



## *Italian Households' Income and Wealth*

**Address by the Deputy Governor of the Bank of Italy  
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**The Bank of Italy's Analysis of Household Finances**  
Fifty years of The Survey on Household Income and Wealth and the Financial Accounts

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## **1. Introduction**

I am pleased to open this two-day conference on household finances fifty years after the Bank of Italy began to develop systematically the two statistical tools that lend themselves to this type of analysis: the Financial Accounts and the Survey on Household Income and Wealth (SHIW).

Statistics are a constant reference point for research and policy action by the Bank of Italy. Throughout its history, the Bank has not only drawn extensively on data published by Istat and other national and international agencies for many years, but has also been an active producer of statistics, both on banking and finance, and on firms and households.

Italy was among the first countries to join a line of international research launched in the 1950s by Morris Copeland for the United States and carried forward by the Federal Reserve. In its 1964 Annual Report the Bank of Italy presented the first full matrix of the 1963 financial accounts, consisting of a dual-entry table demonstrating, item by item, the financial flows between the sectors listed in the rows and columns. Since then the publication has become regular and is today one of the standard tools for financial analysis and policy making.

The Bank's statistical activity did not stop with aggregated data however; from the early 1950s the Bank sought additional micro-level information on companies. At the time only a few aggregate statistics were published by the Italian Association of Joint Stock Companies. The Bank of Italy began to survey the balance sheet items for a group of firms that was eventually enlarged from the initial core of 60 to more than 400. Over time the survey progressively expanded to include data on investments and divestments as well, becoming what is now the Survey on Industrial and Service Firms. It is an important instrument and one that in recent years has made it possible to document firms' restructuring and manufacturing reorganization processes, aspects linked to innovation and productivity, and internationalization strategies.

In the early 1960s the Bank developed another statistical tool that has proved to be fundamental for the analysis of the economic behaviour of Italian households: the survey on household finances. The survey improves our knowledge about the preferences of individuals and the determinants of economic and financial decisions, such as risk aversion and intertemporal preferences. Households' choices are often conditioned by imperfect information or bounded rationality and so the survey allows us to shed light on such issues. In recent years we have devoted much effort to looking more closely into the effects of financial education (or lack of it) and into the role of risk aversion, framing effects and heuristic rules on households' financial choices.

## 2. The Survey on Household Income and Wealth

The oldest survey-based statistics on household income and wealth were produced in the United States and the United Kingdom in the mid-1940s. In Italy the SHIW, developed just a few years later, was the first – and for a long time the only – regular survey on this topic.

By the 1950s, the Bank of Italy had already worked with a private company, Doxa, in conducting surveys on household finances. In a letter dated 12 April 1951, Paolo Baffi provided instructions for a ‘survey’ to be conducted to verify the intentions of a ‘sample’ of heads of household, regarding the ‘propensity towards certain forms of consumption and investment given a hypothetical sustained increase in income, a sustained decrease in income, and the one-off payment of a sum of money’: questions that are still of considerable interest today, as we shall see in the first session of this Conference.

Between 1961 and 1962, the Bank of Italy conducted six pilot surveys on the income, consumption and savings of Italian households, which were not published at the time; they were only commented on briefly in the Statistical Bulletin, published in the summer of 1966, which reported the results of the first official survey conducted in March of the same year. Sample surveys were comparatively unusual at the time in Italy.

The key findings of the first survey were later published in a document entitled *Reddito, risparmio e alcuni consumi delle famiglie italiane* (‘Income, savings and some consumables of Italian households’).<sup>1</sup> The foreword described the reasons for the research:

The economic importance that households assume in our system, as in most market economies, appears evident when one considers that they directly or indirectly possess almost all the national wealth, collect almost all the national income and currently account for approximately three quarters of the overall domestic demand in Italy. Even from a financial perspective the importance of households is significant, since a substantial share of the financial flows originate from them, and they possess a sizeable share of financial wealth. (...) The economic behaviour of households, in general, and their reaction to stimuli from other sectors, in particular, originate in significant part from the structural characteristics and distribution of perceived income, the propensity to consume

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<sup>1</sup> Banca d’Italia, 1966.

and save, the nature and concentration of wealth, and so on. Where collections of such aggregates for the household sector exist, it is possible to measure the key aspects of household behaviour using econometric methods; however, even in this circumstance an understanding of the structures of the behaviour on a microeconomic level could serve to give more validity to the results obtained on an aggregate level, upon which one can base many economic decisions.

The same words could be used today, although half a century of research on the way consumers make decisions and on how to measure individuals' welfare would significantly broaden the definition. The survey has been increasingly used over time to study households' decisions about consumption and saving, the distribution of wealth and more. I will give several examples later on.

In the 1970 Bulletin, reporting the 1968 results, the Bank of Italy deemed it necessary to clarify to the readers the reasons behind the survey, the errors that sample surveys are subject to, the differences in the definition with respect to the national accounts and the difference between the monetary income observed in the survey and the one inferred from the survey.

