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RESEARCH PAPER

Subjective Well-Being Capabilities: Bridging the Gap Between the Capability Approach and Subjective Well-Being Research

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Abstract As a result of the disenchantment with traditional income-based measures of welfare, alternative welfare measures have gained increasing attention in recent years. Two of the most prominent measures of well-being come from subjective well-being research and the (objective) capability approach. Despite their promising features, both approaches have a number of weaknesses when considered on their own. This paper sets out to examine to what extent a fusion between both approaches can overcome the weaknesses of both individual approaches. It uses features of the capability framework to enrich what is basically a subjective well-being perspective. Key drawbacks of normative subjective well-being views can be overcome by focussing welfare assessments on "Subjective Well-being Capabilities", i.e. focussing on the substantive opportunities of individuals to pursue and achieve happiness.

Keywords Subjective well-being · Capability approach · Policy-making · Normative economics

1 Introduction

Income-based measures of well-being have seen a lot of criticism in recent years, being attacked of painting too narrow a picture of human welfare and societal progress (e.g., Stiglitz 2010; Michalos 2011). As a result of this disenchantment with the traditional welfare economic framework, a number of alternative approaches have gained more widespread support and attention by researchers (see, e.g., Fleurbaey 2009; Michalos 2011;

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Binder and Witt 2011; Bleys 2012, for overviews). Two of the most prominent measures of well-being come from subjective well-being research and the capability approach respectively. While measures of subjective well-being are attractive because they directly ask individuals for their own assessment of their situation, the capability approach offers a much broader informational space to assess the situation of a person, including a focus not only on outcomes but also on agency and a person's substantive opportunities.

Despite their promising features both approaches have significant weaknesses when considered on their own. Subjective well-being measures, on the one hand, neglect a person's opportunities and are prone to understate individuals' degrees of deprivation due to hedonic adaptation (the "hopeless beggar critique" to which the standard economic framework is susceptible as well, see Sen 1987, pp. 45–46). The capability approach, on the other hand, offers no guidance how to trade-off different valuable functionings and how to arrive at a list of them, which then could be constitutive of welfare. In the extreme, the alleged objectivity of the approach could lead to individuals being declared as well-off in functionings space without them sharing this assessment. This has prompted opponents of the approach to label it as paternalistic (e.g., Sugden 1993).

This paper sets out to examine to what extent a fusion between both approaches can overcome the weaknesses of both individual approaches. How subjective well-being views and the capability approach relate to each other has been discussed by scholars before (see, e.g. Comim 2005, and other contributors to the special issue in the Review of Social Economy, 2005, as well as the special issue in the Journal of Socio-Economics, 39, 2010) and scholars in both fields tend to be sympathetic towards the other camp and stress the potential for "bridges to be built" (Anand et al. 2009, p. 137).[1] Sen (1985a) himself has already linked happiness to the fulfillment of functionings in his approach (more on this later). As the capability approach offers an open framework for analysis, it seems that most of the attempts of a synthesis have aimed at incorporating insights from subjective well-being research into the capability framework, e.g. making happiness one valuable functioning among others that individuals have value to reason (a prominent exception here is the work of Anand et al. 2005; Anand and Hees 2006; Anand et al. 2008, 2009, 2011, who assess how capabilities impact on subjective well-being and vice versa). The present paper goes a different route and wants to use features of the capability framework to enrich what is basically a subjective well-being perspective. I will argue that some key drawbacks of normative subjective well-being views can be overcome by focussing welfare assessments on "Subjective Well-being Capabilities" (SWC), i.e. focussing on the substantive opportunity of individuals to achieve happiness.

The paper is structured as follows. Section 2 describes how measures of subjective well-being can be used in a normative context and what main drawbacks this has. These very drawbacks do not pose themselves in a capability framework (Sect. 3). However, the capability approach itself in isolation has some normatively undesirable features. I will attempt a thought-experiment and argue in Sect. 4 that combining both approaches, a fusion between subjective well-being views and the capability approach can overcome at least three of the most undesirable features of both approaches, namely the problem of hedonic adaptation, the lack of an agency perspective of a subjective well-being view as well as the problem of how to select a list of valuable functionings in the capability approach. The paper ends with an outlook (Sect. 5).

[1] See also Anand and Clark (2006), p. 179, and van Hoorn et al. (2010), p. 339.

2 Subjective Well-Being Research

Measures of subjective well-being have gained traction as measures of societal progress in recent years (this section draws on the discussion in Binder 2013). They constitute a more direct way of measuring welfare than is provided by its more traditional measure of income:

> "Money … is a means to an end, and that end is well-being. But money is an inexact surrogate for well-being, and the more prosperous a society becomes, the more inexact a surrogate income becomes. The measurement of well-being has advanced sufficiently that it is time to grant a privileged place to people's well-being in policy debates, a place at least on a par with monetary concerns. After all, if economic and other policies are important because they will in the end increase well-being, why not assess well-being more directly?" (Diener and Seligman 2004, p. 2)

As such, measures of subjective well-being (SWB, or for that matter synonymously the more colloquial term "happiness") are an individual's own aggregate judgement of that person's life situation. Formally, one would conceive of an individual's reported subjective well-being r as a function of that individual's true well-being $u(\cdot)$ at some point in time (see Blanchflower and Oswald 2004, p. 1361):

$$r = h(u(y, \vec{x}, \vec{z})) + \epsilon \tag{1}$$

An individual's "true" well-being u depends here on a range of factors, among which is income y, but other life events play a role as well (measured as a vector x of further determinants), as well as personal and demographic factors (measured by vector z). The reported well-being r (reported, for example, on a life satisfaction scale from 0 to 10, that ranges from "completely dissatisfied with life" to "completely satisfied") then depends on this complex range of factors influencing well-being. As well-being is a subjective psychological quality, it tends to be subject to measurement imprecision and bias, which is subsumed in the error term ϵ.

It is easy to see that such a measure can offer a broader picture of human flourishing than income-based measures since it puts subjective well-being in relation to a larger number of factors and life events that influence it, many of them non-pecuniary or non-market-related. Research has determined a large number of influences on subjective well-being $(\vec{x}, \vec{z})$, ranging from individual determinants (e.g., self-esteem, optimism or other personality traits) to socio-demographic (such as gender, age, education, or marital status), economic (such as status, type of work, or unemployment), situational (such as health, social relationships), and even institutional factors (Frey and Stutzer 2002, p. 10–11). Well-researched are the relationships between subjective well-being and income, health, the social domain, as well as the effects of unemployment on subjective well-being. In these domains we find quite well-established relationships between subjective well-being and its covariates. The situation is, however, much less clear with regard to some personality traits or domains such as gender, age or education (Dolan et al. 2008 provides an overview). While education, for instance, has a direct bearing on many domains of life that in turn influence subjective well-being, evidence for a direct relationship is sparse and mixed.[2]

[2] This could be due to the averaging out of any effect in standard regression frameworks, as there is some evidence that education plays a role for individuals in the extremes of the subjective well-being distribution (Binder and Coad 2011b).

