The Determinants of Subjective Economic Well-being: An Analysis on Italian-Silc Data

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Abstract Using Italian data on Income and living conditions for the year 2005, the paper investigates the main determinants of households' subjective economic well-being by means of a Partial Proportional Ordered Logit Model. According to a joint subjective and objective perspective of analysis, we use as dependent variable the perceived ability of households to make ends meet. Whereas, we use as explanatory variables some objective aspects of living conditions relating to housing, financial equilibrium, possession of durables and quality of residence place and some socio-demographic characteristics. The empirical results show that the financial strain is the most relevant dimension of living conditions influencing the subjective economic well-being, but its effect is attenuated depending on the level of education and the tenure status of accommodation. Actually, when the highest levels of education are coupled with the status of self-employee and house-owner households have more chances to reach a higher probability to be economically satisfied. The insights coming out from the results may call for different policy measures depending on the degree of well-being and the characteristics of households. In particular, more efficient policies would be oriented to sustain the households' income, to encourage to buy a house and to allow young people to get the highest levels of education.

Keywords Ordered logit model · Subjective economic well-being

The analysis and measurement of well-being are relevant issues for societies, which are engaged in defining efficient and effective policies able to reduce social inequalities and to improve the well-being or the quality of life of people.

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During the last years the extensive literature produced on this topic has highlighted some important insights, which are leading the recent course of the literature.

Firstly, income is a necessary condition to achieve a good level of well-being, but it is a too rough measure to depict on the whole the well-being. So that, income is only a plausible but not exclusive indicator or explanatory variable of a sub-dimension of well-being, viz. the economic dimension.

Secondly, the well-being is a complex and wide subject concerning a broad spectrum of important domains of life ranging from material to socio-environmental aspects, personal perceptions, aspirations and feelings.

Thirdly, objectively and subjectively measurable indicators have to be used in a complementary way in order to better explore the overall well-being or one or more sub-dimensions of it.

In the light of these considerations, we adopt a joint subjective and objective perspective to explore the economic well-being of households by using households' responses on their economic status.

Differently to other similar studies, we measure the perceived economic well-being by using a question related to the ability of households to make ends meet, rather than the usual income satisfaction question. Focusing on the relationship between perceived economic well-being and many variables linked to the ability of households to access to resources, and to some personal characteristics of the respondents, we show that the subjective economic well-being does not depend exclusively on the financial strain, but also dramatically on the level of education and the tenure status of accommodation.

Objective and Subjective Perspective in the Analysis of Well-being

For a long time among the economists it has been thought that well-being is a concept that may be analysed and measured by means of income.

Later it was argued that income was only a partial and uncompleted measure of a wider concept as well-being, therefore attempts were made in order to define socio-economic measures as alternative or complementary to income.

In this context, among the significant scientific contributions, the capability approach proposed by Sen has to be mentioned (1985). It is a normative framework based on the concepts of 'commodities', 'functionings' and 'capabilities'. Sen points out that well-being concerns what individual is able to do or to be along his/her life.

Sen's approach may be seen as an open track to the multidimensional analysis of well-being or quality of life, which is based on the consideration that individual well-being depends not only on income, but also on health conditions, social activity, leisure time, education, etc. (see e.g. Bérenger and Verdier-Chouchane 2007; Deutsch and Silber 2005; Diener et al. 1999; Maasoumi 1986; Silber 2007).

From a measurement point of view, the well-being literature is branched in two streams, viz. the *objective* and *subjective* approach, which use objective-quantitative and subjective-qualitative indicators of quality of life, respectively.

The *objective approach* (see e.g. Wolff and Zacharias 2009) evaluate the well-being using quantitative objective measures either one indicator like income or expenditure, or a multi-dimensional one.

Whereas, the *subjective approach* focuses on the feeling of people on her/his life as a whole (see e.g. Diener 1984), or on some specific domains of her/his life, like health, job, leisure, financial, environmental, etc (see e.g. Cummins 1996).

It must be noticed, that among economists the objective approach has been dominant for a long time, while only in the last decade the subjective approach has been enriched by interesting theoretical and empirical contributes (e.g., see Di Tella et al. 2001; Easterlin 2003; Graham and Felton 2006; Kenny 2005; Van Praag et al. 2003; Van Praag and Ferrer-i-Carbonell 2008). However, some prominent economists have earlier paid attention to the study of well-being from a subjective point of view (Clark and Oswald 1994; Easterlin 1974; Van Praag 1971; Van Praag and Kapteyn 1973).

The subjective well-being as multi-faceted concept implies that the satisfaction of life as a whole can be explored as an aggregation of satisfaction results in different domains of life (see e.g. Cummins 1996; Rampichini and Schifini D'Andrea 1998; Van Praag et al. 2003).

Van Praag et al. (2003) stated that "satisfaction with life as a whole can be seen as an aggregate concept, which can be unfolded into its domain components" (p. 30).

The studies on subjective well-being (SWB) use information from surveys, which ask households how they are satisfied with their life as a whole, or how they are satisfied with their household income, or health, or leisure, or job, etc.

The choice and the number of life domains is arbitrary and depends on the research topic. For example, Cummins (1996) following a meta-analysis approach identified seven life domains: material well-being, health, productivity, intimacy, safety, community, and emotional well-being. Van Praag et al. (2003) considered six life satisfaction domains: job, financial, housing, health, leisure, and environment. Rojas (2006) explored the relationship between life satisfaction and different life domains related to health, economic situation, job, family, friendship, personal development, community environment.

Generally, the studies on subjective well-being concern the investigation of only one or few domains of life (see e.g. Cutler and Richardson 1997; Groot 2000; Seghieri et al. 2006), other ones explore the relationship between the overall life satisfaction and one or more domains of life (Clark and Oswald 1994; Frey and Stutzer 2000; Van Praag et al. 2003); and other ones look only at the overall SWB (Kohler et al. 2005).

Subjective Economic Well-being

In the literature economic well-being (or even economic welfare) has been thought as the contribution of income to well-being by the possession of goods and services (see e.g. Van Praag et al. 2003); in other words it represents the economic domain of life.

The analysis of the economic domain along a subjective perspective was proposed by Goedhart et al. (1977), Van Praag (1968, 1971) and Van Praag et al. (1980).

According to this stream of literature the subjective economic well-being (SEW) is based on the Income Evaluation Question (IEQ). In particular, it is evaluated by asking households how they evaluate their own situation in terms of verbal labels.

This approach is known as 'Leyden approach', and it represents an operationalization of the experienced utility concept.

The Leyden approach is based on the following assumptions: *a)* people are able to evaluate both the income levels in general and their own income in terms of verbal (e.g. 'bad', 'sufficient', 'good') or numerical response categories ranging from one to five or ten corresponding to lower and higher level of satisfaction; *b)* the ordinal interpersonal comparability, i.e. if two respondents give the same answer we assume they have a similar level of satisfaction.

