



EUROPEAN CENTRAL BANK

EUROSYSTEM

Household Finance and Consumption Network

The Household Finance and Consumption Survey: methodological report for the first wave – revised information for Spain



March 2020

Disclaimer: This paper should not be reported as representing the views of the European Central Bank (ECB). The views expressed are those of the authors and do not necessarily reflect those of the ECB.

Contents

1	Introduction	3
2	The HFCS Blueprint questionnaire	4
3	Collection of data and other fieldwork aspects	5
4	Sample design	6
5	Unit non-response and weighting	7
6	Item non-response, Multiple Imputation and Editing	8
7	Variance Estimation	10
8	Statistical Disclosure Control	11
9	Comparability Issues	12

Corrections to the Methodological report for the first wave of the HFCS

The Methodological Report for the first wave of the Household Finance and Consumption Survey¹ (HFCS) summarises the methodologies used in the first, 2010 wave of the HFCS. Information presented in the report refers to surveys used for the HFCS Results of the first wave-report², in which the most frequent reference period for households' balance sheet items was 2010. In Spain, the fieldwork was conducted between November 2008 and July 2009, and the reference periods were set as the time of interview.

During the production of the third, 2017 wave of the HFCS the Spanish data for the first two HFCS waves were revised to improve temporal alignment with other HFCS countries. The Statistical tables for these waves were also revised.

This document presents the updated methodological information for Spain. All information in this document refers to the survey conducted by the Bank of Spain between October 2011 and April 2012, and should be used instead of the information in the HFCS Methodological report for the first wave in interpreting the data from the HFCS Statistical tables. Please, note that the report on the HFCS results for the first wave has not been revised. This document only shows data for Spain and only tables for which the information from the 2011 survey is different from the 2008 survey.

¹ Household Finance and Consumption Network (2013a)

² Household Finance and Consumption Network (2013b)

1 Introduction

Table 1.1

Main features of the HFCS country surveys

Country	Responsible institution	Fieldwork period	Frequency (years)
Spain	Banco de España	2011/2012	Three

2 The HFCS Blueprint questionnaire

No tables in this chapter were revised.

3 Collection of data and other fieldwork aspects

Table 3.1

Share of interviews by survey mode in HFCS countries and length of interviews

Country	CAPI	CATI	CAWI	PAPI	Median length of interview (minutes)
Spain	100	0	0	0	60

Notes: CAPI: Computer Assisted Personal Interviews; CATI: Computer Assisted Telephone Interviews; CAWI: Computer Assisted Web Interview; PAPI: Paper-and-Pencil Interview.

Table 3.2

Information on interviewer training

Country	Length of Training, hours	Number of interviewers participating in the training
Spain	40	87

Table 3.3

Fieldwork indicators

Country	Organisation responsible for fieldwork	Number of interviewers conducting the survey	Language versions of the questionnaire	Length of fieldwork period (months)	Adaptation of existing survey (other than HFCS wave 1)
Spain	SA	84	Spanish	7	Y

SA = Survey Agency

4 Sample design

Table 4.3

Numbers of strata and primary sampling units selected

Country	Number of strata	Primary sampling units selected, for multi-stage designs
Spain	All except Basque Country and Navarre: 5 strata by municipality size and 8 strata by taxable wealth. Basque Country and Navarre: 6 strata by municipality size.	4116+985

Note: number of strata refers to the first sampling stage only. Primary sampling units selected are shown for countries with multi-stage sampling designs.

Table 4.6

Effective oversampling rates of the wealthy

Country	Effective oversampling rate of the top 10%	Effective oversampling rate of the top 5%
Spain	234	374

Notes: Notes: "Effective oversampling rate" of the top 10%: $(S_{90} - 0.1)/0.1$, where S_{90} is the share of sample households in the wealthiest 10%.

Effective oversampling rate of the top 5%: $(S_{95} - 0.05)/0.05$, where S_{95} is the share of sample households in the wealthiest 5%. Wealthiest households are defined as having higher net wealth than 90% (95%) of all households, calculated from weighted data.

5 Unit non-response and weighting

Table 5.1

Response behaviour indicators in the HFCS

Country	Gross sample size	Net sample size	Response rate*	Response rate** (including panel)	Refusal rate	Cooperation rate	Contact rate	Eligibility rate
Spain	13,442	6,106	31.7	48.1	46.0	49.6	97.0	94.4

Source: ECB – HFCS metadata.

Gross sample includes panel households that have responded to previous waves of the same survey.

* For comparability, response rates are shown for households interviewed for the first time.

** Response rates for the whole sample in countries that have a panel component. In Finland, the panel component consists of households interviewed in the three previous waves of the income and living conditions survey.

Table 5.2

Calibration Variables and sources

Country	Age	Gender	Household Size	Region	Other	Source
Spain	X	X	X		Municipality size	Census

Table 5.3

Final estimation weights by country

Country	Sum	Mean	Coefficient of variation, %
Spain	17,429,812	2,855	148

Notes: Sum is the sum of the estimation weights over the households, and corresponds to the size of the target population, i.e. the number of households. Mean weights indicate the average number of households that one net sample unit represents. The coefficient of variation is the relative standard deviation of final estimation weights (as a percentage of the mean of weights). This indicates the variability of the final weights in the net sample.

