An Phríomh-Oifig Staidrimh
Central Statistics Office

Standard SIMS Report:

Household Finance and Consumption Survey (HFCS)

Single Integrated Metadata Structure (SIMS) Report

For

Household Finance and Consumption Survey

This documentation applies to the reporting period:
2020

Last edited: 27/10/2023

1. Table of Contents

2. Introduction

The primary focus of the Household Finance and Consumption Survey (HFCS) is the collection of information on the assets and liabilities of different types of households in Ireland, in order to derive indicators on wealth. It is a voluntary (for selected households) survey of private households. The HFCS is collected under the auspices of the European Central Bank's (ECB) Household Finance and Consumption Network (HFCN) which designed the survey for use in the Eurozone.
The outputs are primarily used for research purposes by the European Central Bank and the Central Bank of Ireland but data may also be used by other recognised research institutions.

3. Contact

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4. Metadata Update

4.1. Metadata last certified

19/10/2022

4.2. Metadata last posted

21/10/2022

4.3. Metadata last update

19/10/2022

5. Statistical Presentation

5.1. Data Description

The HFCS collects household-level data on households' finances and consumption in the Eurozone area. Some non-Eurozone countries also participate, such as Poland.

The participating institutions report a set of commonly agreed output variables for their respective country. 'Core' output variables are to be delivered for all participating countries. A set of 'non-core variables' has also been defined, with the participating institutions being free to decide which of these non-core variables they collect and report for their respective country. Ireland does not collect any of these non-core variables, although other variables of national interest are collected. The collection of standardised variables will ensure cross-country comparability.
The primary variables of interest include the value of real and financial assets and debt. The HFCS core variables catalogue can be found at the following link:

https://www.ecb.europa.eu/stats/ecb_surveys/hfcs/html/index.en.html

5.2. Classification System

Household Composition
For the purposes of deriving household composition, a child was defined as any member of the household aged 17 or under. Households were analysed as a whole, regardless of the number of family units within the household. The categories of household composition are:

- 1 adult aged 65+
- 1 adult aged <65
- 2 adults at least 1 aged 65+
- 2 adults, both aged <65
- 3 or more adults
- 1 adult, with children aged under 18
- 2 adults with 1-3 children aged under 18
- Other households with children aged under 18

Tenure Status
Tenure status refers to the nature of the accommodation in which the household resides. The status is provided by the respondent during the interview and responses are classified into the following two categories;

- Owner-occupied
- Rented or rent free

Region
Ireland is divided into three NUTS2 regions. Nomenclature of Territorial Units (NUTS)

- Eastern and Midland
- Northern and Western
- Southern

NUTS 2- 4 Regional Breakdown of Ireland

NUTS2	NUTS 3	NUTS 4
Northern and Western	Border	Cavan
		Donegal
		Leitrim
		Monaghan
		Sligo
	West	Galway city
		Galway County
		Mayo
		Roscommon
Southern	Mid-West	Clare
		Limerick City and County
		Tipperary
	South East	Carlow
		Kilkenny
		Waterford City and County
		Wexford
	South-West	Cork City
		Cork County
		Kerry
Eastern and Midland	Dublin	Dublin city
		Dun Laoghaire-Rathdown
		Fingal
		South Dublin
	Mid-East	Kildare
		Meath
		Wicklow
		Louth
	Midland	Laois
		Longford
		Offaly
		Westmeath

Percentile of Household Income

All households are arranged by amount of household income, from lowest to highest and divided into 5 equal sized groups. The 20% of households with the lowest income are classified as 'Less than 20', the next group are '20-39' and so on. The 20% with the highest income are classified as '80-100'.

- Less than 20
- 20-39
- 40-59
- 60-79
- 80-100

Age of Reference Person

Households are classified depending on the age of the reference person.

- Under 35
- 35-44
- 45-54
- 55.64
- 65+

Work Status of Reference Person
Households are classified depending on the employment, or work status of the reference person.

- At work
- Unemployed
- Home Duties
- Retired
- Other

Education of Reference Person
Households are classified depending on the level of education of the reference person using International Standard Classification of Education (ISCED) - 2011

- Primary or below
- Lower secondary
- Higher secondary
- Post leaving cert
- Third level non-degree
- Third level degree or above

5.3. Sector Coverage

HFCS is concerned with the measurement of 'wealth' of households in Ireland. It does not cover those that may be living in private or public institutions such as nursing homes.

5.4. Statistical Concepts and definitions

The following is an outline of the statistical variables that are collected in the HFCS and the categories they fall into.

Real Assets:
Real assets include the value of the household main residence for homeowners, other real estate property, vehicles, and valuables (such as jewellery, works of art, antiques, etc.) and value of self-employment businesses.
Financial Assets
Financial assets include deposits (sight and saving accounts), mutual funds, bonds, shares, money owed to the households, value of voluntary pension plans and whole life insurance policies of household members and other financial assets item - which includes private non-self-employment businesses, assets in managed accounts and other types of financial assets.

Debt
Total debt includes mortgages collateralised on household's main residence, mortgages collateralised on other real estate property owned by the household, non-mortgage loans (consumer credit loans, private loans and other loans not collateralised on household's real estate property), credit lines/bank overdrafts debt and credit card debt (outstanding amount on which interest is paid at the end of the billing period)

Income
Household income includes all money receipts which accrue to the household regularly at annual or more frequent intervals. The gross receipts, (i.e. before subtraction of income tax and social insurance deductions) of individual household members are combined to give the average income for the households. The components of gross income are direct income and social transfers.

Direct income is composed of employee income and gross cash benefits or losses from self-employment. It also includes pensions from individual private plans, income from rental of property or land, regular inter-household cash transfers received, interests, dividends and profit from capital investments in unincorporated business.