The above argument does not mean that SWB measures should replace income-based measures of economic performance, but it means that SWB measures capture more broadly the effects societal change: non-market factors that are badly-captured by income-measures (for example: social capital) are directly reflected in SWB measures. If economic policy increases economic performance and hence incomes but at the same time increases also social isolation and decreases social capital, SWB measures would more comprehensively capture both effects (whereas income-measures would only capture the positive income effect and neglect the negative social capital effect of the policy). In this way, much broader and more nuanced (economic) policies are likely to be possible in a subjective well-being framework. Such a potential use of SWB measures in this normative context has only very recently become the focus of academic research (Layard 2010; Frey and Stutzer 2010, 2012; Duncan 2010; Graham 2011; Dolan et al. 2011; Binder 2010 2013).

SWB measures can serve multiple functions in a normative context: they can be used to (1) evaluate the success of policies and their impact by policy-makers, they can be used to (2) legitimize policies and institutional change in a policy discourse before the implementation, and they can be (3) used to provide a coherent "leitmotif" or "Leitbild", viz. a guiding principle in creating a more coherent public policy and trading-off conflicting policy goals and other values (this approach has been sketched in more detail in Binder 2013). Subjective well-being is quite uncontroversially one, if not the most important basic value for individuals (Bruelde 2007; Layard 2005) and would provide guidance in trading-off other, more instrumental values. In the above example of conflict between economic performance and social integration of a society, SWB measures offer a way of assessing the total effect of such a two-dimensional change. Finally (4), SWB research can inform policy-makers about citizens' goals: the life domains that have been robustly shown to influence individual subjective well-being here offer unbiased (as opposed to asking interest groups) advice on what plays an important role in individuals' life (it also allows to estimate the relative importance of these domains vis-à-vis each other). This final point also extends to citizens themselves which have been shown to systematically mispredict the sources of lasting happiness (Wilson and Gilbert 2005). Sound empirical research here can offer information and can be considered useful to individuals on a very practical level (as evidenced by the abounding popular literature on how to achieve happiness).

While these functions of SWB measures are largely uncontroversial, debate has arisen as how to implement SWB measures in a policy context. These "politics of happiness" can largely be conceived along two different paradigms, which could be termed the "welfare economic" and the "constitutional" or ("institutional") approach to happiness politics (see Duncan 2010; Schubert 2012, on this distinction). The former approach draws on a traditional welfare economic understanding and suggests maximizing a social happiness function, analogous to a typical social welfare function (Veenhoven 2010; Dolan and Peasgood 2008; Dolan et al. 2011). This approach is in direct lineage of the Benthamite idea of a "greatest happiness principle" and its defenders are optimistic that such a welfare function can be measured with precision and indeed maximized by appropriate discretionary policy interventions. Defenders of the institutional approach are more cautious and rather advocate the sovereignty of citizens in pursuing their own ideals of happiness. They note that individuals not only care about outcomes but also derive well-being from processes and the way outcomes are achieved (Frey and Stutzer 2012; Schubert 2012). For them, public policy intervention should then be limited to creating institutional frameworks that are conducive to individuals' attempts at pursuing happiness (Frey and Stutzer 2010, 2012; Schubert 2012; Graham, 2011).

SWB measures have some attractive features in a normative context. Asking the individual open-ended happiness or life satisfaction questions, makes said individual sovereign in defining what it understands by subjective well-being (Graham 2011, p. 24). This mirrors the commitment on individual valuations also present in the orthodox economic view of welfare as preference satisfaction. Making the individual the judge of its well-being does not raise objections of paternalism that objective theories of welfare (such as Sen's capability approach) might raise.[3]

Moreover, asking about individuals' subjective well-being and correlating it in empirical happiness equations with known determinants and other factors of the individuals' environment allows to measure factors for which individuals can reveal no preferences directly (see, e.g., Frey and Stutzer 2012, p. 665). Examples are preferences for democratic institutions, inequality, freedom, or macroeconomic variables such as inflation, unemployment rates or inequality. This extends also to the evaluation of public goods such as pollution or to phenomena such as crime or corruption. When accounting for the usual known influences on subjective well-being, adding variables for the above-mentioned factors allows to assess their effects on subjective well-being directly.

Within a subjective well-being framework, addiction, norms or phenomena of limited self-control are also better amenable to welfare analysis. Not all individual behavior is easily represented as voluntary utility-maximizing behavior and subjective well-being measures aid in coming to an empirically better informed appraisal of human behavior and its welfare effects. Instead of assuming that addiction or obesity are a matter of optimal consumption derived by an individual in a rational maximization calculus, subjective well-being measures allow to directly estimate hedonic effects of gaining weight and the influence of norms that mediate individuals' perceptions of their situation (see, e.g., Graham and Felton 2005).

While the "science of happiness" has advanced to a point where the direct assessment of individuals' well-being is starting to become feasible, problems and open questions remain. These pertain to measurement aspects, value judgements about which measure to use in welfare assessments (on this compare also Angner 2010), but they also relate to a grave problem of how to evaluate hedonic adaptation and issues of autonomy (and agency) related to this.

