Developing the questionnaire for the Eurosystem Survey on Household Finance and Consumption

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Abstract

This paper describes the development process of a questionnaire intended for the euro area Household Finances and Consumption Survey (HFCS) currently being prepared by the Eurosystem (national central banks in the euro area and the European Central Bank (ECB)) and some National Statistical Institutes. The survey will cover information on manifold households' decisions with regard to holding real and financial assets, taking debt, risk attitudes, employment, income, pensions, intergenerational transfers, gifts, consumption and savings, thus expected to result in a powerful research tool.

The process of preparing the survey and the questionnaire in particular was marked by several challenges posed by the multidisciplinary nature of the HFCS as well as by the cross-national nature of the initiative. These challenges and the development of the harmonised HFCS questionnaire are illustrated in this paper.

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Introduction

The Eurosystem (national central banks in the euro area and the European Central Bank (ECB)), in collaboration with a few euro area national statistical institutes, is currently implementing a new survey of euro area households: the euro area Household Finance and Consumption survey (HFCS).

This paper describes the process of development of the questionnaire for this survey which has been prepared by a network of experts from the Eurosystem and the participating national statistical institutes.

The paper is structured in five sections. Section 1 describes the motivation behind the Eurosystem HFCS initiative. Section 2 provides a few general features of the HFCS. Section 3 describes the common questionnaire and summarises the challenges faced during its development. Section 4 elaborates on the process that shaped the development of the questionnaire, particularly on its pre-tests carried out by a number of countries. Section 5 concludes and provides information about the next steps of the project.

1.   Why a euro area survey on Household Finance and Consumption?

Households are characterized by extreme heterogeneity in their financial holdings and behaviour. For example the wealth distribution is extremely skewed with a small fraction of households owning a large percentage of total wealth.[3] Depending on their income, wealth, demographics, risk aversion and many other factors, households make very different choices regarding issues such as consumption, savings, investments, borrowing, etc. Also, households respond differently to macroeconomic shocks, such as to changes in interest rates, house prices, employment situation of its members, taxes, pension reforms. Numerous research papers use micro data to illustrate the immense heterogeneity in household economic behaviour, for example, the response of consumption to shocks, the causes and consequences of household indebtedness and its connection with house prices, household response to various macroeconomic shocks and to institutional changes like pension reforms. Aggregate data can hardly provide an adequate picture of this heterogeneity.

Micro level data on household finances can therefore have substantial value-added for research and policy analysis in areas relevant for central banks, including monetary policy, financial stability and payment systems. For example, in the case of household debt, whereas aggregate statistics illustrate overall changes in the level of debt incurred by households, micro level data can show how debt is distributed across different household categories as well as across different income and age classes. Micro data can shed light on whether debt increases are concentrated on the most vulnerable household groups[4], the latter entailing higher risks to financial stability and/or to household consumption.

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[3] See for example, for the U.S: Campbell 2006, for Italy, Germany and the Netherlands: Guiso, Haliassos and Jappelli 2002.

[4] An illuminating example on how macro- and micro data can lead to different conclusions regarding household debt is shown in Farinha (2003).

Even though surveys on household wealth and consumption exist in some countries[5], consistent and comparable data across the euro area are still lacking.[6] Acknowledging the need for a survey that would compensate for this shortcoming, the feasibility of implementing a HFCS under the responsibility of the Eurosystem was examined by two subsequent expert groups comprising euro area central banks' staff, ECB representatives, NSI representatives, a Eurostat observer (the co-ordinator of the EU Survey on Income and Living Conditions) and three renowned consultants.

2. General features of the HFCS

The Eurosystem HFCS will be conducted at a decentralised level following an output-oriented approach. Although in the initial stages of discussing the survey it was thought that all participating countries would use a common questionnaire, it soon became apparent that this would not necessarily be the most efficient approach. Given the considerable differences existing across euro area countries, it was concluded that in a number of areas obtaining comparable information requires questions to be formulated differently within each country. To that aim, considerable knowledge on the specific institutional, cultural and economic set up of each country is deemed necessary. In addition, some of the countries which are already running a similar survey have already developed their own questionnaire, which they prefer to continue using as much as possible, as it has proved to work well in the field. Finally, in some countries, part of the information required would already be available via administrative sources and would thus not need to be collected through the questionnaire.

