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The Luxembourg Household Finance and Consumption Survey: Results from the fifth wave in 2023

Peter Lindner, Thomas Mathä,
Giuseppe Pulina, Michael Ziegelmeier

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The Luxembourg Household Finance and Consumption Survey: Results from the fifth wave in 2023*

Peter Lindner †
peter.lindner@bcl.lu

Thomas Y. Mathä †
thomas.mathae@bcl.lu

Giuseppe Pulina †*
giuseppe.pulina@bcl.lu

Michael Ziegelmeyer †
michael.ziegelmeyer@bcl.lu

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Abstract:

This report presents the main results and underlying methodology of the 2023 wave of the Luxembourg Household Finance and Consumption Survey (LU-HFCS). Between 2021 and 2023, household net wealth declined, especially in real terms. Declines were broad-based across various types of households, reflecting declines in value of both real and financial assets. However, household debt also declined. There were no significant changes in income or wealth inequality.

Keywords: Household, survey, wealth, income, assets, debts.

JEL-Codes: D31, D14, C81, C83.

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† Banque centrale du Luxembourg, Luxembourg.

* Department of Economics and Management, University of Luxembourg, Luxembourg.

Résumé non-technique

Ce rapport présente les principaux résultats de la dernière édition de l'enquête sur le comportement financier et de consommation des ménages au Luxembourg. Cette enquête représentative recueille des données sur les actifs, les passifs, les revenus et la consommation des ménages individuels. Ces informations servent à analyser la composition globale de la dette et du patrimoine des ménages, ainsi que leur répartition au sein de la population. Au Luxembourg, cette enquête est la seule source de données détaillées sur les bilans des ménages individuels.

L'édition 2023 de cette enquête s'appuie sur un échantillon représentatif de 3 699 ménages résidant au Luxembourg. Les résultats sont pondérés afin de représenter l'ensemble des ménages de la population résidante. En comparant les différentes éditions de l'enquête, il faut tenir compte que l'échantillon est sélectionné pour être représentatif de l'année en question et que les ménages retenus sont généralement différents d'une édition à l'autre.

Les résultats présentés dans ce rapport se réfèrent à la situation au Luxembourg en 2023. Depuis lors, plusieurs évolutions macroéconomiques, y compris l'évolution de l'inflation et des taux d'intérêt, ont eu un impact sur le patrimoine et l'endettement des ménages. L'impact de ces évolutions sur les finances des ménages sera évalué lors de la prochaine vague, qui sera réalisée entre octobre et décembre 2026.

Actifs bruts des ménages

Les actifs des ménages se composent d'actifs réels et d'actifs financiers. En général, les actifs réels, tels que les biens immobiliers, les véhicules et les objets de valeur, représentent la plus grande partie des actifs. En 2023, les actifs réels représentaient 81 % de l'ensemble des actifs détenus par les ménages au Luxembourg et leur valeur moyenne était de 1 058 000 euros par ménage. Les véhicules étaient les actifs réels les plus courants (détenus par 84 % des ménages), suivis par la résidence principale (détenue par 62 % des ménages). Les autres biens immobiliers étaient détenus par 32 % des ménages et les objets de valeur par 29 %. Ces parts sont similaires à celles de 2021. En termes de valeur, les deux actifs réels les plus importants étaient la résidence principale des ménages (59 % de la valeur des actifs réels) et les autres biens immobiliers (32 %). Les autres composantes représentaient des parts beaucoup moins

importantes : 6 % pour le patrimoine des indépendants, 3 % pour les véhicules et 1 % pour les objets de valeur.

En 2023, les actifs financiers représentaient 19 % de l'ensemble des actifs détenus par les ménages. En termes de valeur, les actifs financiers se composaient de dépôts bancaires (45 %), d'actifs risqués tels que les fonds d'investissement (19 %) ou les actions cotées (9 %), et d'autres actifs financiers (27 %), notamment des actions de sociétés non cotées, des comptes gérés par des spécialistes en investissement, des prêts à des amis ou à la famille, des sociétés privées, des obligations d'État ou des pensions volontaires / assurances-vie. Les dépôts bancaires étaient le type d'actif financier le plus répandu, détenu par 97 % des ménages. La valeur moyenne des actifs financiers s'élevait à 249 000 euros par ménage.

