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Life Satisfaction in Italy: Evidence from the ISAE Consumers Survey

by

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ABSTRACT

Self-reported life satisfaction (SRS) in Italy appears relatively low, starting to decline well before the current crisis. This paper explores the relationship between SRS and quality of life in Italy, using the ISAE data-base on households. SRS has been surveyed on 2000 individuals in May 2008, November 2008, and April 2009. Three main results can be drawn; first, SRS has not significantly changed during the last 6 months. Second, moving to a different socio-economic group has a greater impact on SRS than changing income within the same group. Third, measures of financial stress such as debt, willingness to work and earn more, and problems meeting basic household expenses, prove to explain SRS in addition to income.

Keywords: perceived happiness, well-being; households.

JEL codes: D12, D31, I31.

CONTENTS

1 INTRODUCTION[1]

The literature in happiness economics has been growing rapidly, and it is now specialised in subfields of research. However, strangely enough, a central topic is still unexplored: the current economic crisis. Italy emerges as an interesting case with this respect, because she is especially hit by the crisis. But Italy is an interesting case also for another reason, i.e. because happiness, or more precisely self-reported life satisfaction, has ceased to grow in the last decade, and it now appears to be declining. Apart from the U.S. and maybe the U.K., this is an anomaly (STEVENSON B. - WOLFERS J. 2008).

However, the study of the Italian case is seriously hindered by the scarcity of the data on happiness and related financial variables. The Eurobarometer provides historical series of life satisfaction, but no financial variables; the Bank of Italy's Households Survey provides both kind of data, but the question on life satisfaction has been inserted only recently, and the data are available only for 2004 and 2006.

This paper explores the problem of self-reported life satisfaction in Italy in the very middle of the economic crisis. It relies, in fact, on the ISAE survey on Italian Consumers, which reports data on both their self-reported satisfaction and financial stance in three waves, from May 2008 to April 2009. No historical analysis is allowed, but a cross-section analysis of the relationship between self-reported satisfaction and financial variables (i.e. absolute and relative income, income perceived as "fair", saving and borrowing, basic expenses) in three recent points of time can tell us two pieces of interesting information: first, whether and how self-reported satisfaction follows the cycle; secondly, which are the financial variables that help explain self-reported satisfaction.

The analysis remains exploratory in character, because three waves are few, the sample is not numerous, and even the question on self-reported satisfaction is scaled differently across the waves. But it lays the basis for future research by raising the right issues when more data will be available, being surveyed twice a year.

The paper is organized as follows: section 2 briefly introduced the database and the ISAE consumers survey; section 3 sketches the evolution of self-reported satisfaction in Italy, and how it emerges from the ISAE survey; section 4 describes how the crisis is perceived by the Italian consumers,

[1] The authors wish to thank an anonymous referee for the useful comments to a preliminary version of the paper. The usual disclaimers apply.

especially regarding their self-reported satisfaction; section 5 reports the econometric analysis; section 6 concludes.

2 THE ISAE CONSUMERS SURVEY

2.1 Survey Design

Since 1973 ISAE realizes a survey on consumers' opinion, in the framework of an EU-wide project harmonized by the European Commission. The survey consists of qualitative questions on the personal situation of the consumer and that of the country. Questions allow five possible answers, ranging from strongly positive to strongly negative; results are usually expressed as weighted balances of positive and negative replies. The survey is conducted with a Computer Assisted Telephone Interviewing (CATI) system; it is based on a monthly sample of 2.000 Italian consumers, changing each month, for a total of 24.000 persons interviewed per year. The sample is extracted from the public telephone book registers and selected on the basis of a two-stage technique: in the first step, it is stratified according to zone of residence and size of municipalities (see table 1); the second stage is based on

Table 1 **THE ISAE SAMPLE**

Geographic zone	Size of municipalities							**TOTAL**
	<5000	5000-10000	10001-20000	20001-50000	50001-100000	100001-500000	>=500000	
North West	57	23	22	35	19	4	53	**214**
Center-North	76	59	53	53	25	15	45	**325**
North-East	70	73	76	46	28	90	0	**384**
Center	44	41	51	76	49	42	88	**391**
South	78	59	76	96	82	41	32	**465**
Islands	35	29	28	51	25	32	22	**222**
Total	**360**	**285**	**308**	**356**	**228**	**223**	**240**	**2 000**

Source: ISAE.

the selection of a specific consumer within the household selected in the first step. This selection is based on quota sampling according to gender (48,5% males, 51,5% females). Quota sampling ensures that sample size is always equal to the target, substituting non response with other consumers extracted

from the sample; the response rate of the survey, calculated as the ratio among the number of the respondents and that of total monthly contacts has been equal to roughly 66% in recent years. Currently, individual responses are not weighted, in order to take into account possible selection biases; changes over time in the households composition and age composition may also impinge on the possibility of making long-term analysis of the data. For these reason, ISAE is currently working on a system of probability and pos-stratification weights, that will be used as soon as they become available in future works[2].

2.2 The questionnaire

The ISAE consumers survey contains a number of questions that may be potentially related to individual life satisfaction. The first part of the questionnaire provides structural information about the consumer and her household, including age, gender, the area of residence, level of education and working status of the respondent; the second part gathers consumers opinions on the general economic situation of the country (including questions on unemployment and price dynamics) and on that of the household and the individual consumer. In particular, a question on the monthly budget asks whether the family has been able to save or had to borrow to finance current expenditure.

Moreover, the survey asks Italian consumers about their income: obtaining a reliable measure of income is usually problematic in surveys administered with our methodology. In order to reduce the probability of a missing reply, the respondent is asked to assign family income to one out of 22 classes, rather than providing a precise estimate. Even so, the number of valid answers is considerably lower than for other sample questions, and the mean of sample family income is lower than what is implied in corresponding measures in national accounts (see Fig. 1).

In the model we will use in section 5, we estimate family income by the central class value, and obtain a measure of income per person dividing family income by the ISEE indicator, related to family size, which takes into account economy of scales in consumption. The distribution of our income per person across the three sample waves is reported in figure 1. As expected, the distribution is asymmetric, with a small percentage of respondents reporting a large family income.

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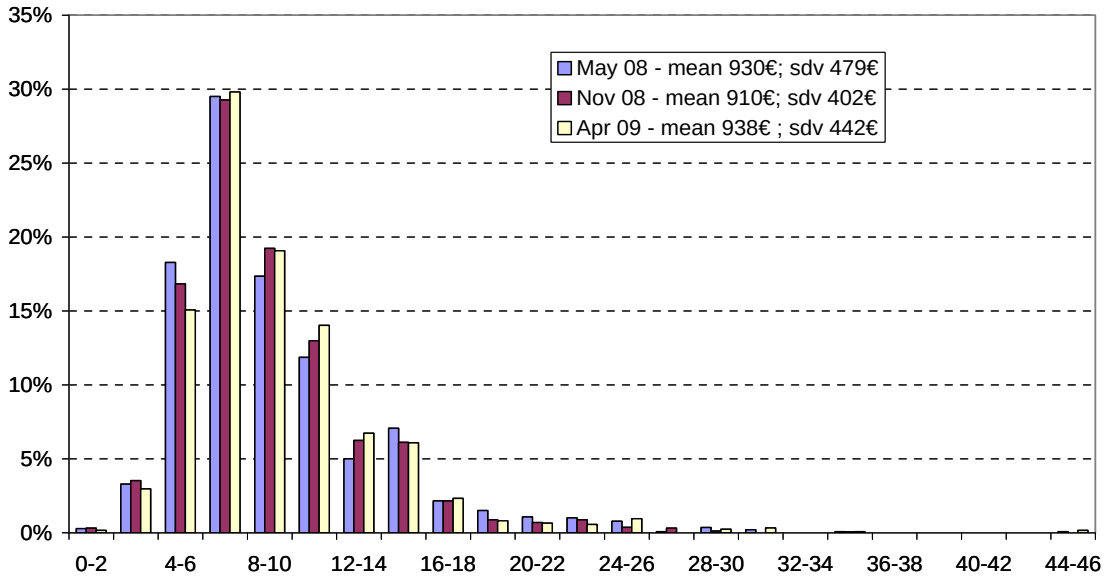
[2] See on this FULLONE F. - MARTELLI M. (2008).