It was therefore agreed that the countries will strive for harmonisation on the survey 'output side'. This means, that the countries will deliver the same set of variables, the 'output variables', which have been commonly defined. A set of so-called 'core' output variables will be delivered by all participating countries. In addition, a set of non-core variables has also been defined and countries can freely decide to collect (some of) them in their surveys. The advantage of also defining non-core variables is that if the countries decide to include related questions in their questionnaire, this can be done in a standardised way so as to allow for cross-country comparability.

Common definitions and questions corresponding to each output variable have been stored in a single database. The blue-print questionnaire will be used primarily by the countries implementing such a survey for the first time.

3. The common Eurosystem questionnaire – content and challenges

It was early decided that the mode for the implementation of the HFCS should be via Computer Assisted Personal Interviews (CAPI), i.e. via face-to-face interviews. Therefore, the questionnaire was designed in a way that should enable a smooth interaction between interviewers and respondents and the use of the computer over

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[5] Related surveys are currently conducted in Greece, Spain, France, Italy, Cyprus, the Netherlands, Portugal and Finland.

[6] This has been noted for example in the ECB report 'EU Banking Sector Stability' (2007) and Bover et al. (2005).

the interview.[7] The selection of the survey mode can be explained by the general nature of the survey: since the areas covered are both complex and sensitive, the mediation of the interviewer is deemed essential. Upon establishing first contact with the household, interviewers can explain the importance of the survey, its purposes, the confidential treatment of the data, etc. thus building trust of the respondents and increasing the probability that respondents agree to participate in the survey. Later on, during the interview, they may further assist respondents by explaining them the meaning of some questions as well as, reassuring them about the intended use of their answers, thus reducing item non-response and the risk of incomplete interviews. The computer implementation is also important as it facilitates routing and enables immediate automatic detection of errors.

Questionnaire content

The questionnaire covers the following topics: demographics, employment, income and pensions (asked of every individual member of the household older than 16) as well as financial and real assets, liabilities, intergenerational transfers and gifts and consumption (asked of the household as a whole). Each topic forms a separate section in the questionnaire, while additional questions on attitudes regarding financial behaviour were inserted throughout the questionnaire.

The structure of the questionnaire is depicted in the following diagram:

Diagram 1: Structure of the HFCS questionnaire
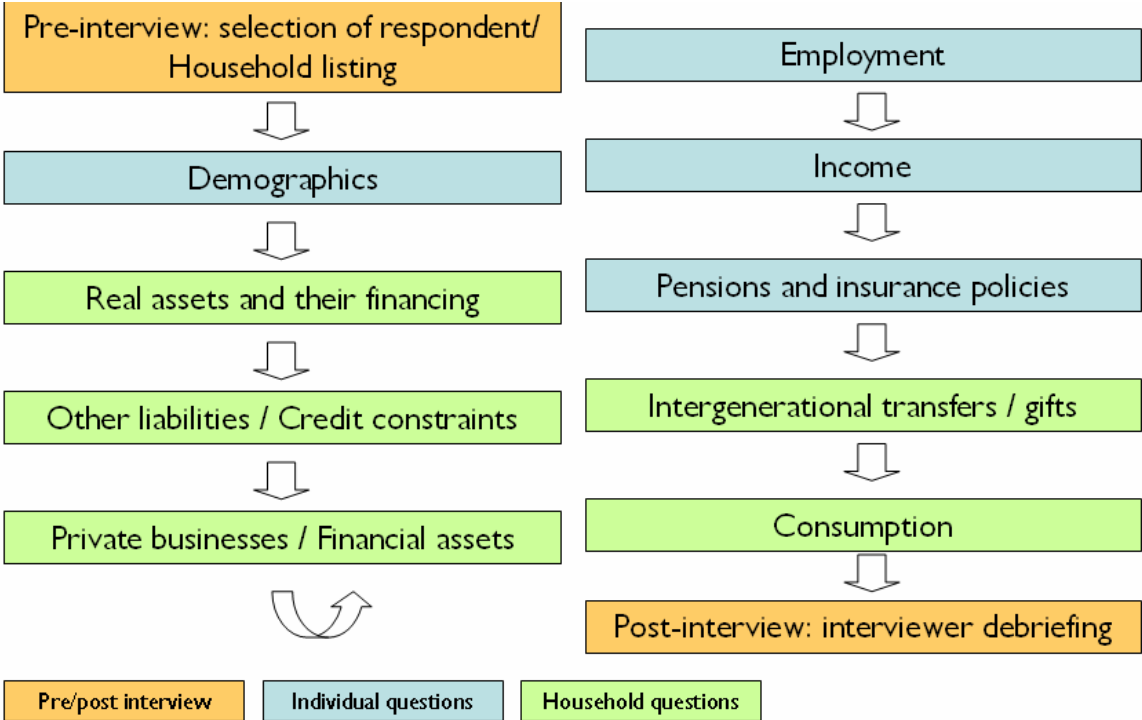
Prior to the actual interview, the main respondent, that is the respondent that is going to answer the questions referring to the whole household, is selected: this person is the so-called 'financially knowledgeable person', since he or she should be the one