Social transfers include Jobseekers payments, state pensions and family/children related allowances such as maternity/adoptive benefit, child benefit, one-parent family payments and carers' payments). It also includes housing allowances such as rent supplement, fuel allowances and exceptional needs payments. Other social transfers include survivors' payments, sickness payments, disability payments, education-related allowances and social exclusion not elsewhere classified.

Gross household income excludes certain receipts which are generally of an irregular and non-recurring nature. The principal exclusions are receipts for sale of possessions, withdrawals from savings, loans obtained, loan repayments received, windfalls, etc. Furthermore, transfers of money between household members (i.e. pocket money, housekeeping money etc.) are ignored since the household is treated as a single unit.

The following is an outline of the statistical variables that are derived from collected data and the categories they fall into.

Participation rates
The percentage of households that own particular assets as defined above.

Distribution of assets
The value of a particular asset as a percentage of the value of all assets held by households.

Debt sustainability ratios
Several ratios are derived including debt to asset, debt to income, debt service to income, mortgage debt service to income, loan to value of HMR, net liquid assets to income that indicate levels of debt burden and fragility.

Gross wealth
This is defined as the sum of real and financial assets.
Only certain assets and liabilities are included. In particular, the present value of all future, expected defined benefit pensions is excluded, which can be a sizable portion of the wealth of many households.
The present value of future, voluntary, expected defined contribution pensions is included.

Net Wealth
This is defined as gross wealth less total debt.
Net wealth is the difference between total household assets and total household liabilities.

5.5. Statistical Unit

The basic units of observation are individuals normally resident in Ireland and Irish households.

5.6. Statistical Population

The survey population is all private households and their current members residing in the state at the time of the data collection.

5.7. Reference Area

HFCS reference area is the 26 counties of the Republic of Ireland.

5.8. Time Coverage

HFCS is available for the years 2013, 2018 and 2020.

5.9. Base period

Not applicable.

6. Unit of Measure

Participation rates in assets, debt and credit constraints are measured as categorical variables (Yes/No) and estimates are presented as percentages.

The quantity of assets or debt owned, such as number of mortgages, are collected as numerical variables.

Values of assets, debt and income are measured as numerical variables expressed in Euro and estimates are presented in magnitudes of a thousand.

Demographic variables such as gender, labour status and job description are collected as categorical variables.

Demographic variables such as age, number of years working, and number of household members are collected as numerical variables.

Several debt ratios presented are expressed as percentages.

7. Reference Period

The reference period is the 12 months prior to the date of interview. Interviews were conducted between July 2020 and January 2021 giving a reference period from July 2019 to January 2021.

8. Institutional Mandate

8.1. Legal Acts and other agreements

There is no statutory requirement for the collection and dissemination of HFCS data.

Data for the HFCS is collected under Sections 24 and 30 of the Statistics act, 1993.
Section 24 relates to voluntary surveys or censuses.
Section 30 enables the CSO to have access to the records of public authorities for statistical purposes.

The principles relating to the processing of personal data in the GDPR recognise the secondary use of data for statistical purposes:
Article 5.1.b. : "further processing for archiving purposes in the public interest, scientific or historical research purposes or statistical purposes shall, in accordance with Article 89(1), not be considered to be incompatible with the initial purposes ('purpose limitation')".

8.2. Data Sharing

The HFCS makes use of anonymised administrative data managed by the CSO's Administrative Data Centre (ADC), which adheres to strict confidentiality controls.

9. Confidentiality

9.1. Confidentiality – policy

All information supplied to the CSO is treated as strictly confidential. The Statistics Act, 1993 sets stringent confidentiality standards: Information collected may be used only for statistical purposes, and no details that might be related to an identifiable person or business undertaking may be divulged to any

other government department or body.
These national statistical confidentiality provisions are reinforced by the following EU legislation: Council Regulation (EC) No 223/2009 on European statistics for data collected for EU statistical purposes.
Further details are outlined in the CSO's Code of Practice on Statistical Confidentiality.

For more information on the CSO confidentiality policy please visit:
https://www.cso.ie/en/aboutus/lgdp/csodatapolicies/statisticalconfidentiality/

9.2. Confidentiality – data treatment

Confidentiality is ensured within the anonymised micro-data by using coded variables instead of original values for key characteristics. For example, variables such as income are randomly rounded, variables are categorised and outliers are suppressed or recoded to a maximum or minimum value.

To ensure confidentiality, the HFCS processing team do not have direct access to the raw administrative datasets. The ownership of these files rest with the CSO's Administrative Data Centre (ADC). Only selected variables are made available, and these variables are only provided for those individuals in the HFCS sample. The CSO assigns a unique number derived from the PPSN to link data. This number is derived and managed by the ADC section to ensure added security and confidentiality around individuals' data.

10. Release Policy

10.1. Release Calendar

The date of dissemination of all statistics released by CSO can be found in the Release Calendar published in CSO.ie. This calendar is regularly updated.

10.2. Release calendar access

The release calendar can be accessed via the CSO website, www.cso.ie, or directly from this link:
https://www.cso.ie/en/csolatestnews/releasecalendar/

10.3. User access

In accordance with Principle 6 of the European Statistics Code of Practice all users of CSO statistics have equal access via the CSO website at the same time of 11 am. Any privileged pre-release access to any outside user is limited, controlled and publicised. In the event that leaks occur, pre-release arrangements are revised so as to ensure impartiality.

The CSO recognises that in very limited circumstances a business need for pre-release access may be substantiated. Any form of pre-release access is a privilege and a strict CSO pre-release access policy is adhered to for these special requests. The full pre-release access policy can be accessed at
https://www.cso.ie/en/aboutus/lgdp/csodatapolicies/csopolicyonpre-releaseaccess/
The various results are published nationally in statistical release format as well as on the CSO website (www.cso.ie). Selected extracts from the results are posted on the CSO's data dissemination database, PxStat.

11. Frequency of Dissemination

Fieldwork for the HFCS will be conducted every three years from 2020. Data will be disseminated between approximately 12 and 18 months after the fieldwork completion date.