As regards measurement error ϵ, the consensus view is that meaningful analysis of subjective well-being and its causes and correlates is possible with sufficient scientific precision. Satisfactory validity and reliability are indicated by many psychological studies (see Krueger and Schkade 2008; Helliwell and Wang 2012, for an overview), and while subjective well-being is partly stable and fixed over time, being determined in parts by genes and personality traits (Lykken and Tellegen 1996; Diener et al. 1999), it is also sufficiently variable, especially in the short- and medium-run, and can be influenced (even permanently) by such life events as repeated unemployment, marriage or child birth (Headey 2010). Nevertheless, measurements are not as precise as the measurement of other economic variables and judgements of well-being can be distorted by all sorts of response biases the researcher needs to take into account (e.g., Schwarz and Strack 1999; Krueger and Schkade 2008). These measurement difficulties can pose a problem for the welfare

[3] There is a danger of paternalism also for SWB views when it comes to policy advice based on the life domains that empirically tend to influence subjective well-being (Qizilbash 2012). If policy-makers and happiness researchers focus on these domains without acknowledging individual heterogeneity in learning likes and dislikes, a subjective well-being view can become paternalistic on this level of the sources of well-being. I will deal with this objection in Sect. 4.

economic paradigm and the construction of national well-being indices. It is less of a problem for the institutional approach, where the focus is on creating a policy framework that aims a furthering those life domains that robustly influence subjective well-being (the main determinants of subjective well-being have been robustly shown to play a role irrespective of country or culture, see Graham 2009).[4]

The other points of criticism are more fundamental: should subjective well-being be considered to be the *one and only* criterion of societal progress or are other fundamental values relevant that should not be considered only instrumental to well-being. With respect to the proposal below, a case in point here would be the question whether the outcome-focus of SWB measures is not too narrow and should be extended to incorporate some agency perspective that centers around individuals' opportunities to achieve well-being. This is mirrored in the criticism of Frey and Stutzer (2010, p. 567), who argue that the orientation of policy-makers on a national happiness index ultimately reduces citizens to "metric stations" instead of sovereign, autonomous agents in a political discourse.[5] According to this critique, an engineering view that aims at maximizing a well-being index runs counter to elementary principles of democracy and the political process (Duncan 2010). Moreover, such a view opens the door to manipulation by politicians as well as partial citizens who misrepresent their subjective well-being to influence policies in their favor. Again, the full brunt of this line of criticism seems to fall mostly on the welfare economic paradigm of a politics of happiness.

A final objection against the normative use of subjective well-being measures lies in the problem of hedonic adaptation. This might be the most challenging problem for happiness research in the future (Graham 2011, p. 104) and convincing solutions to it have yet to be proposed. Hedonic adaptation proves to be a formidable challenge for the assessment of subjective well-being as a benchmark of societal progress: the paradox of "happy peasants and miserable millionaires" (Graham 2009) elucidates this: individuals can adapt to misfortune and bad conditions, which is a positive mechanism for the individuals suffering from bad conditions. Collectively, however, hedonic adaptation can lead to undesirable social outcomes being sustained because the individuals involved have adapted to the situation and are not motivated to change their situation. Moreover, hedonic adaptation could (falsely) prompt policy-makers to conclude that no action is necessary as subjective well-being levels are high. From a distributive point of view, this seems quite problematic.[6] It is exactly this problem which has led Amartya Sen to develop the capability approach.

3 The Capability Approach

The adaptation (of preferences or happiness) to adverse circumstances is a problem that bedevils the standard welfare economic framework and subjective well-being views alike. It is the major starting point of Sen's capability approach and is referred to as the "hopeless

[4] A more fundamental problem is to decide what measure of subjective well-being (affective; cognitive or even broader mental well-being notions) will be relevant to assess welfare. This is a normative question that can only be in small parts influenced by empirical concerns such as data availability. In many respects, those measures give similar results, but this is not the case for all determinants of subjective well-being.

[5] Gasper (2010), p. 358, similarly argues that subjective well-being judgements involve careful deliberation and should not be interpreted as simple meter readings.

[6] The problem exists also with regard to "miserable millionaires" (or "frustrated achievers", Graham, 2009): how is their misery to be evaluated that exists despite their objectively good situation?

beggar" or "adaptation problem" (this is discussed more extensively in Schubert and Binder 2013). In Sen's words:

> "A person who has had a life of misfortune, with very limited opportunities, and rather little hope, may be more easily reconciled to deprivations than others reared 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 laborer, the dominated housewife, the hardened unemployed or the overexhausted coolie may all take pleasures in small mercies, and manage to suppress intense suffering for the necessity of continued survival, but it would be ethically deeply mistaken to attach a correspondingly small value to the loss of their well-being because of this survival strategy. The same problem arises with the other interpretation of utility, namely, desire-fulfillment…" (Sen 1987, pp. 45–46)

Sen's approach wants to solve the adaptation problem by recourse to an objective understanding of welfare. He offers a broad theoretical framework to assess individual welfare based on the two notions of "capabilities" and "functionings" (Sen 1985a, b, 1987).[7] Functionings are describing individuals' aspects of live, what persons are and do. To assess well-being these functionings can incorporate "being happy" but also many other intrinsic values, for example "being nourished", "avoiding premature mortality" (Sen 1992, p. 39) or "being in good health", "being well-sheltered", "being educated" or "moving about freely" (Kuklys 2005, p. 10). These functionings are all of intrinsic value and irreducible to each other, making the approach multi-dimensional. Formally, a person's state of being (and her individual activities) is described by a vector of functionings (the following formalization is from Sen 1985a; Kuklys 2005):

$$\vec{b} = f_i(c(\vec{x})|\vec{z_i}, \vec{z_e}, \vec{z_s}) \tag{2}$$

In this approach, resources (commodities) are transformed into achieved functioning subject to a conversion function.[8] The vector of functionings $\vec{b}$ is defined by the following elements: $\vec{x} \in X$ is a vector of commodities out of the set of all possible commodities (or more generally: resources) X. Sen extends the informational space for welfare assessments here by *expressis verbis* including non-market goods and services as well. $\vec{x}$ is mapped into the space of characteristics (Lancaster 1966) via the conversion function $c(\cdot)$ so that $\vec{c} = c(\vec{x})$ would be a characteristics vector of a given resource vector $\vec{x}$. While a resource's characteristics are assumed to be identical for different individuals, what varies is the extent an individual can profit from these characteristics, i.e. the amount of functioning achievement the individual derives from the resource. Sen's example is that the caloric content of a loaf of bread is different for individuals having certain parasitic diseases (Sen 1985a, p. 9).

These differences in profiting from resources are reflected by the conversion function of an individual $f_i \in F_i$ that maps a vector of characteristics into the space of functionings (F is the set of all possible conversion functions). This conversion is influenced by the

[7] The following draws on the exposition of Sen's approach in Binder and Coad (2011a, 2013).

