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Organization of data collection and sharing, and the management challenges for the implementation of Statistical Data and Metadata eXchange**The Euro-area Household Finance and Consumption Survey:
survey mode, oversampling wealthy households and other
methods to reduce non-response bias****Note by the European Central Bank***Summary*

Convincing respondents to participate in a survey in which they will be requested to provide wealth and/or income information is a well known challenge. Non-response is not a random phenomenon: it is typically more pronounced in specific household subgroups (for instance those on the top income and/or wealth deciles) than in others. For that reason, adopting specific measures to reduce unit non-response turn out fundamental to avoid significant bias in the variables of interest. Taking as a basis the experience gained with the Eurosystem Household Finance and Consumption Survey, the paper highlights, in particular, the importance of personal interviews, of oversampling wealthy households and of other fieldwork procedures to achieve better response rates.

I. Introduction¹

1. Imagine tomorrow you are requested to participate in a survey and provide information on all your possessions and debts. What would be your first reaction?

2. Indeed, while unit non-response may potentially affect any kind of survey, household wealth surveys typically register lower response rates largely because of the sensitivity of the survey topic. In addition, such surveys may severely suffer from the effects of non-random selectivity caused by the difficulty to contact and convince particular groups of households (for instance those on the top income and/or wealth deciles) to participate. Indeed, unit non-response is likely to more severely affect wealthy households, which usually hold particularly interesting information in the specific case of household wealth.

3. These are important challenges for the Eurosystem Household Finance and Consumption Survey (HFCS). The HFCS is an initiative of the euro area national central banks coordinated by the European Central Bank, which consists of a set of ex-ante harmonised wealth surveys conducted across all seventeen euro area countries. The HFCS collects microdata on household real and financial assets, debts, consumption and saving, income and employment, demographics, future pension entitlements, intergenerational transfers and gifts and risk attitudes. The first wave of the HFCS is currently undergoing, and the resulting micro data will be made available to the research community in the future.²

4. Besides this introduction, this paper is split into four sections. Section one elaborates on the importance of personal interviews to collect wealth survey data from households. Section two explains why oversampling wealthy households is a very effective way to mitigate distorting effects coming out of non-random selectivity bias. Section three puts forward other methods to maximise participation and reduce non-response bias in wealth surveys largely based on the experience gained with the HFCS. Finally, section four concludes.

II. The importance of personal interviews to collect wealth survey data from households

5. Technically, unit non-response occurs when information cannot be obtained from an (eligible) unit included in the initial sample. Non-response may be due to the inability to make contact with the selected sample unit, his/her unwillingness to participate in the survey or to other reasons such as language barriers or some other incapacity. Apart from reducing the sample size and hence increasing the variability of the estimates, non-response may introduce bias in the estimates of the variables of interest.

¹ This paper heavily draws on the feasibility study prepared by the Eurosystem Household Finance and Consumption Network and submitted to the ECB Governing Council, the field experience in conducting the HFCS and the experience of the national surveys that already existed in several euro area countries prior to the HFCS. Useful comments received from Michael Ehrmann and Patrick Sandars are gratefully acknowledged.

The views expressed in this paper (as well as any possible mistakes) are exclusively the author's and do not necessarily represent the views of either the European Central Bank nor of the Eurosystem Household Finance and Consumption Network.

² More information on the HFCS is available on http://www.ecb.europa.eu/home/html/researcher_hfcn.en.html

6. Survey design literature and empirical evidence to date confirm that the survey mode (i.e. the way the survey is conducted, whether through face-to-face interviews, paper questionnaires, over the internet, via telephone, etc.) is an important determinant of measurement error. The use of several modes to interview different sample units entails high risks to comparability due to undesirable distortions such as social desirability bias³ and respondent satisficing⁴. Most importantly, different modes applied across countries may affect the comparability of the aggregate results.⁵

7. In the specific case of a wealth survey (such as the HFCS), conducting the survey via face-to-face interviews is deemed to be of particular importance. The HFCS follows a Computer-Assisted Personal Interviewing (CAPI) survey mode⁶, i.e. face-to-face interviews administered by an interviewer, using a computer to record the replies provided by respondents.

8. The choice made for the HFCS can be explained by the important role attached to the interviewers in a survey on income and wealth, which relates to: (1) persuading respondents to participate in the survey / increasing response rates and reducing the risk of response bias; (2) building up trust vis-à-vis respondents such as to lower the likelihood that they stop providing answers in the middle of the interview; (3) minimising item non-response, i.e. none or incomplete answers to individual questions, by personally assisting (i.e. offering pre-designed prompts) - if required - during the interview; (4) avoiding incomplete responses; (5) providing additional information (interviewers' observations / paradata); etc.