This research (i.e. the surveys) is a useful integration of the aggregate information inferrable from the official statistics. From the latter it is possible to observe, for example, the overall income produced by the community in a given year, but not how it is allocated among household groups or different individuals according to residence, education level, business activity, age and so on. Moreover, only by using sample surveys is it possible to analyse the correlations between the financial aggregates in the various groups of the population (e.g. savings as a function of income and net worth).

With regard to income, the 1970 Bulletin clarified that the survey results should not be compared with existing aggregate data, but rather complemented them with distributional aspects:

... the aim of this survey is not to provide estimates on household income in addition or in opposition to those already in existence, but to integrate the knowledge already acquired on an aggregate level with other information on the distribution of income among groups of households and individuals, classified on the basis of geographic, demographic, and socio-economic criteria.

While this remains true, the divergence between the results of the 1982 survey and those of the national accounts in terms of percentage change in household income compared with the previous year were significant enough to warrant some rethinking of

the methodology. In February 1985 the Bank's Research Department organised a conference on the SHIW that resulted in a thorough reorganization. The work on this is on-going and I shall come back to this point later.

There have been many innovations aimed at improving the quality of data collection since then. The sample was doubled for the 1986 survey, from 4,000 to 8,000 households, and thanks to the collaboration with Istat the procedure for extracting households was modified so as to use population registry lists instead of electoral rolls, as the latter system – in the absence of correction methods – led to the overestimation of households with several adult members. The survey has been biennial rather than annual since 1987, and a longitudinal survey was started on a part of the sample families, the 'panel', in order to provide a more accurate study of the evolution of certain phenomena over time.

Moreover the surveying process is more carefully monitored nowadays, in order to improve our ability to understand the effects of operational choices on the estimates (non-sampling errors). Information is collected about the interviewers, the length of the interview, and the families that do not take part in the survey. For the last ten years or so, the data have been collected by means of Computer-Assisted Personal Interviewing (CAPI), which makes it possible to improve data quality; many errors and inconsistencies can now be intercepted and immediately resolved with the respondent.

### **3. Using the survey for policy and research**

Sample surveys are an important tool for policy analysis. Not everyone reacts in the same way to external events or to economic policy measures; information on the entire distribution of phenomena is required to understand the aggregate impact. This becomes even more necessary when measures that target specific population groups are studied.

With the broadening of the range of research and policy issues the number of questions to be asked has steadily increased. In the 1990s the questionnaire was given a modular structure, which placed monographic sections next to the traditional sections on income and assets. These are used to improve the understanding of important aspects such as risk aversion, income expectations, inheritance, financial behaviour and knowledge of finance, or behaviour and opinions on the subjects of "civiness", tax evasion and corruption.

The SHIW has covered many important and topical issues over the years. Let me give just one example. In the last few days the thresholds for the use of cash have been

under discussion. It is useful to remember that it is thanks to this survey that we know that between 1993 and 2014 credit card ownership rose from 10 to about 30 per cent of households, while ATM card ownership doubled from 34 to 70 per cent. Thanks also to the contribution of prepaid cards, the share of households able to make electronic payments is now close to 80 per cent and the percentages are even greater for the working population (over 85 per cent for households with a member under the age of 65). Despite these developments, payment instruments other than cash are used less in Italy than in Europe generally: only 71 such payments are made per year per household, compared with a European average of 187 and a euro-area average of 194.

Compared to 50 years ago, it is much easier nowadays to use large microeconomic databases to simulate, with a certain degree of complexity, the behaviour of economic agents based on various hypotheses on the evolution of policies and economic and demographic variables. Information collected through the SHIW has thus become the basis for micro-simulation models that are useful for comparing alternative policy measures, such as changes in transfers and taxation. The survey is often referred to in parliamentary hearings and in official documents.

In the Bank of Italy SHIW data have frequently been the basis of structured research projects. One of the main ones was the Saving and the Accumulation of Wealth project, coordinated by Albert Ando, Luigi Guiso and Ignazio Visco at the end of the 1980s, which studied the determinants of savings, the implications of ageing on pension systems, the distribution of wealth, and liquidity requirements.

In the 1990s the SHIW played a key role in the research project coordinated by Amartya Sen which aimed to measure human well-being from the point of view of the capability approach and explore its implications for policy design. Another research theme that has been covered further thanks to SHIW data is that of social capital. Studies have shown the complex interactions between social capital and the education system, the public administration, and economic and political governance.

In the 2000s, in tandem with an economic phase that saw a modest growth in income and an important role for capital assets in sustaining the economic well-being of households, studies on the survey data were a central part of the study of household wealth in Italy, a project I personally pushed as the then Head of Statistics. This allowed us to publish the first aggregate accounts of household wealth several years ago. Istat has begun to publish the balance sheets of all the institutional sectors on a regular basis this year.

