to the 11 wellbeing dimensions, obtained by regressing the Better Life Index rankings (with equal weights) on the wellbeing dimensions (normalized scores) with a simple OLS technique. The choice of equal weights for calculating the BLI index is for illustrative purposes only. The chart shows point estimates (*black dashes*) and their 95 % confidence intervals (*blue dashes*) (Source: *How's Life?* 2013)

education also perform relatively better on overall wellbeing (Fig. 33.5).

- Balanced wellbeing patterns are more likely to be associated with a higher overall wellbeing performance (Fig. 33.6), that is, countries that perform evenly across the eleven dimensions are more likely to be ranked higher overall.
- Finally overall wellbeing is positively associated with low socio-economic differences in wellbeing measured by income or educational inequality (Fig. 33.7).

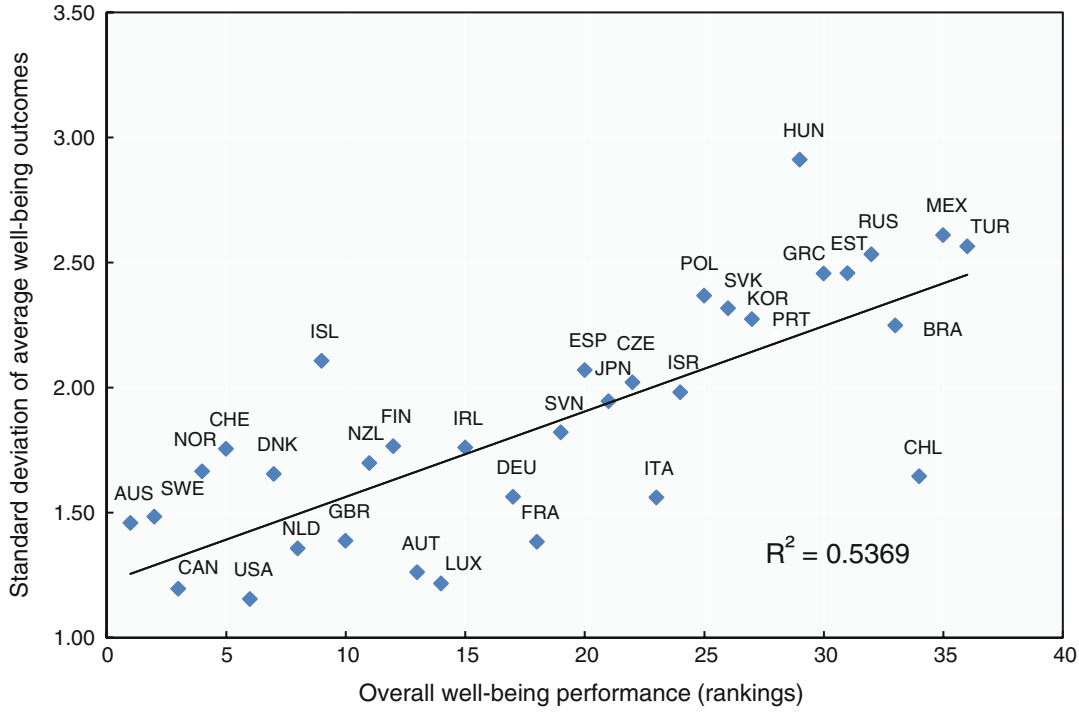


Fig. 33.6 Correlation between overall wellbeing performance and performance dispersion (*Notes*: Rankings are calculated using the Better Life Index methodology (with equal weights). The choice of weights is for illustrative purposes only. Standard deviations are calculated for the BLI indicators measured for an average representative household in a country) (Source: *How's Life?* 2013)

A similar link between social disadvantage and average wellbeing outcomes is also found when looking at the relationship between average wellbeing outcomes and child poverty, even after controlling for levels of GDP per capita. Child poverty has been found to have a detrimental, long-lasting effect on children's progression and wellbeing, impacting long-life outcomes and subsequent generations ("Doing Better for Children", OECD 2009a; "Society at a Glance" 2009b for a review).

Future Plans

The OECD envisages publishing *Society at a Glance* and *How's Life? Measuring Wellbeing* on a regular basis also in the future. In addition, the OECD plans to launch a new series of country monographs in wellbeing called "*How's Life in Country x*". The success of the OECD Better Life Initiative has also resulted into the development of wellbeing indicators at regional level, the so-called "*How's Life in your Region*?" project. From June 2014, a new web platform is available to visualize about 20 wellbeing indicators in 8 wellbeing dimensions (based on the *How's Life?* framework) for more than 300 OECD regions.

At the same time the OECD is bringing forward its statistical agenda on wellbeing. This agenda, which is undertaken in collaboration with National Statistical Offices of Member countries and many other International Organizations, mainly consists of developing better statistical instruments and indicators of wellbeing. Recent examples of such efforts are the OECD Guidelines on Measuring Subjective Wellbeing, the OECD Guidelines for Microstatistics on Wealth and the OECD Framework for Statistics on the Distribution of Income, Consumption and Wealth.

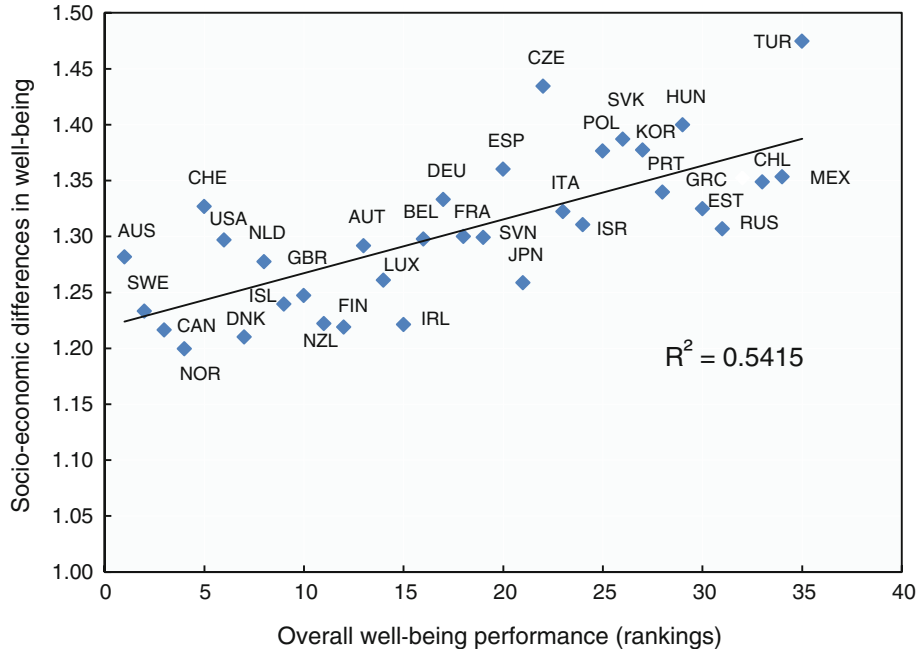


Fig. 33.7 Correlation between overall wellbeing performance and socio-economic differences in wellbeing (*Note*: The chart shows the correlation between an overall wellbeing performance measure (i.e. BLI rankings with equal weights) and a synthetic measure of socio-economic differences (average of ratios of BLI indicators values for individuals with high socio-economic background to BLI indicators values for individuals with low socio-economic background) in wellbeing achievements, whenever information on the socio-economic characteristics of individuals is available. See http://stats.oecd.org/Index.aspx?DataSetCode=BLI for more details on the latter) (Source: *How's Life?* 2013)

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The World Health Organization – The Case for Measuring Wellbeing in Europe

34

Claudia Stein and Ritu Sadana

Who Is WHO?

The World Health Organization (WHO) was founded in 1948 to work for the attainment of the highest possible level of health by all peoples. The Constitution provides us in WHO with the moral, inspirational and technical fundamentals for leadership in health policy and public health. WHO is the authority responsible for public health within the United Nations system. WHO is made up of its Member States (currently 194 countries around the world) and its secretariat (including some 150 country offices and specialized centers, six regional offices and headquarters). The WHO Regional Office for Europe (WHO/Europe) serves the WHO European Region, which comprises 53 countries, covering a vast geographical region from the Atlantic to the Pacific oceans and about 900 million people. WHO/Europe collaborates with a range of public health stakeholders in the Region and globally, to ensure that coordinated action is taken to develop and implement efficient health policies and to strengthen health systems.

WHO's supreme decision-making body is the World Health Assembly, which meets in Geneva, Switzerland every year. The WHO Regional Committee for Europe fulfills a similar role, addressing the health needs of the 53 countries of the European Region. Held in September, the annual meetings of the Regional Committee bring together representatives of Member States: health ministers and other high-level decision-makers. At these sessions, Member States discuss key challenges and adopt regional policies, strategies and action plans, while overseeing the Regional Office's activities and approving its budget. The Regional Committee is a unique platform for policy dialogue and decision-making, shaping public health policies and anchoring WHO's work in the European Region. In everything we do, we at the Regional Office seek to unite and integrate the Region – acting as a bridge between sub-regions and promoting equity, solidarity, universality, participation and human rights. We work to help Member States improve the health status of their populations by providing tailored support through technical programs, and we respond to emergencies, disease outbreaks and other health crises when they occur by providing technical support, logistics and coordination. Our mandate enables us to bring together the best expertise from key partners in national and international institutions, and to gather and analyze data and research results to propose evidence-based public health interventions. The Regional Office runs or has direct access to health databases covering all 53 countries in the Region.

Although the chapter summarizes materials published by the World Health Organization Regional Office for Europe (WHO 2013), the views expressed in this article are those of the authors and do not necessarily represent the decisions, policies, or views of the World Health Organization.

C. Stein (✉) • R. Sadana
WHO, Geneva, Switzerland
e-mail: cls@euro.who.int

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DOI 10.1007/978-94-017-9178-6_34,

The staff of WHO/Europe includes public health, scientific and technical experts, who are based in the main office in Copenhagen, Denmark, in 4 outposted centers and in country offices in 29 Member States. The Regional Office generates evidence-informed research and innovative policy tools and platforms, such those used by the Evidence Informed Policy Network (EVIPNet) supporting our work across 53 Member States. The Copenhagen office provides core functions related to policy, strategy and program development, and the country offices implement tailor-made technical cooperation programs which are agreed in biannual accords with WHO, the Bilateral Cooperative Agreements (BCA), working closely with national authorities.

WHO and the Case for Measuring Wellbeing

The WHO definition of health, coined in 1948 by all its Member States, is the corner stone for the Organization's efforts to develop measurements of wellbeing. The definition describes health "not merely as the absence of disease or infirmity" but as "complete physical, mental and social *wellbeing*". Notwithstanding this, for more than 60 years WHO has neither measured nor reported on wellbeing. While WHO has developed measurement tools such as WHOQOL, it has focused its reporting on death, disease and disability (WHO 1998). This includes reporting on the burden of disease from mental disorders, a theme that WHO dedicated its World Health Report to in 2001. The report highlighted unipolar depressive disorders as the leading cause of burden of disease world-wide if measured by years lived with disability (YLD). It also showed suicides as the second leading cause of death in the European Region after transport accidents.

While this monitoring function and its focus on more reliable statistics, such as mortality, are clearly a core mandate for the Organization, and WHO has done well over the decades reporting on such indicators, WHO has only recently partnered with other institutions to report on the wellbeing of populations in a wider context than mental health and to measure progress on the enhancement of wellbeing in Europe more broadly. This is in part a reflection of the lack of valid and comparable indicators for wellbeing which has gained pace over the past decade due to increased interest from policy makers. WHO is therefore doing this work in the context of the new European health policy 'Health 2020'. This policy which was adopted by the region's 53 Member States in 2012 puts citizens at the center, uses a whole of government and whole of society approach and emphasizes wellbeing as a target for the whole region. This requires not only ministries of health to engage in the enhancement of health and wellbeing but all government sectors and agencies as well as all stakeholders in a society.

What does wellbeing mean? What makes up a "good life" is one of the basic moral discussions common across all philosophical traditions. Across countries, people usually agree on the "big picture" or the minimum ingredients of wellbeing, even if the identification of important areas or components remains a normative exercise. What matters to people's lives is also surprisingly constant, indicating that what we value does not change easily. It is a multidimensional concept. Wellbeing and health are interactive concepts, with some common determinants, such as the health system.

Discussions with representatives from European Member States and technical experts during the extensive consultation on Health 2020 provided qualitative evidence that, across the European Region, people value health and want to minimize disease. In terms of important broader determinants of health and wellbeing, they value social cohesion and inclusion, so that all people have a fair chance for health. People also value security and safety, which are related to health in the context of wellbeing. Common values across Europe increase the possibility of having a regional target for health and wellbeing.

Why is this important for health? Policymakers, public health practitioners and people living in communities across Europe agree that wellbeing includes health, and that health is an

essential part of – if not a prerequisite for – wellbeing. Health matters for wellbeing, and specifically several aspects of health, including the physical, mental and social. Moreover, research shows that there are two-way relationships between different areas of wellbeing: it is clear that health influences overall wellbeing, but wellbeing is also an indicator of future health or illness. Further, reviews of studies to date suggest that the effect of wellbeing on health is substantial (though variable), and has a comparable effect to other risk factors that are more traditionally targeted by public health interventions, such as a healthy diet.

Why is this important to governments and societies across Europe? Improving – or at least maintaining – wellbeing is part of the social contract between governments and the people they represent. This entails ensuring a good life is not owned by any particular sector or service, as it is a multidimensional concept with multiple determinants. Improving population wellbeing can be a platform to develop a common agenda, including a whole-of-government approach, across sectors and stakeholders. In addition to governments, major actors interested in wellbeing include civil society groups, patient groups, wellness and health promotion practitioners and the media.

The past few years have witnessed a number of national and international initiatives promoting the policy use of wellbeing indicators that reach beyond measuring economic performance and, within the health sector that can supplement standard metrics of mortality, disability or disease. These initiatives are very diverse in their scope, methods, targets and key audiences. Another goal shared by some of these initiatives is to involve citizens in the definition of measures of wellbeing and progress.

Measuring Wellbeing – The Beginning of a Journey

The WHO Regional Office for Europe recently dedicated its flagship report, *The European Health Report 2012* to 'charting the way to wellbeing'. This report, which is only published every 3–4 years, describes the health situation in the European region, outlines six targets for health adopted by all 53 Member States and describes the process for measuring wellbeing at the regional level.

It has taken WHO some time to come to this point. In the 1990s, WHO's new efforts to broaden the concept of health and move away from the sole measurement of morbidity and mortality led to the development of the WHOQOL (WHO Quality of Life) measurement instrument. The WHOQOL defines quality of life and assesses it as "individuals' perceptions of their position in life in the context of their culture and value systems in which they live and in relation to their goals, expectations, standards and concerns". It exists in some 30 languages and yields a multi-dimensional profile of scores across domains and sub-domains (facets) of quality of life. However, WHO has never reported routinely on these parameters at country level with the exception of the recent WHO Study on Global Ageing and Adult Health (SAGE) (Kowal et al. 2012). SAGE is a survey of ageing and health drawing on nationally representative samples from six countries (China, Ghana, India, Mexico, the Russian Federation and South Africa); it measures subjective wellbeing through a combination of life satisfaction (WHOQOL 8 – eight questions about satisfaction with different domains of life) as well as experienced wellbeing through the day-reconstruction-method. Conducting such surveys, however, is time consuming and resource-intensive. In order to explore how wellbeing could be measured using existing data sources or minimize the resource needs, the WHO Regional Office for Europe established an international expert group for the measurement and target setting of wellbeing. International partners such as the EC and OECD which has done much work in the area of wellbeing were part of this group (OECD 2013). This group met three times during 2012 and proposed a framework for wellbeing in the context of health, drafted a definition of wellbeing and suggested subjective as well as objective indicators for the wellbeing target, as

outlined below (*The European Health Report 2012* describes this in detail).

In September 2012, representatives of the 53 Member States that make up the WHO European Region adopted the European health policy framework – now called Health 2020. The new policy sets out an action framework to accelerate the attainment of better health and wellbeing for all; and includes regional targets on health and wellbeing, which are listed below.

Through an intense process of consultation and endorsement by the Region's Member States, Health 2020 has arrived at six goals (overarching targets) for achievement by 2020:

1. Reduce premature mortality in Europe by 2020.
2. Increase life expectancy.
3. Reduce inequities in health.
4. Enhance the wellbeing of the European population.
5. Provide universal coverage in Europe.
6. Establish national targets set by Member States. (This goal reflects the processes put in place by Member States to ensure the achievement of Health 2020 objectives.)

The international expert group proposed indicators to measure the level of achievement for each of these goals; these indicators were adopted by the 53 Member States of the WHO Regional Committee for Europe in September 2013.

The international expert group also provided a working definition for wellbeing which entered into the Health 2020 policy. It states that wellbeing has two dimensions: subjective and objective. Elements of objective wellbeing include people's living conditions and their opportunities to realize their potential – opportunities that should be equitably distributed among all people. Aspects of objective wellbeing include health, education, jobs, social relationships, environment, security, civic engagement and governance, housing and leisure. Elements of subjective wellbeing include people's experience of their lives, such as life satisfaction, self-perceived health, reported feelings of safety and being part of a community, among others. Certainly there are other elements that people value, or that matter, for wellbeing. However, a full agreement on what is meant by wellbeing is not needed in order to develop ways to improve wellbeing and eventually measure and monitor it.

Health 2020 – An Overarching Health Policy Framework for Europe

In fact, a wide range of different tools can be used to measure wellbeing. Some use measures of objective factors, such as air quality or level of hearing impairment. Others include subjective measures: for example, people's satisfaction with a particular area of life, such as employment, or the quality of the environment. Some measures are quantitative; others, qualitative. One of the most widely used methods to collect information on wellbeing is through surveys, typically asking people to answer specific questions. A very large number of standardized instruments have been developed, including WHOQOL to provide additional information on wellbeing associated with a particular type of morbidity, health condition or disability. The most common domains covered by all tools are wealth, health, education, society/community and environment (European Health Report 2012). The WHO Regional Office for Europe together with academic experts conducted a systematic literature review of validated tools for the measurement of wellbeing, to increase understanding in this area; this review will be available shortly.

Studies measuring wellbeing at the population level are in practice more relevant for the aim to monitor and report on health and wellbeing across the European Region, than those focusing on specific clinical sub-populations.*The European Health Report 2012* highlights several population level initiatives, led by national governments, other international organizations, a private firm, as well as by WHO at the international level. All feature health as an important component of wellbeing, or a factor directly affecting wellbeing; a few draw on the same data sets collected through international surveys; and some use different words, such as quality of

life and happiness, to discuss what makes up the good life, or ways to measure subjective wellbeing and self-reported objective wellbeing. While the degree of direct policy relevance of these initiatives and their objectives vary, all of them aim at informing policy-making in a way or in another.

The efforts coordinated by the WHO Europe will build on experiences in different Member States. For example, a Member State with a long history of commitment to target setting and health measurement at the population and local levels is the United Kingdom. A program to develop an accepted set of national statistics for understanding and monitoring national wellbeing, was launched in 2010 and is led by the Office for National Statistics (ONS). The initiative includes public debate (in which health is one of the major issues identified), a review of international work and further development of subjective wellbeing. The program initially proposed domains in 2011, and ONS published a second iteration of a framework with ten domains in July 2012. There will be further development of domains and measures as ONS' Measuring National Wellbeing Programme progresses, such as in the area of children's wellbeing. The ONS approach to measuring health within the context of wellbeing includes indicators of objective and subjective wellbeing.

The WHO/Europe led efforts will also take stock of global experiences. For instance, WHO at the global level is addressing how to better measure wellbeing within the WHO Study on Global AGEing and Adult Health (SAGE) (Kowal et al. 2012). SAGE is a longitudinal study with nationally representative samples of persons aged 50+ years in China, Ghana, India, Mexico, Russian Federation and South Africa, and includes a smaller sample of adults aged 18–49 years in each country for comparisons. Wave 1 (2007–2010) included 34,124 respondents and 8,340 comparison individuals. Wave 2 data collection was completed in 2012, following up all Wave 1 respondents, and will be available for analysis during 2013. Wave 3 is planned for 2014–15. For all sites, the study protocol included standardized survey instruments, set of methods, interviewer training and translation procedures. This study aims to improve understanding of wellbeing and measurement, through identifying potential biomarkers of wellbeing; examining framing effects (e.g. how the way one asks questions can influence the response) within different methodologies; comparisons between populations; and relations with characteristics such as temperament. It is expected this will lead to an increased use of data as inputs to identify and evaluate possible interventions and contribute to policy-making.

Challenges in Measuring Wellbeing

Wellbeing is multidimensional, so it is difficult to summarize and communicate in a meaningful way, with a single measure. Wellbeing is often treated as synonymous with the quality of life or happiness, yet these include other subjective elements and are also seen by WHO as only one part of wellbeing. Within the different elements, and the way these are defined by different tools, there is neither consistency in the types of questions asked, nor areas assessed. Only a limited number of tools support assessment of wellbeing at the society or population level; the vast majority focus on individual wellbeing, for example assessed within clinical trials or individual patients. Many countries in the Region lack capacity to collect or use information on wellbeing at the national level and WHO has therefore entered into negotiations with survey providers to find ways for Member States to report on wellbeing.

International organizations are cooperating closely in this area, and their work complements countries' initiatives. The WHO Regional Office for Europe will use experience from national governments, other international Organizations (including United Nations agencies) and the private sector. WHO aims to focus on efforts to measure wellbeing at the society level, i.e. report wellbeing in an aggregate manner, rather than individual conditions and will emphasize external factors affecting wellbeing, since government policy might be able to influence them in the long term.

Where Is WHO Going with the Measurement of Wellbeing?

Despite its long history of developing instruments for the measurement of quality of life and wellbeing, WHO stands at the beginning of a journey to chart wellbeing in Europe. Despite general agreement on what makes a good life, as well as multiple tools and approaches to measure health and wellbeing, researchers in this area agree that the field of measuring wellbeing would benefit from additional clarity and more rigorous assessment methods. Some of the challenges are a narrow conceptualization of health and wellbeing; limited data sources, yet a vast number of tools and indices; greater reliance on mortality or illness measures than those that assess positive health; and a lack of meaningful approaches to communicating and interpreting multidimensional concepts.

With strong support for an overarching target addressing health and wellbeing as part of the new European health strategy, Health 2020, the WHO Regional Office for Europe is working with technical partners to provide operational clarity on how health is measured in the context of wellbeing. In parallel, the Regional Office has entered a process of intense consultation with Member States. With the approval of governing bodies, the WHO expects to have the following results prior to the next edition of the European Health Report:

- a framework and definition of wellbeing that is conceptually sound (as far as possible the operational approach to measurement should draw on existing models that have been used at the population level);
- identification of the range of domains and subsequent indicators – for example, linked directly to the codes of the International Classification of Functioning, Disability and Health (ICF), WHO's framework for measuring health and disability at both individual and population levels, which complements WHO's International Classification of Diseases (ICD);
- indicators and an approach to their measurement, identified to measure each aspect of the health domain, that are tied to an agreed target identified for monitoring progress towards the Health 2020, to improve population health in the context of wellbeing;
- clarity on the way policy-makers, health professionals and other interested stakeholders across the European Region can use this information as input to policy-making and interventions, joined up with different sectors (for use within Health 2020, both the information content of wellbeing measures and the entry points need to be considered carefully, along with potential limitations to using wellbeing indicators); and
- a recognition that a large number of countries in the Region do not currently have national efforts (whether within the health ministry, other ministries or national statistical agencies) to conceptualize, collect or use information on health and wellbeing (any effort to improve wellbeing at the regional level should consider options to support a broad range of countries, with different data and measurement starting points).

Improving health and wellbeing is a recognized as an essential component of Health 2020. A wide range of ongoing activities measuring wellbeing at the international level in Europe, as well as many national initiatives, provides a strong basis for the WHO Regional Office for Europe to build on work in this field: in particular, measuring health in the context of wellbeing and setting out a research agenda that improves both the methods for assessing and communicating measures and the policy processes to enhance the use of information that improves health and wellbeing.

The Regional Office will also support the policy use of health and wellbeing measures:

- drawing on strategies reflecting the WHO European Region's comparative advantage in several areas, including approaches to disseminating policy relevant information, working in collaboration with partner European institutions and Member States;

- advising on how wellbeing indicators should be interpreted and used in connection with standard measures of mortality, morbidity and health system performance indicators; and
- undertaking a more innovative role in providing evidence on the mechanisms and tools for the health sector to enhance wellbeing in other sectors.

Conclusion

This brief chapter outlines WHO/Europe's approach to further develop and measure progress on health in the context of wellbeing, by putting in place mechanisms to refine concepts; address methodological issues and limitations; identify measurement approaches; support countries across the European region to collect and analyze such information as inputs to health policy; and eventually report on the level of health and wellbeing at the European regional level. These efforts are to support advancing health and wellbeing across the European Region in order to reach the regional, overarching target endorsed by WHO European member states, within Health 2020, the new European health policy. WHO/EUROPE is also keen to identifying new collaborators, resources and processes that can support joined up work on how to mark progress on what we value – health and wellbeing across European populations.

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Social Reporting of the European Union – Description of the Organization

35

Marleen De Smedt

The Treaties and the Role of the European Commission

The European Union (EU) consists of 28 Member States. The three main EU institutions are the *European Commission* (further referred to as 'the Commission') which represents the interests of the EU as a whole, the *Council of the European Union* which represents the individual member countries, and the *European Parliament* which represents EU citizens and is directly elected by them.

The Commission has the *right of initiative* to propose laws for adoption by the European Parliament and the Council. In most cases, the Commission makes proposals to meet its obligations under the *EU treaties*, or because another EU institution, country or stakeholder has asked it to act. From April 2012 onwards, EU citizens may also call on the Commission to propose laws (the latter is named the 'European Citizens' initiative'). Besides law-making, the Commission has also the task to ensure that EU law is *correctly applied* by the Member States.

The treaties (primary legislation) are the basis for all EU action. Secondary legislation (which includes regulations, directives and decisions) is derived from the principles and objectives set out in the treaties. Besides legislation, the treaties also lay the ground for the Commission proposing *different policies and programs*.

Social Policies: From the Right of Equal Pay to Improving Quality of Life

Following different versions of the treaties, the EU increased its focus to balance economic development with social and environmental sustainability. From the recognition of the right to equal pay for men and women as written in the Treaty of Rome, the treaties' texts evolved with more and broader societal objectives: in 1992 "*. . .improving quality of life of its citizens*" was added as an objective to the Treaty of Maastricht, and the Treaty of Lisbon[1] clearly states "*wellbeing*" as an explicit objective of the EU.

Going back to the 1950s and 1960s, the initial social policies looked at *freedom of movement for migrant workers, social security arrangements* and the establishment of the *European Social Fund (ESF)*. Further on, social policies developed at EU level to improve the *living and working conditions* for particularly vulnerable groups in society. The Single European Act, which was signed in 1986, emphasized the importance of *strengthening economic and*

M. De Smedt (✉)
Eurostat, European Commission, Luxembourg, Gr Duche Luxembourg
e-mail: marleen.desmedt@ec.europa.eu

[1] 'The Union's aim is to promote peace, its values and the wellbeing of its people' (Treaty on the functioning of the European Union, art.3).

W. Glatzer et al. (eds.), *Global Handbook of Quality of Life*, International Handbooks of Quality-of-Life,
DOI 10.1007/978-94-017-9178-6_35,

social cohesion in the Community and the Community charter of the fundamental social rights of workers was adopted in 1989.

In 1992, the Maastricht Treaty introduced a *public health mandate* for the EU and since then, the Commission gradually launched various action programs and strategy papers on public health matters with the actual overall health program[2] now running until end 2020.

The Amsterdam Treaty (1997) integrated an agreement on *social policy* and inserted a chapter on *employment*. The Lisbon strategy, which was set out in 2000, has led to the Council and European Parliament adopting the *Social Policy Agenda*[3] as well as the adoption of an *open method of coordination (OMC)* as a voluntary, flexible and decentralized form of co-operation. The Lisbon strategy has also given impetus to European *education and training* policies leading ultimately to the actual strategic framework for education and training – ET 2020[4] (adopted in 2009). In the actual version of the treaties there are different articles that cover various social policy domains, going from employment and social rights, to culture, education and training, consumer protection and health.

Along these lines, the EU has developed an increasingly focused set of policies within the field of social cohesion, where the EU competence is mainly on the *monitoring* aspect. However, in a number of domains the Commission has also the task of *law-making*: it has notably proposed EU law on the labor market, such as on free movement of workers and health and safety at work and on social security schemes, and these proposals have been adopted by the Council and European Parliament.

Next to monitoring and law-making, the Commission has an important role in exchanging information and promoting the *sharing of best practices* in fields like poverty and social exclusion and pensions or in the field of health promotion and prevention.

Sustainable Development and the Europe 2020 Strategy

The focus on social development is also part of the EU's commitment *to sustainable development*. The first Earth Summit in Rio de Janeiro in 1992 led to an EU-wide sustainable development strategy (SDS), which was adopted by the European Council in Gothenburg in 2001, and renewed in 2006. The *EU SDS* launched a vision of progress that links economic development, protection of the environment and social justice. The renewed 2006 strategy sets out a single, coherent approach with key challenges, including on public health, social inclusion, demography and migration.

In order for our own and future generations to continue to enjoy a high-quality of healthy life, underpinned by Europe's unique social models, the European Council has adopted in 2010 the *Europe 2020 strategy*,[5] with the objective to turn the EU into *a smart, sustainable and inclusive economy* delivering high levels of employment, productivity and social cohesion. The Europe 2020 strategy is accompanied by seven flagship initiatives, such as the *European Platform against Poverty and Social Exclusion*.

Amongst others, the strategy sets Member States and the Commission the goal of "Promoting social inclusion, in particular through the reduction of poverty, by aiming to lift at least 20 million people out of the risk of poverty and exclusion".

For the main policy themes relevant for the Europe 2020 Strategy, *thematic summaries*[6] have been developed to facilitate a comparison between Member States and to put the economic challenges they face into a broader context. A set of key indicators (see below) has been selected

[2] http://ec.europa.eu/health/programme/policy/index_en.htm

[3] A first Social Policy Agenda ran from 2000 to 2005; a second Social Policy Agenda covered the period 2006–2010.

[4] http://ec.europa.eu/education/lifelong-learning-policy/framework_en.htm

[5] http://ec.europa.eu/europe2020/index_en.htm

[6] http://ec.europa.eu/europe2020/making-it-happen/key-areas/index_en.htm

for each theme which allows the different positions of the Member States to be compared. The summaries also contain general guidelines on policies that should be followed to tackle current shortcomings and hasten progress towards attainment of relevant targets.

At the same time, the EU Member States established the European Semester reference: http://ec.europa.eu/europe2020/making-it-happen/index_en.htm and this as a part of a wider reform of the EU economic governance. The European Semester covers an *ex ante* and integrated policy coordination, which is anchored in the Europe 2020 strategy.

The preparations of the European Semester start when the Commission publishes *its Annual Growth Survey (AGS)* and Alert Mechanism Report already in November of the preceding year. The Annual Growth Survey includes the overall political priorities for the EU for the coming year. The Semester itself runs during the first semester of the year and is composed of two phases – the first phase runs up to the spring European Council meeting and the second phase runs from that meeting to early summer. The Semester ends in June when the Council concludes by agreeing on a set of *Country-Specific Recommendations*, highlighting areas where Member States need to take further action. The Member States then continue implementing the plans and recommendations in the second half of the year. The social reporting – by the Member States and by the Commission – follows this cycle (see below).

The Social Investment Package (SIP)

In February 2013, the Commission has launched its Social Investment Package (SIP).[7] This Package is based on an *analysis of data* (e.g. the 2012 Employment and Social Developments in Europe Review – see below) and *existing good practices* which demonstrate that Member States with a firm commitment to social investment – that is, benefits and services that strengthen people's skills and capabilities – have lower rates of people at risk of poverty or social exclusion, higher educational attainment, higher employment, lower deficits and higher GDP per capita.

The Social Investment Package consists of a Communication setting out the policy framework, concrete actions to be taken by Member States and the Commission and guidance on the use of EU funds to support reforms. It builds inter alia upon the Europe 2020 flagship initiative the European Platform against Poverty and Social Exclusion. The SIP is accompanied by a *series of Commission Staff Working Documents* on various social issues, going from demographic and social trends, to homelessness and active inclusion of people excluded from the labor market.

The Package furthermore complements earlier initiatives such as the *Employment Package*[8] that sets out the way forward for a job rich recovery, the *White Paper*[9] *on Pensions* presenting a strategy for adequate, sustainable and safe pensions and the *Youth Employment Package*[10] dealing specifically with the difficulties young people face in achieving employment.

The Commission closely monitors the performance of individual Member States' social protection systems through the European Semester and formulates, where necessary, proposals for *Country-Specific Recommendations*.

Overview of Activities in Social Reporting

The Evolution of Social Reporting as a Key Task of the Commission

As above mentioned, one of the Commission's key tasks in the area of social affairs is the regular *monitoring* of the social situation and of the national policies in the EU. During the

[7] http://ec.europa.eu/social/main.jsp?catId=1044&langId=en

[8] http://ec.europa.eu/social/main.jsp?catId=101&intPageId=1865&langId=en

[9] http://ec.europa.eu/social/main.jsp?langId=en&catId=89&newsId=1194&furtherNews=yes

[10] http://ec.europa.eu/social/main.jsp?catId=1036

monitoring exercises in the 1960s–1970s, *more and better data and reports* revealed important differences in the social situation and in European societies. This gave the impetus for preparing and implementing European social policies and programs during the following decades.

On the basis of the Commission's Communication[11] 'Working together, working better' the European Council adopted in 2006 a new framework for the *social protection and social inclusion process*: the existing OMCs in the fields of social inclusion and pensions, and the then on-going process of co-operation in the field of health and long-term care, were brought together under common objectives and simplified reporting procedures. National governments translated the common objectives into national plans – submitted as national strategic reports. These national reports were assessed by the Commission and Council in joint reports (then called Joint Report on Social Protection and Social Inclusion) which reflected what EU-level initiatives had been achieved in individual countries.

By adopting the *Europe 2020 strategy*, the Council included for the first time *five headline targets* to be achieved by the EU in 2020 and required these targets to be monitored by *eight main indicators* and *three sub-indicators* (**see Annex I**). The progress achieved in implementing four of the five targets (i.e. in the areas of employment, education and poverty/social exclusion) is measured with the help of social statistics.

From 2011 onwards the social reporting – including the reporting on progress towards the Europe 2020 targets – became streamlined with the *European Semester* (**see Annex II**). The Members States submit now to the EC their national social reports – together with their national reform programs. These national social reports (NSR) cover the three strands of the OMC: social inclusion, pensions and health. The Social Protection Committee[12] (SPC) analyses the NSRs, including the country's progress on indicators and targets and submits its Annual report together with the thematic focus for the year in January.

A more detailed analysis of the NSR is carried out – jointly by the Member States and the Commission – through the *Joint Assessment Framework (JAF)*, which uses a diagnosis tool based on key indicators. This analysis supports the Council's work on setting Country Specific Recommendations (in June, so at the end of the European Semester).

A second tool used by the Commission is the *Social performance monitor*, which summarizes the progress of the Member States towards their national targets, reports on the key challenges identified through the JAF and lists remaining issues as well as national ambitions that do not match the EU ambition. Finally the Commission's overall reporting on the Social situation results in the Annual review 'Employment and Social Developments in Europe' and in Quarterly reviews on social topics.

Over the last decades the number of social indicators as well as the format and detail of social reports in the EU have been steadily increasing. Besides the Annual and Quarterly reviews above-mentioned, the Commission also publishes a number of periodicals such as the Social Agenda, the European Vacancy Monitor, the European Job Mobility bulletin, and the Online Journal of free movement of workers, and many other publications which can all be found on the Europa website.[13]

In addition, the European Foundation for the Improvement of Living and Working Conditions publishes at its website[14] many findings and reports on a variety of social topics.

[11] COM(2005)706 final of 22.12.2005

[12] Established by Council Decision – based on art 160 of the Treaty on the functioning of the European Union – with the objective to monitor the social situation in the European Union and the development of social protection policies.

[13] http://ec.europa.eu/social/main.jsp?langId=en&catId=22

[14] http://www.eurofound.europa.eu

Social Statistics for Underpinning Social Indicators

Good and regular monitoring requires accurate statistical data: this is why the Commission stays actively engaged in further developing the statistical base on the social situation in the EU. Over the recent decades, with the variety of social topics becoming broader, more robust and more detailed, the Commission has established a solid and transparent *underlying knowledge-base* which has led to establishing '*indicator sets*', on employment, living conditions, income, education, health, social protection, crime, etc.

In this process, Eurostat, the statistics' Directorate-General of the Commission, and its partners in the European Statistical System reference: http://epp.eurostat.ec.europa.eu/portal/page/portal/ess_eurostat/introduction provided technical assistance to policy departments for deciding on these indicator sets. Eurostat took a leading role in developing European statistics[15] using where possible *common statistical instruments* – through legal requirements or by way of common guidelines – for assuring quality and comparability of the European data sets.

Examples of European statistical legislation for establishing European statistics on social issues are

- the Regulation on the Labour Force Survey (LFS),[16]
- the European Community Household Panel (ECHP), followed by the Regulation on EU-Statistics on Income and Living Conditions (EU-SILC)[17]
- the Regulation on the production and development of statistics on education and lifelong learning.[18]
- the Regulation on statistics in the field of public health and health and safety at work,[19] together with a set of Implementing Measures, i.e. on Causes of Death statistics, on Accidents at Work and on the second wave of the European Health Interview Survey, the first wave being carried out on a voluntary basis.

Measuring Progress and Quality of Life in a Changing World

Over the years it became clear that even with all the existing indicator sets in the economic, social and environmental domain, some basic information on the real progress of our societies was still lacking. Therefore, the Commission agreed in 2009 on a *new road map* setting out the main actions for a better measurement of progress of our societies.

In its Communication[20] of August 2009 on 'GDP and beyond: measuring progress in a changing world' the Commission concluded to complement GDP with *additional indicators*, such as indicators on *quality of life* and on *wellbeing*, on 'environmental sustainability' and on 'household income, consumption and wealth'.

The publication – 1 month later (September 2009) – of the *Stiglitz-Sen-Fitoussi* (SSF)[21] *Report* also put the measurement of quality of life at the spotlight. Both initiatives responded to a growing need for a wider view on *what makes a society successful* and for a new benchmark that looks at development beyond pure economic progress. This need came (again) at the forefront in a time of tackling the impact of the economic and financial crisis.

[15] Which means as developed according to the Statistical law: Regulation of Council and EP 223/2009 and according to the Principles of the European Statistics Code of Practice.

[16] http://epp.eurostat.ec.europa.eu/portal/page/portal/labour_market/introduction

[17] http://epp.eurostat.ec.europa.eu/portal/page/portal/income_social_inclusion_living_conditions/introduction

[18] http://epp.eurostat.ec.europa.eu/portal/page/portal/education/introduction

[19] http://epp.eurostat.ec.europa.eu/portal/page/portal/health/introduction

[20] COM(2009)433 of 20.8.2009 – further referred to as the Communication or road map 'GDP and beyond' – http://www.beyond-gdp.eu/EUroadmap.html

[21] The report of the « Commission on the measurement of economic performance and social progress » chaired by Joseph Stiglitz for the French government was published in September 2009 – http://www.stiglitz-sen-fitoussi.fr/en/index.htm

For the first time, the *measurement of 'subjective issues'* has been put – through these two high-level texts – clearly in the spotlight for further consideration through official statistics. There is also an increasing interest in measuring not only objective outcomes, but also in collecting data on *people's subjective perceptions of life*. These subjective perceptions could either relate to the outcome 'overall experience of life' or to the subjective perceptions of each of the other dimensions (satisfaction with income, with health, with social relationships etc.).

The measurement of quality of life is a relatively new field. The European Statistical System agreed that quality of life indicators need to be understood through a *multidimensional* framework such as proposed in the SSF Report.

The nine dimensions, which comprise both societal opportunities and individual capacities or resources, are:

- Material living conditions (including income and consumption)
- Health
- Education
- Productive and valued activities (including work)
- Governance and basic rights
- Leisure and social interactions (inclusion/exclusion)
- Natural and living environment
- Economic and physical safety
- Overall experience of life.

Eurostat is now working on a complete detailed set of common *quality of life indicators* covering the full range of quality of life dimensions and bringing together objective and subjective data. Such a set would complement GDP in indicating whether a population is 'going well' from a view point wider than only an economic perspective.

This set consists of primary and context indicators (for each dimension) and out of which a small and forceful set (dashboard) of headline and/or synthetic indicators could be chosen. A list of dimensions and topics/subtopics is added in **Annex III.**

The European Statistical System agreed for the European Statistics on Income and Living Conditions (*EU-SILC*) to be developed as a core instrument for measuring quality of life and its dimensions (see below).

The EU-SILC data collection results in a vast *micro data set*, which allows connecting the different dimensions of quality of life at the individual level and as such could show their dynamic interdependencies. The large sample size of EU-SILC (see below) makes it possible to look at distributions and inequalities between different regions within a country and between different possible vulnerable groups within a society.

International cooperation on the preparation of detailed Guidelines[22] (by OECD) on how best to measure 'Current Subjective Wellbeing' in household surveys will further contribute to improving international comparability.

In its work on establishing quality of life indicators, Eurostat is assisted by an Expert Group[23] consisting of representatives of about ten National Statistical Institutes (NSIs), of representatives of OECD and Eurofound and of a number of scientific researchers experienced in the field. The work is also followed by the respective Commission policy services and is endorsed by the Directors of Social Statistics.

It is Eurostat's intention to publish *a first set of quality of life indicators* at its website in 2013. It should be noted that especially for the subjective issues, the data collection methodology is still in its early days and by consequence Eurostat considers the related statistics still of an 'experimental nature'.

EU-SILC as the Core Measuring Instrument

In a number of European countries, national surveys on income and living conditions existed before the 1990s when the first EU-scale survey – the European Community Household Panel (ECHP) – was launched. The ECHP ran from

[22] http://www.oecd.org/statistics/guidelines-on-measuring-subjective-wellbeing.htm

[23] Established by the European Directors of Social Statistics (DSS) and reporting back to the ESS.