Another similar method is based on the Minimum Income Question (MIQ) by asking households what income they regard as their minimum income to make ends meet (see, for example, Kapteyn et al. 1988; Kapteyn 1994).

According to IEQ and MIQ approaches, the economic well-being is a function of the household income level and 'intervening variables', like age, sex, education, household size, etc. (Van Praag and Ferrer-i-Carbonell 2008).

Although, in the literature is recognized that "income is only one factor among others influencing individual life satisfaction levels" (Frijters and Van Praag 1997, p. 6), IEQ and MIQ approaches persist in considering "…absolute and relative material circumstances…" (Frijters and Van Praag 1997, p. 6) as valid welfare or economic well-being indicators.

A less stiff approach disregards the income-based questions entirely and uses instead self-rating wider questions by which persons place themselves on a ladder of well-being or poverty (see e.g. Pradhan and Ravaillon 2000; Ravaillon and Lokshin 2002).

This approach is based on the Economic Welfare Question (EWQ); for example, the economic well-being is evaluated by asking households whether they are 'poor', 'borderline' or 'non-poor' (see Mangahas 1995, 1999; Riffault 1991).

Our contribution can be inserted in this stream of literature. In particular, we consider as economic well-being indicator a self-rated economic well-being by asking households how they evaluate their ability to make ends meet in terms of verbal response categories, i.e. with great difficulty, with some difficulty, easily, and very easily. Subjective economic well-being as defined is related to some objective and subjective explanatory variables concerning the possibility of households to access goods and services of daily needs, the housing conditions, the possession of durables, environmental conditions and social-demographic aspects.

In the next Section, we will present EU-Silc project, Italian-Silc data, and the data and the empirical model used for our analysis.

Methods

The EU-Silc Project

The European project on Statistics on Income and Living Conditions replaced the pioneering European Community Household Panel Survey (ECHP) expired in 2001. Seven countries launched EU-Silc in 2003; it was extended to fifteen countries in 2004, twenty seven countries in 2005 and thirty and first countries in 2008. EU-Silc is the European reference source for comparative statistics on income distribution, living conditions and social exclusion; it has conducted by the member states of the

European Union and collected by Eurostat. The purpose of EU-Silc is to allow the member states and the European commission to monitor national and supranational progress towards the European goals in the area of social inclusion and protection, and to support the policy makers in the institutional processes.

EU-Silc gives information on several aspects of people's life (i.e. housing, labour, health, education, financial distress, material deprivation and possession of durables) allowing a multi-dimensional approach to the study of well-being, poverty and social exclusion.

The survey is composed of primary (collected every year) and secondary (collected in general only one shot) target variables. For countries using the integrated design, all variables will be collected both in cross-sectional and longitudinal data.

The *primary target variables* concerns either household and individual information. At household level, we have information on demographic characteristics, housing, material deprivation, income and tax; while at individual level, we have in addition to demographic characteristics, also education, health, labour and income information.

Households and individuals records are linkable by a common identifier; moreover, cross-sectional and longitudinal data could be matched likewise.

The *second target variables* are related to specific issue, like inter-generational transmission of poverty (2005), social participation (2006), etc.

In addition to these *objective data* on the situation of households and individuals (i.e. income, housing conditions, possession of durables, socio-demographic characteristics, etc.), the survey collects also *subjective data* relating to respondents' perceptions and evaluations (i.e. degree of satisfaction of their economic situation, their difficulties and needs, etc.).

In Italy the Survey on Income and Living Conditions (IT-Silc) has been launched in the year 2004 by the National Institute of Statistics. Information on socio-economic aspects of living and housing conditions is collected at household level, while information on labour, education and health regards individuals aged sixteen and over.

Italian-Silc Data

In our analysis we focus on Italian-Silc dataset for the year 2005 based on a sample of 22,032 households.

As measure of *subjective economic well-being* (SEW), we consider the level of difficulty experienced by the household in making ends meet. The evaluation by the respondents was based on an ordinal six-point scale: one (with great difficulty), two (with difficulty), three (with some difficulty), four (fairly easily), five (easily) and six (very easily). Due to the low percentage of observations in the point scale one and six, a re-coding in four-point scale has been done. From our view, if a household experiences a low (high) level of difficulty to make ends meet it could (not) satisfy entirely its needs, so the household will be (un) likely satisfied of its economic situation. According to this assumption, the four-point scale evaluation can be translated into a satisfaction degree of the economic domain of life: one (unsatisfied), two (not much satisfied), three (satisfied), four (greatly satisfied).

Although EU-Silc presents income evaluation and minimum income questions, we follow EWQ approach (i.e. Economic Welfare Question) and use — as economic well-being indicator—the ability of households to make ends meet. The question chosen lets to overcome the criticism connected to income relating to the ability of households to know and to evaluate their own situation (for details see Pradhan and Ravaillon 2000).

In the light of that, we examine the relationship between subjective economic well-being and some relevant personality aspects (age, gender, education, and work status), environmental aspects, and life daily needs related to financial strain, housing conditions, possession of durables.

Table 1 reports the original questions of EU-Silc survey and the labels of the variables used in our analysis.

As indicators of financial equilibrium 'FE', we consider the following variables: arrears on utility bills, financial burden of the total housing cost, capacity to afford a meal with meat, chicken, fish every second day, capacity to afford paying for one week annual holiday away from home, incapacity to afford food expenditures in the last twelve months, incapacity to afford clothes' expenditures in the last twelve months, incapacity to afford health expenditures in the last twelve months, incapacity to afford educational expenditures in the last twelve months, incapacity to pay taxes in the last twelve months, payment of rubbish tax, taking out a short-term loan.

The housing conditions 'HC' involves variables like number of rooms available to the household, ability to keep home adequately warm, total housing cost, tenure status of accommodation, problems with the dwelling regarding leaking roof, damp ceilings, dampness in the walls, floors or foundation or rot in window frames and doors, problems with the dwelling (i.e. too dark, not enough light, etc).

The possession of durable goods 'DUR' concerns the availability of household of some durable goods like telephone, colour television, computer, washing machine, dishwasher, car, connection to internet, video recorder, video camera, parabolic aerial.

As indicators of socio-demographic factors (SD) gender, age, level of education and work status of respondent were included.

Moreover, the respondent feeling of noise from neighbours or from street, pollution, grime or other environmental problems, and crime violence or vandalism in the residence area were considered as proxies of environmental quality of residence place of household (RP dimension).

Finally, in order to catch the different economic perception of well-being among Northern and Middle-southern regions a dummy variable has been inserted.

Descriptive Statistics

Table 2 shows some descriptive statistics of variables used in our empirical model. With respect to the ordinal and nominal variables, we report the relative frequencies distribution and the S-Gini Index[1]; whereas mean and standard deviation are reported for the quantitative variables.