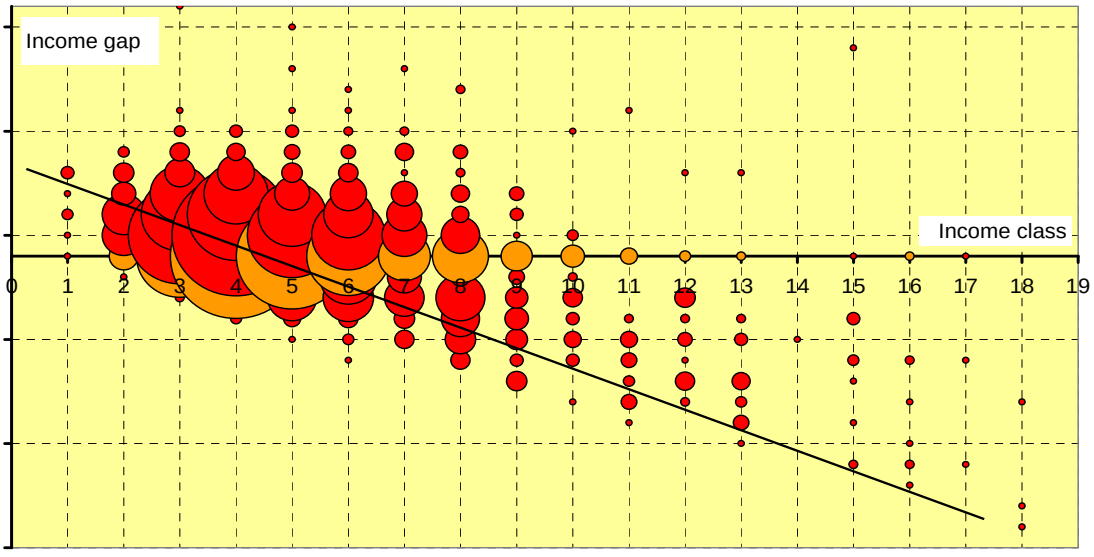
Fig. 1 **Average income per person (hundreds euro)**



Average income per person does not change significantly from our first wave in May 2008 to the last wave in April 2009. A higher sample income in the first wave is largely attributable to a higher number of respondents reporting high income, rather than a shift in the overall distribution.

Another potentially interesting variable to help explaining SRS is the ISAE measure of “subjective poverty” defined as the gap between the level of income perceived to be necessary to “live without luxury but also without deprivation” and actual income. The distribution of the variable-labelled “income gap” on the vertical axis- in all sample waves is reported in figure 2, which has income

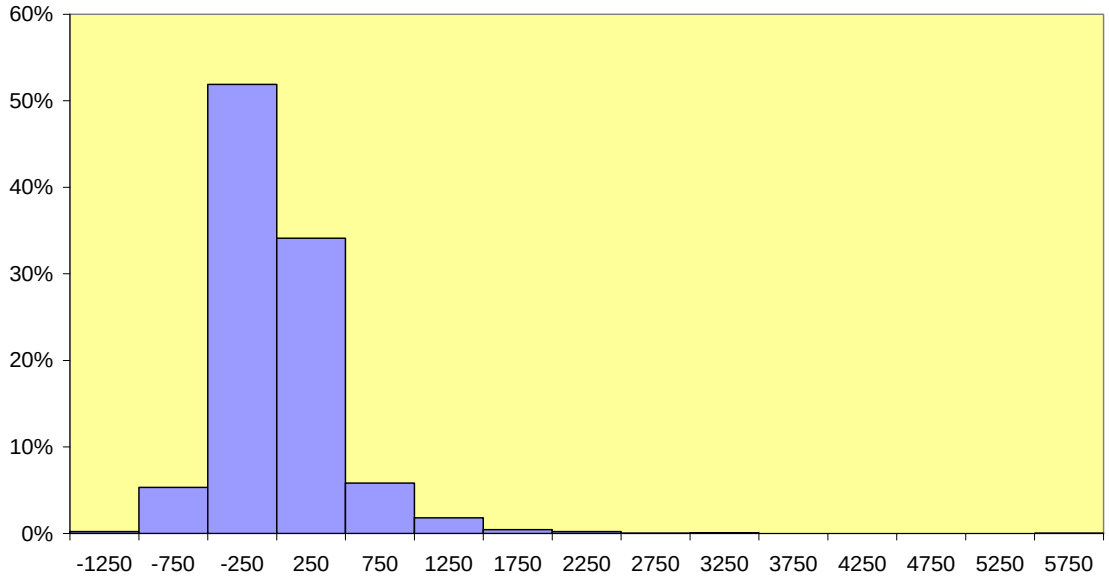
Fig. 2 **Income gap by income classes (difference between "fair" income per person and actual income per person)**



classes on the horizontal axis. The areas of each circle are proportional to the number of respondents which fall into each category, with the paler circles indicating those who perceive their income to be sufficient. The straight line represents where each respondent should be if the income gap corresponded to the distance between family income per person and the sample average income per person. The chart in figure 2 shows that the majority of respondents “feels poor”, and this may help to explain a lower satisfaction than what would be predicted by absolute income.

Another measure which should be relevant in explaining SRS is relative income, i.e. the difference between family income and income of a reference group. We chose to define groups by sex, location (Southern/Northern regions), age (working age/retired) and professional position, and computed average income for each group. We define “relative income” the difference between reported income and group income, and its distribution over the whole sample is reported in figure 3. Again, the distribution is asymmetric, with a small number of relatively very rich people in some groups.

Fig. 3 **Income per person, relative to the group**



3 CONSUMERS OPINION AND SELF REPORTED SATISFACTION IN ITALY

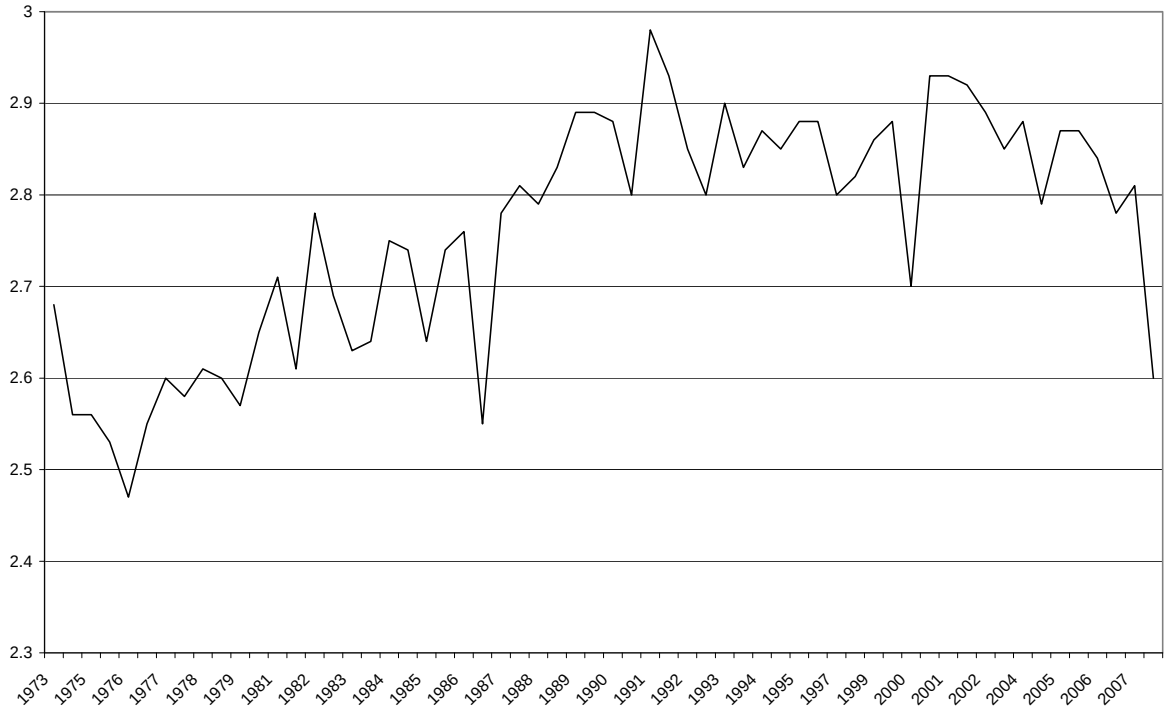
3.1 Patterns of self reported satisfaction in Italy

Since 1973, the Eurobarometer survey provides data on Self Reported Satisfaction (SRS) of European citizens[3]; more specifically, the question contained in the Standard Eurobarometer questionnaire is the following:

On the whole, you are very satisfied, fairly satisfied, not very satisfied or not satisfied at all with the life you lead?

Answers are provided on a 1-4 scale, and a synthetic measure of SRS may be obtained simply averaging out individual replies, where people answering they are not satisfied at all with their life are assigned a score equal to one, and those answering they are very satisfied have a score equal to four. In this respect, according to survey results, SRS of Italian citizens (Fig. 4) has showed a positive slope until the end of nineties; since the beginning of the new

Fig. 4 Self Reported Satisfaction of Italian citizens – sample mean



Source: Eurobarometer, various issues.

[3] See http://ec.europa.eu/public_opinion/index_en.htm.

decade, however, Italians have gradually become less satisfied with their lives, with the indicator returning in 2008 on the levels of the end of the eighties. More specifically, in Spring 2008 only 64% of Italians declared to be satisfied with their life, well below the European average of 77%, a result already observed by Blanchflower D.G. - Oswald A. (2008)[4].