1994 to 2001 in 14 of the then 15 Member States (the exception being Sweden). Despite a high level of overall harmonization in most countries, the ECHP suffered from some comparability and timeliness issues.

It was with the triple aim of solving the ECHP's technical problems, conforming to the internationally agreed definition of income and extending the data collection to the enlarged EU (and beyond), that the decision was taken to stop the ECHP and launch EU-SILC. After starting on the basis of a gentlemen's agreement in 2003 in seven countries (six EU countries plus Norway), the EU-SILC project was then implemented by means of a legal basis which was gradually adopted as from 2003 and implemented from 2004 onwards.

Since then, all EU Member States are required to implement EU-SILC, which is based on the idea of a common 'framework' as opposed to a common 'survey'. The common framework consists of common procedures, concepts and classifications, including harmonized lists of target variables to be transmitted to Eurostat. EU-SILC is one of the most extensive data collection exercises in the EU, with data collected – on a large set of socio-economic variables – of more than 130,000 households and 270,000 persons aged 16 and more in the EU.

Two types of annual data are collected through EU-SILC and provided to Eurostat:

– *cross-sectional data* pertaining to a given time period, including variables on income, poverty, social exclusion and other living conditions. The data for the survey of Year N are to be transmitted to Eurostat by November of Year (N + 1);
– *longitudinal data* pertaining to changes over time at the individual level and observed periodically over a 4-year period. Longitudinal data are confined to income information and a reduced set of critical qualitative, non-monetary variables of deprivation, designed to identify the incidence and dynamic processes of persistent poverty and social exclusion among subgroups of the population. The longitudinal data corresponding to the period between Year (N − 3) and Year N are to be transmitted to Eurostat by March of Year (N + 2).[24]

The survey design is nevertheless flexible in order to allow countries to anchor EU-SILC within their national statistical systems. The *primary target variables* relate to either household or individual (for persons aged 16 and more) information and are grouped into areas:

– at household level, five areas are covered: (1) basic/core data, (2) income, (3) housing, (4) social exclusion and (5) labor information;
– at the personal level, there are five areas: (1) basic/demographic data, (2) income, (3) education, (4) labor information and (5) health.

The *secondary target variables* are introduced every 4 years or less frequently only in the cross-sectional component. One ad-hoc module per year has been included since 2005:

- 2005: inter-generational transmission of poverty
- 2006: social participation
- 2007: housing conditions
- 2008: over-indebtedness and financial exclusion
- 2009: material deprivation
- 2010: intra-household sharing of resources
- 2011: inter-generational transmission of disadvantages
- 2012: housing conditions
- 2013: wellbeing
- 2014: material deprivation.

Currently the legal EU-SILC framework is being revised. An essential prerequisite will be an analysis of the cost-efficiency of the whole operation – in particular its longitudinal component and the annual ad-hoc modules – as well as the length and content of EU-SILC. The overarching objective of this revision is to stabilize

[24] EU-SILC cross-sectional data are available in the form of tables *12 months* after the end of the data collection period while the longitudinal data are available *18 months* after the end of the data collection. In addition, anonymised EU cross-sectional *micro data files* to be used for research purposes are available *15 months* after the end of the data collection and *20 months* for the longitudinal files.

and foster the main core components of EU-SILC, while considering some possible changes (both to include emerging topics of interest – such as variables related to 'quality of life' and to omit less fundamental aspects).

EU-SILC has a major role in identifying macro-trends, in analyzing the characteristics of people at risk-of-poverty and exclusion and understanding the drivers of poverty, in documenting labor market transitions as well as the dynamics of poverty.

It is a highly valuable source in measuring both outcome variables relevant to wellbeing and the components that may be seen as 'drivers' of these outcomes, the drivers typically including standard of living, employment, education, health, environment, social interactions, safety, and civil rights. This is why the European Statistical System has recommended using EU-SILC as the core instrument for measuring different aspects of quality of life.

In 2011 the European Statistical System has agreed on an additional set of topical questions on subjective aspects of wellbeing that was attached – for the first time – as a so-called '*ad-hoc module*' to the EU-SILC of 2013, for which the variables and the procedure are laid down in a Commission Regulation (**see Annex IV**).

This module is the first common instrument launched in the European Statistical System which is almost exclusively targeted to measuring subjective issues. EU-SILC is of course not the only source, nor does it cover all components. The 'quality of life' indicator set will be completed where needed with other European statistical instruments,[25] complementing EU-SILC.

Reporting on Health, Education and Training, Culture, Crime

For some areas in the social field there are other Commission services[26] responsible as is the case for public health, education and training and for justice and home affairs. So in addition to the publication of social statistics and social indicators on Eurostat's website, and the social reports published by the Commission's Directorate-General on Employment and Social Affairs, the Commission publishes many more topical reports on the other social domains through the webpages of the respective policy services.

Finally, the social reporting by the Commission is complemented by reports from a number of European agencies, such as the European Centre for Disease Control (ECDC), the European Agency for Health and Safety at Work (EU-OSHA) and the European Centre for the Development of Vocational Training (CEDEFOP).

Selected Examples/Typical Publications

Employment and Social Development in Europe – Annual Review of the European Commission (2013 Version Published on 21/1/2014)[27]

This Review provides the basic analysis to underpin policy developments under the inclusive growth strand of the Europe 2020 strategy. Since 2011, this Review replaces the earlier (annual) 'Social Situation Report' and the 'Employment in Europe' report.

[25] I.e. LFS, AES and EHIS. The European Statistical System also recommended to further develop an EU common approach for the Household Budget Survey (HBS) and the Time Use Survey (TUS).

[26] Other than the Directorate-General for Employment and Social Affairs.

[27] http://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=7315&type=2&furtherPubs=yes

The 2013 Annual Review describes that a significant increase in poverty among the working age population is one of the most tangible social consequences of the economic crisis. A gradual reduction of unemployment levels may not be enough to reverse this situation if wage polarisation continues, notably due to a rise in part-time work.

This Review also looks into the positive impact of social benefits on the likelihood of getting back into employment, the consequences of persistent gender imbalances, and the social dimension of the Economic and Monetary Union. All the graphs and tables included in these Reviews can be downloaded both in gif and excel format by accessing the individual chapters.

EU Employment and Social Situation Quarterly Reviews[28]

These Quarterly Reviews published by the European Commission provide an overview of developments in the European labor market and the social situation in the EU, based on the latest available data. Each Review analyzes labor market and social data from a wide combination of information sources, including European statistics, reports and survey data from the Commission services, national and sectorial statistics, articles from respected press sources and contributions from public and private employment services.

In addition, each edition highlights some specific issues, such as the latest Quarterly Review of September 2014 which shows that the economic recovery which started in the spring of 2013 remains fragile and future employment developments remain uncertain, unemployment still remains close to historical records, and the long-term unemployed represent a large and growing share of total unemployment.

An overview of the topics covered in the two first Annual Reviews (2011 and 2012) and in the Quarterly Reviews is given in **Annex V**.

Social Europe – Current Challenges and the Way Forward – Annual Report of the Social Protection Committee (2013 Version Published on 19/03/2014)[29]

This Report is prepared as part of the mandate given to the Social Protection Committee established by the Council to monitor the social situation in the European Union and the development of social protection policies. The Commission provided the necessary analysis and calculations used in the Report with the extensive assistance and data provision of Eurostat.

Commission Analytical Working Papers[30]

Since 2012, the Commission services are also publishing technical Working papers. The objective of these papers is to analyze various issues in the employment and social policy domain and as much as possible to underpin priority policy needs – notably the Europe 2020 process. Initially, the papers are/will be written by Commission staff, but joint authorship with external authors is envisaged in the future.

Social Statistics and Social Indicators – Eurostat Website and Paper Publications

From Eurostat's website[31] different sets of indicators can be retrieved according to main European policies and strategies, the most

[28] http://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=7348&type=2&furtherPubs=yes

[29] http://ec.europa.eu/social/main.jsp?catId=758&langId=en&furtherPubs=yes

[30] http://ec.europa.eu/social/main.jsp?langId=en&catId=89&newsId=1352&furtherNews=yes

[31] http://ec.eurostat.eu/eurostat

important indicator sets being the *Europe 2020 indicators*, the *Employment and Social policy indicators* and the *European Sustainable Development indicators (SDIs)*.

Together with these sets Eurostat launched dedicated webpages on its website which would allow for an easy access and with a view to fostering the use of the data. The data include the EU aggregates, data for individual Member States, EEA/EFTA,[32] and candidate countries; for some indicators also data for USA and Japan are available. Quality profiles are published for all European statistics and related indicators.

The Europe 2020 webpages also publish the numerical values of the EU targets related to the headline indicators and the values of the national targets that are harmonized with the EU concepts. Eurostat is also involved in the work related to the *Europe 2020 flagship initiatives*, such as on providing European statistics for

- Innovation Union Scoreboard
- European Research Area: Exploration of an indicator on Research Infrastructures;
- European Innovation Partnership on Active and Healthy Ageing
- Dashboard of indicators on the youth
- Digital Agenda Scoreboard
- A Roadmap towards a Resource Efficient Europe
- Communication on Industrial Policy Reinforcing Competitiveness
- A definition of the ICT related indicators under the New Skills and Jobs flagship.

Potentially many of the indicators linked to the flagship initiatives would stem from sources outside the European Statistical System. Eurostat doesn't plan to disseminate the indicators under the flagship initiatives on Eurostat's dedicated web section, but there are still on-going discussions about the work division between Eurostat, and the Commission policy services. On Eurostat's Europe 2020 dedicated web section a link has been included referring to the Commission's Europe 2020 web page, where the relevant information about each flagship initiative could be found.

The statistical work related to Europe 2020 indicators goes beyond headline indicators and indicators for the seven flagship initiatives. There are other thematic sets of indicators related broadly to Europe 2020, for instance the *Joint Assessment Framework (JAF)* and the *Education and training 2020 (ET2020) indicators*.

European Statistics in general and European social statistics in particular can also be retrieved from Eurostat's website according to 'Statistics by *theme*'[33] and '*Statistics explained*'.[34] The different social themes range from population, labor market and social protection, to income and living conditions, health, education and crime.

Besides the regular reporting of European statistics and social indicators on its website, Eurostat publishes a virtual European Yearbook, various 'Statistics in focus'[35] and 'Data in focus' as well as Pocketbooks and Statistical Books. Examples of such Statistical Books are

– the *Eurostat Statistical Book on 'Income and living conditions'*[36]: this book is about the income and living standards of the people of Europe. It treats employment, income inequality and poverty, housing, health, edu-

[32] European Economic Area/European Free Trade Area.

[33] http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/themes; details on how to retrieve social statistics can be found on an information leaflet: http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-31-12-666/EN/KS-31-12-666-EN.PDF

[34] http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Main_Page

[35] http://epp.eurostat.ec.europa.eu/portal/page/portal/publications/collections/sif_dif

[36] http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-31-10-555

cation, deprivation and social exclusion. It tries to give an answer to questions such as how much income poverty is there in Europe? Is inequality increasing? Does a job guarantee escape from income poverty? How is Europe's welfare state coping with the economic crisis? The book explores 'the new landscape of EU targets' and the implications for monitoring at EU and national levels.

– the *Eurostat Statistical Book on 'Sustainable development in the EU'*[37]: this Eurostat monitoring report, published every 2 years, provides an objective, statistical picture of progress, based on the EU set of sustainable development indicators (SDIs). These indicators have been developed for monitoring the EU sustainable development strategy, launched by the European Council in Gothenburg in 2001 and renewed in 2006.

Quantitative rules applied consistently across indicators, and visualized through weather symbols, provide a relative assessment of whether Europe is moving in the right direction, and with sufficient haste, given the objectives and targets defined in the strategy. Eurostat has so far published five monitoring reports, in 2005, 2007, 2009, 2011 and 2013. The statistics illustrate the range of issues relevant for sustainable development, and should contribute to raising awareness of the opportunities and challenges lying ahead.

– *'Figures for the future – 20 years of sustainable development in Europe'*[38]: this publication is a practical guide to the EU sustainable development indicators (SDIs) and the trends they show. It communicates statistical figures as seen through the eyes of fictional 17-year-old student Anne. This publication goes together with four videos on sustainable development issues. The Eurostat Statistical Book on Smarter, greener, more inclusive? - Indicators to support the Europe 2020 strategy - 2013 edition, reference: http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-02-13-238

Publications in Other Social Fields

Examples of social reporting in other domains than employment, income and living and working conditions are the *European Health reports* and the *Annual Progress reports towards the common European objectives in education and training* which includes indicators and benchmarks.

Future Plans

Improving the Statistical Base

One of the most pressing needs in social reporting is to obtain more timely European statistics on the social situation, in particular on poverty and social exclusion. In November 2012, the ECOFIN[39] Council called "*. . .upon Eurostat and the Member States to draw up an action plan to significantly improve the timeliness of statistics on inequality, poverty, income and social exclusion in the context of Europe 2020*".[40]

The European Statistical System is now working on such an action plan based on the following principles: to provide a *systemic answer throughout the whole range of social statistics*, so not

[37] http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-02-13-237

[38] http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-32-12-152

[39] Economic and Financial Affairs Council.

[40] http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ecofin/133462.pdf

only on EU-SILC, to use whenever possible modern methodology and tools, including *modeling* and, in several cases, to opt for *process re-design* in the context of modernizing European social statistics.

Other statistical priorities are inter alia exploring the dynamics of poverty and social exclusion, linking the social situation to macro-economic trends, comparing data from National Accounts with social statistics, providing social indicators at sub-national level, obtaining comparable morbidity data, providing better data – including distributional measures – on household income, consumption and wealth.

Reporting

Besides the regular reporting mechanism through Annual and Quarterly Reviews, the Commission also continues to publish new issues in the series of Working papers.

Other future initiatives on social reporting will be linked to a mid-term review (in 2015) of the Europe 2020 targets and a better and more detailed reporting on quality of life and wellbeing, including information on distribution and inequalities.

Annexes

Annex I: Europe 2020 Strategy

Three priorities:

- ***Smart growth*** – developing an economy based on knowledge and innovation;
- ***Sustainable growth*** – promoting a more resource efficient, greener and more competitive economy;
- ***Inclusive growth*** – fostering a high-employment economy delivering economic, social and territorial cohesion.

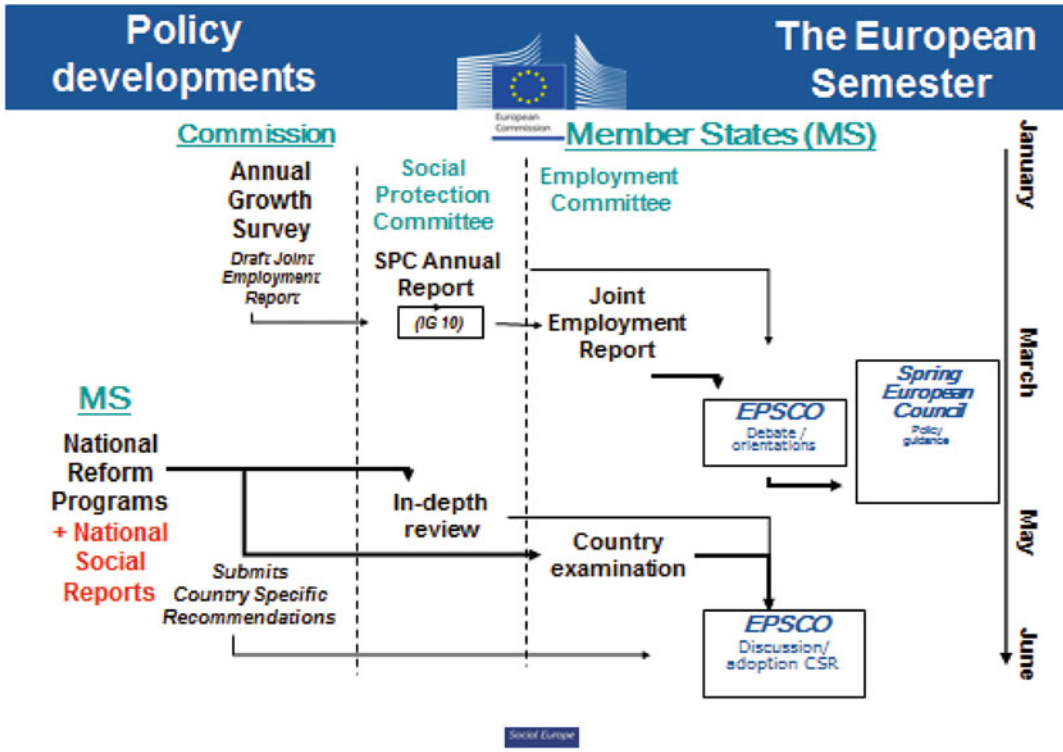
***Five headline targets, eight headline indicators (in italics) and three sub-indicators*:**

1. 75 % of the population aged 20–64 should be employed
   Employment rate – age group 20–64
2. 3 % of the EU's GDP should be invested in R&D
   Gross domestic expenditure on R&D
3. The '20/20/20' climate/energy targets – reduction of the greenhouse gas emissions by 20 % compared to 1990; increasing the share of renewable energy sources in final energy consumption to 20 %; 20 % increase in energy efficiency
   Greenhouse gas emissions
   Share of renewable energy in gross final energy consumption
   Primary energy consumption
4. The share of early school leavers should be under 10 % and at least 40 % of 30–34 years old should have completed tertiary or equivalent education
   Early leavers from education and training
   Tertiary educational attainment
5. Reduction of poverty – by aiming to lift at least 20 million people out of the risk of poverty or exclusion
   People at risk of poverty or social exclusion, with subindicators:
   People living in households with very low work intensity
   People at risk of poverty after social transfers
   People severely materially deprived

***Seven flagship initiatives*:**

- **Smart growth:** Innovation Union, Youth on the move, A digital agenda for Europe
- **Sustainable growth:** Resource efficient Europe, An industrial policy for the globalization era
- **Inclusive growth**: An agenda for new skills and jobs, European platform against poverty

Annex II: The European Semester



EPSCO Council: Employment, Social Policy, Health and Consumer Affairs Council

Annex III: Quality of Life Indicators – List of Topics and Sub-topics[41]

Dimension	Topic/subtopic
1	**Material living conditions**
	1.1 Income
	1.2 Consumption
	1.2.1 Constrained consumption
	1.2.2 Non-market consumption and government provided services (including STIK)
	1.3 Material conditions
	1.3.1 Material deprivation
	1.3.2 Housing conditions
2	**Productive or main activity**
	2.1 Quantity of employment
	2.1.1 Unemployment
	2.1.2 Underemployment, quantity
	2.1.3 Underemployment, quality
	2.2 Quality of employment
	2.2.1 Income and benefits of employment
	2.2.2 Health and safety at work
	2.2.3 Work/life balance
	2.2.4 Temporary work
	2.3 Quality of main activity
	2.4 Subjective appreciation
3	**Health**
	3.1 Outcomes
	3.1.1 Life expectancy
	3.1.2 Morbidity & health status

(continued)

[41] As agreed by the Eurostat Expert Group on Quality of life indicators and endorsed by the Directors of Social Statistics.

Dimension	Topic/subtopic	
	3.2	**Drivers: healthy and unhealthy behaviors**
	3.3	**Access to healthcare**
4	**Education**	
	4.1	**Competences and skills**
	4.1.1	Educational attainment
	4.1.2	Self-reported skills
	4.1.3	Assessed skills
	4.2	**Lifelong learning**
	4.3	**Opportunities for education**
5	**Leisure and social interactions**	
	5.1	**Leisure**
	5.1.1	Quantity of leisure: availability and time use, including personal care: satisfaction with time to do the things that people like
	5.1.2	Quality of leisure
	5.1.3	Access
	5.2	**Social interactions**
	5.2.1	Activities with people (including feelings of loneliness)
	5.2.2	Activities for people (volunteering and care)
	5.2.3	Supportive relationships
	5.2.4	Social cohesion (interpersonal trust, perceived tensions, inequalities)
6	**Economic and physical safety**	
	6.1	**Economic security and vulnerability**
	6.1.1	Wealth (assets)
	6.1.2	Debt
	6.1.3	Income insecurity (including job)
	6.2	**Physical and personal security**
	6.2.1	Crime
	6.2.2	Perception of physical safety
7	**Governance and basic rights**	
	7.1	**Institutions and public services**
	7.1.1	Trust and/or satisfaction in institutions
	7.1.2	Trust and/or satisfaction in public services
	7.2	**Discrimination and equal opportunities**
	7.3	**Active citizenship**
8	**Natural and living environment**	
	8.1	**Pollution (including noise)**
	8.2	**Access to green and recreational spaces**
	8.3	**Landscape and built environment**
8 + 1	**Overall experience of life**	
	9.1	**Life satisfaction**
	9.2	**Affects**
	9.3	**Meaning and purpose**

Annex IV: Variables of the 2013 Ad-Hoc Module[42] on 'Subjective Wellbeing' for EU-SILC

I. **Overall experience of life (2)**
   Overall life satisfaction
   Meaning of life
II. **Material living conditions (2)**
   Satisfaction with financial situation
   Satisfaction with accommodation
III. **Health (5)**
   Being very nervous
   Feeling down in the dumps
   Feeling calm and peaceful
   Feeling downhearted or depressed
   Being happy
IV. **Productive and valued activities (3)**
   Job satisfaction
   Satisfaction with commuting time
   Satisfaction with time use
V. **Governance and basic rights (3)**
   Trust in the political system
   Trust in the legal system
   Trust in the police
VI. **Leisure and social interactions (4)**
   Satisfaction with personal relationships
   Personal matters (anyone to discuss with)
   Help from others
   Trust in others
VII. **Natural and living environment (2)**
   Satisfaction with recreational and green areas
   Satisfaction with living environment
VIII. **Economic and physical safety (1)**
   Physical security

Annex V: Examples of Topics of Commission Publications on Social Reporting

Employment and Social Developments in Europe (Annual Reviews)

[42] http://epp.eurostat.ec.europa.eu/portal/page/portal/income_social_inclusion_living_conditions/legislation

- **2011**: six chapters integrating employment and social issues
  - Shifts in job structure
  - Income inequalities
  - Poverty and social exclusion
  - In-work poverty
  - Active ageing
  - Workers' mobility after enlargement
- **2012** themes:
  - Dynamics of poverty and long-term exclusion
  - Long-Term unemployment
  - Effectiveness and efficiency of welfare systems
  - Impact of taxation on labor market and social outcomes
  - Wages and productivity
  - Skill mismatches
  - Migration (including inclusion of migrants)

Quarterly Reviews

- **Employment and social trends**
  - Quarterly LFS data, by social groups
  - Consumer surveys by income quintiles (monthly data)
- **Special focuses** (i.e.)
  - Child poverty
  - Material deprivation
  - Efficiency of social spending
  - Euro barometer results

References

Employment and Social Analysis portal: http://ec.europa.eu/social/main.jsp?catId=113&langId=en

Eurostat website: http://ec.eurostat.eu/eurostat

Health-EU: http://ec.europa.eu/health-eu/index_en.htm

Quarterly EU Labour Market Review, March 2013, homepage: http://ec.europa.eu/social/main.jsp?langId=en&catId=89&newsId=1852&furtherNews=

Wellbeing for All – The Aim of Social Cohesion: Developing the Approach at the Council of Europe

36

Gilda Farrell

The loss of standards in the modern world, the inability to judge what takes place and what reiterates itself every day, on the basis of solid, universally recognised standards, to subsume them as specific cases of a well-known universal All, as well as the consequent difficulty of providing principles for the requisite action: all this has often been characterised in terms of the nihilism inherent in our age, as a devaluation of values, a sort of twilight of the gods, a catastrophe in the world's moral order. (Hannah Arendt 1995: 55)

Introduction

Social cohesion is a concept which can only be understood in the context of recognizing and respecting human plurality in political interaction. Paraphrasing Hannah Arendt we might affirm that social cohesion deals with the community and the reciprocity of *different* human beings. (Arendt 1995: 40)

The Council of Europe[1] has been promoting this concept in order to ensure that plural European societies adopt dynamic processes of interaction between various players and stakeholders with a view to **guaranteeing the wellbeing of all**, which should in principle mean avoiding all forms of social fragmentation. The Council has also tackled this concept from a societal progress angle, assuming that interaction would lead to "progress" in reducing social injustice, i.e. that interaction can "give human affairs a type of future durability which they could not procure otherwise" (Arendt 1995: 47).

Given that cohesive societies ensuring the wellbeing for all do not reflect a relationship between dominant and dominated, interrelations and action on behalf of cohesion can only make sense if the principles of democracy are respected. Example of this are settling conflicts through mediation between contradictory interests, especially those of weaker and stronger parties; public prioritization of the protection of the weaker groups; guaranteeing rights, social protection and fiscal equity for all, and recognizing everyone's capacity for acting and effecting change, that is to say active co-responsibility (Fig. 36.1).

The questions we shall be examining in this text are as follows: is social cohesion, thus the wellbeing for all, politically viable in contemporary European societies, which are increasingly polarized and hierarchical? Is it feasible in our societies in which 'flexibility', as an organizing principle advocated by a neoliberal viewpoint, takes precedence within the decision-making and bureaucratic structures? Is it sustainable in societies opening the way to

[1] For an explanation on the history and role of the Council of Europe, see: http://www.coe.int/aboutCoe/index.asp?Lang=en

G. Farrell (✉)
Research and Early Warning Division, Council of Europe, Strasbourg, France
e-mail: Gilda.farrell50@gmail.com

W. Glatzer et al. (eds.), *Global Handbook of Quality of Life*, International Handbooks of Quality-of-Life,
DOI 10.1007/978-94-017-9178-6_36,

Fig. 36.1 Social cohesion in the light of democracy (Source: the author)

concentration of wealth, increased financial insecurity on the part of individuals, 'corrosion of the will-power' (Sennett 1998) and intelligence of citizens vis-à-vis living together, and the exclusion of specific categories of persons?

If social cohesion, thus the wellbeing for all, recalls interaction among citizens as stake-holders, is it possible to imagine that "*solid, universally recognised standards*" can be constructed with a view to "*providing principles for the necessary action*"*?* The barrier to imagining this is that differences in living conditions have reached such levels that trust and any horizontal vision of solidarity collides with the perception – on the part of an increasing number of people – of social injustice and inequality in the distribution of wealth and in the implementation of legal and institutional principles.

To answer these questions, we shall explore the theoretical and methodological aspects of the cohesion concept, assuming that its political goal is to ensure the wellbeing of all and therefore to minimize social polarization. As for the Council of Europe wellbeing for all is a direct consequence of political interaction, the concept has been developed to express the ethic of mutual responsibility by involving the voices and the abilities of the citizens to subscribe to shared visions and references. In such involvement lies the originality of the Council of Europe contribution.

Does the Genesis of a Concept Delimit Its Evolution?

The Council of Europe adopted the concept of social cohesion in the 1990s, notably in the spirit of the Declaration of the First Summit of Heads of State and Government in 1993, the final version of which for the first time includes a pledge for the cohesion of societies: through "commitments accepted within the framework

of the Council of Europe Social Charter and European Code of Social Security in order to provide member countries with an adequate system of social protection".[2]

Such an affirmation – from the viewpoint of the member states – induces them to pay closer attention to legal frames concerning social protection and integration, at a time in history when fragmentation is looming large as a worrying phenomenon, as a consequence of various decisions to liberalize social security and the labor market. It's in 1997 at the second Summit of Heads of State and Government of the Council of Europe that the final declaration acknowledges that European society is facing major change and that, in order to take up the consequent challenges, the concept of social cohesion must be enshrined in a strategy and an action plan.[3] It means moving from the monitoring of legal tools to the understanding of the societal changes.

It should be remembered that this social cohesion concept, which was originally formulated by Durkheim in the nineteenth century, has a specific inherent configuration: after acknowledging the "mechanical" solidarity based on uniformity of beliefs and traditional values, the author stresses an organic type of solidarity which is developed by individuals capable of acting together while developing personalities which are independent from, or even critical of tradition. So, this concept presupposes a capacity for interacting responsibly in the public space.

Nevertheless, the political fortune of the social cohesion concept – at state level – lies somewhere in its interpretation as a notion which disregards any conflicted elements such as unequal distribution of wealth, to stress the potential of the "links" or points of contact created by administrative measures more closely targeting specific types of needs and populations. The consequent action will focus more on the bureaucratic capacity for regulating the increasing differentiation of social and economic positioning among categories of citizens, notably by more closely targeting conventional policies and measures. Moreover, the vision of integration, which government departments have forcibly combined with this concept, is rather functional in nature. It concerns immediate social dysfunctions (poverty, racial distinctions, disabilities, etc.) rather than the structural transformations which could, in the long term, help increase social justice. Viewed from the administrative angle, this concept should group together elements from different spheres of public management, attempting to subsume them under a shared rationale. On the social front it should emphasize some degree of interdependence among sets of individuals (whence the appeal for solidarity), without necessarily questioning the hierarchical form of the decision-making processes.

An institutional approach having been adopted, the first steps in the process launched in the Council of Europe in 2000 obviously started off from conventional policies: the development of possible "links" between the different fields of state social action in order to combine the sectorial approaches into a common rationale. Hence, understanding how such policies contribute to the wellbeing for all.

Nevertheless, in an institution which bases its work on human rights, democracy and the rule of law such as the Council of Europe, the fact of radical changes in European societies, and above all the gradual erosion since the 1990s of the pillars which had, so to speak, shored up social bonds in Europe since the Second World War (universal social protection and guaranteed legal right to work), has led us to broaden the reflection on the contribution of social cohesion to the quest for complex balances. We are therefore exploring the "links" between economic efficiency and fair distribution of resources, between pluralism and common rules (Council of Europe 2005: 15). Moreover, within the Council, more particularly the Social Cohesion, Research and Early Warning Division, the question has arisen of securing a reference definition of social cohesion in relation to a general policy project, notably a definition

[2] https://wcd.coe.int/ViewDoc.jsp?id=621771

[3] https://wcd.coe.int/ViewDoc.jsp?id=593437

capable of guiding the action in the light of democratic *acquis* and the application of human rights.

In connection with the more descriptive dimension of the administrative fields to be assessed or quantified, there was a distinct change in the approach used when *we moved on from considerations about the "links" between different conventional sectoral measures to observation of the "links" between the component parts of wellbeing (for all) as defined by the citizens themselves*. We shall be coming back to this point in detail.

For the time being we shall concentrate on how governments were asked to use the social cohesion concept to conduct, with an eye to a shared logic or common rationale, the whole range of measures and actions which the administration has created in the social field as a contribution to the welfare of the citizens, mainly the weakest ones.

The Social Cohesion Concept Converging Public Policies Towards a Shared Logic

As the institution responsible for protecting diversity and plurality, the Council of Europe could not adopt a "mechanical" conception equating social cohesion with non-differentiation or a mere relationship between similar people, or indeed disregard the conflictedness and insecurity inherent in social fragmentation. Approaches which regard social links as "natural"[4] tend to ignore the open-endedness of the concept, whose content always results from interpretative processes initiated by both the institutional players and the citizens in exercising their collective responsibilities, particularly in terms of their capacity or incapacity for settling conflicts. Therefore, the chosen reference rationale for social cohesion involved affirming that "citizen wellbeing" is the most important aspect and that first of all, reflection on this type of wellbeing is based on the collective learning and the political work developed in European societies throughout their modern history,[5] and secondly, citizens' wellbeing changes in line with social change.

Four analytical elements, or "societal capacities" for ensuring such citizen wellbeing, have thus been selected in order to create an educational framework for converging conventional public policies towards a shared logic: fairness (non-discrimination), recognition of human dignity, autonomy (personal development) and participation in the public sphere. The first three elements are connected with the exercise of individual rights and the last one relates to the allocation of content to rights by means of collective action.

The fact could not be overlooked that – in these four fields – public policies are not the only area relevant to the creation of citizen wellbeing. Private spaces, citizen self-organization at all levels and economic powers are also used for structuring the nature of wellbeing. There are fractures between these "living spaces". The meaning commonly ascribed to social cohesion, viz "the manifestation of an intact society, marked by solidarity and helpfulness, and by a kind of team spirit",[6] ignores these conflicted interactions, including the fact that even public policies result from choosing among different interests, available resources and knowledge items. These aspects lead governments only to provide for specific component parts of the whole societal phenomenon and to restrict the field of institutional arrangements and conflict mediation, particularly where social injustice is concerned. This means that even an exercise in converging disparate public policies towards the social cohesion concept is inherently partial.

That being the case, how are we to integrate the notion of interaction among "living spaces" and the voices of stakeholders as a decisive

[4] See e.g. the recent publication by Bertelsmann Stiftung 2013, which, despite the enormous amount of analytical material concerning this issue, uses a "simplified" definition of social cohesion excluding material wealth, social inequality and wellbeing, p. 14.

[5] Council of Europe, op. cit., p. 28.

[6] Bertelsmann, op. cit., p. 8.

aspect of social cohesion and the wellbeing for all? How are we going to understand the collective challenges, clarifying the priorities to be implemented and providing principles for action?

As public action on its own has its limits, even where sectorial policies are built up around a reference concept such as social cohesion, has led the Council to introduce the concept of "shared social responsibility" or "social co-responsibility" as to make it clear that the wellbeing for all implies mutual responsibility, beyond institutional answer to individuals. We shall be coming back to this concept.

The approach to explore links between fields of action for public policies has been to identify these fields (employment, housing, health, social protection and social assistance, etc.) and to elaborate a verification grid with qualitative and quantitative indicators on the extent to which policy or measure X or Y is helping create the conditions for ensuring fairness in the enjoyment of rights, recognition of human dignity, autonomy and active participation,[7] i.e. the four above-mentioned "societal capacities".

"Shared social responsibility" or "co-responsibility" is interpreted as meaning the outcome of interaction among those who leave behind any coercive modes of social control or the defense of vested interests and become actively involved in designing collective action for citizen wellbeing, the requisite processes and the results. Coercive social control annihilates the capacities for suggesting, opposing and participating in decision-making, while attention to vested interests destroys the ability to make choices with full knowledge of other people's needs or visions of wellbeing. Responsibility – as the capacity for responding to social issues – often embraces two different ideas, viz that of the shared costs and benefits of collective action, and that of the standards or obligations for ensuring that the less well-off share the benefits, e.g. taxation, but also social and moral norms.[8] The first approach presupposes equality of conditions (equal sharing of costs and obligations), while the second requires the existence of effective rules for distribution from the better-off to the less well-off. Both approaches limit the possibility for political interrelations to be maintained by persons in unequal situations. Under one approach, those who are less able to bear the burden are excluded, while under the other, the assumption is that the existence or the awareness of the existence, of the norms is sufficient for the responsibility to be shared.

The Council of Europe faced the challenge of producing joint standards for setting priorities in polarized societies in which equal sharing of the burden is impossible. And this in the knowledge that "parity-based" collective solutions cannot be built up among persons at the two extremes of the distribution of social wellbeing. Standards – including legal ones – do not always encourage sharing of the responsibilities of the better-off, for instance where regressive tax structures are put in place.

The question, to which we shall be coming back in the next section, is how to stimulate interaction and action to promote wellbeing for all on the basis of standards on which citizens can reach agreement without coercion, or rather via the formulation – with some government support – of "signals"[9] encouraging *collective*

[7] For further details, see Council of Europe 2005, op. cit., pp. 123–194.

[8] In his work for the Council of Europe on shared social responsibility, Claus Offe regards this notion as comprising two different ideas, the first of which relates to problems of co-operation, collective action and production of collective goods. Such problems can only be resolved if the persons wishing to benefit from the solutions are induced to share both the cost and the effort, accepting the obligation or responsibility bound up with a problem. The second idea, according to the author, is that shared social responsibility often entails a dimension of sharing our own resources with others, launching or joining in distribution measures in favour of the less well-off. Cf. Claus Offe (2011).

[9] According to Stein Ringen (2005), "signals" are a political persuasion resource geared to encouraging individuals to behave in a specific manner in various walks of life, quotation from Claus Offe, op. cit. 2011, p. 24.

action on the basis of a consensus on priorities. The signals proposed were intended to go beyond the "signals" or recommendations from governments designed to change individual behaviours as the aim was not to change people, which Hannah Arendt considers as an essentially non-political attitude,[10] but rather to provide standards for responsible political interaction. This was an ambitious undertaking, especially since bureaucratic culture concentrates on influencing the individual, even where such influence has a general aim, e.g. when people are asked to be careful about their water consumption or waste sorting. This kind of approach makes the citizens implementers of public policies, although in most cases they do not have access to full information on the results of their individual actions. For example, people living in a given town do not know how many tons of waste is sorted there, whether volumes are increasing or decreasing, or where and how the final processing is carried out.

So we see that policy public on social cohesion tends to prioritize bringing individual conduct into line with a number of recommendations ("signals"), or providing different types of support for those who are excluded for a wide variety of reasons. The conclusion from all this is that the administration is not naturally equipped to promote a collective search for solutions or joint action. The endeavor to stipulate a common framework for policies to support social cohesion may deliver food for thought on certain shortcomings in the public response in the four fields selected, but cannot in any way change the personalized approach which is peculiar to it. This approach could only be changed if the authorities agree to launch initiatives which "facilitate" the convergence of groups of citizen-stakeholders towards actions in which responsibility is shared; or in other words, in which knowledge of the gaps in distribution of wellbeing serves as the basis for policy-making rather than the analysis of poverty *per se*.

[10] Ibid, p. 58.

The Social Cohesion Concept Facilitating the Convergence of Citizen-Stakeholders: Co-responsibility for the Wellbeing of All

The minimum prerequisite for ensuring interaction among different groups of stakeholders is to ask whether it is possible to lift the "veil of ignorance" which enables citizens to coexist in the same physical spaces (towns, neighborhoods, etc.) in complete ignorance of their mutual conditions and aspirations. Moreover, they lack any reliable standards for assessing universally recognised situations or shared principles for action priority. Beyond this, clearly, looms the problem of power differentials.

The Council of Europe therefore launched an experiment (known as SPIRAL[11]) based on the idea that society can only be understood *to the extent that several persons discuss it and exchange their mutual opinions and perspectives.*[12] The experiment consisted in inviting representatives of the different "situations" in a town, neighborhood, institution, etc., to express and validate their criteria regarding wellbeing for all, a concept with which everyone is familiar, regardless of their individual situation. This experiment is an invitation to "experience plurality".[13] In contrast to the introspective approach whereby the isolated individual is invited to express his own feeling of wellbeing/malaise, as in the case of opinion polls, the Council of Europe chose a hybrid method combining collective and introspective approaches (individuals organized into

[11] For further information on this point, consult the presentation of the SPIRAL methodology on the website https://wikispiral.org

[12] Arendt 1995 op. cit., p. 92.

[13] Ibid.

homogeneous groups[14] expressing three levels of criteria: "their wellbeing", "their malaise" and what "they are willing to undertake to promote wellbeing for all" with individual support), in order subsequently to launch a forward-looking collective process of analysis and interpretation to achieve a shared consensus on their situation.[15] This consensus becomes an "objective" tool on the basis of which specific action principles can be defined. Given that the aim is not to change individuals but rather to renew, or indeed create, their common reference criteria, the latter are classified and grouped together into 9 dimensions or fields of social interaction (Fig. 36.2), facilitating an initial overall analysis. A series of diagrams enable us to compare the weightings assigned to each of these dimensions (example in Fig. 36.3).

Some of these 9 dimensions relate to private life (such as personal relationships) or the effect of climatic conditions on behaviours. This allows us to establish in which of these dimensions political action is relevant or necessary. The Council of Europe presented them as interlinked in order to highlight their mutual influence. This does not mean that everything is regulated by interaction in the public space; nor does it mean that there is a clear distinction in our modern societies between private and public spaces. For instance, work "flexibility" or a lack of social protection makes it difficult for people to develop satisfactory private relationships or to properly form their own identities. All the criteria in fact comprise public, private and collective aspects. An example of a criterion concerning affective relationships might be: "I need a dog in order to feel well". This criterion can be used in the personal field, unless the person concerned is in prison. Permitting a prisoner to keep a dog in his cell with him may be the result of a political decision to allow prisoners to develop affectionate and care relationships in order to reduce loneliness. This can also apply to a homeless person expressing his malaise when people look contemptuously at him, i.e. where the *constraint of necessity* is compounded with the *constraint of other people's violence*.[16] This kind of criterion highlights the link between material and spiritual aspects and leads to the inclusion in political discussions of dimensions which are normally disregarded, thus expanding the perceived scope of societal issues.

This kind of approach is particularly important in what we shall call the "refinement" of public and political life and involves discussing "mechanisms", for instance, in formulating administrative measures, which are intended as responses to questions of inequality or injustice, but in fact only emphasize the organization of expenditure. For example, using the grid of dimensions and components in order to evaluate a conventional educational indicator for persons migrating from the interior to the coastal regions of a Council of Europe country member showed that the officials responsible for implementing the indicator considered that it was right "in principle", but that the results were unreliable as compared with the standards used for other citizens. This contradiction shows the extent to which public management – including the adoption of internal coherency concepts such as social cohesion – only promotes the emancipation of individuals if the interaction with the citizens takes account of a multitude of effects, not merely the sterile notion of efficiency, understood as cost-cutting.

As we have said, the Council of Europe uses a variety of consolidator tools in order to improve our understanding not only of the plurality of

[14] A homogenous group comprises X number of persons presenting similar characteristics. For example, persons with disabilities, young people, migrants, physicians, entrepreneurs, civil servants, etc. Some affinity among members of the group facilitates dialogue. Using the SPIRAL method, the Council of Europe encourages the setting up of as many homogenous groups as possible in order to cover the diversity of criteria specific to the different situations existing in a given area or neighbourhood.

[15] The analysis involves reorganising the homogenous groups into heterogeneous groups, i.e. the participants are mingled together to analyse all the criteria; see SPIRAL website https://wikispiral.org

[16] After Hannah Arendt.

