Measuring financial competences in a large-scale survey: the Spanish Survey of Financial Competences[1]

Josep Amer, Olympia Bover, Laura Hospido and Ernesto Villanueva, Bank of Spain

Measuring financial competences in a large-scale survey

The Spanish Survey of Financial Competences[1]

Josep Amer, Olympia Bover, Laura Hospido, Ernesto Villanueva[2]

Abstract

This document summarizes several methodological aspects of the 2016-2017 Survey of Financial Competences, a joint initiative of the Banco de España (BdE) and the Comisión Nacional del Mercado de Valores (CNMV) aimed at measuring the financial competences of the adult population in Spain. The survey is comparable to a blue print elaborated by the International Network of Financial Education, an initiative recently implemented in a large number of countries. We use a large sample provided by the National Statistical Institute, of randomly selected individuals that is representative of the whole Spanish population and of each of its regions. In addition to financial competences, this face-to-face survey elicits basic information on demographics, household financial pressure as well as measures of individual's expectations about their retirement, labor market opportunities and the evolution of housing prices. We discuss the measures taken during the fieldwork to guarantee the quality of the responses. Namely, we discuss the monitoring of interviews via authorized recording, the phone supervision of each case once the interview is completed and, finally, the platform-based editing of each interview. Those are key inputs that determine the admission of a valid observation or the requirement to repeat (selected parts of) interviews. Finally, we use specific examples to illustrate the relationship between monitoring and interviewer behavior.

1. Introduction

Evidence from a variety of countries suggests that a sizable fraction of the population has deficient knowledge about basic financial notions on interest rates, compounding, inflation or risk diversification. Furthermore, even when one compares individuals with similar degree of education or income, those with lower financial knowledge hold lower wealth levels, higher debt and a higher degree of financial stress.[3] As financial products become increasingly complex over time, it is important to identify the characteristics and choices of groups of the population with insufficient financial knowledge.

This study describes some methodological aspects of the Survey of Financial Competences (ECF, by its Spanish initials), an initiative aimed at measuring the financial competences of the population 18-79 in Spain. The ECF follows a blueprint questionnaire elaborated by the International Network of Financial Education, an assessment of the financial knowledge, attitudes and behavior of representative samples of the adult population. A large number of countries have recently implemented the blueprint under the

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[1]   This document is a summary of a presentation at the Satellite Seminar on Financial Inclusion, held in Marrakech on July 14th, 2017 and organized by Bank-Al-Maghrib, Centro de Estudios Monetarios Latinoamericanos (CEMLA) and the Irving Fisher Committee (IFC).

[2]   Josep Amer is a PhD student at the European University Institute. The rest of the authors work at Banco de España. Laura Hospido is also a research fellow at IZA.

[3]   See, for example, Lusardi and Mitchell (2011), Alessie, Lusardi and Van Rooij (2011) or Stango and Zinman (2009).

coordination of the Organization of Economic Cooperation and Development (OECD). As a result, the results of the ECF will be comparable to those in other countries. However, the ECF contains a number of extensions and adaptations to the Spanish case that we describe below

A characteristic of the ECF is the collection of representative information of financial practices of the population of each of the 17 Autonomous Communities in Spain (except the Autonomous Cities of Ceuta and Melilla). Representativeness at the regional level is important because the competences about education are transferred to regional authorities. Moreover, the demographic and socio-economic composition of the population varies widely across Autonomous Communities. Therefore, to identify which segments of the population are at risk of financial exclusion or are less knowledgeable about basic financial matters, it is important to achieve not only representativeness of the Spanish population as a whole but also of each Autonomous Community.

We describe the adaptations of the blueprint questionnaire to the Spanish case and lay out the measures taken to ensure appropriate measurement of financial competences. To that end, we review the questionnaire (Section 2), the sampling (Section 3) and the methods applied during fieldwork to ensure high response rates and a good quality of the interviews (Section 4). Section 5 describes the procedures to validate completed interviews and provides examples illustrating the relationship between monitoring and interviewer behavior.

2. The questionnaire

The questionnaire contains the following sections:

1. Basic demographics and labor force status

2. Household's portfolio and sources of information.

3. Sources of income in the old age and if not working

4. Attitudes toward saving

5. Financial competences

6. Competences in Economics

7. Main residence

8. Expenses and financial fragility

The questionnaire of the ECF follows a blueprint by the International Network on Financial Education (INFE), implemented in a large number of countries in 2015-2016. That exercise measures what financial products individuals know, hold or have recently acquired. If respondents have recently acquired one, the blueprint also asks which type of information they used to make that decision. Another main block of the INFE exercise is a series of questions measuring financial knowledge. Those questions measure if the respondent is familiar with the notion of interest rate and can apply it in simple computations. Further questions measure if respondents understand interest rate compounding, risk diversification and the role of inflation.

The ECF questionnaire follows the INFE measurement exercise. However, it also includes some adaptations to the Spanish context. Firstly, the ECF asks about labor market status, individual expectations about employment loss (if employed) or employment finding (if unemployed), as well as measures of impatience. That information is important to characterize precisely the expectations and attitudes of individuals with low financial literacy.

A second feature of the ECF is that it is not only a survey on individuals, but also aims at collecting information about the household's level of financial competence. Namely, the survey asks each individual if he or she is familiar with household's asset and debt holdings, as well as about the reasons that determined the financial choices. If the individual is not familiar with the financial matters, an informed person provides complementary information about the household portfolio and his or her own financial competences. We think that measuring household's competences is important in countries where large households with different generations are not uncommon.

Thirdly, with the aim of disentangling financial from other generic competences, the ECF also includes items measuring basic reading comprehension (extracted from the 1994 International Adult Literacy Survey) as well as graph comprehension (extracted from the 2012 Program for International Adult Competences, PIAAC).

Finally, following the National Capability Survey in the United States, the ECF includes a module on housing, where respondents provide information about whether they own or rent the house of main residence, the reasons for their choice and their expectations about the evolution of the price of the dwelling. If they financed the purchase of their house with a loan, the survey collects some information about basic loan characteristics.

Other characteristics

The survey was implemented via Computer-Assisted Personal Interviews, to facilitate data handling as well as interviewers navigation of the questionnaire. As discussed below, computer-assisted interviews allowed implementing basic consistency checks.

3. Sample design

The sample was drawn by the National Statistical Institute to be representative of the population of Spanish individuals aged 18-79 living in private households. It is also representative of each of the 17 regions as, to a large extent, the educational system is ran at that level. The sample contains about 21,000 individuals, drawn from the most recent Census. The ECF is a probability sample, obtained through a two-stage sampling design, stratified in the first stage units by region and municipality size. The first stage units are the census sections in the country and the second stage are the people between 18 and 79 who have their main residence in the sections selected for the sample.

The fieldwork started in end-September 2016 and ended in June 2017. The reference period was mostly the moment of the interview, but there were exceptions. Some questions referred to last 12 months (whether household expenses exceeded income, or if the household had fallen into arrears). There were also retrospective questions about the last two years (if the individual had acquired a financial product during that period) or the last five (if the individual had had some disagreement with a financial institution).

4. Fieldwork

Efforts to mitigate non-response

Each sample member received an envelope containing an introductory letter signed by the Governor of Banco de España and the Chairperson of the Comisión Nacional del Mercado de Valores (CNMV). The envelope also contained a letter by the field work agency and a brochure describing the main aims of the study. The introductory letter from BdE and the CNMV was anonymous and included on a separate envelope within the one sent by the field work agency to emphasize the point that neither institution knew the identity and address of the potential interviewee. The letter from both institutions also contained a webpage and a telephone number in BdE to reassure on legitimacy of survey and to answer any question. Finally, it was written in each of the official languages of each region (Catalan and Spanish in Catalonia and the Balearic Islands, Basque and Spanish in the Basque Country, Galician and Spanish in Galicia and Valencian and Spanish in Valencia). Finally, local branches were informed about the ongoing survey in case sample members turned to them for confirmation.