A similar pattern is also observed on the basis of ISTAT (2007) data concerning the satisfaction of Italian citizens with respect to their economic situation: according to the ISTAT survey, the share of those being satisfied with their economic conditions declined from 64% of the sample in 2001 to a mere 50,2% in 2006, with a corresponding decline in self perceptions regarding various other aspects of life (health, relationship with relatives and friends, use of leisure and working times). Similarly, data extracted from the ISAE survey on Italian consumers show a sharp drop in the level of Consumers Confidence in the period 2001-2009 and a contemporaneous rise of "subjective poverty" (ISAE, 2009), calculated as the share of population for which actual income is below the level perceived to be necessary to "live without luxury but also without deprivation"[5].

3.2 The ISAE survey on self reported satisfaction

For these reasons, a more thorough analysis of the patterns and determinants of Self Reported Satisfaction in Italy may be of particular interest. In this respect, in May 2008 ISAE and the Department of Economics at the University of Cassino started a research project aiming at inserting - twice a year - a question on Self Reported Satisfaction in the ISAE monthly survey on Italian Consumers[6]. With respect to more traditional surveys on life satisfaction performed worldwide, the ISAE survey lacks the possibility of inserting controls

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4 Different results are reported in Scoppa V. - Ponzo M. (2008) according to which on the basis of the Bank of Italy Survey of Household income and wealth (SHIW) in 2006 the share of Italians being satisfied with their life in a 1 to 10 scale was much higher, with 76,35% of individuals being comprised between a level of 5 and 8 in SRS and only 10,38% being below 5.

5 For a general description of ISAE survey, see also Malgarini M. (2009); the Consumers Confidence indicator is published on a monthly basis by ISAE on its web site (www.isae.it). The subjective poverty measure is analysed every year in an ad hoc ISAE "Monthly Note", usually published in July (see the last note published in July 2009 here: http://www.isae.it/nota_mensile_luglio_2009.pdf).

6 Results for the first wave of the survey have been presented in Malgarini M. - Pugno M. - Zezza G. (2008).

for individual values possibly influencing perceptions[7], nor it is possible to use more sophisticated survey methods as those proposed in Kahneman D. et al. (2004). However, the insertion of such a question into the ISAE survey allows us to obtain a new SRS measure for Italy that is available on a regular basis, at an higher frequency and with a much higher timeliness with respect to those existing at the moment. Moreover, on the basis of the standard ISAE questionnaire, results concerning SRS may be usefully analysed in relation to a number of factors possibly influencing satisfaction, including socio-demographic characteristics of the consumer and her own perceptions about the economic situation of the household and of the country in general.

More specifically, the SRS question inserted in the May 2008 ISAE questionnaire allowed for a 1 to 5 scale of personal satisfaction:

All things considered, do you consider yourself to be extremely satisfied, satisfied, neither dissatisfied nor satisfied, not satisfied or not satisfied at all, with the life you lead?

Starting from the second wave, performed in November 2008, the question has been modified to allow for a 1 to 10 scale of SRS:

All things considered, how are you satisfied with the life you lead? Please answer on a 1 to 10 scale, where 1 corresponds to being extremely not satisfied and 10 corresponds to being extremely satisfied with the life you lead.

The question has been repeated in a third wave, performed in April 2009, and will be inserted on a regular, bi-annual basis in the ISAE questionnaire. Results are now fully comparable with those recently obtained in the Gallup World Poll (see on this Helliwell J.F., 2008). Moreover, all waves of the survey include a further question on the consumer attitude toward working hours and leisure; in this respect, the consumer has to indicate whether she prefers to increase working hours and income, or to stabilise both, or to decrease working hours at the price of diminishing her income.

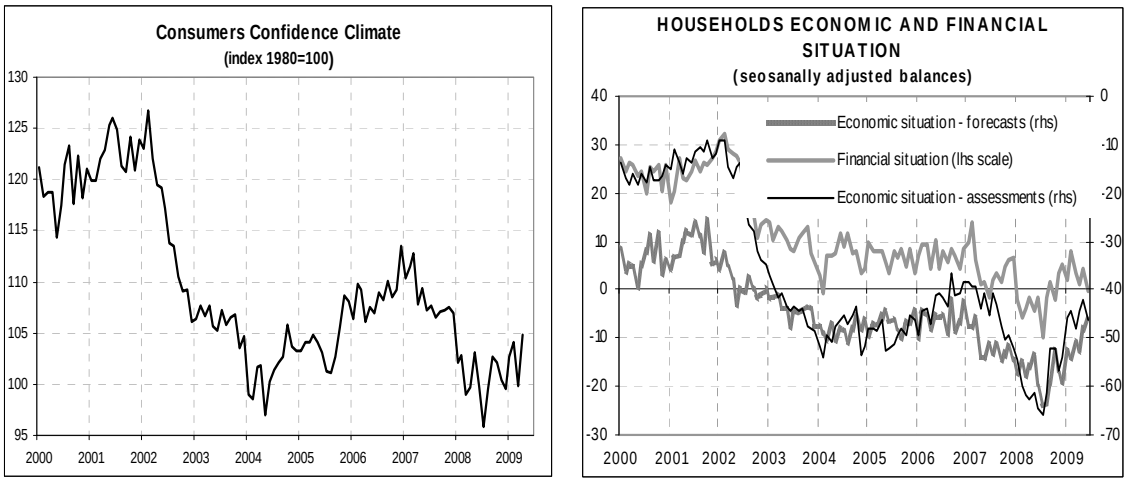
[7] See for instance the already quoted Eurobarometer survey or the World Value Survey (www.worldvaluesurvey.org).

4 THE IMPACT OF THE CRISIS ON CONSUMERS OPINION AND SELF REPORTED SATISFACTION

4.1 Aggregate evaluations

The two specific questions on working times and life satisfaction have been administered to a sample of 2,000 Italian consumers in May and November 2008 and in April 2009, for a total of 6,000 interviews. Among the first and the third wave of the survey, the general economic situation has deteriorated worldwide, resulting in a significant drop of GDP levels for the year 2008 and in negative forecasts for 2009; in Italy, the labour market situation deteriorated as well, while inflation – after reaching a peak in the summer of 2008 – declined rapidly, reaching its lowest level of the decade in the first quarter of 2009[8]. At the time of our first wave, the ISAE survey was already registering a sharp deterioration of consumers opinions: in the first five months of that year, the confidence indicator calculated on survey data was almost 6 points below the average of the second part of 2007, with a sharp drop in consumers opinions regarding the situation of the country and that of the households, particularly for the assessments on their financial situation (Fig. 5).

Fig. 5 ISAE Consumers Confidence indicator and opinions on the households economic and financial situation

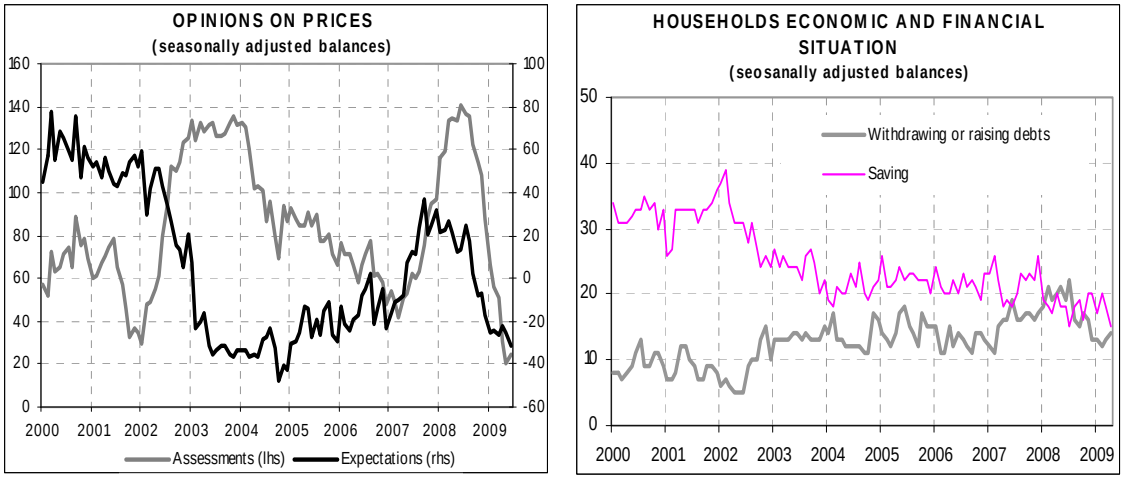


Source: ISAE.

[8] According to the Italian official statistical office (ISTAT), the unemployment rate in the fourth quarter of 2008 was equal to 7,1%, marginally higher than in the first part of the year; also, employment was stagnating starting from the second quarter, registering a marginal reduction both in the third and fourth quarters (respectively, -0,1 and -0,2%). On the other hand, inflation reached a peak in the third quarter (at 4%), rapidly declining afterwards and stabilising around 1,5% in the first quarter of 2009.