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[1] The S-Gini Index, as a measure of heterogeneity of the distribution for qualitative variables, is a standardized index ranging from 0 (low heterogeneity) and 1 (high heterogeneity).

Table 1 Variables description

Variable	Label of variable
Dependent variable	
Ability to make ends meet	SEW
With great difficulty (Unsatisfied)	1
With some difficulty (Not much satisfied)	2
Easily (Satisfied)	3
Very easily (Very satisfied)	4
Financial equilibrium (FE)	
Arrears on utility bills	AUB
Yes	1
No	2
Financial burden of the total housing cost	FBHC
A heavy burden	1
Somewhat a burden or not burden at all	2
Capacity to afford a meal with meat chicken, fish every second day	MMCF
No	1
Yes	2
Capacity to afford paying for 1 week annual holiday away from home	HOL
No	1
Yes	2
Incapacity to afford food expenditures in the last 12 months	FOODE
Yes	1
No	2
Incapacity to afford clothes' expenditures in the last 12 months	CLOE
Yes	1
No	2
Incapacity to afford health expenditures in the last 12 months	HEALTHE
Yes	1
No	2
Incapacity to afford educational expenditures in the last 12 months	EDUE
Yes	1
No	2
I don't have this type of expenditure	3
Incapacity to pay taxes in the last 12 months, payment of rubbish tax,	TAXE
Yes	1
No	2
Taking out a short-term loan	LOAN
Yes	1
No	2
Housing conditions (HC)	
Number of rooms available to the household	ROOMH
1 room	1

Table 1 (continued)

Variable	Label of variable
2 rooms	2
3 rooms	3
4 rooms	4
5 rooms	5
6 6 or more rooms	6
Ability to keep home adequately warm	WARMH
No	1
Yes	2
Total housing cost	THC
	Continuous
Tenure status of accommodation	TSA
Tenant	1
Owner	2
Beneficial owner	3
Accommodation is provided free	4
Problems with the dwelling regarding leaking roof, damp ceilings, dampness in the walls, floors or foundation or rot in window frames and doors	DAMP
Yes	1
No	2
Problems with the dwelling: too dark, not enough light, etc.	DWEP
Yes	1
No	2
Possession of durable goods (DUR)	
Do you have a telephone?	PHONE
Yes	1
No	2
Do you have a colour TV?	TELEV
Yes	1
No	2
Do you have a computer?	COMP
Yes	1
No	2
Do you have a washing machine?	WASHM
Yes	1
No	2
Do you have a dishwasher?	DISCHW
Yes	1
No	2
Do you have a car?	CAR
Yes	1
No	2

Table 1 (continued)

Variable	Label of variable
Do you have an internet connection?	INTER
No	1
Yes	2
Do you have a video recorder?	VIDREC
No	1
Yes	2
Do you have a video camera?	VIDCAM
Yes	1
No	2
Do you have a parabolic aerial?	PARAB
No	1
Yes	2
Socio-demographic aspects (SD)	
Gender of the respondent	GEN
Female	1
Male	2
Age of respondent	AGE
<35 years old	1
36–50 years old	2
51–65 years old	3
>65 years old	4
Level of education of respondent	EDUL
Elementary school leaving certificate	1
Lower secondary education certificate	2
Secondary education certificate	3
Degree	4
Master, PhD, etc	5
Work status of respondent	WORK_S
Unemployed	1
Employee	2
Self-employed worker	3
Retired	4
Other	5
Quality of the residence place (RP)	
Noise from neighbours or from the street	NOISE
Yes	1
No	2
Pollution, grime or other environmental problems	POL
Yes	1
No	2
Crime violence or vandalism in the area	CRIME

Table 1 (continued)

Variable	Label of variable
Yes	1
No	2
Geographic clusters	
Area	AREA
Middle-southern regions	1
Northern regions	2

It is worth noting that most qualitative variables present a high heterogeneity (i.e. S-Gini Index $\cong$ 1); in particular among these, we find AREA and several variables related to DUR.

Moreover, regarding to HC, RP, and FE only few variables present a low dispersion. In particular, variables like arrears on utility bills, capacity to afford meal, incapacity to afford food, incapacity to pay taxes, and ability to keep home adequately warm show a low heterogeneity; viz. they present an S-Gini Index ranging from about .21 to .44.

Regarding to the dependent variable, the percentage distribution of respondents across categories shows that a high share of households experiment to make ends meet with great and some difficulty, 32.53% and 39.69%, respectively.

Furthermore, with respect to the explanatory variables though 70.44% of households are home owner, their major concern is related to the housing cost, which is a heavy burden for the 50.67% of households. Similarly, the capacity to afford an holiday and clothes expenditures represent also a worry for the households; about 38.0% and 16.0% of households have difficulties to afford paying a week away from home and to buy clothes.

Relating to the quantitative variables we see that on average the Italian households have got a house with about 3.47 available rooms, and they support a monthly housing cost equal to 382.00 euro.

More information emerge by crossing the categories of the dependent variable and some explicative variables (see Table 3). Generally, a percentage greater than 90.0% of households with arrears on utility bills, with a heavy burden of housing cost, with incapacity to afford holiday, clothes, health expenditures belongs to the first two categories of the dependent variable (i.e. with great difficulty and with some difficulty). Moreover, households living in the Middle and Southern regions, with lower levels of education, home tenant and with unemployed householder experiment greater difficulties to make ends meet.

Theoretical and Empirical Models

In order to detect which kind of strain affects the perception of economic well-being, we consider three large clusters of explanatory variables, i.e. FE, HC and DUR. These have been thought as indicators of access to services and goods, which allow

Table 2 Descriptive statistics

Variable	Label of variable	Frequency %	S-Gini index
Nominal Variable			
Arrears on utility bills	AUB		
Yes	1	8.070	.297
No	2	91.930	
Financial burden of the total housing cost	FBHC		
A heavy burden	1	50.670	1.000
Somewhat a burden or not burden at all	2	49.330	
Capacity to afford a meal with meat chicken, fish every second day	MMCF		
No	1	9.710	.351
Yes	2	90.290	
Capacity to afford paying for 1 week annual holiday away from home	HOL		
No	1	37.980	.942
Yes	2	62.020	
Incapacity to afford food expenditures in the last 12 months	FOODE		
Yes	1	5.440	.206
No	2	94.560	
Incapacity to afford clothes' expenditures in the last 12 months	CLOE		
Yes	1	16.210	.543
No	2	83.790	
Incapacity to afford health expenditures in the last 12 months	HEALTHE		
Yes	1	10.900	.389
No	2	89.100	
Incapacity to afford educational expenditures in the last 12 months	EDUE		
Yes	1	4.390	.766
No	2	35.460	
I don't have this type of expenditure	3	60.150	
Incapacity to pay taxes in the last 12 months, payment of rubbish tax	TAXE		
Yes	1	12.490	.437
No	2	87.510	
Taking out a short-term loan	LOAN		
Yes	1	16.590	.554
No	2	83.410	
Ability to keep home adequately warm	WARMH		
No	1	9.710	.351
Yes	2	90.290	
Tenure status of accommodation	TSA		
Tenant	1	16.500	.622
Owner	2	70.440	