9. The use of a computer allows a smooth and error-free administration of the routing of the questions (typically complex in a wealth survey like the HFCS), the application of consistency checks during the interview and the automatic storage of the data. Eliminating errors at the interview stage improves the quality of the data collected and may save considerable resources in the subsequent data editing and cleaning phase.

10. Optimal survey design advises on the use of a main method (in this case, CAPI) up to its maximum potential.⁷ The use of different auxiliary modes for a few survey items may also be useful though, for instance to reduce social desirability bias and item non-response. To that aim, the most sensitive questions and/or some questions that may require further reflection on the part of respondents or consulting additional documentation may be asked differently, e.g. CAPI may be complemented by telephone interviews or self-administered survey modes as long as they are applied consistently across sample units (otherwise, differences across households may be hidden behind mode effects).

11. To conclude, employing a single survey mode to collect survey information avoids distortions that may significantly affect comparability across different sample units and

³ When respondents report a more socially desirable answer in order to portray themselves in a good light. (DeMaio, T. J. (1984))

⁴ Provision by respondents of "adequate" but suboptimal, incomplete or biased information, which nonetheless may in most cases look reasonable to the interviewer. (Krosnick, J. A. (1991)) This may be due to several reasons, e.g. the difficulty of the questions, (lack of) respondents' motivation, inability of the respondent to answer, etc. which for a wealth survey may be more efficiently prevented by specific survey modes, e.g. by the active interaction between respondents and interviewers.

⁵ Lyberg, L. and Kasprzyk, D. in Biemer (1991) / Groves, R.M. et al (eds) (2004) / S., Häder, S. & Lynn, P. (2006) / Lynn, P. (1998) / Jäckle, A., Roberts, C. & Lynn, P. (2006) / Dillman, Don A. 2006 / Dillman, D. A., Christian, L. (2005) / Malhotra, Neil, and Jon A. Krosnick. (2007).

⁶ With the exception of the Netherlands, where the HFCS is conducted via web-based interviews.

⁷ de Leeuw, E. D. (2005).

across countries. If for reasons of convenience personal interviews need to be complemented with telephone interviews or self-administered survey modes, it is recommendable that such modes are applied consistently across sample units in order to avoid introducing distortions and/or comparability issues.

III. Oversampling wealthy households⁸

12. Wealth surveys typically pursue two competing objectives: on the one hand, representing the behaviour of “typical” (average) individual households and, on the other hand, representing the total mass of wealth. While for the former target it is optimal that the sample proportionally represents the population as a whole, for the study of wealth, the sample should adequately represent total wealth.

13. The second objective entails a few challenges. On the one hand, wealth is highly unevenly distributed, i.e. a small fraction of households holds a disproportionately high share of total wealth⁹. On the other hand, portfolio sophistication also increases with wealth, such that certain financial instruments are almost exclusively held (and in large quantities) by the wealthiest households.¹⁰

14. Given the skewness of the distribution of wealth across households and the fact that only wealthy households hold certain financial instruments, if such households are not well represented in the final sample the results will likely not provide a reliable picture of the distribution and composition of household portfolios. A given level of precision would either require a rather large (and costly) sample or, if efficiently designed, a sample which should include a higher than proportional number of wealthy households. Indeed, using data from a purely random selection of units would thus yield a statistically very inefficient estimate of the distribution of wealth.¹¹

15. There are several reasons why achieving a representative portion of wealthy respondents through standard sampling-design and contact-strategy procedures is very unlikely. Firstly, establishing contact with wealthy respondents may be more difficult as they are likely to possess more than one residence, to be surrounded by additional security measures and also to be absent from their principal residence during prolonged periods of time. Secondly, both available time as well as self-perceived value/time ratio usually predispose wealthy households to refuse participating in surveys; in practice, a differentiated contact and interviewing strategy possibly implying additional persuasion effort is required. In many of these cases, best-practice measures may help mitigate the effects on final non-response, i.e. more flexible contact strategies and adaptation to household schedules, additional contact efforts, collection of information from non-household members (e.g. portfolio managers, accountants, lawyers), etc.

⁸ Household Finance and Consumption Network (2008.a).

⁹ Existing data reflect the unequal distribution of household wealth. For instance, the wealthiest 20 per cent of the households in Italy hold approximately 75 per cent of financial wealth for Italy (Italian Survey of Household Income and Wealth 2008). In Spain, according to tax records 0.4 per cent of the households holds 40 per cent of taxable wealth.

¹⁰ For example only 8 per cent of the population in Italy are holders of government securities according to the SHIW. Assuming a large part of bond holders belong to the upper wealth classes, in the absence of oversampling the analysis of the behaviour of bond holders would be based on less than 700 households out of a total SHIW sample of around 8,000 households.