Contractually, each interviewer had to make at least five attempts to locate each sample member in person (at least once on weekends). However, the number of attempts often exceeded that threshold, especially for sample members who had not been reached by the end of the fieldwork.

Training of interviewers

In mid-September 2016, immediately prior to the start of the fieldwork period, one hundred and eighteen interviewers went through a centralized two-day training about the contents of the survey, the protocols, and the use of support material (cardboards, letters from BdE and CNMV and a small gift for participants). Interviewers were divided into four groups, each trained by a member of the field work company. A representative of BdE participated in each group to clarify matters that were to arise during the explanation of the questionnaire. Interviewers also received a manual containing definitions of relevant variables, examples and some classifications (like four digit occupations).

Aside from issues general to all surveys, the protocol included training points specific to a Survey of Financial Competences. The first training point was the relevance of reading questions exactly as posed in the questionnaire. For example, and unlike financial surveys, when asking if the interviewee knew some specific financial product, interviewers were instructed not to provide definitions–as the survey aims at measuring knowledge of these products. Interviewers were also instructed to detect basic inconsistences and introduce explanatory comments. Such inconsistencies are especially likely to arise in a sample that is representative of individuals aged 18-79 as some respondents delegated financial matters to other household members. For example, some individuals answered that they did not have a bank account, but subsequently mentioned that they held financial products that usually require such product. Those comments, especially common in interviews to the least financially literate respondents, proved very useful during the edition phase.

A third training point stressed the role of the interviewer in imposing discipline when measuring competences. Interviewers asked other family members to leave the room during the section measuring financial knowledge or, if that was not possible, they emphasized that no one could assist the sample member. On the other hand, interviewers were instructed to record if the interviewee used items like paper and pencil or a personal calculator in financial competence questions.

A final training point referred the coding of occupation of the interviewee. That variable was included with the double purpose of obtaining information about the socio-economic status of respondents, as

well as about the tasks they conducted in their main job. In particular, respondents had to provide a verbal description of their current or main occupation, which the interviewer coded and subsequently introduced into an automatic search algorithm that proposed the corresponding 4-digit occupation.

By the end of the two-day training, all interviewers took a test, consisting in conducting a shortened interview where one of the members of the training team acted like the interviewee. Interviewers either performing poorly in that test, or coding answers incorrectly underwent additional training before going into the fieldwork or moved to other studies.

Fieldwork controls

Immediate follow-up after each interview

Within five days after each interview had been conducted, the supervisors of the field work company phoned the interviewee to check that the guidelines had been implemented. The phone supervisor asked the interviewee the recalled duration of the interview, whether the interviewer asked the consent to be recorded, used a tablet, showed cards or gave a small gift. In addition, the supervisor confirmed selected responses in the interview using a pre-defined script –for example, household composition and housing tenure.

In specific cases when the phone supervision was not successful, the field work company sent another interviewer to verify in person that the interview had taken place. BdE was immediately told about any incidence.

Time and audio recording

The time duration of 10% of the questions was recorded, and neither the interviewer nor the interviewee knew which ones.[4]

In addition, interviewers asked all interviewees their consent to be recorded. The wording of the question clarified that the purpose of the audio was to check whether the interview was following the protocol. Upon acceptance, the tablet recorded 5% of the questions, and neither the interviewer nor the interviewee knew which ones. More than two thirds of interviewees gave their consent, and the fraction increased as fieldwork progressed –see Figure 1.

Audio recording is useful for reasons beyond fieldwork control. It allows a better understanding on how interviewees receive complex questions. A first example is a question about the main occupation of the respondent. There, respondents described the tasks they did at their jobs and their level of responsibility. The interviewer assigned then a four-digit ISCO code using an automated search tool provided by National Statistical Institute. Audios were very useful in guaranteeing that interviewers were eliciting the information needed to code occupation correctly.

A second example refers to the measurement of expectations about the evolution of the house of residence over the next year. In that question respondents allocated 100 points to 5 possible price increases. Audios were again crucial to monitor if the interviewee understood the question correctly.

Duration and audio recording were important monitoring tools that allowed detecting anomalous interview durations or audio recording rates once we used cases in similar locations as a benchmark. Monitoring interviews during the field work was crucial to provide quick feedback when errors were detected.

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[4]   The only exception was a question on reading comprehension, where interviewers measured the time required to read and understand a written text unrelated to financial matters.

5. Validation

The CAPI program was developed to detect basic inconsistencies between questions. As already mentioned, those inconsistencies are likely because some individuals are unsure about their own financial situation. The program allowed re-routing in case errors were detected. For example, some individuals had financed high expenses using a personal loan, despite having reported previously that no loan was contracted during the last two years. The program automatically re-asked the questions missing –in this case, the source of information used to acquire the loan.

Aside from those checks, there was an extensive validation of interviews during fieldwork, with the aim of detecting errors and providing feedback to interviewers as soon as possible. To that end, the personnel from BdE had provided a one-day training course to four reviewers in the field work company. The validation was done via a Web-based platform that permitted access to each (properly anonymized) interview. The field work company and BdE could both access each interview, but not at the same time. The platform included fields that allowed three rounds of interactions about each case.

The protocol was the following. Once finished, each interview was reviewed by the fieldwork company, which could recommend through the platform changes in the data, re-contacting the interviewed household or, in extreme cases, completely redoing (parts of) the interview. In all of those cases, the BdE team reviewed the proposals of the fieldwork company and decided on a case-by-case basis. On the other hand, the BdE team also reviewed at random interviews marked as correct by the field work company to make sure that all interviewers were receiving feedback about their performance.

In cases where some answers were contradictory with previous ones, and after the approval of BdE, the fieldwork company re-contacted the interviewee by phone. The most common reasons for re-contacting an individual were doubts about his or her degree of financial inclusion. For example, an individual could report not having a bank account, but receiving public pension income. As most of these payments are made through bank accounts, there was a reasonable doubt about whether or not the individual held the financial product. Another common case for re-contact was that of individuals reporting a collateralized loan but not real estate property whatsoever. Finally, inconsistencies about household composition –because the one reported in the interview differed from the one in the phone supervision – or about the labor market status of the individual always led to a phone re-contact.

Finally, in a handful of cases, the BdE decided that the interview had to be repeated because of deficiencies in measuring financial competences or strong doubts if it had really taken place.[5]

As a result of this validation process, the field work company provided immediate feedback to each interviewer, either positive or providing suggestions for improvement. That feedback was especially important during the first weeks of field work to avoid the accumulation of errors.

The main validation tools were the duration of questions, geo-location of interviews and, especially, audios. Durations served as a basic tool in detecting if some interviewers shortened or read too quickly important questions. On the other hand, audios turned out to play an important role. Firstly, they helped in detecting deviations from the protocol, like imprecise wording or non-neutral attitude of the interviewer –especially relevant in the Section of financial competences. Secondly, knowing that the interview was recorded helped to discipline the interviewer.

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[5] In total, all interviews were reviewed by the field work company and about 40% were reviewed additionally by the BdE team.

Examples

This Section provides examples comparing how interviewer behavior varies depending on whether or not the interviewee gave consent for the recording. These examples are meant to be illustrative of the relevance of field work monitoring, but are not necessarily informative about the causal impact of consent to be recorded on interviewer behavior. By the same token, they are not meant to be representative of the typical behavior of interviewers.