Table 2 (continued)

Variable	Label of variable	Frequency %	S-Gini index
Beneficial owner	3	3.780	
Accommodation is provided free	4	9.280	
Problems with the dwelling regarding leaking roof, damp ceilings, dampness in the walls, floors or foundation or rot in window frames and doors	DAMP		
Yes	1	18.850	.612
No	2	81.150	
Do you have an internet connection?	INTER		
No	1	67.620	.876
Yes	2	32.380	
Do you have a video recorder?	VIDREC		
No	1	36.500	.927
Yes	2	63.500	
Do you have a parabolic aerial?	PARAB		
No	1	73.160	.785
Yes	2	26.840	
Gender of the respondent	GEN		
Female	1	28.340	.812
Male	2	71.660	
Work status of respondent	WORK_S		
Unemployed	1	33.980	.919
Employee	2	13.970	
Self-employed worker	3	2.820	
Retired	4	35.900	
Other	5	13.330	
Noise from neighbours or from the street	NOISE		
Yes	1	23.990	.729
No	2	76.010	
Pollution, grime or other environmental problems	POL		
Yes	1	19.940	.639
No	2	80.060	
Crime violence or vandalism in the area	CRIME		
Yes	1	11.870	.418
No	2	88.130	
Area	AREA		
Middle-southern regions	1	51.180	.999
Northern regions	2	48.820	
Ordinal Variable			
Ability to make ends meet	SEW		
With great difficulty (Unsatisfied)	1	32.530	.918
With some difficulty (Not much satisfied)	2	39.690	
Easily (Satisfied)	3	20.720	

Table 2 (continued)

Variable	Label of variable	Frequency %	S-Gini index
Very easily (Very satisfied)	4	7.060	
Level of education of respondent	EDUL		
Elementary school leaving certificate	1	6.020	.939
Lower secondary education certificate	2	30.870	
Secondary education certificate	3	24.670	
Degree	4	29.830	
Master, PhD, etc	5	8.610	
Age of respondent	AGE		
<35 years old	1	12.520	.971
36–50 years old	2	28.330	
51–65 years old	3	27.540	
>65 years old	4	31.610	

Variable	Label of Variable	Mean Value	Std. Dev
Continuous Variable			
Number of rooms available to the household	ROOMH		
1 room	1	3.470	1.158
2 rooms	2		
3 rooms	3		
4 rooms	4		
5 rooms	5		
6 6 or more rooms	6		
Total housing cost	THC	382.410	266.120

to disentangle the real aspects of economic status of households. Moreover, we explore if the place of residence (AREA) and the quality of it (RP) act on SEW. Finally, some 'intervening personality' variables (SD) have been included to investigate how and to what extent demographic characteristics determine the achievement of high levels of SEW.

To achieve our aims, the choice of the statistic tool has been data-driven, but also it has been based on theoretical reasons. Van Praag et al. (2003) argued "when two respondents give the same answer, they are assumed to enjoy similar satisfaction levels, implying that ordinal comparability is permitted" (p. 30). In order to respect the ordinal comparability assumption and the ordinal nature of the dependent variable, we hypothesize that the responses of perceived economic well-being are explained by an ordered logit model.

The most general ordered logit model is the following:

$$P(Y_i > m) = g(\mathbf{X}\beta_m) = \frac{\exp(\alpha_m + X_i\beta_m)}{1 + \{\exp(\alpha_m + X_i\beta_m)\}}, \ m = 1, 2, \ldots, M - 1, \quad (1)$$

Table 3 Distribution of dependent variable vs. some explicative variables

Variable	Ability to make ends meet				
	With great difficulty (Unsatisfied) %	With some difficulty (Not much satisfied) %	Easily (Satisfied) %	Very easily (Very satisfied) %	Total %
Arrears on utility bills (Yes)	72.990	22.960	3.320	0.730	100.000
Financial burden on the total housing cost (A heavy burden)	53.080	37.360	7.980	1.580	100.000
Capacity to afford a meal with meat chicken, fish every second day (No)	77.250	18.280	3.400	1.060	100.000
Capacity to afford paying for 1 week annual holiday away from (No)	62.940	32.520	3.760	0.780	100.000
Incapacity to afford clothes' expenditures in the last 12 months (Yes)	74.330	21.640	3.020	1.010	100.000
Incapacity to afford health expenditures in the last 12 months (Yes)	74.930	19.950	3.540	1.580	100.000
Ability to keep home adequately warm (No)	75.560	20.840	2.990	0.610	100.000
Tenure status of accommodation (Tenant)	50.630	34.490	11.830	3.050	100.000
Do you have an internet connection? (No)	38.220	39.700	17.110	4.970	100.000
Do you have a video recorder? (No)	43.590	37.110	14.740	4.560	100.000
Do you have a parabolic aerial? (No)	36.810	39.760	17.840	5.590	100.000
Work Status of respondent (Unemployed)	31.570	40.670	20.670	7.090	100.000
Level of education of respondent (Elementary school leaving certificate)	52.340	37.030	8.140	2.490	100.000
Level of education of respondent (Lower secondary education certificate)	38.640	40.050	17.640	3.670	100.000
Area (Middle-southern regions)	39.300	40.820	15.350	4.530	100.000

In parenthesis are reported the reference categories

where M is the number of categories of the ordinal dependent variable. From Eq. 1, the probability of Y to take values from 1 to M is the following:

$$P(Y_i = 1) = 1 - g(X_i\beta_1),$$

$$P(Y_i = m) = g(X_i\beta_{m-1}) - g(X_i\beta_m), \quad m = 2, \ldots, M - 1,$$

$$P(Y_i = M) = g(X_i\beta_{M-1}) \tag{2}$$

This model is not parsimonious because it involves as many α and β coefficients as the $M-1$ number of dependent variable categories.

A more parsimonious model is the Ordered Logit Model that implies the parallel-lines assumption for all explanatory variables,[2] i.e. the model presents M different α coefficients and the same β coefficients for each category of dependent variable. This model is called also Proportional Odds Model and represents a special case of the Generalized Ordered Model (Eq. 1). It can be written as:

$$P(Y_i > m) = g(\mathbf{X}\beta) = \frac{\exp(\alpha_m + X_i\beta)}{1 + \{\exp(\alpha_m + X_i\beta)\}}, \quad m = 1, 2, \ldots, M - 1 \tag{3}$$

As it is evident, Eqs. 3 and 1, related to the parallel-lines model and the generalized ordered model, respectively, are very similar, the only exception being on the β's, that are the same for all values of m in Eq. 3. Actually, in the empirical analyses the parallel-lines assumption is often violated (i.e. one or more β's could differ across values of m categories).

