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Statistics

Methods and Sources:
Methodological Notes

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Surveys on Financial Literacy and Digital Financial Skills in Italy: Young Adults

General Aspects

In the first quarter of 2023, the Bank of Italy conducted a survey on financial literacy and digital financial skills among young people aged 18 to 34. The survey aimed to assess the understanding of basic economic and financial concepts, the financial behaviours of respondents, and the range of financial services used, from traditional to more complex ones. The questionnaire included questions to capture the opinions and aspirations of young individuals, with a dedicated section exploring their interest in economic and financial topics.

This note provides a synthesis of the main methodological features of the survey. It discusses the reference universe, sample characteristics, and the questionnaire administered to the respondents. Additionally, it outlines the data collection methods and finally, the analyses conducted to ensure the quality and representativeness of the information collected.

Reference Universe and Sample

The reference universe for the survey comprises individuals aged 18 to 34 residing in Italy. Individuals were quota-sampled and the quotas reflect the distribution of the population by age and geographical area of residence. Information on the characteristics of the reference universe is sourced from ISTAT. The sampling design considers three age groups (18-23, 24-29, and 30-34 years) and five geographical areas (North-West, North-East, Centre, South, and Islands). The Cartesian product of age groups and geographical areas defines the number of classes (15), where statistical units are allocated in proportion to each class's importance in the population.

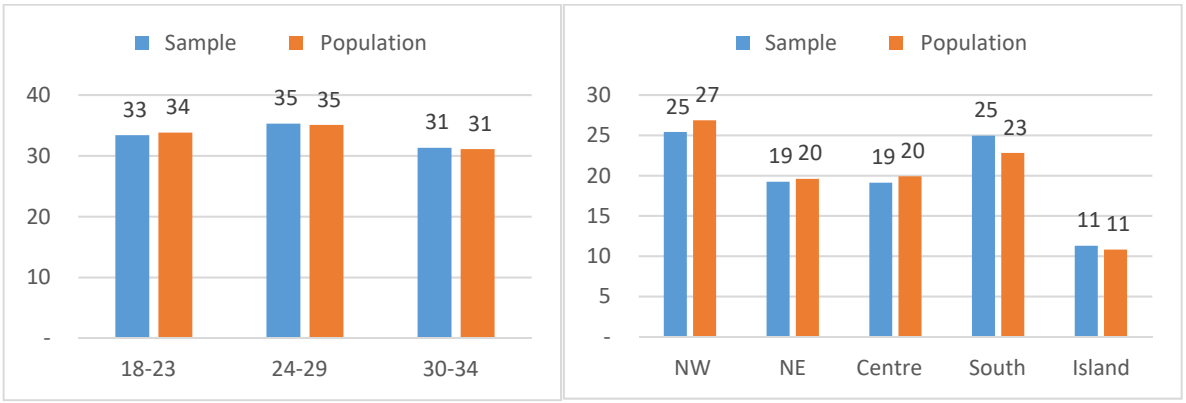
The sample surveyed includes over 5,000 young individuals. To obtain this sample, approximately 42,000 individuals were contacted, resulting in a response rate of 12.7 per cent.[1] Non-responses were higher among less educated individuals and younger age groups within the survey's reference universe.

[1] The response rates of online surveys are generally low. For a detailed discussion, see Daikeler et al. (2020), "Web Versus Other Survey Modes: An Updated and Extended Meta-Analysis Comparing Response Rates," Journal of Survey Statistics and Methodology.

Figure 1 illustrates the percentage compositions of the population and the sample by age and geographical area of residence.

Figure 1

Composition of the sample and reference population by age and residence of respondents
(percentages)



Questionnaire and Data Collection

The questionnaire includes sections containing demographic information, financial knowledge, behaviours and services used, including in the digital financial environment. Other sections focus on opinions, aspirations and interest in economic and financial topics. Provisional versions of the questionnaire underwent pre-testing (expert review and respondent debriefing) within the Bank of Italy. Further refinements incorporated the results of a pilot exercise conducted on a sample of 50 units by the data collection company.

Data were collected using the Computer Assisted Web Interview (CAWI) technique. The online questionnaire application was prepared for PC and laptop devices, tablets, and mobiles. Survey participants were selected from individuals belonging to the sample available (opt-in) to the company, which provided a toll-free number for participants' assistance requests.

The average questionnaire completion time was 18 minutes, with smartphones used in 73 per cent of cases, PCs in 22 per cent, and tablets in 5 per cent.

Data Quality

Analyses were conducted on the quality of the information collected, considering factors such as questionnaire completion time and conceptual coherence between responses in different parts of the survey. Unlikely completion durations and questionnaires with inconsistencies hindering data interpretation were excluded from the results. Questionnaires showing conceptual inconsistencies generally had a low completion time. In some cases, the survey allowed ‘open’ responses, formulated alternatively to ‘closed’ options (benchmark). Text analysis facilitated the reclassification and use of responses given in an ‘open’ form.

In survey research, information on the habits, behaviours and opinions of respondents can be subject to risks of bias relating to memory bias or social desirability bias. The Computer Assisted Web Interview (CAWI) technique used in this survey mitigates these risks, mainly due to the absence of the interviewer's role in the data collection process and to flexibility in completion times.[2]

Weighting and Estimators

For reporting survey data to the universe, post-stratification and statistical raking methods were applied. Post-stratification mitigates distortions relating to non-response,[3] refining the distribution of statistical units to account for relevant heterogeneities. For this survey, 90 post-strata were defined, obtained from the Cartesian product of 15 classes defined based on the geographical area of residence and age class, which is one of the variables used in the non-response analysis; two classes defined by gender (male, female); three classes defined based on the size of the municipality of residence (up to 30,000; from 30,000 to 100,000; over 100,000 inhabitants). Within each post-stratum, the weights are defined by the formula:

$$w_{ij} = \frac{N_i}{Nn_i}$$

where w_{ij} is the weight assigned to unit j in the i-th post-stratum; N is the size of the reference population; n_i is the number of valid interviews in the i-th post-stratum, and N_i is the size of the population in the i-th post-stratum.

Lastly, the statistical raking technique was applied to enhance the representativeness of the sample based on education level, which is another important variable in the non-response analysis. Three education levels were considered: lower secondary school diploma or lower; upper secondary school diploma; degree.[4]

For the target variables, the Horvitz-Thompson estimator was used, defined based on the recalibrated sample weights using the techniques described. The linearized Taylor series expression was used to estimate the variance of the estimators. Analyses conducted using resampling methods (bootstrap) yielded similar results.

[2] See Kreuter et al., (2008), "Social Desirability Bias in CATI, IVR, and Web Surveys: The Effects of Mode and Question Sensitivity", *Public Opinion Quarterly.*

[3] Non-responses could lead to distortions in the results of survey research if segments of the population less willing to participate are underrepresented. The extent of distortion may depend on the gap between the expected value of the measured variable for survey participants and non-participants.

[4] Based on these levels, the 'marginal' distributions of the sample are aligned with those of the reference population. The calibration of the final weights is carried out by consecutively aligning the marginal distributions of the sample along each of the considered dimensions (geographical area, age group, gender, size of municipality of residence and educational level).