[8] In the empirical measurement, Eq. 2 can also be only measured with imprecision. One could thus ask whether it should not contain an error term similar to Eq. 1. Reporting subjective well-being, however, is imprecise in a different way from just simple measurement error when it comes to empirically measuring some objective quality. For that reason, the error term in the subjective well-being equation seems of a more principal nature than the one that could be added here. When functionings also incorporate subjective assessments such as "being happy", the same reporting error term would apply here.

conversion factors $\vec{z_k}$, where we can distinguish individual ($\vec{z_i}$), social ($\vec{z_s}$) and environmental ($\vec{z_e}$) influences (Kuklys 2005, p. 11). The conversion of the resource bread into achieved functioning "being nourished" is thus different depending on a physical (dis)ability (a conversion factor) of the individual. Other individual factors could be gender, intelligence, etc. But there might also be social influences (legal regulations, population density, etc.) or environmental conversion factors (climate, environmental pollution, and so on). Basically, conversion factors act as non-monetary constraints.[9]

When choosing what way of life to live, a person chooses from a set that contains all her achievable different functioning vectors (the person chooses from them depending on her more or less idiosyncratic preferences). The set of all feasible functioning vectors for a person i is this person's *capability set* Q_i. It is a derived notion and represents the person's opportunities to achieve well-being, reflecting the various functionings that are potentially achievable (given her constraints X_i, $\vec{z_k}$). This set can now be defined as

$$Q_i(X_i) = \left\{ \vec{b_i} \middle| \vec{b_i} = f_i(c(\vec{x_i}) | \vec{z_i}, \vec{z_e}, \vec{z_s}) \, \forall f_i \in F_i \wedge \forall \vec{x_i} \in X_i \right\} \tag{3}$$

While the notion of the capability set is a derived notion, it is supposed to be the more important and central of the two notions in the capability approach (for more on the difficulty this poses, see below). With its double focus on outcome (achieved well-being) and opportunity (capability to function), the capability approach is a broad and widely applicable framework to assess individuals' quality of life. It is also rightly lauded as making use of a broad informational space to assess well-being and advantage. And with the focus on substantive freedoms of an individual to achieve well-being there also comes a strong emphasis on the agency aspects of a person's life (Sen 1985b, pp. 185–187).

The capability approach evades the main criticism of both the subjective well-being and standard economic view by virtue of conceiving of welfare as consisting of a set of functionings that are objective and independent of individuals' evaluations (Sen, 1985b, p. 196). These functionings are understood to be objective features of human live and intrinsically valuable. If the "underdog" (Sen 1984, p. 308) or the severely impoverished adapts his preferences to a bad situation, this will not be a problem for the capability approach since the deprivation is reflected in low functionings achievement (in some or all dimensions) and/or a small capability set. The approach is also attractive with respect to the broad informational basis used for welfare assessments: while subjective well-being (happiness) might be considered a functioning, capability scholars have brought up and analyzed deprivation with regard to a large number of other valuable functionings constitutive of individual welfare. Additionally (and much more ambitiously), the approach wants to make the central notion of welfare an individual's capability to achieve valuable functionings. This emphasizes human agency, the freedom an individual enjoys to be and to do things: an individual in this approach is evaluated as having a high welfare in capability space if that individual has a large set of substantive freedoms to achieve what the individual has reason to value (constrained by what supposedly constitute valuable functionings). This treats an individual as an autonomous person who should decide herself what she wants to achieve. If someone lives poorly (with lots of functionings unfulfilled) but with many substantive freedoms not realized voluntarily, such an ascetic is accorded high well-being in capability space. The individual is free to choose from many different

[9] Note that selection of some of the conversion functions is part of an individual's capability to function while, of course, some conversion functions are just not eligible, e.g. being female or male, and thus outside an individual's control (Sen, 1985a).

life-styles and could also sacrifice own well-being for other reasons. In this respect, the capability aspect goes beyond a narrow well-being focus and stresses individual liberties to take autonomous action (Sen 1985b).

With the design focus on openness regarding many of its key concepts, there come, however, problems. The selection of a list of valuable functionings is one example of the approach's openness. Sen defends this openness and has time and again emphasized the deliberative social dimension that drives choosing a set of valuable functionings. Other authors have promoted full-fledged lists of functionings (e.g., Nussbaum 2003) or at least argued for providing a methodology to select such a list (Robeyns 2005). This has not stopped the better part of scholars to approach the question in a more cavalier fashion of happily focussing on different, often ad hoc selections of functionings, mostly based on data availability.[10] It also extends to competing methodologies of measuring functioning achievement, conversion factors and capabilities. With this openness also comes a danger of paternalism insofar as selected functionings might not reflect individuals' ideas of what is valued or at least reasonable to value. Critics of the approach here point to the purported objectivity of the approach: individuals can have high levels of functionings achievement but nevertheless claim to be badly off or feel miserable. These individual self-assessments would paternalistically have to be discounted within this approach in such cases. If the discrepancies between objective functionings achievement and subjective assessments of well-being become too large, the approach might be considered implausible. Such danger of paternalism is exacerbated if functionings lists are limited and selected ad hoc and allow for "political tinkering" (see Canoy et al. 2010, p. 392). Because of this, the question of list selection has received quite a bit of scholarly attention, perhaps undeservedly so (Robeyns 2005): empirically, many suggestions for a concrete list of functionings (or substantive aspects of an individual's quality of life) share a great overlap (Qizilbash 2002) and lead to quite similar assessments of welfare in functionings space.

While this might seem *prima facie* reassuring it becomes a more pressing problem by virtue of the approach's lack of a dynamic orientation. It is not unreasonable to conjecture that valuable functionings will change over time, something the framework is silent on.[11] Economic and social change are pervasive and this should affect individuals' valuations of the good life (Binder and Witt 2011, 2012). To the extent that the list of functionings then changes alongside individuals' preferences for what makes it on the list, a dangerous "subjective turn" (Sumner 2006, p. 9) is introduced into the approach. This problem cannot be overstated: adaptive preferences, the main point motivating Sen's departure from happiness or preference-based approaches, then make its reappearance in an approach that was designed to avoid this very problem for welfare assessments.

There are also other methodological difficulties with the capability approach (see more extensively, Binder and Coad 2013). These pertain to an underspecification of critical concepts: while theoretically quite clear, it is much more difficult to empirically measure conversion factors (Brandolini and D'Alessio 2009) and the literature tends to be rather sparse (but see, e.g., Deutsch et al. 2003; Chiappero-Martinetti and Salardi 2007; Binder and Broekel 2011, 2012). A similar problem pertains to measure actual capability to

[10] One way out of this dilemma would be to focus on "basic functionings" (Sen 1993), for which perhaps a larger consensus might exist.