12. Accessibility and clarity

12.1. News release

https://www.cso.ie/en/csolatestnews/pressreleases/2022pressreleases/pressstatementhouseholdfinanceandconsumptionsurvey2020/

12.2. Publications

HFCS 2013. CSO, 2015
https://www.cso.ie/en/media/csoie/releasespublications/documents/socialconditions/2013/hfcs2013.pdf

HFCS 2018. CSO, 2020
https://www.cso.ie/en/releasesandpublications/ep/p-hfcs/householdfinanceandconsumptionsurvey2018/

HFCS 2020. CSO, 2022
https://www.cso.ie/en/releasesandpublications/ep/p-hfcs/householdfinanceandconsumptionsurvey2020/

"HFCS report on the results from the 2014 wave", ECB, 2016
"HFCS report on the results from the 2017 wave", ECB, 2020
https://www.ecb.europa.eu/pub/economic-research/research-networks/html/researcher_hfcn.en.html

12.3. On-line database

HFCS 2013/2018/2020:
https://data.cso.ie/product/HFCS

2014 Eurozone data including Ireland:
https://www.ecb.europa.eu/home/pdf/research/hfcn/HFCS_Statistical_Tables_Wave_2014.pdf?bf06c66b9f89bd01e30e9ead7d836dad
2017 Eurozone data including Ireland:
https://www.ecb.europa.eu/home/pdf/research/hfcn/HFCS_Statistical_Tables_Wave_2017_May2021.pdf?ca15e575b6b7765dad1147e7a3dba728

12.3.1. AC 1. Data tables -consultations

The following table shows the number of web hits the HFCS 2020 publication received from the publication date of the 19th of May, 2022 to the 17th of August, 2022, a period of approximately 3 months.

Page	Page views	Unique Page views	Avg. Time on Page
/en/releasesandpublications/ep/p-hfcs/householdfinanceandconsumptionsurvey2020/	3701	919	16.32
/en/releasesandpublications/ep/p-hfcs/householdfinanceandconsumptionsurvey2020/wealth/	1356	369	48.72
/en/releasesandpublications/ep/p-hfcs/householdfinanceandconsumptionsurvey2020/assets/	1029	281	42.67
/en/releasesandpublications/ep/p-hfcs/householdfinanceandconsumptionsurvey2020/incomeandwealthinequality/	954	270	17.96
/en/releasesandpublications/ep/p-hfcs/householdfinanceandconsumptionsurvey2020/summaryofresults/	943	264	31.30

/en/releasesandpublications/ep/p-hfcs/householdfinanceandconsumptionsurvey2020/data/	764	229	25.77
/en/releasesandpublications/ep/p-hfcs/householdfinanceandconsumptionsurvey2020/income/	755	221	15.76
/en/releasesandpublications/ep/p-hfcs/householdfinanceandconsumptionsurvey2020/debtandcredit/	586	175	28.63
/en/releasesandpublications/ep/p-hfcs/householdfinanceandconsumptionsurvey2020/saving/	583	177	7.70
/en/releasesandpublications/ep/p-hfcs/householdfinanceandconsumptionsurvey2020/introduction/	529	158	19.88

12.4. Micro-data Access

Data is available to researchers via Researcher Coordination Unit (RCU) once Research Micro File (RMF) applications have been accepted.

12.5. Other

An infographic was produced that highlights some of the key findings in a clear and user-friendly way.

The micro-data files were sent to the European Central Bank (ECB) with various statistical disclosure controls applied such as rounding of respondents age and income.

"Survey data on household finance and consumption – research summary and policy use" (ECB Occasional Paper No 100, 2009), available from https://www.ecb.europa.eu/pub/pdf/scpops/ecbocp100.pdf?407cbc929d64b0d234a7e803af2ec891

12.5.1. AC2. Metadata consultations

The following table shows the number of web hits the HFCS 2020 methods page received from the publication date of the 19th of May, 2022 to the 17th of August, 2022, a period of approximately 3 months.

Page	Page views	Unique Page views	Avg. Time on Page
/en/methods/socialconditions/hfcsurvey/	201	78	19.72
/en/methods/socialconditions/hfcsurvey/faqhfcs/	65	29	58.20
/en/methods/socialconditions/hfcsurvey/abouthfcs/	22	12	8.94
/en/methods/socialconditions/hfcsurvey/contactushfcs/	6	3	6.00

12.6. Documentation on Methodology

The compilation of the HFCS at national level follows the HFCS Methodological Guidelines given by the European Central Bank. These guidelines include:

- HFCS questionnaire and Paradata,
- List of Core Output Variables,
- List of tasks for conduct of an HFCS,
- Longitudinal Survey Methods for the Eurosystem Household Finance and Consumption Survey by Peter Lynn (University of Essex).

All above available at:
https://www.ecb.europa.eu/pub/economic-research/research-networks/html/researcher_hfcn.en.html

Other methodological Documents available include:

- "The Euro-area Household Finance and Consumption Survey – survey mode, oversampling wealthy households and other methods to reduce non-response bias" (UNECE Conference of European Statisticians, available from: http://live.unece.org/fileadmin/DAM/stats/documents/ece/ces/2011/48.e.pdf
- "Re-weighting to reduce unit non-response bias in household wealth surveys: a cross-country comparative perspective illustrated by a case study" (European Conference on Quality in Official Statistics, 2010, available from https://www.ecb.europa.eu/home/pdf/research/hfcn/WealthSurveys.pdf?1cadd63be4bcf2e341be5ae2378010a5

12.6.1. AC3 – Metadata completeness – rate

Information has been provided on all 19 of the elements in this report.
For section 18, cost information will be provided (report will be updated) when it becomes available.