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[7] The effects of survey modes have been explored extensively in the literature, see for example Lyberg & Kasprzyk (1991), Groves et al. (2004) Chapter 5, Dillman (2006).

best placed to provide information about the household's finances. To select the main respondent and define the household ('household listing'), a series of standardised rules is followed by all countries. In addition, a single definition of household[8] will be applied by all countries in order to ensure consistency with regard to the unit of analysis - i.e. the household - across all country surveys.

The first section of the main part of the interview is on the demographic characteristics of the household members, e.g. age, gender, education, nationality, marital status or relationship to other household members.

The second section focuses on holdings of real assets and encompasses the main residence, other properties, vehicles and valuables of the household. It also covers extensive details on the loans that are collateralised on the household's real assets (including issues such as refinancing, interest rates, loan purpose, etc.).

The following section covers detailed characteristics of other kinds of debts of the household, i.e. overdrafts, credit lines, credit-card borrowing, leases, consumer / instalment loans, etc. In addition there are a few questions on financial constraints.

The next section covers businesses (differentiating between passive investments in private businesses and self-employment businesses, the latter being covered in a few more detail) and financial assets (with an extensive coverage of the household's portfolio). Some questions on risk attitudes are also included at the end of this section.

The section on employment covers employment status, main current employment, employment history and expected age of retirement of household members above 16. The income section records the 12-month gross income by individual sources, which is compared with the past average household income and with the next-year expectations.

The section on future pension entitlements records a few questions on public, employment-related and private (not-employment-related) pension schemes as well as on life insurance. The section on intergenerational transfers and gifts includes a few questions on the two most important ones received by any member of the household as well as on expected inheritances.

The final section of the interview is on consumption. This section is not meant to cover extensively all consumption expenditure of the household under a budget-type battery of questions but rather to collect a few consumption indicators (e.g. food consumption, regular expenses, etc.). Respondents are also asked to compare latest overall consumption to average expenses and income. A few questions on saving motives and access to emergency assistance are also included in this last section.

After the interview, the interviewer fills in a section about issues related to the interview, such as perceived respondent's accuracy, use of supporting documents, (miss)trust on the interviewer, etc. Such information is useful for ex-post adjustments such as correction of evident data errors and imputation of missing values.[9]

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[8] Household is defined as a person living alone or a group of people who live together in the same private dwelling and share expenditures, including the joint provision of the essentials of living. The household definition largely follows the one applied in the Eurostat's EU-SILC survey.

[9] In addition to being helpful for data editing and imputation, the "paradata" provided by the interviewer also serves to improve the quality of future waves of the survey. For instance, it can be used for non-response analysis (see Kennickell, 2005 and Lynn, 2003).

General guiding principles of the questionnaire development

A basic principle in determining the content of the questionnaire was that the data should be adequate to address the most important policy and research questions. To that purpose research papers on the most relevant topics for monetary policy based on existing survey data were examined and the latter largely incorporated to the information to be collected through the questionnaire.

It was also considered important that concepts and definitions should be consistent to the extent possible both with macroeconomic aggregates (mostly National Accounts) and with the recommendations of the Canberra Group on Household Income and Statistics contained in its 'Final Report and Recommendations' (Ottawa, 2001). Micro-macro comparability is desirable since the macro aggregates could serve as a benchmark for survey estimates, as the latter are subject to under-reporting and/or non-response; on the other hand, survey data could be used for assessing the quality of macro aggregates, in particular for items for which direct statistical information is weak, or even fill gaps in the data when reliable estimates cannot be computed. For these reasons, consistency with National Accounts was studied extensively and the current core questionnaire allows for a conceptually meaningful and fairly comprehensive comparison between the survey estimates of the household income and wealth and the aggregate data available from the National Accounts sources, both at the national level and for the euro area as a whole (Euro Area Integrated Accounts). However, because the survey categories must be translated into terms understandable to a broad population of respondent households, some approximation is inevitable. Comparability can further be improved if 'non-core' questions are included in the questionnaire.