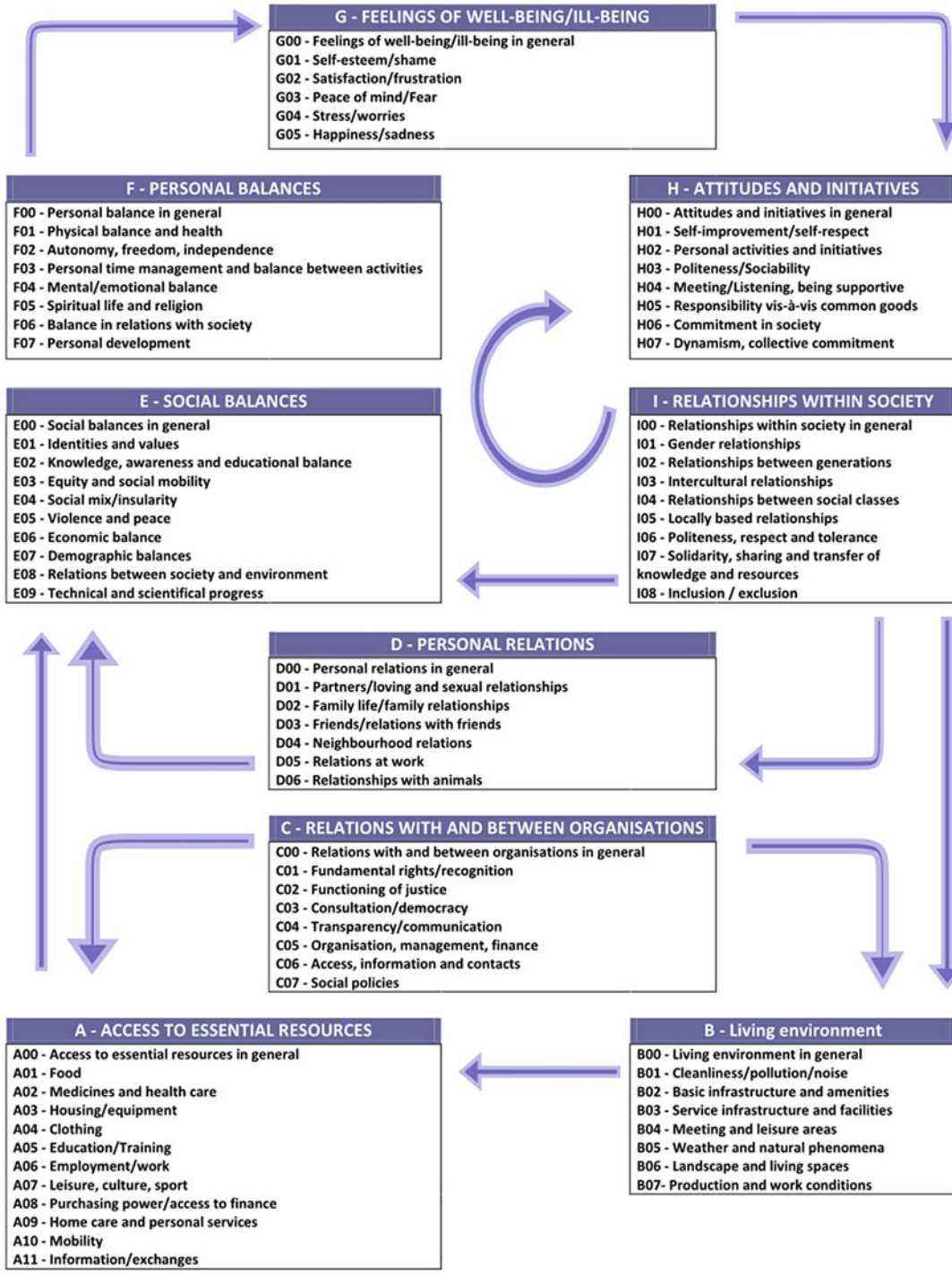


Fig. 36.2 The 9 dimensions and 67 components of wellbeing of all expressed by citizens (Source: https://wikispiral.org/tiki-index.php?page=R%C3%A9sultats&structure=wikispiral&page_ref_id=604)

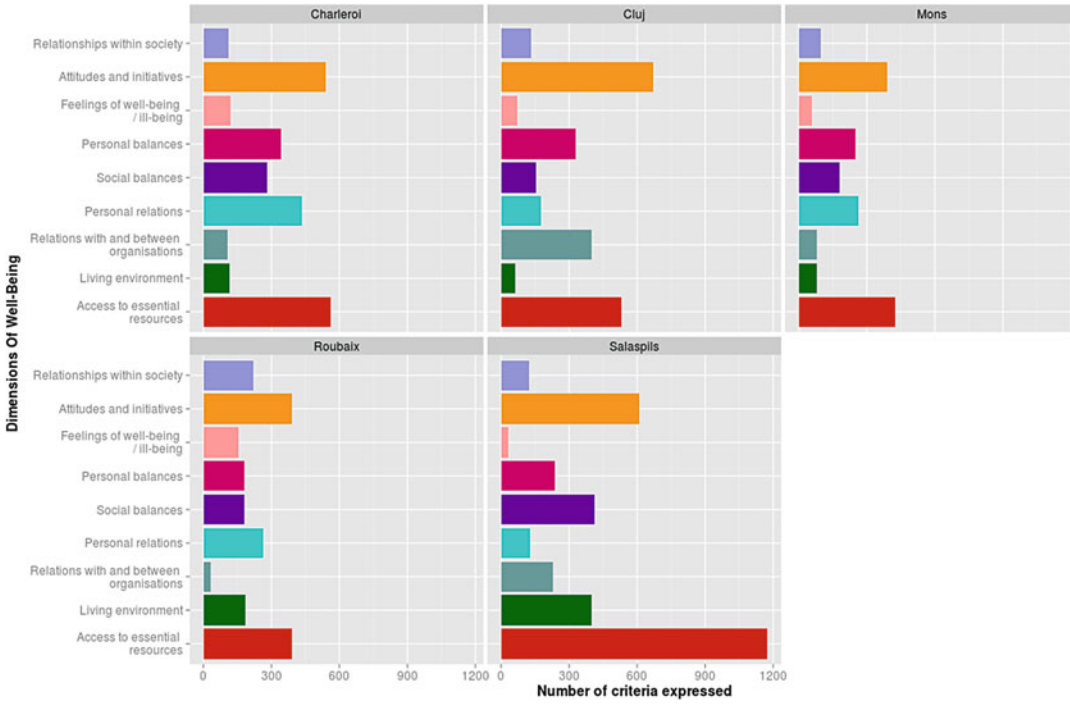


Fig. 36.3 Comparative summary of the distribution of criteria in 9 dimensions in the towns of Charleroi and Mons (Be), Timişoara and Cluj (Ro), Roubaix (Fr) and Salaspis (Le)

conditions, but also the pluri-dimensionality of the concept of wellbeing and cohesion (see Fig. 36.2).

This figure, for example, clearly shows the relative importance attributed by participants to the different aspects/sources of wellbeing. Comparing these towns, we note for instance, that proactive attitude (dimension H) is more heavily emphasized where the issue of access to life resources (meeting of needs) has apparently not been resolved for all (cf. Timişoara, Salaspils, Charleroi and Cluj). While these graphs erase the extremes by exclusively showing which fields are more relevant to interaction or the lack of interaction or of an awareness of the input from the wellbeing dimension, a subsequent "horizontal" classification of the standards illustrates the extent of the extremes. We shall take the example of the following components: (B04) place of encounter and leisure, and (C06) access, information and contacts with the institutions. The following cases are examined:

Places of encounter and leisure

Highly unsatisfactory situation	Unsatisfactory situation	Average situation	Satisfactory situation	Highly satisfactory or ideal situation
Meeting places destroyed or abandoned	Lack of playgrounds and parks for children and young people		Well-equipped places of encounter	Large numbers of well-kept green spaces

Access, information and contacts with the institutions

Highly unsatisfactory situation	Unsatisfactory situation	Average situation	Satisfactory situation	Highly satisfactory or ideal situation
Discrimination in relations with the public institutions	Sent back and forth between departments and unpleasant contact with the public services		Assistance in understanding administrative procedures	Access to services via simplified procedures and one-stop shops

These examples of social polarity within one single town beg the question of how, in such cases, we can elicit any modes of responsibility or capacities for solving such problems and progressing towards a society of wellbeing for

all. We might also wonder whether there is any possibility of prompting awareness of the "social continuum", i.e. the requisite knowledge for understanding the links between the extremes of social distribution and the interdependence between situations despite an apparent lack of connection.

We shall begin with the second question of developing capacity. Implementation of the SPIRAL methodology in various European towns shows that in Europe, awareness of rights prompts citizens to consider such principles as "free of charge", "equal access", "responsibility" and "observing the rules". These elements point to an understanding of society as *something which is shared by several individuals, which is upheld by them, which separates and binds them, and which looks different to each individual* (Arendt 1995: 92). This understanding holds despite the difficult question of interdependence between the extreme conditions. Each person, from their own perspective, sees that there is an ideal link between the concept of rights for all and that of common property/assets. In that sense, human rights provide an essential backdrop, a reference element which replaces the mechanical links of belonging with political support for the idea of the "good" life. Rights as understood by the citizens cover fundamental aspects of human dignity, including access to nature, culture, the institutions, social equality and the various forms of freedom of expression.

So when citizens discuss these "rights" in practical terms, they take in all the aspects of living together which can only be satisfactorily and fairly addressed by means of joint action. These aspects include fair and universal access to resources and services, respect for and preservation of fundamental assets, environmental sustainability, consultation and responsibility. Broadly speaking, while these aspects are mentioned in the context of work with the Council of Europe, the public authorities are expected to provide virtually all of the solutions. This means that most citizens have less confidence in their own power to help guarantee these values than in the capacity of the public and political institutions to do so.

The human rights framework creates an environment conducive to involving citizens in interaction for co-responsible action. However, it is the issue of "power of implementation" which opens up a breach between the human rights and the co-responsibility frameworks. Demands framed in terms of non-exclusion of rights are channeled towards action by public institutions, which are theoretically responsible for ensuring fairness. Co-responsible action presupposes a collective-co-operative approach, with the adoption of rules linked to commitments on sharing in order to restore social justice. It also draws on modes of reciprocity which are sadly missing from today's citizen-public-institution relationship. Moreover, the debate on citizenship barely touches on the idea of common systems of resources, beyond public assets or funds, or the "costs" of social justice. The power mechanisms (including legislative powers[17]) which foster social polarization, that is to say the concentration of resources by a small number of individuals, are therefore surrounded by public bodies concentrating on the distribution not of wealth, but of forms of "downward compensation" geared to cutting the cost of marginalization. In most cases, such a political choice involves poor rights and poor resources for the marginalized, thus saving society the "cost" of equality and social justice. If the "costs" of exclusion, polarization and injustice are paid by the civil service, it is difficult to address the question of collective interaction for social justice. Furthermore, the citizens tend to access assets other than those provided under public action in the private sector, the market, rather than through co-operative action.

Combining rights-based and market frameworks is insufficient to obtain an understanding of the extent and function of shared responsibility or co-responsibility. Recognition of this type of responsibility depends on political interaction geared to identifying, demanding and learning. This interaction is based on the objective of long-term transformation, which is not devoid of conflict, for example with the

[17] Cf. Gallino and Borgna 2012.

institutions or the private modes of resource appropriation. In restoring the meaning of social justice, as interpreted by Amartya Sen, and including inter-generational justice, we find that beyond the framework of rights, an awareness of "*sovereignty over resources*"[18] still has to be secured. We still need to legitimize the idea that decisions geared to "defending life", as reiterated by Hannah Arendt, cannot be taken from the perspective of a small number of people or decreed from on high, but must instead by produced by a common accord after mutual discussion and persuasion (Arendt 1995: 100).

It must be stressed that when the notion of wellbeing for all includes plural dimensions, as the Council of Europe has shown with the implementation of SPIRAL, there are scattered indications of people demanding sovereignty over resources. For example, some citizens request access to free shared places of encounter and dialogue, to end property speculation in order to make housing accessible to all, to have common land for producing vegetables in towns and cities, to have low-cost or free access to drinking water and renewable energies, to make all public and private places accessible to persons with disabilities, to provide everyone with a minimum income, to prioritize local production, etc. These demands point to an awareness in some quarters of the need for shared responsibility for the exercise of rights and of the desire to change the means of controlling resources for the collective wellbeing.

Nevertheless, this awareness is not about to be properly linked up with common action and the sharing of responsibilities. In addition to the need for educational tools, legitimacy for action (for example, citizen forums, social charters, multipartite agreements or social contracts[19]) and sources of inspiration and learning about the means of contributing to collective approaches and resource management methods,[20] we must also be able to overcome the fear of breaking down certain factors limiting the social imagination. For example, the separation of responsibilities, the right of the better-off to waste, even in the presence of those who are without the resources to live in dignity, or the legitimacy of dual standards in public rights and investments. We shall come back to these points when dealing with the question of ideological, institutional and legal constraints on co-responsibility.

So the awareness of the "social continuum" which is necessary for responsible action in polarized societies can only be conceived of as a long process. For this reason SPIRAL proposes successive cycles[21]) whose gradual implementation requires not only a straightforward "undertaking to participate or attend" on the part of the government departments, but also the transformation of their methods of dealing with political life in fragmented societies. Currently, and we shall be coming back to this, the political response to fragmentation is not to seek mediation for consensus but rather to abandon responsibility towards the ever greater numbers of people faced with increasingly insecure lives.

[18] "Sovereignty over resources" in this context means a community's capacity for recognising its right to organise the resources required for maintaining human dignity under a collective decision-making process.

[19] The Social Cohesion Research and Early Warning Division has experimented with various multipartite social contracts, involving different parties in pursuing a shared goal after their participation in the implementation of SPIRAL. For the moment these contracts have been confined to dealing, in a co-ordinated manner, with the responses provided by each participant separately for citizens in difficulty, such as over-indebted persons, the unemployed, etc. The next step will be to expand this experiment on the basis of shared objectives in the different fields of living together.

[20] Cf. the work of the Social Cohesion, Research and Early Warning Division geared to inspiring citizens with alternative modes of organisation of resources for combating polarisation, poverty and social insecurity: http://respondingtogether.wikispiral.org/

[21] See: https://wikispiral.org

Tentative Conclusion

Action for Social Cohesion and Constraints on the Development of Co-responsibility

As we have seen throughout this article, in order to secure the participation of its members, shared responsibility or co-responsibility in a given society must be based on consensual standards (or principles) relating to the production and distribution of goods conducive to ensuring wellbeing for all. The idea is that these principles should be adopted by each of the stakeholders, citizens, and private and public profit and non-profit organizations in their choices and individual and collective behaviours with a view to achieving results capable of restoring justice and social cohesion.[22] This type of consensus requires proximity, which is why the Council of Europe has launched this approach at the local level and within businesses, schools, hospitals, etc.

We shall be pointing out some of the difficulties in affirming such an approach, including problems which have already been mentioned in this text.

The first difficulty in creating consensual standards involves persuading the better-off to engage in decision-making exercises in the presence of less well-off people. There were very few towns where those helping to implement SPIRAL also included better-off people. Their absence from the discussion on wellbeing for all reinforces fragmentation. It also highlights the lack of mediation skills among the public authorities, on which the Council of Europe relies for inducing their citizens to participate. Above all it stands in the way of the cognitive change which might just allow us to debate the extent and consequences of polarization. In the light of social fragmentation, local authorities are instead developing multiple instruments or contact spaces with various stakeholders, without necessarily promoting exchange among them, particularly where there are high levels of social differentiation.

The second difficulty, which derives from the first, relates to equipping the administration to carry out these tasks. State departments have two main functions vis-à-vis their citizens. Firstly, they must create the "signals" or "recommendations" to guide their behavior in a wide range of areas as children's education, preservation of public order, environment, etc, drawing on a range of measures which look more like penalties than incentives. In every case, it is the individual who is targeted to obtain a result in terms of societal functioning, without necessarily providing tools to foster or encourage collective action. Again, inequalities are dealt with on a case-by-case basis, intensifying prejudices about the less well-off. In addition to infringing the dignity of certain categories of citizens and increasing their fear, these prejudices prevent people from understanding the main point of the exercise: ascertaining how to reach all the stakeholders in order to discuss the requisite means of ensuring social justice. Whatever the justification for the individualized approach, it reduces the space for creating the specific added value of co-operation projects. Consequently, conventional policies would seem to lack the potential for generating the dynamics for encouraging political interaction for shared responsibility. In other words, the creation of social added value through the interdependence of citizens, which is vital for social cohesion, is not ensured by the usual means of implementing these policies.

The third difficulty stems from the previous one in cases involving resources for action, and particularly in meeting vital needs for living in dignity. The vision adopted by government departments is usually limited by the availability of public funds. The idea is consequently emerging that because of ever-diminishing public resources, there is no other solution than to do without responsibility. The lack of a "resource hybridization culture" in government departments is an obstacle to the creation of models for using resources which exist, but have been

[22] For further information on this point see Sacconi (2011).

abandoned or are just not used, and the creation of assets via collective contributions (with or without public financial support).[23] In the absence of recognition of these assets and more generally of the concept of shared assets, it is difficult for social cohesion to gain recognition as a societal issue.[24]

The fourth difficulty relates to the possibility of organizing collective action and identifying common objectives where the citizens, particularly the most underprivileged, have lost confidence in their capacity for transforming things. In addition to having a direct impact on mutual trust, the lack of a collective approach to problem-solving or to developing social capacities blocks the political debate on sovereignty over resources, a political concept which is vital for configuring contributory and shared responsibility processes for the wellbeing of all.

The fifth difficulty is the indifference of the political establishment, which threatens the very source of its legitimacy. This legitimacy is created not only by mediating between different interests, prioritizing protection of the weaker groups, guaranteeing rights, protection and fiscal equality for all, but also through the activation of a shared vision of the meaning of living together by recognizing the capacity of everyone to bring about change. As we pointed out at the beginning of this text, this shared vision is based on the fundamental principles of democracy underpinning any social cohesion process.

What conclusion is to be drawn from this short survey of the difficulties? Perhaps that one essential question remains unanswered: since there is no question of trying to change individuals, how can we place public institutions on a new footing so that they can support the production of the collective added value, thus of wellbeing for all? By basing wellbeing for all on "*solid, universally recognised standards*", it will be possible to develop a new sensitivity to the "*difficulty of providing principles for the necessary action*".

The Council of Europe, particularly it's Social Cohesion, Research and Early Warning Division, has endeavored to provide some answers. Yet social cohesion as the capacity to ensure the wellbeing for all must continue to be a political objective if we are to prevent as Hanna Arendt states the "*devaluation of all values and a catastrophe in the world's moral order*".

[23] Cf. the project "Responding Together: engaging citizens in fighting poverty and inequalities", run by the Council of Europe in co-operation with the European Commission: https://respondingtogether.wikispiral.org

[24] Shared assets here means anything which is *constructed collectively through political or contributory channels* with an eye to ensuring the exercise of fundamental rights and the full development of human dignity.

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Part VII

Basic Dimensions of Global Wellbeing

Assessing the Subjective Wellbeing of Nations

37

Filomena Maggino

Introduction

In order to measure and monitor nation's wellbeing and progress, a systematic approach is needed, leading from *concept* to *measure*, then to *synthesis* and *interpretation*.

The process requires the identification of – in order – (a) the concepts (and their corresponding conceptual dimension) to measure and monitor and the domains in which the concepts have to be measured and monitored, (b) the indicators including the techniques aimed at summarizing and summing up the indicators, (c) interpretative and explanatory models.

Concerning the first step, we can say that the widely accepted main concepts defining the progress of a nation are *wellbeing* of individuals (*quality of life*) and society, its fair distribution (*equity*) and sustainable promotion (*sustainability*).

The notion of *wellbeing* at individual level refers to *quality of life*, which can be structured in two macro components/dimensions: *living conditions* and *subjective wellbeing*, which in turn find subsequent sub-dimensions. On the other hand, the concept of "nation wellbeing" is complex and includes different characteristics. Some of them are macro in themselves; others could be defined in terms of aggregation of individual outcomes. The same reflections could concern also other aspects of individual wellbeing (e.g., trust). What it should be avoided is superimposing the concept of individual "wellbeings" with that of country wellbeing. In other words, the notion of wellbeing declined at national level refers to concepts which include *social cohesion*, *integration of individuals and groups*, *relations and ties (social capital)*.

While the concept of *equity* can be expressed as the distribution of wellbeing in the population and refers to dimensions like social inclusion/exclusion, the concept of *sustainability* refers to the possible erosion/durability of those conditions (interpretable in terms of capitals) with reference to present generations' future and future generations. According to the World Bank's four-capital approach, for example, sustainable development should enhance and preserve social, human, produced and natural capital of present generations and provide future generations with them. However, the capital approach turns out to be limited. In fact, other approaches include concepts like "vulnerability" (considering *risks factors* of the present level of wellbeing) or "resilience" (interpreted in terms of resources and capabilities) which can be activated in order to face possible future needs and risks (Riccardini, 2014). In both perspectives, the observations (but also the activations) can be accomplished at micro and macro level with reference to time and space. The concept to be considered in order to relate risk and resilience is that of precaution (not only in terms of prevention).

F. Maggino (✉)
Department of Statistics, Informatics, Applications "G. Parenti" (DiSIA), Università degli Studi di Firenze, Florence, Italy
e-mail: filomena.maggino@unifi.it

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Actually, each concept can be declined, observed and investigated through both objective and subjective aspects, which include opinions, evaluations, feelings, perceptions, attitudes, desires, values, and motivations related to each individual life (as a whole or in different specific contexts).

The comparison that each individual can make with other persons, groups, neighbours, colleagues, and so on allows the perceived equity to be observed while retrospective and prospective comparisons allow perceived sustainability to be described.

The different levels of importance that each individual assigns to living aspects in (i) any person's life and (ii) one's own life, reveal respectively a component of individual's values and the individual investment in the different life's areas. The interpretation of the latter case allows individual's *internal equity*[1] and the sustainability of individual investment to be checked.

Equity and sustainability of individual living conditions can be evaluated at micro level by observing the "perceived adequacy", "perception of the future", and sense/scope of one's own life. Moreover, social capital can be explored also by describing the (interpersonal and systemic) trust expressed by each individual

The above description allows us to realize how much the subjective perspective constitutes an integral part of those concepts' definition. Consequently, the measurement of the subjective perspective represents an important component of the national progress and wellbeing's description and assessment. This explains the numerous international initiatives and events revealing the increased attention on individual perception about living conditions and on subjective wellbeing in describing quality of life.

In order to obtain precise and accurate subjective indicators, it should be taken into account that measuring subjective characteristics and creating subjective data have a long tradition in the scientific field. Even if it is difficult to assess its measurement, social policies and programs need more and more data about subjective components in order to complement information concerning social, economic, and health factors, such as the degree to which a perceived need is being met and the importance of that 'perceived need' to one's overall life.

This work aims at clarifying some conceptual issues concerning subjective characteristic (such as subjective wellbeing) and unraveling some important methodological aspects and issues that should be considered in measuring subjective characteristics and creating subjective data and indicators.

Conceptual Definition: Subjective Dimensions and Characteristics

Traditionally, "subjective dimensions and characteristics" can be distinguished in three content areas (Nunnally 1978):

- **abilities**, that concern the capacity in performing different tasks (*performance*, that is evaluated with reference to specified criteria); the abilities can be intellectual (usually thought of as those forms of abilities that are important for scholarly accomplishment and scientific work) or special (usually thought to be important for mechanical skills, artistic pursuits, and physical adroitness); among the abilities we can mention the verbal comprehension and fluency, the numerical facility, the reasoning (deductive and inductive), the ability to seeing relationships, the memory (rote, visual, meaningful, etc.), the special orientation, the perceptual speed;
- **personality traits**, that can be defined as the psychological characteristics that determine the organizational principles and that reflects the way through which an individual reacts to the environment (*locus of control*, ego, introversion, self-esteem, identification, etc.); in this perspective, some overlapping categories can be identified:

[1] Internal equity is differentiated from external equity, described by comparing groups' distributions (identified by gender, age, or other grouping variables).

  - *social traits*, represented by the characteristic behavior of individuals with respect to other people; typical social traits are honesty, gregariousness, shyness, dominance, humor, social responsibility, religiosity, charity;
  - *motives*, concerning individual characteristics aimed at reaching a certain goal and satisfying personal non-biological "needs" and "drives" (affiliation, aggression, achievement, and hostility)[2];
  - *personal conceptions*, concerning the way in which the individual interacts with the social and material environment; i.e., a subject can (a) view other people as basically friendly or hostile, (b) believe that getting ahead in life depends more on luck, (c) believe important to plan personal goals on a long-range; etc.;
  - *adjustment*, concerning the relative freedom from emotional distress and/or socially disruptive behavior; this trait is strongly connected to the others (i.e., a hostile social trait makes the individual less adjustable);
  - *personality dynamics*, that consist of organizational principles whereby the above four types of traits are "put together" (i.e., the identification with various role models);
- **sentiments**, generic terms referring to feelings, opinions, evaluations and judgments:
  - *interests*, concerning the preferences for particular activities;
  - *values*, concerning preferences for "life goals" and "ways of life"; actually, the term "value" refers to a wide range of contents, from intellectual aspects of life to more abstracts values regarding goals of self-attainment;
  - *attitudes*, concerning the individual feelings of like and dislike for particular objects; traditionally, attitudes are defined as composed by three components:
    - cognitive (beliefs), important component even though not easy to be defined, concerning the way whereby the individual judges the social and material environment (**evaluations**); so, it refers also to the **opinions** that an individual has with reference to particular objects (physical objects, type of people, politics, social institutions, policies, etc.); with reference to wellbeing, this component refers to cognitive evaluation of one's own life – job, study, family, relationships, etc. – (level of **satisfaction** with dimensions of individual life)
    - affective, reflecting emotional feelings, perceptions and self-descriptions of an individual with reference to particular objects (e.g., professional role); with reference to wellbeing, it reference to emotional states, like **happiness**);
    - behavioural (actual actions), reflecting the behavioural tendencies of an individual with reference to a certain object, the *intentions* can be included in this component, thought as actions or behaviours that the individual plans and will execute in the future.

Of course, the scheme is not exhaustive and the different identified components for each area can overlap one another.

[2] Concerning this, we can mention that Abraham H. Maslow in 1954 in his work *Motivation and Personality* defined hierarchy of needs; Maslow postulated that needs are arranged in a hierarchy in terms of their potency. Although all needs are instinctive, some are more powerful than others. The lower the need is in the pyramid, the more powerful it is. The higher the need is in the pyramid, the weaker and more distinctly human it is. The lower, or basic, needs on the pyramid are similar to those possessed by non-human animals, but only humans possess the higher needs.

Subjective Components in Measuring Nation's Progress and Wellbeing

Subjective Components of Wellbeing

Individual Wellbeing (*Quality of Life*)

The notion of *quality of life* is complex and multidimensional. Wolfgang Zapf (1975, 1984)

proposed a model with two main macro components/dimensions, which in turn find subsequent sub-dimensions

(i) *living conditions* referring to outcomes, resources and capabilities, external circumstances, subjective evaluations
(ii) *subjective wellbeing*, cognitive and affective components, positive and negative components.

Living conditions

The relevant aspects of *living conditions* refer to outcomes, resources and capabilities, external circumstances, subjective evaluations. They can mainly be distinguished in objective living conditions and subjective evaluation of living conditions, observed, respectively, through objective and subjective measures and indicators.[3] For example, concept of "security" can be seen in objective terms but also in its dynamics related to subjective perceptions.

Objective living conditions relate to the different (personal and social) domains which each individual is involved in. In other words, objective living conditions refer mainly to material resources, standards of living, working conditions and status, state of health, individual status, social relationships, and freedom to choose one's lifestyle. Objective indicators allow each aspect of living conditions to be evaluated. Their specificity is in the possibility to define and recognize external objective references. In other words, they are *verifiable*.

The subjective evaluation of living conditions can concern different dimensions, like self-determination (expressed in terms of perceived autonomy), spirit of initiative (in the meaning of capacity/possibility to contribute to building common wellbeing), sense/scope of in one's own life, perceived adequacy.

Subjective wellbeing

The idea that observing subjective wellbeing has a high informative and analytic value is widely acquired. Perceptions and evaluations influence the way persons face life and benefit from opportunities. In other words, considering subjective wellbeing among the conceptual dimensions of the general wellbeing allows attention to be oriented towards a component of the quality of life which is the result of the individuals' evaluation of living conditions, opportunities, preferences, expectations and adaptations (Eurofound 2005)

In this perspective, information on subjective wellbeing can usefully complete other objective information by allowing divergences between what persons perceive and what is objectively observed to be evaluated (Diener and Seligman 2004).

One of the most accepted and adopted definitions of *subjective wellbeing* conceives it as a composite construct described by two distinct components, cognitive and affective (Diener 1984).[4]

The cognitive component is related to the process through which each individual retrospectively evaluate (in terms of "satisfaction") her/his life, as a whole or in different domains. The subjective evaluation is made by taking into account personal standard (expectations, desires, ideals, experiences, etc.). Consequently, the level of satisfaction is expressed as a function of the reached objective, fulfilled ambitions, comparing ideals, experiences, other persons. In other words, satisfaction with life is the result of a cognitive process, allowing the individual to evaluate her/his present situation with reference to *standards* (Nuvolati 2002) individually defined.

The affective component refers to the emotions experimented by individuals during their daily lives and relates to the individuals' present situation. The emotions can be positive

[3] Any approach highlights how defining a group of characteristics concerning individuals' life is important. They should be "intrinsically as objective expressions of a good life, or instrumentally, to achieve valuable subjective states or other objective goals" (Stiglitz et al. 2009) and should allow people to have resources. The possibility to adequately exploit opportunities contributes to the betterment of quality of life.

[4] This definition has been adopted by OECD's Factbook: http://lysander.sourceoecd.org/vl=8034723/cl=21/nw= 1/rpsv/factbook2009/11/02/02/index.htm

(*pleasant affects*) or negative (*unpleasant affects*), which are considered conceptually distinct and influenced by different variables (Bradburn 1969; Diener and Emmons 1984; Argyle 1987).[5] Observing this component is particularly important since it allows us to obtain information about the temperamental structure used by each individual in facing the everyday life.[6]

The combination of the two components allows subjective wellbeing to be assessed. Some authors proved that individual choices in the long term are influenced by both components (Kahneman and Krueger 2006).

Summarizing, the concept of subjective wellbeing can be framed through the following dimensions:

- "cognitive" dimension
  - satisfaction with life as a whole
  - satisfaction with different life domains[7]
- "affective" dimension
  - positive *affect* (happiness, serenity, etc.)
  - negative *affect* (concern, anxiety, stress, etc.)
  - *affect* related to particular situations or activities (family, work, etc.).

Community Wellbeing

From the general point of view societal wellbeing involves dimensions like economic and social cohesion, integration of individuals and groups, social connection and social ties (social capital), referring to dimensions observed at both macro and micro level:

- social and political activities and engagements (associations, organizations, . . .),
- participation (social and political activities and engagements in associations, organizations, . . .)
- performance of societal institutions
- quality of relations (e.g., shared values, conflicts, solidarity),
- social relations (informal networks)
- quality of relations (e.g., shared values, conflicts, solidarity)
- trust in institutions

The subjective aspects of societal wellbeing can be outlined in the following way:

- *Expressed interpersonal trust (*trust in family, relatives, friends, neighbours, colleagues, other social groups, . . .)
- *Expressed systemic trust* (trust in State, national government, parliament, politics, institutional figures, public administration, political parties, judiciary system, the police, public education system, public health system, financial and credit system, enterprises, media/information system, associations, international organizations, European Union, European Commission, European Parliament, religious organizations, etc.)
- *Perceived sense of belonging* (*identity*) to one's town, region, country, etc.
- *Perceived social exclusion*: weather one feels or not to be part of the society
- *Perceived solidarity*: ones' consideration/concern for other social groups' living conditions (neighbours, elderly people, the unemployed, immigrants, the disabled)

[5] A particular attention should be devoted to the term "happiness", which assumes different meanings according to different authors. Many scholars refer "happiness" to the affective component of subjective wellbeing (Nuvolati 2002; Diener et al. 2008). Others consider happiness as a synonymous of life satisfaction Veenhoven (1994).

Besides the different conceptual views, the statistical evidences can tell different stories. The highest rank correlation value between "*how satisfied with life as a whole*" and "*how happy are you*" by country in round 4 of European Social Survey data is 0.6 (registered for the United Kingdom sample), revealing not only that the two components are not coinciding but also that a linguistic problem underlies the definition of happiness. Just an example concerning that. The "happiness" (one of the dimensions of subjective wellbeing) is translated if Italian "felicità". Actually, if we look at the linguistic roots of them we could realize that they are dealing with two different world, since the former comes from "to happen" and latter from "chance".

[6] According to some authors, like Veenhoven, affects' determinants are universal and consequently not produced by individual response-styles or cultural differences.

[7] One of the first attempts aimed at identifying the more relevant life domains is Andrews and Withey's study (1976). By admitting that individual *concerns* can be infinite, they focus on those domains which seem to be relevant and meaningful for individuals and their quality of life. Different studies identify different lists of domains, even very different from each other (e.g., *Extended Satisfaction with life scale*, Allison et al. 1991).

Subjective Components of Equity

The concept of *equity* refers to the distribution of wellbeing. In this sense, it could be referred to concepts like *social inclusion/exclusion, disparities and inequalities*, related to welfare's distribution within a society and assessed by checking

- inequalities among individuals, groups, societies (women and men, generations, social strata, disabled, races, citizenship groups, . . .),
- regional disparities.

However, it is possible to identify the equity dimension also at individual level (wellbeing distribution within each individual).

Consequently, we could identify two levels of equity, (i) *external*, observed by comparing different social groups (identified through different perspectives, age, gender, and so on), and *internal*, referable to the balance among the different life aspects in each individual.

External equity could be assessed in terms of individual perceptions. The perceived equity can be referred to subjective evaluations expressed with reference to different levels and living conditions and contexts. For example:

- *Perceived equity/inequality in living conditions by comparing one's conditions with reference persons' conditions* (better or worse)
- *Perceived equity/inequality in living conditions by comparing one's conditions with other social groups' conditions* (better or worse)

A possible (even though disputable) evaluating perspective of *internal equity* is the adopting the concept of symmetry of the investment among the different life domains. Individual can express the importance of different life domains with reference to (i) any individual life and (ii) his/her own life. While in the former case, the expression of individual structure of values is explored, in the latter case, the individual "investment" in different life domains is observed. The "investments" can be interpreted in terms of internal equity.[8]

[8] Actually, this measure could be interpreted also in terms of sustainability of investments at individual level.

Subjective Aspects of Sustainability

The relationship between the previous two conceptual dimensions and the **limit** in their development and promotion – with reference to time and space perspective – leads directly to the concept of **sustainability**.

In particular, it refers to the possible erosion/durability of those conditions with reference to present generations' future and future generations.[9]

In this perspective, sustainability can be defined by referring to the capitals which should be preserved (five dimensions) and to two perspectives (Table 37.1)[10]:

It is widely accepted that wellbeing and sustainability cannot be represented by the same indicators and that sustainability indicators should concern the monitoring of the different capitals, economic, human, social and natural (Stiglitz et al. 2009; Giovannini et al. 2012).

As the previous concepts, also sustainability can be assessed from the subjective point of view by considering, in particular, retrospective comparisons and prospective evaluations:

- *Perceived sustainability in terms of expectations*:
  - present one's living conditions in comparison with future ones (improvement/worsening)
  - present nation's conditions in comparison with future ones (improvement/worsening)
- *Expectations in one's level of standard of living* (improvement/worsening)

[9] An example: any attempt aimed at improving connections between cities (in terms of travelling time) faces limits. Time spent to go from one city to another can be reduced thanks to new technologies and improvements of territorial structures. However, the commuting time that can be reduced should be balanced with the capitals (such as the territory) that needed to be consumed and sacrificed for that reduction. In other words, the question to be put is: what is the price to be paid in order to reduce the commuting time also few minutes? Maybe, the technological efforts could be oriented towards how to reduce the amount of people that need to commute each day . . .

[10] According to the World Bank's four capital approach, for example, sustainable development should enhance and preserve social, human, produced and natural capital of present generations and provide future generations with them.

Table 37.1 The "sustainability" concept: dimensions and perspectives

Dimensions of sustainability →		Perspectives of sustainability ↓		← Level of observation
		Present generations' …	Future generations' …	
	Physical	…behaviours affecting individual health		Micro
	Social	…behaviours affecting social relations and networks		Micro & macro
	Economic	…processes affecting welfare		Micro & macro
	Human	…processes affecting individual skills, training, education, health		Micro
	Natural	…processes affecting the eco-system and natural resources		Macro

Life Domains

Life domains represent segments of the reality in which the relevant concepts and their dimensions should be observed, monitored and assessed. The thematic areas refer to the individual, family, territorial, societal ambits in which each individual lives.

They typically can be households and families, income and standard of living, housing; health, transport, environment, leisure and culture, social security, crime and safety, education, labor market, working condition, and so on.

Actually, a shared list of domains showing explicit priority does not exist, also because the list strictly depends on value judgments, valid and acceptable in a certain place or time (Noll 2004). However, many scholars noticed that many domains recur in empirical studies (Felce and Perry 1995; Nuvolati 1997; Johansson 2002; Stiglitz et al. 2009), highlighting how human conditions lead individuals to face challenges that are common all over the world and that require collective solutions. Generally, the differences concern the importance assigned to each domain.

Indicators

Investigating different aspects related to subjective wellbeing as well as to other subjective or objective dimensions, requires the definition of basic indicators representing what is actually measured with reference to the corresponding dimension.

The **indicators** represent the observable elements to be defined for each conceptual dimension and each domain.

Subjective indicators aim at measuring and quantifying individual components involving different elements – as conscience, cognition, emotion, attitude, and opinion – that are related to contingent and mutable situations.

Creating subjective indicators requires a delicate process allowing subjective data to be collected through surveys by selecting the more appropriate procedures of data collection and, subsequently, data analysis. Each basic subjective indicator is defined by an **item**, represented by the question to be submitted and the corresponding response scale. In this perspective, it is important to pay particular attention to item construction For example, scaling techniques affect enormously the quality of data. This means that:

- all the interviewed people have to clearly and univocally share the meaning of the scale,
- the adequate analytical approach has to be identified.

With reference to the former issue, *label scales* show undoubted advantages, while *rating scales* (e.g., from 0 to 10) show ambiguities in their meaning but allow different analytical approaches.

Selecting Indicators: Criteria

Different issues need to be addressed in order to select and manage indicators, especially when this is carried out in a complex system allowing the accomplishment of functions like monitoring,

reporting and accounting. Michalos (in Sirgy et al. 2006) identified fifteen different issues related to the combination of social, economic, and environmental indicators. As Michalos asserts, the issues collectively yield over 200,000 possible combinations representing at least that many different kinds of systems (Sirgy et al. 2006):

- Settlement/aggregation area sizes, e.g., the best size to understand air pollution may be different from the best size to understand crime.
- Time frames, e.g., the optimal duration to understand resource depletion may be different from the optimal duration to understand the impact of sanitation changes.
- Population composition, e.g., analyses by language, sex, age, education, ethnic background, income, etc. may reveal or conceal different things.
- Domains of life composition, e.g., different domains like health, job, family life, housing, etc. give different views and suggest different agendas for action.
- Objective versus subjective indicators. e.g., relatively subjective appraisals of housing and neighborhoods by actual dwellers may be very different from relatively objective appraisals by "experts".
- Positive versus negative indicators. Negative indicators seem to be easier to craft for some domains, which may create a biased assessment, e.g., in the health domain measures of morbidity and mortality may crowd out positive measures of wellbeing.
- Input versus output indicators, e.g., expenditures on teachers and school facilities may give a very different view of the quality of an education system from that based on student performance on standardized tests.
- Benefits and costs, different measures of value or worth yield different overall evaluations as well as different evaluations for different people, e.g., the market value of child care is far below the personal, social or human value of having children well cared for.
- Measurement scales: e.g., different measures provide different views of people's wellbeing and relate differently to other measures.
- Report writers: e.g., different stakeholders often have very different views about what is important to be monitored and how to evaluate whatever is monitored.
- Report readers: e.g., different target audiences need different reporting media and/or formats.
- Conceptual model: e.g., once indicators are selected, they must be combined or aggregated somehow in order to get a coherent story or view.
- Distributions: e.g., because average figures can conceal extraordinary and perhaps unacceptable variation, choices must be made about appropriate representations of distributions.
- Distance impacts: e.g., people living in one place may access facilities (hospitals, schools, theatres, museums, libraries) in many other places at varying distances from their place of residence.
- Causal relations. Before intervention, one must know what causes what, which requires relatively mainstream scientific research and, which may not yet be available.

Choices and options selected for each issue have implications for the other issues. The issues are not mutually exclusive and are not expected to be exhaustive as other can be identified.

Dealing with these issues is merely a technical problem to be solved by statisticians or information scientists. On the other hand, the construction of indicators of wellbeing and quality of life is essentially a political and philosophical exercise, and its ultimate success or failure depends on the negotiations involved in creating and disseminating the indicators, or the reports or accounts that use those indicators (Michalos, in Sirgy et al. 2006).

Within a system, we also consider the difficulties related to the availability of indicators (across time and space) and in harmonizing different data sources and levels of observation.

Table 37.2 Indicators' Conceptual Matrix (ICM): an example referring to subjective aspects of nation's wellbeing

Concepts	Subjective dimensions			Life domains (*)											
↓	↓			1	2	3	4	5	6	7	8	9	10	11	12	13
Wellbeing	Individual level (quality of life)	Subjective evaluation of living conditions														
		Subjective wellbeing	Cognitive													
			affective													
	Societal level	Social cohesion and social capital	Trust													
			Identity													
			Solidarity													
			...													
Equity	Distributions of wellbeing's perceptions and evaluations among groups		Age													
			Gender													
			...													
	Perceived inequalities in living conditions compared with		Other persons													
			Other group													
			...													
Sustainability	Expectations		In individual living conditions													
			In general situation													
			In subjective wellbeing													
			...													