[11] This is not to say that there are no applications or potential methodologies at all that try to put the capability framework into a dynamic perspective in its empirical application (see, e.g., Hirschberg et al. 2001a, b, for an application of cluster analysis in time series multidimensional welfare analysis). However, the questions of how and why functionings would change over time is not sufficiently well-researched at this moment.

function (but see, Anand et al. 2005, 2009; Anand and Hees 2006), which is not surprising since one would have to measure not only the outcome but all the options potentially open to an individual, viz. hypothetical states of the world. Even if possible to come to a measure of a person's capability set at time t, the lack of a dynamic orientation makes the approach ill-suited to deal with scenarios of the following sort (Brandolini and D'Alessio 2009, pp. 109–111): a person's capability set at time t, Q_t, might reflect voluntary choices of the person at time $t-1$. A student willingly commits to years of study in relative poverty in order to later secure a better job. That student might initially have foregone a bigger opportunity set (through work without study) to later have an even larger opportunity set. The approach leaves these complications unanswered, although they can be conjectured to be pervasive in the assessment of welfare in opportunity space. This is even more of a problem considering that the assessment of capabilities is supposed to be the primary currency of welfare in Sen's framework.[12]

Two final complications arise through the vagueness of the approach, first, regarding how to trade-off the different dimensions of well-being, i.e. how to weight different functionings vis-à-vis each other (Slesnick 1998, pp. 2148–2149). While partial orderings might suffice in some cases, one can safely assume that for outcome-centered assessments of different policies, the more relevant and useful comparisons will involve trade-offs between different dimensions. An aggregation of the functionings vector into some summary measure that would allow such trade-offs, or a scheme of weights for that matter, have so far been rather ignored in the literature. The second difficulty results from the fact that it is often left unspecified whether a certain good is a resource or a conversion factor: being in good health could be seen as a functioning, but it might also be a conversion factor to achieve being well nourished (as in the above example about the parasitic disease). Or it might be a resource for the functioning being happy. This vexing "circularity problem" seems yet unsolved and few studies explicitly address it (Binder and Coad 2011a).

4 Bridging the Gap: Subjective Well-Being Capabilities

To what extent can the approaches discussed in the previous sections profit from each other? Is there a way to enrich one with the insights of the other? This question has come to the fore in recent years and scholars in both fields seem interested in bridging the gap between both approaches (see the introductions to two special issues and the respective special issues, i.e. van Hoorn et al. 2010; Comim 2005). Capability scholars often include insights from subjective well-being research into their approach, e.g. by making "being happy" one valuable functioning among others (see, e.g., the recommendations in Stiglitz 2010; Binder and Coad 2011a). Another stream of literature has assessed to what extent capabilities influence subjective well-being, i.e. to what extent having substantive freedoms in itself is a determinant of subjective well-being (Anand et al. 2005, 2008, 2009, 2011; Anand and Hees 2006). In this section, I will explore to what extent a subjective well-being view can be substantially enriched by recourse to the capability approach. The idea here is to start from what I have discussed above as the "Leitbild"-approach to the politics of happiness and enrich such a view with concepts from the capability approach. The resulting approach will still mainly be a variety of hedonism and see subjective well-

[12] The paucity of progress in actually measuring capabilities is reflected in the fact that most empirical applications measure achieved functioning and interpret this as a proxy for capabilities (Canoy et al. 2010, p. 393). Whether one's actual achievements are a good proxy of one's opportunities is not *a priori* clear.

being as the central defining value when it comes to human welfare (an extensive argument for hedonism is sketched in Binder 2010). It will, however, incorporate some of the agency aspects of the capability approach as well as a recourse to less subjective factors in order to overcome the problem of hedonic adaptation. I will argue that such an approach can cope with a number of objections discussed in the previous two sections and should thus be considered an attractive welfare-theoretic framework that could be usefully developed in further research.

The typical well-being Eq. (1) that is used in traditional happiness research serves as an empirical approximation for the framework proposed here. In the framework to be developed in this section, the individual has a set of resources that are transformed into happiness-relevant functioning achievement (my approach here is similar to Sen's capability approach and will focus on the happiness function $h(\cdot)$ shortly discussed in Sen (1985a) that is the hedonic evaluation of the functioning vector). These happiness-relevant functionings are the doings and beings of a person that make that person happy (hence the underlying basic value judgment that what matters with respect to a person's welfare is that person's happiness). The transformation of resources, similar as in the capability approach, depends on diverse conversion factors, which can be individual conversion factors ("internal conversion factors", such as genetic dispositions, age, gender, education) or environmental conversion factors ("external conversion factors", such as political regimes, the level of freedom in a society, corruption and so on). Resources can be defined as narrow as income but might also be seen more broadly incorporating other non-income factors of an individual's endowment (wealth, non-market goods and services and so on).[13]

Conversion factors should be understood mostly as those determinants of subjective well-being that are broadly outside of an individual's control or those factors that only play an indirect role for subjective well-being. As such, to determine what factors belong to this set is mainly an empirical question. Paying attention to the distinction between resources, happiness-relevant functionings and conversion factors will also help happiness researchers to better come to grips with the analysis of individual determinants of subjective well-being: should age and gender really be considered to be determinants of subjective well-being or are they rather moderating the influence of other determinants of subjective well-being? Age effects might mostly be driven by different life domains having different importance at different ages and life goals being reached in different age brackets, so that an age effect might not persist per se if one holds life goals and domain satisfaction weights constant in the analysis. If so, age would only indirectly determine SWB. Empirically, the relationship described in the preceding paragraphs will still bear resemblance to Eq. (1) or rather the following equation

$$r = h_i(x_i, \vec{y_i}|\vec{z_i}) + \epsilon \tag{4}$$

Conceptually it is closer to the functionings achievement Eq. (2)

$$\vec{b_i} = f_i(x_i, \vec{y_i}|z_{\vec{internal},i}, z_{\vec{external},i}), \tag{5}$$

where the individual achieves happiness-relevant functionings from resources depending

[13] Should not income also be a happiness-relevant functioning if it makes people happy? The answer to this question depends on whether there exists a direct effect of income on SWB. While the literature on the relation between SWB and income is controversial as to what extent income plays a direct role for subjective well-being, it seems plausible to hold that income is one very important indirect source of subjective well-being through its role for health, education, longevity, nutrition and so on. Whether income would directly influence SWB if one controlled for all indirect effects (such as the ones named, but also through providing status and so forth) might be questioned and should probably be the focus of further research.

on internal and external conversion factors as in the capability formalization. The difference here lies in not making the vector of functionings the relevant concept constitutive for individual well-being, but the individual's evaluation of the functionings vector through a happiness function

$$r = h_i(\vec{b_i}) + \epsilon \tag{6}$$

Note that this differs from the approach taken by Anand and colleagues by relating SWB to the outcome-side of the capability approach; Anand et al. (2009, p. 129) relate SWB to the opportunity-side, i.e. $r = h_i(Q_i(X_i))$.[14]

