How dark is the night: the consumers' mood coping with the crisis. Evidences from ISAE Consumer Survey

Preliminary draft

Stefania Gabriele ISAE, Unità Operativa R. 2 Microeconomia tel. +39 0644482210 e-mail s.gabriele@isae.it

Bianca Maria Martelli ISAE, Unità Operativa R. 4 Inchieste tel. +39 0644482720 e-mail b.martelli@isae.it

Michele Raitano

Sapienza Università di Roma e-mail michele.raitano@uniroma1.it

ABSTRACT

Since 2008 the global economy, following also the financial crisis, is facing a severe decline in economic activity and the economic estimates concerning the first quarter 2009 are even worse.

While in the major industrialized economies Consumers Confidence Indicators (CCI) show common negative trends, in Italy we have observed a different pattern. After a sharp fall beginning in 2007, the CCI (in the Italian definition) is unexpectedly showing some signals of recovery since the end of summer 2008. Specifically, the confidence on the personal condition improved, while the economic picture was considered in deterioration at least till the first quarter of 2009.

From another point of view, whereas the expectations on the future are worsening, the evaluation on present conditions are recovering. It seems that the effects of the financial crisis have not influenced Italian consumers yet, as it is documented worldwide.

It is worth sorting out this puzzle. The paper tries to explain these trends starting from the role played by the single elements on which the composite indicator of confidence climate is determined. Then the recent price evolution and its influence on the Italian Consumer Confidence dynamics are investigated. Since end of summer 2008, the sharp inflation slowdown together with nominal wages increase, may have contributed to keep confidence from falling. A further tool for explaining recent CCI dynamics could also be represented by a micro-data analysis of opinions of population sub-groups, because some of these could have been more exposed than others to the crisis. Therefore the paper explores reactions of different consumers segments (e.g. by income, professional status, household composition).

Keywords: Consumers Confidence, Consumption, Survey data.

JEL classification: C21(Cross sectional models); D12 (Consumer Economics Empirical Analysis).

1 INTRODUCTION

The aim of this paper is using information stemming from the ISAE consumer survey (Fullone and Martelli, 2008) in order to inquire how consumers are facing the current recession. It is worth noticing that Tendency Survey offer very timely information even though of qualitative kind. It is then possible to analyze the "present" situation and this occurrence gives sure advantages in understanding the economic frame.

A further essential economic interest of Consumer confidence lies in the fact that it has often been used as a proxy variable of households consumption, also with leading capacities (see e. g. Klein and Ladiray 2002). A wide literature has been dedicated to Consumer confidence and its relationship with consumption since the leading work of Katona (1951,1975) and, for Italy, by Parigi and Schlitzer (1994) and Locarno and Parigi (1995).

A recent and thorough review of literature referring to the role of confidence and its relationship with consumption is presented in Malgarini and Margani (2007). The authors point out that confidence contributes to explain households' consumptions besides the economic macro-variable correlated with them. They further assess that Confidence is also affected by political or exceptional events, mainly, however, when straight linked to situations directly influencing consumers.

In the past it has been observed that during the sharp 1992-1993 recession the Consumer Confidence Indicator fall amounted about 20%. A similar drop was also recorded during the 2002-2004 period, even though consumption didn't fall and the recent ISAE revision of cycle chronology (ISAE, 2009) defined the period May 2003-August 2007 as a recovery phase of the economy (the 2002-2004 drop could be mainly imputed to the changeover tensions that let uncertainty increase).

The focus of the present paper is on the most recent time span since January 2007 up to now (April 2009), for which other kinds of information are scarce or even missing. Since August 2007 the Italian economy has entered a contraction period, worsening over the time. Accordingly, and to some extent anticipating the downturn, Consumer Confidence fall between January 2007 and July 2008 about 13%. Just after mid 2008, the world credit crisis let the world economy enter the most severe recession since second world war. Unexpectedly, however, in Italy CCI recovered a major part of the previous 2007-mid 2008 drop in the following nine months (+ 9%), since August 2008 up to now (April 2009), when the crisis is perhaps easing but its end is not yet certainly foreseeable, after the GDP decrease of 2,4% in the 2009 Q1 with respect to the previous quarter and of 5,9% with respect to 2008 Q1 (ISTAT 2009).