An important question in the ECF asks, "Are you informed about the financial matters in your household? By this we do not only mean if you know the financial products the household has, but also the reasons why some decisions were taken". If the interviewer answered "yes", the interview would proceed as usual. However, if he or she answered "not", an informed household member would have to answer an extra section on financial competences, thus lengthening the duration of the interview.

Figure 2 presents two histograms of time durations of the question on knowledge about household financial matters of two actual interviewers (interviewer "A" and "B"). That is, it shows the fraction of interviews where the question about knowledge of financial matters lasted 4-5 seconds, 6-7 and so on. The duration of the question differs across interviews depending on whether or not the interviewer had to repeat the question, whether the interviewee hesitated about the answer or because of other reasons.

The white (green) histogram in Figure 2 shows the distribution of durations of the question (measured in seconds) when the interviewee gave (refused) his or her consent for the recording. In the case of interviewer "B" (shown in the rightward panel), the distribution of times taken to make the question about familiarity with financial matters does not depend much on whether or not the interviewee gave his or her consent. However, the behavior of interviewer "A" differs. We observe a distribution of durations similar to that of interviewer "B" when the interviewee gave his or her consent to be recorded. However, when the interviewee refused to be recorded, we observe a number of interviews with unusually low durations (well below 10 seconds). In such cases, the fieldwork company provided feedback to the interviewee, asking for additional details about the protocol followed when the interviewee did not provide his or her consent to be recorded. In addition, those cases were studied in detail by the revision teams of the BdE and the fieldwork company and, in some instances, the sample member was re-interviewed.

The provision of those warnings seems to have been effective. Figure 3 shows the distribution of time durations of the same question of a third interviewer (Interviewer "C"). In this case, the histogram compares two moments in the fieldwork. The histogram in green shows the distribution of time durations of the question about being familiar with household finances before the warning while the histogram in white shows the same distribution after the warning. Interestingly, no interview has time durations below 10 seconds after the warning, while these represented more than 15% of the total before. These changes indicate that monitoring of interviewers is very important to guarantee a correct implementation of the survey.

References

Alessie R., A. Lusardi and M. Van Rooij (2011) "Financial literacy and stock market participation" *Journal of Financial Economics* Volume 101, Issue 2, Pages 449-472.

Lusardi A. and O. Mitchell (2011) Financial Literacy Around the World: An Overview *Journal of Pension Economics and Finance* Volume 10 Issue 4, Pages 497-508.

Stango V. and J. Zinman (2009) "Exponential growth bias and household finance" *Journal of Finance* Volume 64, Issue 6, Pages 2807–2849.

Figure 1. Fraction of interviews where the interviewee gave consent to be recorded, by week of fieldwork
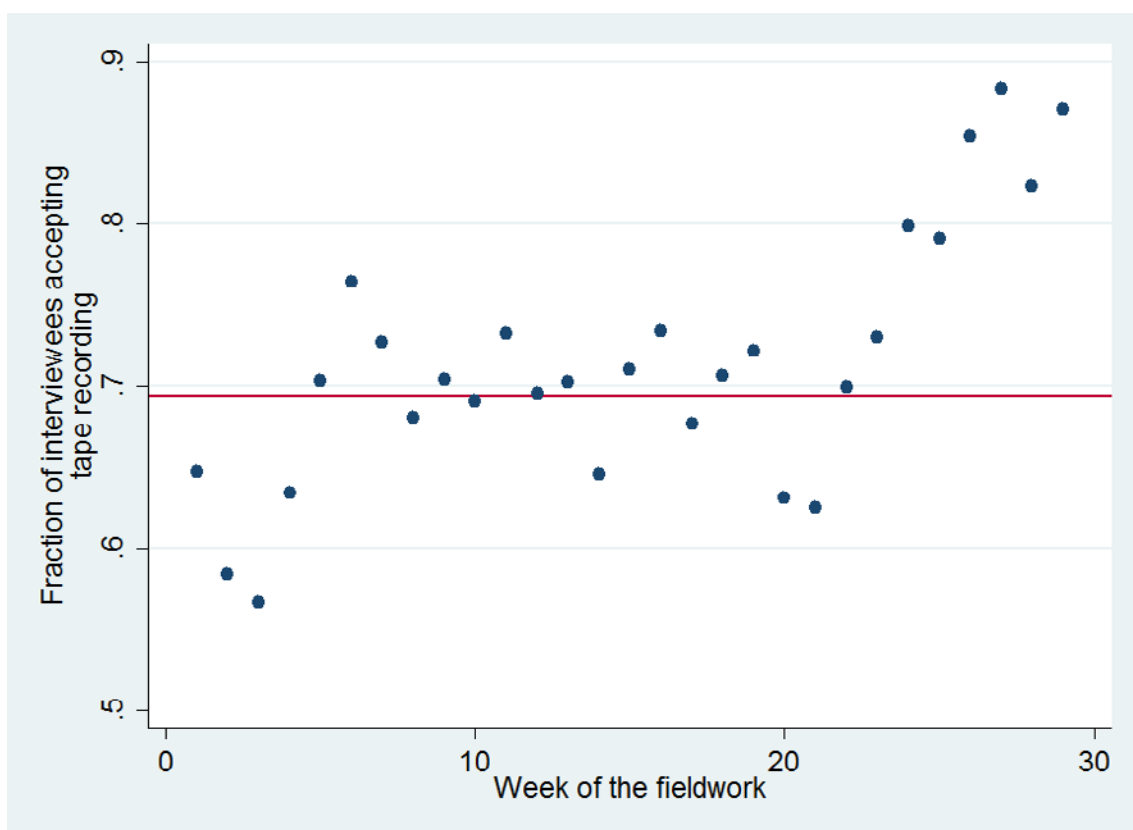
Figure 2: Duration of questions of two interviewers, by interviewee consent to be recorded.
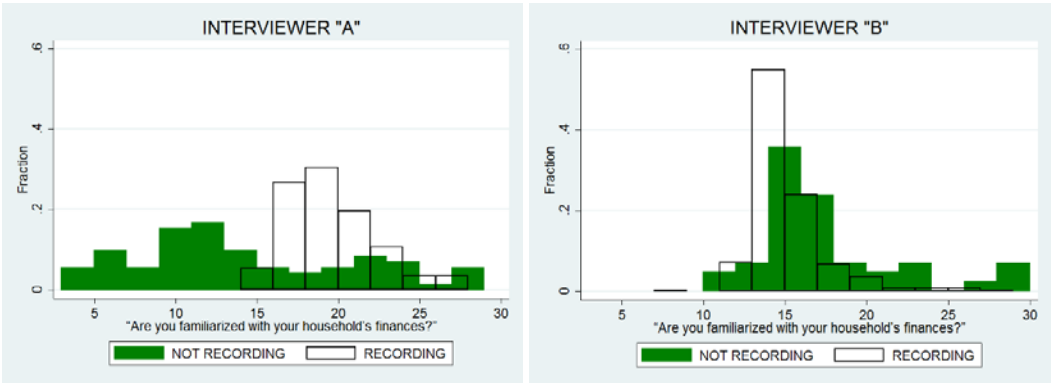
The Panels show histograms of time durations -in seconds- of the question "Are you informed about the financial matters in your household? By this we do not only mean if you know the financial products the household has, but also the reasons why decisions were taken". The histogram in white (green) reflects time durations when interviewee gave (refused) consent to be recorded.