On the other hand, confidence almost stabilised in between the first and the second wave, with the index being one point below the average of the first part of the year. Some sign of recovery emerged in between the second and the third wave, with the indicator showing sign of resilience with respect to the very low levels reached at the end of last year. Indeed, Italian consumers in this period have been much more pessimistic on the economic situation of the country in general, and on that of the labour market in particular, being on the other hand less negative in their evaluation of the personal situation. More specifically, the share of those being in "financial distress" (i.e. those deeming they have to withdraw on reserves or make debts) fell from an near-historical high of 21% at the time of the first wave to 18 and 14% respectively in November 2008 and April 2009; however, those deeming they are able to save (a little or more) remained almost stable in the three waves (see Fig. 6), with a corresponding increase of those claiming they are able to meet their budget. In the same period, opinions on current and expected price developments declined sharply, reaching their lowest levels since the end of 2004.

Fig. 6 Price opinions and households financial situation



Source: ISAE

Table 2 reports our results for the two specific questions added in the three waves of the survey. In our first wave, in May 2008 more than 79% of Italian consumers were "nor satisfied or dissatisfied" or thoroughly "satisfied" with their life (i.e., the sum of those having answered 3, 4 or 5 to the question on life satisfaction); life satisfaction seems to have slightly increased in November, when the share of those reporting to be satisfied (i.e. the sum of those having answered 6 to 10 to the new question on life satisfaction) rise to

83,2%[9]. A slight reduction in satisfaction emerges from the April 2009 data, when the share of Italian citizens being satisfied with their life was equal to 82,9%.

Table 2 Self-reported satisfaction with life as a whole

SRS scale	May 2008	*SRS scale*	Nov. 2008	April 2009
1	2.9%	1	0.4%	0.8%
2	16.5%	2	0.6%	0.5%
3	26.3%	3	0.5%	1.0%
4	48.8%	4	2.4%	2.0%
5	4.5%	5	8.3%	8.5%
		6	14.3%	20.6%
		7	30.5%	27.9%
		8	23.5%	21.1%
		9	6.5%	5.9%
		10	8.3%	7.4%
Refuse	1.1%	Refuse	4.6%	4.4%

At the same time, in May 2008 almost 13% of the consumers wished to work and earn more (Table 3), with 2% of them wishing to reduce their working effort and 30% of the sample being satisfied with their combination of pay and working times. The preference towards working times showed little changes in the three waves, albeit it is possible to observe a growing part of the sample declaring their preference towards the current working time/earning combination, coupled with a decline of those wishing to work and earn less and a slight increase also of those wishing instead to work (and earn) more than now.

Table 3 Working time preferences

	May 08	Nov 08	Apr 09
Working and earning more than now	12.7%	12.0%	12.7%
Working and earning less than now	2.0%	1.2%	1.2%
Working and earning the same as now	29.9%	30.3%	31.0%
Refuse	2.1%	3.2%	1.7%

[9] The increase may be due to a scaling factor, as discussed in more detail in section 5.

4.2 Distribution of replies

In this section, we analyse the distribution of those reporting to be satisfied with their lives in the three waves, according to some socio-demographic characteristics of the respondents and to the answers given to some of the question in the standard monthly ISAE questionnaire. More precisely, we will considered as “satisfied” those having answered 3, 4 or 5 to the one to five scale question on life satisfaction administered in the May 2008 and those answering 6-10 to the 1-10 scale question of November 2008 and April 2009. Life satisfaction varies according to both socio-demographic factors and the degree of optimism/ pessimism on the personal and general economic situation. The analysis that follows should be interpreted as a first evidence on the SRS distribution among individuals, conditional to a peculiar socio-demographic characteristic of the individual; in this sense, it is purely descriptive, and should not be used to infer any causal relationship about SRS levels and the individual characteristic taken into consideration.

In particular, in all three waves (see Table 4) satisfaction is higher for males, aged 18-49, living in the Centre-North of the country, in a family with one or two kids, having an high school or – better – an university degree and being employed (either part time or full time) or being a student. Results are broadly in line with previous findings. The change in the scale of the question does not allow for an easy comparison of results among the first and the other waves; however, results of the second and third waves are fully comparable. With respect to working conditions, life satisfaction has remained overall stable, with some intra-group difference: in fact, satisfaction has increased for full-time workers and for people unemployed and has reduced for students and those looking for first employment and for elderly singles.

Table 5 reports levels of life satisfaction according to the degree of optimism/ pessimism with respect to the general situation of the country and that of the households, as emerging from the answers to the usual monthly questions of the ISAE consumers’ survey. Again, the relationship among SRS and households opinions is purely statistical and does not imply any causal link. More specifically, we have analyzed the distribution of responses with respect to questions referring to consumers’ opinions about past and future price changes, unemployment expectations, households’ budget and their appraisement on the past and future economic situation. Those perceiving a significant or even a moderate rise in the price level in the last 12 months are also much less satisfied with their lives with respect to those deeming prices have remained stable or have fallen; in this respect, results seem to be in line with the findings of Del Giovane P., Fabiani S., Sabbatini R. (2009) and

Table 4 **PEOPLE "SATISFIED" ACCORDING TO SOCIO-DEMOGRAPHIC CHARACTERISTIC OF THE RESPONDENTS**
(all things considered how are you satisfied with your life in general?)

	May 2008 (*)				November 2008 (**)				April 2009 (**)			
	Satisfied	Non sat.	No reply	Total	Satisfied	Non sat.	No reply	Total	Satisfied	Non sat.	No reply	Total
Total	79.5	19.6	1.0	100	80.4	13.5	6.1	100	80.7	14.3	5.1	100
Gender												
Male	81.2	18.2	0.6	100	83.4	11.1	5.5	100	84.5	12.1	3.4	100
Female	78.0	20.8	1.2	100	77.7	15.6	6.7	100	77.2	16.3	6.6	100
Age												
18-29	85.5	12.8	1.7	100	93.9	5.1	1.0	100	92.2	3.5	4.4	100
30-49	85.1	14.4	0.5	100	88.1	8.8	3.1	100	90.0	8.3	1.8	100
50-64	79.6	19.9	0.5	100	84.3	11.0	4.7	100	83.6	13.6	2.8	100
65+	73.5	24.9	1.6	100	70.6	19.5	9.9	100	70.5	20.6	8.9	100
Geographic area												
North west	82.8	16.1	1.1	100	81.7	12.8	5.6	100	84.1	11.4	4.5	100
Nort east	82.8	15.9	1.3	100	82.8	10.7	6.5	100	82.8	13.8	3.4	100
Centre	77.3	21.7	1.0	100	82.7	11.2	6.1	100	81.9	14.4	3.8	100
South	75.3	23.8	0.9	100	76.2	17.5	6.3	100	75.0	17.0	8.0	100
Islands	78.4	21.6	0.0	100	77.9	15.3	6.8	100	78.8	15.8	5.4	100
Family status												
Single, age > 64	70.4	29.6	0.0	100	66.1	23.1	10.9	100	63.3	25.5	11.3	100
Single, age < 64	63.7	34.5	1.8	100	84.0	12.0	4.0	100	85.7	12.7	1.6	100
Couple without kids	80.8	17.8	1.4	100	80.2	12.9	6.9	100	80.9	14.6	4.5	100
Couple with 1 kid	80.8	18.1	1.1	100	86.0	9.8	4.2	100	87.3	11.0	1.7	100
Couple with 2 kids	86.1	13.0	0.9	100	86.7	9.6	3.7	100	87.6	8.5	3.9	100
Couple with 3 kids +	81.7	17.4	0.9	100	77.8	15.2	7.1	100	84.4	10.4	5.2	100
Education												
Up to middle school	73.2	25.8	1.0	100	73.3	18.2	8.6	100	72.5	20.4	7.0	100
Up to high school	86.2	12.9	0.8	100	88.9	7.5	3.6	100	90.8	6.7	2.5	100
University or more	88.9	10.1	0.9	100	93.3	6.2	0.5	100	90.9	6.5	2.7	100
Working status												
Employed - part time	85.9	13.8	0.3	100	90.2	7.5	2.3	100	90.7	8.4	1.0	100
Employed - full time	85.2	12.2	2.6	100	91.1	8.9	0.0	100	96.3	2.9	0.7	100
Unemployed	50.0	50.0	0.0	100	63.8	23.4	12.8	100	73.2	22.0	4.9	100
Unable to work	76.8	22.0	1.2	100	75.9	14.4	9.7	100	75.1	18.4	6.5	100
Student/looking for 1st job	87.7	10.7	1.6	100	94.4	3.7	1.9	100	92.8	1.5	5.8	100
Other	73.4	25.5	1.2	100	71.8	20.5	7.7	100	69.3	20.9	9.9	100

(*) People answering 3-5 on a 1 to 5 scale; (**) People answering 6 to 10 on a 1 to 10 scale.

Table 5 **PEOPLE "SATISFIED" ACCORDING TO THEIR OPINIONS ON THE GENERAL AND PERSONAL ECONOMIC SITUATION**
(all things considered how are you satisfied with your life in general?)