This recent and continuous positive trend stands for the key question the paper tries to answer, concerning the determinants of the recent trend of the Italian CCI, which, as said, is an outlier within the harmonized frame of European countries.

The paper is composed by two main sections. Firstly (section 2) a mainly descriptive and preliminary presentation of the ISAE Consumer Survey results is introduced, focusing on the very recent months and on the most interesting series, i.e. concerning opinions about prices, saving and unemployment and, above all, the Consumer Confidence Indicator. CCI is analyzed as a whole and by different breakdowns, either focusing on subsets of confidence (as personal, economic, current or future ones) and by sectoral breakdowns (e.g. by occupations, income quantiles, geographical areas) to better focus consumer attitudes. Then (section 3), using a micro-econometric methodology, we will try to distinguish the behaviors of different groups of the population as regards confidence during these key quarters. Through an

ordered probit model it is possible to highlight the features characterizing the mood of various categories (age, gender, professional status, etc.) and their relative shifts during the observed period. Conclusions follow, containing a tentative answer to the question: what consumers confidence trend tell us?

2 RECENT EVOLUTION OF CONSUMER CONFIDENCE

In this section, while presenting consumer series starting in 2000 in order to better define the frame, the attention is mainly focused on the period since beginning 2007 up to now, with major attention to the last months, since July 2008 up to April 2009.

Italian Consumer confidence, after the 2002-2004 slowdown probably due to the changeover difficulties, shows a correlated shape both with cycle index and ISTAT household consumption (Fig 1 and 2). Already from the graphical inspection, CCI leading features are evidenced in the 2007 upper turning point that consumer assessed beginning of the year. Since mid 2008 Confidence seems to show, besides, an increased variability, a possible stabilization or even the start of a recovery.

It has to be noticed that in Italy, as in most European countries, the financial crisis did not exert the heavy effects on individuals' vulnerability it could cause on the United States, where pension and health care systems are mainly managed by private funds. Besides, no bank went bankrupt in Italy.

Moreover, crisis cut inflation that has been accelerating since the beginning of 2007 up to mid 2008, and afterwards showed a remarkable drop until March 2009. Also this occurrence contributed to easier the consumers' worries.

Bound to the industrial crisis, however, labor market worsening is likely to have contributed to lower consumer confidence. As known, a main drawback of the Italian welfare system concerns the lack of an universal unemployment benefit¹. However, it has to be considered that an instrument as the Cassa Integrazione Guadagni – which grants an income to some kinds of workers who are temporary suspended for economic reasons - allows not to break the relationship between the employee and the firm. This can contribute to avoid a drop in employees sentiment when firms go trough difficult economic periods.







¹ For a detailed description of the Italian system of unemployment benefit and a review of the workers' categories entitled to receive the *Cassa Integrazione Guadagni*, see Ferrera (2006).

2.1 Confidence and saving

To improve our understanding of confidence performance, in this paper a slightly different version of the usual ISAE consumer sentiment indicator is presented. It is computed² as simple average of the series (excluding bases and constant) and is aimed to better highlight the swings of the series in the recent tumultuous months. The same reasons led us not to seasonally adjust the data. Furthermore the saving opportunity is excluded from the confidence computation. This latter series in fact stems from an ambiguous question. Namely the wording is: "Do you consider the present time a good moment for saving?"³. Positive answers could be given indeed for conflicting purposes (e.g. for finance investment or for lifecycle or precautionary objectives).

From Graph 3 it is evident that since the beginning of 2007 confidence (grey broken line) and saving opportunity (black line) show opposite trends. The precautionary aspect of the opportunity to save is probably prevailing and often this occurrence is bounded with consumer uncertainty against the future (Guiso *et al.* 1992 and Carroll and Kimball 2006) and could be one of the factors restraining consumption (ISAE 2009). When considering a Confidence indicator calculated excluding present saving opportunity (red/grey line) this evidence becomes even more remarkable⁴. Therefore, in the following sections, this latter version of the indicator will be applied⁵.