(*) Life domains:
1 households and families, *2* housing, *3* transport, *4* leisure and culture, *5* participation standard of living, *6* education, *7* labor market and working condition, *8* Income and, *9* health, *10* environment, *11* social security, *12* crime and safety, *13* total life situation

Indicators' Conceptual Matrix (ICM)

The process allowing for the construction of indicators leads to a conceptual matrix in which each raw represents a conceptual dimension/sub-dimension, while each column represents a life domain. Indicators are made concrete in each cell. Each combination raw/column does not necessarily can be observed through indicators. Table 37.2 represents the Indicators' Conceptual Matrix (ICM) referring to the previous description of possible subjective aspects.

In an ICM, not each combination of conceptual dimension and domain (*cell*) will necessarily be covered by indicators.

Moreover, according to a simple (as well as weak) strategy, each cell can be covered by a single indicator (*single-indicator approach*). This strategy, undoubtedly thrifty and functional, requires the adoption of robust assumptions concerning the possibility of measuring one dimension (with reference to one domain) with just one indicator. Such an assumption carries some risk since each single indicator can produce a wide and considerable amount of error related to:

(a) *precision* (*reliability*), since the measurement through one single indicator is strongly affected by random error;
(b) *accuracy* (*validity*), since the chance that one single indicator can describe one conceptual dimension is highly dubious and questionable;
(c) *relationship* with the other dimensions;
(d) *capacity of discriminating* and *differentiating* among observed cases.

Consequently, the adoption of several indicators (*multi-indicator approach*) for each conceptual dimension is desirable. This approach

allows the problems produced by single-indicator approach to be avoided or, at least, reduced. In fact, multiple measures allow the characteristic to be measured with more precision and accuracy[11] and with more discriminant capacity.

Synthesis of Indicators

The systematic identification of basic indicators, identified with reference to concepts and domains, allows a downright "system of indicators" to be constructed (more complex than a simple "set of indicators", which are not always related to a conceptual framework).

Consistent application of the hierarchical design produces a complex structure.

In order to obtain a meaningful and interpretable picture, data should be managed in some way. In other words, the system of indicators may require the indicators to be reduced in order to allow more comprehensive measures. This issue is referred as *reductionism*. Reductionism cannot be avoided, since it is actually impossible to pull an image and a story from a pure observation of the reality and completely grounded on it. On the other hand, it is dangerous to concentrate on just a few elements and statistically infer from them the sufficiency of the reduced observation.

Reductionism applied to indicators can find essentially two solutions: (i) reducing the number of indicators, (ii) synthesizing indicators.

The former approach needs a solid conceptual support. From the statistical point of view, the only evidence supporting the exclusion of one between two indicators is correlation. A high correlation between two indicators allows us to consider just one of them, assuming that indicators showing high correlation are actually measuring the same concept's component. However, this assumption is not necessary always true. The degree of freedom for such decisions is in the reality: The relationship between two indicators (e.g., number of firemen and amount of damages in a fire) can be high but mediated by a third one (e.g., dimension of the fire). If the nature of the third indicator changes, the relationship between the other two indicators changes or disappears, even though they will continue to describe, autonomously, the reality. If, by observing the previous high correlation, we excluded one of the two indicators, doing without one of them could deny ourselves precious pieces of the whole picture (as represented by the indicators). This means that having a solid conceptual model allow indicators concepts' relationships to be identified and interpreted.

The latter approach consists in combining the indicators in a meaningful way.

From the methodological point of view, synthesis concerns different aspects of the system (Maggino 2009) and needs different analytical procedures.

(i) **Aggregation of units** (cases, subjects, etc.). This aggregation aims at mainly comparing macro units (social groups, age groups, geographic areas), with reference to [synthetic or not] indicators, as defined in the monitoring perspectives. This kind of synthesis is generally accomplished by applying statistical instruments (e.g., average), very simple even though unsatisfying since they do not allow the phenomenon's distribution to be correctly represented and synthesized. A possible (not necessarily the best) solution is to report, for example, the percentage of a subgroup or a dispersion index (standard deviation or interquartile range).

(ii) **Synthesis of basic indicators**
   1. **at micro level** (individual level)
   2. **at macro level** (regional, national, group level)

The synthesis can be achieved through **different perspectives**:

- For each uni-dimensional variable
  - **For a single domain** (e.g., satisfaction at work) → reflective approach

[11] In particular, the basic indicators defined in multi-indicator approach are considered *multiple measures*, since they are assumed to cover the conceptual dimension's variability.

  - **Across domains** (e.g., life satisfaction → all domains) → formative approach
- For each multidimensional variable
  - **For a single domain** (e.g., subjective wellbeing at work) → difficult to manage in interpretative and technical terms
  - **Across domains** (e.g., subjective wellbeing → all domains) → difficult to manage in interpretative and technical terms
- Across variables
  - **For a single domain** (e.g., work → all concepts) → impossible to manage in interpretative and technical terms

From the **technical point of view**, synthesis can be faced through different approaches:

- Aggregative-compensative approaches:
  - Based on correlations (reflective approach): in the presence of high correlations (difficult to observe), the indicators can be aggregated and the aggregated score is easily interpretable
  - Based on weights (formative approach): in this case, not-correlated indicators are preferable however are difficult to interpret with reference to the concept, which turns out to have a normative meaning.

  Aggregation of indicators should take into account the nature of indicators (Maggino 2009) which can be:
  - **reflective**, when indicators are function are seen as functions of the latent variable
  - **formative**, when indicators are viewed as causing – rather than being caused by – the latent variable

  Reflective indicators are linearly related and interchangeable (the removal of an indicator does not change the essential nature of the underlying construct).
- Non-aggregative synthetic approaches, based upon discrete mathematics

Aggregative approaches require applying the following procedure (Nardo et al., 2005):

1. Decision about the level of aggregation (*micro*/*macro level*)

   At what level synthesis should be performed first is not a trivial issue. It depends on the meaning that should have the final aggregation. An example could help in illustrating the different meaning of syntheses accomplished through different sequences.

   The affective component of subjective wellbeing is observed by collecting at individual level data concerning both positive and negative affects. Generally, the synthetic indicator, performed at individual level, is represented by the *affect balance*, defined as the difference between positive *affect*s and negative *affects*. Actually, even though the difference can be obtained also at macro level and since the obtained indicator should tell something related to the affective component of subjective wellbeing, the synthesis should be performed at micro level.
2. Checking the dimensionality of the indicators to be aggregated (*dimensional analysis*): this step allow testing the model of measurement and the level of complexity of the concept measured by the indicators, in order to evaluate the approach to synthesis.

   Highly correlated indicators reveal a reflective model, in which:
   - correlations between indicators, can be interpreted only by the presence of latent variables
   - two uncorrelated indicators cannot measure the same construct
   - each indicator has an error term

   The statistical evidence allowing the aggregation of reflective indicators is **internal consistency**.

   In case of formative model, highly correlated indicators reveal redundancy among them. In fact, according to the formative approach:
   - indicators are not interchangeable (omitting an indicator is omitting part of the construct)
   - two uncorrelated indicators can serve as meaningful indicators of the same construct (internal consistency is not important)
   - indicators have no error term
3. Defining the importance of each indicator in measuring the conceptual dimension (*weighting criteria*)

   Defining the importance of indicators requires some decisions to be adopted:

- proportional size of weights (equal or differential weighting)
- approach to obtaining weights (objective or subjective)
- level for obtaining and applying weights (individual or group)

4. Identifying the proper technique for aggregating indicators (*aggregation technique*)
   According to the criteria allowing the proper aggregation technique to be chosen, the technique:
   - admits or does not admit compensability among indicators
   - requires or does not require comparability (with reference to nature of data) among indicators
   - requires or does not require homogeneity in indicators' level of measurement

Step 3 and 4 are characteristic of formative indicators.

Non-aggregative approaches allow indicators to be assessed in a multidimensional ordinal setting by:

- Respecting the ordinal nature of the data
- Avoiding any aggregation among indicators (i.e., no composite is computed)
- Producing a synthetic index

In this perspective, the main tool refers to the Partial Order Theory (Fattore et al., 2011, 2012).

Non-aggregative approaches are focus not on dimensions but on "profiles", which are combinations of ordinal scores, describing the "status" of an individual. The profiles are mathematically described and analyzed through Partially Ordered Set (Poset) Theory, instead of using classical linear algebra tools (variances, correlations, . . .).

Benchmarks

The identification of the indicators should be accompanied by the identification of the benchmark for each indicator or the point to be monitored.

A benchmark serves as a reference point in determining the current situation or position relative to the stated objective. In this perspective, a benchmark establishes the point from which measurements can be made. Indicators identify what will be measured.

The reference point could be represented by specific best practices or by comparison of current performance with previous performance and desired norms.

Benchmarking is the systematic process, which is useful for monitoring and securing continual improvement. It[12] allows priorities to be established, better practices to be defined, impacts to be evaluated, and awareness among the stakeholders to be aroused.

The benchmark value is not always easy to be identified and requires a consensus not easy to be reached.

However, it is really difficult to state benchmark with reference to subjective wellbeing indicators. What can be actually done is to identify a reference group (e.g., percentage of people with a high level of satisfaction with life as a whole).

Actually, the benchmark, interpreted in terms of reference point, can assume different shapes (Śleszyński 2012):

- genuine reference point (or critical value): it represents a quantitative information established thanks to the scientific research;
- signpost arrow; it represents a guideline/direction for actions ("*go this way*");
- best practice, representing a model to be followed;
- goals, defined though a consensual process (policy level, public opinion, etc.), from cultural paradigms, normative demands, expert groups' pressure, shared wishful ideas.

Interpretative and Explanatory Models of Subjective Wellbeing

Measuring subjective aspects needs many elements to be considered and requires an interdisciplinary approach, able to consider and

[12] The use of benchmarks plays an important role in the ambit of a program development. Used in combination with the program objectives they provide the basis for program accountability.

understand the different levels at which each individual react.

With reference to subjective wellbeing, the different levels involve personality, values, interests, motivations, intellectual and expressive dispositions, memory, experiences, social attitudes as a member of a limited group or of a community, and so on. The frame is complicated also by the possible interaction between the different levels, as it is very simply exemplified in Fig. 37.1.

Consequently, in order to understand the whole picture described by the information concerning the subjective wellbeing, it is important to have interpretative and explanatory models.

Since the 1960s, several researches and studies deepened different approaches in measuring subjective wellbeing (Cantril 1965; Bradburn 1969; Campbell et al. 1976; Andrews and Withey 1976). However, in the field of political sciences, the interest was concentrated on objective measures as policy makers' instrument.

The skepticism towards this component is related to the lack of any external reference allowing subjective aspects (motivations, satisfaction, and opinions) to be assessed. Moreover, the subjective components' change over time makes difficult to assess their reliability and validity.

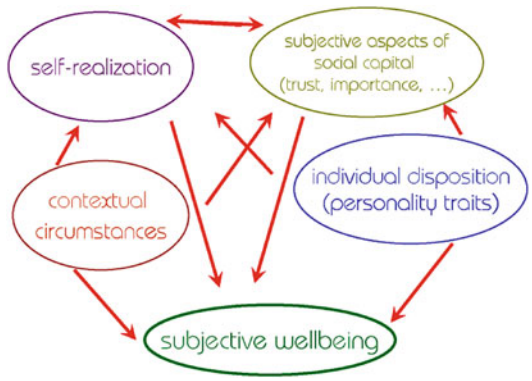

Fig. 37.1 Aspects interacting and explaining subjective wellbeing: an example

While the pioneer researches stated the stability of subjective wellbeing (Andrews and Withey 1976; Campbell et al. 1976), more recently, some researchers tried to identify empirical evidences of that stability (Diener 1984, 1994; Veenhoven 1984; Argyle 1987; Diener and Larsen 1993), by also identifying, as we have seen (*mixed causal model: up-down approach*), two different components in explaining subjective wellbeing, a long-period component (top-down effect), represented by the personal disposition, and a short-period component (bottom-up effect), represented by satisfaction related to circumstances.

In particular, while daily fluctuations of individual mood exist (affective component), the cognitive component is quite stable on the average. According to some authors, this stability can be explained by individual disposition toward life (Andrews and Robinson 1991).

In this perspective, we should take into account that subjective wellbeing is subjected to continuous reflections in different fields (psychology, sociology, and economics). The main approaches, aimed at giving a definition and subsequent explanation to subjective wellbeing, refer to (a) personality traits, (b) evaluations and values, or (c) feelings and emotions, or (d) perceptions and functionings (Sirgy 2011). Generally, psychologists include in subjective wellbeing's definition also abilities/capacities while sociologists and economists consider them just conditions (Fischer 2009).

The interpretative and explanatory models allow determinants of subjective wellbeing to be identified. This is important especially if the obtained information allow subsequent policy intervention to be discussed and planned. The different ways through which the relationship between living conditions and subjective wellbeing is defined relate to different conceptualization of quality of life.

Personality traits

- ***Propensity model*** **(Top-down approach)**. According to the **disposition theory** (Kozma et al. 1990), subjective wellbeing does not depend on living conditions but depends on stable individual characteristics (personality traits). For this reason, subjective wellbeing is not produced by the combination of perceptions in different domains. In other words, the relationship between subjective wellbeing as a whole and satisfaction in different domains is definable not in causal terms but in inferential terms (subjective wellbeing helps in obtaining success in different domains; Lyubomirsky et al. 2005). Consequently, the approach pays a special attention on **individual traits**. Different versions of this approach were defined (*Costa-McCrae* in 1980, *Abbey-Andrews* in 1985).

Evaluations and values

- ***Reactivity Model*** **(Bottom-up approach)**. According to this approach, subjective wellbeing is quantified by the sum of the reactive measures with reference to the defined domains. Overall global evaluations of life satisfaction are a **function of evaluations** made in various life domains such as family life, social life, leisure life, financial life, community life, spiritual life, and so on. In other words, evaluations of life domains (especially important ones) influence the evaluation of life overall.
- ***Social judgment theory***. Social judgment theory posits that people do make judgments about their life overall or certain aspects of their lives (e.g., community wellbeing) using some references (or standards of comparison). Different approaches refer to this theory.
  - **Comparison approach** ("Michigan model"): subjective wellbeing is not directly related to objective components or individual living conditions but is based upon the comparison between individual conditions and a series of (actual or ideal) standards (Easterlin 1974). The comparison can be made at different levels:
    - social level, when comparisons are made between different social entities (social groups, populations, countries, etc.)
    - lifetime level, when comparison are made at individual level and related to individual experiences

		Domains of comparison				
		Housing	Work	Family	Friends	...
Standards of comparison	Previous experiences					
	With other people					
	With aspirations					

This approach is based upon the following postulates

- subjective wellbeing results from the (more or less mindful) comparison with ideal life *standards*. The smaller the perceived gap between individuals' aspirations and their reality, the higher their subjective wellbeing;
- the *standards* are relative and subjected to adjustments along time, in case of improvement of living conditions, they get higher and vice versa;
- the *standards* are arbitrary since are individual construction.

This approach can be considered as a fundamental step in defining a method finalized to the evaluation of subjective wellbeing based upon perceived differences (Andrews and Withey 1976; Campbell et al. 1976), particularly between aspirations and realizations. It registered approval but also criticism, since its definition describes the evaluation of subjective wellbeing exclusively in cognitive terms and excludes the affective component.

- **Multiple discrepancies approach**. The previous approach found successive modifications especially thanks to Michalos (1985), who formulates the *Multiple Discrepancies Theory* (MDT). In particular, Michalos introduces the concept of gap (*discrepancy*) between expectations and aspirations (*achievement gap*). According to this theory, subjective wellbeing represents (is function of) the perceived gap between what one has and wants, and relevant others have, the best one has had

in the past, expected to have, expected to deserve, and expected with reference to needs. The gap is observed with reference to different domains (health, finances, family, job, friendships, housing, recreation, religion, transportation, and so on). In this context, happiness is considered an individual trait not dependent on living conditions.

- ***Purpose and meaning in life***. According to this approach, purposes and meanings that an individual has in life play a very important role in subjective wellbeing. People who are aware of what life aspects are most vital and live their lives consistently with those values are likely to experience high levels of subjective wellbeing.

Feelings and emotions

- ***Hedonic psychology* approach**. According to this approach, subjective wellbeing can best be conceptualized in terms of **momentary feelings of positive and negative affect**, captured through a variety of methods such as the immediate sampling method, end-of-day diaries, the recall-of-yesterday method, and the day-reconstruction method. These methodological approaches to capturing subjective wellbeing were initially suggested by Daniel Kahneman and his work on "objective wellbeing" (Kahneman et al. 2004).
- ***Positive/negative affect***. The determinants of positive affect of wellbeing may be different from the determinants of negative affect. Therefore, positive affect should be captured differently from negative affect (i.e., positive and negative affect are two separate dimensions and not polar opposites of the same dimension). Much research done by Diener (1984) and his colleagues have demonstrated this notion.
- ***Positive emotions theory* (Human flourishing)**. Several universal human psychological needs (e.g., competence, relatedness, and autonomy) contribute to human flourishing. **Positive feelings and positive functioning in life** produces (Keyes 2002) flourishing in life, symptom of "mental health", while the absence of mental health is languishing in life. The theory of positive emotions suggests that cultivating positive emotions is useful for building resilience to stressful events. In essence, positive emotions enhance coping behavior.

Perceptions and functionings

- ***Flow and engagement***.
  - **Traditional approach:** when individuals are acting with focused and intense involvement in an activity, they report an optimal state of mind. **Flow is a function** of the relationship between perceived challenge and the person's skill level (perception of having the necessary skill to meet the challenge).
  - **Eudaimonistic identity theory**. According to Waterman (2005), identity development is accomplished when people identify their best potentials and engage in activities that move them toward realizing those potentials. Engagement in those activities produces feelings of personal expressiveness. These feelings, in turn, reinforce the motivation that people feel to keep on engaging in those activities.
  - **Eudaimonic approach**. According to this approach, wellbeing is explained by the subjectively expressed sense of purpose in life and social engagement (Huppert and So 2009) including respectively
    - autonomy, competence, interest in learning (personal growth), goal orientation, resilience, self-acceptance
    - positive relations with others, caring, and altruism. In this perspective, also the *expressed solidarity*, definable as one's willingness to act in order to improve other social groups' living conditions (neighbours, elderly people, the unemployed, immigrants, the disabled), can be related to subjective wellbeing.

Mixed approach

- ***Moods-and-disposition* approach**. According to the *Kozma-Stones* approach (1990), subjective wellbeing is composed by two components, one expressed in terms of "reactive state" – acting in short periods

(moods) – and the other expressed in terms of "trait" (disposition). Living conditions act on the reactive state, while the trait can attenuate the effects of that impact. Happiness is considered an additive combination of the two components (and the error). The importance of this approach is mainly in having encouraged interest in personality components of wellbeing and for having contributed to explanation of wellbeing in both conceptual and measurement terms.

- ***Mixed causal model*** **(up-down approach)**. As previously examined, two different causal explanations can be defined:
  - ***bottom-up*** approach (Reactivity Model), according to which, subjective wellbeing is explained as a "reactive state" to the environment,
  - ***top-down*** approach (Propensity Model), according to which, subjective wellbeing is explained by the presence of individual stable traits (individual disposition), which determine satisfaction in single domains.[13]

  Actually, both approaches are not able to explain completely the relationships between the observed variables. This means that causal effects can emerge in both directions. The subsequent debate[14] did not allow us to identify which of the two approaches is the best explanatory description of wellbeing, and produced the proposal of bi-directional approach (***up-down***). The proposal, which found many supporters, provides for the assessment of causal effects in both directions at the same time. This approach takes into account two explanatory components, a long-period component (top-down effect), represented by personal disposition, and a short-period component (bottom-up effect), represented by satisfaction related to circumstances. The contributions to this approach have been many (Headey et al. 1991; Lance et al. 1995) also from the methodological point of view.[15]

Undoubtedly, mixed approaches allow the reality to be read by respecting the indisputable complexity even though they require composite analytical approaches.

This means that, in policy perspective, the adopted model of subjective wellbeing should consider different determinants. The possibility to identify and observe determinants allows subjective wellbeing to be (statistically) analyzed by distinguishing the weights of each of them.

In other words, the possibility to have data regarding different determinants allow the portion of variance due to each to be assessed by distinguishing those related to individual disposition and those related to contextual circumstances and objective components. Among the individual dispositions we can identify:

- individual disposition (personality traits dimension)[16]: self-esteem, perceived adequacy, perception and attitude towards the future (prospective dimension), purpose in life, self-determination (expressed in terms of perceived autonomy),
- self-realization (eudaimonic dimension): autonomy, personal growth, self-acceptance, spirit of initiative (capacity/possibility to contribute to building common wellbeing), environmental mastery,
- subjective aspects of social capital: trust (interpersonal and systemic), identity, values (importance ascribed to different life domains), positive relations with others.

Subjective aspects allow not only the level of subjective wellbeing to be explained but also the level of equity and sustainability to be evaluated with reference to individual living conditions.

[13] The first reports on the empirical evidences concerning the concept of happiness date back to Beiser in 1974 (Stones et al. 1995).

[14] This issue was debated between Veenhoven and Stones on Social Indicators Research in the 1990s.

[15] The study conducted by Mallard et al. (1997) is particularly interested regarding the application of the MDT approach, extended with analysis of causal relationships of subjective wellbeing.

[16] In many cases, the observation can be accomplished in a direct way (e.g., items) or in an "indirect" (by observing the individual response model considered estimates of subjective dispositions).

Why Should Subjective Wellbeing Be Considered by Policy?

There is an increasing interest, especially at international level, in subjective wellbeing as an instrument allowing public policies to be evaluated and assessed. Actually, while many researches urge the use of subjective indicators also in the policy context, many critics manifest their doubt about their utility.

In a policy perspective, the need to consider not only subjective wellbeing but also subjective aspects in general, arises while (i) assessing policy results and (ii) selecting policy objectives (Veenhoven 2002).

The former item concerns the need to assess if a policy has been successfully implemented (e.g., "is there perception of more security in the streets after increasing police staff?"). The latter item refers to what people desire (e.g., less air pollution, more social cultural events in the city). However, meeting citizens' desires and choices implies conciliation between different interests (stakeholders consulting).

The need to consider also citizens' subjective dimensions in the policy arises also in consideration of the limits of objective indicators (Veenhoven 2002), as reality cannot be fully reduced only to objective facts. Moreover, objective facts are measured referring to a design or a model that is "subjective" in its definition.

According to many supporters, the policy action should maximize individual happiness or subjective wellbeing. In other words, the increasing or decreasing of the synthesized level of happiness or satisfaction corresponds to a success or failure of the policy action. This stance assumes that a good society is that in which citizens feel happy.

Actually, according to other authors, happiness, even though could represent a personal goal, cannot become a policy goal.[17]

By looking more closely at the issue in policy perspective, the happiness issue seems to be also mystifying. Actually, the cognitive dimension seems to be more pertinent and relevant compared to the affective dimension (Fischer 2009), even though failing to consider individuals' sentiments is problematic since those sentiments very often lead individuals to choices aimed at improving their level of wellbeing (Gilbert 2005).

The debate does not always clarify the determinants of subjective wellbeing, which, as empirical studies showed (Noll 2013), are many and some of them cannot be object of any policy action.

An attempt in this perspective is made by Costanza et al. (2007) who reflected on the relationship between subjective wellbeing and policy by relating the concepts of (i) human needs, (ii) subjective wellbeing, and (iii) opportunities (defined in terms of four-capital approach, natural capital, produced capital, human capital and social capital). The defined model sees the relationship between subjective wellbeing and policy in terms of both input and output also and mediated by envisioning and evolving social norms:

At the same time, subjective wellbeing is influenced by human needs, while the relationships between human needs and perceived satisfaction with each of them can be affected by mental capacity, cultural context, information, education, temperament, and the like.

In this perspective, quality of life is the extent to which objective human needs are fulfilled in relation to personal or group perceptions of subjective wellbeing. In other words, quality of life can be seen as an interaction of human needs and the subjective perception of their fulfilment, as mediated by the opportunities available to meet the needs (Costanza et al. 2007).

Policy and culture help to allocate the four types of capital as a means for providing the opportunities. According to this approach, overall quality of life is a function of (i) the degree to which each identified human need is met (*fulfilment*), and (ii) the *importance* ("weight") of the need to the respondent or to the group in terms of its relative contribution to their subjective wellbeing.

By taking into account the debate, it should be realized that the identification of the two

[17] The debate is illustrate by Noll in the recent (2013) Special Issue of Social Indicators Research.

aspects – objective and subjective – represents in any case a reduction of the reality. Even if the reduction is needed for measuring reasons, it should not degenerate into a contraposition between two different "realities." The reality will be inevitably distorted by contemplating just one of the two aspects. That is because, the necessity to study and comprehend facts through the observations of different components with reference to two different perspectives of observation, traditionally classified in terms of objective and subjective components is felt in many research fields concerning social phenomena – from economics to education.

In conclusion, the reflection on subjective wellbeing measures urged also official statistics to include subjective indicators in official statistics and to define/improve surveys projects. The debate of this[18] allowed all the involved actors to point out the idea to integrate data from different sources in order to improve information availability to researchers and policy makers.

Measuring and assessing subjective wellbeing of nations should play an important role in the policy making process. However, we have to recognize the important role is also a limited role since it provides only one type of information, only one perspective of the reality, which remains complex and multifaceted.

[18] A recent event, which can be considered a further evidence of the increasing interest and the need to deepen the study of subjective wellbeing in order to study quality of life, is the workshop "Measuring subjective wellbeing: an opportunity for National Statistical Offices?". The workshop was held on July 23 and 24 2009 in Florence (Italy). It was jointly organized by the *International Society for Quality of Life Studies* (ISQOLS), OECD (in the ambit of the *Global Project* "*Measuring the Progress of Societies*") and the Italian National Institute of Statistics (ISTAT) as *Satellite Meeting* of the IX ISQOLS Conference "*Measures and goals for the progress of societies*" (Florence, July 19–23, 2009).

The workshop gathered producers and users of subjective wellbeing data and national statistical institutes' representatives and aimed at increasing the awareness of the importance of measuring subjective wellbeing in the statistical community, as the experiences of many organizations, first national statistical offices (like ISTAT), have demonstrated.

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Cultural Construal of Wellbeing – Theories and Empirical Evidence

38

Yukiko Uchida, Yuji Ogihara, and Shintaro Fukushima

Cultural Construal of Wellbeing

Most people might agree that subjective wellbeing is a subjective state because of its connection with individual situations and experiences, such as those within family, jobs, friendships, recreation, education, and the environment. It can even be connected to one's biological condition. Therefore, what constitutes subjective wellbeing can differ across individuals.

Subjective wellbeing and its universality have received considerable attention in the literature on wellbeing. A series of cross-cultural studies pointed out the importance of considering the cultural construal of wellbeing (Uchida and Ogihara 2012) since there is a sizable cultural difference in how people define wellbeing and how people pursue it. The cultural construal of wellbeing is shared within a culture and constructed through socio-cultural experiences. Once it is shared and transmitted down through generations, it then defines the way people pursue and experience wellbeing, such as when they feel happiness and unhappiness.

A number of culturally-oriented psychologists (or simply "cultural psychologists") have emphasized the critical role of culture in explaining psychological functions and behaviors. Cultural psychology investigates psychological processes such as cognition, emotion, and motivation with the assumption that these processes are socio-culturally constructed (Bruner 1990; Kitayama et al. 2007; Markus and Kitayama 1991, 2010; Shweder 1991). This perspective is different from traditional psychological studies, which define psychological phenomena as universal entities. From this perspective, culture is usually defined as a set of symbolic concepts located in patterns of ideas and practices. Markus and Kitayama (2010) noted that culture is "*. . . a stand-in for a similarly untidy and expansive set of material and symbolic concepts, such as world, environment, contexts, cultural systems, social systems, social structures, institutions, practices, policies, meanings, norms, and values, that give form and direction to behavior. Culture is not a stable set of beliefs or values that reside inside people. Instead, culture is located in the world, in patterns of ideas, practices, institutions, products and artifacts*" (p. 422).

The cultural construal of wellbeing is grounded in historically nurtured ideologies and

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Y. Uchida (✉)
Kokoro Research Center, Kyoto University, Kyoto, Japan
e-mail: yukikou@educ.kyoto-u.ac.jp

Y. Ogihara
Graduate School of Education, Kyoto University, Kyoto, Japan

S. Fukushima
Uehiro Kokoro Studies, Kokoro Research Center, Kyoto University, Kyoto, Japan

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religious ideas. For instance, the Japanese model of the self is based on interdependence (Markus and Kitayama 1991, 2010) whereby social relationships are most salient. In contrast, the European-American model of the self is defined in terms of independence, whereby individual freedom and personal rights are more salient. Consequently, we might expect considerable cross-cultural variation in the meaning of happiness and wellbeing (see reviews; Uchida and Ogihara 2012; Uchida et al. 2004).

By engaging in shared activities and practices such as education systems (e.g., via parents and schools) and rituals (e.g., traditional rituals that transmit local values and rules), each individual develops a culturally unique style of subjective wellbeing. Examples of this are East Asian (e.g., Japanese) views of wellbeing as being derived from social harmony or European American views of wellbeing as being derived from individual achievement. In this paper, we will describe psychological perspectives on the cultural construal of happiness, focusing on evidence of cross-cultural differences between East and West, based on evidence from Japan, China, Korea, Philippines, Bhutan, Canada, and the US. We will then propose how subjective wellbeing can be "collective" based on the Japanese concept of wellbeing. Finally, we will discuss how globalization or cultural change affects wellbeing and how we can achieve sustainable wellbeing worldwide.

Social Psychological Perspectives on Happiness and Wellbeing Indices

Understanding the Meaning of Happiness Rather than Doing Simple Mean Comparison

Recently, the Organization for Economic Co-operation and Development (OECD) and several nations, including the UK, France, Germany, and Japan, have attempted to measure subjective wellbeing and happiness (Better Life Index). The OECD published a report titled "How's Life" in 2011. This initiative was based on research into 11 aspects of life that are supposed to contribute to the wellbeing of people around the world. The OECD employed a "global approach" to develop a standardized measure of subjective wellbeing that could be used for policy design and evaluation across several nations.

Worldwide macro data analysis sometimes brings important information. For example, when analyzing the countries' economic situation and level of subjective wellbeing, income does play a role in the achievement of happiness ($r = .62$ across nations, Diener and Suh 2000) since basic living needs might need to be met to attain happiness. However, it has been pointed out that there are countries (such as Latin countries like Brazil, Chile, and Argentina) that have unexpectedly high subjective wellbeing for what would be predicted considering their economic situations. Diener (2000) suggested that "cultural factors" affect such phenomena.

We would like to point out that we have to be cautious in such cross-cultural comparisons. First, there are response biases (i.e., Japanese and Chinese are more likely to use the midpoint of a scale than Americans; Chen et al. 1995) and the reference group effect (i.e., people judge themselves against surrounding others; thus, individual judgment in each nation varies according to their reference point, a comparison target that is usually established by in-group members; Japanese people tend to compare their happiness with that of other people in their neighborhood, not with that of Americans; Heine et al. 2002) . Secondly, and more importantly, we have to consider that optimal happiness varies substantially across cultures.

Raw scores of happiness and life satisfaction scales in Japan are lower than in other industrialized societies (Diener et al. 1995). Japan is ranked lower in the OECD's report as well. Thus, based on this simple mean comparison, Japan could be defined as a "miserable country." This would be fine if the cause of unhappiness was precisely determined from these measures, but this is not the case in most situations. Some researchers argue that systems in Japanese society, such as implicit and explicit

rules of the workplace (e.g., long working hours and a rather hierarchical system), have a negative impact on subjective wellbeing because of collectivism and weaker motivation to protect individual human rights, such as allowing freedom. These arguments are partly true. However, this pessimistic view tends to ignore the collectively-shared concept of wellbeing in Japanese culture, which is to pursue a "moderate level" of happiness. Actually in Japan, the ideal level of happiness is not a 100 % happy situation (people estimate the ideal level to be around 75 %, according to the Cabinet Office, Government of Japan, 2012).

In the same manner, cross-cultural standardized scales are sometimes invalid when used in cultures other than the ones in which they were developed. For instance, Diener et al.'s (1985) Satisfaction with Life Scale is widely used, but it measures European-American ideas of happiness, which are based on personal achievement and attainment. Because of the inherent bias embedded in scales measuring life satisfaction, individuals within Asian cultures are sometimes judged less healthy and more emotionally distressed than are American or European individuals (e.g., Norasakkunkit and Kalick 2002).

Need for Two Indices to Evaluate Wellbeing

We propose that two types of indices are needed to evaluate wellbeing; one is a "standardized index" and the other is an "indigenous index." Standardized measurements, such as the OECD's *Better Life Index*, facilitate broad international comparisons in order to investigate which aspects contribute to happier societies. On the other hand, indigenous measurements such as Bhutan's GNH (as explained in the next section) contain multidimensional measurements that reflect Bhutan's cultural and religious ideas and orientations. Measurements are related not only to subjective wellbeing and happiness, but also to more collective and societal factors, such as community vitality, ecological resilience, and good governance (Center for Bhutan Studies, 2012).

Hitokoto and Uchida (2014) proposed the concept of "Interdependent Happiness" and devised an Interdependent Happiness Scale to capture the Japanese style of wellbeing by measuring its interdependent nature. A 9-item Interdependent Happiness Scale (IHS) was developed to measure how individuals feel happiness by being relationally oriented (e.g., "I make significant others happy"), quiescent (e.g., "although it is quite average, I live a stable life") and ordinary (e.g., "I believe my life is just as happy as that of others around me"). Interdependent happiness is more likely to be relevant in cultural contexts where overall subjective wellbeing is maintained by harmonious relationships with one's significant others. This perspective is incorporated to give a new light on the collective happiness that is prevalent in Japan and other interdependently oriented societies. These culturally-oriented measurements are necessary because they are used not only for comparison but to attempt to investigate culturally specific factors important for predicting happiness within each society. In both cases (cross-cultural comparisons and indigenous investigations), we should consider a cultural construal of wellbeing, given that subjective evaluations of wellbeing are mostly influenced by cultural meanings and values within each nation. Recognition of this point is crucial to avoid simplified comparisons such as "which country is happier than others," which neglect differences in important cultural values.

From the outcome of the measurement, we should consider what components constitute wellbeing in each society rather than using simple mean comparisons to make happiness ranking, given the difference of each cultural context. Happiness equations should differ across cultures based on the shared values of a given society, and such cultural differences will give us the rich information to understand wellbeing in each context and to improve the situation for actualizing higher wellbeing.

Therefore, it is helpful to use several indices, including both measures that can be used across cultures and measures that reflect the cultural

construal of happiness in a given cultural context. We believe that cultural psychological perspectives will contribute to the establishment of those two types of measurement and an understanding of wellbeing across a variety of cultural contexts.

Bhutan's GNH

Recently Bhutan's Gross National Happiness (GNH) has attracted attention from developing countries concerned about how they can "grow" their society in a way that balances material and psychological welfare, as well as from the industrialized countries that are economically developed but are seeking to increase psychological wellbeing.

Sometimes media coverage describes Bhutan as a paradisical "happy country", but that is not quite true. Their actual level of happiness is moderate, and surveys published in 2010 reported that 40.9 % are at least extensively happy and the remaining half are narrowly happy (48.7 %) or unhappy (10.4 %) (Ura et al. 2012). Rather, Bhutan is a country which thinks deeply about the wellbeing of citizens and defines wellbeing as a central and ultimate goal of the country. The government of Bhutan not only measures GNH, but it also actively uses it as a screening tool when they make political decisions so that the government can increase GNH through "decreasing the insufficiencies of not-yet-happy people" (Ura et al. 2012, p. 1).

Like other Asian cultural ideas of wellbeing, GNH defines happiness as in a holistic way. GNH measures include nine dimensions: psychological wellbeing, health, education, culture, time use, good governance, community, living standards, and ecology. The spirit of GNH includes Buddhist ideas, thus the measurement is more indigenous one. In contrast to Western analyses of subjective wellbeing, GNH would not suggest too much materialistic or mental excitement; rather, it would suggest a sense of fulfillment in life; interdependence with other people, species and nature; and peacefulness.

Japanese Wellbeing Indices

To devise valid measures of wellbeing for use at the national or local level, it is necessary to invite ideas from various fields that address how wellbeing could be achieved in a given society.

In Japan, a commission on happiness studies with the Cabinet Office discussed this issue from 2010 to 2013. The commission reached the following conclusions: (1) In order to examine the cause and consequence of wellbeing, researchers should include both subjective and objective measurements of wellbeing as well as other related factors, such as job satisfaction and relationships with family members. (2) To identify what factors constitute Japanese wellbeing, researchers should think about wellbeing in a global way, considering both cross-national comparisons and indigenous wellbeing. (3) Researchers should examine differences in happiness between life stages and use indices to develop a policy to improve the happiness of each generation. (4) To ensure that we achieve a sustainable society, we should examine wellbeing not only at the individual level but also at a collective level. In addition, we should focus on inequity within societies (Wilkinson and Pickett 2009). (5) It is important to think about the current Japanese situation regarding wellbeing after the tragic national disaster of March 11, 2011 (the Great East Japan Earthquake, see Uchida et al. 2013). Unfortunately, the commission closed in 2013, but this approach should be taken into consideration in the future.

The Cultural Construal of Wellbeing as a Collectively Shared Concept

In this section, we will review cross-cultural evidence revealing differences in (1) meanings of wellbeing across cultures and (2) predictors of wellbeing across cultures (see Table 38.1).

Table 38.1 Evidence of the cultural construal of wellbeing

Culture	View of happiness	Meaning of happiness	Socio-economic factors, social change
European and North America	Positive	Individual achievement orientation	Freedom of choice
	Incremental	Autonomy	High social mobility
	High arousal	Agency	
		Personal achievement	
		Self-esteem	
East Asia	Negative	Relationship orientation	Controversial effect of individualism under globalization
	Dialectical	Interdependent happiness	
	Low arousal	Ordinariness	
		Relationship harmony	
		Relational goal	
		Social support	

Cited from Uchida and Ogihara (2012)

The Meaning of Wellbeing: Cultural Background, Thinking Styles, and the Idea of Happiness

Recent cross-cultural evidence suggests that there are cultural variations in happiness and subjective wellbeing. It is likely that what constitutes the good and valuable in life varies substantially across cultures. In European-American cultural contexts, happiness and subjective wellbeing is defined as a positive emotional state that is typically construed as a state contingent on both personal achievement and maximized positivity of personal attributes (Myers and Diener 1995). Negative features of the self, including negative emotional states, are perceived to be a hindrance to happiness. Furthermore, a sense of happiness and subjective wellbeing is based on the incremental model: positive situations are thought to invite more positive outcomes. Individuals within these cultures are motivated to maximize the experience of positive affect. Therefore, individuals are highly motivated to find and affirm the positive aspects of themselves or their life circumstances.

On the other hand, in East Asian cultures, happiness and subjective wellbeing are based on the balance model, in which balance of happiness in social relationships (e.g., me and others) and in chronological life change (e.g., now and future) are important. People in East Asian cultures evaluate their current state of happiness by taking the ups and downs in life into account as a whole (Ji et al. 2001). If people recognize that their current state is not good enough, but they expect it to improve in the future, then their current unhappiness does not have such a negative meaning. In addition, Japanese scores on indices of happiness or wellbeing are generally quite low (6.5 on a 10 point scale) compared with those of other industrialized nations (for example, 7.4 for the U.S. and 7.8 for Canada on average; Veenhoven 2010). However, this might be partly due to the balance-oriented concept of wellbeing in Japan. As we discussed above, the commission of happiness studies in Japan (2012) found that the Japanese ideal for happiness is 7.2 (on a 10-point scale), indicating that Japanese do not seek 100 % happiness. This balance orientation is well connected to sufficiency and satisfaction within a given environmental setting; if our resources are limited and should be equally shared with others, fulfillment is more important than increment.

Based on the differences in the backgrounds of Asian cultures and European-American cultures, several studies (which include data from 38 nations) have suggested that within European-American cultures and other Western cultures (i.e., European cultures and Latin cultures), positivity and negativity are often seen as contradictory,

whereas they are seen as complementary in Asian cultures (Schimmack et al. 2002). For example, Bagozzi et al. (1999) measured the reported intensity of pleasant and unpleasant emotions and observed that these two types of emotion were negatively correlated in the United States, whereas they were positively correlated in China and Korea. Kitayama and his colleagues found the same cross-cultural differences when measuring the frequency of emotions. Similar findings have been revealed in recent studies examining cross-cultural differences in the experience of emotion (Kitayama et al. 2000, 2006). Furthermore, Miyamoto et al. (2010) found that Japanese individuals experience mixed (positive and negative) emotions more often when in a happy situation than do Americans. Additionally, this dialectical emotional experience positively predicts physical health among Japanese (Miyamoto and Ryff 2011).

The notion of dialecticism vs. bipolar emotional experiences might be related to cognitive processes, namely, changes in prediction and motivation. With regard to cognitive processes, Ji et al. (2001) presented Chinese and American participants with graphs representing either a linear or a nonlinear trend and asked participants to indicate which graph might best represent the change in their happiness over the lifespan. Chinese respondents were more likely to choose a nonlinear graph while Americans were more likely to choose a linear graph. In addition, participants were shown several points of a trend within a graph (e.g., economic performance in January and February) and then asked to predict what would happen next. The results showed that Chinese participants predicted more deviations from the initially presented trend compared to American participants. The Chinese exhibited a style of cognition referred to as a dialectic thinking style that has its root in the ancient Chinese philosophy that suggests the world we live in is never static and is always changing. Such ideas have been found to be more prevalent among East Asians relative to Americans in several studies.

Predictors of Wellbeing: Relationship Orientation vs. Personal Achievement Orientation

If a cultural construal of wellbeing differs across cultures, predictors of happiness should vary depending on each cultural context as well. Individuals within independent cultural contexts (Markus and Kitayama 1991) are motivated to maximize the experience of positive affect and to seek happiness via autonomous agency. In contrast, within East Asian cultural contexts, happiness tends to be defined in terms of interpersonal connectedness or a balance between the self and others (see Uchida et al. 2004; Uchida and Ogihara 2012 for a review). The examination of the axis between personal achievement orientation and relationship orientation is valid, and several cross-cultural studies have been conducted using this approach.