Figure 3: Duration of questions of one interviewer, before and after a warning was issued.
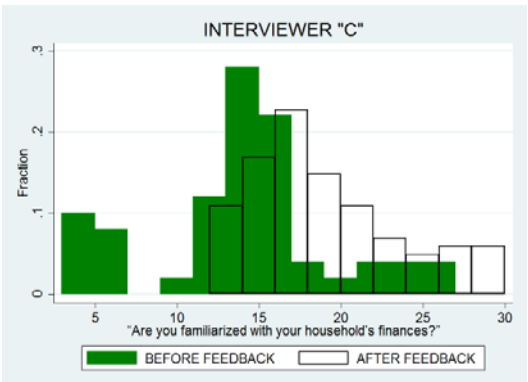
The Panels show histograms of time durations -in seconds- of the question "Are you informed about the financial matters in your household? By this we do not only mean if you know the financial products the household has, but also the reasons why decisions were taken". The histogram in green (white) reflects time durations before (after) a warning was given to the interviewer.

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[1]   This presentation was prepared for the meeting. The views expressed are those of the authors and do not necessarily reflect the views of the BIS, the IFC or the central banks and other institutions represented at the meeting.

MEASURING FINANCIAL COMPETENCES IN A LARGE SURVEY: The Spanish Survey of Financial Competences.

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Bank Al-Maghrib – CEMLA – IFC Satellite Seminar on Financial Inclusion

July 14th 2017

OUTLINE OF THE PRESENTATION

1. **Introduction.**

   Aim of the Spanish Survey of Financial Competences

   Measures of financial literacy

   Basic characteristics (sampling, reference period)

2. **Contents of the Survey.**

   Sections of the survey

   Adaptations of the INFE questionnaire

3. **Fieldwork.**

   Efforts to minimise non-response

   Interviewer training

   Validation and Control

   Examples

4. **Conclusions.**

BANCO DE **ESPAÑA**

1. INTRODUCTION

> **Aim of the survey:** measuring financial competences, quality of decision-making and financial outcomes among the adult population in Spain.

Survey on the <u>financial competences</u> of the population 18-79 years of age

   Face-to-face survey to a large sample of individuals, questionnaire presented as CAPI.

   Information about the person chosen at random, but also of financial competences from a household member informed about the household finances.

Adapts a questionnaire coordinated by OECD, currently implemented in a number of countries.

   Initiative of the INFE (International Network of Financial Education)

   First pilot in 2010, 14 countries participated.

   Questionnaire revised and the second measurement involves 30 countries.

The core of the Spanish questionnaire is broadly based on the one provided by INFE but has special features.

General motivation: The strong correlation between the lack of basic financial competences and poor financial outcomes

   Lusardi and Mitchell (2008, 2011), Alessie, Lusardi and Van Rooij (2011b), Stango and Zinman (2009)

QK4_a) Suppose you put €100 into a savings account with a fixed interest rate of 2% per year. There are no fees and taxes subject to this account. You don't make any further payments into this account and you don't withdraw any money. How much money would be in the account at the end of the first year, once the interest payment is made?

Record response numerically - - -   *a) Don't know*   *b) Refuse to answer*

1. INTRODUCTION: Examples of INFE questions on Financial Competences (ii)

QK4_a) Suppose you put €100 into a savings account with a fixed interest rate of 2% per year. There are no fees and taxes subject to this account. You don't make any further payments into this account and you don't withdraw any money. How much money would be in the account at the end of the first year, once the interest payment is made?

Record response numerically - - -   *a) Don't know*   *b) Refuse to answer*

QK4_b) Once more, if you don't make any further payments neither withdraw any money, once the interest payment is made, how much money would be in the account at the end of five years [remembering there are no taxes and fees and the payment is made every year]? Would it be:

a) More than €110   *b) Exactly €110*   *c) Less than €110*   *d) Or is it impossible to tell from the information given*

e) Don't know f) Refuse to answer

QK5) I would like to know whether you think the following statement is true or false: It is usually possible to reduce the risk of investing in the stock market by buying a wide range of stocks and shares.

a) True   *b) False*   *c) Don't know*   *d) Refuse to answer*

BANCO DE **ESPAÑA**

QK4_a) Suppose you put €100 into a savings account with a fixed interest rate of 2% per year. There are no fees and taxes subject to this account. You don't make any further payments into this account and you don't withdraw any money. How much money would be in the account at the end of the first year, once the interest payment is made?

Record response numerically - - -   *a) Don't know*   *b) Refuse to answer*

SIMPLE INTEREST RATE

QK4_b) Once more, if you don't make any further payments neither withdraw any money, once the interest payment is made, how much money would be in the account at the end of five years [remembering there are no taxes and fees and the payment is made every year]? Would it be:

a) More than €110   *b) Exactly €110*   *c) Less than €110*   *d) Or is it impossible to tell from the information given*

e) Don't know f) Refuse to answer

INTEREST RATE COMPOUNDING

QK5) I would like to know whether you think the following statement is true or false: It is usually possible to reduce the risk of investing in the stock market by buying a wide range of stocks and shares.

a) True   *b) False*   *c) Don't know*   *d) Refuse to answer*

RISK DIVERSIFICATION

1. INTRODUCTION: Basic features.

- **Representative sample of the population of Spanish individuals aged 18-79 living in private households**
  It excludes institutionalized population.

- **Representative of each of the 17 regions as, to a large extent, they run the educational system.**
  Sample of about 21,000 individuals, drawn from the most recent Census.
  Probability sample, stratified by Primary Sampling Unit (*Sección Censal*).

- **Reference period:**
  Conducted between end-September 2016 and end-June 2017.
  Mainly reflects situation in the moment of the interview:
  - *Some questions refer to last 12 months (whether expenses higher than income) and up to the last 2 years (acquisition of financial assets).*
  - *Others to next 12 months (expectations about the value of the main residence in a year's time).*
  - *Some questions refer to previous two years (if acquired some financial product).*

1. **Basic demographics and labor force status**
   Age, household composition
   Employment status, occupation, probability of job loss and of finding job

2. **Respondent's portfolio and sources of information.**
   Knows financial products, holds them now, acquired them during the last 2 years?
   - *Checking and savings accounts, mortgages, pension and mutual funds, stocks, bonds, consumer loans, credit cards, life and health insurance.*
   Information on acquisition of financial products

3. **Sources of income in old age**
   Current or expected

4. **Attitudes toward saving**

5. **Financial competences**

6. **Competences in Economics**

7. **Main residence**
   - Tenure, reasons renting/purchasing, subjective expectations about growth of own house price next two years
   - If indebted: Mortgage monthly installment and original loan-to-value.

8. **Expenses and financial fragility**
   - Qualitative: whether or not expenses exceed revenues over last 12 months and, if yes, how financed the difference between expenses and revenues.
   - Quantitative: expenses in food, education and income (the latter in ranges).
   - Entered into loan arrears last year?

2. CONTENTS OF THE SURVEY: Special features

- **Survey to individuals, but also aim to collect information about the financial competences of an informed household member.**

  Ask respondent if he or she is familiarized with household's asset and debt holdings, as well as about the reasons for financial choices.

  If individual is not familiarized, interview a person who is informed about the household portfolio.

  - *Household <u>financial competences</u>.*

- **Complement INFE questionnaire with information on general competences.**

  Literacy: reading and understanding a (non-financial) text.

  Understanding graphs:

  - *Non-financial: based on PIAAC assessment of numeracy and literacy (evolution of number of births).*

  - *Financial: based on UK Financial Capability Survey (evolution of the value of mutual funds).*

- **Module on housing.**

  Housing tenure and reasons that led to that choice.

  Subjective expectations about house price growth over the next year.