The precautionary aspect of saving opportunity is also confirmed looking at the confidence index breakdowns (Fig 4-6). The positive correlation between saving opportunity and confidence (Tab. 1) observed up to 2004, weakens in 2005-2006 and turns negative since 2007. This effect is relatively stronger for personal and current indicators, but in the last period also for economic and future confidence.

² See Methodological notes in Appendix for the formula applied for calculating the ISAE Consumer Confidence indicator.

³ The EC wording more properly is: "In view of the general economic situation do you think that is now a very good/fairly good/not a good/a very bad moment to save". Also this version, even different from the Italian one, could give raise to ambiguity in interpretation.

⁴ A similar behavior, even though weaker in intensity, was also recorded during the 1993-1996 recession.

⁵ Future and Economic Confidence have only one version as saving opportunity isn't a component of them.

Consumers somehow considered that the domestic crisis started in 2007 affected their personal situation much more than the world financial one that broke out with its impressive effects September 2008. This latter, is more influencing the economic and future perceptions. It looks like consumers feel to some extent personally more "protected", less "uncertain" about their own situation and current assessment.



Deep pessimism shaped, on the contrary, the economic and future confidence since the beginning of 2007 up to March 2009. April 2009 data, however, to the limited extent of the informative capacity that only one month of survey can offer,⁶ record a sharp positive upswing. Possible explanations could be attributed to the first public announcements on the possible overcoming of the most negative phase.

R2	Total		Personal		Cur	rent	Economic	Future
Date	Total	excl. saving opp.	Total	excl. saving opp.	Total	excl. saving opp.	Total	Total
00-04	0.52391	0.44275	0.60273	0.47141	0.54782	0.41719	0.38424	0.45199
05-06	0.48184	0.17684	0.78370	0.28784	0.71607	0.33019	0.07034	-0.02004
Jan07- Jul08	-0.33448	-0.49667	-0.31906	-0.69806	-0.37787	-0.58235	-0.31280	-0.14964
Aug08 -Apr09	-0.54245	-0.65585	-0.23082	-0.40518	-0.32516	-0.51508	-0.41156	-0.47456

Tab. 1 - Confidence and Saving Opportunity

A further tool for evaluating the saving perceptions is offered by the financial stress indicator outlined by Malgarini (ISAE 2008). This indicator is simply calculated from the question on household financial situation included in the consumer survey, as the percentages of answers indicating that consumers have to use their own savings or get into debt. According to this indicator, consumers reported increasing financial stress since beginning 2007, anticipating the August turning

⁶Preliminary May 2009 data seem to strengthen this occurrence.

point; this behaviour, however, sharply turned upside down mid 2008, together with the domestic inflation slowdown (see below) and despite the international financial crisis.



2.2 Inflation

After the troubled changeover years, since the beginning of 2007 Consumer qualitative perceptions satisfactorily fit the consumer price evolution. Consumers were clearly aware of the 2007 price dynamic acceleration and of the subsequent mid 2008 slowdown which, coming with the renewal of many collective labor agreement during 2008, is well reflected on their optimism, particularly on the personal confidence.





In fact, the judgment on prices evolution seems to influence a lot Italians mood, offering a reason for the current confidence improvement. This is confirmed by Golinelli and Parigi (2005), which - in their model for the estimation of CCI - find a structural break in coincidence with the changeover, disappearing if perceived perception on prices evolution is included in the estimate. Gabriele, Pollastri and Raitano (2009), estimating the personal climate till 2008, find that the price dynamic is significant and has a negative coefficient.

2.3 Geographical breakdown

Disaggregating confidence indicators by geographical areas, from a preliminary graphical inspection, significant different patterns in the dynamics of North and South do not emerge. Instead, differences are better investigated with the micro data analysis presented in section 3. After the 2007-mid 2008 slowdown, all areas show a positive shape during the recent months. North-west regions are characterized by an above-the-average persistent optimism, while the persistent pessimism featuring Centre-South of Italy seems to decrease in comparison with the rest of the country the last year. Looking also at confidence components in the different areas, the mid 2008 recovery, mainly due to personal and current assessments, is everywhere widespread (Graph 11-14).