As regards the transformation of resources into happiness-functioning achievement, note the following discrepancies from the capability approach: while these achievements are considered only indicative of subjective well-being in the present approach, but not constitutive of it, they have two attractive properties for our "Leitbild"-approach of subjective well-being, where subjective well-being is used as the guiding principle for public policy (Binder 2013).[15] First, they offer, in a Senian spirit, more information about individual well-being than taking mere recourse to individuals' reported subjective well-being. That means, we cannot only compare subjective well-being across individuals (to the extent that SWB measures are interpersonally valid, see, e.g. Krueger and Schkade 2008; Helliwell and Wang 2012),[16] but we can also compare individuals in terms of their fulfillment of happiness-relevant functionings. Policy-makers who orient their policies at furthering subjective well-being can thus not only use subjective well-being as snapshot of societal progress at given moments but also use objective indicators of happiness-relevant functionings to get a more detailed picture of the sources of subjective well-being in society.

Secondly, they solve the problem of list selection of the capability approach by recourse to a naturalistic methodology.[17] At the core of this framework is the value judgement of

[14] Note further that the happiness Eq. (6) might, depending on the concrete purpose, be unpacked further into different domain satisfactions. The vector of functionings then is transformed through the individual's subjective evaluation into a vector of domain satisfactions. The overall assessment of different domain satisfactions is the individual's comprehensive assessment r. Given our scant knowledge of how domain satisfactions map into life satisfaction, it will depend on future work how to specify this relationship more precisely. At the present point in time, it can be conjectured that some substantial part of the reporting error ϵ in Eq. (1) might stem from the inability of individuals to correctly aggregate one's satisfaction in important domains of life into an overall measure of life satisfaction.

[15] To use Sumner's tripartite distinction of nature, sources and indicators of welfare (Sumner 1996): subjective well-being is constitutive of welfare, happiness-relevant functioning achievement are sources of welfare; and indicators of welfare would be whatever measure we find to assess happiness-relevant functioning or subjective well-being with.

[16] Given that economists traditionally tend to believe that this is impossible, there is surprisingly ample evidence that individuals similarly convert response labels into numbers (van Praag 1991), that friends and family can rate one's subjective well-being quite accurately (Sandvik et al. 1993) and that more objective displays of pleasure and pain can be interpersonally judged with accuracy (Algom and Lubel 1994; Redelmeier and Kahneman 1996).

[17] This also solves the problem of how to attach weights to different functionings. SWB information gives us relevant information on the weights individuals attach to different functionings. A similar point has been argued by Schokkaert (2007), p. 423. The idea behind this is that the coefficients of the determinants of SWB in empirical well-being regressions provide us with empirical knowledge about how strongly each happiness-relevant functioning influences well-being. For example, if we consistently find that coefficients for unemployment are much higher than coefficients for income, one could argue that an appropriate priority should be given to keeping individuals in employment as opposed to increasing the incomes of those who are employed. Emphasis in policy should then be commensurate with the weights of happiness-relevant functionings vis-à-vis each other.

hedonism and this allows us to solve the list selection problem by selecting as happiness-relevant functionings all these doings and beings that empirically increase individuals' subjective well-being. In many important aspects, this list will probably be rather similar across cultures and time due to human biological makeup.[18] The approach suggested here is thus subjective in that its core notion refers to subjective well-being. It has, however, an objective side to the extent that happiness-relevant functionings tend to be shared (in parts) by individuals qua their biological heritage.

It is useful to discuss this naturalistic solution to the list selection problem in somewhat more detail (see more extensively also Binder 2010, chap. 5): Seeking rewards is one essential feature for the survival and reproduction of all animals. From a biological perspective, not the pursuit of pleasure and pain is the ultimate goal but reproductive success. To ensure this, actions that are in general beneficial for reproductive success are made rewarding for the organism. Rewards can be understood to be all those stimuli that positively reinforce behavior; rewards thus increase the probability of behavior (McClure et al. 2004, p. 260). There are many so-called primary reinforcers that are genetically hardwired to be reinforcing; these include food, water, air, sexual stimuli etc.[19] Via associative learning, previously neutral stimuli can be learned to be reinforcing as well. For example, one can conjecture that the most prominent secondary reinforcer money is conditioned on other primary rewards. In principle, all learned reinforcers are conditioned on primary reinforcers (even if the chain of associations may sometimes be quite large and idiosyncratic; see Cabanac 1979; McClure et al. 2004).

Being biological products, humans have not evolved to be happy but to survive and reproduce (Camerer et al. 2005, p. 27). Our continued functioning is practically achieved by a process called homeostasis, a process that seeks to regulate bodily functions in reaction to changes in external and internal conditions. As such, they compensate for changes in environmental conditions. One can think of the regulation of body temperature, the regular intake of air, water and food as examples of homeostatic processes.[20] These homeostatic processes mostly work without any deliberate intervention. The negative hedonic feeling that is associated with the deviation from set points, i.e. the deprivation of reinforcers discussed above, is nature's way of motivating action of the organism to restore homeostatic balance. In that sense, sensory pleasure is a sign for the presence of a useful stimulus (Cabanac 1979). Closely related, and complicating the account a little more, is the concept of "alliesthesia" (greek for: "changed sensation", see Cabanac 1979), meaning that a stimulus can be perceived to be pleasant or unpleasant depending on the inner state of the organism. While deprivation is the negative motivator for action, alliesthesia is the positive one, making stimuli more rewarding when an organism is deprived of them. In that

[18] It is doubtful that one list can be justified for once and for all, independent of time and place. It is more plausible that there is a "skeleton list" that offers the basis for a more concrete specification of a full-fledged list of valuable functionings.

[19] A list of different innate reinforcers is provided by Millenson (1967) and discussed in Witt (2001). They are a well established *fact* in psychology (Damasio 2003, pp. 131–132).

[20] Homeostatic processes consist of two subprocesses. First, the organism detects a deviation from "set points" as regards the parameters that are necessary to allow continued functioning of the organism. For instance, the hot summer has increased our body temperature or the hunting for food has dehydrated the organism. Then, mechanisms set in to restore the balance condition in these monitored parameters (so to speak, bring back the organism into equilibrium; set points comprise mostly of parameter ranges, not sharp levels). The organism begins to sweat to reduce body temperature or becomes thirsty to motivate the replacement of lost fluids.

sense, pleasure and pain are "sovereign masters" (Bentham) motivating human action (see also Cabanac 1992).