On the policy side the survey data and the macroeconomic estimates on wealth are, among other things, extremely useful for monitoring the financial vulnerability of

households. For example, in the latest Financial Stability Report we noted that households' financial conditions strengthened, thanks to an increase in disposable income and low interest rates, and vulnerability was reduced.

The survey is also widely used in academic research outside the Bank. Since the early 1990s, we have been able to allow external researchers to access individual information, while preserving the anonymity of the responses. A bibliography of scientific works that have used the survey data includes, to date, over 800 articles by more than 450 authors, only a small fraction of which have been produced in the Bank. The most common themes are income and wealth distribution, inequality and poverty, savings and its determinants, fiscal policy, income and employment expectations, and the role of education. In more recent years attention has focused largely on household vulnerability, debt sustainability and financial weakness.

A look at the list of works that will be presented during the conference shows how the information provided by the SHIW is used to explore many economic policy issues. For example, how does a tax break impact on consumption (Rondinelli and Scoccianti)? What is the effect of an unexpected change in property prices (Jappelli and Padula)? How severe is the legacy of the global crisis in terms of household over-indebtedness (D'Alessio and Iezzi)? What is the reach of the underground economy (Cappariello, Marino and Zizza)? What is the effect of having wealth hidden in tax havens (Pellegrini, Sanelli and Tosti)?

#### **4. Microdata, macrodata, new sources, new technology: future challenges**

Many challenges lie ahead of us. International comparability, the matching of SHIW data with those from other surveys or administrative sources, consistency between microeconomic information and aggregate estimates, timeliness of the estimates, and dissemination of the data to a wider public with various requirements are some of the more prominent issues. Let me briefly consider each of them in turn.

The Bank of Italy has been a contributor to the Luxembourg Income Study since the mid-1990s and endorsed the Luxembourg Wealth Study in the following decade. The goal of both these projects was to improve international comparability by creating a cross-country database of microeconomic data on household income and wealth to combine data collected in a number of countries, and ‘post-harmonizing’ them as much as possible. In recent years this survey has become part of the Eurosystem’s Household Finance and Consumption Survey (HFCS), an ambitious project that endeavours to develop consistent surveys on household finance in the euro area.

As is the case with many countries, surveys on income and wealth yield results that may differ from the macroeconomic aggregates. For example, looking at surveys conducted by the European System of Central Banks, the estimate of average net wealth yielded by these surveys is between 10 and 30 per cent lower than national accounts figures. The discrepancies are larger for financial assets. Part of the explanation for these inconsistencies lies in differences in definitions, but they often appear to be due to the unwillingness of households to disclose some economic facts in full, and to the under-representation of certain groups of the population, mainly the wealthiest households, who are few in number but account for a large share of certain assets. There are various ways to tackle this issue, including matching survey data with administrative and other data, and improving the sample to improve the representativeness of the right tail (i.e., over-sampling of the ‘rich’). We have been experimenting with such strategies and will continue to do so in the future. Perfect consistency is probably impossible, but improvements can surely be achieved.

In recent years, administering surveys through the internet or by e-mail has become increasingly common. This practice improves efficiency and timeliness, but limited access to the internet for certain segments of the population is still an obstacle to their full-scale adoption. However, as the population becomes more computer-literate, internet-based surveys on households will most likely become more and more useful



alongside more traditional methods. The survey on households will probably have to be redesigned to take full advantage of new opportunities.

As a producer of data, the Bank of Italy has always endeavoured to make its statistics available to the widest possible audience. As I pointed out earlier, the Bank has paved the way for a greater dissemination of microdata by releasing anonymised data for research purposes since the end of the 1980s. In the 1990s the Bank also retrieved microdata from its surveys from 1977 onwards, scattered among several different databases that had by then become obsolete, and made them available in a historical database as a response to the growing demand by researchers for standardised microdata. Following these developments and thanks to technological advances, the Bank subsequently decided to simplify the administrative procedure required to obtain the data. Whereas previously data were released on tape drives to a narrow and selected audience, the system has gradually evolved into a virtually full release of anonymised microdata, first on floppy disks, then on CDs, and now on the internet. Within the Eurosystem's Household Finance and Consumption Survey (HFCS), Italian data are available on request alongside those of other euro-area countries. For data on firms (both structural and cyclical), which are much more difficult to anonymise, the Bank has developed a remote access system called BIRD that enables users to perform their analyses online, thereby preserving data confidentiality. This strategy has proved to be more effective than one in which data are available on site, which requires the costly simultaneous presence of users and supervisors. We plan to make a similar system available for certain bank data.

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Before closing let me also mention that this conference has given us the opportunity to add more information to the section of our website devoted to the survey. Starting today we are making available an improved set of tables and graphs and a reconstruction of income gross of taxation. The site will also include historical data, for example statistical tables, questionnaires and memos for the surveys pre-dating 1977.

The time span and quality of data made available will continue to improve. Thanks to the continued interest of the Bank and – let me add – to the passion and competence of our statisticians, I count on the SHIW contributing to research and policy debate for at least the next fifty years.