12.7. Quality Documentation

Further information on the quality of the HFCS at national level can be found in the CSO's methods page associated with the release, directly from this link:
https://www.cso.ie/en/methods/socialconditions/hfcsurvey/

Quality documentation for the ECB publication will be available on the HFCN website in 2023 when the European wide results are published. See link in 12.6 above.

13. Quality Management

13.1. Quality Assurance

Quality Management Framework
The CSO avails of an office wide Quality Management Framework (QMF). This framework allows all CSO processes and outputs to meet the required standard as set out in the European Statistics Code of Practice (ESCOP). The QMF foundations are based on establishing the UNECE's Generic Statistical Business Process Model (GSBPM) as the operating statistical production model to achieve a standardised approach to Quality Management. All and any changes implemented to CSO processes and outputs require adherence to the QMF.

13.2. Quality Assessment

The QMSA Quality Review Survey is completed annually for HFCS. The survey highlights parts of the survey process that could be improved and parts of the process that are done well. Quality of the HFCS data is constantly improving with each wave, for example the introduction of multiple imputation and an improved oversample selection method in the 2018 wave and the introduction of a panel component and improved weighting system in the 2020 wave. Results from the 2022 QMSA survey will help to identify any possible improvements in quality for the 2023 wave.

14. Relevance

14.1. User Needs

14.1.1. Main National Users

Central Bank of Ireland are the main national users. The HFCS is used in their reports that are published regularly, for example quarterly and annual reports. Outputs for the HFCS are determined by the ECB in coordination with central banks across the Eurozone and are implemented by the CSO. Some ad-hoc outputs are available in the Irish dataset upon request by the CB

14.1.2. Principal External Users

The European Central Bank publishes results from the HFCS after each wave. Outputs for the HFCS are determined by the ECB in coordination with central banks across the Eurozone and are implemented by the CSO.

14.2. User Satisfaction

As the survey is designed by the ECB and they, along with the Central Bank of Ireland are the main users, there is little need currently for assessment of user satisfaction. Ad-hoc consultations are conducted with the Central Bank of Ireland in terms of survey content and, if practical, their user needs are generally met.

14.3. Data Completeness

Several core variables are not provided due to the difficult nature of asking the relevant questions via telephone interview and also due to the relative increase in response burden associated with them. Some paradata variables are unavailable for technical reasons.

14.3.1. Data Completeness rate

There are 267 core variables, of which 248 are collected. The missing variables are primarily sample register variables and paradata. Several missing variables are child variables that would not have been asked to all respondents even if included in the survey.

15. Accuracy and reliability

15.1. Overall accuracy

The main sources of error are outlined in the following sections. In addition to the sources of error outlined, a potentially significant source of error in the HFCS is the under-reporting of assets by respondents. This effect can be seen by observing the coherence between central bank quarterly financial accounts data and the HFCS. For example, the total value of “Savings” in the HFCS is approximately 35% of the value of money on deposit from the central bank accounts data. Under-reporting is an issue in wealth surveys and is difficult to rectify. Improved access to administrative data has corrected under-reporting of income and debt in the HFCS.

To reduce error during data collection, survey interviewers receive online training to prepare for the fieldwork. Communication is open between the statistician and the field staff for the duration of the field work. This enables any issues relating to the survey instrument to be recognised and if necessary, any technical bugs can be fixed with a new survey instrument release. The statistician is also available to answer any questions the field staff may have about the survey and its implementation in the field. Although this helps to reduce error and improve the quality of the data collected there are still obvious keying errors visible in the raw data. These are deleted and the value is imputed.

Data editing and imputation are performed during the data processing phase to ensure data quality. Processed data is validated by the ECB to ensure consistency, accuracy and validity in survey data and flag data. To ensure quality and relevancy, dissemination of HFCS data in Ireland is closely aligned with estimates produced by the ECB. Variables collected and disseminated are recommended by the ECB based on feedback from European Central banks and various task teams within the HFCN.

15.2. Sampling Error

The HFCS sample is designed to be a randomly selected cluster sample with each household in the target population having an equal and known probability of selection. Non-response has the potential to introduce bias into the sample. HFCS sample implementation procedures are designed to minimise non-response. The sample is designed for a full-time field force of 100 interviewers. Adequate monitoring and management of the field-force availability is critical in assuring a high-quality representative sample. An on-going issue with all CSO household samples is the availability of field interviewers. When any of the interviewers are not available due to holidays, sickness or retirement, the interviewers are replaced by temporary interviewers (back-ups) whenever possible. There may be non-response bias in the HFCS where certain geographical areas are under-represented if there is a lower response rate in those areas. This non-response is accounted for in the non-response weighting procedure.

Certain cohorts of society have lower response rates than others, such as households where the household reference person is aged under 35 or rented households. The weighting procedure used in the HFCS takes into account this under representation and adjusts weights appropriately.

As the HFCS uses an oversample of wealthier households, these households will have higher representation in the dataset than what would be expected if no oversample was used. The weighting procedure used in the HFCS takes into account the oversample and adjusts weights appropriately.