¹¹ Kennickell, A. (2005) / Bover, O. (2004).

16. All in all, while oversampling the wealthy may add to total costs, it increases precision and reduces non-response bias in wealth surveys. In addition, oversampling also improves efficiency in the estimation of variables positively correlated with wealth.

17. There are several information sources which can be used to identify wealthy potential respondents, for instance wealth tax files where such taxes still exist¹², income tax files (taking financial – possibly also rental - income as a proxy for household wealth), property taxes and/or registers, tax and socio-economic information at municipality or small area level, census of dwellings, etc.

IV. Other methods to maximise participation and reduce non-response bias in wealth surveys: experience gained with the Household Finance and Consumption Survey¹³

18. Different approaches and practices may significantly affect response rates. While some of these factors may hardly be controlled (e.g. the sensitivity of questions about wealth and income, the need to cover both urban and rural areas - with response rates significantly lower in the former -, etc.), applying best practices with regard to some others may make a big difference.

19. Over the fieldwork for the first wave of the HFCS, different factors were identified to have significant beneficial effects on achieved response rates. The following is a non-exhaustive selection of such factors:

- (a) Selecting experienced interviewers and participating actively in their training;
- (b) Carefully monitoring interviewers' workload and compensation scheme;
- (c) Providing concrete instructions as to the contact schedule;¹⁴
- (d) Taking due care in providing potential respondents with information materials beforehand (e.g. advance letter signed by the national central bank Governor closely before the first interviewer's visit, supporting materials to be used during on-site visits covering uses of the data, etc.);
- (e) Selecting incentives that respondents may particularly appreciate;¹⁵ and
- (f) Providing feedback to respondents ex-post about uses of the data (particularly helpful in the case of panels).

20. As a last resort, refusal conversion (i.e. applying additional effort to convince initially reluctant respondents to participate, possibly via a refusal-conversion specialist) may also have non-negligible effects on response rates.

¹² In a large number of euro area countries, wealth taxes have been abolished in recent years.

¹³ Pérez-Duarte S., Sánchez-Muñoz C., V.-M. Törmälehto (2010) / Household Finance and Consumption Network (2008.b).

¹⁴ For the HFCS, it was specifically recommended to make a minimum of four personal visits to each sampling unit (including at least one visit in the evening and one over the weekend, spread over at least two different weeks) as well as to systematically record contact attempts and check them regularly.

¹⁵ The best incentives very much vary from country to country: symbolic tokens (for instance symbolic goods only produced by central banks), lottery tickets, charity donations, occasionally some money, etc.

21. After the fieldwork, there are additional ways to minimise bias due to non-response. In particular, adjustment of the design weights may be conducted by using response propensities, for instance within homogenous response groups.
22. Such adjustment requires that information on the characteristics of non-respondents are known. Possible sources that may be used to that aim are
- (a) Contact attempts;
 - (b) Interviewer observations (paradata information);
 - (c) Panel attrition;
 - (d) Microgeographic information; information derived from the sampling frame;
 - (e) Record-linked data from administrative and statistical registers.
23. Finally, it is also worth to try and get some limited information on personal reasons to refuse participating from non-respondents. This is not only useful to implement corrections ex-post, but also to introduce adjustments in the contact strategy for subsequent waves of the survey which may also help reduce non-response in the future.
24. Interviewer observations on non-respondents in the euro area HFCS comprise descriptive information on geographical distribution, dwelling rating, appearance, location, surrounding neighbourhood, and security measures which are part of the paradata information collected in the survey. Such variables are indeed very useful to detect specific patterns of non-response.

V. Conclusions

25. If increasing response rates is a challenge for most household surveys, it is particularly challenging in the case of wealth and income surveys. Being a new survey which touches upon such sensitive areas, the Eurosystem HFCS has been confronted with these challenges from the very outset. The experience gained and the lessons learnt throughout the first wave of this survey are reflected in the set of survey practices to reduce non-response that have been presented in this paper.
26. The paper highlights the importance of conducting a wealth survey via computer-assisted personal interviews. In addition, given the importance of achieving a good representation at the top of the wealth distribution a wealth survey should ideally over-sample wealthy households. Given additional difficulties to establish contact with them, ideally a differentiated contact strategy should be put in place. Finally, a number of other best survey practices may significantly contribute to achieving better response rates. Some limited descriptive information on non-respondents and on the reasons for participation refusal also prove fundamental in two ways: first, to introduce re-weighting adjustments to the survey data in order to reduce non-response bias ex-post; and second, to improve contact strategies with a view to subsequent waves of the survey.

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