	May 2008 (*)				November 2008 (**)				April 2009 (**)			
	Satisfied	Non satisfied	Refuse to answer	Total	Satisfied	Non satisfied	Refuse to answer	Total	Satisfied	Non satisfied	Refuse to answer	Total
Total	**79.5**	**19.55**	**0.95**	**100**	**80.4**	**13.45**	**6.15**	**100**	**80.7**	**14.25**	**5.05**	**100**
					General Economic Situation							
Consumers' prices, last 12 months:												
Risen a lot / moderately	78.45	20.61	0.94	100	79.43	14.39	6.18	100	75.73	17.67	6.6	100
Risen slightly	89.17	9.17	1.66	100	83.03	12.84	4.13	100	86.35	12.46	1.19	100
Stayed the same / fallen	90.41	9.59	0	100	87.01	3.9	9.09	100	86.69	9.25	4.06	100
Consumers' prices, next 12 months:												
Will increase more rapidly / same rate	79.89	19.4	0.71	100	80.09	13.22	6.69	100	75.79	19.64	4.57	100
Will increase slower rate	80.51	18.97	0.52	100	80.56	17.5	1.94	100	79.34	19.83	0.83	100
Will stay same /fall	82.11	16.99	0.9	100	84.12	11.82	4.06	100	86.64	10.59	2.77	100
Unemployment next 12 months:												
Will rise	75.25	24.02	0.73	100	78.84	15.43	5.73	100	80.36	14.6	5.04	100
Will stay the same	83.21	16.07	0.72	100	85.42	10.63	3.95	100	87.98	10.2	1.82	100
Will fall	86.22	10.67	3.11	100	86.21	10.34	3.45	100	81.44	14.43	4.13	100
					Personal economic situation							
Household balance:												
Run into debts / decreases savings	64.62	34.89	0.49	100	66.46	25.61	7.93	100	71.28	21.11	7.61	100
On balance	81.6	17.58	0.82	100	80.54	12.92	6.54	100	81.53	13.98	4.49	100
Saving a little / a lot	89.36	9.24	1.4	100	91.2	5.13	3.67	100	86.87	9.09	4.04	100
Economic situation, last 12 months:												
Improved	79.55	15.91	4.54	100	95.24	2.38	2.38	100	92.86	7.14	0	100
Stayed the same	88.57	10.28	1.15	100	86.46	8.73	4.81	100	86.51	9.75	3.74	100
Worsen	72.29	27.06	0.65	100	73.16	19.06	7.78	100	71.35	21.42	7.23	100
Economic situation, next 12 months:												
Will improve	82.82	15.95	1.23	100	84.78	11.96	3.26	100	93.62	4.26	2.12	100
Will stay the same	82.98	16.04	0.98	100	83.26	11.58	5.16	100	84.44	12.21	3.35	100
Will worsen	70.45	28.98	0.57	100	71.75	20.5	7.75	100	65.41	28.42	6.17	100

(*) People answering 3-5 on a 1 to 5 scale; (**) People answering 6 to 10 on a 1 to 10 scale.

Malgarini M. (2009), according to which there is a significant correlation among inflation opinions and the perception of the general economic and personal situation. Similarly, those expecting a rise in the unemployment rate are also reporting a lower level of life satisfaction. Similarly, those reporting they have to make debts or withdraw from savings are much less satisfied with their lives with respect to those deeming they are able to meet they budget or are even saving a little or more. Finally, satisfaction is also higher for those being optimistic in their assessments and expectations on the households' economic situation[10].

5 ECONOMETRIC EVIDENCE

The model we want to estimate relates our measure of self-reported satisfaction (SRS) to all socio-demographic variables available in our survey, plus a number of indicators for income, the distance between income and income perceived as "fair" from the respondent, and other indicators of financial and economic stress for the household.

5.1 Addressing different SRS scales

Starting from our second sample in Nov. 2008 we decided to extend the scale of our SRS measure to 1-10, from the 1-5 scale adopted in the first sample in May 2008. As a first step we therefore investigated how to reconcile our measures of SRS on a single, 1-5 scale[11].

Sample frequencies for the two samples over the 1-10 scale, when compared to our 1-5 sample, showed no easy recipe for joining adjacent groups. Moreover, the underlying distribution of SRS seems asymmetric when measured on both scales, and we believe that adopting available techniques to

[10] ISAE calculates a confidence climate for Italian consumers considering also the questions on the general economic situation of the country, savings assessments and expectations and the willingness to purchase durable goods; results – not reported here but available from authors upon request – were similar to those in table 5, with those being more optimistic declaring also an higher level of satisfaction with the life they live.

[11] We chose to move to a 1-10 scale to enhance the possibility of international comparisons.

estimate an underlying normal distribution of SRS from different ordinal measures would yield unsatisfactory results.

We therefore tried to get information on how to group the answers on the 1-10 scale by estimating an ordered probit model on our two samples, using all the available socio-demographic and income variables as explanatory variables.

The number of our qualitative variables for both family structure, and working conditions of the respondent, suggested some regrouping. On the basis of exploratory data analysis, we decided to group households on the basis of family size, the number of children and the number of people 64 or older. As for the working condition of the respondent, we considered jointly the position at work, the type of contract, and the education level, where the latter variable was used only for those who are self-employed, to try to distinguish between workers with temporary jobs and "true" self-employed such as lawyers etc. For each group we tested the significance of each modality, and dropped those modalities which were not relevant in explaining SRS.

From our estimates we computed the probabilities for all individuals to be assigned to one of the 10 SRS classes. Results are displayed in the upper-panel of Figure 7. We estimated our model again on our sample where SRS is measured on a 1-5 scale, and computed the probabilities for all individuals to be assigned to each of the 5 classes, reported in the middle-panel of Figure 7. At least three possible mapping, summarized in the bottom-panel of Figure 7, were therefore available, and we chose the third grouping which minimized the (squared) distance between SRS class distribution in our first wave and in the other two waves, regrouped.

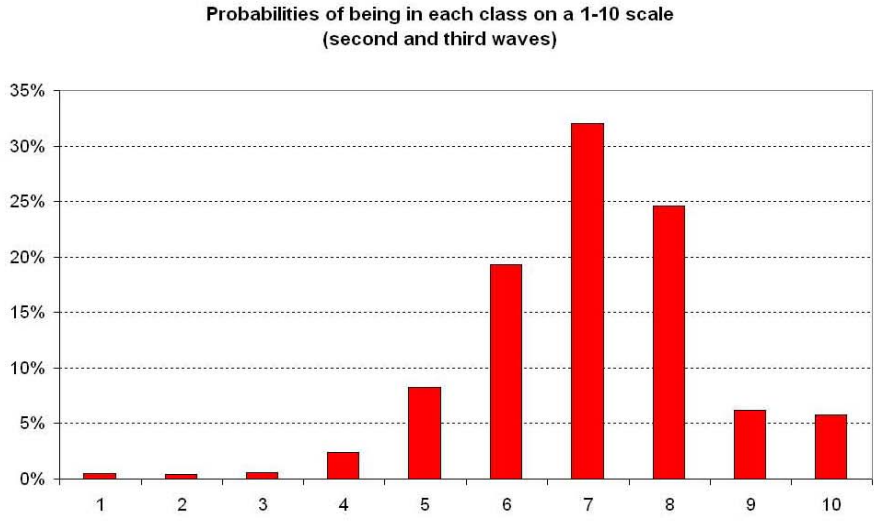
This result is somewhat confirmed[12] from estimating the same regression for SRS - estimated against all our socio-demographic variables plus our measures of income and financial stress - over the original distribution in the last two samples, where SRS has been standardized, and comparing results with the output of the same regression over the three possible groupings (Table 6) [13].

We are aware that our procedure may introduce biases in our analysis, and we therefore have verified our econometric results both with our chosen regrouping, and with each subsample in the original SRS ordinal measure.

[12] All significant explanatory variables remain significant in both cases.

[13] See the Appendix for a legenda of variable names.

Fig. 7 **Self-reported satisfaction on two possible scales**

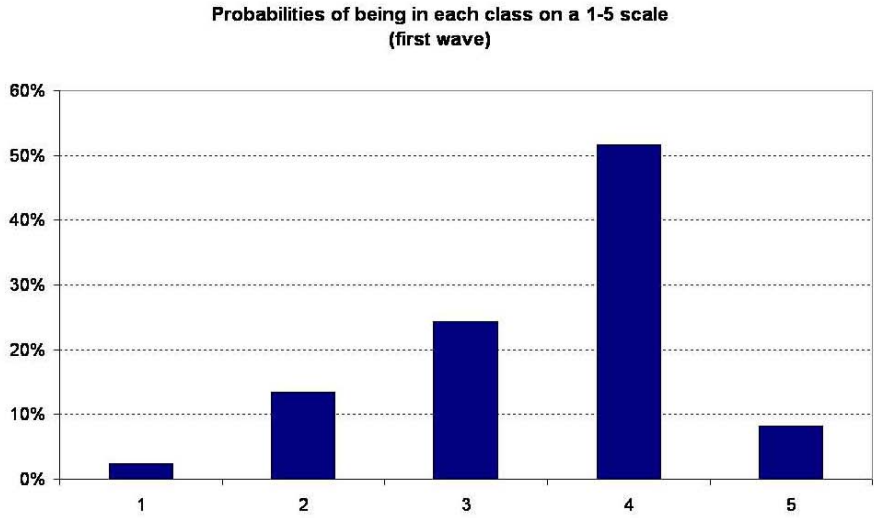


Possible groupings, (B & C based on an ordered probit estimation):