  If financed house with mortgage: loan to value at purchase and current monthly installment

BANCO DE ESPAÑA

- **Efforts to mitigate non-response:**

  Letter signed by Governor of BdE and President of SEC (CNMV) sent in advance.

  At least 5 attempts to locate each sample member <u>in person.</u>

  > *At least once on weekends.*

  Webpage and BdE telephone provided to interviewees to reassure on legitimacy of survey and answer questions.

- **Two-day training on survey content, protocol, material (cardboards)**

  Centralized (118 interviewers).

  In mid-September, immediately before the start of fieldwork.

  All interviewers tested at the end of the two-day training.

- **Special training points in a Survey of Financial Competences:**
  1. Reading questions exactly as posed in questionnaire.

  2. Spotting basic inconsistencies and introducing comments.

     Always important, more so in a survey measuring financial inclusion.

       E.g. individual does not have a bank account, but reports holding a mortgage.

     Errors are common among the least financially literate respondents.

  3. Imposing discipline in section of financial competences.

     Importance of other household members not helping in competence questions.

1. After each interview completed, company phoned back the respondent (100% rate)

Was the interview conducted? Selected responses checked following predefined script.

Household composition, housing tenure, compliance with protocols and duration.

BdE immediately informed about any inconsistencies –more on this below.

2. Recording durations

The duration of 11% of the questions is recorded.

Neither interviewer nor interviewee knew which ones.

Except for 1 question (reading ability)

3. Audio recording

Interviewee consent needed (Graph).

5% questions recorded, neither interviewer nor interviewee knew which ones

3. FIELDWORK: Fraction of interviewees accepting tape recording
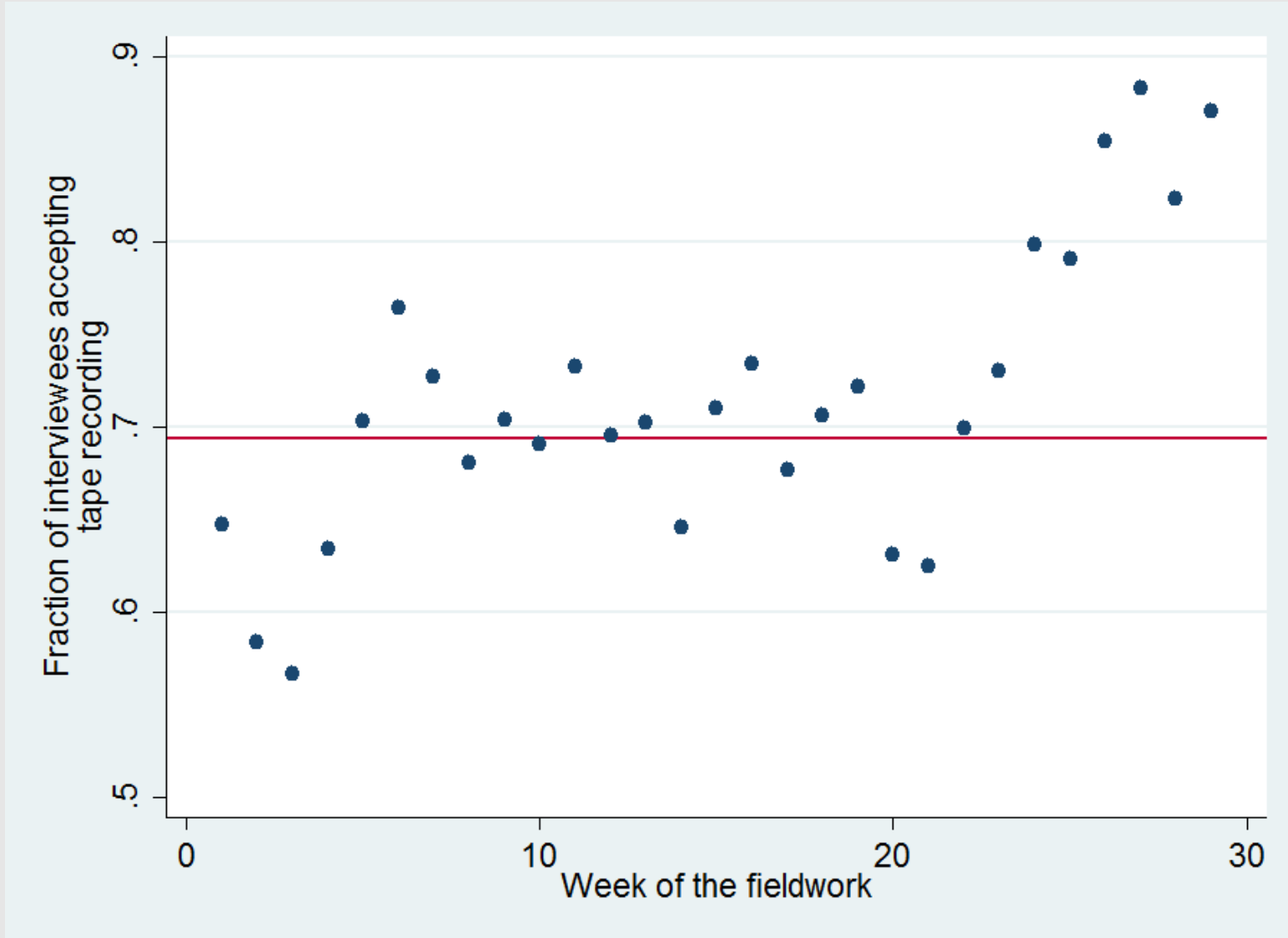
1. **Audio recording has methodological interest for some difficult questions**

   Occupation.

   Respondents describe what they do at their jobs and interviewer assigns ISCO code using an automated search tool provided by Statistical Institute).

   Expected growth of the value of house of main residence over one year.

   Allocate 10 points to 5 predetermined bins with possible values.

2. **Duration and audio recording allow detecting interviewers with anomalous interview durations, audio recording rates, etc.**

   Interviewers in similar locations used as a benchmark (statistical control).

3. **Duration and audio recording also allow monitoring and quick feedback if errors are detected.**

   Examples later in the talk

3. FIELDWORK: Validation

- **Web-based system to access, review and edit each (anonymised) case.**

  Reviewers from BdE and fieldwork company could interact on each case

- **Each completed interview was reviewed by the fieldwork company, that can recommend through the platform:**

  Editing some variables.

  Re-contacting the respondent.

  Completely redoing the interview.

- **BdE reviews the cases and decides about all edits and re-contacts.**

  But also supervises at random.

  Immediate feedback to interviewers.

- **Doubts about <u>financial inclusion</u> usually led to re-contacting the respondent**

  Examples:

  Respondent does not have a bank account, but reports receiving pension income or unemployment insurance.

  Holds a mortgage, but reports no real estate property.

  Other reasons were doubts about household composition or labor market status.

3. FIELDWORK: Validation (ii)

- **Reviewed interviews as fieldwork progresses**

  Crucial to <u>correct errors</u> early.

  Provide interviewers with feedback.

- **Time spent on each question serves as a basic control**

  Serves in detecting if some interviewers shorten or read too quickly some questions.

- **Role of audios**

  Help in detecting deviations from protocol.

  Imprecise wording, non-neutral attitude in financial competence questions, etc

  Discipline the interviewer.

  McGonagle, Brown and Schoeni (2015): "Interviewee consent to be recorded lengthens interviews by 3.5%"

- **Next, we provide two examples on interviewer monitoring (one is an extreme case)**

  Time duration of question: "Are you informed about household finances?"