Therefore, an alternative procedure is to fit a Partial Proportional Ordered Logit Model through which some β coefficients could differ among the categories of the dependent variable; viz. the proportional parallel-lines assumption is not satisfied for some explanatory variables.

To test the parallel-lines assumption a Brant test could be done (Brant 1990). If Brant test is significant there will be evidence that the parallel regression assumption has been violated.

A more parsimonious layout and an easy way to understand the parallel-lines assumption is provided by the Gamma parameterization (see, e.g. Peterson and Harrell 1990; Lall et al. 2002). Under the Gamma parameterization, each explanatory variable has one β coefficient concerning the first category of dependent variable contrasted to the all other ones; $M-2$ γ coefficients that represent the deviation from proportionality; and $M-1$ α coefficients reflecting the cut-points:

$$P(Y_i > m) = \frac{\exp(\alpha_m + X_i\beta + \Delta_i\gamma_m)}{1 + \{\exp(\alpha_m + X_i\beta + \Delta_i\gamma_m)\}}, \quad m = 1, 2, \ldots, M - 1 \tag{4}$$

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[2] The parallel-lines constraint is satisfied if $\beta_1 = \beta_2 = \ldots = \beta_M$.

where Δ_i is a matrix containing the values of a subset of q explanatory variables ($q<p$, where p are all the variables) for which the parallel-lines assumption is violated, and γ_m is a vector of regression coefficients. The test of the proportional assumption, for the q-covariates, is based on the null hypothesis H_0: $\gamma_m=0$ for all m categories. γ_m coefficients significantly different from zero indicate the effect of independent variable changes passing from the lower category of SEW to the higher.

In our analysis, as several covariates violated the parallel lines assumption a Partial Proportional Ordered Logit Model (PPOLM) has been estimated.

The following PPOLM under Gamma parameterization has been estimated:

$$P(Y_i > m) = \frac{\exp(\alpha_m + \beta FE_i + \beta HC_i + \beta DUR_i + \beta SD_i + \beta RP_i + \beta AREA_i + \Delta_i \gamma_m)}{1 + \{\exp(\alpha_m + \beta FE_i + \beta HC_i + \beta DUR_i + \beta SD_i + \beta RP_i + \beta AREA_i + \Delta_i \gamma_m)\}} \quad (5)$$

where the variables have the meaning described above in sub-Section 'Italian-Silc data'.

Clearly, it is not expected all variables of Eq. 5 (i.e. the variables included in the general model to be estimated) would be required in an adequate statistical model. In fact, in our case the estimation of Eq. 5 has showed some variables were not statistical significant; and furthermore some variables connected to DUR dimension highlighted some multicollinearity problems. In the light of this, a more parsimonious model has been estimated and the results will be presented in the next section.

Results

PPOLM Estimates

The estimates of PPOLM are presented in Table 4. Wald test[3] on parallel-lines assumption is statistically significant for the following variables HOL, FOODE, CLOE, HEALTHE, EDUE, TAXE, LOAN, THC, VIDREC, EDUL (relating to this last variable only for the categories two, four and five) and AREA.

The estimated model achieved a good fit and the coefficients of the variables—estimated by the Maximum Likelihood method—generally possessed the expected sign, the only exception being the negative sign of FOODE coefficient.

As expected, the financial equilibrium (FE) represents the most relevant dimension influencing SEW. In fact, FE dimension involves key variables linked to the basic expenditures and aspects of daily life of each household. The estimations show households with no financial burden of the total housing cost, with a good capacity to afford paying for one week annual holiday away

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[3] To check the parallel-lines constraint the *autofit* option of *gologit* procedure of STATA software was followed. This STATA procedure does a series of Wald tests on each variable to see whether its coefficients differ across equations, e.g. whether the variable meets the parallel-lines assumption. If the Wald test is statistically insignificant for one or more variables, the variable with the least significant value on the Wald test is constrained to have equal effects across equations. A global Wald test is also done of the final model with constraints versus the original unconstrained model; a statistically insignificant test indicates that the final model does not violate the parallel-lines assumption.

Table 4 Partial proportional ordered logit estimates

y=SEW (Ability to make ends meet)

(*With some difficulty vs. With great difficulty*)

	Coeff.	Std. Err.
Financial equilibrium (FE)		
AUB		
Yes	Reference Group	
No	0.483	0.069
	(*.000*)	
FBHC		
A heavy burden	Reference Group	
Somewhat a burden or not burden at all	1.616	0.032
	(*.000*)	
MMCF		
No	Reference Group	
Yes	0.467	0.066
	(*.000*)	
HOL		
No	Reference Group	
Yes	1.402	0.041
	(*.000*)	
FOODE		
Yes	Reference Group	
No	-0.164	0.099
	(*-.097*)	
CLOE		
Yes	Reference Group	
No	0.801	0.058
	(*.000*)	
HEALTHE		
Yes	Reference Group	
No	0.588	0.073
	(*.000*)	
EDUE		
Yes	Reference Group	
No/I don't have this type of expenditure	0.108	0.037
	(*.004*)	
TAXE		
Yes	Reference Group	
No	0.280	0.067
	(*.000*)	

Table 4 (continued)

LOAN		
Yes	Reference Group	
No	0.215	0.051
	(.000)	
Housing conditions (HC)		
ROOMH	0.132	0.013
	(.000)	
WARMH		
No	Reference Group	
Yes	0.467	0.066
	(.000)	
THC	0.000	0.000
	(-.813)	
TSA		
Tenant	Reference Group	
Owner	0.466	0.049
	(.000)	
Beneficial owner	0.413	0.081
	(.000)	
Accommodation is provided free	0.325	0.060
	(.000)	
DAMP		
Yes	Reference Group	
No	0.188	0.038
Possession of durable goods (DUR)		
VIDREC		
No	Reference Group	
Yes	0.205	0.046
	(.000)	
INTER		
No	Reference Group	
Yes	0.046	0.049
	(.351)	
PARAB		
No	Reference Group	
Yes	0.269	0.033
	(.000)	
Quality of the residence place (RP)		
NOISE		
Yes	Reference Group	
No	0.072	0.037
	(.052)	

Table 4 (continued)