Grouping A: 1-2; 3-4; 5-6: 7-8; 9-10

Grouping B: 1-3; 4-5; 6-7: 8-9; 10

Grouping C: 1-3; 4-5; 6: 7-8; 9-10



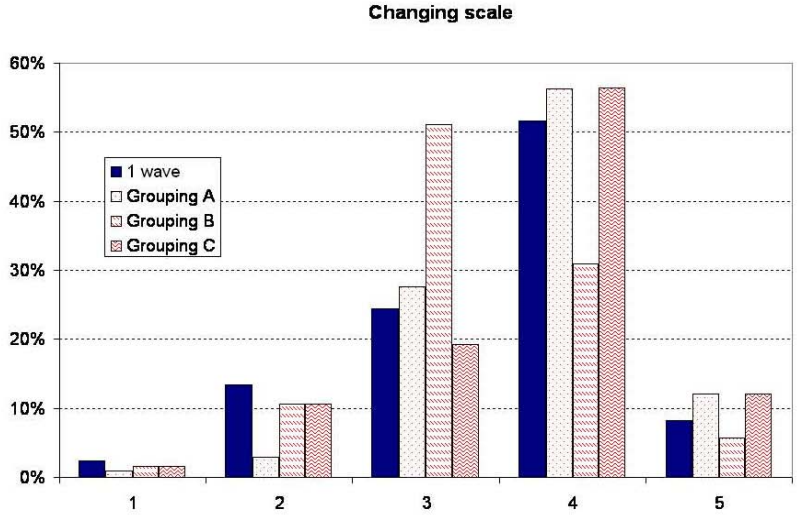


Table 6 Effects from grouping. SRS specification in the last two waves

	10 CLASSES		GROUPING A		GROUPING B		GROUPING C	
CITY	0.136936	*	0.131384	*	0.128045	*	0.141109	*
SOUTH	-0.122714	*	-0.114204	*	-0.11154	*	-0.08676	°
FAMSIZE	0.123614	*	0.117114	*	0.121503	*	0.103653	*
COUPLE0KID	0.14531	*	0.147146	*	0.13267	°	0.152739	*
FARMER	0.193207	*	0.204046	*	0.156985	°	0.17097	*
WHITECOL	0.100093	°	0.106226	°	0.08631		0.066212	
YEARSEDU	0.028696	*	0.030719	*	0.023752	*	0.030175	*
SAVES	0.161839	*	0.154811	*	0.155024	*	0.139911	*
BORROWS	-0.110223	°	-0.095532	°	-0.10702	°	-0.12231	*
INCOME	4.77E-05		2.78E-05		7.02E-05		8.33E-05	
INCOMEGAP	4.95E-05		3.08E-05		5.79E-05		7.13E-05	
INCOMEGAP*(INCOMEGAP>0)	-0.000106		-8.84E-05		-0.00011		-0.00013	
REL_INCOME	7.07E-05		8.46E-05		4.45E-05		3.90E-05	
PROBLEMSBILLS	-0.27829	*	-0.279341	*	-0.25488	*	-0.3017	*
PROBLEMSFOOD	-0.500469	*	-0.488324	*	-0.45022	*	-0.51854	*
CHANGEDFOOD	0.358597	°	0.374871	°	0.301002		0.374353	°
CHANGEDMED	-0.070204	°	-0.079293	°	-0.0633		-0.09046	*
MOREWORK	-0.118445	°	-0.086194		-0.14063	*	-0.09201	
C	-0.602681	*	-0.58596	*	-0.58487	*	-0.60064	*
R-square	0.168119		0.160443		0.146432		0.166138	

* Significant at 5%; ° Significant at 10%.

SRS has been standardized to have zero mean and unit variance in each estimate.

5.2 A different approach to measuring relative income

Our first analysis of self-reported satisfaction (SRS) relative to income and socio-demographic control variables in Table 7 led to some puzzling results, where the role of absolute and relative income in determining SRS was not easy to assess (see also Malgarini M. - Pugno M. - Zezza G., 2008, for similar estimates over the first wave in May 2008).

Part of the explanation rests on the difficulty in getting reliable measures of absolute and relative income from the sample, and therefore differences in income may be reflected more accurately from measures of financial and economic stress, which are usually significant in our estimates.

To improve on our ability of measuring relative income we therefore chose to regress our income measure on all our control variables, starting with our sub-sample formed by the 2nd and 3rd waves, and then moving to the overall sample[14]. Removing non-significant control variables, our estimate shows that location, age, family size, family type, working status and education explain

[14] Our estimates for the sub sample formed by the last two waves are available on request, and do not differ markedly from estimates in Table 7.

about 46% of income (Table 7). Since our control variables implicitly split the sample in different household categories, from the regression we can obtain a series for fitted income Y^*, which will measure the variability of income across such categories, and a series for residuals *Y^*, which will measure whatever is left unexplained in income, i.e. income variability within each category.

Table 7 Explaining income. All waves - least squares estimation

	INCOME	INCOME/Person
VILLAGE	-57.49548*	-31.96744*
SOUTH	-255.31770*	-125.8431*
AGE	3.39882*	1.60952*
FAMSIZE	263.3578*	-18.07011*
ALONE		364.9687*
ALONEOLD		-226.3184*
COUPLE0KID	170.3599*	135.5816*
COUPLE1KID	321.7350*	130.4432*
COUPLE2KIDS	148.5219*	
WCOUPLE0KID	272.4623*	199.2988*
UNEMPLOYED	-436.6453*	-205.3445*
BLUECOL_NS_PR	-200.9447*	
WHITECOL	209.5289*	121.0692*
FULLTIME	211.0068*	93.51445*
YEARSEDU	64.21730*	37.18322*
C	-36.33567	383.4351*
N	4234	4234
Adj R-squared	0.461	0.352

* Significant at 5%; ° Significant at 10%.

It turns out, as expected, that this latter measure is strongly related to our measure of relative income described above, in Section 2.

The same modelling approach has been applied to income per person, obtained dividing family income by a factor proportional to family size[15]. Results, shown in Table 7, do not differ markedly from those obtained for family income.

5.3 Explaining Self Reported Satisfaction

We next turn to modelling SRS, with respect to our derived measure of "category income" Y^*, other measures of economic and financial stress, and socio-demographic variables not included in our regression for income (to avoid collinearity). Results for our subsample show that two specifications hold. In the

[15] We adopted the ISEE scaling factor.

first case[16] (Table 8) relative income helps explain SRS, while our income gap measure is not significant.

Table 8 Self Reported Satisfaction: specification search

	3A	3B	3C	3D
FIT_INCOME	0.70686*	0.75321*	0.386315*	0.411032*
RES_INCOME		0.114832*		0.054014*
CITY	0.195663*	0.061102	0.029963	0.008739
FARMER	0.302187*	0.276155*	0.066270	0.069131
SAVES	0.270261*	0.244707*	0.162959*	0.127676*
BORROWES	-0.14623°	-0.14135°	-0.172781*	-0.183635*
REL_INCOME	0.124162*		0.043598*	
PROBLEMSBILLS	-0.48544*	-0.42707*	-0.263795*	-0.265239*
PROBLEMSFOOD	-0.86629*	-0.58577°	-0.518280*	-0.428951*
CHANGEDFOOD	0.585369°	0.299565	0.307967*	0.207921°
MOREWORK	-0.21752*	-0.27252*	-0.132460*	-0.148418*
C	5.879353*	5.843709*	2.992097*	2.969546*
N	1961	2657	3014	4029
R-square	0.168	0.152	0.165	0.165

3A; 3B > 2nd and 3rd waves, with SRS measured over 10 classes.

3C; 3D > all waves, SRS in 5 classes, grouping C.

** Significant at 5%; ° Significant at 10%.*

However, when we introduce our derived measure of "residual" income *Y^*, this picks up the role of relative income, which is no longer significant, as in equations 3B; 3D. We note that our "income gap" measure is never significant, perhaps because of its collinearity with income.

With OLS estimation we can directly compare the value of coefficients[17]: it turns out that an increase in income obtained from moving across categories (*Y**) has an impact on SRS which is more than 5 times the effect of an increase in income within the same category.

We tested the model switching to our measure of income per person. While qualitatively results are similar (Table 9), collinearity between our

[16] Estimates in Table 8 have been constructed to evaluate the robustness of our results when moving from the 1-10 scale for SRS to the 1-5 scale. The "best" equation has been obtained on the 1-10 scale, and the same equation has been estimated on the 1-5 scale over the whole sample. The "best" equation over the whole sample turns out to be slightly different, and it is discussed below.

[17] OLS estimates in principle are not suited with a categorical dependent variable; however, the estimation with maximum likelihood methods provides the same results, more specifically for statistical significance of the explanatory variables. Hence, we choose to report here OLS estimates allowing us to directly compare the value of the coefficients. Results of maximum likelihood estimations are available with the authors upon request.