6 Item non-response, Multiple Imputation and Editing

Table 6.1
Imputation methodology

Country	Use of weights			Limiting imputation due to low number of observations				Selection of predictor in the imputation model		
	Weighted regression	Weight as covariate	No weights used	Yes values left missing	Yes estimation/other methodologies used	Yes, variables pooled and imputed	No	Automatic with limited editing	Automatic pre-selection with case-by-case evaluation	Case-by-case evaluation
Spain			x	x						x

Source: ECB – HFCS metadata.

Table 6.2
Number of covariates used for main variables

Country	Value of Household Main Residence (HMR)	Outstanding amount of most important HMR loan	Value of savings accounts	Employee income
Spain	241	111	162	251

Source: ECB – HFCS metadata.

Table 6.3
Item non-response rates: Current value of household main residence

Country	% having item		Of those having item*			Conditional mean (EUR)	
	Reported having item	Imputed as having item	Collected	Imputed from ranges	Imputed from missing	All	Collected#
Spain	87.5	0.0	87.5	8.8	3.8	189,200	189,200

* Collected observations include those collected from administrative sources. In addition to collected and imputed values, observations can be edited or estimated, which is why the columns do not always add up to 100%.

Includes observations collected from registers, edited, estimated or collected as range values and then imputed.

Table 6.4
Item non-response rates: Highest mortgage on Household Main Residence: value still owed

Country	% having item		Of those having item*			Conditional mean (EUR)	
	Reported having item	Imputed as having item	Collected	Imputed from ranges	Imputed from missing	All	Collected#
Spain	19.0	0.1	94.2	2.7	3.1	79,800	80,100

* Collected observations include those collected from administrative sources. In addition to collected and imputed values, observations can be edited or estimated, which is why the columns do not always add up to 100%.

Includes observations collected from registers, edited, estimated or collected as range values and then imputed.

Table 6.5

Item non-response rates: Value of savings accounts

Country	% having item		Of those having item*			Conditional mean (EUR)	
	Reported having item	Imputed as having item	Collected	Imputed from ranges	Imputed from missing	All	Collected#
Spain	30.9	0.6	85.5	6.2	8.3	44,900	44,800

* Collected observations include those collected from administrative sources. In addition to collected and imputed values, observations can be edited or estimated, which is why the columns do not always add up to 100%.

Includes observations collected from registers, edited, estimated or collected as range values and then imputed.

Table 6.6

Item non-response rates: Gross employee income

Country	% having item		Of those having item*			Conditional mean (EUR)	
	Reported having item	Imputed as having item	Collected	Imputed from ranges	Imputed from missing	All	Collected#
Spain	32.2	0.1	93.6	3.2	0.0	18,814	18,849

* Collected observations include those collected from administrative sources. In addition to collected and imputed values, observations can be edited or estimated, which is why the columns do not always add up to 100%.

Includes observations collected from registers, edited, estimated or collected as range values and then imputed.

Table 6.7

Impact of imputation on aggregate variables

Country	Gross real wealth		Gross financial wealth		Gross income	
	Share of imputation-affected observations	Share of imputed observations in total	Share of imputation-affected observations	Share of imputed observations in total	Share of imputation-affected observations	Share of imputed observations in total
Spain	13.5	4.3	13.5	7.9	10.5	3.2

Share of imputation-affected observations: share of households for which at least one component of the aggregate variable was imputed.

Share of imputed observations in total: weighted sum of all components of the aggregate that were imputed divided by the weighted sum of the aggregate variable.

7 Variance Estimation

Table 7.2
Calibration of replicate weights

Country	At household level	At person level	By gender	By age group
Spain	Yes	No (1.1%)	No (1.5%)	(3.0%)

Notes: In parentheses, the coefficient of variation of the weighted total. For gender and age, the average coefficient of variation over the categories is shown. Age groups are: less than 25, 26 to 44, 45 to 64, 65 and over.
*For age, only the coefficient of variation on the standard age categories is shown, since different age groupings were used in different countries to calibrate replicate weights.

8 Statistical Disclosure Control

Table 8.2

Cases in the top -or bottom- coded range age-related variables (%)

Country	Age RA0300	Length in residence HB0200	Year of acquisition HB0700	Inheritances received HH0201
Spain	3.49	7.81	0.06	0.04

Sources: HFCS data

9 Comparability Issues

Table 9.1

Reference periods

Country	Fieldwork	Assets & Liabilities	Income	Inflation adjustment factor between 1st and 2nd wave
Spain	10/2011 - 04/2012	Time of interview	2010	1.049

Source: HFCS metadata.

*Time of interview for variables collected in the interview, 30/4/2013 for variables derived from register data.

Table 9.2

Possible Inflation and Purchasing power parity correction factors

Country	Date of reference	PPP
Spain	2011	0.945

Notes: HICP: Harmonised Index of Consumer Prices, Overall index, calculated to adjust values in the HFCS to 2014 amounts.

Source: Eurostat (2015) for HICP and purchasing power parity factors, HFCN calculations.

Table 9.3

Variables Available in the User DataBase (UDB)

Country	Household-level file (maximum 157)	Personal-level file (maximum 52)
Spain	141	43

Notes: the table displays the number of variables with at least one non-empty observation.

Table 9.5

Number of Variables in the to-be-imputed list with missing or not collected values

Country	Household-level file		Personal-level file	
	Not fully collected	Not fully imputed	Not fully collected	Not fully imputed
Spain	4	0	2	0

Source: ECB – HFCS metadata.