Within European-American cultural contexts, the factor that tends to be the most highly correlated with happiness is self-esteem (Campbell 1981; Diener and Diener 1995; Diener et al. 1985). Likewise, accomplishing personal goals predicts positive emotional states. For example, Taylor and Brown (1988) argued that the perception of one's positivity and effectiveness, even when it is illusory, can contribute to mental health. Other similar factors such as achievement of independent goals (Emmons 1986, 1991; Oishi and Diener 2001) and positive but non-relational emotional experiences (Kitayama et al. 2006) are strong predictors of happiness, subjective wellbeing, and life satisfaction within European-American cultural contexts.

In contrast, interpersonal factors, such as adapting to social norms and fulfilling relational obligations, tend to increase wellbeing among people within East Asian cultural contexts. For example, Suh and his colleagues (1998) have shown that positive affect enhances the feelings of happiness in North America, but it is other, more social factors (such as adapting to social norms and fulfilling relational obligations), that increase happiness in East Asia. Other factors,

such as the attainment of interpersonal goals over personal goals (Oishi and Diener 2001), positive relational emotional experiences (Kitayama et al. 2006), receiving emotional support (Uchida et al. 2008), fulfilling relational norms (Suh et al. 1998), and relational harmony (Kwan et al. 1997), are highly predictive of happiness and wellbeing among people in Asian contexts. In addition, in East Asian contexts, the importance of self-esteem is questionable. Diener and Diener (1995) investigated 31 countries and found that self-esteem is more strongly correlated with subjective wellbeing in individualistic (e.g., European–American) cultures than in collectivistic (e.g., East Asian) cultures.

Social relationships are also important within European-American cultures. For example, perceived availability of support provides a variety of beneficial effects on health and wellbeing (e.g., Cohen and Wills 1985; Uchino et al. 1996). Studies of emotional support using European–American samples describe the effects of support as they relate to self-esteem. In line with a strong emphasis on self-esteem, individuals within European–American cultures regard social relationships as an important factor in happiness because they affirm a sense of positive self-worth or self-esteem (Leary et al. 1995). On the other hand, if support fails to maintain self-esteem (i.e., feeling too dependent on others), its effect on happiness tends to deteriorate. Indeed, some studies in the United States have shown that perceived emotional support sometimes fails to have a positive effect on wellbeing and health (Bolger and Amarel 2007; Bolger et al. 1996, 2000; Fisher et al. 1982; Seidman et al. 2006). Fisher et al. (1982) reviewed a series of studies and found that recipients of support often experience negative consequences, such as feelings of failure and dependency. Similarly, invisible support might work better since it has not been shown to be harmful to self-esteem (Bolger and Amarel 2007). In sum, it is likely that within European–American cultural contexts, emotional support - such as encouragement, compassion, and sympathy - often evokes ambivalent emotions; this might signify both worthiness of the self and weakness of the self. Therefore, emotional support might contribute to happiness only to the extent that support does not threaten self-esteem. Indeed, Uchida et al. (2008) found that in two different Asian cultures (Japan and the Philippines), both self-esteem and perceived emotional support were equally predictive of happiness. However, in the American sample, once self-esteem was controlled for, the effect of emotional support on happiness vanished, and self-esteem was the only remaining predictor of happiness in the U.S. sample.

The Meaning of Happiness in Japan and the United States

We have reviewed the sizable cross-cultural differences in predictors of wellbeing, but few studies have investigated the cultural construal of wellbeing from a basic analysis of the meaning of happiness. Uchida and Kitayama (2009) used a systematic approach to explore individuals' knowledge of happiness and unhappiness in the United States and Japan. Their results suggested that Americans believe happiness is a relatively enduring positive state that should be pursued personally, whereas Japanese are likely to believe that happiness is a relatively positive, transitory interpersonal moment, and yet, that it is also fraught with numerous negative consequences. In the first part of Uchida and Kitayama's study, both American and Japanese participants were asked to describe up to five features, effects, or consequences of happiness. After describing these features, participants were asked to rate each feature in terms of general desirability. Results showed that over 98 % of American descriptions were reported as positive, whereas only 67 % of Japanese descriptions were reported as positive. In the second part of their study, a large number of features collected in the first part of the study were printed on separate index cards. A stack of cards was then presented to a new group of participants from each culture (i.e., meanings of happiness obtained in the United States were shown to American participants only). These participants were

asked to sort the cards according to perceived similarities of the descriptions. On the basis of this data, the likelihood of each pair of descriptions being classified into the same category was calculated. This likelihood (an index of perceived similarities among the features of happiness) was used to compute a multidimensional scaling solution. In both cultures, three types of descriptions were commonly observed: general hedonic states (e.g., joy, excitement, and positive attitude), personal achievement (e.g., getting a good grade, getting a job), and interpersonal harmony (e.g., getting along with others, having a party for a friend). In addition to these cultural similarities, two other clusters of negative features of happiness were obtained from the Japanese group. One such negative feature of happiness was transcendental reappraisal, which included avoidance (e.g., letting people avoid reality), nihilism (e.g., ephemeral), and transcendental realization (e.g., difficult to identify). The other cluster was social disruption, which included negative social consequences (e.g., envy and jealousy from others) and inattention (e.g., failing to pay enough attention to one's surroundings). These negative clusters were largely absent within the American sample.

Collectively Achieved Wellbeing

How to Examine Collectively Achieved Wellbeing

As we discussed so far, while individuals within independent cultural contexts are motivated to seek happiness through personal achievement and self-esteem due to the assumption that happiness is something that people have both a responsibility and a right to seek by themselves (e.g., Joshanloo and Weijers 2013), happiness is defined in terms of interpersonal connectedness and balance-seeking among others in East Asian cultures. These interpersonal psychological characteristics are found not only in East Asian cultures (Ballas and Tranmer 2012), but also in cultural contexts where interdependence is more prevalent and where shared and collective factors with close others are more likely to affect the psychological tendencies and behaviors of residents. In the Japanese context, wellbeing is not only pursued individually, but also collectively attained within group. We call this kind of wellbeing "collectively achieved wellbeing."

We cannot capture the characteristics of collectively achieved wellbeing if we only focus on an individual level analysis. As individuals are clustered together in neighborhoods, cities, regions, and nations, people living in the same regional areas could share the same factors or local environments. Researchers have increasingly acknowledged that the subjective wellbeing of an individual cannot be explained solely by the characteristics or attributes of that individual, but is also explained by more collective features such as the resources in communities or nations where they live (Farrell et al. 2004).

In order to examine this collective aspect of wellbeing, a single-level analysis (either an individual level dataset or a micro level dataset) is not sufficient (Oyserman et al. 2002). Single-level analysis actually contains both the compositional effect, which explains how the characteristics of each individual affect individual behaviors or psychological functions, and the contextual effect, which explains how social and cultural environments affect individual behaviors or psychological functions (Hauser 1970). Because of this mixed effect, two types of fallacy have been identified. Single individual-level analysis ignores the social context; this limitation is called an "atomistic fallacy" (Macintyre 2000), which is shown on the left side of Fig. 38.1. For example, wellbeing and social relationships are correlated at first glance, but once we control the associations at an area level, this association will disappear. Single macro-level analysis at the area level contains an "ecological fallacy" (Robinson 1950; Susser 1994), as shown on the right side of Fig. 38.1. In the figure, wellbeing and social relationships are correlated at area level at first glance. Once we control the associations at an individual level, however, the original area level association will disappear.

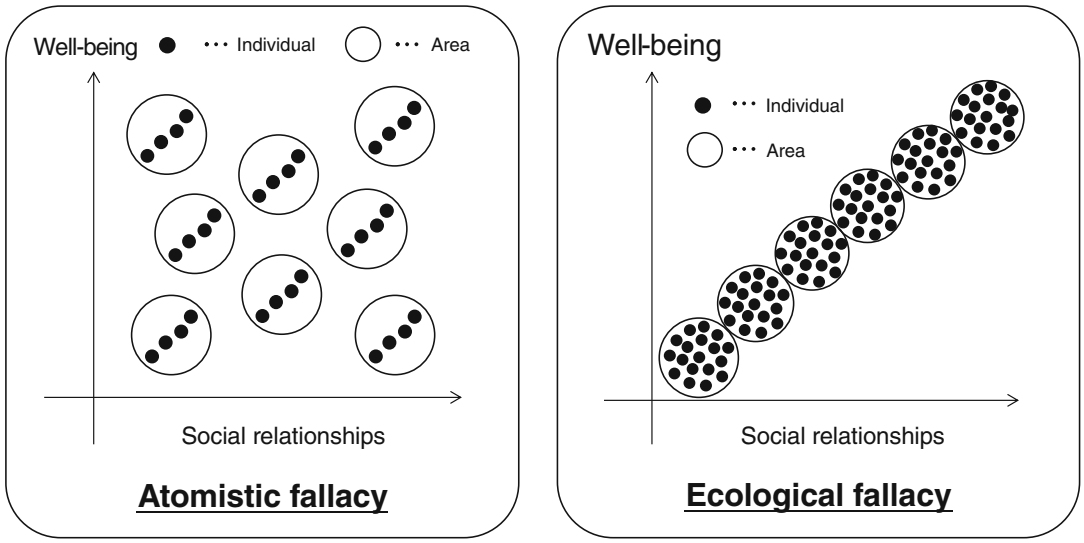

Fig. 38.1 Examples of atomistic fallacy and ecological fallacy

Unlike single level analysis, a multilevel model analysis which contains both individual level and macro level data simultaneously can be applied to overcome these two types of fallacy. The basis of the multilevel model is the assumption that individual level phenomena are embedded in a macro level context, and simultaneously, macro level contexts emerge through the interaction with individual level phenomena.

Collectively Achieved Wellbeing: An Empirical Study in Japanese Local Communities through Multilevel Analysis

In this section, we will show the factors that construct the different levels of collectively achieved wellbeing in Japanese local communities as shown by multilevel analysis.

According to previous studies, the links between social relationships and subjective wellbeing are strongly supported at the individual level (e.g., Diener and Seligman 2002) but are rarely shown at the macro-level. As one example of the macro-level studies, Bjørnskov (2008) found a significant correlation between social trust and happiness at the state level in the U.S., which indicates that the states where people have good social relationships show higher average wellbeing.

Fukushima and his colleagues (2011a, b) conducted a large survey study in 445 local communities in Japan with multilevel analysis to examine the characteristics and the functions of social relationships in the traditional cultural context of Japan. Questionnaires were distributed to every household (N = 32,685). The study adopted self-rated health (SRH) as the wellbeing index (Frey and Stutzer 2002; Idler and Benyamini 1997) and trust as the social capital index (Feghua and Canfei 2010). In this study two types of trust were employed: general trust (trust in generalized others; Yamagishi and Yamagishi 1994) and community trust (trust in in-group members among a community). It has been shown that while general trust is an individual attribute, community trust is formed collectively among community members (Fukushima et al. 2011a, b).

The results showed that (1) general trust was formed and functioned only at individual level, which means that general trust does not contribute to the collective achievement of wellbeing, (2) community trust, on the other hand, was formed at the collective level, and (3) economic affluence was formed and functioned at the collective level. These results suggest that collectively achieved wellbeing might be constructed through interpersonal relationships within a community. In addition, although economic affluence

is usually regarded as an individual phenomenon functioning at an individual level (Clark et al. 2008), it can be formed and function in a collective manner in a Japanese interpersonal local context.

Wellbeing Under Globalization

Cultural Change Under Globalization

We have shown that wellbeing is substantially constructed by culture and that this cultural construal of wellbeing is collectively shared. However, culture is not static but changeable. Therefore, we must consider how culture and society change, as well as how cultural and societal change affects human psychology and behavior.

Globalization has strongly affected human psychology (Chiu et al. 2011). Of the various factors associated with globalization, the effect of individualism is prominent because individualism is one of the most influential global values (Pilkington and Johnson 2003). Individualism is defined as "a social pattern that consists of loosely linked individuals who view themselves as independent of collectives" (Triandis 1995, p. 2). Globalization can bring an increase in wealth (Hofstede 1980) and urbanization (Kashima et al. 2004; Yamagishi et al. 2012), and those changes cause an increase in individualism, such as seeking uniqueness, making decisions by oneself, choosing where one wants to live, and living alone. Indeed, recent research showed that between the nineteenth and twenty-first centuries, many societies became more individualistic. For example, by examining trends in the American parents' choices of children's names, Twenge et al. (2010) demonstrated that Americans had become more individualistic (see also Twenge et al. 2012, 2013). Not only in the U.S., but also in the U.K. (Greenfield 2013) and Japan (Hamamura 2012), such cultural changes are found. In Japan, individualism has spread at both the personal and macro levels as a result of globalization, especially since the late 1990s (Toivonen et al. 2011). For instance, at the personal level, the average family size has decreased, the divorce rate has increased, and the importance of independence during child socialization has increased (Hamamura 2012). In addition, at the macro level, the system of individualism has been employed in many companies (i.e., utilizing individual achievement-based evaluations; Joe 2004; Takahashi 2010). Consequently, people in Japan are faced with achievement-oriented situations more often than they were before, and they try to become individualistic.

The question here is how do these cultural changes (i.e., becoming more individualistic) affect wellbeing? In the next section, we review the negative results of this cultural change, especially those that have been found in more interdependent and collectivistic cultures such as Japan (Markus and Kitayama 1991).

Negative Effects of Individualism in Japan

Basically, individualism has positive qualities. For example, individualism enables people to act autonomously and to make decisions or choices with their free will (Triandis 1995). Thus, self-ratings of subjective wellbeing were higher in individualistic countries than in collectivistic countries (e.g., Diener et al. 1995). In addition, in countries where autonomy and freedom increased, the average ratings of subjective wellbeing also increased (Fincher and Boer 2011; Inglehart et al. 2008). However, it seems that these positive qualities have not been witnessed in Japan. It has been suggested that individualism in Japan might be *qualitatively* different from individualism in the United States (Kitayama 2010, 2012). Specifically, individualism in Japan is more likely to be interpreted as the opposite to being harmonious with others. Thus people in Japan try to cut of harmonious relationships with others in order to be independent from others; therefore, individualism in Japan has connotations of egoism or social isolation. As a result, individualism in Japan might cause a decrease in wellbeing. Indeed, Ogihara

and Uchida (2014) found that interpersonal relationships might deteriorate when Japanese seek individualism, leading them to become unhappy. An individualistic orientation makes it difficult for Japanese individuals to build and maintain good relationships with others; this can lead to decreased wellbeing. Interestingly, we did not find such negative effects of individualism in a sample of U.S. participants. Furthermore, Ogihara et al. (2014) collected images of individualism in Japan and the U.S. and revealed that in the U.S., individualism is perceived as being unique and different from others, whereas in Japan, individualism is regarded as being selfish or egocentric and causing loneliness or isolation.

Even under the pressure of globalization, traditional Japanese cultural values of interdependence still exist. The discrepancy between explicit norms (global standards) and implicit norms (traditional standards) might lead to decreases in happiness among Japanese individuals.

We have argued that Japan is an example of a country that is under pressure from globalization, but similar examples might be found within other Asian cultures that are also experiencing the shifting of cultural norms toward new ideas, such as values imported from European–American cultures. It is necessary to examine this issue in other Asian countries that are under the pressure of globalization.

In addition, the effects of this pressure are not limited to non-Western societies. Recently, it has been suggested that even in the U.S., individualism might affect wellbeing negatively. In the U.S., happiness was originally thought to be a consequence of good luck given by God or fate, but under the pressure of individualism, happiness is increasingly considered something that is controllable and should be pursued by the individual (Oishi et al. 2013). However, the pursuit of such individualized happiness can induce negative consequences, such as loneliness and unhappiness (Mauss et al. 2011, 2012). Therefore, people in individualistic cultures might paradoxically feel lonely and unhappy due to their pursuit of happiness.

For a Sustainable Society and Wellbeing

In this chapter, we have argued that wellbeing is culturally constructed. Especially in Japan, a balance-oriented concept of wellbeing is prevalent, and wellbeing is not only individually but also collectively achieved through relationships. Such notions are important when considering wellbeing in a global context in order to have an equivalent distribution of the resources that contribute to wellbeing in a world-wide context.

For example, from an environmental point of view, actualizing sustainable wellbeing in every society in the world is an important issue in the twenty-first century. Collectively achieved wellbeing is more likely to be related to such environmental sustainability. If one individual uses up environmental resources (public goods) in order to achieve his or her own satisfaction, the average level of wellbeing among those who share that resource would decrease. Then, of course, the one who had first used up that resource would also be unhappy. This is a well-known perspective on the "social dilemma" or "the tragedy of the commons" in social science. In order to avoid such dilemmas, human beings have established ethical rules and values. Seeking balance orientation could support a future sustainable society because balance-oriented thinking draws attention to the equal distribution of resources and encourages altruism, not only within nations but also worldwide and for the benefit of future generations. In order to achieve sustainability, we must focus not only on relationships in the present, but also on those of future generations. Thus, we need to have a wider view that transcends present conditions now in order to contribute to the building of sustainable societies. Because it integrates wellbeing and sustainability, the concept of collective wellbeing can lead to important discussions in various fields of social science, including psychology, economics, and political science.

Fostering people's sense of fulfillment is also quite important. Most of the discussion on happiness and wellbeing concerns the factors or

conditions that lead to them. For example, if GDP is accepted as an important cause of wellbeing, increases in GDP will be sought. Economic factors, as well as other factors, are certainly important to attain happiness and wellbeing, but they do not establish sufficient conditions to achieve them. Indeed, many people are not satisfied even with their objectively sufficient conditions. Conditions that lead to wellbeing and the feeling of happiness are independent of each other. The sense of being happy can be weak when the conditions that lead to happiness are high, especially in industrialized countries. In Japan, for example, after the Great East Japan Earthquake on March 11, 2011, many people re-evaluated their everyday lives and their happiness increased, possibly because the re-evaluation of their values prompted them to become more satisfied with their current life conditions rather than seek more and more happiness (Uchida et al. 2013).

One of the key factors in fostering a sense of wellbeing is emotion regulation. Changing cognitive framing and engaging in more transcendent cognition and wider attention lead to altruism; consequently, individuals can make decisions with a broader vision and avoid seeking increases in their own short-term wellbeing. To achieve this, education is quite important. In Bhutan, for example, meditation plays an important role in regulating emotions in school and at home. We can learn how to achieve sustainable happiness when we examine the various models of wellbeing in other cultural contexts.

We have reviewed several studies on the cultural construal of wellbeing. At an abstract level, conceptions of wellbeing can be seen as universal in terms of satisfaction with one's accomplishments and relationships; however, the degree to which each of these factors is emphasized and predicts wellbeing can vary substantially from culture to culture. Furthermore, connotations of wellbeing and happiness also differ, such as the incremental views observed in European-American cultures and the dialectic views observed among East Asian cultures. In addition, we build our sense of wellbeing and obtain wellbeing not only as individuals but also through joining communities.

We have to illustrate not only universal factors but also cultural construals of wellbeing shared within nations or communities to establish a broader argument as to the nature of wellbeing.

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Satisfaction and Happiness – The Bright Side of Quality of Life

39

Louis Tay, Lauren Kuykendall, and Ed Diener

Introduction

Quality of life is a valued societal outcome for policy makers and academics from various fields such as economics, sociology, and psychology. Of late, there has been increasing interest in individual subjective wellbeing (SWB), or what is referred to colloquially as "happiness". One reason for this increased interest is the recognition that conventional quality of life metrics based on economic indicators (e.g., income or employment) are of limited value for assessing subjective quality of life. While conventional metrics are valuable as important predictors of quality of life, happiness is valuable as a direct indicator of quality of life. Indeed, there is growing recognition that measures of subjective wellbeing directly index evaluations and feelings associated with quality of life. Within quality of life research, economic factors are important largely as resources conducive to the pursuit of happiness. In contrast, happiness as subjectively experienced is intrinsically valuable and is pursued as an end in itself. As such, happiness is valuable above and beyond conventional indicators in predicting quality of life, both as a direct indicator of quality of life and an invaluable personal goal pursued by all individuals – more basic and fundamental than money. For these reasons, researchers and policy-makers have suggested that happiness indicators be utilized at a national level to complement existing economic measures (Diener and Seligman 2004). An exemplification of this approach comes from the popular magazine *The Economist* (2011), which recently debated and concluded that economic measures are inadequate for measuring societal progress and should be complemented by happiness.

The goal of this chapter is to show how subjective wellbeing directly fulfills the major functions of a social indicator, which include enlightening the public, improving mental and physical health, enhancing organizational outcomes, and planning policy (Land et al. 2012). First, we present evidence suggesting that subjective wellbeing is a cherished societal goal worthy of attention. Second, we show that, in addition to being intrinsically valuable, subjective wellbeing also has utility as a predictor of important life outcomes such as health and longevity, social relationships, and positive work outcomes. Finally, we show that, in contrast with previous theory and findings (Easterlin 1974), SWB is malleable to changes in economic conditions. Substantial research now shows that subjective wellbeing is sensitive to economic conditions such as income and employment, implying that economic policies can improve

L. Tay (✉) • L. Kuykendall
Purdue University, West Lafayette, IN, USA
e-mail: stay@purdue.edu

E. Diener
University of Virginia, Charlottesville, USA

The Gallup Organization, Washington, DC, USA

University of Utah, Salt Lake City, USA
e-mail: ediener@illinois.edu

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wellbeing while not being equivalent to subjective wellbeing; that is, they are distinct entities. Together, this demonstrates that subjective wellbeing serves an incremental role beyond objective quality of life indicators and is useful for policy purposes.

Subjective Wellbeing

Research now shows that subjective wellbeing – while colloquially known as 'happiness' – has both cognitive and affective components, which reflect the sense of wellness of individuals (Diener 1984). The cognitive component refers to the individual's overall life evaluations and the affective component refers to the presence of positive emotions and the absence of negative emotions. These components are distinct (Lucas et al. 1995) and can be easily measured using self-reports in a valid and reliable manner (Diener et al. 2013a; Schimmack and Oishi 2005).[1] In addition, SWB can also be categorized by different life domains such as marriage, leisure, or job. Satisfactions and experienced emotions in these domains constitute domain-level SWB. More generally, SWB falls within the rubric of human flourishing that include other aspects such as engagement in work, sense of accomplishment, and good relationships (Seligman 2011).

Subjective wellbeing has been measured in various ways through the use of short measurement scales such as the Satisfaction with Life Scale (SWLS) (Diener et al. 1985), Positive and Negative Affect Schedule (PANAS) (Watson and Clark 1994) and Scale of Positive and Negative Experience (SPANE) (Diener et al. 2010). New and innovative ways of measuring SWB have also been proposed. For example, the Day Reconstruction Method (Kahneman et al. 2004) is an end-of-day survey where individuals divide their day into activities and report associated emotions experienced in each activity. Although newer methods require more validation (Diener and Tay 2014), scientific evidence clearly demonstrates the validity of SWB scores and the reliability of SWB measures (Diener et al. 2013a; Tay et al. 2014).

[1] See Diener and Tov (2012) for a taxonomy of how these components may be further differentiated by whether they are based on "objective" events and life circumstances, "on-line" reactions and experiences, recall of past reactions and experiences, or overall evaluations of one's general experiences.

Interest in Subjective Wellbeing

Subjective wellbeing is an important, if not the most important, goal that individuals seek throughout their lives. A survey of 41 nations revealed that individuals on average rated life satisfaction and happiness close to "extraordinarily important and valuable" (Diener et al. 1998). A survey of college students from 17 nations showed that they think of subjective wellbeing frequently and view it as more important than money (Diener 2000). Further, happiness, along with meaning in life, was most essential to folk concepts of a good life for U.S. college students and community adults rather than money (King and Napa 1998). In addition to its personal importance to individuals, the importance of happiness as a societal goal is also evident in the writings of famous historical figures. Thomas Jefferson, one of the founding fathers of America stated that "the care of human life and happiness and not their destruction is the only legitimate object of good government" (Lipscomb and Bergh 1903–1904). Indeed, others such as John Stuart Mill and Jeremy Bentham have promoted the goal of maximizing the subjective wellbeing of societies.

The value of SWB as an important research outcome can also be gleaned from recent publication trends. As displayed in Fig. 39.1, a search on the *Web of Science* on topics pertaining to "subjective wellbeing" or "happiness" revealed that most of the research occurred in the last 10 years. There was a fivefold increase from about 350 articles in the year 2000 to almost 1,500 articles in 2011. This is motivated by the growth of positive psychology (Seligman and

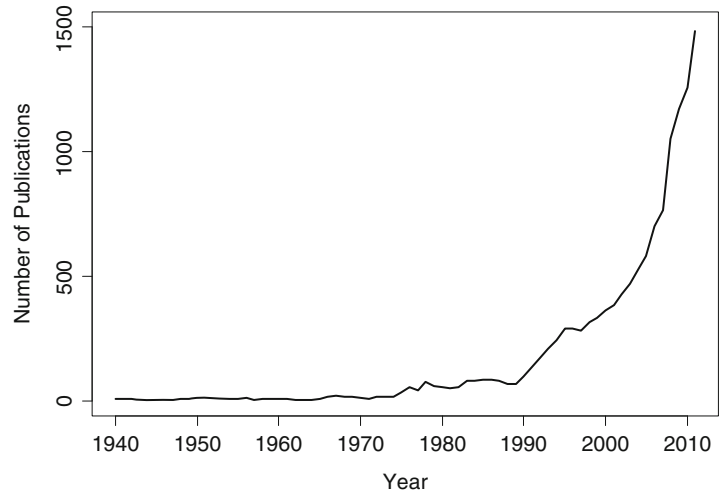

Fig. 39.1 Annual number of publications related to subjective wellbeing

Csikszentmihalyi 2000), which emphasizes the importance of positive moods and mental states. In addition to psychologists, economists are now emphasizing that promoting human welfare and happiness, and not economic benchmarks *per se*, is the end goal (e.g., Economic Debates: GDP 2010; Schwartz 2012).

To date, measures of SWB have been used in many large-scale surveys such as the National Opinion Research Centre (NORC), American Institute of Public Opinion (AIPO), World Values Survey (WVS), German Socio-Economic Panel (GSOEP), British Household Panel Survey (BHPS), and The Gallup World Poll (GWP). They are now being advocated for in multiple contexts for tracking societal quality of life over time. In 2011, the National Academies of Science commissioned a committee to examine the measurement of SWB in a policy relevant framework. International organizations such as the Organization for Economic Cooperation and Development (OECD) and the United Nations (UN) are advising nations on scale adoption. The expanded use of SWB measures in large-scale surveys and in international organizations, points to the importance of SWB as a societal outcome.

Benefits of Subjective Wellbeing

In addition to the intrinsic value of SWB, it is also beneficial to a wide range of valued outcomes, including health and longevity, social relationships, and success (e.g., job performance, income) (Diener and Chan 2011; Judge and Bono 2001; Lyubomirsky et al. 2005b). It has been theorized that the positive fruits of SWB point to the adaptive role of SWB in our evolutionary history (Diener et al. 2013b). Evolutionary forces may account for why humanity experiences moderately high levels of SWB (e.g., Myers 2000; Tay and Diener 2011) and our own self-conscious pursuit of it, where people across multiple nations think frequently about SWB frequently and rate it as more important than even money (Diener 2000). Therefore, the evolutionary impulse could have played a distal role in the intertwining of SWB and positive benefits. The increased interest in SWB as a topic of research is partially explained by its wide-ranging benefits. In the following, we describe research demonstrating the utility of SWB for societies.

Health and Longevity

There is an overwhelming amount of evidence showing that SWB is not only associated with, but also leads to, health and longevity. In a recent study of the general population in the U.S. (Xu and Roberts 2010), it was shown that SWB lowers the risks of all-cause, natural-cause, and unnatural-cause mortality even after controlling for baseline demographic and health covariates. Diener and Chan (2011) surveyed different types of research – prospective longitudinal studies, experimental studies, and quasi-experimental studies examining changes in SWB and health – that show a compelling case for SWB improving health and longevity. These examinations have been corroborated with systematic reviews. A quantitative review focused on experimental studies found substantial effects of SWB on short-term and long-term objective health outcomes (Howell et al. 2007). A meta-analysis of prospective studies demonstrated that SWB was associated with lower mortality in both healthy and disease populations (Chida and Steptoe 2008). Therefore, favorable main effects of SWB on physical health are incontrovertible, and research has begun to turn to differential effects of SWB components and differences in subpopulations (e.g., Pressman and Cohen 2005; Wiest et al. 2011).

Research has uncovered two causal channels linking SWB to physical health. One channel involves physiological functioning, in which positive emotions enhance cardiovascular, immune, and endocrine systems, whereas negative emotions lead to regulatory dysfunction (Edwards and Cooper 1988; O'Leary 1990). Emotions can affect physiological functioning that lends either resilience or vulnerabilities to disease, morbidity or mortality (Kiecolt-Glaser et al. 2002). For instance, prospective research shows that positive emotions can lead to decreased likelihood of hypertension, diabetes mellitus, and respiratory tract infections (Richman et al. 2005). Also, anxiety can lead to onset of coronary heart disease (Kubzansky and Kawachi 2000). A second causal channel involves health-promoting behaviors. It has been found that higher levels of SWB are associated with healthier diets (Blanchflower et al. 2012), physical activity (Garatachea et al. 2009; Huang and Humphreys 2012) and less smoking (Ashton and Stepney 1982). Taking diet as an example, mood induction studies show that individuals eat more unhealthy food (e.g., buttered popcorn) when put in a sad mood and more healthy food (e.g., raisins) when put in a positive mood (Garg et al. 2007). This may be because sadness lowers self-regulation capability (Garg and Lerner 2013).

Social Relationships

SWB can promote better social relationships. Research shows that there is a robust link between SWB and the quantity and quality of social relationships (Myers 2000). Therefore while social relationships form an integral basis for SWB (Tay and Diener 2011), SWB can also enhance social relationships. A review of correlational, longitudinal, and experimental studies found positive benefits of positive emotions on factors that promote social relationships (Lyubomirsky et al. 2005b). Prospective, longitudinal, and experimental studies demonstrated that SWB improves marital satisfaction, sociability, prosocial behaviors, and positive perceptions of self and others. To illustrate, inducing positive moods causes individuals to have greater interest in social activities compared to those in neutral or negative mood conditions (Cunningham 1988a, b).

It has been proposed that SWB, particularly the positive emotion component of SWB, influences social relationships through two primary mechanisms – inducing approach tendencies and building social resources (Lyubomirsky et al. 2005b). Approach tendencies are characterized by motivation to engage in potentially pleasurable opportunities, whereas avoidance tendencies are characterized by motivation to avoid potentially painful experiences. A strong body of research suggests that positive affect is associated with approach tendencies and negative affect with avoidance tendencies

(Carver 2004; Elliot and Thrash 2002; Gable et al. 2000, 2003). For instance, Carver and White (1994) found higher behavioral activation system (BAS) ratings, which are typically associated with approach behaviors, in the presence of a potential reward and higher behavioral inhibition system (BIS) ratings, which are associated with avoidance behaviors, in the presence of a potential threat. When individuals experience high SWB, high positive and low negative emotions induce approach tendencies that encourage active engagement with the environment, including one's social environment. This in turn leads to enhanced social relationships.

Positive emotions can trigger approach tendencies that exert prompt effects on social engagement; positive emotions can also exert cumulative effects on social relations via social resources. The broaden-and-build theory of positive emotions states that positive emotions temporarily broaden an individual's thought–action repertoire (Fredrickson 2001). These broadened mindsets promote the discovery of new actions, ideas, and social bonds, which in turn build a reserve of resources that can be drawn on during difficult times. Social experiences stimulated by positive emotions can result in lasting social resources such as social bonds and social support (Aron et al. 2000; Lee 1983). Thus, individuals who experience positive emotions more frequently are likely to have a greater reserve of social bonds and resources, resulting in more enhanced social relationships, such as higher marital quality (Lyubomirsky et al. 2005b).

Productivity and Success

Individuals who are happy and satisfied with their lives are more likely to be effective workers and to have successful careers. A recent longitudinal study has shown that optimistic and hopeful workers perform better than less optimistic and hopeful workers, as indexed by both supervisor ratings and financial performance (Peterson et al. 2011). Individuals who experience greater positive feelings also tend to miss work less frequently, whereas individuals who experience greater negative feelings tend to miss work and quit their jobs more frequently (Pelled et al. 1999). A recent meta-analysis has shown that individuals who are highly satisfied with their lives tend to be more satisfied with their careers, more committed to their organizations, and less likely to have intentions to quit their jobs (Erdogan et al. 2012).

While these findings provide support for the association between SWB and work success, they do not allow for inferences about the causality of the effect. Though it is generally unfeasible or unethical to test the directionality of these effects using experimental studies, it is possible to examine directionality using longitudinal studies. Several longitudinal studies have provided support that the relationship between SWB and work success is at least partially accounted for by SWB influencing future work success. For instance, SWB has been shown to predict future income level (Diener et al. 2002; Marks and Fleming 1999), even when controlling for factors such as intelligence, education, and health (De Neve and Oswald 2012).

The effects of SWB on work success can be seen at the organizational level in addition to the individual level. Bockerman and Ilmakunnas (2012) found that job satisfaction predicts the productivity of manufacturing plants. Edmans (2011, 2012) found consistent evidence, showing that the "100 Best Companies to Work For in America" increased more in equity value compared to the industry benchmarks, resulting in 3 % higher returns per year. Additionally, a longitudinal study of ten large organizations has shown that work units with satisfied and engaged employees had higher bottom-line organizational outcomes such as revenue, sales, and profit (Harter et al. 2010). In contrast, a model specifying reverse causality (i.e., bottom-line organizational outcomes predicting employee satisfaction) did not fit the data as well.

In summary, SWB is immensely valuable to individuals, both intrinsically and extrinsically. Its intrinsic value is documented by the extent to which people desire happiness over other valued commodities such as money; its extrinsic value is

shown by the wide range of positive outcomes it influences (e.g., health and longevity, social relationships, work success).

Subjective Wellbeing and Policy

Empirical research on the intrinsic value and wide-ranging benefits of SWB is relevant to policy planning only if it can be shown that SWB is malleable and sensitive to societal changes such as improvements in economic conditions. Attempts to enhance individual and societal SWB will be ineffective if SWB is unchanging and genetically predetermined. However, if SWB is sensitive to environmental changes, policy planning could be a fruitful avenue for enhancing SWB and producing the wide range of desired outcomes associated with enhanced SWB. Interestingly, in *The Economist* debate on whether SWB should be a key indicator of progress, commentators on both sides agreed that economic indicators such as wealth are unrelated to SWB. Some commentators used this point as evidence for the inadequacy of economic indicators, suggesting the need to measure SWB because economic indicators are inadequate; on the other hand, others construed the same information as counter-evidence that SWB indicators are invalid and impracticable. In light of this controversy, it is necessary to address how and to what extent SWB can be affected by objective social indicators such as economic factors.

In this section, we focus on the examples of wealth and (un)employment because societies are highly invested in these economic issues. More and more individuals and societies are working toward material prosperity. Further, work and employment form an important basis of identity (Hulin and Judge 2003; Terkel 1974) and individuals spend the majority of their time working (OECD 2011). Determining whether wealth and employment are related to SWB will have implications for existing economic policies (e.g., Frey and Stutzer 2002) and it is important to understand whether these goals are orthogonal to SWB or if there is at least some degree of overlap. Before we review research on the topics of wealth and employment, we examine the malleability of SWB more generally, as the issue of malleability precedes and constrains the potential influence of economic factors.

Malleability of SWB

A crucial issue concerning SWB is whether it is sufficiently malleable and can be affected by societal conditions. Research now demonstrates that SWB is stable over time and that there is a genetic component to the stability. However, these genetic effects have often been misconstrued as reflecting a highly predetermined SWB level. In fact, research shows that SWB can be modified over time and is not as static as once believed. Tay and Kuykendall (2013) review several lines of evidence that we integrate and summarize here.

First, the landmark study by Lykken and Tellegen (1996) has been frequently cited as the basis for the invariance of SWB. Based on the retest correlations of SWB after 5–10 years, it has been estimated that the heritable component of SWB is 80 %. However, it is inaccurate to infer from this study that 80 % of SWB is static. Rather, retest correlations were only about .50, indicating that only 50 % of the variance is stable over time, and only 80 % of this stability is accounted for by a genetic component. Thus, about 60 % of the variance in SWB changes over time. Consistent with this interpretation of the data, Lykken (1999) later recognized that happiness can be changed within "wide limits" despite a heritable component underlying stability.

Second, genetic studies may be limited for inferring SWB stability. Studies often rely on separation of genetic and environmental effects, which have been shown to give inflated estimates of heritability (Roberts and Jackson 2008). These studies assume that SWB is an outcome of genetic material + environmental influences. However, molecular biology now shows that this model is too simplistic (Robinson 2004). In fact, DNA does not generate behaviors directly. DNA contains information that the cellular

environment uses to synthesize proteins, which lead directly to physiological and psychological outcomes. Environments can directly influence the process of protein production, substantially influencing the behavioral expression of DNA. Aside from the limitations of statistical modeling, the use of within-nation samples are often limited for inferring environmental effects because of restrictions on environmental variance. When cross-national data are brought to bear on the issue, it becomes apparent that very consistent and large differences appear between countries such that richer nations are happier than poorer ones (Inglehart and Klingemann 2000). If SWB is primarily determined by genetic factors, we should observe homogeneous national SWB values that are not moderated by locality. Other issues such as lower accuracy in specifying environmental factors (compared to genetic effects) and low base rates of environmental exposures (that may severely impact mental health) increases the probability associated with detecting genetic effects rather than environmental effects (Vineis 2004).

Third, research now shows that life events can alter SWB levels with little evidence of adaptation over time. A recent review on this issue showed that major life events such as widowhood, unemployment, and disability can lead to long-lasting changes in SWB (Lucas 2007). Recent experimental research on SWB interventions, such as gratitude exercises or the use of character strengths, show that SWB levels can be altered over lengthy periods of time (e.g., Seligman et al. 2005; Sheldon et al. 2010).

Wealth and SWB

If SWB is malleable, can economic conditions like national wealth foster or fetter it? Intuitively, money is a means by which one can fulfill intrinsic needs and obtain conveniences – or a reduction in unwanted challenges – that can enhance SWB (e.g., Tay and Diener 2011). The effect of money is magnified at the nation level: increases in national wealth can enable more public goods and modern infrastructure including improved transportation, communications, healthcare, and sanitation. Through these channels income can enhance SWB. However, this view that income can benefit SWB has been challenged historically.

In a seminal study of 14 nations, Easterlin (1974) found an association between income and SWB within-nations but not between nations. Further, it was found via observation that United States happiness scores did not seem to increase despite a known increase in national wealth over time. To account for the discrepancies, researchers proposed that individuals use relative income – rather than absolute income – to gauge their wellbeing. If individuals make income comparisons with others in their own country, the observed pattern of within-nations but not between-nations differences in SWB would be expected. The relative income perspective also explains why income aspirations rise as nations become wealthier, resulting in a lack of association between absolute income and happiness.

Does the relationship between individuals' income and SWB reflect only relative income effects? If individuals rely only on relative income standing within nations, we should observe a null relation between national income and SWB. Nevertheless, between-country Gallup World Poll analysis of 132 nations shows that each doubling of GDP per capita is associated with a constant increase in life satisfaction and income accounted for about 70 % of the variance in SWB ($r = .84$; Deaton 2008). Further analyses showed that there was no satiation point in SWB with increased income (Sacks et al. 2012). An inescapable conclusion from these findings is that absolute income contributes to SWB. With a 70 % overlap, a straightforward interpretation would suggest that absolute income plays a substantially larger role than relative income.

In the past 40 years, studies have increasingly employed improved methodology and representative worldwide data, providing conclusive evidence that absolute wealth and SWB are intertwined. Time series analysis has now produced strong results validating the relation between national income and SWB. An analysis

of 21 nations from periods of 1958–1996 showed that life satisfaction of nations rise with GDP per capita in both the short and long term although short term effects were stronger (Hagerty and Veenhoven 2003). Data using 67 nations over periods from 10 to 46 years also confirmed this positive trend (Veenhoven and Vergunst 2013). Finally, data from 135 nations over a period of 7 years also found a positive relation of income on SWB (life evaluations, positive feelings, negative feelings); this effect was not attenuated over time or affected by the wealth of nations (Diener et al. 2013b). These findings do not imply that relative income exerts zero influence on SWB. Rather, it shows that absolute income matters to a more substantial degree than had been supposed.

One point worth mentioning is that although there is general agreement on the positive relationship between income and SWB at the individual-level, it has been frequently suggested that the relation is weak and non-substantial. For instance, the average correlation between individual-level income and SWB was has been estimated to be around .20, accounting for only 4 % of the variance in SWB (Diener and Biswas-Diener 2002). However, in nationally representative samples of 113 countries, the reported relationship was much larger. The median income-life satisfaction gradient (standardized regression coefficient) controlling for other demographics was .38 and gradients were positive in every country except one (Stevenson and Wolfers 2008). Importantly, a recent study using the German Socio-Economic Panel Study and the World Values Study showed that small observed correlations between income and life satisfaction can translate into large mean differences ranging from 1.0 to 1.5 standard deviations between the rich and poor on SWB (Lucas and Schimmack 2009). Therefore, income is robustly associated with, and can have large effects on, SWB.

Overall, because accumulated evidence robustly shows that absolute income matters for SWB, the Easterlin hypothesis of relative income has retreated to a position that is very different from its initial incarnation. Easterlin and colleagues (2010) have revised their position, suggesting that, even though income can produce higher short-term SWB, the effects fail to persist longer than 10 years due to growing aspirations. Even in this highly modified version of the Easterlin hypothesis, the relative income conjecture cannot explain the strong relationship between income and SWB in cross-sectional studies. Further, the evidence showing that income improves SWB both in the short and long term contradicts this revised hypothesis (Diener et al. 2013b; Hagerty and Veenhoven 2003; Stevenson and Wolfers 2008; Veenhoven and Vergunst 2013). As such, SWB finds itself squarely in line with standard economic theory, which proposes that income matters for absolute utility or SWB. The conclusion that income matters to SWB is encouraging because it suggests that policies set on improving the material welfare of individuals are not misguided and should lead to increased SWB over time.