POL		
Yes	Reference Group	
No	0.028	0.041
	(.496)	
CRIME		
Yes	Reference Group	
No	0.049	0.047
	(.301)	
Geographic clusters		
AREA		
Middle-southern regions	Reference Group	
Northern regions	0.164	0.040
	(.000)	
Socio-demographic dimension (SD)		
WORK_S		
Unemployed	Reference Group	
Employee	0.649	0.109
	(.000)	
Self-employed worker	1.030	0.113
	(.000)	
Retired	0.685	0.115
	(.000)	
Other	0.596	0.118
	(.000)	
EDUL		
Elementary school leaving certificate	Reference Group	
Lower secondary education certificate	0.009	0.072
	(.899)	
Secondary education certificate	0.086	0.075
	(.253)	
Degree	0.277	0.081
	(.001)	
Master, PhD, etc	0.896	0.114
	(.000)	
GENDER		
Female	Reference Group	
Male	0.045	0.035
	(.192)	
AGE		
<35 years old	Reference Group	
36-50 years old	-0.062	0.048
	(.201)	

Table 4 (continued)

51-65 years old	0.136	0.054
	(.012)	
>65 years old	0.387	0.066
Deviations from proportionality (*Easily vs. With some difficulty*)	γ_2	Std. Err.
FOODE		
Yes	Reference Group	
No	-1.179	0.174
	(.000)	
CLOE		
Yes	Reference Group	
No	0.436	0.135
	(.001)	
HEALTHE		
Yes	Reference Group	
No	-0.071	0.153
	(.643)	
EDUE		
Yes	Reference Group	
No/I don't have this type of expenditure	0.016	0.047
	(.732)	
THC	0.000	0.000
	(.075)	
HOL		
No	Reference Group	
Yes	0.234	0.065
	(.000)	
VIDREC		
No	Reference Group	
Yes	-0.148	0.057
	(.010)	
INTER		
No	Reference Group	
Yes	0.164	0.058
	(.005)	
AREA		
Middle-southern regions	Reference Group	
Northern regions	0.440	0.048
	(.000)	
LOAN		
Yes	Reference Group	
No	0.210	0.067
	(.002)	

Table 4 (continued)

TAXE		
Yes	Reference Group	
No	0.299	0.131
	(.022)	
EDUL		
Elementary school leaving certificate	Reference Group	
Lower secondary education certificate	0.102	0.063
	(.107)	
Degree	0.205	0.062
	(.001)	
Master, PhD, etc	0.340	0.103
	(.001)	
Deviations from proportionality (*Very Easily vs. With some difficulty*)	γ_3	Std. Err.
FOODE		
Yes	Reference Group	
No	-1.462	0.394
	(.000)	
CLOE		
Yes	Reference Group	
No	0.623	0.383
	(.105)	
HEALTHE		
Yes	Reference Group	
No	-1.169	0.327
	(.000)	
EDUE		
Yes	Reference Group	
No/I don't have this type of expenditure	-0.134	0.066
	(.732)	
THC	0.000	0.000
	(.000)	
HOL		
No	Reference Group	
Yes	0.018	0.136
	(.895)	
VIDREC		
No	Reference Group	
Yes	-0.355	0.084
	(.000)	
INTER		
No	Reference Group	
Yes	0.162	0.079
	(.040)	

Table 4 (continued)

AREA		
Middle-southern regions	Reference Group	
Northern regions	0.398	0.069
	(*.000*)	
LOAN		
Yes	Reference Group	
No	0.285	0.105
	(*.006*)	
TAXE		
Yes	Reference Group	
No	1.040	0.304
	(*.001*)	
EDUL		
Elementary school leaving certificate	Reference Group	
Lower secondary education certificate	-0.362	0.100
	(*.000*)	
Degree	0.070	0.088
	(*.427*)	
Master, PhD, etc	0.202	0.124
	(*.104*)	
N	22,032	
Log likelihood	-20,269.41	
Pseudo R2	.2613	
LR chi2 (61)	14,338.44	

from home, and without problems to afford clothes' expenditures in the last twelve months, have more chance to experiment a higher level of SEW; that is, they are satisfied of their economic situation. The variables characterizing the financial equilibrium dimension are more supporting of SEW than the other dimensions HC and DUR. In particular, among FE dimension the variables FBHC (financial burden of the total housing) and HOL (holiday for a week) have a coefficient greater than one.

The other variables related to FE dimension like arrears on utility bills, capacity to afford a meal with meat, chicken, fish every second day, and incapacity to afford health expenditures in the last 12 months are less supporting of household feeling in order to achieve a higher level of SEW; these variables present a coefficient lower than 0.60. Finally, EDUE and TAXE are less supporting of SEW with a coefficient equal to 0.11 and 0.28, respectively.

Regarding to the housing conditions dimension (HC), all coefficients of variables appear statistical significant except the total housing cost coefficient (THC). Among HC dimension, the most relevant variables are the tenure status of accommodation (TSA) and the ability to keep home adequately warm (WARMH). With regard to the former (TSA), if household is home owner it will have more chance to get a higher

level of SEW than the reference group (i.e. tenant). In particular, the intensity of TSA coefficient decreases passing from the second TSA category to the third and the fourth one (i.e. $\beta_{TSA,2}=0.47$, $\beta_{TSA,3}=0.41$ and $\beta_{TSA,4}=0.33$). This result was expected on our data as for Italian people to be house owner represents a status symbol.

Moreover, DUR dimension presents all variables with statistically significant coefficients, even if the coefficient of INTER is not significant for the first category; in fact the γ coefficients of INTER variable appear to be statistically different from 0 (viz. $\gamma_{INTER,2}=0.16$ and $\gamma_{INTER,3}=0.16$); while the β coefficients of PARAB and VIDREC are equal to 0.27 and 0.21, respectively.

Relating to the socio-demographic characteristics, the influence of both the education level and the work status have to be outlined. In particular, the highest level of education and the condition of self-employed worker represent the most important conditions to have a high SEW. Furthermore, all variables related to SD dimension respect the parallel-lines constraint except EDUL variable. This variable presents different β coefficients for the categories two (lower secondary education certificate), four (degree) and five (master, PhD, etc.); while for the third category (secondary education certificate) there is only one β coefficient as the parallel-lines constraint was verified. Regarding to AGE, only the coefficients of the third and fourth classes appear statistically significant. This result is expected because those households with an older respondent have likely a steady level of labour or a retirement income that lets households to reach satisfying living conditions.

Finally, the coefficients of variables related to RP dimension are not statistically significant; while the coefficient of AREA is statistically significant; in other words the Italian households have a different feeling of SEW if they live in the Northern or Middle-Southern regions. As shown by γ coefficients, AREA has a different effect on the categories of SEW (i.e. $\gamma_{AREA,2}=0.44$ and $\gamma_{AREA,3}=0.40$). It is reasonable to suppose AREA interacts with some macro covariates, like regional rate of unemployment, per capita regional GDP, respectively lower and higher in the Northern regions that the other ones. In addition, the best economic situation, the availability for Northern households to have better social services and to be supported by more efficacious family-policies, make it possible they reach high levels of SEW.[4]

Profiles of Households Along Average Probabilities

The predicted probabilities estimated by PPOLM model show Italian households are mainly concentrated in the first two categories of SEW. In particular, the average probabilities to make ends meet 'with great difficulty' and 'with some difficulty' are equal to .33 and .40, respectively. While, the average probabilities of households to belong to the categories 'easily' and 'very easily' is very low, viz. .21 and .07, respectively.