Graph11

Graph12



Graph 13







2.4 Professional statuses breakdown

Looking at the breakdown by professional statuses, working consumers are steady more optimistic than the average (Graph 17). Among them, self-employed show a continuous higher profile also in the most recent months. Unemployed, even though more pessimist, don't show any collapse (as it could be feared) since mid 2008. Looking at the confidence index breakdowns (Graph 18-21), major differences between professions concerning personal, current, and also future indicators emerge, while for the index concerning economic confidence opinions are more homogeneous. Personal and current confidence also confirm the increasing trend since mid 2008 for all occupational breakdowns. The evaluations on economic and future situation remain more cautious.







2.5 Unemployment

Due to the recessive phase, the expectations of unemployment increase reached in the first quarter of 2009 their historical maximum. Nevertheless, in April they show a sharp downturn. This improvement in labor market expectations could be seen as a positive signal stemming from consumers. They start to have less negative forecasts for the near future. This positive mood affects the very recent economic confidence.

Evident inverse correlation between personal confidence and unemployment expectations since mid 2008 is, on the contrary, not easy to explain. The most recent available official figures on unemployment refer to 2008 Q4, when the situation was still beginning to worsen while a strong deterioration is likely to become manifest only in the current months. ISAE Consumers perceive a labor market weakening since mid 2008; this occurrence, however, does not affect their personal situation, may be as the unemployment increase is assumed as a limited phenomenon that should not concern the majority of respondents. This occurrence could be confirmed by the April Survey data, when to a remarkable improvement in the labor market expectations does not correspond a similar personal confidence growth.



2.6 Income

Analyzing confidence by income quartiles (Graph 22), it comes out that the most wealthy one (Q4) has been showing a remarkable loss in confidence, mainly

since mid-2007 up to July 2008 (Tab. 2). Consumer owning financial assets were the most hit by the crisis even before the July 2008 subprime drop, as the financial markets started to worsen already in 2007. The most recent months, however, are characterized by a high volatility (uncertainty), but on a substantially stationary or even weakly positive trend.

The third quartile (Q3) also shows a loss in the same period, but of lower intensity. It is interesting to point out the non-respondent to the question of household income behavior (Q_NR). In recent times this elusive group of consumers is unfortunately amounting to about 25% of the respondents, nearly vanishing the possibility of any precise estimation (for this reason information about income quartiles are not used in the micro-econometric analysis carried out in section 3). However, treating non-respondents as a fifth quartile, some information do emerge. They show a very similar profile as the third quartile, just with more uncertainty in the last months. Maybe this group is composed by consumers with less stable (even not deprived) situation, who are not so able to cope with the present difficulties. Q2, showing the best recovery since last August, is likely to be the category which better benefited from the strong inflation drop. The poorest quartile (Q1) shows relatively limited swings, downwards until July 2008, and upwards in the subsequent recovery. It is worth noticing however that the drop started already in 2006.





1 a. 2	Ta	b.	2
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%	Jan2007-	Aug2008_
Changes	July2008	Apr2009
Q1	-39%	12%
Q2	-49%	26%
Q3	-82%	15%
Q4	-234%	11%
Q NR	-85%	1%

The graphical inspection seems to suggest that the confidence is recovering since mid 2008 for all the quartiles with different intensity. The improvement is stronger for the lower ones (mainly Q2), possibly because of the inflation dynamic slowdown; while for the upper two (and for non respondents) confidence increases in a slower way, maybe also due to the (relatively) lower volatility shown by financial markets. According to Leproux and Malgarini (2007), it is the confidence of the poorer segments of population that more affects the consumption expenditure, suggesting in our case less pessimistic trends for the near future.