  Classified by "whether interviewed person gave consent to record"

3. FIELDWORK: Example on usefulness of monitoring

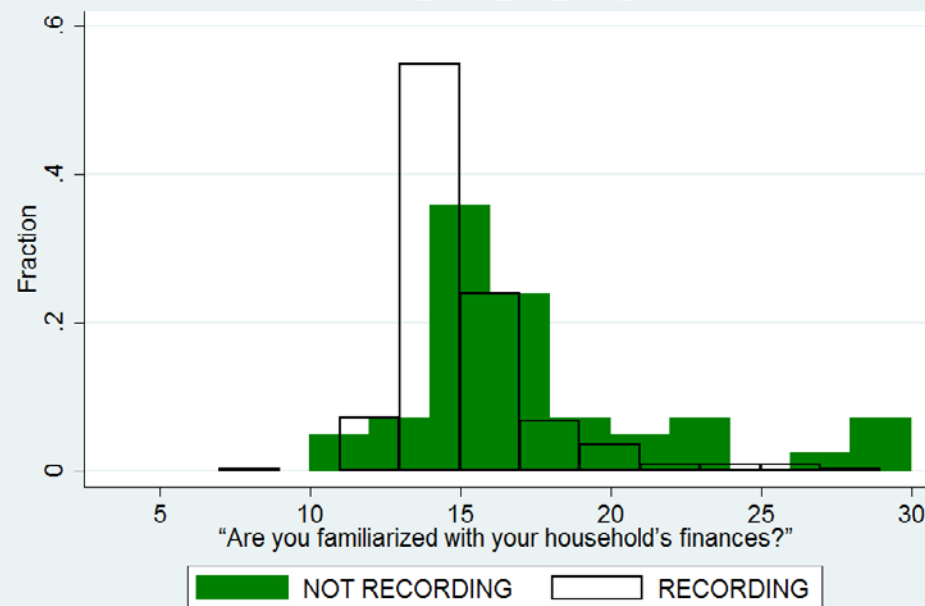**Graph displays histogram of durations of a particular question (if respondent informed about household finances)**

Interviewer "A" makes the question much faster when not recorded (interviewer "B" does not)

HISTOGRAM OF TIME DURATION OF A PARTICULAR QUESTION BY WHETHER OR NOT INTERVIEWEE GAVE CONSENT TO RECORD
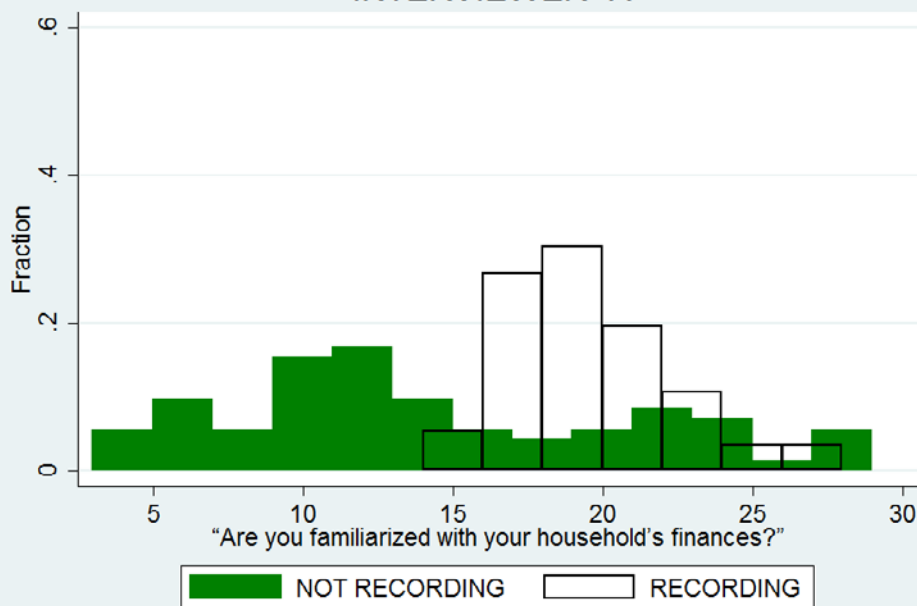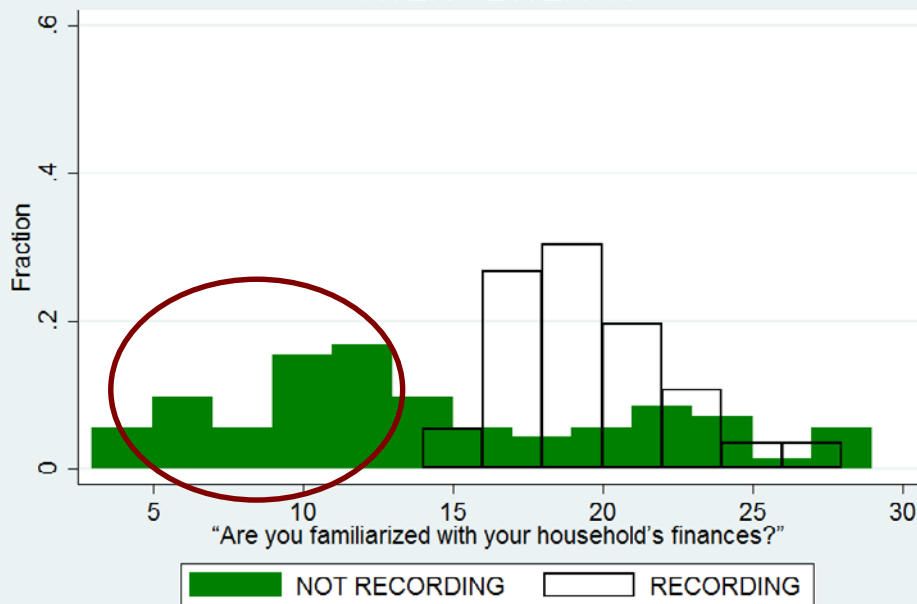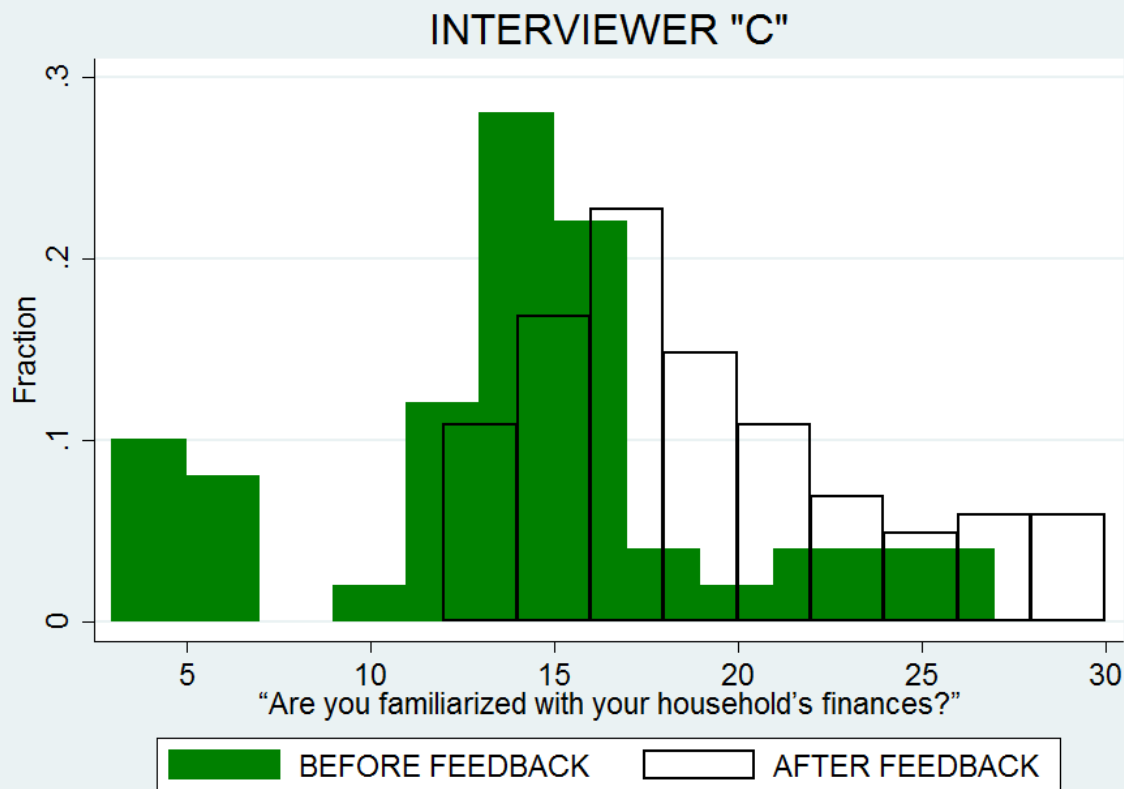
3. FIELDWORK: Example on usefulness of monitoring (ii)