Consistency was also sought with other European Household Surveys, such us the EU-Survey on Income and Living Conditions (SILC). To that purpose, the definitions were to the extent possible consistent with recognised definitions and standards. For instance, the household definition is very similar to the one used in EU-SILC (with minor adaptations to a survey with a focus on household wealth).

A principle arising from cost and data quality considerations was that the interview should last on average around one hour. And since some countries aimed to include non-core and/or other country specific questions, it was agreed that the core part of the questionnaire should last somewhat less than an hour. Long interviews may inhibit respondents' participation in the survey, induce errors due to respondents' fatigue, affect the level of item non-response and can ultimately make respondents break off the interview. On the other hand, once respondents decide to participate in the survey, they may appreciate that sensitive aspects like income and wealth are dealt with rigorously over the interview and excessively short/superficial interviews may induce mistrust on the seriousness of the survey. Striking the right balance between adequate detail and response burden was indeed a major challenge for the development of the questionnaire.

Challenges

Both the topic and the international character of the survey posed significant challenges in the development of the questionnaire.

Information on households' investments, liabilities, income, etc. is considered particularly sensitive and the questions may appear the more intrusive the more details are asked. On the other hand, sufficient detail is important for analytical purposes, and also because it can help improve the quality of the answers. For

example, asking for the detailed components of income and wealth (sometimes even going through the largest individual financial instruments one by one) helps respondents remember all the individual sources of income or wealth and so the resulting total is more accurate than the one obtained by asking for the totals straight away. On the basis of the countries' previous survey experience and the pre-tests, questions were formulated in a way that provides sufficient accuracy without overburdening respondents.

Respondents also often have difficulties responding to many questions on financial matters. Answering such questions, for example, on interest rates, monthly re-payments and outstanding balances, pension contributions, mutual funds characteristics, etc. frequently requires consulting documentation. Bearing this in mind, while setting up the questions, efforts were made to keep the questions simple, to word them in everyday language and to place them in a logical sequence.

Additional challenges stemmed from the cross-national character of the survey. Households' financial behaviour is heterogeneous across countries: for instance, in some countries households invest predominantly in real estate, whereas in others they tend to prefer financial assets; in some countries people use extensively credit card loans, whereas in others such loans are very rare. Consequently, each country survey would ideally aim to cover such predominant topics with the maximum level of detail. Having to combine the priorities of all countries within one single questionnaire, bearing in mind the limitations related to the length of the interviews posed indeed a substantial challenge.

Similarly, as pension systems are quite country-specific, with some countries having mainly state/defined-benefit-type pensions, and others having mainly private/defined-contribution-type pensions, the questions to capture the most basic elements of the households' pension entitlements would necessarily differ. As country pre-tests universally proved, respondents have extremely limited knowledge with regard to their pensions' contributions and entitlements. Therefore, for reasons of cost-effectiveness, the core output only covers basic information on future pension entitlements.

Furthermore, the understanding of common concepts -- what people have readily in mind when asked about a particular concept – differs across countries. For example, in some countries it is gross annual salary what people know offhand (as this is what is usually advertised/negotiated, etc), whereas in other countries people are used to speak in terms of their net monthly salary. And whether net is generally understood to refer to net of tax or also net of social contributions may differ too. Therefore, there was a need to flexibly formulate questions and possibly collect different types of answers from respondents, as long as the information can be adjusted to a common output. Such a common output is defined in terms of gross income, bearing in mind also the existence of different taxation regimes across countries.

 Indeed, income is an area where it was difficult to find consensus, especially with regard to the selection of the reference period for data collection. The initially thought 'ideal' of asking both last year's income (from different sources) and current monthly employment income to allow for changes in the employment situation was rejected as the initial pre-tests of the Eurosystem questionnaire revealed that respondents perceived this as repetitive (see also next section). In choosing a single option, it was easily agreed to collect income information over a prolonged period of time - twelve months - as this was less subject to distortions than collecting last month's income, which could be affected by recent changes in the employment or financial situation of

the households. However, although it was quickly agreed that the reference period for asset holdings and outstanding debt should be the time of the interview, whether the reference period for the collection of income data should be the last calendar year or the last twelve months prior to the interview date had to be discussed at length.

'Last calendar year' has the advantage that the household can refer to the tax form and other records and so report accurately the relevant amounts. On the other hand, if the fieldwork takes place late in the year, the current household position may be substantially different from the one of last year. So, the most appropriate reference period may have more to do with the time at which the fieldwork is taking place, which again differs across countries. It also has to do with whether the households are asked to consult their tax records or not. While in some countries this is recommended, in other countries this would not be appropriate at all, as it would make the households fear of record linking between survey data and tax declarations.