Because of this biological setup, it is not surprising that a relatively robust relationship between a number of determinants and SWB has been established. Among the major determinants of subjective well-being are a rather small number of life domains that are robustly found to influence subjective well-being around the world (e.g., Graham 2009; Layard et al. 2012): quite irrespective of cultural context, these determinants include one's income and job situation, one's health as well as one's social situation (friends, family and spouse). It can be speculated that most of these determinants can be traced back to satisfying primary (and secondary) reinforcers. In this respect our "skeleton list" of happiness-relevant functionings will be similar for most people (with the usual genetic variance).

The role that learning plays for the acquisition of secondary reinforcers does, however, complicate the picture. Through well-established psychological learning mechanisms, individuals learn new pleasures and pains. This leads to idiosyncratic preference learning based on time and culture the individual finds itself in, but also based on person-specific life trajectories. These individual learning histories lead to the impossibility to completely specify a list of happiness-relevant functionings once and for all. For the framework presented here, this is not as bad a problem as for the capability approach: the idiosyncrasies of individual valuable functionings make a definitive list rather implausible within the capability approach, it gets, however, captured within the SWC framework by recourse to individual's SWB assessments. While the welfare analyst thus does not know the complete list of valuable functionings giving rise to an individual's assessment of SWB, he does know the subjective well-being assessment itself and weight is given to that individual's learning history through this assessment (both Binder 2010; Schubert 2012, argue extensively for the relevance learning plays for SWB views; the SWB score, in general and in the present framework, reflects what the individual has learned to like or dislike; formally one would add an idiosyncratic element to each individual's functioning vector, which represents that individual's learning history). One direct consequence of this conceptualization would be that subjective well-being researchers need to pay more attention to finding out which influences on subjective well-being can be classified as members of the skeleton list and which influences are more strongly determined by culture. It can be conjectured that some of the rather less robust results in the field might be exactly that because they tend to be more culturally-specific.

In this sense, the framework avoids paternalism objections that have been leveled against the capability approach and the alleged existence of one definitive list of valuable functionings that is supposed to be valid for everyone (despite individuals' actual assessments of this list). But realizing that many sources of subjective well-being are learned by individuals depending on their life circumstances also avoids a similar critique leveled against subjective well-being views (Qizilbash 2012). Qizilbash (2012, p. 49) argues that recourse to the above-mentioned life domains and their impact on subjective well-being can also be subjected to a similar paternalism objection since it fails to take into account individual heterogeneity (instead of capability scholars, in this version of the criticism it is happiness researchers who tell individuals paternalistically what makes them happy). Leaving room for individual learning in a SWC framework expressly acknowledges this heterogeneity (this will be relevant below in justifying the focus on capabilities to achieve subjective well-being).

Nevertheless, the information inherent in our skeleton list of happiness-relevant functionings does, however, offer us additional useful information to assess individual well-being. First, such a list can be used as proxy in cases where no relevant subjective

well-being information is present.[21] Secondly, even in cases where subjective well-being measures exist, the information on happiness-relevant functioning achievement offers additional information on likely sources of well-being. Here, policy-makers are informed as to how subjective well-being in a society is composed of, i.e. which of a number of important drivers of subjective well-being are likely causing a society's well-being. A given well-being score for individuals at a given point in time can thus be further unpacked into its components (with the explicit understanding that this is not a 1:1 mapping as idiosyncratic components will play a role as well). The measurement of welfare in terms of capabilities for happiness offers a more diversified tool for policy. In sum, while in standard happiness approaches, the policy-maker faces the task to find policies that make persons happier, resorting to the present view of Subjective Well-being Capabilities allows to decompose the overall welfare measure into concrete sources. These sources might then in turn be each addressed individually, but with the explicit understanding that these elements of the outcome vector are not constitutive of welfare but merely sources of individual subjective well-being.

The decomposition of SWB into its sources and main components (which are to be derived empirically, as argued above), also helps in an innovative fashion in assessing the extent of hedonic adaptation for the individuals in a society (compare Binder and Broekel 2012). At the present, measures of subjective well-being for a country are often taken at face value, prompting paradox situations where Afghans for instance show high levels of well-being despite low incomes, high uncertainty, bad health outcomes, low education and constant warfare in society (Graham and Chattopadhyay 2009).[22] In our framework, the Afghan case would show a country high in SWB but low in happiness-relevant functionings, thus suggesting that hedonic adaptation distorts the picture. Of course, cultural influences (or learned likes) might account for this finding so that the credibility of the assessment of hedonic adaptation hinges on how well such influences can be controlled for in a measurement exercise (i.e., how complete is the list of relevant determinants of subjective well-being, can country-specific influences be identified etc.) Despite these complications, the indicators for happiness-relevant functioning achievement routinely prompt the researcher to unpack the subjective well-being measures for a country.[23] Let me sum up this argument: First, for the concrete measurement of welfare, one can resort to functionings scores as offering a more detailed picture even when subscribing to a subjective well-being view of welfare. Secondly, the discrepancy in functioning achievement between persons who report the same level of happiness can be understood as a measure of hedonic adaptation.

In spirit with the Leitbild-approach, the suggested well-being framework presented here should, however, also incorporate the capability-aspect of Sen's approach. Subjective well-being capabilities then are the analogue of capabilities to function of Sen's approach. They reflect the total of an individual's capabilities to achieve subjective well-being, given that individual's resources and conversion factors (constraints).

[21] One could also try and use this information as well as the weights provided from typical SWB regressions to try and estimate a subjective well-being rating given a certain happiness-relevant functioning achievement.

[22] It seems that typically SWB measures reflect objective conditions better than in some of the better known exceptional cases like the one discussed here. To what extent SWB measures reflect the objective circumstances of a society or are subject to the adaptation problems is still debated.

[23] The same rationale applies for the miserable millionaires case, where happiness-relevant functioning achievement is high and subjective well-being is low.

$$Q_i(X_i, Y_i) = \{r \mid r = h_i(x_i, \vec{y_i}|\vec{z_i}) + \epsilon \forall x_i i \wedge \forall \vec{y_i} \in Y_i \wedge \vec{z_i}\} \quad (7)$$

They should also be seen as the primary concept of the framework presented here, i.e. increasing the well-being of individuals within this approach would focus on increasing individuals' capabilities to achieve well-being, not directly increasing individuals' well-being. This focus makes sense in order to avoid the serious shortcomings of a subjective well-being view as described in Sect. 2. Making this connection complements traditional happiness accounts with the important insight that not only achieved happiness is important but maybe even more so the opportunity to achieve happiness, i.e. the pursuit of happiness (compare Frey and Stutyer 2010; Schubert 2012; Graham 2011). That is, the capability set of a person in this interpretation reflects the person's substantive freedom to pursue happiness in different ways. Although two choices from the set might lead to the same actually achieved level of happiness, this level of happiness would result from different sources at the discretion of the individual choosing them. Thus, the perspective of traditional accounts of happiness is considerably broadened by this synthesis.