15.2.1. A1.Sampling error indicator

HFCS precision estimates for the 2020 wave carried out in Ireland

HFCS Precision estimates 2020

Variable	Statistic	Estimate	95% Conf Int		Standard Error	Coefficient of Variation	Variance	Sample Number
			Lower CL	Upper CL				
Net Wealth	Median	193,100	183,131	203,069	5,086	0.03	25,870,249	6,020
Net Wealth	Mean	353,600	331,610	375,590	11,219	0.03	125,870,657	6,020
Gross Wealth	Median	265,100	254,555	275,645	5,380	0.02	28,946,009	6,020
Gross Wealth	Mean	418,600	396,914	440,286	11,064	0.03	122,416,138	6,020
Household Main Residence (HMR)	Participation	69.6	69.6	69.6	0.0	0.00	0.0	6,020
Land	Participation	8.9	7.6	10.2	0.7	0.07	0.4	6,020
Other Real Estate Property	Participation	12.5	11.2	13.8	0.7	0.05	0.4	6,020
Self Employment Business Wealth	Participation	15.2	13.7	16.7	0.8	0.05	0.6	6,020
Vehicles	Participation	79.1	77.4	80.8	0.9	0.01	0.8	6,020
Valuables	Participation	78.3	76.5	80.1	0.9	0.01	0.9	6,020
Savings	Participation	96.6	95.3	97.9	0.6	0.01	0.4	6,020
Bonds or Mutual Funds	Participation	13.6	12.5	14.7	0.6	0.04	0.3	6,020
Shares	Participation	10.5	9.4	11.6	0.6	0.05	0.3	6,020
Voluntary Pension	Participation	16.3	15.0	17.6	0.7	0.04	0.4	6,020
Other Financial Asset	Participation	7.2	6.1	8.3	0.6	0.08	0.3	6,020
Mortgage on HMR	Participation	30.4	29.3	31.5	0.5	0.02	0.3	6,020
Mortgage on Other Property	Participation	7.2	6.4	8.0	0.4	0.06	0.2	6,020
Non-mortgage loans	Participation	45.5	43.4	47.6	1.1	0.02	1.1	6,020
Overdraft	Participation	6.7	6.0	7.4	0.4	0.06	0.1	6,020
Credit Card	Participation	26.8	24.9	28.7	1.0	0.04	0.9	6,020
Household Main Residence (HMR)	Median	260,000	251,446	268,554	4,364.5	0.02	19,049,043	6,020
Land	Median	300,000	256,834	343,166	22,023.4	0.07	485,030,472	6,020
Other Real Estate Property	Median	236,600	210,938	262,262	13,093.0	0.06	171,426,570	6,020
Self Employment Business Wealth	Median	19,700	11,862	27,538	3,999.1	0.20	15,993,137	6,020
Vehicles	Median	10,000	9,101	10,899	458.6	0.05	210,276	6,020

Valuables	Median	4,100	3,442	4,758	335.9	0.08	112,812	6,020
Savings	Median	8,700	7,593	9,807	564.9	0.06	319,156	6,020
Bonds or Mutual Funds	Median	5,000	1,717	8,283	1,674.9	0.33	2,805,431	6,020
Shares	Median	5,800	3,643	7,957	1,100.3	0.19	1,210,602	6,020
Voluntary Pension	Median	37,600	31,553	43,647	3,085.0	0.08	9,517,252	6,020
Other Financial Asset	Median	10,000	5,986	14,014	2,048.1	0.20	4,194,899	6,020
Mortgage on HMR	Median	124,400	118,942	129,858	2,784.5	0.02	7,753,354	6,020
Mortgage on Other Property	Median	104,800	91,054	118,546	7,013.4	0.07	49,188,163	6,020
Non-mortgage loans	Median	7,300	7,215	7,385	43.6	0.01	1,902	6,020
Overdraft	Median	600	515	685	43.2	0.07	1,867	6,020
Credit Card	Median	700	553	847	74.9	0.11	5,612	6,020
Applied for credit	Participation	44.4	42.6	46.2	0.9	0.02	0.8	6,020
Refused or Reduced Credit	Participation	5.9	5.3	6.5	0.3	0.06	0.1	6,020
Not Applied for Credit	Participation	4.6	3.7	5.5	0.5	0.10	0.2	6,020
Credit Constrained	Participation	6.4	5.4	7.4	0.5	0.08	0.3	6,020
Debt to asset ratio	Median	23.3	21.2	25.4	1.1	0.05	1.2	6,020
Debt to income ratio	Median	40.8	35.8	45.8	2.5	0.06	6.4	6,020
Debt Service to income ratio	Median	10.8	10.2	11.4	0.3	0.03	0.1	6,020
Mortgage debt service to income	Median	11.8	11.3	12.3	0.3	0.02	0.1	6,020
Loan to value of HMR ratio	Median	45.2	42.6	47.8	1.3	0.03	1.7	6,020
Net liquid assets to income ratio	Median	13.9	11.6	16.2	1.2	0.08	1.4	6,020

15.3. Non-sampling Error

In addition to known sampling errors, any survey will be subject to other non-sampling errors; for example, measurement errors arising from different interviewing techniques or comprehension of questions. Non-sampling error is far more difficult to measure than sampling error and no formal estimate of non-sampling error is available in HFCS.

15.3.1. Coverage error

The sampling frame is a combination of the 2016 Census file and An-Post's GeoDirectory (see https://www.geodirectory.ie/). The vast majority of dwellings in Ireland are included in the frame. The sample excludes island communities and individuals living in institutions or communal accommodation and persons of no fixed abode. This sampling frame is a dwelling register but this does not equate to a household register. The frame is not a household register as there may be more than one household residing in a single dwelling or a single household residing in multiple dwellings.

15.3.1.1. A2. Over coverage rate

There are no known over coverage issues in the HFCS sample.

15.3.1.2. A3. Common units – proportion

98% of individuals in the P dataset are covered by both survey and administrative sources.
This is 78% of all individuals in the survey. Those aged under 16 are not included in the P dataset.

15.3.2. Measurement error

The primary source of measurement error in the HFCS is due to keying errors made by interviewers.

Another source of error is comprehension errors – there are terms used in the survey that may not be understood by all respondents, but this is unavoidable in such a survey. Interviewers are provided with a PDF of definitions that list unfamiliar terms and their meanings with references to the question where the term is used.

To help minimise non-sampling effects, information on the interviews is collected and analysed (including, for example, when interviews were conducted and their duration). This information is compared across the interview team to ensure no unusual variation in interviewer performance exists.

Co-ordinators, as an additional check on the quality of the interviewer's work, can contact households to check the quality of the collected data.

No formal evaluation of sources of error is available, although measures are in place to minimise error. The quality of the data collected is improved using regular field staff training and debriefings.