“residual income” and our measure of relative income per person makes the interpretation of econometric results more difficult, since both our residual income variable and relative income are significant - when used jointly (first column of Table 9), while removing residual income makes relative income not significant. When we remove our residual income variable (last column of Table 9) we can use a larger sample, and the residual income variable is again significant. Overall, results obtained using our measures of income per person confirm our previous results based on family income.

Table 9 **SRS and income per person (5 classes, all waves)**

INCOMEP_FIT	0.703280*	0.574200*	0.544857*
INCOMEP_RES	0.321137*	--	0.080556*
REL_INCOMEP	-0.000258*	0.021886	--
SAVED	0.178727*	0.195386*	0.185976*
BORROWED	-0.126550*	-0.127908*	-0.136321*
PROBLEMSBILLS	-0.386063*	-0.413687*	-0.507003*
PROBLEMSFOOD	-0.159638*	-0.164124*	-0.201643*
PROBLEMSHOME	-0.141841*	-0.138954*	-0.084056*
PROBLEMSMED	0.146894*	0.143443*	0.130473*
PROBLEMSSCH	-0.219162*	-0.232917*	-0.302305*
CHANGEDBILLS	0.185890*	0.199686*	0.254343*
WAVE1	-0.201689*	-0.199137*	-0.197693*
C	3.181763*	3.341971*	3.533201*
N	3073	3073	4088
R2	0.148	0.145	0.144

* Significant at 5%; ° Significant at 10%.

Having tested the robustness of our model against the change of scale, we repeat our specification search over the whole sample, with SRS classified in five groups. Our preferred equation is presented in Table 10, where all explanatory variables are highly significant.

SRS is explained by the socio-economic group determining “fitted income”. OLS estimates makes coefficients comparable: for instance, an increase in “fitted income” of more than 2000 euro is required to shift SRS to the next class; and having problems paying monthly bills has an effect on SRS comparable to a loss of more than 1000 euro in “fitted income”. As noted above, residual income helps explaining SRS, but an increase in residual income has a much smaller effect on the SRS level.

We tested for possible additional effects from variables which are included among the determinants of income, most importantly, sex and education[18]. It turns out that none has additional effects on SRS, besides those which determine the income level.

As a last step, we introduced in our model the various indicators of consumers' sentiment available in the survey. We have not introduced such variables from the start since descriptive analysis showed that some of them are correlated to SRS, and we suspected that they could be measuring the same latent variable in different ways. Surprisingly - given the data description in Section 2 above - perceptions about inflation, and expectations about future inflation, were not significant in our SRS equation. Perceptions about the family situation were significant and with the correct sign, as well as expectations on how the economy will do in the future.

Table 10 **SRS: preferred specifications**

	OLS	OLS	O-PROBIT	O-PROBIT
FIT_INCOME	0.418623	0.394436	0.526289	0.515704
RES_INCOME	0.059783	0.057484	0.094378	0.097314
SAVES	0.124472	0.085173	0.189275	0.142201
BORROWS	-0.164040	-0.116876	-0.170956	-0.111689
PROBLEMSBILLS	-0.479228	-0.375884	-0.549085	-0.442737
PROBLEMSFOOD	-0.163438	-0.101897	-0.168709	-0.094088
PROBLEMSHOME	-0.089945	--	-0.095453°	--
CHANGEDBILLS	0.261739	0.197492	0.290996	0.227404
CHANGEDMED	-0.061384	-0.074085	-0.065653	-0.082544
MOREWORK	-0.145003	-0.157537	-0.197518	-0.220119
WAVE1	-0.220025	-0.239810	-0.308537	-0.343637
C	3.026894	4.066335		
PAST_FAMILY		-0.107345		-0.131481
PREV_FAMILY		-0.113554		-0.144945
PREV_ECON		-0.085699		-0.111291
N	4029	3627	4029	3627
R^2 & Pseudo-R^2	0.181	0.205	0.075	0.087

° Significant at 10%. All other variables significant at 5%.

We finally estimated our preferred model with the ordered probit method, where results are reported in the last two columns of Table 10. All variables remain significant, and the model correctly identify individuals' SRS in about 53% of the cases.

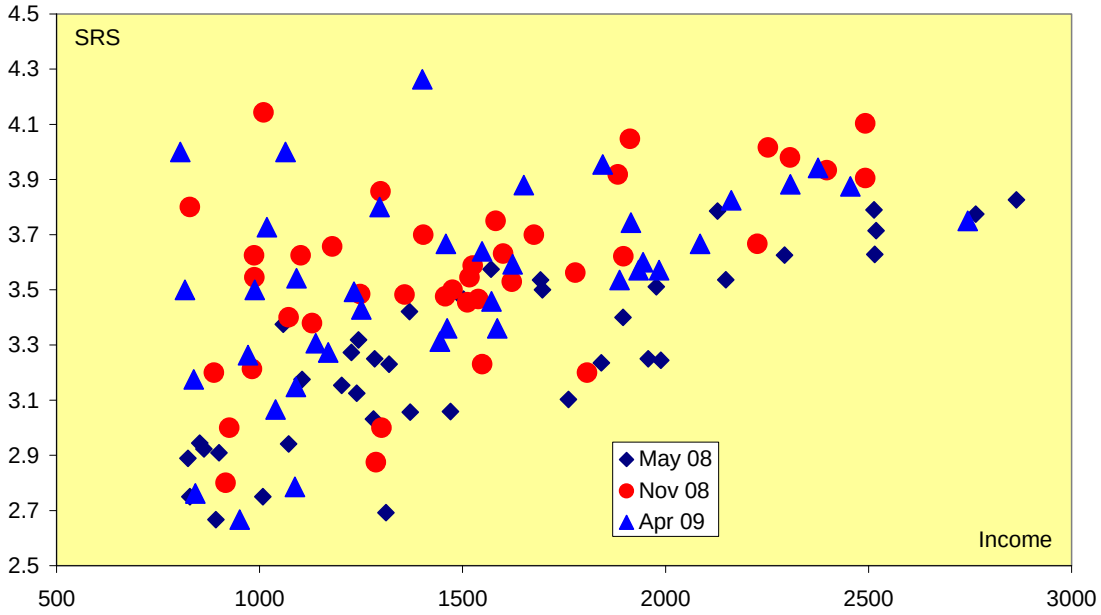
[18] Since fitted income is a linear combination of its determinants, which include sex and education, these latter variables will be collinear to fitted income in the regression on SRS, so results must be interpreted with caution.

5.4 First results from a pseudo-panel approach

The ISAE survey is not designed to sample a same group of individuals over time, and therefore dynamic panel models cannot be constructed with our data. However, since we were interested in testing some correlations over time, possibly to establish causal links among our key variables, we have constructed a pseudo-panel, defining forty groups based on sex, location (North/South), age (working age/retired) and professional status. We computed the sample means for our key variables for all groups in each wave, in order to adopt a panel estimation procedure.

The distribution of SRS and income in our groups in the three waves is given in Figure 8, which confirms that no clear shift has occurred among the waves, with the exception of a lower average value in our first wave, due to rescaling.

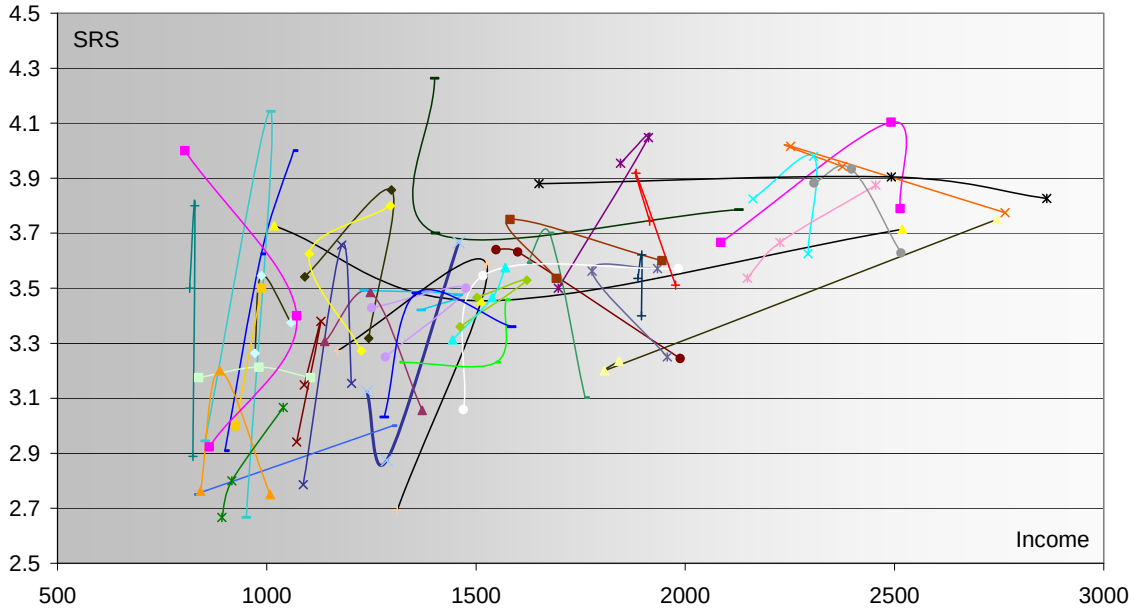
Fig. 8 **SRS and Income across our 3 waves**



In Figure 9 we connect the observations for each group in the three waves. Our results are not clear-cut, since while a few groups are relatively stable in the SRS-income space, others experience large changes in income while keeping the same SRS (horizontal shifts) while others register substantial shifts in the SRS while keeping income stable (vertical shifts).