Short durations, coupled with other information, led to:
1. Immediate warning to interviewer.

2. In some cases, re-visiting the respondent's household to elicit information from an informed individual

HISTOGRAM OF TIME DURATION OF A PARTICULAR QUESTION BY WHETHER OR NOT INTERVIEWEE GAVE CONSENT TO RECORD
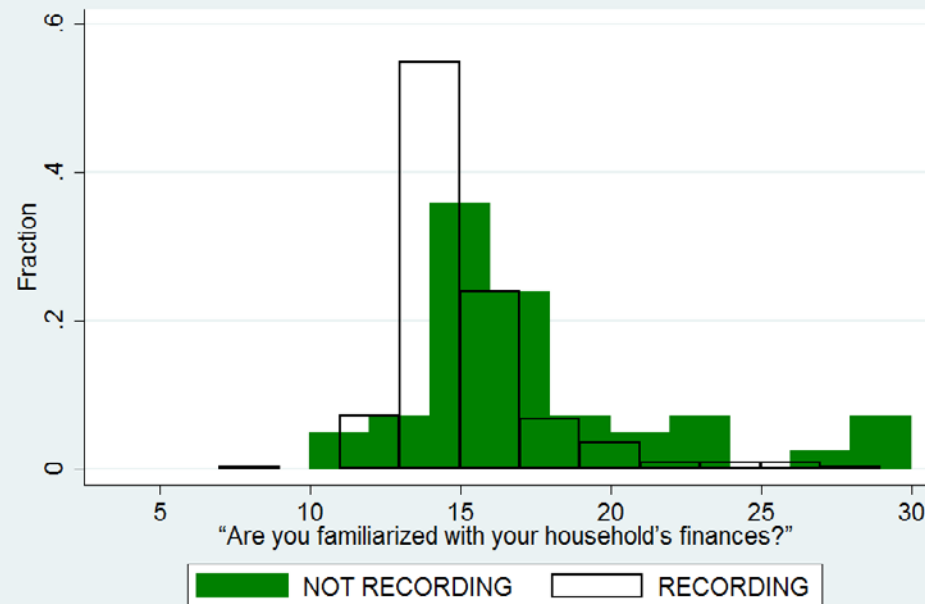
3. FIELDWORK: 2nd example on usefulness of monitoring

Graph displays histogram of durations of same question as above (if respondent informed about household finances).
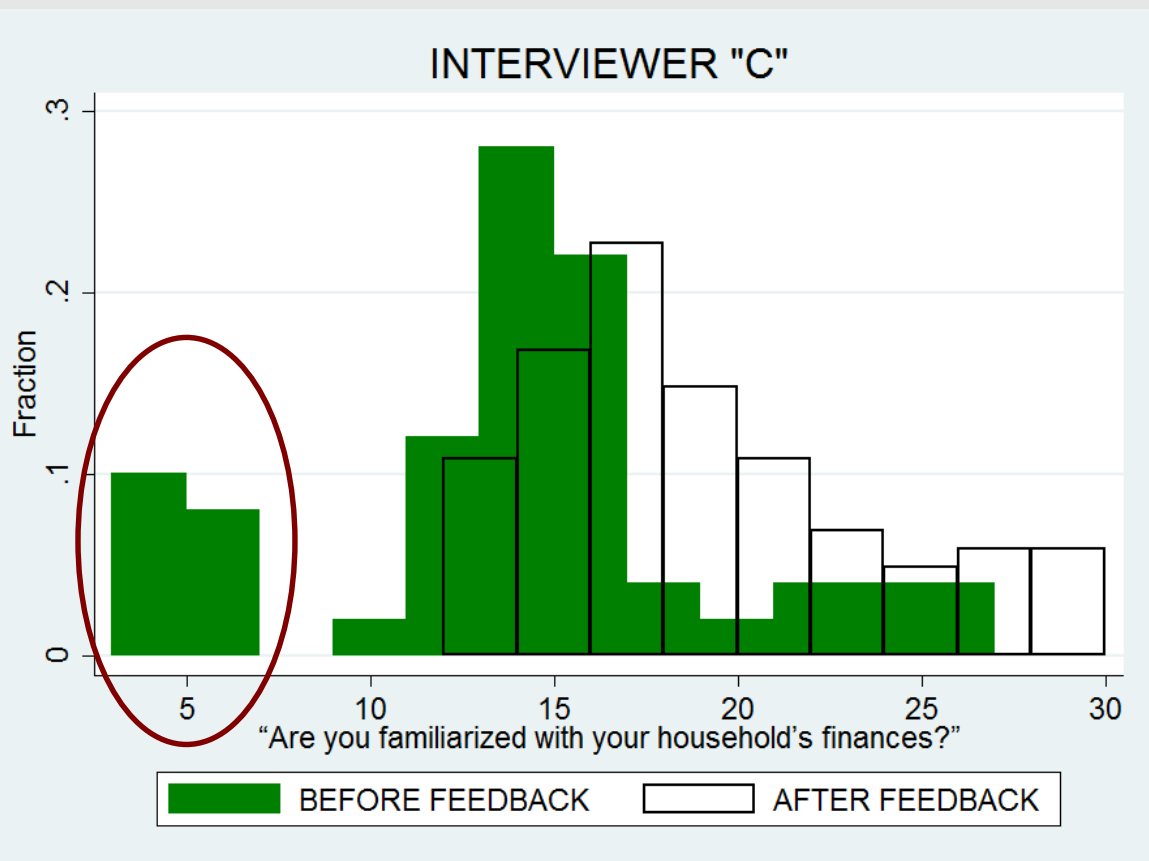
Two histograms, reflecting two different moments of fieldwork (before and after warning provided).

INTERVIEWER "C"

3. FIELDWORK: 2nd example on the usefulness of monitoring (ii)

Unusually short durations for a complex question less common after warning was provided (*"Please, read the question as it is written in the questionnaire"*)

4. CONCLUSIONS

- **This presentation has described the contents and main characteristics of the Survey of Financial Competences in Spain.**

  Part of a coordinated effort by OECD to measure financial competences in 30 countries.

  Adapted to Spanish environment and including additional relevant features

- **Described the fieldwork**

  Measures to minimize non-response.

  Interviewer training.

  Control during fieldwork.

  Validation.

- **Control and validation processes are always important to achieve data quality.**

- **Specially so in a Survey of Financial Competences.**

  Important to distinguish if an individual does not have a financial product or, alternatively, he or she has the product but did not understand the wording of the question.