Employment and SWB

Another economic influence on SWB is the (un) employment level of countries. Unemployment rates can affect SWB of societies because work forms an important basis of identity (Hulin and Judge 2003). Job loss can therefore fuel a loss of identity and be harmful to SWB. Further, Warr (2007) and Jahoda (1982) have both suggested that employment provides physical, psychological, social, and monetary resources that can promote SWB. Unemployment has been shown to influence individuals' self-efficacy, self-esteem, and other psychological needs (Cole et al. 2009; Creed and Klisch 2005; Creed and Bartrum 2008; Goldsmith et al. 1996; Pavlova and Silbereisen 2012), providing support for the claim that employment provides a context where psychological needs can be met.

Because employment fulfills important aspects of individuals' lives, loss of work is psychologically detrimental (Hulin and Judge 2003). Classic work by Durkheim proposed that unemployment is linked to suicide (1951/1897). More recent studies have validated this effect and strongly suggest causality. A prospective study

using a sample of two million New Zealanders showed that unemployment status was associated with a two to threefold increase in the relative risk of suicide deaths (Blakely et al. 2003). At the national level, time series analysis revealed that unemployment was linked to suicide rates in six out of eight nations (Boor 1980).

With regard to SWB, a recent meta-analysis of 104 empirical studies found that unemployed individuals had substantially lower life evaluations than the employed (corrected $d = -.48$); and longitudinal studies show that unemployment led to lower mental health on average (corrected $d = -.38$) (McKee-Ryan et al. 2005). The effect of job loss on unemployment remains after controlling for the effects of loss of income (Latif 2010; Winkelmann and Winkelmann 1998) and is stronger after repeated unemployment (Luhmann and Eid 2009). These effects can also be observed at the national level. Studies have shown that country-level unemployment predicts average levels of happiness (Di Tella et al. 2001; Graham and Pettinato 2001; Ochsen 2011). Therefore unemployment rates affect not only the unemployed but spillover to other people as well. Corroborating this, a recent study using 136 nations from the GWP found that unemployment led to greater job dissatisfaction of workers – likely due to uncertainty and increased workload – that in turn lowered life evaluations (Tay and Harter 2013).

Unemployment and income serve as examples of economic factors that can influence the important end goal of SWB and the desired outcomes associated with SWB. Having documented the malleability of SWB to changes in economic conditions, we now examine implications for policy planning.

Implications for Policy

The empirical evidence showing that economic factors can influence SWB should offer encouragement to policy makers who hope to see improvements in subjective quality of life as a result of societal-level changes. Finding substantial linkages between economic indicators and SWB overturn the idea that SWB is a moving target or a static entity and reverse the conclusion that SWB measures are invalid or impracticable for policy purposes. Research shows that SWB systematically follows changes in economic factors although SWB is not equivalent to economic factors.

At a practical-level, how can SWB measures be used for improving policy? We do not seek to repeat suggestions proposed in the past and refer readers to work on this topic reviewed by Diener and colleagues (e.g., Diener and Seligman 2004; Diener and Tov 2012; Diener et al. 2009). We use economic factors as our primary example, acknowledging that the general framework can be broadly applied to a wider range of factors such as education and healthcare. The two possible uses and applications of SWB measures include: (1) enhancing clarity on the links between subjective quality of life and specific economic indicators and (2) understanding the mediating mechanisms of economic factors on subjective quality of life.

First, there are a variety of SWB indicators that may be linked to different economic indicators and research now shows differential predictive validities. For instance, income is more predictive of life evaluations than of positive or negative feelings (Diener et al. 2013b). Additionally, unemployment rates affect job satisfaction directly but not life satisfaction, whereas national wealth affect both job satisfaction and life satisfaction (Tay and Harter 2013). In view of this, different economic policies (e.g., monetary or labor market) that seek to enhance certain economic conditions would be expected to have greater influence on unique aspects of SWB.

Second, we propose that economic policies can enhance societal SWB via several different pathways. Perceptions of policy action – or inaction – can affect SWB. News of a strong economy, or a sense of optimism instilled by policy makers, can bolster confidence and promote certainty among citizenry, assuaging potential fears and enhancing SWB. Policies can also steer economic resources to groups of individuals, families, or organizations, influencing specific

dimensions of SWB. For example, the allocation of economic resources to families having children can potentially alleviate financial burden that enhances marital or family SWB. Along these lines, there seems to be evidence showing that progressive taxation is associated with higher national SWB (Oishi et al. 2012).

Increased knowledge about the mechanisms by which economic policies enhance SWB will allow policy makers to better understand the pathways by which economic (and other) policies influence outcomes. For instance, in a worldwide Gallup World Poll sample, it was found that national income does not predict SWB when both physiological and psychological needs are accounted for (Tay and Diener 2011), implying that expenditures on basic needs (e.g., clean water, shelter, food) or infrastructure to fulfill psychological needs can enhance national SWB. In line with this, it has been found that increase in a sense of freedom among citizens mediated the relation between national income and SWB (Inglehart et al. 2008). Longitudinally, income growth produced highest growths in SWB when it was accompanied by increases in material welfare, financial satisfaction, and a sense of optimism (Diener et al. 2013b).

By including SWB indicators alongside other economic and social indicators, policy makers can be better positioned to evaluate societal progress than they would be if relying primarily on economic indicators such as GDP. SWB measures provide incremental value for policy makers over indicators such as GDP that have commonly been used to assess societal progress. For instance, GDP per capita indexes household wealth, which has been shown to enhance SWB, but also includes air pollution and expenditure on weapons and prisons, which do not enhance SWB. Because GDP does not directly assess subjective quality of life and contains elements that are not useful for predicting subjective quality of life, it is inappropriate as an index of subjective quality of life. SWB complements GDP by offering a valid and reliable index of subjective quality of life. Using SWB in conjunction with GDP allows policy makers to assess whether economic policies benefit individuals – both objectively and subjectively.

While policies can improve SWB, is there a limit to the potential effectiveness of policy-level changes? A thought experiment would suggest that raising the national population to a level of 100 % happiness is unrealistic. There are several reasons why this is so. First, it is possible that the genotypic underpinnings of SWB limit experienced SWB phenotype such that, even with salutary external conditions, there will upper limits to SWB. At a national-level, there may be a small group of curmudgeons who cannot be appeased. Indeed, Kahneman and Deaton (2010) found that when examining the proportion of people that were happy, there were limits to the effects of personal income such that 10 % of individuals at the highest income level did not indicate they were happy. Further, we find that certain aspects of SWB, like life evaluations, are tied more strongly to societal conditions whereas other aspects of SWB, such as positive and negative feelings, are tied more closely to individual conditions (Tay and Diener 2011). We propose that these are dependent on the activities and choices that individuals make (Lyubomirsky et al. 2005a). Therefore, we can expect that improvements in societal conditions can enhance evaluations but personal feelings may hinge on personal endeavors. This suggests that societies can provide *opportunities* for individuals to be happy – that is, guarantee the pursuit of happiness – but not necessarily guarantee a perpetual state of happiness.

Are there cultural factors that may moderate the effects of economic factors on SWB? In other words, could we expect the enactment of economic policies to translate into similar SWB outcomes regardless of world regions? There is certainly evidence that culture plays a vital role. Cultural differences can lead to differences in goals, priorities, and values, resulting in different patterns of SWB predictors across cultures (see Diener and Suh 2000; Diener et al. 2003). For instance, in a study examining SWB across 31 nations, self-esteem was a stronger predictor of SWB in more individualistic nations as compared to collectivistic nations (Diener and Diener 1995). Nevertheless, because of evolutionary processes (Kenrick et al. 2010), there is a

universal pan-cultural basis for SWB with regard to physiological (e.g., food) and psychological needs (e.g., social affiliation, self-esteem) that can be actively targeted through policies (Tay and Diener 2011). Further, analyses of emotion indicators across the world demonstrated that amidst cultural and linguistic variation, there is cross-cultural similarity in the structure and interpretation of emotion terms (Tay et al. 2011). Therefore there is a basis for international comparisons of SWB.

We have focused primarily on the utility of SWB indicators for measuring the effects of economic policies on subjective quality of life. However, the potential utility of SWB indicators is not limited to measuring effects that stem from economic policies. Rather, the general framework can be applied widely. SWB measures can be used to directly assess the improvements in subjective quality of life that result from environmental policies, employment policies, healthcare policies, and educational policies (Diener et al. 2009). SWB measures can also be used to measure the degree to which government investments such as improved infrastructure and better recreational facilities and programs translate into improved subjective outcomes for citizens. For example, it has been proposed that traffic congestion or noise pollution can be reduced to improve SWB (Diener and Tov 2012). Many of these policies and programs are specifically targeted towards improving the subjective quality of life of citizens. Systematically measuring SWB both nationally and in local communities offers a way for policy makers to track the effectiveness of government policies and programs on the happiness of citizens.

Conclusions and Future Directions

In our review, we have presented evidence for the usefulness of subjective wellbeing as a social indicator of quality of life. We have focused on three key issues. First, we have presented evidence that happiness is a top priority, if not the top priority, for individuals and societies, making subjective wellbeing an immensely valuable social indicator with incremental value above conventional measures of societal progress. Second, we reviewed the literature on the wide range of positive outcomes associated with subjective wellbeing (e.g., health, successful relationship, productivity, etc.), providing evidence for its extrinsic value as a predictor of key outcomes. Finally, we have shown that SWB is malleable and sensitive to societal conditions such as wealth and unemployment. Taken together, these points suggest that SWB has great potential as a social indicator, particularly when used to understand how subjective outcomes are influenced by economic (and other) societal changes and to determine the pathways by which economic (and other) changes influence subjective quality of life.

In the current paper, we have focused primarily on the effects of economic factors on SWB, acknowledging that the general framework could be extended to a wider range of societal factors such as education and environmental factors. Future research should identify which societal factors most strongly influence SWB and the mechanisms by which related programs and policies influence subjective quality of life. Encouraged by strong evidence that societal conditions can influence SWB, researchers and policy makers should focus future efforts on identifying and implementing those societal changes that have the greatest potential to enhance happiness.

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Worries and Pain – The Dark Side of Quality of Life

40

Wolfgang Glatzer

Negative Wellbeing Seems Inevitable

Quality of life research is primarily concerned with positive wellbeing, like satisfaction and happiness. In contrast, this contribution is concerned mainly with aspects of negative wellbeing like worries and pain and other negative traits, which are the psychic burdens of individuals and societies. The reasons are manifold – natural and manmade – when we look at people's experience of hunger, disease, epidemics, natural catastrophes, political struggles, atomic contamination and ecological disasters. Worries and pain are inevitable, not least as disturbing events of everyday life, but also because death is the destiny of all human beings and nearly everybody suffers from the loss of loved persons. In an extreme case, suffering may lead to suicide, but the differences in suicide rates are a complex problem. Data about the dark side of life are numerous but they are like spotlights on selected points of the broad stream of life. Because knowledge is increasing enormously, systemizing that knowledge gains importance.

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W. Glatzer (✉)
Goethe-University, Frankfurt am Main, Germany
e-mail: glatzer@soz.uni-frankfurt.de

Negative Wellbeing Is Part of a Threefold Entity

In the long tradition of quality of life research we find often hints that wellbeing is not a one-dimensional trait; three main categories are used to order the variety of components of wellbeing: positive wellbeing, negative wellbeing and future perspectives. These components of wellbeing exist side by side and vary, at least partially, independently.

Early studies show these results as Bradburn points out (2014, See Chap. 11 in this volume): "The analysis of the responses shows that individuals vary along two dimensions – one indicative of positive affect and the other indicative of negative affect. Further, it was clear, that these two dimensions are independent of one another".

Other earlier authorities state similar results: Campbell et al. (1976, p. 58) and Andrews and Withey (1976, p. 332). Similar findings are indicated by the German welfare survey carried out by Glatzer and Zapf (1984, p. 186). These messages confirm that positive and negative components of wellbeing exist at the same time and that they vary independently. But this is not the whole story of the components of wellbeing, which is now in the focus of some colleagues (Anderson 2011). Some old insights seem to have been forgotten: the earlier Cantril Study (1965) showed that a further dimension is hopes and fears; they are part of wellbeing, and hopes and fears vary independently to a great extent from positive and negative states of wellbeing.

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Altogether this implies that wellbeing is threefold: there are existing positive components (like satisfaction and happiness); negative components (like worries and pain) and, last but not least, future perspectives (like hopes and fears). This is the foundation for the study of wellbeing. Obviously there is a bright side of life and dark side of life and they are weakly correlated and modified by varying future expectations. People vary with respect to their future perspectives and expectations, for example their hopes and fears, respectively their optimism and pessimism, all of which are decisive for their wellbeing. A comprehensive concept of the wellbeing of people has to take into consideration at least three components: the positive and the negative sides of wellbeing, and future perspectives.

The Variety of Worries and Pain

Words and names for various states of wellbeing and ill-being underlie cultural, situational and lingual influence (Glatzer and Gulyas 2014). Usually people express their "wellbeing" by giving names to their feelings and emotions. They can also express their wellbeing in verbal and nonverbal acts such as body language and crying as expressions of severe pain. These nameless emotions and feelings reach our brain and have to be identified and recognized by the individual before they can be included in human communication. Each language offers an inventory of words for our emotions and feelings and an individual has various possibilities for ascribing a certain word or term to those emotions and feelings. This is a process of interpretation and part of the social construction of reality.

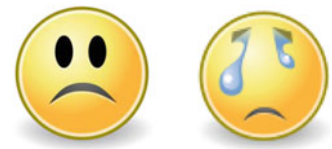
Worries, anxieties and pain are in contrast to positive wellbeing; they are structural traits of societies and belong to the complex of negative feelings which are carried in each society to a certain degree. There are many specific "worries" which people articulate and there is no known person who has never experienced any kind of worry. The broad concept of worries includes anything which worries people or makes them suffer.

Both individuals and societies are characterized by lower and higher levels of negative wellbeing. A society without any worries is an unrealistic utopia, but a society with mild worries is clearly preferable to a society with severe worries.

There are many negative aspects of life as expressed in a collection of words which can be used to characterize negative states or feelings. However some words have a clear meaning, others have no precise meaning, and some have meanings that overlap with similar words. Each language has developed many terms to describe negative feelings because it is never an easy task to define what kind of worries an individual is exposed to.

Neither worries and pain, nor anxieties and threats are self-evident; they must be diagnosed by ourselves or others who belong to our social context. The process of naming our feelings and emotions seems to require two components: on the one side, there is the diffuse physical feeling of the individual and, on the other side, there are linguistic labels for feelings, and we have to bring both together. The words are available in our language inventory and the naming is learned by socialization (Table 40.1).

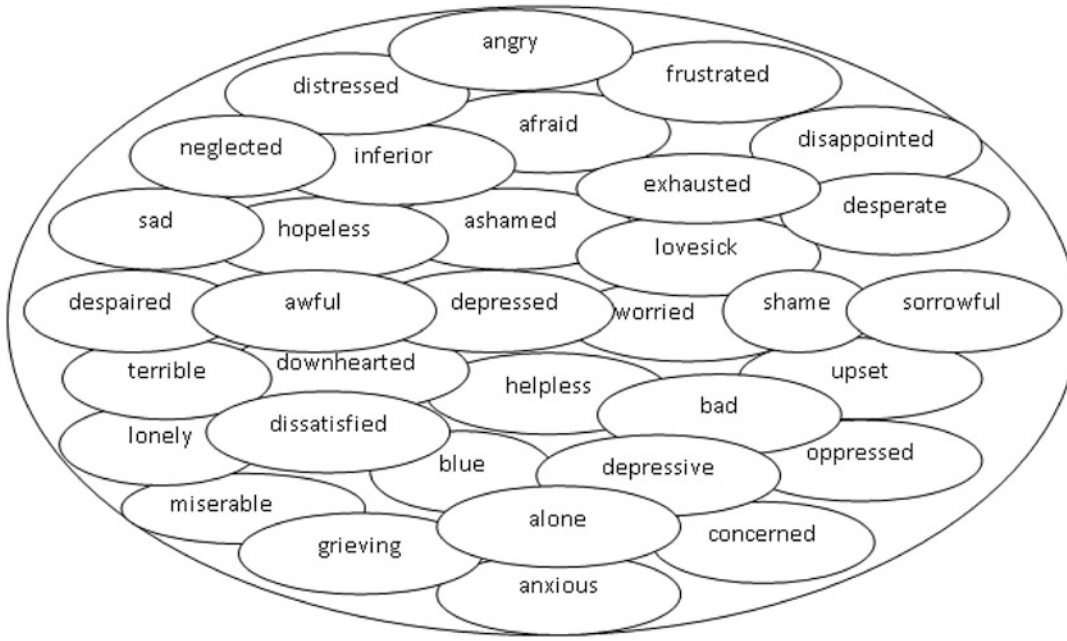
Icons, for example smileys, are also used to describe the state of emotions of an individual. The examples for negative wellbeing are:



Source: http://tango.freedesktop.org/Tango_Desktop_Project

There is a long way from the top to the bottom of emotions and feelings. At the top of the scale we find the following descriptions: "fully satisfied" or "completely satisfied" or "totally happy". The bottom of the satisfaction scale can be "not satisfied" or "not at all happy". But then the question remains whether "totally dissatisfied" or "completely dissatisfied" are categories beyond "not satisfied". To suffer from worries and pain can be much more than simply not being satisfied. The domain of negative wellbeing is

Table 40.1 Words for negative feelings and emotions in English



Source: Glatzer and Gulyas (2014)

differentiated into various burdens which can be more or less mild, or severe.

The naming of our feelings and emotions is a complex process and it seems that there are almost as many positive as negative labels for the state of feelings. Psychologists and sociologists are sometimes concerned with the task of naming or labeling states of feelings. People differ in how many feelings they know, how strong their impact is, what names they give to them and what their consequences are. In a nutshell, the process of identifying feelings often works in different ways.

Categorization of Worries

Worries are characterized by different reference points and these relationships are used to characterize their basic features. Perhaps most important is the division between worries about oneself (e.g. about one's own health), about relatives and friends (e.g. the health of one's own child) and about people in other parts of the world (whose health is threatened). Worries about others are often a motive or a source of various kinds of social support.

Attention is also given to "personal and national worries" (Bradburn 1969) also referred to as "micro and macro worries" (Boehnke et al. 1998). Micro worries (e.g. "being unattractive", "that my parents will die") deal with the self or with those one identifies closely with. Macro worries (e.g. "unemployment in our country," "people in the world dying of hunger") are related to aspects of life which have to do with the wider society, world, or universe (Schwartz and Melech 2000, p. 220). These two sub-dimensions – worrying about oneself or about others – are relevant in all life domains such as health, safety, environment, social relations, work and so on.

It is primarily in the psychological field that the underlying features of worries are regarded as pathological or non-pathological worries (Tallis et al. 1992). Pathological worries as defined by "Generalized Anxiety Disorders (GAS)" are chronic, excessive and uncontrollable worries patients suffer from (American Psychiatric Association 1987). In psychological research, pathological worries are measured on

scales like the Penn State Worry Questionnaire (PSWQ) (Meyer et al. 1990), which focuses on the intensity and the uncontrollability of worries. Where sociologists distinguish between personal versus national, and micro versus macro worries, the distinction of pathological versus non-pathological worries is a clinical diagnosis.

The variety of worries is tremendous in kind and depth, especially because they may have different reference points like personal/individual, or national/global and, from a clinical point of view, the emphasis is on pathological rather than on non-pathological worries. There are often people who react to worrying people, who participate in their worries and share the suffering. In this sense, worries may be infectious.

Positive and Negative Functions of Worries

At first glance, worries and dissatisfaction appear to be something undesirable which we would like to banish from this world. But we find also the opposite view: "Although suffering is generally considered undesirable, if not evil, it is sometimes considered advantageous or educative. . ." (Anderson 2011, p. 4). Both arguments are reasonable:

Worries can contribute negatively to wellbeing for the following reasons:

- In general, people do not like worries and pain – as anxieties, dissatisfaction and other states – because they feel a reduction of their wellbeing. As everybody knows, worries and dissatisfaction exert a more or less severe negative impact on wellbeing. Many see worries as an unavoidable burden of life for individuals and societies although macro worries do not provide the same significance for subjective wellbeing as micro worries (Schwartz and Melech 2000). However, based on their life experience, most people know that it is not possible to avoid worries completely.
- Worries can function as a self-fulfilling prophecy. If there is some kind of evil that people worry about, it is possible that people exaggerate their worries and that they develop dissatisfaction at a level which inhibits their behavior. Thus the event, which could be avoided, comes about.
- From the point of view of a whole society, worries and dissatisfaction can contribute to the damage of that society. The idea that 50 % of a population is dissatisfied, which happens sometimes in extreme cases, is a critical indicator of the quality of the society. Protest and violence, emigration and counter-reactions could follow.
- From the view of the individual, one of the reactions to severe pain is suicide and various forms exist in a worldwide distribution (Pompili 2012). Though suicide rates are increasing globally it is questionable how far they are influenced by quality of life.

But on the other hand, there are views that worries could have positive functions:

- People have a better understanding of their positive wellbeing if they experience their own negative wellbeing. The experience of positive wellbeing is seen as more valuable by someone who has experienced negative wellbeing.
- Another positive contribution of worries is that they act as signals in the face of danger. Worries that are articulated indicate that human beings are concerned about something. This may force social action to remove the causes of worries. In such a process, worries have a positive function because they are like an alarm system, which stimulates people to take the necessary steps against the threats which are causing the worries. In this context worries have the positive function of a self-destroying prophecy.
- Finally, another important function of worrying concerns worries about people in need. A readiness to assist emerges if the worries concern other individuals or populations. This may be a crucial motive for giving social support. A fundamental question is: "Without suffering, would we have humanitarian action and charitable giving?" (Anderson 2011). It seems that certain styles of worrying are necessary for human assistance and social support.

Worries and pain, anxiety and dissatisfaction are, to a certain extent, expressions of unpleasant life events and living conditions, but at the same time, they are signals that individuals and nations need changes in their life styles. Nations with an especially high burden of worries and pain are challenged to reduce these worries peacefully.

Measurement Procedures and Data Sets About Worries

One way of collecting data is to ask people openly about their worries and code the answers into certain categories; the second method is to ask closed questions.

Open questions about worries were used in the old Cantril Study (Cantril 1965, p. 23). Cantril also included the Self-Anchoring Striving Scale where people were asked to position themselves on the Cantril-ladder. This ladder ranges from the worst possible experience to the best possible experience, with experiences ranked from 0 to 10. There are additional studies which measure the experience of worries in the past (for example Warr 1978). A slightly different open question was used by Veroff et al. (1981): "What kind of things do you worry about?" Coding the responses is always a demanding task.

A number of questions are differentiated by their answer categories. Similar to the traditional Affect Balance Scale, there are questions like, "Did you experience the following feelings a lot during the day, yesterday? How about worries?" (Gallup World Poll 2010). The respondents can answer with yes or no, so this is an example of a closed question with dichotomous answer categories.

Another similar method is to ask the following closed question: "Most people worry more or less about some things. Would you say you never worry, worry a little, worry sometimes, worry a lot, or worry all the time?" (Andrews and Withey 1976). Here the respondents can rate the strength of their worries in the given case in five categories.

Today a number of indicators are available in different surveys and survey archives. Highly significant are the "World Database of Happiness" (Veenhoven 2012) at Rotterdam, which collects happiness data from all over the world, and the data potential of the World Value Survey.

Monitoring Features of Negative Wellbeing

Many people believe that some negative wellbeing (or ill-being) is inevitable in life. Indeed, as long as death and natural catastrophes are part of human life, some worries and pain are unavoidable. Given that worries and pain are always a part of life, the practical question is whether people can influence how much and how deeply they suffer. The interesting question is what kind of worries and pains are avoidable, and what kind and how much worry and pain are unavoidable in life. Worries should be considered with regard to eras, countries and continents. In earlier eras the measurement of ill-being received more attention than the measurement of wellbeing, but this changed with the rise of quality of life research, but not all worries were lost sight of in quality of life research (Glatzer 2011). Various approaches investigate negative wellbeing using with different methods. One approach is to ask people about their worries in their own terms and then to categorize the results. A second approach is to use negative items, as occurs with affect-balance scales. In a third approach, the lower end of satisfaction scales are labeled "totally dissatisfied" or "not at all satisfied" as reference points for defining dissatisfaction.

Worries and Concerns in the World Population

More detailed knowledge of the worries burdening people can be explored with open questions where respondents describe their worries in their own words. This method used by the social sciences is also used and funded by private companies who are interested in security

Table 40.2 Main concerns in the world and for selected nations 2010

	Global Level	US	Germany	India	Vietnam
Issue	*Concerns of adult population (percent)*				
Global economic stability	17	31	8	8	5
Terrorism	17	22	22	42	17
Climate change	16	6	15	15	30
Violence in everyday life	15	17	10	8	6
Global poverty	11	6	20	14	8
Natural disasters	8	5	11	6	13
Pandemic diseases	8	4	3	5	18
Social breakdown	7	9	12	2	4

Source: HSBC (2010, p. 2)
Questions refer to selected issues

questions. The interests of various services, especially insurance industries, are influenced by the issue of worries and pain and the surveys which they carry out contain information about unknown areas. One example for monitoring national concerns was initiated by the Hong Kong and Shanghai Banking Corporation who carried out an online survey of over 15,000 people in 15 countries. The result (see Table 40.2) is that, in about 2010, four dominating concerns characterized the worries of people on the world: "global economic instability", "terrorism", "climate change" and "violence in everyday life". They were the main worries of mankind almost equally and they included global economic problems, security, ecological questions and everyday threats. Added to the list of dominant worries in the world are global poverty, natural disasters, pandemic diseases and social breakdowns. This was the pattern of worries on the globe in about 2010, a pattern which differs from country to country according to their stages of development and modernization.

These main worries present different challenges for different types of society: worries about global economic stability and violence in everyday life are mainly present in the USA; Germany worries chiefly about terrorism and global poverty; in India, terrorism is the biggest worry, and in Vietnam, climate change the main worry. Each region reveals a specific pattern of worries related to the societal and natural problems which have played a role in their recent historical experience.

A previous global study on worries called "Human Needs and Satisfaction" (Gallup International Research Institute (Ed.) 1978) and carried out about 15 years ago presented results from 8,500 personal interviews worldwide for the middle of the 1970s. The data were collected by Gallup International Research institute from 1974 to 1976 and the interviews were carried out in 58 nations. The results revealed that concerns about health and one's personal economic situation were the dominant worries, worldwide. Though this study of worry and pain is rather old, there are no strictly comparable studies.

Thematically, results are available for the period of inquiry from 1957 to 1963 when nearly 20,000 people were interviewed (Cantril 1965). The Cantril Study of 1965 investigated personal worries and fears of people within rich and poor countries. The following categories for the world population were deduced from the results of the interviews (see Table 40.3): worries focused on health and personal economic situation followed by international war-peace problems, and family problems. Less weight was given to having a job or work, political fears, social fears and personal values. Only a small proportion reported no fears and worries. These results indicate that we can state that widespread fears and worries in modern and pre-modern societies are normal.

Attention is drawn especially to the discrepancies between the richer and poorer countries. People in richer countries (US, West Germany and Israel) have fears about their personal health (55 %) and their economic situation

Table 40.3 Personal fears within richer nations (United States, West Germany, Israel) and poorer nations (Brazil, Nigeria, India), 1957–1963

General category	Rich countries average	Poor countries average	
Fears/worries	*% adult population*		Percentage difference
Health	55	43	12
Personal economic	51	49	2
International war-peace	34	1	33
Family	28	21	7
Job or work	6	3	3
Political	5	2	3
Social	3	6	−3
Personal values	5	10	−5
None	7	7	0

Source: Cantril (1965, p. 224)
Question: What are your fears and worries about the future? (Cantril 1965, p. 23)

(51 %). In the poorer countries (Brazil, Nigeria, India) people have nearly the same level of fear about their personal economic situation. At this time in the 1950s in rich countries, the worries about war and peace were widespread but were not articulated in poorer countries. Fears about international war-peace conflicts play a role mainly in the rich countries. In poor countries, social fears and fears about personal values show higher rates than richer countries, which is an astonishing result.

Altogether the result is a mixed picture.[1] Where health und economy were the main concerns of the 1960s, in the new millennium the concerns are economic stability, terrorism and climate change. There seems to have been a change from personal to more global concerns.

Negative Affect in Selected Countries Around the World

The Affect Balance scale is a research instrument which is used to investigate the state of affect of broad populations, which is close to their quality of life. Negative affect, especially negative wellbeing, is explicitly referred to in a number of questions in addition to questions on positive affect. Both are related to the individual's negative experiences during the past few weeks. The items – negative or positive – are fixed and people can only choose to agree or not (Bradburn 1969, p. 56). Questions about negative feelings related to unpleasant events which could happen during a day are asked, as below:

> During the past few weeks, did you ever feel . . ..? (yes/no)
>
> So restless that you couldn't sit long in a chair?
> Bored?
> Depressed or very unhappy?
> Very lonely or remote from other people?
> Upset because someone criticized you?

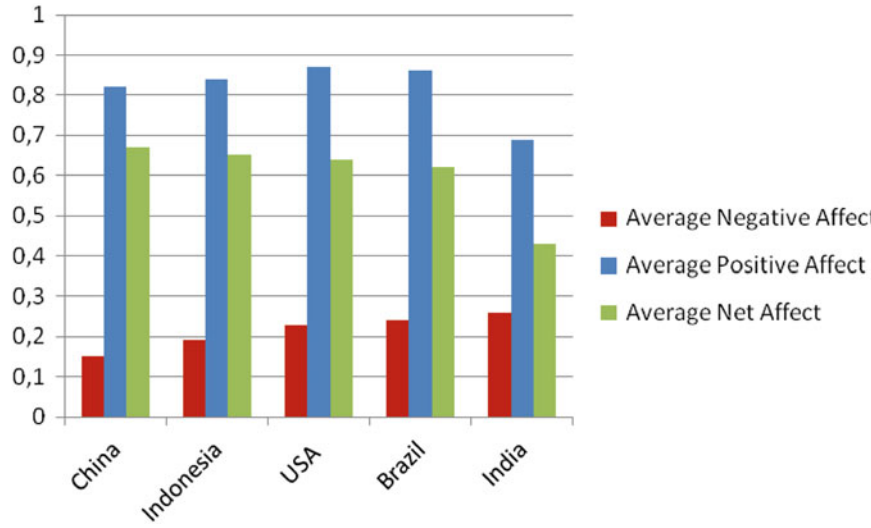
In addition to these negative events, there are five questions on positive feelings.[2] These are modifications of the original Bradburn scale. As can be seen, the items are a small selection of what could happen to individuals in everyday situations.

The results of this representative questionnaire suggest that people experience positive events more often than negative events, and

[1] In the available global materials I could not find measures of the depth and strength of worries and pain. It could be that the perceived depth and strength of worries and pain differs between different countries and population groups.

[2] The questions reflecting positive feelings are:
Pleased about having accomplished something?
That things were going your way?
Proud because someone complimented you on something you had done?
Particularly excited or interested in something?
On top of the world?

Table 40.4 Affect balance scores for the world's big countries 2010



Source: Helliwell et al. (2012), pp. 47–55

negative and positive ratings show no strong positive correlation. It is striking to see that negative affect is especially clear in countries which are close to wars or characterized by social tensions e.g. the Palestinian territories or Iraq. In these countries people express their negative experiences without showing strong compensating behavior on the side of positive affect.

The largest proportion of the world population lives in China, India, the USA, Indonesia and Brazil and these countries are positioned in the middle area of the affect balance scale for the big countries on the world, as shown in Table 40.4.

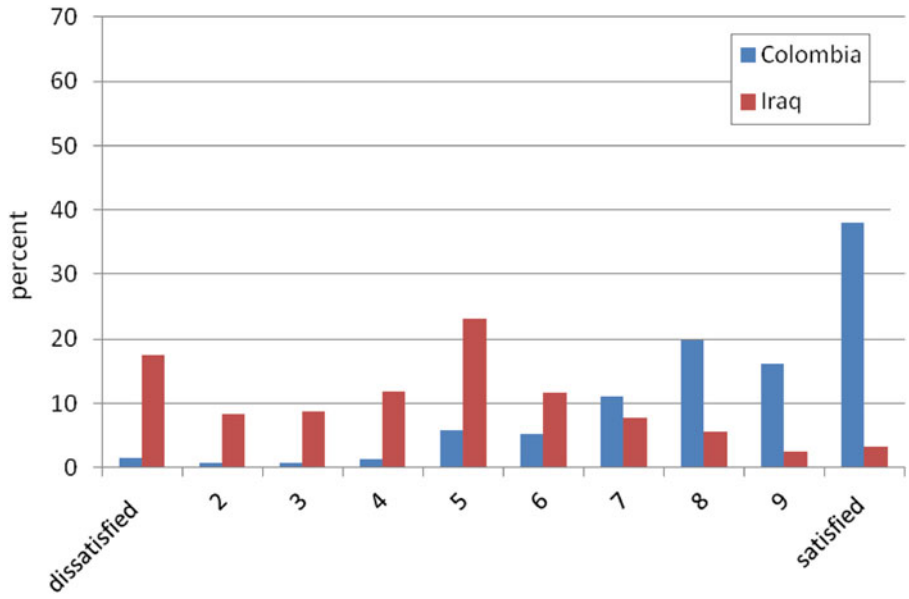
The scores on the affect balance scale, as used in Table 40.4, lie between the extremes of minus five and plus five. The original data show Sweden at the top with 2.9 and Japan at the bottom with 0.39. From the index above, which shows separate positive and negative parts, it is evident that in the USA people have a much higher positive affect on average, but the negative affect is similar to other countries. The Affect Balance Scale shows that the negative burden of life and the positive side of life vary independently. The absence of negative feelings does not necessarily indicate the presence of positive feelings. All over the world a certain amount of negative affect is evident in everyday behavior. Obviously negative affect is a structural feature of society.

Dissatisfaction Levels of Countries and Continents

Sometimes positive and negative wellbeing is measured in the same surveys with similar scales. This is especially the case if "dissatisfaction" is measured as the lower part of the satisfaction scale. However, in the case shown in Table 40.5, we find extreme discrepancies between countries and continents: Iraq is at the top and Colombia is at the bottom of the dissatisfaction scale.

The discrepancies shown in this graph for two societies go beyond conventional expectations. Iraq shows small percentages of positive values for their people and high percentages for negative scale points beyond the midpoint. Colombia shows only very small number who rate themselves in the lower part, but high percentages in the upper part of the scale. As we know from many research findings, most countries have a tendency to right-skewed satisfaction distributions like this. A left-skewed satisfaction

Table 40.5 Dissatisfaction-satisfaction-distribution for worlds extremes: Iraq and Colombia



Source: World Value Survey (2005–2008), ASEP/JDS Databank

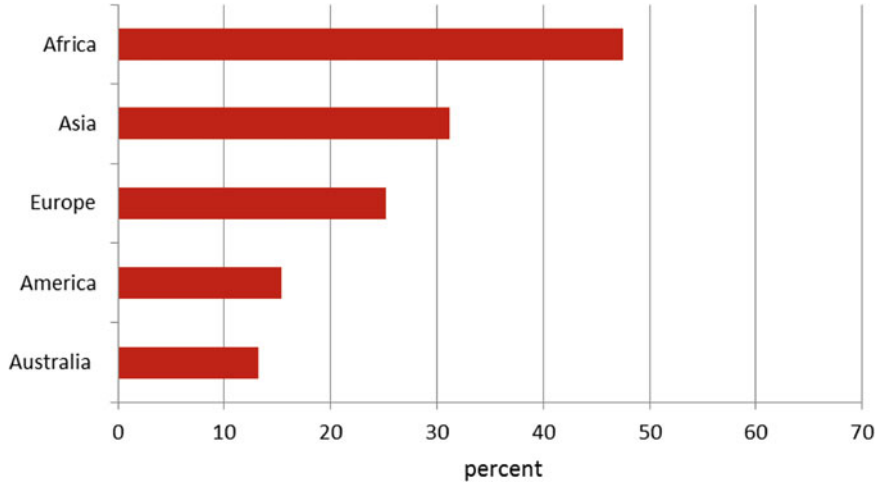
distribution is unusual. A dissatisfaction ratio of 50 is the exception. Most other countries show satisfaction ratios around the average. The different satisfaction distributions show the huge gap which societies have to bridge in order to meet the needs of their people.

Each continent has its own dissatisfaction level and this level is related to social consequences in terms of emigration and protest or, as was said once, "of exit and voice". The indicator used here for the amount of dissatisfaction of a continent is the percentage of people rating themselves below the middle of the ten-point-scale, which is far below the average. For purposes of comparison we consider the steps on the satisfaction ladder from one to five as dissatisfaction. Theoretically we can assume a critical point when more than half of the population rate themselves as dissatisfied. A population where each second individual is dissatisfied will not give much support to its society. Certainly, a margin of error must be taken into account because a random selection was used in each continent and not all countries of the continents were included.[3] But for most continents, the representation of countries seems sufficient to recognize main trends.

Africa is clearly the continent with the highest number of countries with dissatisfied people; it is three times higher than America. The dissatisfaction level in Asia and the "old world" of Europe is in the middle of the dissatisfaction hierarchy. The lowest dissatisfaction levels exist in America and especially in Australia.

[3] The number of countries included and the representation of the continental countries:
Nine from Africa, distribution from the North to the South with big gaps in between;
Fifteen from Asia, including China and Russia, some of South East Asia but not India;
Twenty from Europe, only small countries are missing, mostly from the Baltic;
Eleven from America, including all big countries of the North, the Middle and the South;
Two from Australia; namely Australia and New Zealand but not Oceania (not the Arctic and not Antarctica).
This is not an exact representation of the world, its countries and its population, but it is the best representation which we can get today.

Table 40.6 Dissatisfaction ratios of the continents (incomplete representation)



Source: World value survey (2005–2008), ASEP/JDS Databank
Dissatisfaction Ratio: Percentage of dissatisfied people per country who describe their life satisfaction with the answer-categories 1, 2, 3, 4, 5 on the ten-point satisfaction scale in respect to the total number of respondents of the countries

No continent shows a dissatisfaction level above 50 % though in single countries a high level of dissatisfaction exists. All continents are above 10 % and two continents are above 25 %. Each continent is characterized by its own dissatisfaction level, which presumably has consequences in terms of exit and voice (Table 40.6).

The dissatisfaction level of countries shows huge differences. In different surveys the results vary a little, but remain the same at the core. Africa is a continent under pressure and this results in migration to Europe. As long there is no solution for the dissatisfaction problem of Africa, the migration tensions between the continents will remain.

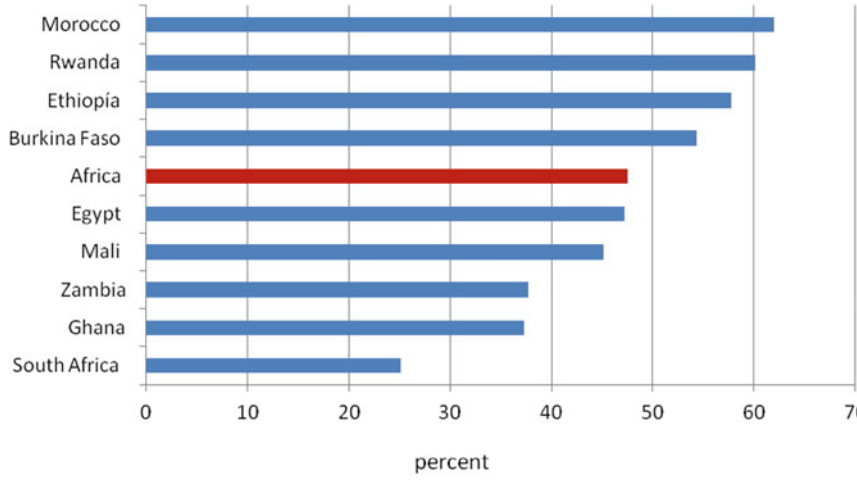
People live in very different areas of dissatisfaction and satisfaction. The extremes of highest and lowest dissatisfaction at the time of the survey were Colombia and Iraq. The high dissatisfaction level in Iraq is obviously a result of the past war and its postwar disturbances. On the other hand, the lowest dissatisfaction level in Colombia was unexpected, taking into consideration the socio-economic conditions of the country. There is a special satisfaction-inclination in some countries of middle and South America which leads to satisfaction without the modernization of the country (Castrillon 2013). This demonstrates an important conclusion for satisfaction ratings: satisfaction and dissatisfaction alone are not always enough to evaluate a nation's quality of life. In respect of the least and most dissatisfied countries there is small change: Norway temporarily showed the level of least dissatisfaction of the world's countries, and other war countries replaced Iraq as the country with the highest level of dissatisfaction.

National Differences of Dissatisfaction Ratios in the Continents

Analysis of the dissatisfaction ratio of the countries of each continent reveals the following results: the discrepancies between the countries in respect to their dissatisfaction ratio appear extreme (Tables 40.7, 40.8, 40.9, and 40.10).