In order to provide a synthetic information, some average probabilities conditioned to some categories of socio-demographic variables and the categories

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[4] We explored the effect of regional location by using different aggregations of data; for example, North, Centre, South or North-Centre and South. In these cases, the coefficients of AREA were not statistically significant.

of tenure status of accommodation have been calculated.[5] These average conditional probabilities let us to obtain interesting profiles of Italian households. We explore if the average probability of the four categories of SEW will vary when socio-demographic characteristics of households and the tenure status of accommodation change (see Table 5). The household profiles have been identified taking into account either the relevant and differentiate characteristics of social structure of Italian households, and the estimates of PPOLM.

Due to the characteristics of Italian labour market (e.g. high youth unemployment rate), we analyse the respondents aged 36–50 because they have likely achieved a permanent labour market position or a well-paid job.

Generally, one could expect the effect of high level of education and status of employee will raise the probability to reach a higher level of well-being. Partly in line with this expectation, we find the highest level of education only if coupled with the status of self-employee and the owner tenure status of accommodation gives some good chances to have a satisfying level of well-being (SEW=3).

Going inside the profiles of Table 5, we find for households which respondent has got an elementary school certificate and she/he is unemployed, the probability to make ends meet 'with great difficulty' decreases strongly if he/she is house owner; i.e. the average conditional probability is .57 and .45 for tenants and owners (see Table 5, Profiles 1 and 2), respectively.

For respondents with the lower level of education and the work status of employee the conditional average probability to make ends meet 'with great difficulty' (i.e. SEW= 1) is lower than the previous profiles. In particular, if the family is tenant the conditional average probability of SEW to be in the first category will be .41; while, if the family is house owner the probability will be .30. Briefly, for the previous type of households the probability to reach the highest categories of SEW is very low.

Regarding to profiles 5-8, we note that the conditional average probability of the second category of SEW (i.e Pr(SEW = 2|X)) does not change significantly among the different profiles, while the conditional average probability to make ends meet 'easily' (i.e Pr(SEW = 3|X)) increases strongly, passing from .21, for the profile 5, to .28 for the profile seven. In particular, for those families which respondent has a high level of education, the conditional average probability to reach both a satisfying and a very satisfying level of SEW (i.e Pr(SEW = 3|X) and Pr(SEW = 4|X)) is connected mainly to the work status of the respondent and less to the tenure status of accommodation. In fact, if the respondent is a self-employed worker the probability to make ends meet 'easily' and 'very easily' is higher than that of the employee respondent. In synthesis, the highest values of probability to be in the categories 3 and 4 of SEW is reached when the respondent has a master or PhD, and she/he is self-employed and house owner.

Furthermore, considering the PPOLM estimates, an average probability of SEW conditioned to some supporting explanatory variables has been calculated. We call this conditional average probabilities the *very nice profile*; it concerns the households for which the total housing cost is somewhat a burden or not a burden at all; those households having capacity to afford clothes' expenditures in the last twelve months and capacity to afford paying for one week annual holiday

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[5] Regarding to the other explanatory variables, the median value has been considered; this choice seems the most appropriate considering the nature of the data.

Table 5 Household profiles

Profile	Average probability			
	Pr(SEW=1|X)	Pr(SEW=2|X)	Pr(SEW=3|X)	Pr(SEW=4|X)
Profile 1	.453	.499	.041	.006
Age: 36–50 years old				
Level of education: Elementary School				
Work status: Unemployed				
Tenure status accommodation: Owner				
Profile 2	.569	.400	.026	.004
Age: 36–50 years old				
Level of education: Elementary School				
Work status: Unemployed				
Tenure status accommodation: Tenant				
Profile 3	.302	.610	.075	.012
Age: 36–50 years old				
Level of education: Elementary School				
Work status: Employee				
Tenure status accommodation: Owner				
Profile 4	.409	.535	.049	.008
Age: 36–50 years old				
Level of education: Elementary School				
Work status: Employee				
Tenure status accommodation: Tenant				
Profile 5	.150	.601	.213	.036
Age: 36–50 years old				
Level of education: Master, PhD				
Work status: Employee				
Tenure status accommodation: Owner				
Profile 6	.220	.608	.149	.023
Age: 36–50 years old				
Level of education: Master, PhD				
Work status: Employee				
Tenure status accommodation: Tenant				
Profile 7	.108	.566	.275	.051
Age: 36–50 years old				
Level of education: Master, PhD				
Work status: Self-Employed				
Tenure status accommodation: Owner				
Profile 8	.162	.605	.200	.033
Age: 36–50 years old				
Level of education: Master, PhD				
Work status: Self-Employed				
Tenure status accommodation: Tenant				

Table 5 (continued)

Profile	Average probability			
	Pr(SEW=1|X)	Pr(SEW=2|X)	Pr(SEW=3|X)	Pr(SEW=4|X)
Profile 9	.325	.398	.207	.070
All households				
Profile 10	.022	.256	.497	.225
The very nice profile				

The very nice profile concerns households whose total housing cost is somewhat a burden or not burden at all, respondent is tenant of accommodation, respondent is self-employed worker, and households having capacity to afford clothes' expenditures in the last 12 months and capacity to afford paying for 1 week annual holiday away from home, and households which the respondent has achieved a Master, a Phd, etc

away from home. Moreover, it involves the households whose respondent is tenant of accommodation, self-employed worker, and she/he has achieved a master, a PhD, etc. For households with the above characteristics the probability to reach the upper categories of SEW is fairly high, i.e. .50 and .22, respectively, for SEW equal to 3 (to make ends meet easily) and 4 (to make ends meet very easily).

Finally, in order to provide a comparison between subjective and objective measures of well-being two cross frequency tables have been done concerning the predicted probabilities of SEW and the equivalent disposable income (EDI).

In particular, we cross five classes of EDI and the cumulative predicted probability of SEW for the first two categories (i.e. SEW = 1 and 2) and the last two (i.e. SEW = 3 and 4) (see Tables 6 and 7). In this way we divide households in two groups, viz. households with unsatisfying (SEW = 1 and 2) and satisfying (SEW = 3 and 4) living conditions.

Table 6 shows 66.70% of households have a probability greater than .60 to be in the first and second category of SEW; in particular a high share of these families (70.50%) have a EDI less than mean value (μ_{EDI}=16,600 euros). The other side of the coin shows the probability to be in the third and fourth category of SEW is very low; in fact only 16.0% of households have a probability greater to .60 (Table 7). In particular, this percentage involves households belonging to the third class of EDI, while 74.50% of households have a probability less than .50 to achieve a satisfying SEW (Table 7).