Personal Confidence even if at different levels, showed substantial stability in 2006-2007 for the two upper quartiles (Q3 and Q4) while the remaining ones already began to deteriorate (Graph 23). Current confidence, instead, recorded downward trends for all the quartiles but the richest one (Q4) since beginning 2007 (Graph 24). In the second half of 2008, similar profiles are shown by personal and current confidence, where sharp increases, are recorded for all. Since February 2009, however, Q1 and Q4 seem to break their upward trends both for Personal and Current confidence. Economic confidence (Graph 25) shows a negative and very volatile

profile for all the quartiles. Maybe the most recent upswing could be seen as the starting point of a better mood. Looking at future confidence (Graph 26) convergence emerges in all the quartiles but the first one which show an increasing pessimism.



3. Micro data analysis

2005 2006

2007 2008 2009

100

120

2000 2001 2002 2003 2004

The analysis is carried out through an ordered probit model⁷, because the dependent variables used in the regressions are qualitatively ordered ones (their increase means a better sentiment)⁸. The variables investigated are the different compositions of confidence indicator, namely total, personal, current, (both without saving opportunity), economic and future. On the right side of the estimated model a large set of explicative variables is included: gender, age, the number of family components and of income recipients inside the household, a dummy signaling if there are children younger than 18 in the household, the educational attainment, the dimension of the town of residence, the geographical area (North-West, North-East and South/Islands, assessed respect to Centre) and the professional status. In

-60

-80

100

Q NR

2000 2001 2002 2003 2004

2005 2006

2007 2008 2009

Q NR

⁷ For a detailed treatment of the ordered probit model see Verbeek (2008).

⁸ Dependent variables are obtained as a simple sum of variables recording individual sentiments along many dimensions, which are recorded trough five qualitative modalities, ordered by increasing levels of confidence. Consequently the dependent variables used in this section, being obtained as a simple average of values of qualitatively ordered variables, are themselves qualitatively ordered too.

particular the professional status is assessed comparing, respect to the modality "white-collar", the following statuses: student, housewife, retired, unemployed, farmer⁹, blue-collar and self-employed. Regressions are carried out for each quarter since 2007 to the first quarter of 2009 and, in each quarterly regression, monthly dummies are included too.

In general, major information can be collected with reference to the personal climate, on which the analysis is mainly focused. In this frame, women are significantly less optimistic than men for all the observed period. The higher is the number of income earners in the household, the better is the sentiment, and the bigger is the number of household members, the worse is the mood (these results are evidently due to the level of per capita available resources). Having got a mortgage worsens the sentiment, as well as renting the house.

The younger are the people interviewed, the wider is the optimism. People with higher education attainments perceive less vulnerability (but it has to be remarked that education, rather than signaling a pure better sentiment against the crisis by people with a higher attainment, could merely signal a better feeling by well-off individuals, being, on average, higher educational attainments associated to higher incomes). The estimated coefficients of the variable "dimension of the town of residence" and of the dummy recording if there are children aged under 18 in the household are non significant nearly in all quarters since 2007.

Let's now analyze some variables which show several interesting changes during the observed period that is focusing on the dynamic before and during the crisis. Table 3 shows the signs of the estimated coefficients for professional categories (see also Graphs 17-21) and geographical areas (Graphs 10-14), i.e. "+" means that the considered category gives a better judgment than the reference one (+1 in the Graphs), "-" (-1 in the Graphs) means the opposite, and "0" stands for a not significant result.

The unemployed are usually more worried about their personal situation than the white collars (taken as reference category). This is not true only in 2007 Q IV and 2008 QI, after unemployment and the hours of Cassa Integrazione (mostly paid in the manufacturing sector) reached a minimum in 2007 (ISAE, 2009).

On the contrary, students are generally optimistic. It is more interesting to underline that housewives and retired people, who show great vulnerability in 2007 and till the third quarter of 2008, align afterwards their sentiments to those of white collars. It seems that the price rise of the last couple of years represented a relatively harder problem for them, while the financial crisis, with all its consequences, is not so worrisome.

Self-employed judge their personal situation with more serenity than white collars, except for the second half of 2007 and 2008 Q I. Maybe they first felt that economy turned down, then, since 2008 Q II on, while the crisis was worsening self-employed are showing a greater optimism than white collars, suggesting better capabilities and flexibility to face the recession.