15.3.3. Non-Response Error

Certain cohorts of the population are less likely to respond such as households where the reference person is aged under 35 or those living in rented accommodation. Unit nonresponse can take several forms including:

- no contact with the household is made,
- where contact is made but the household refuses to take part,
- where the household takes part but does not complete the survey (see table in 15.3.3.1 below for more).

In the case of initial non-contact with a household, interviewers made further attempts to contact householders using addressed correspondence. To correct for unit nonresponse, household weights are adjusted appropriately using logistic modelling based on the characteristics of households available on the sampling frame.

Item nonresponse occurs when respondents do not know the answer to the question being asked or refuse to provide an answer as they deem it to be sensitive information. Missing values due to item nonresponse are imputed using Gibbs sampling methodology, an iterative Markov procedure of successive simulation of the distribution of variables conditioned on both observed data and distributions of variables previously simulated in the same iteration.

15.3.3.1. Unit non-response rate

The HFCS 2020 has 6,020 respondent households giving a response rate of 45.1% when all sampled households are considered. The following table is a breakdown of response types.

HFS 2020 Summary of outcomes	
Status	**Number of households**
Complete Interviews	5,972
Incomplete Interviews	60
No interview, other reason	821
No relevant household at dwelling	216
Did not respond to postal request	6,634
Refusal	776
Temporarily absent	67
Other	2

15.3.3.2. Item non-response rate

HFS 2020 Summary of response rates for selected variables		
Variable Description	**HFCN Code**	**Non response rate (%)**
Current value of the household main residence (HMR)	HB0900	6.3
Total value of cars	HB4400	2.8
Value of self-employment business	HD0801	29.1
Value of deposit accounts	HD1110	23.6
Value of savings accounts	HD1210	25.6
Current Value of Pension Plan (1st pension)	PFA0801	66.5

15.3.4. Processing error

HFCS 2020 was published without any known processing errors. In the event of processing errors leading to significant misreporting of estimates being detected, it is standard procedure that HFCS 2020 data would be revised and republished.

15.3.5. Model assumption error

Not applicable.

16. Timeliness and punctuality

16.1. Timeliness

A significant time lag was introduced due to delays in obtaining the Central Credit Register which was required for processing HFCS 2020 data. As this data source is now available to the CSO, this should not cause any additional time lag in future waves of the HFCS.
Time lag was also introduced as a new version of EMIR, the software used for multiple imputation was used. As this is now operational, there will be less difficulties with this in future waves.

16.1.1. TP1. Time lag – First results

Not applicable.

16.1.2. TP2. Time lag – Final results

Estimates from HFCS 2020 were made available 16 months after the reference period.

16.2. Punctuality

There was no release schedule for HFCS in 2020 due to the CSO being in the process of obtaining Central Credit Register data from the Central Bank which was required for HFCS processing.

16.2.1. TP3. Punctuality – Punctuality - delivery and publication

Not applicable.

17. Comparability

17.1. Comparability – Geographical

Due to low response rates in some locations, estimates at a NUTS 3 level may be unreliable. Estimates produced at county level or lower should be considered unreliable. Estimates at NUTS 2 level would be the most reliable for geographical comparisons.

At European level the participating institutions produce harmonised output (i.e. survey data) for their respective country, but do not necessarily use identical questionnaires. However, a common template questionnaire serves as a benchmark for the country questionnaires, as well as for establishing the output desired.

17.1.1. CC1. Asymmetry for mirror flow statistics.

Not calculated

17.2. Comparability over time

When HFCS 2020 was originally published, there was a break in series. This meant HFCS 2020 was not comparable to 2013 and 2018. This was due to methodological changes made in 2020. The 2018 data has subsequently been revised to account for the methodological changes introduced in 2020 and was re-published in May 2023. As a result of this, there is now a break in series between 2013 and 2018 data only. As of May 2023, data from 2018 and 2020 are comparable.

17.2.1. Length of Comparable Time series

Currently the time series stands at 2 waves, 2018 and 2020.

17.3. Coherence – cross domain

The income data in the HFCS can be compared to the income collected in the SILC, (Survey on Income and Living Conditions), an annual household survey conducted by the CSO. Comparisons can be seen in the table below. Gross household income includes social welfare payments. As both SILC and HFCS income comes directly from administrative sources, a high level of coherence would be expected. Details of SILC coherence with institutional sector accounts and other data sources can be found in the SILC quality report for 2020 at the following link:
https://www.cso.ie/en/methods/qualityreports/surveyonincomeandlivingconditions/

Comparison of HFCS and SILC income	Mean	Median
HFCS gross household income (€)	71,347	53,333
SILC gross household income (€)	73,698	55,259
Difference (%)	3.3	3.6

HFCS data can be compared to the Quarterly Financial Accounts published by the Central Bank of Ireland which contain data on financial assets and liabilities of Irish households.
https://www.centralbank.ie/statistics/data-and-analysis/financial-accounts

HFCS and QFA are not directly comparable as QFA also includes non-profit institutions serving households (NPISH), non-incorporated enterprises, sole-traders and partnerships which are not large enough to be considered quasi corporations and institutionalized households. Although they cannot be compared directly, QFA figures consist mostly of private household wealth as defined in the HFCS so an approximate comparison can be made. Comparisons between HFCS and QFA for Q4 2020 can be seen in the following table.

HFCS	€bn	QFA Q4 2020	€bn
Sights and savings deposits	50.2	Currency and Deposits	165.2
Bonds	5.1	Securities other than shares	0.6
Shares	10.2	Listed shares	70.4
Mutual Funds	10.1	Investment Fund Shares	4.0
Loans	122.1	Loans	129.5
HMR & Other real estate	505.7	Housing assets	537.0

Differences between deposit amounts may be due to under-reporting by survey respondents which is a trend that is also seen in other countries where HFCS is carried out.

17.3.1. Coherence – Sub annual and annual statistics

Not applicable.

17.3.2. Coherence with National Accounts

Not applicable.