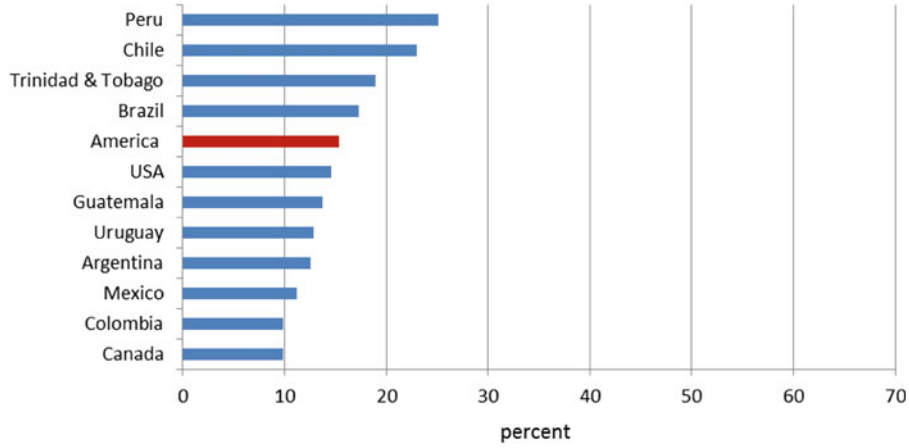
African countries show many high dissatisfaction ratios, with Morocco at the top and South Africa at the lower end. Earlier investigations showed South Africa with one of the highest increases in satisfaction when democracy was established. But 25 % of South Africa's

Table 40.7 Dissatisfaction ratios in Africa and its countries



Source: World value survey (2005–2008), ASEP/JDS Databank: own computation

Table 40.8 Dissatisfaction ratios in America and its countries

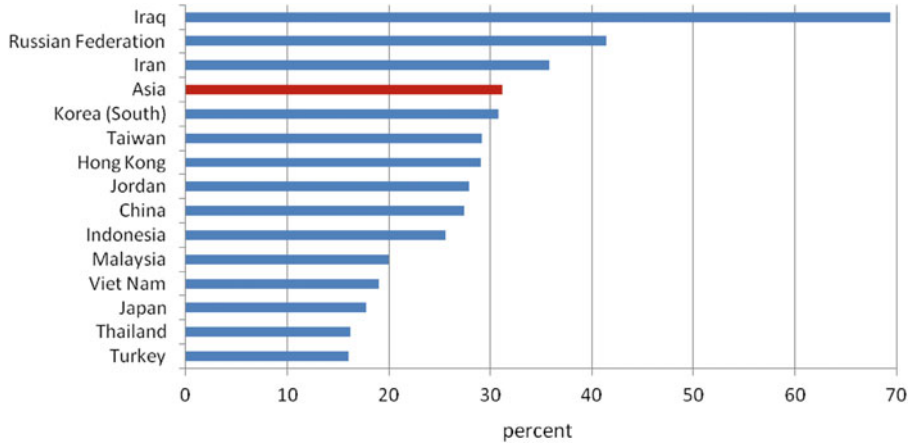


Source: World value survey (2005–2008), ASEP/JDS Databank: own computation

respondents are dissatisfied and Morocco's figure is close to two-thirds. The difference between these two compared to the other continents is relatively low but it is a low difference on a high level of dissatisfaction. Low dissatisfaction levels, as in Australia and America, are unknown in Africa as far as we can see. If dissatisfaction is a reason for protest and violence, then Africa seems to be threatened most.

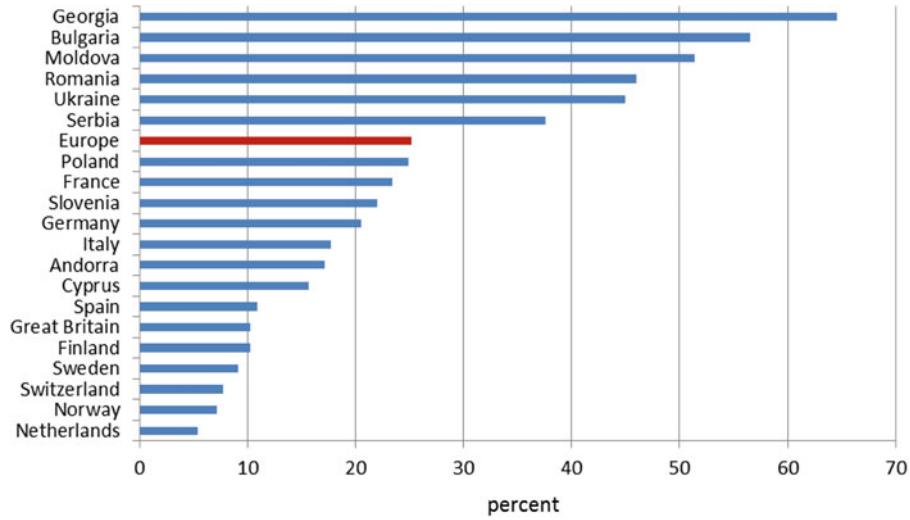
America is the continent with the lowest dissatisfaction potential altogether. Most countries of North America, Middle America and South America show relatively low dissatisfaction levels. The highest dissatisfaction ratios in American countries are far below the dissatisfaction ratios of the other continents. The difference between high and low dissatisfied countries in America is rather small and therefore the internal tensions are not enforced by the dissatisfaction of people. However, the migration problems between North and Middle America are astonishing: it must be taken into account that within a fairly satisfied population there are always a certain number of dissatisfied people who want to change their living conditions.

Table 40.9 Dissatisfaction ratios in Asia and its countries



Source: World value survey (2005–2008), ASEP/JDS Databank: own computation

Table 40.10 Dissatisfaction ratio in Europe and its countries



Source: World value survey (2005–2008), ASEP/JDS Databank: own computation

Whereas postwar Iraq shows the highest dissatisfaction rate worldwide, the continent of Asia as a whole is below Africa's dissatisfaction level. Vietnam has overcome its wars and shows a fairly low dissatisfaction ratio for Asia. Among Asian countries, Japan and Turkey are the least dissatisfied.

Within its geographical continental borders from the Ural to the Atlantic, Europe shows a severe dissatisfaction pattern. The difference is highest of all the continents because the difference between Bulgaria and the Netherlands reveals 50 % of dissatisfied people. The northern welfare states show lowest dissatisfaction ratios; dissatisfaction is moderate in central Europe, including parts of southern Europe, and dissatisfaction begins to get higher in the direction of east and south-eastern Europe. The Baltic area, which is not included here, also shows rather high dissatisfaction levels in different surveys.

We can speak of a dissatisfaction circle running from the north through central Europe to the south then to the more eastern and south-eastern areas and up again to the north-east.

To sum up: at the present time, the highest dissatisfaction levels between continents are in Africa, and this will affect the worries of the world. In some countries more than 50 % of the population are dissatisfied, which can be regarded as a critical point for protest and emigration. At present the least dissatisfied country in Africa is South Africa, which was the problem country before the democratic revolution of 1994. The country of Iraq shows the highest dissatisfaction levels on the globe, certainly a consequence of war. Europe also shows some countries close to the Ural border of Europe with levels of dissatisfaction above the 50 % mark. With regard to the dissatisfaction indicator, the northern countries are among the best-off countries in Europe. America and Australia, the offspring of Europe, are rather low in respect of dissatisfaction, but the high satisfaction levels in South and Middle America are astonishing. This leads to the conclusion that satisfaction is not always a sufficient indicator for the quality of society; we should take a small battery of QoL-indicators into consideration. Although the data are from the last decade, it is remarkable how slowly the world changes and how abrupt changes occur only in extraordinary cases.

Summary from the Global Diagnosis of Negative Wellbeing

The main insight gained from this study is that worries, pain and other components of negative wellbeing should not be neglected in quality of life research. Wellbeing is not one-dimensional but threefold: its dimensions are the positive and the negative side of wellbeing as well as future perspectives, which are always modifiers of individual and collective wellbeing. Negative wellbeing consists of a variety of traits and components, which develop in ways that are different from traits of positive wellbeing.

Another insight is that, among the variety of worries, several distinctions are very important: worries can be focused on oneself or on others who are perceived to suffer, and it is postulated that worries about other people, whether close or far away, are an important basis for charity and support. Worries about needy people may be an important motive for support and help. Worries about external people and associations can refer to individuals, to regions, to nations or to the globe. Some approaches speak of micro and macro worries.

Worries and pain in the global context can be identified by different approaches, of which a selection is presented here:

- Open questions about worries and pains, summarized by categorization;
- Negative affect in the context of a double-sided affect balance scale;
- Dissatisfaction ratios measured as the lower part of a satisfaction scales.

A further insight is that worries, as well as related components of negative wellbeing, have not only negative, but also positive functions, even though a significant negative function is that individuals suffer from their worries and feel bad. A positive function of worries is that they are warning signals for unwanted developments. Worries tell the individuals that they should be careful about activities which could reinforce their worries. Moreover, negative wellbeing is often an indicator of wrong behavior and provides pressure for changes.

Continents and countries are characterized by specific levels of worries and dissatisfaction. Africa shows the highest dissatisfaction potential, which finds its expression in migration to neighboring continents. Additionally, there are huge differences of dissatisfaction within each continent. This implies that there is dramatically high potential for social conflicts, sometimes internal wars, and for enforced emigration.

The goal of improving quality of life has to take into consideration two rather different strategies: increasing positive wellbeing has to be combined with reducing negative wellbeing. Worries are a contrast-category for positive wellbeing, but there is variance between less

and more worries. A society without any worries is a Utopia, but a society with mild worries is preferable to a society with severe worries.

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Hopes and Fears – Future Views of Quality of Life

41

Jennifer Gulyas

Introduction

There is a German saying which goes: "Hope dies last." If there is nothing left anymore, there is still hope, although the hope will also eventually die. Hope is good in general, but this does not mean that fears are bad. Although hopes and fears of people occur in some Quality of Life studies and researchers have dealt with them (e.g. Staats and Stassen 1985) no systematic research on the hopes and fears of people in and for the field of Quality of Life has been done. Certainly, there are basic approaches available, but they have not been developed. Other disciplines like psychology, theology, philosophy and economics provide approaches which have to be considered and we have to put this knowledge together to make it productive for research in the Quality of Life field. For that reason, this text follows an interdisciplinary approach. Glatzer (1990) included hopes and fears, to understand as future expectations, in the concept of wellbeing, using an approach based on the assumption that wellbeing is threefold and that future expectations vary to a strong degree independently of positive and negative states of wellbeing (Glatzer in press, 2014).

Organization of the Chapter

The first step is to review the available literature systematically and then develop a theory about hopes and fears for the field of Quality of Life research. In addition to this theoretical framework, the measurement of hopes and fears falls within the focus of interest, namely how to measure hopes and fears and describe those hopes and fears in a global perspective. In the empirical part, studies reflecting and measuring hopes and fears are summarized and then selected results are presented graphically to illustrate people's future expectations.[1] The results are interpreted and contextualized on the basis of the developed theory.

A Review of Hopes and Fears

Hopes and Fears in Different Disciplines

Philosophy

In philosophy the principle of hope described by the German philosopher Ernst Bloch (born 1885, died 1977) is especially important. Originally the

I dedicate this chapter to Prof. Wolfgang Glatzer. It was a pleasure for me working with him.

J. Gulyas (✉)
Goethe-University Frankfurt am Main, Frankfurt am Main, Germany
e-mail: j.gulyas@soz.uni-frankfurt.de

[1] The availability of free data is a huge problem, especially in the case of data with a global set of countries such as Gallup provides, where the data is available with restricted access; only the current data is available for free, you have to pay for more data.

W. Glatzer et al. (eds.), *Global Handbook of Quality of Life*, International Handbooks of Quality-of-Life,
DOI 10.1007/978-94-017-9178-6_41,

title of his work was "Dreams of a better life". In his 'principle of hope' Bloch (1985/1959) consciously connects hope with rationality to fulfill the contents and make them real. So hope is not something irrational, and it can be differentiated from dreams. Hope provides the energy to change certain things in the real world, according to our wishes and according to the real possibilities, so making things attainable.

Nietzsche (German philosopher, born 1844, died 1900) also wrote about hope. He referred to the Greek myth of Pandora's Box. The gods' gift to mankind was brought to them by Pandora, in a box. Outwardly, the box was a box of happiness, but all the evils of mankind came out of the box when she opened it. Pandora closed the box, leaving only one thing in it: hope. Mankind believed that hope was the main source of happiness. However, Zeus willed that humans, no matter whether they were tortured by other evils, would not throw their lives away, but continue to be tortured by other, new things. For this reason, Nietzsche concluded that hope "is the worst of evils, for it prolongs the torment of man" (1878). So, according to Nietzsche, hope is not simply positive for mankind.

Theology

In the theology of hope, Moltmann (1997) builds on Bloch. For Moltmann, a Protestant theologian (born 1926), hope is strength in this world. We live in hope and in the power of hope, as long as our hope is not destroyed or fulfilled. People try to live a good life, because they hope to go to paradise after death and they fear going to hell. So hope and fear for something may change our behavior. Tiger (1995), on the other hand, says that the key function of religion is to offer the solace of optimism, and must therefore give people hope.

Economics

In Economics, the terms 'hopes' and 'fears' often come up in order to describe the mood of people with regard to economics or to describe the economic situation. Economists are interested in forecasting their future expectations for the stock market, economic development, consumer behavior, and so on. They make use of objective data like the Gross Domestic Product (GDP) but they also use subjective data such as the opinions of people, to make statements about the future. In the field of economics the words 'optimism/optimistic' and 'pessimism/pessimistic' are often used to describe whether people are hopeful or fearful of a situation, such as whether the stock market will react positively or negatively in the future. Keynes (1936), in his business cycle theory, had already identified emotions as important factors in making investment decisions; he speaks of "animal spirits", and Kaufman (2006) writes that "Emotions may potentially affect investment decisions through several different channels. One is through the influence of optimism and pessimism". The market is subject to waves of optimism and pessimism, which are irrational but also justified if there is no solid basis for reasonable calculations (Keynes 1936), as the following newspaper headlines show:

- "Optimism leads to blind euphoria"[2]
- "Optimism out of nothing"[3]
- "This round goes to the pessimists"[4]

Emotions have an important influence on the economy, and the financial market is influenced by the human actors with their hopes and fears. The following example of the stock market clearly shows this connection: Investors buy shares when they think that the trend will develop positively and the prices will rise and, because many investors think the same way, prices do rise. People buy shares in the stock market, because they believe in the growth of the share. They buy shares in the hope that they will make profits (like during the dotcom bubble burst in 2000).

Similarly, if investors do not believe in an enterprise, they will sell shares and then the

[2] http://m.faz.net/;s=gNBoRE71Nr7yMWUXNQ30g36/aktuell/finanzen/fonds-mehr/strategie-optimismus-fuehrt-zu-blinder-euphorie-1731409.html

[3] http://m.faz.net/aktuell/finanzen/fonds-mehr/strategie-optimismus-aus-dem-nichts-1731414.html

[4] http://www.faz.net/frankfurter-allgemeine-zeitung/wirtschaft/die-boersenwoche-diese-runde-geht-an-die-pessimisten-1993767.html

share price falls. So it is clear that human factors and expectations influence certain developments on the stock market whether they are positive or hopeful (that a share will increase), or whether they are negative, and connected with fears that a share price will decrease. Economics provides us with several studies which deal with the hopes and fears of people, like the study of JP. Morgan Asset Management (2011), or the Livingston Survey (2013), which started in 1946, and is the oldest continuous survey of economists' expectations, summarizing the forecasts of economists from industry, government, banking, and academia.

Psychology

In psychology, 'hope' is defined in different ways: as a problem-solving strategy (Alexander 2008), as a self-competence (Schäfer 2009), as a decision-making competence (Schnoor 1991).

In the research field of positive psychology, established by Seligman (2002), hope is defined as a positive future forward-looking emotion, like optimism, trust, belief and confidence. Staats and Stassen (1985) defined hope as "positive future expectations" and, in comparison to happiness, which is also described as a positive feeling, "hope has the additional cognitive aspect of expectations". So hope has both affective and cognitive aspects, which can be measured separately.

Another definition of hope comes from Snyder et al. (1991): Hope is "a cognitive set that is based on a reciprocally-derived sense of successful agency (goal-directed determination) and pathways (planning to meet goals)". This concept of hope is known as hope theory and it has been used in much psychological research literature. Another often-cited definition of hope is "a multi-dimensional dynamic life force that is characterized by a confident yet uncertain expectation of achieving good, which is realistically possible and personally significant" (Dufault and Martocchio 1985). These writes distinguish between generalized hope, which refers to a belief in an uncertain future, and particularized hope, which more concretely identifies the objects of hope in a persons' life. In addition to all these definitions, we have to consider that hope is culture specific (Averill and Sundararajan 2005). "[The] Western conception of hope is predominantly as an episodic emotional state, whereas the Eastern conception is as a more enduring personality trait" (*ibid.*).

On the one hand, hoping means that people who are hopeful need to think positively, and this is a conscious process. On the other hand, just thinking is not enough. People who are hopeful also have to make decisions and they have to make plans about how to reach certain goals and then these plans have to be put into practice. Plans may be prepared well, but life does not allow us simply to follow our plans to reach certain goals. Sometimes there are barriers which we have to climb. We have to rethink our plans and find other routes to reach our goals. According to Snyder's hope theory, high-hope people face barriers better than low-hope people. High-hope people think about alternative ways to reach their goals, whereas the low-hope people have no ideas. High-hope people regard barriers as challenges, they do not give up and they are creative in finding new options (Snyder et al. 1991).

These thoughts lead to the idea that fears have more a passive component. People who have fears may tend to do nothing, simply waiting for their fears to come true. Bar-Tal (2001) defines fear as follows: "Fear is an automatic emotion, grounded in the perceived present and often based on the memorized past (also processed unconsciously), that leads to freezing of beliefs, conservatism, and sometimes pre-emptive aggression." This definition includes a future orientation, because fears are a negative imagination of the future, of what could happen.

Sociology

In sociology there is no specific definition of hope, although we find hope and the terms 'optimism' and 'pessimism' in the International Encyclopedia of the Social Sciences (2nd edition) (Darity 2008); however, that definition refers more to psychological approaches.

The theory of Berger and Luckmann (1977) gives a basic sociological approach, which describes hope as "knowledge bases". "In the interaction and the mutual interpretation a typified action is developed which is based on hope. In this sense, hope is seen as part of social reality. It is through interaction and interpretation that hope is reproduced and becomes real" (Translation from German, Laubach (2006)). Neves (2003) suggested that, according to Durkheim (1984), he "understood hope to be a collective sentiment that has been learned over time and experience, and as such, is something to be cultivated, not annihilated. If the pursuit of happiness is to remain a human ideal worth committing ourselves to, then hope must be encouraged and learned, not debased and banished. ... As such, pessimism not only appears to stultify the effort to achieve subjective wellbeing, it also appears to imply a metaphysical justification for suicide, since without the belief in the appearance of a better life, as a better life worth waiting for in active hope, the suicidal person does not stand a chance in hell."

Review of Literature on Hopes and Fears in the Field of Quality of Life (QoL) Research

In an early publication by Staats and Stassen (1985) hope was simply described as a "predominance of expected future positive feelings over future negative feelings" and they used a modified Bradburn Affect Balance Scale, the Expected Balance Scale (EBS), which focuses on the future to measure hope. The EBS asks "In the next few weeks..." instead of "In the last few weeks...". Their results showed that hope correlates with satisfaction and subjective wellbeing and, to a lesser degree, with happiness. Hope, understood as an expected life quality, is an important variable (Stassen and Staats 1988) and it is a good predictor of present life quality and satisfaction (Horley and Little 1985).

Staats and Partlo (1992) conclude that the hope data is more consistent with a need theory (greater deprivation or threat leading to greater hope) than with a comparison theory. They found that hope for peace increased especially during the Gulf invasion, and hope for productivity increased especially in a time of recession (*ibid.*). They conclude that threat may lead to more hope, and remark that hope influences behavior positively, because hope may serve as motivation that keeps the individual behaving, although "the capacity for hope differs across persons." (*ibid.*) They come to the conclusion that there has to be more research on the conditions under which threat decreases hope and those under which threat increases hope. (*ibid.*)

A study of hope levels in South Africa, where hope is measured with a modified Snyder hope scale, found that there are geographical and social differences in citizens' average hope levels (Boyce and Harris 2012). Regarding the cultural aspect Rustoen and Utne (in press, 2014) conclude "further studies need to focus on how hope differs across cultures and how these cultural differences impact coping". So we see that "Future expectations are shaped by socio-demographic characteristics, current physical and psychological functioning, as well as by social environment and culture. Future expectations encompass a complex web of expectancies referring to various life domains, but these can be assimilated into positive and negative expectations" (Shrira and Palgi in press, 2014).

In the cited studies, there is no study which includes the hopes and fears of people in the concept of subjective wellbeing. This is a major research gap that is discussed in the next section.

A Theory of Hopes and Fears for Quality of Life Studies

The Terms 'Hopes' and 'Fears'

'Hope' and 'fear' are not terms clearly defined in psychology or social sciences, but what is clear is that they refer to the future, whereas worries refer

to the present, the future or the past. Hope is a positive expectation that something good will happen, or that the future will be better than the present. Fear is a negative expectation that something bad will happen, or that the future will be worse than the present, whereas worries could refer to the present or the future.

The Terms 'Optimism', 'Pessimism' and 'Neutralism'

Optimism or pessimism can be understood as personality traits. Being an optimist or pessimist depends on one's personal character, just as it is the personality of the judge that decides whether a glass is half full or half empty. In other studies, hope is clearly distinguished from optimism (Scioli et al. 1997) which can be measured with Schleier and Carver's (1987) Life Orientation Test.

The focus of this article is not on this perspective, however. In this section we shall use 'optimism' to describe a person who, in general, has more hopes than fears, and we use 'pessimism' to describe a person who has more fears than hopes. On a national level, we can say that a country is optimistic if more people are hopeful than fearful, and we can say that a country is pessimistic if there are more people who have fears than hopes. The two levels of optimism, the individual on the one side and the national (or other groups and organizations) on the other, are connected with different questions of psychological or social structural provenance. This perspective of optimism has a more modern usage, and here optimism denotes a tendency to hold positive expectations of the future (Bennett 2011). According to Gillham et al. (2000), optimism can be seen as a stronger version of hope, with which it is often used interchangeably (Gillham et al. 2000, cited after Bennett 2011).

The third category, besides pessimism and optimism, is neutralism which means that people do not expect any change; they think that the future will be like the present, on the same level, independent of the height of the actual level, whether it is high or low.

General Assumptions

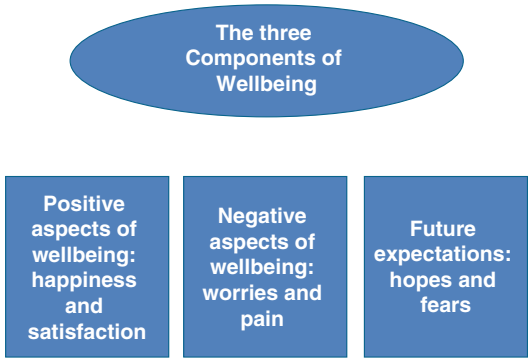
Wellbeing Is Threefold

The main approach which we wanted to follow is that wellbeing is threefold and to do that we have to examine all three dimensions of wellbeing. The three dimensions are: positive wellbeing, negative wellbeing and future expectations. Andrews and Withey (1976) noted that a subjective wellbeing measurement should include cognition, affect and other factors. These findings were supported by Horley and Little (1985). And Headey et al. (1984) stated that "a sense of ill-being (worry, somatic complaints, and negative affect) results quite largely from a low sense of personal competence, a feeling that one cannot control and plan one's life. It also results from unfavorable socio-economic and family circumstances. A sense of wellbeing, on the other hand, seems to depend on a wider range of personality variables – extraversion and optimism as well as personal competence – and also on the availability of a close, supportive social network," (Headey et al. 1984). Thus we have three aspects: the positive aspects, namely happiness and satisfaction; the negative, namely worries and pain, and the future expectations, hopes and fears.

The three dimensions vary independently of each other: someone can be happy although he has worries and hopes for the future. Another person may be unhappy and have worries, but for the future he has hopes; or another one may be happy and have no worries but he has fears for the future. Furthermore, the aspects may vary within the three different aspects, for example someone may have hopes for the future of his work, but he may have fears for his health in the future.

The same is significant for nations. A nation's activity and future planning it is of relevant not only if the nation shows a more positive or negative wellbeing, but also if a majority is optimistic or pessimistic about the future (Overview 41.1).

We believe that hopes have a positive influence not only on wellbeing for the future but also for present wellbeing, and authors have observed that satisfaction is related both to present and



Overview 41.1 The three components of wellbeing (Source: Self-produced)

recent past events, and to expected or hoped-for positive events, and that hope is an important determinant of subjective wellbeing (Staats and Stassen 1985). Fears, on the other hand, might have a negative influence on the wellbeing for the future and for present wellbeing. So hopes and fears may serve as a prediction for future satisfaction with life as well.

Another important point is that the way we are think presently about the future in the present might influence the future. This is the self-fulfilling prophecy which implies that if I think that something will happen, I behave in a way that it will make it become real. Hope sets personal, social and economic resources free, which is why hope can lead to a self-fulfilling prophecy. Where 'positive illusions' are involved, which would appear to be the rule rather than the exception, they have been shown to create self-fulfilling prophecies (Taylor and Brown 1988, cited after Bennett 2011).

The self-destroying prophecy implies that someone behaves in such a way that the prophecy does not come true. For example, a person is threatened with unemployment. He has fears about losing his job in the future, so he does a lot of extra work, enrolls for courses to increase his qualifications, so in the end, he is not unemployed. The prophecy has destroyed itself. An aspect of the self-fulfilling and self-destroying prophecies is that they refer only to situations which can be changed. For example, fears of natural disasters cannot be influenced by a person's behavior. So only changeable situations, especially on a personal level, can be influenced by a person's behavior and because of that they are relevant for the functioning of the self-fulfilling and self-destroying prophecies.

Table 41.1 Objective and subjective conditions and future perspectives

Objective living conditions and subjective conditions	Hope	Fear
Wellbeing	Enfolded hope	Dramatized fear
Adaption	High adaption	Fragile adaption
Dissonance	Fragile dissonance	High dissonance
Deprivation	Precarious hope	Enforced fear

Source: Self-produced

Zapf and Glatzer (1984) developed a typology of subjective and objective conditions. This typology represents the present, but does not include the future perspective so it does not take into account situations where somebody who is presently classified as 'wellbeing', for example, looks on the dark side for the future; or somebody who is presently classified in the field 'deprivation' looks positively into the future.

We cannot say that one constellation is preferable to another constellation. It is, with the future expectation perspective, just a further differentiation of the possible constellations. In addition to the Zapf/Glatzer typology the following table has been developed (Table 41.1).

Here we see that Wellbeing can be compatible with enfolded hope or dramatized fear, Adaption with high or fragile adaption, Dissonance could be compatible with fragile or high dissonance, and Deprivation with precarious hope or enforced fear.

Sometimes the expectations with regard to the future may only be negative, but having negative expectations is better than having naive or surreal expectations, because, in such a situation, disappointment is inevitable and this may lead to feelings of depression. Although fears are not always bad, and hopes are not always good, nevertheless a hopeful society, a society where

Table 41.2 Levels and selected domains of hopes and fears

Level		Domains	
General	Personal	Economic situation Marriage Family Work Leisure Income	Health Security Environment
	Public	Economic situation Poverty Social exclusion Social conflicts	Inequality Health

Source: Self-produced

more people are hopeful than fearful, is to be preferred in general. However, if a society is hopeful where there is no hope, this would be false.

Fears regarding the future can also function as warning signals which lead to changes in behavior (self-destroying prophecy) so the fears will not come true. Fears can flood consciousness, preparing the individual to cope with the threatening situation, and fear motivates protection from events that are perceived to be a threat (Bar-Tal 2001).

Hopes and Fears Have Different Levels and Domains

Table 41.2 gives an overview showing that hopes and fears can be measured on different levels and with respect to different domains, they (hopes and fears) may vary within them.

The general level refers to both aspects, namely personal and public as Bennett (2011) calls the conditions which refer to the external world (social conditions) and the conditions in one's own life (personal conditions). Somebody can have positive expectations for the next year or for the next 5 years. However, this may change when we look at the personal and public levels separately. There somebody may have positive expectations for the personal level, but negative expectations for the public level. Furthermore, within the personal and the public levels we can observe different domains. Somebody may have positive expectations for his personal economic situation, but negative expectations for the public economic situation, that is, for the economic situation of his country.

There are further domains like health, which can be examined from both the personal and collective points of view. The domains are not complete yet, we might add more domains.

Hopes and Fears Can Be Measured

There are several indexes to measure the Quality of Life (for an overview of indices see Glatzer 2012). With these indexes, it is possible to compare countries and their Quality of Life levels. Hopes and fears are an essential part of the concept of subjective wellbeing, because it makes a difference if somebody who is in a bad situation is rather optimistic and hopeful of getting out of it (Glatzer 2012). The chances that he will are rather higher than those of somebody who is also in a bad situation but who is more pessimistic and fearful; the latter person will not have the power to change his situation.

There are also several scales for measuring hopes. For an explanation of different indexes see Lopez et al. (2000). Firstly, there is the EBS (Expected Balance Scale) which was designed to measure hope. This scale is based on the MABS (Modified Affect Balance Scale) (Warr et al. 1983) which is a modification of Bradburns' ABS (Affect Balance Scale) (Bradburn 1969). The EBS measures the affective aspect of hope, that is, expected positive feelings. Secondly, there is the Hope Index which measures the cognitive

aspect of hope and is based on the interactions of wishes and expectations (Staats 1989). The focus of the EBS is on the feelings people have, whereas the Hope Index focuses on cognition. "The Hope Index defines hope as the interaction between wishes and expectations," (Staats and Stassen 1985, cited from Staats 1989). The Hope Index refers to specific events or circumstances, rather than generalized circumstances or expectations. The respondents have to indicate their degree of expectation for the occurrence of events. Furthermore, the self-referenced items are achievement-oriented, employing verbs such as 'achieve' and 'have' (Staats 1989).

Harris (1997) monitored optimism in South Africa by using the South African Quality of Life trends study where expectations for the future have been measured over three decades (Moller 2012).

In a 1983 paper, Michalos does not investigate hopes directly (in fact, it is astonishing that the word "hope" never comes up once), but what he investigates are future expectations, using a variable which contains 5-year expectations. This is an aspect we would like to include.

Beside the hope scales which focus on the affective aspect of hope, we would like to investigate the hopes of people using questions which focus directly on the future. This is a more conscious process of thinking and imagining the future and expectations, using questions like, "Do you think the next year (next 5 years/next 10 years, and so on) will be better, worse, or the same ?" And as we defined hope and fears simply as future expectations, the easiest way to measure them is with questions which refer to the levels and the different domains. For example, on the different levels the following questions investigate hope and fears:

General level:

- Do you look into the new year with more hopes or with more fears? (translated from German: Köcher 2010)
- So far as you are concerned, do you think that 2012 will be better or worse than 2011? (Gallup Global Barometer 1977–2012)
- Compared with this year, in your opinion, will next year be a year of economic prosperity, economic difficulty or remain the same? (Gallup Global Barometer 1977–2012)

Collective level:

- What about wishes and hopes/fears and worries for the future of our country? (Cantril 1965)

Private level:

- When you think what really matters in your own life, what are your wishes and hopes/worries and fears for the future? (Cantril 1965)

Especially in survey research, e.g. the German institute Allensbacher or other research organizations, but also where insurance companies and banks are the ordering clients, we find different single questions which refer to the future expectations.

Empirical Results

In this part I present some empirical results; firstly, which concerns people have hopes and fears about, and secondly, how hopes and fears differs across nations.

The Concerns of Hopes and Fears in Selected Countries

Cantril's study (1965) was an important one. He had already differentiated between personal and national spheres, and he was one of the first to ask questions regarding the future perspective as well. He included 15 countries in his study. I selected for Table 41.3 four countries, namely Germany and the USA (the rich countries), Brazil and India (the poor ones) (See Table 41.3). These four countries are in the top ten countries with the highest populations in the world.

Firstly we will look at the personal hopes and fears, using results from the following years: West Germany 1957, U.S.A. 1959, Brazil 1960/1961 and India 1962.

In both the poor and the rich countries selected, hopes regarding economic affairs are

Table 41.3 Personal hopes and fears/national hopes and fears in the 1960s in percent

	Personal			National			
	Economic	Family	Health	Economic	Political	Social	International
	Hopes			**Hopes**			
West-Germany	85	27	46	69	49	16	42
USA	65	47	48	45	13	33	59
Brazil	68	28	34	58	16	19	5
India	70	39	4	70	9	19	3
	Fears			**Fears**			
West-Germany	51	51	14	44	27	15	70
USA	46	56	25	29	23	21	57
Brazil	30	42	17	34	24	8	19
India	51	23	19	24	20	14	25

Source: Cantril (1965, pp. 169–170, 180–181)

very common: they range from 68 % in Brazil, to 85 % in West Germany. Hopes concerning the family are very common in the USA (47 %) and to a lesser degree in India (39 %). In Brazil and West Germany, hopes regarding the family are lower than in the two countries mentioned before (28 % and 27 %). If we look at the topic of health, we see that there is one 'outlier', namely India. "In India good health almost disappeared as an aspiration" (Cantril 1965). Just 4 % of Indians have hopes regarding health, whereas in Brazil 34 % have hopes and this figure increases in the rich countries, where almost 50 % are hopeful concerning their health (Cantril 1965).

Besides personal hopes and fears, people have national hopes and fears concerning economic, political, social and international topics. In the rich countries especially, people have both hopes and fears regarding international topics. National hopes regarding economic topics are 69 % in Germany and 70 % in India. Maybe the economic miracle is responsible for the high percentage of national hopes in Germany. During the time of the interviews full employment was the case, real wages rose during 1950–1970 and the economy was growing.

Table 41.4 shows which concerns dominate personal and national hopes and fears. Hopes and fears regarding economic aspects are among the top three concerns mentioned in all the selected countries at both the national and personal levels.

On the national level a further category of hopes and fears are political, social and international concerns about peace and war. On the personal level, in addition to economic aspects, health and family are important, and in India, the job and work situation is also important. These results suggest that we should concentrate our analysis of hopes and fears on economic concerns, because they are important to people on both levels and QoL scholars point out that economic factors such as income are instrumental in boosting wellbeing in many other domains (Campbell 1981).

The Spread of Hopes and Fears in Selected Countries

The ten nations with the highest number of inhabitants were selected in order to give an overview of hopes and fears in the world.

In Nations

About 4,095 million people live in these ten selected countries. The world population in 2012 is about 7 058 Mio[5] people and more than

[5] The details of the world population of 7.058 billion (seven billion) people are from the DSW Data Report 2012 of the German Foundation for World Population taken in September 2012 (http://www.weltbevoelkerung.de/oberes-menue/publikationen-downloads/zu-unseren-themen/laenderdatenbank.html?tx_aecountrydb_pi1[region]=1), and in accordance with the publication of the Population Reference Bureau: 2012 World Population Data Sheet.

Table 41.4 Concerns affecting people on the national and personal level

Country	Level	Hopes	Fears
Germany	*National*	Economic	Int. War
		Political	Economic
		Int. Peace	Political
	Personal	Economic	Economic
		Health	Health
		Family	Family
USA	*National*	Int. Peace	Int. War
		Economic	Economic
		Social	Political
	Personal	Economic	Health
		Health	Economic
		Family	Family
Brazil	*National*	Economic	Economic
		Social	Political
		Political	Int. war
	Personal	Economic	Health
		Health	Economic
		Family	Family
India	*National*	Economic	Int. War
		Social	Economic
		Political	Political
	Personal	Economic	Economic
		Family	Health
		Job or work situation	Family

Source: Cantril (1965 180, 181)
Legend to Table 41.3
The questions on the national level are:
Now, what are your wishes and hopes for the future of our country?
And what about your fears and worries for the future of our country?
The questions on the personal level are:
When you think about what really matters in your life, what are your wishes and hopes for the future?
What are your fears and worries about the future? . . ., what would your life look like then?

Table 41.5 The ten countries with the highest total population in the world

Country	Total population in millions
China	1,344
India	1,241
United States	311
Indonesia	242
Brazil	196
Pakistan	176
Nigeria	162
Bangladesh	150
Russian Federation	141
Japan	127
Total	4,095

Source: World Bank (2012)

Table 41.6 Life in 5 years (data from 2012), life today and life 5 years ago in the 10 selected countries

Country	Tendency of positive expectation	Life in 5 years[a]	Life today[a]	Life 5 years ago[b]
China	+1,4	6.5	5.1	3.5
India	+1	5.7	4.7	4.5
United States	+0,9	7.9	7.0	6.8
Indonesia	+1,7	7.0	5.3	5.4
Brazil	+1,8	8.8 (2011)	7.0 (2011)	6.0
Pakistan	+1	6.1	5.1	5.5
Nigeria	+2,6	7.8	5.2	4.1
Bangladesh	+1,7	6.6	4.9	5.1
Russian Federation	+0,8	6.4	5.6	5.1
Japan	+/−0	6.0	6.0	6.1

Source: Gallup World View (2012)
[a]2012 data
[b]2008 data

half the total population of the world live in these ten countries. Thus the selection of these ten countries meets the aim of the paper: to provide a global perspective (Table 41.5).

Table 41.6 shows how people ranked their quality of life at present, 5 years ago and hypothetically in 5 years' time on a scale from 0 to 10, using the Cantril Self-Anchoring Striving Scale. Gallup (2013) generates "The Life Evaluation Index" which includes a self-evaluation of two items (present life situation and anticipated life situation 5 years from now) using the Cantril Self-Anchoring Striving Scale (Glatzer and Gulyas 2014). Taken together, respondents are classified as "thriving," "struggling," or "suffering" (Gallup 2013).

Looking at life 5 years ago (the data is from 2008, so people evaluated the quality of life which they had in 2003), Chinese people were on a rather low level (3.5), as is the case for Nigeria (4.1) and India (4.5). In Indonesia,

Bangladesh, Pakistan and the Russian Federation, people ranked their quality of life between 5.1 and 5.5. Brazil and Japan were almost on the same level, namely 6.0 and 6.1 respectively. The USA was the leader with 6.8.

Looking at how the different nations evaluate their quality of life in the present (at the time of the survey), we see that Brazil and the United States are on the same level. Both have increased their evaluation. Japanese people did not increase their evaluation of life; they still rank their life now at 6.0 on the ladder.

The remaining countries are closer to each other, ranging from 4.7 to 5.6. Some of the countries increased their score on the ladder, others decreased their score. The losers were Indonesia, Pakistan, and Bangladesh. The winners were the Russian Federation, Nigeria and China and only to a very small degree India. China has increased their evaluation the most.

Looking at the future, namely expectations of life in 5 years, we see that Brazil and Nigeria have high expectations of a better life in the future. The other countries also expect to increase their levels, with the exception of Japan.

The difference in expectations between life today and life in 5 years is interesting because it shows whether people are positive and expect life to get better, or they are pessimistic about the future, and expect their lives to be worse.

The United States and Brazil rank their life today at 7.0 points. If we focus only on the life today, we might think that both countries are similar, but they are not with respect to their future expectations. In both countries people expect that their quality of life in 5 years will increase. In the USA, people ranked their life in 5 years at 7.9 points and the Brazilians ranked theirs at 8.8, showing that Brazilians are more optimistic than people in the USA. Looking at Japan we see that life today and life in 5 years are both evaluated at 6.0 points. We might predict that their rank will not change positively in the future.

The most interesting country is Nigeria. They rank their quality of life today on the scale at 5.2 points, so they belong together with Pakistan (5.1), Bangladesh (4.9), India (4.7) and China (5.1) with a rather low level of life satisfaction. If the expectations of the Nigerians for their life satisfaction are fulfilled, and if this is also true for the U. S., the Nigerians will be at almost the same level.

Calculating the Tendency of Positive and Negative Expectation Index

The Expectation Index displays not just the hopes and fears of people themselves. The index is called "the Tendency of Positive and Negative Expectation Index" or simply "Expectation Index" and is calculated as follows: the value of the expectations of life in 5 years is subtracted from the value of expectations of life today. The special feature of this index is that it uses the evaluation of life today, measured with Gallup following Cantril, as a reference point. It also takes into account expectations for life in the future, namely in 5 years' time. The difference between these two results is the Tendency of Future Expectation Index. The main idea is that the difference tells us something about the future perspective, whether people are more hopeful or more fearful. Although it is clear that it is easier to expect an improvement on the ladder of life if it is rather low at present, if the standard is relatively high in a country, the expectations for the position on the ladder might not be as different as the position on the ladder today. So differences may have different weights.

Table 41.6 ranks the ten selected countries according to life satisfaction today and life satisfaction in 5 years. The higher the difference between these values, the higher the level of optimism or pessimism in the country. We see that the Nigerians are the most optimistic country of the ten selected ones, followed by the Brazilians with 1.8, then closely followed by Bangladesh and China.

Pakistan and India are in the middle field of optimism, closely followed by the USA, the Russians and Indonesia. We can say that the Japanese people are rather pessimistic because they do not expect an increase in their life satisfaction in the next 5 years (Table 41.7).

Table 41.7 The ten selected countries by rank order of tendency of positive expectation

Rank	Country	Tendency of positive expectation
1	Nigeria	+2.6
2	Brazil	+1.8
3	Bangladesh	+1.7
4	China	+1.5
5	Pakistan	+1
6	India	+1
7	USA	+0.9
8	Russian Federation	+0.8
9	Indonesia	+0.7
10	Japan	+/−0

Source: See Table 41.5

Table 41.8 Country selection for global barometer of hope and despair

Continent	Countries	Population in 2011 in millions
Australia	Australia	22
North America	USA	311
South America	Brazil	196
	Colombia	46
Europe	Germany	81
	France	65
Asia	China	1,344
	India	1,241
Africa	Nigeria	162
	Egypt	82

http://data.worldbank.org/indicator/SP.POP.TOTL?order=wbapi_data_value_2010+wbapi_data_value&sort=desc

The Global Barometer of Hope and Despair

Now we turn to another study, namely the Global Barometer of Hope and Despair. The selection of countries is different, because there is no data available for Indonesia and Bangladesh. From each continent, I selected the first and second countries with the biggest number of people, with the exception of the Arctic and the Antarctic, because no data is available and a small number of people live there. The selected countries are (see Table 41.8).

Data for 59 countries is available from 1977 for every year to the present day for the Global Barometer of Hope and Despair. The first question refers to future expectations, whether the people think the future will be better, worse, or the same for the next year in comparison with the present year. The question is: "As far as you are concerned, do you think that 2012 will be better, or worse than 2011?"