In synthesis, the percentage of Italian households with a high probability to reach satisfying living conditions (Pr($SWE_{3,4}$|x>.60)) is very low and equal to 16.0%.

Discussion

Summary of Statistical Results

The main findings of our statistical analysis can be summarized in the following.

The achievement of a satisfying subjective economic well-being is strongly influenced by the key variables related to basic needs and to financial strain (FE) that

Table 6 Predicted probabilities of SEW≤2 and equivalent disposable income

EDI	Pr(SEW≤2|X:p_i)			
	p_i<=.5	.5≤p_i≤.6	p_i>.6	Total
		% of households		
≤0	8.86	5.70	85.44	100.00
0≤EDI≤16,577	16.03	6.52	77.45	100.00
16,577≤EDI≤33,000	36.52	10.04	53.44	100.00
33,000≤EDI≤66,000	63.64	8.61	27.74	100.00
≥66,000	75.00	5.81	19.19	100.00
Total	25.54	7.77	66.68	100.00

Pr(SEW≤2\|X) is the probability for SEW less or equal to 2 (unsatisfied and not much satisfied) conditioned to the matrix of explanatoy variables (X)

characterize daily life of households. Within FE, the financial burden of total housing (FBHC), the possibility to go on holiday for a week (HOL), and the difficulty for a family to buy clothes (CLOE) are the more relevant factors of stress.

The PPOLM estimates and the probability distributions conditioned to each category of the socio-demographic variables (i.e. gender, age, level of education and work status) show Italian households will achieve a satisfying level of subjective economic well-being if they are house owner and their respondent have a good work and education status (i.e. self employee and high level of education).

In particular, for the house owner families the expenditures connected to the management of house will weight weakly on their perception of economic well-being, so they will have, *ceteris paribus*, a greater purchasing power than tenant families. Moreover, a higher level of education likely lets people to achieve a good work status that could give them a satisfying level of income, and so likely a low level of difficulty in making ends meet. It is worthy to mention, the entangled relationship existing between education, work and accommodation status; indeed,

Table 7 Predicted probabilities of SEW>3 and Equivalent Disposable Income (EDI)

EDI	Pr(SEW>3|X:p_i)			
	p_i<=.5	.5≤p_i≤.6	p_i>.6	Total
		% of households		
≤0	91.14	3.80	5.06	100.00
0≤EDI≤16,577	83.97	7.91	8.12	100.00
16,577≤EDI≤33,000	63.48	12.37	24.15	100.00
33,000≤EDI≤66,000	36.36	11.97	51.68	100.00
≥66,000	25.00	11.63	63.37	100.00
Total	74.46	9.58	15.97	100.00

Pr(SEW>3\|X) is the probability for SEW greater than 3 (satisfied and greatly satisfied) conditioned to the matrix of explanatoy variables (X)

for low levels of education the chance of households to reach a quite satisfying level of well-being depends more on the tenure status of accommodation rather than on the work status. While, for high levels of education the work status is the variable that influences (more than the tenure status of accommodation) the possibilities of households to have a satisfying level of economic well-being.

Our results are not directly comparable with the results of other researchers as they generally treat subjective and objective indicators all together by some multivariate statistical method; notwithstanding, we find several points of agreement.

For example, Fusco and Dickes (2008), using the Luxemburg's Silc data, find that the main dimensions of poverty are related to financial difficulties and environmental problems, while Ferro Luzzi et al. (2008) by the Swiss Household Panel find the latent factors of poverty being financial poverty, poor health, bad neighbourhood, social exclusion.

Instead, relating to socio-demographic variables, we can compare directly our results that are in general agreement with those of others; actually, education, like the work status, lowers the chances of falling into poverty (see, e.g. Ferro Luzzi et al. 2008), while households with more aged householder reach higher levels of well-being (see, e.g. Ramos and Silber 2005).

Definitely, our analysis show that objective indicators (i.e. explanatory variables) significantly affect SEW; moreover, the statistical treatment of different dimensions of objective aspects of everyday life allow us to detect those policy measures useful to improve the level of economic well-being of Italian households.

Some Concluding Remarks

Following EWQ approach, we consider a dependent variable not directly linked to income rather to a self-perceived condition of economic satisfaction. Moreover, using several items relating to different aspects of daily needs we can extract some important insights in terms of targeted policy actions.

As we said previously, the results highlight that the financial difficulties are the most relevant determinants of low levels of SEW; in particular, the more urgent factors are related to the shortage of resources for housing (financial burden of total housing, to keep home adequately warm) and for holydays (capacity to afford paying for 1 week annual holiday); in spite of the first need, this last is only theoretically a not primary need!

Relating to socio-demographic variables, it is worthy of remark the positive effect on the probability to reach high levels of SEW of both the levels of education and the work-status. However, only when high levels of education are coupled with the status of self-employee and the owner status of accommodation allow to reach a high probability to have a satisfying level of SEW. This, in turn, means that dependent workers have, on average, lower incomes with respect to those of self-employees. It makes sense to suppose that households of employees are mainly concentrated within the income classes ranging from 16,577.00 to 33,000.00 euros and to a lower extent in the next income class (33,000–66,000). Actually, only the 24.0% and the 52.0% of these households respectively, have a high probability ($p > .60$) to reach high levels of SEW.

In the light of these results, we draw out some interesting insights in terms of policies that should be adopted in order to correctly determine those aspects of living conditions

which require anti-poverty measures. The empirical results highlight that the policy makers have to work hard in order to put on suitable and effectiveness policies directed to support strongly family, as it, in the Italian context, plays a role of 'social shock-absorber'.

In particular, policies would be oriented: *a)* to give a 'minimum income' to women and unemployed; *b)* to supply some essential social service, like kindergartens, services for disabled and old people in order to support women and to make it possible their participation to labour market without additional costs for household; *c)* to encourage family to buy an house, by facilities in rate of interest.

Actually, in 2004 the percentage of Italian public expense on GDP in support of households and childhood was only 4.40% with respect to 7.80% of the European average; in the same year the percentage of public expense for housing and unemployment was equal to 0.10% and 2.0%, respectively, in contrast to the European average of 2.0% and 6.60%.

Moreover, education and job policies are necessary to allow younger population to achieve a high level of education that makes it possible to improve their skills increasing the probability to reach a good work status.

It is worthy to be mentioned, these policy implications are partly consistent to the actions of economic policy followed by the last Italian governments. Unfortunately the no good feeling of SEW of Italian families highlights that the policies adopted in Italy in the last years in support of education, job market and house purchase have not been effectiveness.

In conclusion, our results and considerations argue in favour of a critical rethinking of Italian policies regarding to the living conditions of Italian people.

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