The structure of the questionnaire, i.e. the order of the different sections and of the various questions within each section, was also heavily discussed and in particular whether the sections on real assets, financial assets and liabilities should precede the sections on employment, income and pensions (which fit well together in terms of both contents and interviewing strategy as the three blocks are addressed to individual household members above 16). On the one hand employment is a relatively 'easy' section, suitable for the 'warm-up' phase of the interview. But, on the other hand, placing the fundamental blocks on household wealth at the second half of the interview, could endanger the data quality of these sections as respondents' fatigue has accumulated. After long discussions and testing alternative ordering in the countries' pre-tests (see next chapter) it was decided to place the sections on real and financial assets in the first half of the interview.

4.   The development process and the pre-tests

In this section we will briefly describe the development process of the questionnaire, particularly through a series of pre-tests carried out in a few euro area countries. This may provide an indication as to the complexity of this undertaking.

The drafting of the questionnaire started in May 2007. HFCN members with some expertise in a particular subject prepared the first draft of the relevant sections of the questionnaire. Questions were drawn from existing surveys on household finance and wealth, for example the Italian Survey on Household Income and Wealth, the Spanish Encuesta Financiera de las Familias, the U.S. Survey of Consumer Finances, SHARE[10] for the pension section, etc. The resulting first draft of the questionnaire was discussed, commented and revised within the HFCN until the first extended version of the questionnaire was then deemed ready for a first pre-test in the field.

Pre-testing survey questionnaires prior to the conduct of the actual survey is deemed best practice in the survey literature. Pre-test exercises consist of conducting a number of interviews with small samples of respondents (often selected for

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[10] The Survey of Health, Ageing and Retirement in Europe (SHARE) is a multidisciplinary and cross-national panel database of micro data on health, socio-economic status and social and family networks of more than 30,000 individuals in Europe aged 50 or over (http://www.share-project.org/).

convenience, rather than via formal random samples). Feedback mostly on the formulation, understanding and ordering of the questions is then collected from both interviewers and interviewees. On that basis, the questionnaire can then be appropriately adjusted. Therefore, pre-tests constitute a powerful tool to increase the quality of the survey results.

The first pre-test was carried out in September 2007 in Ireland benefiting from the fact that the Eurosystem questionnaire originally prepared in English did not need to be translated. Sixty interviews took place, spread over three phases. In January 2008 a pre-test with 30 interviews took place in Greece, using the revised questionnaire. A further revision took place and in spring 2008 a pre-test was carried out in Germany (200 interviews) and another one in Belgium (40 interviews) using this third version. The French National Statistical Institute (INSEE) also conducted, as part of its regular survey to be conducted in 2009, pre-tests in France.[11] In Portugal, a more informal qualitative pre-test was carried out with 50 employees of the Bank of Portugal.

Following the countries' pre-tests and the final discussions within the HFCN, in the summer of 2008 the questionnaire reached its final content and form.

The pre-tests

As mentioned above, the Eurosystem questionnaire was pre-tested in six euro area countries (Belgium, Germany, Ireland, Greece, France, and Portugal). The pre-tests played a crucial role in the development of the questionnaire. In addition, they also provided some understanding of the actual fieldwork operations and the overall management of the survey for the central banks that had not run such surveys before.

The way of approaching respondents (in most cases, via cold calling) and the interview mode (paper questionnaires were used in most countries apart from Germany, which used CAPI) were substantially different from what would be in place for the actual survey. Therefore, pre-tests do not provide meaningful indications of the foreseeable response rate of the actual survey, although they may help detect important determinants of non-response.

Other than this, the pre-tests tried to simulate the usual interview situation, whereby the interviewer was also instructed to make notes on each question regarding the respondents understanding, comments, questions, etc. The respondents were in most cases randomly drawn (except for the first phases of some pre-tests where households which were more likely to accept participating in the survey were approached).

The pre-tests aimed, and indeed achieved, the following:

 - examine the appropriateness of questionnaire content, for example the extent of coverage and detail of each subject, knowledge of respondents, feasibility of obtaining information;

 - help in establishing the borderline between 'core' and 'non-core' questions/items

 - test the understanding of the questions and the ease with which questions can be answered;

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[11] The French pre-tests aimed at testing procedures for oversampling the wealthy and the new questionnaire for the French survey (partly harmonised with the HFCN core questionnaire), at exploring how best to ask about consumption expenditures and at optimising the CAPI programme.