17.4. Coherence – internal

Estimates are internally consistent.

18. Cost and Burden

This document will be updated with HFCS costs when the data is available.

The median interview time for HFCS in 2020 is 37 minutes, reduced from 42 minutes in 2018. Several core questions were excluded from the survey in 2020 due to excessive burden for respondents via telephone interviewing which was introduced during the COVID-19 pandemic. Some core variables on debt were also excluded as the data could be obtained from the Central Credit Register administrative data source, thus further reducing response burden.

19. Data Revision

19.1. Data Revision Policy

Published statistics are subject to correction and revision for a variety of reasons. The most common reasons include the receipt of additional information (for example, late survey responses) and updated seasonal factors. Occasional revisions also occur as a result of changes to definitions, methodology, classifications and general updating of statistical series.

It is recognised internationally that the existence of a sound revisions policy maintains credibility in official statistics. The CSO General Revisions Policy, which details how revisions should be managed and communicated to users, outlines the three main types of revisions:

- Planned Routine Revisions
- Planned Major Revisions
- Unplanned Revisions.

One reason for unplanned revisions occurring can be when errors are detected after publication. The 'CSO Error Correction Policy – How to deal with Publication Errors' outlines the steps taken when these errors are detected. As required under Principle 6.3 of the European Statistics Code of Practice, errors detected in published statistics are corrected at the earliest possible date and users are informed. An important step in the process is the documentation and analysis of errors that have occurred and their causes. This allows the CSO to take measures preventing similar errors from occurring in the future and uniformity in dealing with them when they do.

The data revision policy that CSO statistics adheres to can be found via the following link: https://www.cso.ie/en/methods/quality/treatmentofrevisions/

19.2. Data Revision Practice

There are no revisions to report for HFCS 2020.

19.2.1. Data Revision – Average size

Not applicable.

20. Statistical processing

20.1. Source Data

The data is primarily survey data but supplemented with administrative data. This includes data from the Department of Social Protection on state transfer payments, data from the Irish Agriculture and Food Development Authority (Teagasc) who provided the CSO with data on Standard Outputs (SOs) for farm animals and hectarage of various crops, data from Revenue who provided income tax records, data from the Residential Tenancies Board (RTB) who provided data on rental properties, data from local councils on HAP payments, data from SUSI on student grant payments, data from the HEA on level of education attained and data from the Central Bank of Ireland on debt in the form of the Central Credit Register (CCR).

20.1.1. Population and sampling frame

The sampling frame for the 2020 HFCS was the register of all private households occupied on the night of the 2016 Census of Population. Census Enumeration Areas (EAs) were used as blocks for the 2016 Census sampling frame. EAs are designed by Census for their enumeration of the Census and generally compromise of two to three small areas. There were 4,660 EAs on the Census 2016 sampling frame, however all blocks that have been previously selected in any CSO household sample over the previous three years are excluded. The reasons for excluding these households are twofold:

1. To reduce response burden on individual households
2. To maintain reasonable response rates.

Island communities are excluded from the sampling frame. As a result, certain island communities were not included when building the HSCU EAs. The generation of HSCU EA data was performed using PHP code and a SQLITE database. The complex nature of the processing meant that SAS was not the appropriate software tool to deliver this work. The output of this work is the creation of the HSCU EA sampling file which contains 3,556 EAs (or blocks).

This HSCU SA sampling file is linked with the Census data and An Post's Geo-Directory to provide the overall sample frame. Two variables, County/NUTS4 (the 31 administrative counties[1]) and the Pobal HP (Haase and Pratschke) Deprivation Index (aggregated to quintiles), exist on the sample frame and they form the basis for the stratification of the population adopted by HFCS in its complex sample design.

[1] The 31 administrative counties as of 2016.

The survey population is all private households and their current members residing in the state at the time of the data collection. A sample of households is taken from the population and data is then collected on each individual within the household. The sample therefore excludes individuals living in public institution (e.g. prisons, hospitals, nursing homes, etc.), communal accommodation and persons of no fixed abode.

20.1.2. Sampling design

There are three components to the HFCS sample for 2020: the panel component, the refresh component and the oversample.

The **refresh sample** was selected as follows. A sample based on the 2016 Census of Population was selected for the HFCS. The sample is stratified using administrative county and the Pobal HP (Haase and Pratschke) Deprivation Index. A two-stage sample design is used. In the first stage 1,200 blocks are selected using Probability Proportional to Size (PPS) sampling. In the second stage households are selected using Simple Random Sampling (SRS). This ensures each household in the sample frame has an equal probability of selection
As HFCS was conducted in Q3 and Q4 of 2020, 600 blocks were chosen with 14 households randomly selected from each block. A total of 8,400 households were selected this way.

The **panel component** consists of households that completed the survey in 2018. A total of 4,748 households were selected for this. Households that only partially completed the survey in 2018 were not included which is why this component is slightly less than the 2018 sample.

Due to the general under-estimation of total population wealth in surveys of this nature, it is recommended to **oversample** wealthier households. This is achieved by including a higher proportion of wealthier households in the sample. The oversample is a separate sample that specifically targets wealthier blocks.
The **oversample** was chosen by assigning a 'wealth' variable (Local Property Tax (LPT) median * Home Ownership Rate) to each block in the Dublin area. This variable is used to create 5 strata with stratum 1 having the lowest perceived wealth and stratum 5 having the highest. We then use a proportional allocation to select 100 blocks from each of the strata. The proportions are 5%, 5%, 10%, 30% and 50% from strata 1, 2, 3, 4 and 5. This results in an oversample size of 1,900 households.

20.1.3. Survey size

Combining the initial sample and oversample, the total sample size for HFCS 2020 is 15,048 households.

The achieved sample is 6,020 households.

20.1.4. Survey technique

Respondents were invited to take part in the survey via a posted letter to the dwelling. Respondents would call the interviewer via telephone to organise a time for the interview. All respondents were provided with a €20 reward for taking part.