Policy-makers then focus on creating an institutional environment that allows individuals to successfully pursue their own conceptions of happiness by providing individuals with as favorable-as-possible SWC sets. Concrete policy levers can then relate to all these domains which can be empirically identified to constitute happiness-relevant functioning achievement, additionally taking into account the heterogeneity of individuals' learning trajectories.[24] Focussing on creating opportunities for individuals to achieve happiness does not reduce individuals to mere "metric stations" whose happiness rating has to be mechanically increased. This way, neither a demeaning picture of individuals nor a technocratic engineering approach towards welfare maximization are promoted within the present framework. Moreover, by removing focus from the actual measurements of subjective well-being, the risk of manipulation inherent in subjective well-being measures (by policy-makers but also by citizens themselves) is reduced (this is discussed extensively in Frey and Stutzer 2012).

Such an approach very strongly puts emphasis on individuals' agency: while policy-makers (or society through them) can create well-being-conducive conditions and institutions, it is the individual that is responsible to critically reflect on what sort of pursuit of happiness it wants to follow or whether or not the individual wants to use the conditions provided to further one's own well-being. Individuals are not the passive recipients of happiness pills or policy interventions that directly increase their happiness, but they are active agents that derive pleasure from enjoying the personal freedom to strive for their happiness (as they see fit according to learned likes and dislikes). With this focus on individual agency, a subjective well-being framework can also avoid being accused of paternalism by forcing people to live their lives according to the findings of what the science of happiness establishes as factors that generally, but not uniformly, make people happy.[25]

However, an important caveat applies to the approach presented in this paper. The measurement of opportunities has proven to be non-trivial in the capability approach and there is no reason to assume this would be otherwise in the present context. Given the

[24] Instead of a maximization paradigm, such an approach would probably also focus on comparative analyses of different policies (Frey and Stutzer 2012).

[25] It is here that the paternalism objection seems to go wrong, as the lack of freedom associated with a "happiness police" telling people how to live their lives is likely to turn out to be well-being decreasing (as Anand et al. 2011, have established that enjoying substantive freedoms is associated with subjective well-being). See also more extensively Duncan (2010), pp. 169–171.

measurement difficulties in assessing the set of potential options and thus assessing hypothetical situations, one probably will have to resort to a similar strategy as in the capability approach and try to assess SWC by approximation of measuring subjective well-being and the related happiness-relevant functionings. Still, within a "Leitbild"-approach, this problem seems somewhat tempered as policies target the institutional environment and aim at favorably influencing SWC (without pretensions of some precise engineering approach). Since within such an approach, focus is on using knowledge of SWB and its determinants in guiding a comprehensive and consistent policy-making on a conceptual level, problems in measuring SWC are less problematic then in a welfare economic paradigm. Knowing the empirical relationships between SWB and its determinants can help to institute policies which can be reasonably conjectured to increase opportunities for individual well-being. This should be seen as a much more modest ambition of using SWB measures and stressing the deliberative dimension of policy-making instead of the technocratic welfare-maximization paradigm.

5 Outlook

In this paper, I have developed a subjective well-being framework that incorporates insights from Sen's capability approach. While both approaches seem *prima facie* disjunct and dealing with substantively different ideas of welfare and advantage, I have made a case that a combination of both approaches allows to avoid some of the drawbacks associated with them in isolation. Subjective well-being capabilities (SWC) are the substantive opportunities an individual enjoys to pursue and achieve happiness. Within a hedonistic welfare framework, policy-makers aim at creating an institutional framework that allows individuals to pursue their conceptions of happiness, thus not treating individuals as mere "metric stations" (Frey and Stutzer 2010), whose subjective well-being can be engineered and optimized. Individuals are treated as sovereign agents that are responsible for their own happiness, for which society can only provide favorable conditions.

On the outcome-level, with happiness-relevant functionings as the actual outcome of individuals' choices from their capability sets, policy-makers are provided with a set of determinants that are empirically derived and shown to reliably influence subjective well-being while at the same time acknowledging that subjective well-being depends also on learned likes and dislikes, accounting for heterogeneity in individuals' determinants of happiness. By relating these objective indicators to subjective well-being measures, an approximation of the degree of hedonic adaptation is possible. The objective indicators for the empirically derived life domains also allow fruitful insights into how to improve the conditions for individuals to pursue happiness in a society.

Future research could successfully employ this framework empirically. On the theoretical side, it would be important to better understand what determinants of subjective well-being actually are best considered as conversion factors and which directly impact on subjective well-being. Also, the dynamic view of how happiness-relevant functionings develop through learning might be fruitfully developed further (Binder 2010; Schubert 2012, deal extensively with the role of learning for subjective well-being). A further dynamic aspect that is generally neglected in both approaches alike is the question what time-frame is relevant for assessing individuals' welfare (see Adler 2007). While not the focus of the present paper, the approach sketched here seems to favor a life-time well-being perspective as opposed to momentary snapshots of well-being at one point in time. The institutional framework suggested above would then aim at ensuring that individuals

can strive to achieve a most favorable life-time balance of subjective well-being instead of giving emphasis to discretionary interventions that somehow maximize only short-term well-being. Such a life-time view seems more plausible considering the dynamics of subjective well-being relating to hedonic adaptation, which would be ill-reflected in momentary snapshots of well-being.

Related to this, it is also important to flesh out a dynamic perspective of the approach suggested in this paper. While I have hinted at the conjecture that there are happiness-relevant functionings that can reasonably be assumed stable qua our biological heritage, it can be conjectured that there are also those happiness-relevant functionings that are subject to cultural influences and which might change with the evolution of our norms and social values. Learning mechanisms might provide a systematic basis to develop a theory of change of these functionings. A better understanding of which determinants of well-being belong into which category would provide a first step into this direction. While space does not permit to develop these thoughts further in the present paper, it can be concluded that the research programme of how to use subjective well-being measures in a normative context, while only recently put on the agenda, provides for exciting future research opportunities.

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