

What do Italian Citizens Know About the Progress of their Country?

Results from the 2009 ISAE/ OECD Survey

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Statistics and Knowledge

- A number of studies have recently focused on the importance of statistical information in the transmission of knowledge (Blinder and Kruger, 2004; Curtin, 2008)
- In this sense, accuracy and clarity of such information is of crucial importance: a piece of information can be interpreted in many different ways depending on how it is presented
- In a previous study (Giovannini et al., 2008) we have already tested about the actual knowledge of statistical data of Italian citizens

Statistics and Knowledge

- 2007 results were quite striking, with almost a quarter of respondents not knowing much about official data, albeit 71% of them reported that being informed is “important” and 23% “very important”
- A possible explanation is that individuals trust official sources, but the existing “vehicle” used to communicate is inadequate, or other barriers to information acquisition do play a role
- In 2009 we have repeated the survey, being able for the first time to compare results over time

The questionnaire

- ? **Unemployment rate**: As you may know, every quarter the Italian National Institute of Statistics publishes figures on the unemployment rate in Italy. In other words, every three months ISTAT officially reports the percentage of people unemployed with respect to the active population. Can you please tell us the most recent rate of unemployment published by ISTAT?
- ? **Inflation**: Another important economic indicator that is published by ISTAT on a monthly basis is the consumer price index, commonly used to calculate the annual inflation rate. Can you please tell us the most recent rate of inflation published by ISTAT?
- ? **GDP**: ISTAT has recently published figures on all final goods and services produced in Italy in 2008. This figure is known as the Gross Domestic Product (GDP) of the country. Can you please tell us the percentage of change of the Italian GDP recently published by ISTAT?

The questionnaire

■ Respondents may choose between:

- Give an answer
- Indicate they do not know the exact figure
- Refuse to answer

■ For those saying they do not know how to answer, we asked a further question:

In the last few days, have you had the opportunity of reading a newspaper article or watching TV news talking about the recent data on GDP/ Inflation /Unemployment released by ISTAT?

Results

- The share of respondents refusing to give a reply is quite low
- However, the majority indicates that they do not know the exact figure ...
- ... and almost a quarter of them has not recently heard of these data
- Italians are pessimistic regarding GDP, Inflation and Unemployment, i.e. they report worse figures than the true ones
- Knowledge does not seem to have increased with respect to two years ago

Results

- Scarce knowledge of most recent figures may be associated with a phenomenon of “staggering updating”
- In other words, people do not update information frequently enough, mainly because of its high cost or low return
- On the other hand, not having recently heard at all about official releases may well imply unawareness of the existence of such data and of their use

Results

Key economic variables	GDP		Inflation		Unemployment	
	2007	2009	2007	2009	2007	2009
Response rate	22.2	23.1	27.1	23.6	31.2	22.3
Heard of, but do not know current rate	na	43.6	na	48.9	na	50.4
Never heard of	na	28.1	na	23.4	na	23.7
Refuse to answer	5.4	5.1	5.1	4.1	2.5	3.5
Sample size	2,000	2,000	2,000	2,000	2,000	2,000
Mean	2.5	-1.4	3.9	3.2	14.6	10.0
Median	2.0	-1.0	2.2	2.5	10.0	8.0
P25	1.5	-1.8	2.0	1.8	7.0	6.0
P75	2.2	-0.5	3.0	3.0	18.0	12.0
Standard deviation	3.1	2.2	7.1	3.5	13.0	5.7
Actual official rate	1.9 ⁽¹⁾	-1.0 ⁽²⁾	1.8-1.7 ⁽³⁾	1.6 ⁽⁴⁾	6.8 ⁽⁵⁾	6.7 ⁽⁶⁾

⁽¹⁾ Data for 2006 available in march-April 2007

⁽²⁾ March 2009

⁽³⁾ March-April 2007

⁽⁴⁾ February 2009

⁽⁵⁾ Data for III Q. 2006 available in March 2007

⁽⁶⁾ III Q. 2008

Results

- 71% of Italians deems it is important to be informed on these issues (as in 2007)
- Only 10% thinks that these information are not important (15% in 2007)
- Almost half of the sample does not need to be more informed (42% in 2007)