Information was collected from all household members, on tablets, by trained interviewers, using Computer-Assisted Telephone Interview (CAPI) software. The questionnaire was completed using the Blaise application and data is transferred to the CSO's head office in Cork via a 'secure tunnel'. To ensure security and confidentiality encrypted data is synchronised on a weekly basis using the REACH interface.

20.2. Frequency of data collection

Data is collected every 3 years.

20.3. Data Collection

20.3.1. Type of Survey/Process

Both survey and administrative data sources are used.

20.3.2. Questionnaire (including explanations)

The HFCS questionnaire contains questions on a range of topics relating to both the household and individual respondents. Topics measured in the questionnaire include:

- gender
- nationality
- age
- income
- industry of employment
- employment status
- occupation
- education level
- real assets and their financing
- financial assets including pensions
- debt
- credit constraints
- intergenerational transfers and gifts
- consumption

The paper form of the survey can be found at the following link:
https://www.cso.ie/en/media/csoie/methods/householdfinanceandconsumptionsurvey/HFCS_2020_paper_form.pdf

20.3.3. Survey Participation

Participation in the HFCS is voluntary for selected households.

20.3.4. Data Capture

HFCS 2020 data was collected from respondents via CATI (Computer Assisted Telephone Interview). This differed to HFCS 2018 (CAPI) due to restrictions during the COVID-19 pandemic. Data is entered into tablets using the BLAISE application. There are various data entry checks incorporated into the survey instrument such as upper and lower limits on amounts entered and feasible value checks.

All administrative data was sourced from the Admin Data Centre (ADC) within the CSO. Admin data is matched anonymously to the HFCS survey respondents using an internal CSO identifier in the SAS application. Administrative data is checked for unusual values, such as outliers, that may be defined as errors based on survey data.

20.4. Data Validation

The distributions of source data are analysed to check for outliers and unusual values. Outliers in a variable for a respondent are checked against other variables for that respondent for plausibility. If found to be implausible, the data point is deleted or edited, whichever is more appropriate.

Comments made by interviewers are examined and sometimes lead to edits in the survey responses.

Trends in the outputs between waves are checked for coherence with outside data sources such as the quarterly financial report published by the Central Bank.

Various data validation checks are completed by the HFCN such as checks for valid values and checks for consistency and flow, both on response values and on flag values. The HFCN also perform some coherence and plausibility checks. Data will not be accepted by the HFCN until all validation tests have been passed.

20.5. Data Compilation

Survey data is combined with data form administrative sources using SAS functions such as Proc SQL and an internal anonymised CSO primary key variable.

Derived variables in the HFCS are the result of arithmetical operations on survey data (i.e survey variables). In certain cases, the variables will consist of administrative data. For example, "Net Wealth" is derived by adding the value of assets and subtracting the value of debt.

Aggregates such as median, mean and participation rates are calculated using SAS functions Proc Means, Proc Univariate and Proc Freq using the "Weight" option to estimate for the total population.

20.5.1. Imputation (for Non-Response or Incomplete Data Sets)

The are 3 scenarios where a value would be imputed in HFCS. If the respondent did not know the answer or refused to answer, then the answer would be imputed. If the respondent gave an unreliable answer, then the answer would be deleted and an answer would be imputed.

Multiple imputation based on Gibbs sampling methodology was used to impute missing values. With this method, five imputed values based on different random draws are provided to the user for each missing value, resulting in five copies of the complete dataset. Gibbs sampling is an iterative Markov procedure of successive simulation of the distribution of variables conditioned on both observed data and distributions of variables previously simulated in the same iteration. The model imputes each missing observation using a maximal set of covariates (from the list determined by the user) from the appropriate subpopulation. For example, in the imputation of the value of bonds, only households that have bonds are considered. Multiple imputation for the HFCS is carried out using EMIR 2.2, a SAS program package provided by the HFCN.

20.5.1.1. A7. Imputation rate

The rate of imputation for certain variables was:

HFS 2020 Summary of response rates for selected variables		
Variable Description	**HFCN Code**	**% of values imputed**
Current value of the household main residence (HMR)	HB0900	6.3
Total value of cars	HB4400	2.8
Value of self-employment business	HD0801	29.1
Value of deposit accounts	HD1110	23.6
Value of savings accounts	HD1210	25.6
Current Value of Pension Plan (1st pension)	PFA0801	66.5

20.5.2. Grossing and Weighting

In order to provide national results, the survey results were weighted to represent the entire population. The process used was as follows:

Firstly, design weights were calculated for all units selected in the initial sample and are computed as the inverse of the selection probability of the unit. The purpose of design weights is to eliminate the bias induced by unequal selection probabilities, which was relevant here as we oversampled wealthy areas.

Next these design weights were then adjusted for non-response. This eliminated the bias introduced by discrepancies caused by non-response between the initial sample and the achieved sample, particularly critical when the non-responding households are different from the responding ones in respect to some survey variables as this may create substantial bias in the estimates. Design weights are adjusted for non-response by calibrating to Census 2016, comparing the attributes of households that responded vs. attributes of households that did not respond.

Next, the weights were adjusted to account for the increased probability of selection of panel households. (Panel households are those that were interviewed in previous waves.)

To obtain the final weights for the results, after the previous steps were carried out, the distribution of households by deprivation, NUTS3 region, home ownership, household size, household type, sex, age, labour status and number of hectares owned was calibrated to the population of households in Q3 and Q4 2020 as derived from the Labour Force Survey. The CALMAR2-macro, developed by INSEE and shared with the HFCN, was used for this purpose and both household and individual external information was used in a single-shot calibration at household level. The final weights are included in the HFCS data as core variables and are distributed to the external users as a part of the HFCN micro data.

20.6. Adjustment

Not applicable.

20.6.1. Seasonal Adjustment

Not applicable.

21. Comment