  Control and validation processes are crucial in telling apart both cases.

  Some illustrations on monitoring.

BANCO DE ESPAÑA

THANKS FOR YOUR ATTENTION!

INTRODUCTION TO FINANCIAL COMPETENCES SECTION

The following section of the questionnaire includes several exercises, some simpler than others.

If you think you have the correct answer, you probably do.

It does not matter if you can not answer them all, but it is important that you try to respond to each.

So that we can obtain valid information you need to answer in private, so that no one can help you.

The following graph shows the number of births in the United States from 1957 to 2007. Data are presented every 10 years
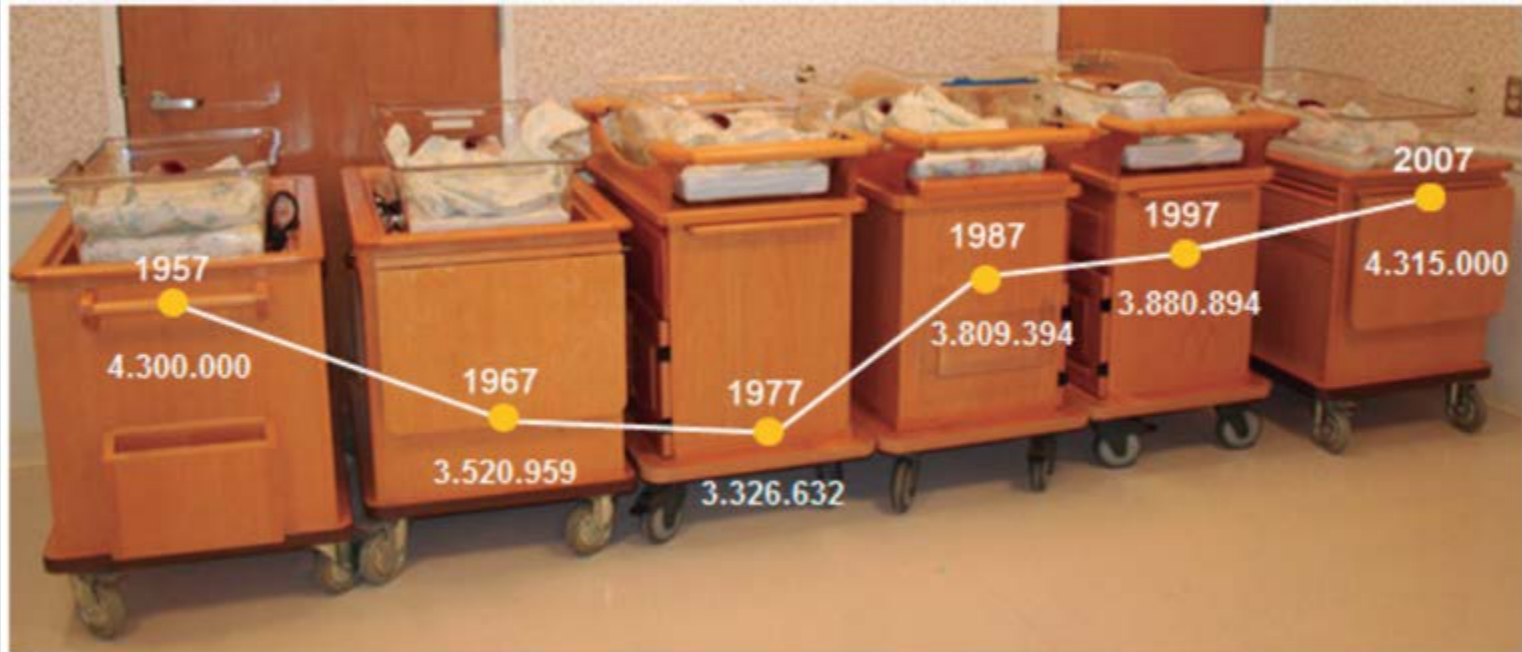
During which period or periods was there a decline in the number of births?

a. 1957-1967   b.1967-1977   c. 1977-1987   d. 1987-1997   e. 1997-2007
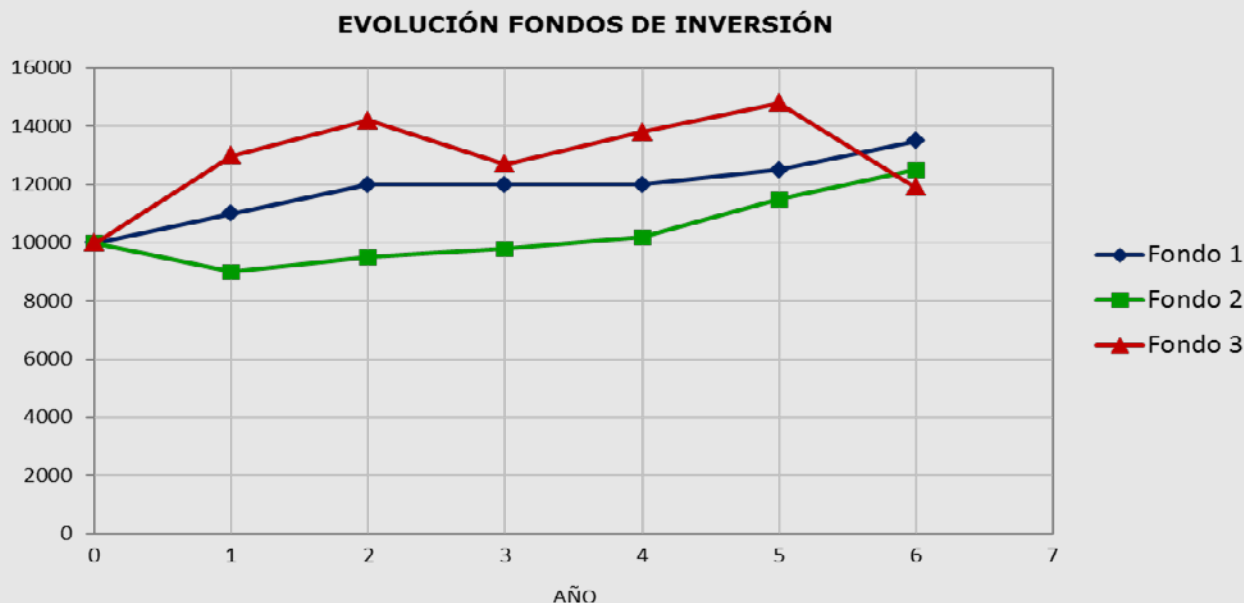f. Don't know   g. Refused

Source: PIAAC, sample item 3: Births in the United States

QNquiz3. This chart shows how a €10,000 investment would have performed in different types of investment funds over the last six years. Assuming that fees and charges are the same for all funds, which fund gave the best return after six years?

~ **Fund 1**
~ **Fund 2**
~ **Fund 3**
~ Don't know
~ Refused

EVOLUCIÓN FONDOS DE INVERSIÓN

Source: UK FCS QNquiz3 and Showcard N3

e0401) Point the sentence that tells what Ms. Cabañero ate during the swim.

a) Don't know   b) Refused   c) Cannot read

e0402) At what age did Cabañero begin swimming competitively?

Record response numerically - - -

a)   Don't know   b) Refused   c) Cannot read

e0403) Please, select the sentences that better summarizes the text that you just read:

a) The news talks about why long-distance swimming is not an Olympic test.

b) The news talks about the attempts of a swimmer to swim across the Strait of Gibraltar.

c) The news talks about the dangers of crossing the Strait of Gibraltar by swimming.

d) The news talks about how women are better than men in long-distance swimming.

e) Don't know   f) Refused   g) Cannot read

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