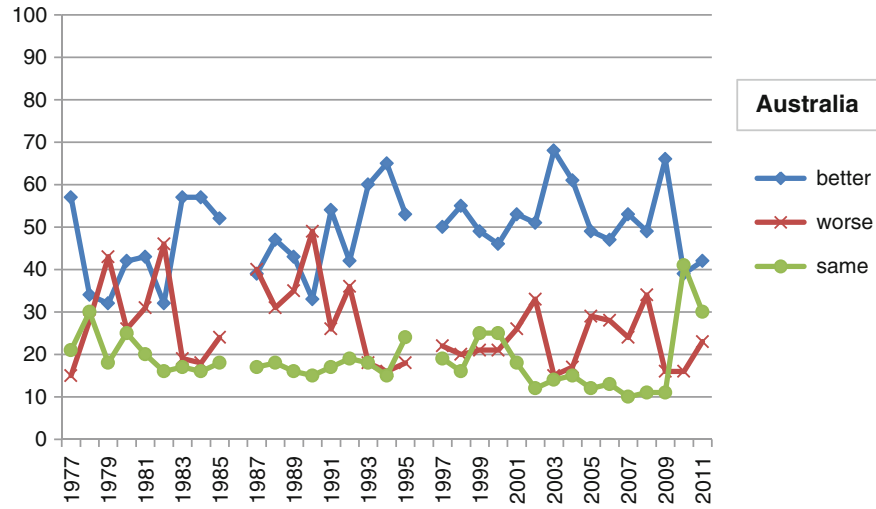
The second question is: "Compared with this year, in your opinion, will next year be a year of economic prosperity, economic difficulty or remain the same?" I have chosen the second, more general question, because it includes all of the levels and domains that future expectations can refer to.

If the expectations are better, we can say that the people are hopeful regarding the future, whereas if people say that they expect that the next year is going to be worse than the present year we can say that the people are fearful. A graph for each country shows the hopes and fears of people in the long run.

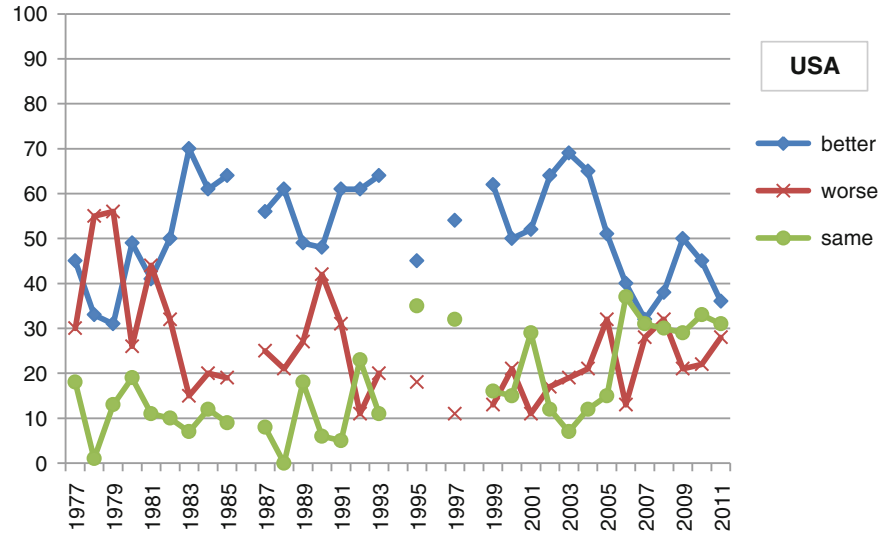
I describe the graphs according to their special characteristics in order to gain an impression of each country. The source of Graphs 41.1, 41.2, 41.3, 41.4, 41.5, 41.6, 41.7, 41.8, 41.9, and 41.10 is the Global Barometer of Hope and Despair 1977–2012 (Gallup International Association Global Barometer 1977–2012).

This graph illustrates the development of hopes and fears of Australians. The year 1977 shows that more people were hopeful (57 %) than fearful for the next year (15 %), but this changed and in 1978 the fears exceed the hopes. Between 1977 and 1990 there were 9 years with more hopes than fears (years 1977, 1978, 1980, 1981, 1983, 1984, 1985, 1988, 1989) and there were 3 years with more fears than hopes (years 1979, 1982, 1990). In 1987, hopes and fears were almost on the same level (39 % hopes to 40 % fears). All in all, up to the year 1990 we can say that over most of the previous years, more Australians expected the next year to be better than worse. In the years since 1991 there have always been a greater number of people more hopeful than fearful.

This graph illustrates the hopes and fears of people in the United States. In 1977 more people

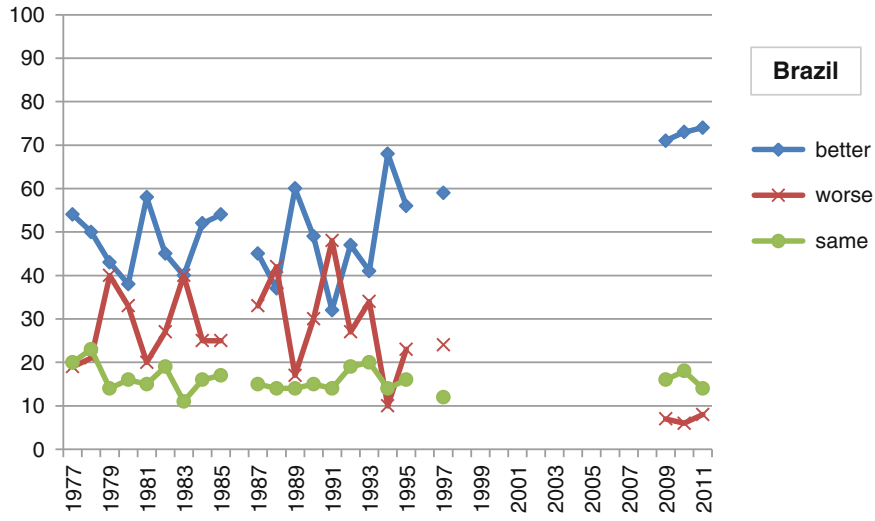


Graph 41.1 The development of hopes and fears of the Australians in the long run

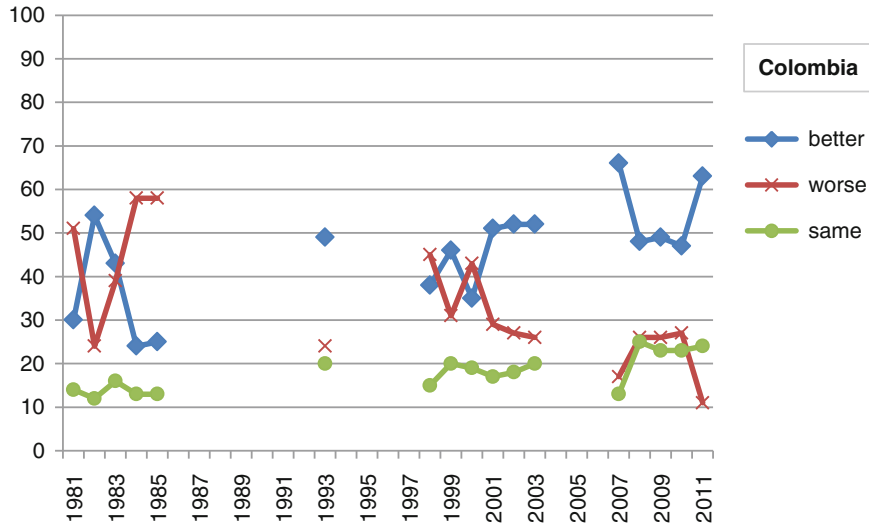


Graph 41.2 The development of hopes and fears of people in the USA in the long run

were hopeful (45 %) than fearful (30 %). Only in the years 1978, 1979 and 1981 did the number of people who were fearful exceed the number of people who were more hopeful. However, although since 1982, there have always been more people hopeful than fearful for the next year, there are years where the number of people who are hopeful is almost the same as those who are fearful (see years 1990, 2007, 2008 and 2011 where the percentage of the answer "better" is close to the number of the answer "worse"). We can say that Americans have not always been a country of optimistic people. There were years where more people were pessimistic about the next year and we can say that, in the USA, the population is somehow divided into people who are optimistic and people who are pessimistic. What we cannot say is whether these differences are associated with the very heterogeneous social structure of the society, which is characterized by



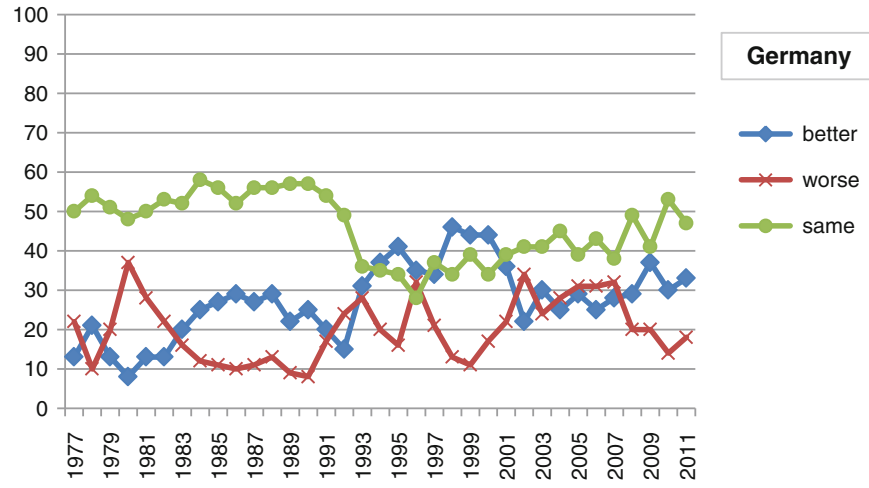
Graph 41.3 The development of hopes and fears of the Brazilians in the long run



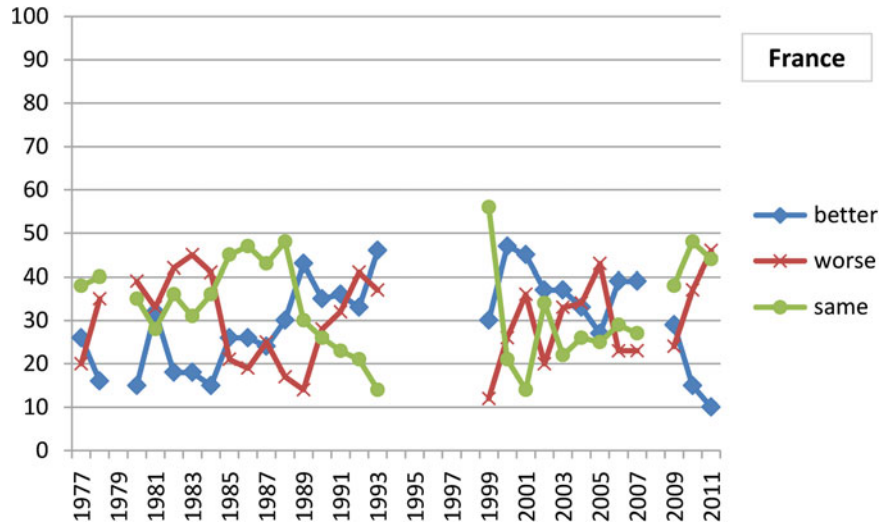
Graph 41.4 The development of hopes and fears of the Columbians in the long run

social inequality. It would be interesting to know whether the poor or the rich are the more optimistic or pessimistic, especially in the United States.

This graph shows the hopes and fears of the Brazilians. Only in 1988 and 1991 were more Brazilians fearful than hopeful for the next year. In the years 1979, 1980 and 1983, the number of people with hopes was close to the number of people who had fears or answered that the following year would stay the same. What is remarkable is the high number of hopeful people since the year 1994, especially since 2009. Unfortunately no data is available for the years 1997 to 2009 so over 10 years are missing, but the last 3 years show that Brazilians are a very optimistic people. What we also see is that the hope line mirrors the fear line. This means if the number of hopeful people increases the number of fearful people decreases almost in the same number and the other way round.



Graph 41.5 The development of hopes and fears of the Germans in the long run

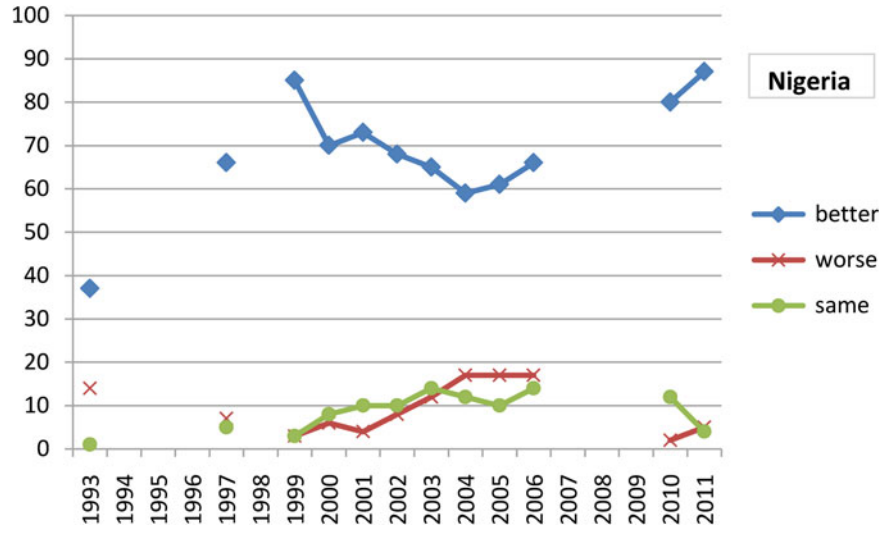


Graph 41.6 The development of hopes and fears of the French in the long run

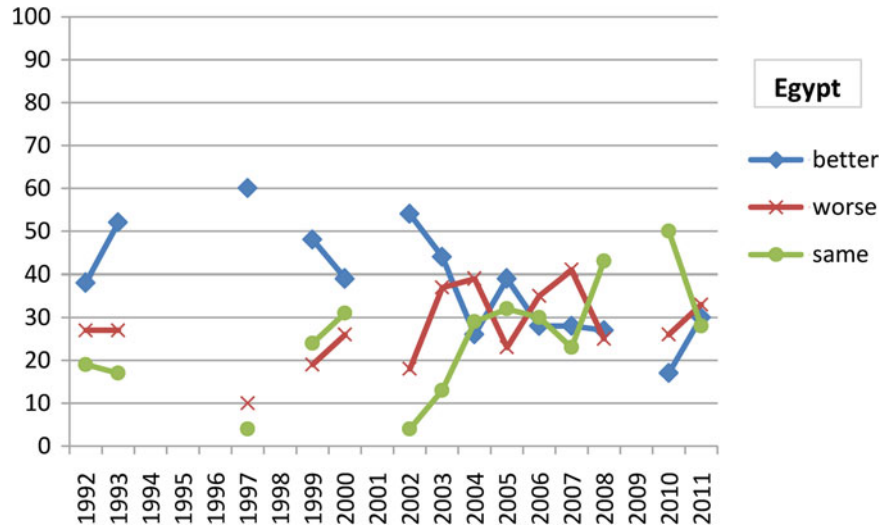
The Brazilians are now a country of optimists, because 74 % are thinking life is going to get better and just 8 % are thinking it will get worse while 14 % think that it will stay the same.

This graph shows that in 2011 a high number of people were positive and the lowest number of people ever was negative about the future. Only in the year 2007 were there more people thinking that the next year would be better than 2011. The Columbians were more optimistic than pessimistic the year 2012, although this has not been always the case. In the years 1981, 1984, 1985, 1998 and to a lesser degree also in 2000, the number of people who were negative about the future was higher than the number of people who were positive. Since 2001, there have also been more optimistic than pessimistic people in Columbia. What we can say is that the Columbians are a very happy nation (Gallup Global Barometer of Hope and Happiness 2012).

In Germany we see that, especially in the years from 1977 to 1992, about 50 % of the

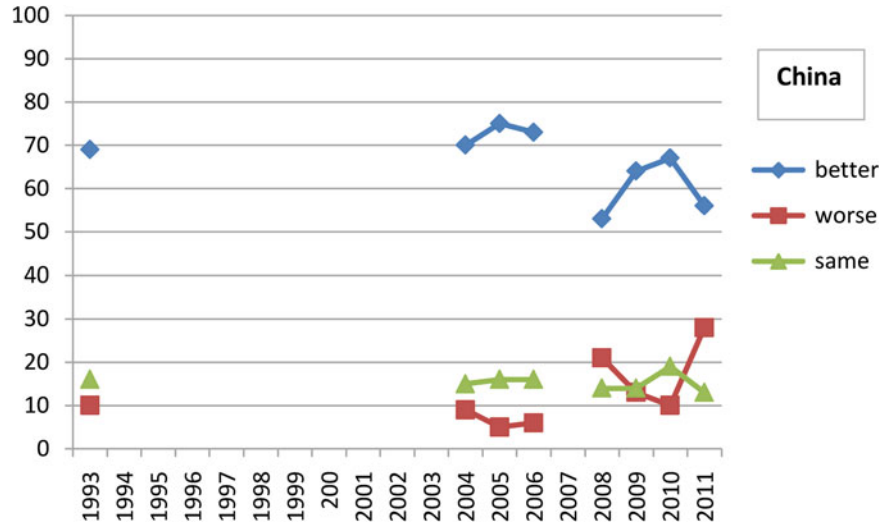


Graph 41.7 The development of hopes and fears of the Nigerians in the long run

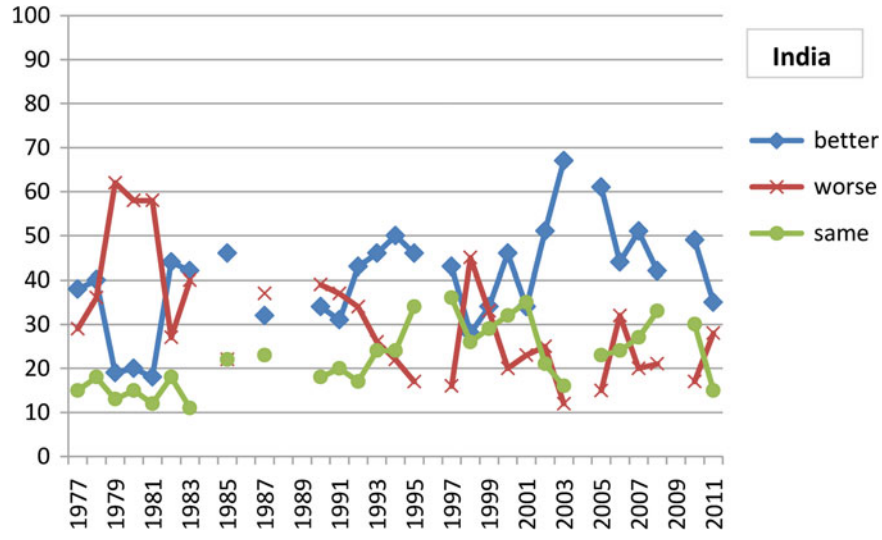


Graph 41.8 The development of hopes and fears of the Egyptians in the long run

population was thinking that the next year would be the same. In the year 1980, 37 % of the population was pessimistic about the future and just 8 % positive. Since 2001, the highest number of people has been thinking neutrally about the future. In the following years, sometimes the number of the pessimists was higher (2002, 2004–2007) and sometimes the number of the optimists (2003, 2008–2011). Possibly, if people in a country are satisfied with their lives, they simply hope that things do not change but stay the same. So we may conclude that if people are on a high level where they are feeling good, and think that the next year is going to stay the same, they are more or less hopeful as well. However, in general, we can describe the highest number of Germans as neutral.



Graph 41.9 The development of hopes and fears of the Chinese in the long run



Graph 41.10 The development of hopes and fears of Indians in the long run

In the years from 1977 to 2011 the French people often shifted between an optimistic, a pessimistic and a neutral view of the future. The year 2000 was the year where the highest number of people was thinking positively about the future with just 26 % pessimistic and 21 % neutral.

In 2011, just 10 % of the French people thought positively about the future, but 44 % thought it would stay the same and 46 % were pessimistic.

The French show a rather neutral point of view with a tendency to pessimism.

In Nigeria the earliest data which is available is from 1993. At that point, the number of people who were optimistic was rather high. Just a small number of people were pessimistic and just 1 % expected that the next year would be the same (unfortunately there were a lot of 'no responses': 48 %).

In 2011, 87 % of the population was optimistic, 5 % pessimistic and 4 % neutral

about the future. Nigerians can really be described as optimists.

The time span from 1992 to 2003 shows the Egyptians were rather positive. In the following years this trend changes. In 2007 there was a high number of people thinking negatively and in the year 2011 the population is divided into three parts: one-third pessimists, one-third optimists and one-third neutral.

In general, we can say that the Chinese people are optimistic regarding the future. For all years for which data is available, the number of people who were optimistic was higher. However, in the year 2010 to 2011, the percentage of optimistic people shrank and the percentage of pessimistic people rose.

In India, especially in the years 1979, 1980 and 1981, most of the people were very pessimistic. This situation has changed in the years since 2000. Now there are more optimistic people than neutral or pessimistic people, although in the year 2011, the numbers of optimistic people (35 %) and pessimistic people (28 %) are very close to each other.

What the graphs demonstrate so clearly is that there have been enormous shifts in hopes and despair over time and the patterns in countries are very different.

Focusing on Europe

Some studies (which I mentioned earlier in the text) give a more precise picture of future expectations. For example, the Eurobarometer (European Commission 2011) is a survey which represents the 27 European Union member states. In the 2011 survey of the Eurobarometer, respondents were asked about their general and personal expectations for the future.

On a personal level the results were as follows: 17 % thought that the financial situation of the household was getting better, and 24 % thought that it was worse. But the highest number of people (56 %) thought that it would stay the same. This also fits for the expectations with respect to the personal job situation; but here, to a lesser degree, people thought that it would get worse.

Looking at the national situation on the three levels,(own country, in the EU, in the World) the results were almost the same. About 16 % thought that it would get better and about 31–36 % thought that it would stay the same. But most Europeans, 41–44 %, thought that it would get worse.

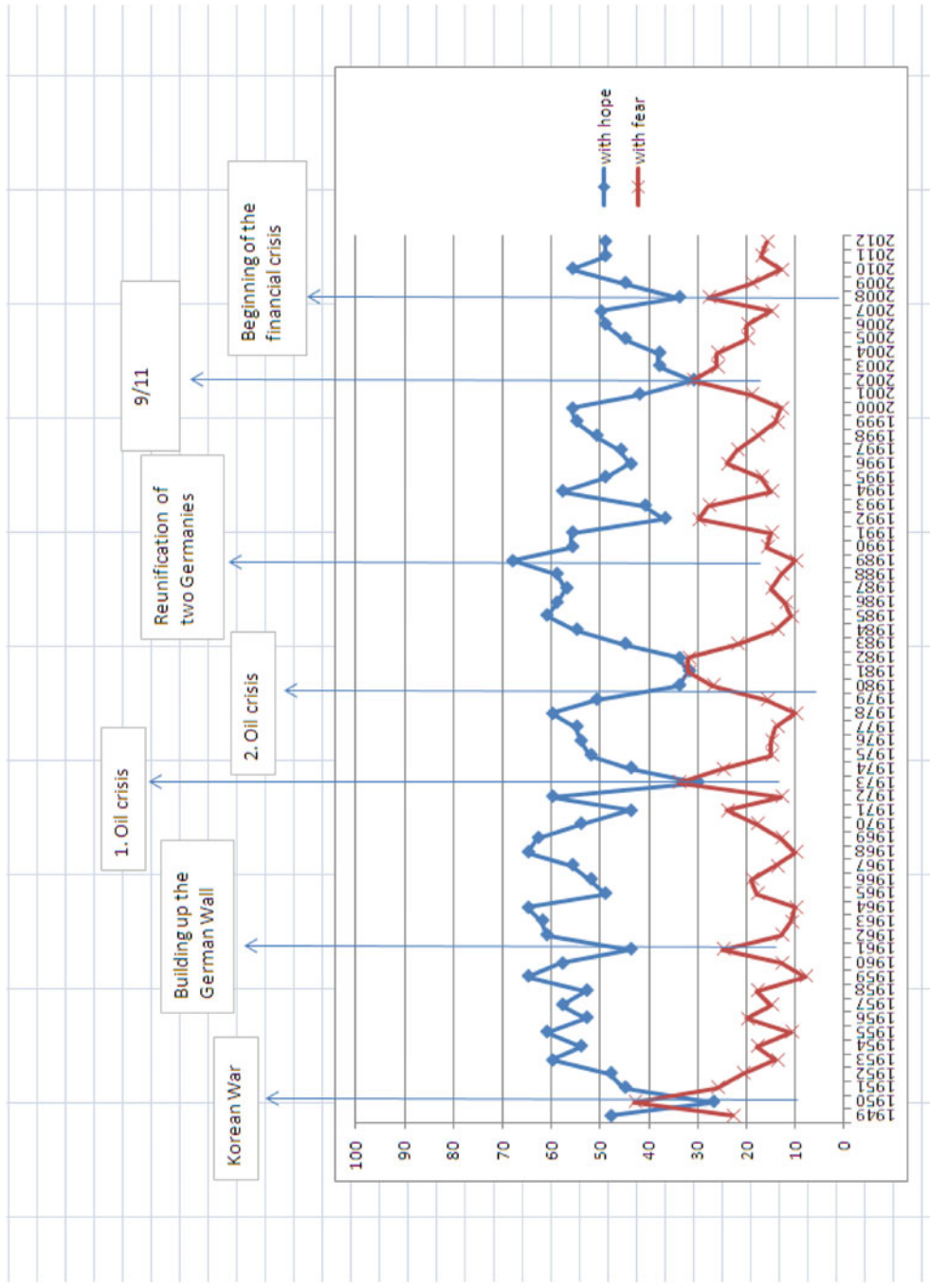
We can conclude that most Europeans were rather neutral on a personal level regarding their expectations for the next 12 months, but on a national level, Europeans had a lot of fears and were feeling negative. For this reason we can describe the Europeans as pessimists, on the national level.

There is also a report available called "The Future of Europe Report" (European Commission 2012) which is interesting because it goes far into the future, focusing on the year 2030, whereas the Eurobarometer asked respondents to think ahead only to the next year.

Forty per cent of Europeans hoped that by 2030 there would be a society where the environment was given more importance. Twenty-two per cent hoped that the economy would be given more importance and 30 % hoped that both would have equal importance. Just 3 % hoped that conditions would stay the same.

There are some areas where hopes were greater than fears, such as the environment, solidarity in society, a better work-life balance and more time to spend with the family. This was also true of gender equality.

There are a number of other sources that collect data about hopes and fears: one future report is the "Future Expectations for Europe" (Reinhardt and Roos 2008); in Britain there is the "British Future State of the Nation Poll" (Jolley and Katwala 2012) and in Germany the Allensbacher Institute collects data concerning hopes and fears. The Allensbacher data has given us a mood picture of the Germans which has been a good economic indicator in recent years (Allensbacher 2012). Graph 41.11 is an atmospheric picture of German society between the years 1949 and 2012, showing that hopes and fears are directly connected to events happening in society. We can assume that the same would be true for other countries where we could find



Graph 41.11 Mood picture of Germany (Source: Allensbacher 2012)

Table 41.9 Expectations for peace

		Peaceful			
Continent	Countries	More	Less	Remain the same	Don't know/no response
Global average		**27**	**32**	**31**	**10**
Australia	Australia	12	28	52	8
North America	USA	20	32	41	7
South America	Brazil	44	31	19	6
	Colombia	30	23	45	3
Europe	France	5	40	54	0
	Germany	9	33	57	1
Asia	China	28	41	25	5
	India	28	30	20	22
Africa	Nigeria	81	8	4	7
	Egypt	16	43	30	11

Source: Global Barometer of Prospects for Peace (2011) "*Do you think that next year (2012) the world will be more peaceful (with fewer wars and terrorist acts) or less peaceful than the year which has just passed (2011); or will there be no difference?*" (Figures in percent)

events which are connected to the rise and fall of hopes and fears.

Peace and War

Glatzer selected the future perspective on peace and war as a more specific orientation towards the future (Glatzer 1990). When we look at Table 41.4 referring to the issues which concern people, we see that international peace and war is an important topic. For example, in the USA, international peace and war was the main issue on the national level with respect to hopes and fears.

Table 41.9 shows expectations for the future in ten countries representing five continents. In Table 41.7 we see, as we have seen before, that Nigeria is a very hopeful country. The same optimism shows in their expectations for peace and war in the world. The Nigerians are very confident that the year 2012 will be more peaceful than 2011. The Brazilians, too, are fairly optimistic that the next year will be more peaceful (44 %) although one-third think that it will be less peaceful. The Germans are rather pessimistic about the development of peace and war in the world. One-third do not think that it will better, but over half of the Germans think that it will stay the same. In Columbia the biggest number of people also think that conditions will stay the same. This is also true for Australia, whereas in other countries, like China, India and Egypt, the highest number of people think that the next year is going to be less peaceful. On a global average, the world is divided into three parts: one part thinks it will stay the same, one thinks it will be better, one thinks it will be worse.

Summary

We now have an impression of the distribution of hopes and fears in selected countries of the world for a time span up to 2012. Nigeria is especially remarkable as an example of a country with a high number of very optimistic people, although Brazil and China are, in general, also rather optimistic countries. In 2011, Columbia is a very optimistic country while France is an example of a country with a rather high percentage of pessimistic people and Germany a country with a high number of neutral people. In both the USA and Egypt, feelings are evenly distributed: one-third pessimistic, one-third optimistic and one-third neutral. In recent years, India has become a country with more optimistic people than pessimistic or neutral, although in 2011, the numbers for pessimism and optimism were close to each other.

What Are the Reasons for the Different Country Distributions?

Maybe we can take the thought of Veenhoven about happiness and adapt it to future expectations: "Firstly, happiness is not temporally stable. Individuals revise their evaluation of life periodically. Consequently their happiness rises and drops, both absolutely and relatively. Average happiness of nations appears not to be immutable either. Though stability prevails, there are cases of change. Secondly, happiness is not situational consistent. People are not equally happy in good or bad situations. Improvement or deterioration of life is typically

followed by changes in the appreciation of it. This is also reflected at the collective level. Average happiness is highest in the countries that provide the best living conditions. Major changes in condition of the country affect the average happiness of its citizens. Lastly, happiness is not entirely an internal matter; it is true that happiness roots to some extent in stable individual characteristics and collective orientations, but the impact of these inner factors is limited. They modify the outcome of environmental effects rather than dominating them" (Veenhoven 1994).

Following Veenhoven, we can conclude that:

Firstly, hopes and fears are, as we have seen in the different countries, not very stable. Secondly, hopes and fears are not situational consistent. Average hopes tend to be highest in developing and less developed countries where the living conditions are rather bad, whereas in developed countries like Germany or France, there is a tendency towards neutralism or pessimism.

And as with happiness, hopes and fears are not entirely an internal matter. Maybe the inner factors play a less important part in the feelings of hopes and fears than in the feeling of happiness, because hopes and fears are strongly associated with the economy which, as we have seen, is an important concern on both the personal and national levels. We may conclude that this influences the evaluation of the future to a high degree.

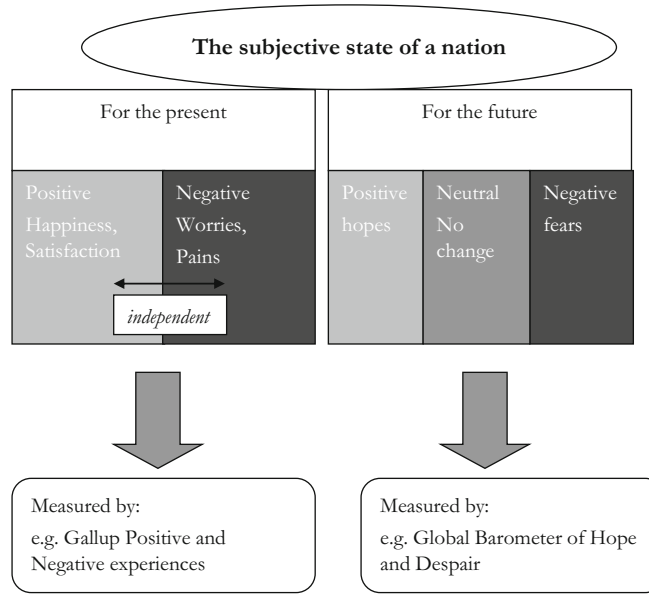
What we need are correlation findings in order to find out the associations between hopes and fears and different factors (like personal aspects, political situations and so on).

What we might already conclude is that optimism is "easier" under adverse conditions, whereas pessimism is "easier" under good conditions. Humans might tend towards optimism, especially in bad times, because they hope that the future is going to get better.

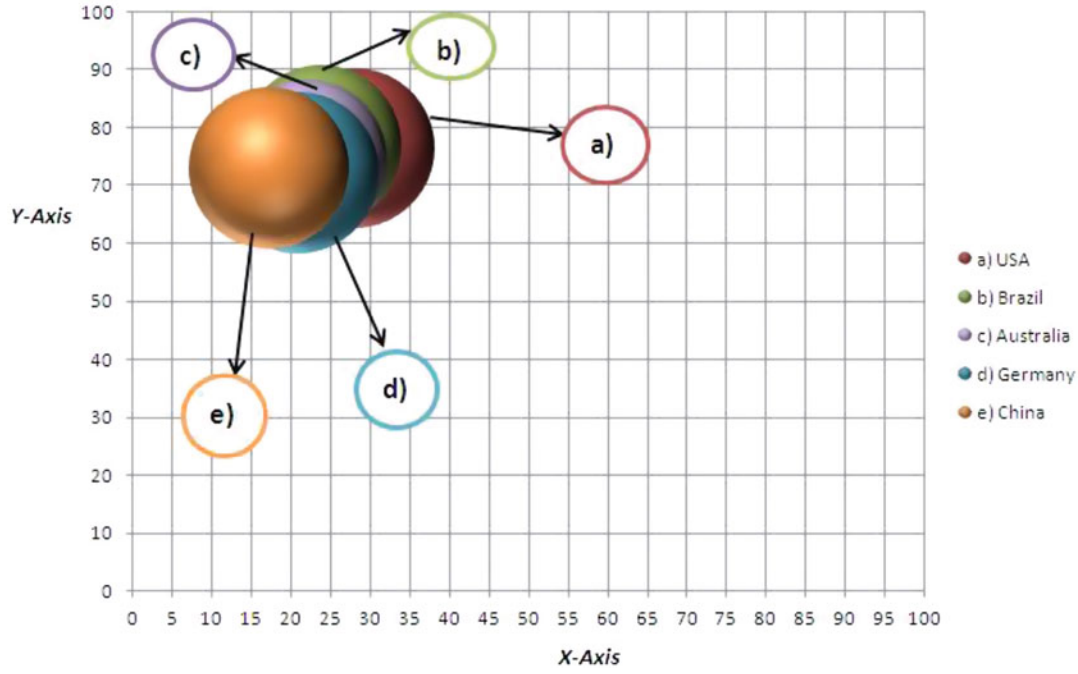
Describing the Subjective State of a Nation

The next step is to demonstrate the subjective state of selected nations bearing in mind that "the subjective state of the nation affords consideration of at least three dimensions: positive aspects of wellbeing, negative aspects of wellbeing and future expectations of wellbeing" (Glatzer 1990).

This is graphically shown in Overview 41.2.



Overview 41.2
Description of the subjective state of a nation (Source: Self-produced)



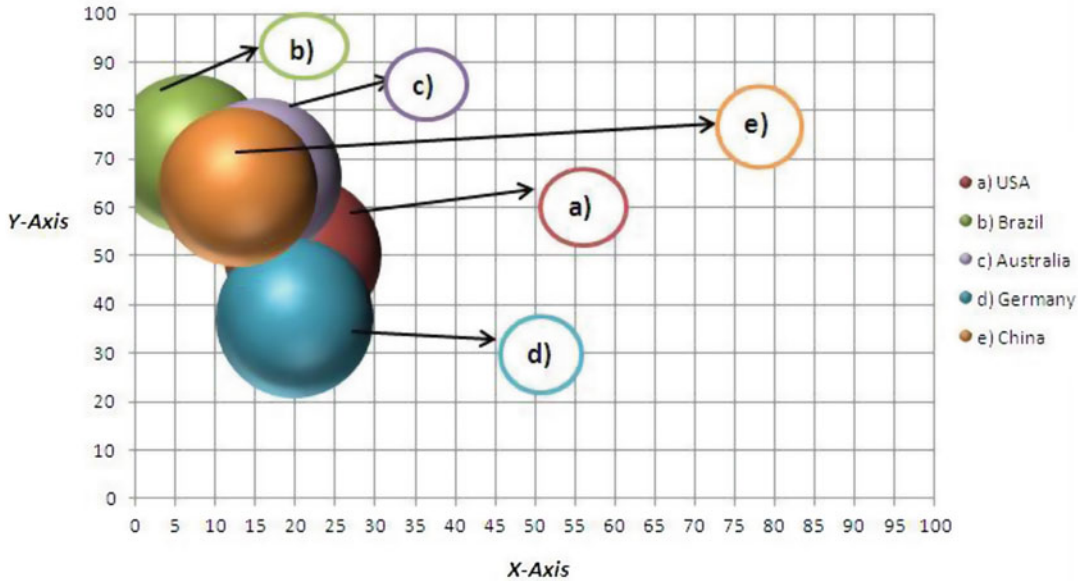
Graph 41.12 Experiencing positive and negative emotions (Source: OECD (2011), data from Gallup World Poll)
X Axis = percentage of people who experienced negative emotions, 2009 or latest year
Y Axis = percentage of people experienced positive emotions, 2009 or latest year

Graph 41.12 shows the positive and negative emotions for the present. They are independent of each other and the positive emotions should represent the positive side of wellbeing, whereas the negative side should represent the negative side of wellbeing. The y axis shows the number of people as a percent according to the country that experienced positive emotions.

This graph shows that in the USA a high number of people (28.1 %) experienced negative emotions, but it is also a country where a lot of people (76.3 %) experienced positive emotions. Brazil is also a country where a lot of people (76.6 %) experienced positive emotions, but here the number of people with negative experiences is smaller (23.9 %) than in the USA. In Germany, 72 % experienced positive emotions and 21 % negative emotions, similar to Australia where 22.1 % experienced negative emotions, although most Australians experienced more positive emotions (74.3 %). On the positive side, Germany is almost on the same level as China, but the Chinese people are better off on the negative side, because only 17. 3 % experienced negative emotions. Thus, people can experience both positive and negative emotions, whereas it is possible to look at the future as simply positive, negative or neutral. Certainly differences might occur between different levels and domains (Graph 41.12).

Graph 41.13 shows the expectations for the future. Brazil is a country with a large number of optimistic people (71 %) and few people who are pessimistic (7 %). Germany is a country with a low level of optimists (37 %), but a number of pessimists (20 %) and, as we know, a large number of neutralists. The USA has almost the same number of people who are pessimistic as Germany (21 %), but the difference is that more people (50 %) are optimistic. China and Australia are almost on the same level with regard to hopes and fears.

This kind of analysis gives us a more complex picture of the subjective state of a nation. If we had looked at the positive experiences only, we would not have recognized that, for example in



Graph 41.13 Hopes and fears for the future (Source: Global Barometer 2009)
X Axis = percentage of people with negative expectations (pessimism)
Y Axis = percentage of people with positive expectations (optimism)

the USA, there are large number people who experience negative emotions even though we know that 50 % of people in the USA are fairly optimistic.

Summary and Conclusions

At the beginning of this contribution hopes and fears from different disciplines were presented. We saw that hope and fear are not clearly defined terms in psychology or the social sciences. We spoke of optimism if a person in general had more hopes than fears, and we spoke of pessimism if a person had more fears than hopes. On a national level, we can say that a country is optimistic if more people are hopeful than fearful, and that a country is pessimistic if there are more people who have fears than hopes. Another category besides pessimism and optimism is neutralism which means that people do not expect any change; they think that the future will be like the present, on the same level, regardless of the height of the actual level, whether it is high or low.

The main approach which we wanted to follow is that Wellbeing is threefold and we have to take into consideration all three dimensions of wellbeing. The three dimensions are positive wellbeing, negative wellbeing and future expectations. The three dimensions vary independently of each other, meaning that someone can be happy although he has worries at present and for the future he has hopes.

Furthermore hopes and fears can be measured on different levels and with respect to different domains. This means that someone might has hopes regarding the future expectations on the personal level but he has fears regarding the national level.

The empirical results show that there have been enormous shifts in hopes and despair over time and the patterns are very different in different countries. There seems to be far greater variation in hopes and fears over time than there is variation in happiness and life satisfaction trends.

By looking at the distribution of hopes and fears in selected countries of the world for a time span up to 2012, it is remarkable that Nigeria especially is an example of a country with a

high number of very optimistic people, even with regard to peace and war. Brazil and China are in general also rather optimistic countries. In 2011, Columbia was a very optimistic country and France is an example of a country with a rather high percentage of pessimistic people, whereas Germany is a country with a high number of neutral people. In the USA and Egypt in 2011, the population was equally divided into pessimists, optimists and neutralists (one-third each). In recent years, India has been a country with more optimistic people than pessimistic or neutral, although in 2011 the number of pessimistic and optimistic people was close to each other.

The empirical results show that people can be both: they might experience positive and negative emotions, whereas for the future it is only possible to look at it positively, negatively or neutrally. Differences certainly occur between different levels and domains.

However, some questions concerning hopes and fears are still unanswered, for example, what is their impact on subjective wellbeing? Are they more important than positive or negative wellbeing, that is, how strong is their influence?

Nevertheless, future expectations are an important aspect of subjective wellbeing. By looking at different countries we have seen that hoping might be easier in developing or underdeveloped nations (see the example of Nigeria) than in developed nations (see the example of France) and having fears or seeing the future neutrally is more common in developed nations. This might be explained by Nietzsche's thesis which states that hope is necessary so that people do not throw their life away, but continue to suffer in the future. Hope keeps people struggling and fighting. If life is good there might be no need to have hope; thinking stagnates, but thinking that it will stay the same, is not necessarily bad in this case. As with the economy, growth does not always have to be the best case. Stagnation could also be a good sign.

This contribution wanted to make clear that it is important to focus not only on the positive and the negative components of subjective wellbeing, but also on future expectations. Only by including all three perspectives can we have a complete picture of subjective wellbeing. We saw that hopes and fears are a topic which has not yet been fully investigated, not so much on the level of individuals, but clearly on the level of nations and organizations. Some researchers have started such research and have provided a lot of answers, but more research is needed. And as Staats and Partlo (1992) recommend, more research is needed to inquire into the conditions under which threat increases or decreases hope, and which strategies and manipulations change levels of hope.

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