While we believe this approach to be promising, it requires a larger overall sample to provide robust evidence.

Fig. 9 **SRS and income in our pseudopanel**



For each of our pseudo-individuals, we were now able to compute changes in SRS and income, and we tested several alternative specifications in a first exploratory analysis, trying to relate changes in SRS to changes in income, and SRS at time T with income at time T-1.

One of the objective of this approach is to verify whether causality runs only from income to SRS, or whether the reverse is also true. Should the former result hold, our estimates in the previous section would be more robust, since income could be interpreted as being weakly exogenous with respect to SRS. If the latter result holds, on the contrary, our previous analysis should be interpreted with more caution. The same can be said for the relationship between SRS and other variables in our analysis measuring the respondent's perceptions on her own family and the economy.

So far, our pseudo-panel econometric results are not conclusive, given the small size of our sample.

Preliminary results show that income in wave T helps explaining SRS in wave T+1, but the reverse is also true, namely that SRS in wave T helps explaining income in wave T+1.

It is interesting to note that, on the contrary, when regressing SRS in wave T over income and household expectations at wave T-1, it turns out that the average perception about how well the family is doing - for a given group - helps explaining SRS in the next wave for the same group, while the reverse does not hold, i.e. SRS in wave T-1 does not help explaining family expectations in wave T. This result may imply that regressions of SRS over household expectations -

as in the second column of Table 10 - will not necessarily suffer from spurious correlation problems.

6 CONCLUSIONS

Italy is an interesting case in the study of SRS, because SRS, as surveyed by Eurobarometer for this country, has been stagnating since the early 1990s, and because the Italian economy is currently falling into a severe recession. The recent three waves of the ISAE survey supplement the few existing data on SRS that are related with households' financial variables.

Unfortunately, in treating these data, some methodological problems arise, such as the small size of the sample, the change of the SRS scale across waves, and the non-panel nature of the survey. This fact makes the conclusions tentative. However, the high frequency of the ISAE survey will allow the research to proceed along this attempt towards more robust results.

Our main conclusions are thus the following. First, SRS has not significantly changed during the last 6 months. The ISAE indices of households' financial stress, which are debts, propensity to work more for more earnings, basic household expenses, have not changed during the last 13 months. These indices have even not changed their correlation with SRS during the last 6 months. This is surprising, because national accounts reports a severe recession in the economy. There are two possible main explanations for these result: either people do not perceive the severity of recession, maybe shifting the attention to the family and other extra-economic domains in evaluating their SRS, or they especially perceive the positive effects of the decline in inflation. A third explanation is also possible: the recession has not yet to be felt at the time of our last wave (April 2009), maybe because the effects on unemployment usually lag those on manufacturing output, which had a sharp decline in the first quarter of 2009.

The second main conclusion regards the 'structure' of the relationships between SRS and financial variables. The issue about the importance of absolute versus relative income for SRS has been treated in a novel way, because the sample is too small for the construction of a reliable proxy for relative income. Actual income has been econometrically decomposed into income as estimated (or fitted) by socio-demographic categories, and a residual, which includes the variability of income within each category. Residual income thus helps explaining SRS, but an increase in residual income has a much smaller effect on the SRS level than the fitted income, thus suggesting

that moving to a different socio-economic group has a greater impact on SRS than changing income within the same group.

The most striking result, however, regards the role of the other financial variables that may stress households. It in fact emerges that debts, the propensity to work more for more earnings, and some basic household expenses prove to explain SRS in addition to income. It is noteworthy that, as income includes estimated income, the more usual variables that are related with income according to the happiness literature, i.e. employment status and education, are already taken into account. This suggests that financial stress may come from different sources, and that income is far from exhausting the possible stressing effects from the financial domain onto SRS.

APPENDIX - LEGENDA

AGE	Age, measured as the central value of the age class (19; 25, 35; 45; 55; 62; 70)
ALONE	Lives alone
ALONEOLD	Respondent is above 64 and lives alone
BLUECOL_NS_PR	Blue collar, not-specialized, temporary contract
BORROWS	Has to borrow
CASAPROP	Household owns their home
CITY	Equal to 1 if household is in a city with a population of 500,000 or more
CHANGEDBILLS	Had problems paying bills, and changed habits
CHANGEDFOOD	Had problems paying for food, and changed habits
CHANGEDMED	Had problems paying medical bills, and changed habits
CHANGEDSCH	Had problems paying for education, and changed habits
COUPLE0KID	Couple with no kids, both at age below 64
COUPLE1KID	Couple with one kid, any age
COUPLE2KIDS	Couple with two kids, any age
FAMSIZE	Number of persons in the household (family size)
FARMER	Farmer
FIT_INCOME	Income fitted from equation in Table 7
FIT_INCOMEP	Income per person, fitted from equation in Table 7
FULLTIME	Equal to 1 if works full-time
LESSWORK	Would like to work less for a lower wage
MALE	Equal to 1 for male respondents
INCOME	Family income, measured as the central value of the income class (arbitrary value for the last income class)
INCOMEGAP	Discrepancy between “fair” income YF and actual income Y. YF-Y.
INCOMEP	Income per person, obtained dividing INCOME by the ISEE scaling factor for family size
MOREWORK	Would like to work more for a higher wage
PAST_FAM	Perception on how well the family did over the previous 12 months, from 1 (improved) to 5 (worsened)

segue **APPENDIX - LEGENDA**

PREV_ECON	Perception on how well the economy will do over the next 12 months, from 1 (will improve) to 5 (will get worse)
PREV_FAM	Perception on how well the family will do over the next 12 months, from 1 (will improve) to 5 (will get worse)
PROBLEMSBILLS	Had problems paying bills (water, gas, electricity)
PROBLEMSFOOD	Had problems paying for food
PROBLEMSHOME	Had problems in meeting house-related payments (rent etc.)
PROBLEMSMED	Had problems paying medical bills
PROBLEMSSCH	Had problems meeting education related expenses (University fees etc.)
REL_INCOME	Discrepancy between actual income Y and income of a reference group YC, where groups are stratified according to sex, location (North/South), working status (5 categories), age (7 classes). Y-YC.
REL_INCOMEP	REL_INCOME scaled by family size
RES_INCOME	Residual income from estimates in Table 7
RES_INCOMEP	Residual income per person, from estimates in Table 7
SAVES	Has positive saving
SOUTH	Lives in one of the eight southern regions
UNEMPLOYED	Unemployed
VILLAGE	Equal to 1 if household is in a city with a population less than 20,000
WAVEi	Equal to 1 for wave i
WCOUPLE0KID	Couple with no kids and two income sources
WHITECOL	White collar
YEARSEDU	Education, in years (0; 5; 8; 13; 18)

REFERENCES

Blanchflower D.G. - A. Oswald (2008) “Hypertension and Happiness across Nations”, *Journal of Health Economics*, 27(2), 218-233

Del Giovane P. - Fabiani S. - Sabbatini R. (2009), “What’s behind “inflation perceptions”? A survey-based analysis of Italian consumers”, Giornale degli Economisti ed Annali di Economia, n. 1, 2009

Fullone F. - Martelli M. (2008), “Re-Thinking the ISAE Consumer Survey Processing”, Documento di Lavoro ISAE n. 92, February

Helliwell J.F. (2008), “Life Satisfaction and Quality of Development”, NBER Working Paper 14507, http://www.nber.org/papers/w14507

Kahneman D. - Krueger A. B. - Schkade D. - Schwarz N. - Stone A. (2004), “Toward National Well Being Accounts”, American Economic Review, Papers and Proceedings, n. 94

ISTAT (2007), La vita quotidiana nel 2006, Rome

ISAE (2009), La povertà soggettiva in Italia, Nota Mensile ISAE, luglio, http://www.isae.it/nota_mensile_luglio_2009.pdf

Malgarini M. (2009), “Quantitative inflation perceptions and expectations of Italian consumers”, Giornale degli Economisti ed Annali di Economia, n. 1

Malgarini M. - Pugno M. - Zezza G. (2008) “Life satisfaction in a survey of Italian Households”, paper presented at the Conference “Well Being: are we happy with our standard of living?”, University of Cassino, Italy, September, 26/27, 2008

Scoppa V. - Ponzo M. (2008), “An empirical study on happiness in Italy”, The B.E. Journal of Economic Analysis and Policy, vol. 8, issue 1

Stevenson B. - Wolfers J. (2008) “Economic Growth and Happiness: Reassessing the Easterlin Paradox”, Brookings Papers on Economic Activity, May

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