Blue collars became more pessimistic since the second quarter of 2008, perhaps because of the worsening of labour market situation, especially in manufacturing (ISAE, 2009). In 2009 blue collar sentiment is again not significantly different from white collars one, and this can be due to a worsening of tertiary sector.

⁹ However it has to be noticed that the number of farmers interviewed by ISAE survey is very low ranging about less than 50 interviews per wave.

Tab. 3 - Personal confidence

	2007 I	2007 II	2007 III	2007 IV	2008 I	2008 II	2008 III	2008 IV	2009 I
Unemployed	-	-	-	0	0	-	-	-	-
Students	0	+	+	+	+	0	0	+	0
Housewives	0	-	-	0	-	-	-	0	0
Retired	-	-	-	0	-	-	-	0	0
Self-employed	+	+	0	0	0	+	+	+	+
Blue collars	0	0	0	0	0	-	-	-	0
North-West	0	0	+	0	0	+	+	+	+
North-Est	+	0	+	0	+	+	0	+	+
South	-	-	0	-	-	-	-	0	-

As for the geographical areas, the increasing optimism of North residents, in particular since 2008, and the pretty constant bad sentiment expressed in the South have to be noticed

Graph 27



Graph 28



It can be interesting to compare these trends with those concerning the Economic Confidence climate. Table 4 and Graphs 29 and 30 show that in this case much more often the categories do not differentiate each other significantly.

Tab. 4 - Economic confidence

	2007 I	2007 II	2007 III	2007 IV	2008 I	2008 II	2008 III	2008 IV	2009 I	
Unemployed	-	-	0	0	0	-	0	0	0	
Students	0	+	+	+	+	0	+	0	+	
Housewives	0	-	0	0	0	0	0	+	0	
Retired	0	-	0	0	0	0	0	0	-	
Self-employed	-	-	-	0	0	0	+	+	+	
Blue collars	0	0	0	0	0	-	-	-	0	
North-West	0	0	+	0	0	+	0	+	+	
North-Est	0	0	+	0	+	+	0	+	0	
South	-	-	-	-	-	-	-	0	+	

Graph 29



More specifically, opinions about Economic Confidences by unemployed, housewives and retired are not worse than those of white collars. Self-employed are pessimistic on economic situation at the beginning of the period and they became relatively more optimistic only since the third quarter of 2008, confirming a certain earlier reaction to the economic cycle by this category. No changes are registered for blue collars.

Graph 30



The geographical areas show less polarisation than the previous case and a certain improvement of the South sentiment respective to the Centre since beginning of 2009.

Looking at Current (Graphs 31 and 33) and Future (Graphs 32 and 34) opinions, we also find some differences. Main divergences among groups stand out on the assessments on Current confidence, especially with regard to housewives and retired, which tend to align to white collars about the opinion on Future climate. The differences by geographical areas are not very relevant.









Graph 33







4. Concluding remarks

Previous analyses show that consumers capabilities of perceiving the economic situation is not so bad as it could appear at first sight. In fact, they reveal definite signals of disease since beginning of 2007, anticipating the August turning point.

The mid 2008 personal confidence improvement seems mainly depend on the inflation rate drop, in a frame of renewal of several collective working agreements. It is however puzzling that the dramatic rise in unemployment expectation recorded since mid 2008 does not affect the personal confidence (Graph 9).

The positive evaluation of their own personal situation doesn't prevent consumers from being worried on economy and future. Furthermore they consider precautionary saving necessary.

Since April 2009, however, personal confidence improvement seems to slow down, if not even stop, while economic confidence seems definitely recovering. It is worth waiting for next months evolution before trying to explain these occurrences, which could anyway be influenced on one hand (i.e. concerning personal confidence) by the labour market difficulties broadening, on the other hand (i.e. concerning economic confidence) by the announcements about the possibility that the worst is overcome.

The confidence improvement of the past quarters – if not contradicted by the following months -could represent a positive sign towards a possible consumption stabilization.