Importance of being informed	March-09 (%)
Very important	23.0
Fairly important	48.2
Neither important nor unimportant	17.7
Fairly unimportant	4.7
Very unimportant	5.3
Don't know/refuse	0.9
Desire of being more informed	
More informed: Yes	49.6
More informed: No	46.0
More informed: Don't know	4.4

Results

- The preferred channel of information is television, followed by newspapers, radio and internet
- With respect to 2007, there is a lesser role of opinion leaders and friends/ relatives
- An high degree of trust in official statistics also emerged (45% in 2007 – Source: Eurobarometer)

Information channels (%)	2007	2009
Television	82.3	91.2
Radio	18.7	17.7
Newspapers, magazines	51.0	49.1
Internet	22.7	24.7
Political, opinion leaders	6.9	4.3
Friends, relatives	11.5	7.5
Don't know	2.4	1.0
Refuse to answer	1.9	0.2

Trust in official statistics	2009
Trust statistics	59.4
Do not trust statistics	33.9
Don't know	6.7

Building a Knowledge score

- In order to investigate the determinants of statistical knowledge, we construct a “Knowledge Score” aggregating the answers to the 3 questions
- The “Knowledge Score” is calculated as follows:
 - Compute the ABSOLUTE VALUE of the individuals errors for each question (i.e. the difference between individual answer and official data)
 - Compute the average of the relative errors: those with an higher score are those having a lower knowledge of data.
 - Apply a linear transformation, standardizing with respect to the mean and standard deviation of the distribution (z-scores)

Building a Knowledge score

- Two possible raw scores are calculated:
 - The first uses both the 2007 and 2009 waves and considers also the “don’t know” answers
 - to those answering “*don’t know*” we impute a score equal to the maximum value reached by the respondents, augmented by a unit.
 - The second score considers only the 2009 wave and also uses the information provided in the follow-up question:
 - to those having answered that *they have recently heard about the statistics of interest*, we assign a score equal to the maximum reached by the respondents, augmented by a unit.
 - to those having answered *they do not know about the statistics*, we assign a score equal to the maximum reached by the respondents, augmented by two units.

A Model for Knowledge: the concept

We estimate a model using the Knowledge score as dependent variable:

$$K_i = f (SD_i, D_i, Tr_i, S_i) + u_i$$

K_i = knowledge score

SD_i = socio-demographic characteristics of the respondents

D_i = desire of being informed

Tr_i = trust in statistics

S_i = source used for being informed

u_i = unobserved error term, assumed to be uncorrelated with the regressors

A Model for Knowledge: data

Control variables are:

GENDER (M/F)

AGE (<30 years, 30- 49, 50-64, and 65+)

ZONE OF RESIDENCE (North West, North East, Center and South of Italy)

EMPLOYMENT STATUS (self-employed, employed, unemployed and out of LF)

LEVEL OF EDUCATION (Primary school, Secondary school and University level and higher)

INCOME (divided into quartiles).

The desire to be informed, the channels used to acquire information, and trust in statistics are measured on the basis of the answers provided to the survey questions.

A model for Knowledge: results

- Knowledge is higher for:
 - Men....
 - ... older than 30 years...
 - ... with an high level of education...
 - ... with higher income...
 - ... deeming that statistical information is important...
 - ... sharing a desire to be more informed...
 - ... using newspapers and contacts with civic and political leaders to obtain information
- Trust in statistics, type of occupation and area of residence does not seem to have an influence – *ceteris paribus* - on the level of knowledge

Concluding remarks

- Albeit almost 59% of Italians trust official statistics, almost a quarter of them have never heard of it!
- Nevertheless, 71% still think it is important to be informed
- A possible explanation is that the lack of knowledge could be addressed by the inadequacy of the “vehicle” or the existence of barriers in accessing information
- A first confirmation comes from the fact that knowledge increases with age, level of education and income
- However, social and psychological factors seem also to play a role, as assessed by the higher degree of knowledge among those more involved in political discussions and using newspapers and internet to acquire information

Concluding remarks

- Further research is however advisable in order to confirm the results both across countries and in different moments of the business cycle
- In fact, differences in the pattern of information acquisition do emerge also in the US and in other countries worldwide
- On the other hand, the “rational inattention” hypothesis (Reis, 2009), according to which knowledge of economic phenomena should be greater in times of “bad news”, should be better explored in the future, possibly implementing new waves of the survey worldwide



Questions?
Thanks for your attention!

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