- measure the time needed for each phase of the interviews

- test the impact of the order of the sections on how the questionnaire was received by the respondent

- test the flow of the questions, for example whether the transition from one question to another is smooth and makes sense

- test the appropriateness of the 'financially knowledgeable' person to provide all information for household questions and the feasibility of getting responses from all adults for the sections that require all adults to be interviewed

- phrasing in the countries' own language.

As already mentioned, although not all 'real' survey situations could be tested, the pre-tests tried to imitate as closely as possible the real situation and many implementation procedures were tried out. In Ireland, Germany and Belgium a survey company was hired for that purpose whereas in France and Greece the pre-test took place as part of the latest waves of their respective surveys. Therefore the pre-tests provided the occasion to gain insight of the procedures and implementation issues involved in carrying out such a survey, for example hiring a survey company, training the interviewers, following up with the interviewers' debriefing after the fieldwork, etc.

The main lessons that have been drawn from the pre-tests as regards the contents of the questionnaire are as follows:

- The length of the interviews in the pre-tests with the first versions of the questionnaire widely exceeded the targeted one-hour duration. Conversely, the pre-tests of the latest version of the questionnaire (resulting from an intense process of streamlining based on the pre-tests' outcome) resulted in interviews which were within the expected one-hour limit on average.

- Including questions on both last years' annual income and current monthly income was annoying to respondents, as they either thought they were being asked twice the same thing or that they were being checked for consistency.

- There was an overall lack of knowledge about pension entitlements and about interest rates payable on loans taken.

- The self-employed persons often found difficult to report information on income earned.

- Some questions proved to be 'popular', i.e. well received by respondents, such as the questions on consumption, attitudes, payment habits, whereas other questions were resented, such as the parents' occupation, questions on credit constraints, and the question on the amount of cash held in the house.

- Interspersing 'popular' questions on attitudes, expectations etc amid "hard" income and wealth questions proved to improve the flow of the interview and keep respondents' interest.

- Questions addressed to individual household members on employment, income and pensions proved easier to answer if these three sections are placed together in the questionnaire.

Besides the feedback on the content of the questionnaire, the pre-tests also indicated various issues that are important regarding the implementation of the survey:

- Given the high sensitivity of the topics, it is important that respondents trust the survey. Therefore, it is essential that prior to the interview they receive an official introductory letter with assurances about the complete confidentiality of their answers. Moreover, a more extensive protocol needs to be developed to offer

assurances of both the legitimacy and importance of the survey.

- Respondents should have the opportunity to choose a suitable time (i.e. interviewers should be flexible enough to adapt to the respondents' preferred time slots, even if these are late afternoons or weekends).
- Interview length and unit non-response depend on interviewers' skills. Consequently, it is important to employ skilled and experienced interviewers, maximise their involvement, and devote adequate resources to their training.
- A relatively large fraction of the sample in many pre-tests was made up of wealthy households. Although these households are sometimes more difficult to convince to participate in the survey, pre-tests suggested that once they give their consent, no special difficulties show up during the interview.

5.   Conclusions and next steps

The last pre-tests showed that the HFCS questionnaire is on the whole well received while it captures the most essential elements of households' finances and wealth.

Nevertheless, to ensure a successful conduct of the interviews, apart from using an intensively tested questionnaire it is essential that the household is alerted beforehand through an introductory letter from a renowned authority and the provision of information material about the survey. It is also important that the interviewer that approaches them is well trained so as to inspire trust and that (s)he communicates successfully (i) the purpose of the survey; (ii) the importance of the participation of the household and that it cannot be replaced by any other respondent for statistical reasons; and (iii) how were respondent's name and address obtained and the confidential treatment of their data.

Next steps

The ECB Governing Council examined the proposal for the euro area HFCS in September 2008 and decided that the Eurosystem HFCS will be conducted in the 15 euro area countries. It also decided to set up a follow-up network of experts composed of economists and survey specialists, which should take care of the latest implementation steps of the HFCS. Such a network will also constitute a forum for research with the survey data as well as a platform to exchange country experiences in conducting the survey with a view to continuously updating, developing and improving the survey.

Following from this decision, survey data collection is expected to start as early as in 2009 in a large number of euro area countries[12]. It is expected that anonymised euro area micro data on household finance and consumption may also be made available to the research community in the future.

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[12] In the implementation of the 2008 wave of their wealth survey, the Bank of Spain is already collecting the HFCS core output variables using a revised questionnaire.

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