From the ordered probit analysis, focusing on personal confidence and on professional statuses, it has emerged that housewives and retired, which probably were the groups the most sensitive to the price dynamic, improved their relative mood in 2008 QIV when inflation went down. Blue collars instead are characterized by a deterioration since 2008 QII, probably because of the labour market worsening. Selfemployed workers seem to be the more optimistic, apart from the months when the economy touched its maximum turning point and started to worsen: they seem to have correctly anticipated the cycle swings. Since the same quarter also sentiments of people living in North areas became more positive. Then these usually (relatively) well off groups (self-employed and North living people) show better capabilities of coping with the recession. Finally it has to be pointed out that economic and future sentiment show more homogeneous results.

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Appendix : Methodological Notes

Within the E.U. Harmonised Survey, ISAE carries out since January 1982 its monthly Consumer Survey on a representative sample of 2,000 respondents. Hereafter a list is provided of the main survey's characteristics.

• The sample is a stratified two-stage (telephone subscribers / consumers) random sample. The reference universe is represented by the full-aged (18+ years) population, stemming from the Census survey and yearly updated with demographic statistics outcomes. The stratification in 42 strata is performed according to six geographical areas and seven classes of demographic width of municipalities.

• The frame is made up of the telephone subscribers list, ordered by region, administrative district, municipality and zip code. Random data selection method is applied within each stratum.

• The data collecting method applied is the Computer Aided Telephone Interviewing (CATI). Interviews are carried out in the evening hours of the first then working days of the reference month.

• The survey is weighed by using the calibration methodology and the CALMAR software (CALage sur MARges). The calibration variables are: age, regional population, occupation, education and demographic width of municipalities.

• This design allows to increase the precision of estimates from the theoretical 2.2 per cent of a simple random sample of size 2000 to 1,38 per cent (2005 average).

• Consumer survey comprises (apart from some information on households' structures and incomes) fifteen qualitative harmonised questions characterised by three-to-five reply options (for example, Much increased, Rather increased, Slightly increased, Stable, Diminished) based on two main topics: notably, opinions on the overall economic situation and opinions on the personal situations. Since 2002 some further question on households' life were added.

• For the fifteen above mentioned question, the results are expressed in terms of the relative frequency of each reply option. Balances (differences between favourable and unfavourable answers) provide the indications on the observed phenomena. Balances may be simple (options are aggregated without weighting) or weighted (by attaching double weight to extreme options. The weights adopted are: 2,1,1,2). Central options (for example, Stable) are not considered in the computation.

• The Italian Consumer Confidence Indicator (CCI) is an overall synthetic indicator of the survey. It is elaborated by ISAE on the basis of nine series considered most suitable to evaluate consumers' optimism/pessimism (notably: ex ante and ex post general and households' economic situations; unemployment trend-with inverted sign; present opportunity and future convenience to save; propensity to purchase consumer durables; households' budget). The results of the nine questions, expressed as seasonally adjusted weighted balances, are aggregated through a simple arithmetical mean setting 1980 = 100 as base year.

- ISAE also computes four sub-indexes, namely: economic, personal, current and future situation indexes. The first is built as arithmetic simple mean of weighted balances of assessments and expectation on general economic situation and on unemployment expectations. The second as average of the remaining six series composing the overall confidence indicator (assessments and expectations on personal situation, household financial situation, opportunity and possibility of saving, convenience of major purchases). The third one is computed as average of questions on assessments (general and personal economic situation, saving opportunities, household financial situation, and convenience of major purchases); the last one as average of expectations (general and personal economic situation, unemployment, and saving possibility). All indicators are based 1980.
- All the series and the Confidence indicators are seasonally adjusted with TRAMO-SEATS method (These latter with the direct method).
- Since September 2001, for each Member State, the Commission computes, as Confidence Indicator, seasonally adjusted (Dainties method) weighted balances (weights being 1, ½, ½, 1) of four series (expectations on the general and on households' economic situations, on unemployment and savings) and aggregates them with a simple arithmetical mean with no index number. The synthetic indicator for EUR-12 is obtained through the arithmetical mean weighted with single countries' private consumption levels.