L'endettement des ménages

En 2023, la moitié des ménages étaient endettés, une baisse de 3,5 points de pourcentage par rapport à 2021. Près d'un tiers des ménages détenaient une dette hypothécaire, tandis que 29 % avaient un autre type de dette. En valeur, la dette hypothécaire représentait la plupart de la dette totale des ménages (90 %). Sur l'ensemble des ménages, la valeur moyenne de la dette a diminué de 7 %, passant de 161 000 euros par ménage en 2021 à 150 000 euros en 2023. La part des ménages ayant contracté des prêts à la consommation a diminué de près de 4 points de pourcentage pour s'établir à 20 % en 2023.

Depuis 2021, les évolutions des différents indicateurs de la charge de la dette ont donné des messages contradictoires. D'une part, les valeurs médianes des ratios dette/actif total et prêt/valeur ont diminué, tout comme celle du ratio dette/revenu brut. D'autre part, les valeurs médianes des ratios service de la dette / revenu et service de la dette hypothécaire / revenu ont légèrement augmenté, reflétant la hausse des taux, en particulier pour les prêts hypothécaires à taux variable.

Patrimoine net des ménages

En 2023, la valeur médiane du patrimoine net des ménages (après déduction de la dette) était de 676 000 euros. Par rapport à 2021, cela représente une baisse de 6 % en termes nominaux et de 15 % en termes réels (après ajustement pour l'inflation des prix à la consommation).

Ces baisses du patrimoine net reflètent principalement des baisses de valeur des actifs réels et des actifs financiers, qui ont été plus importantes que la baisse de la dette. La part des propriétaires-occupants a baissé, réduisant l'effet d'une augmentation de 4 % de la valeur de leurs logements. En revanche, la part des biens immobiliers en location a augmenté, alors que leur valeur moyenne a diminué. En ce qui concerne les actifs financiers, la valeur moyenne a également considérablement diminué (-23 %) par rapport à 2021.

Revenu brut des ménages

Alors que la valeur des actifs et des passifs est estimée au moment de l'enquête, le niveau du revenu brut se réfère à l'année précédente l'enquête. Ainsi, en 2022 la valeur moyenne du revenu brut des ménages était près de 125 000 euros, soit une augmentation nominale de 8 % par rapport à 2020 (aucun changement en termes réels). Le revenu médian était de 96 000 euros à 2022, soit une augmentation de 8 % par rapport de 2020. Le niveau de revenu varie considérablement selon les groupes de population, atteignant son maximum parmi les ménages les plus diplômés et les ménages âgés de 45 à 54 ans. En moyenne, le revenu brut était nettement inférieur chez les locataires que chez les ménages qui étaient propriétaires de leur logement (avec ou sans hypothèque).

Inégalité

Les inégalités de patrimoine, mesurées par le coefficient de Gini, sont pratiquement inchangées par rapport à 2021. En 2023, les 5 % des ménages les plus riches détenaient un tiers du patrimoine net de l'ensemble des ménages, et les 20 % les plus riches en détenaient près des deux tiers, deux indicateurs proches de la situation en 2021.

Nicht-technische Zusammenfassung

Dieser Bericht präsentiert die wichtigsten Ergebnisse der letzten Ausgabe der Umfrage zum Finanz- und Konsumverhalten der Haushalte in Luxemburg. Diese repräsentative Umfrage erfasst Daten zu den Vermögenswerten, Verbindlichkeiten, Einkommen und Konsumausgaben einzelner Haushalte. Diese Informationen dienen der Analyse der Gesamtzusammensetzung der Verschuldung und des Vermögens der Haushalte sowie ihrer Verteilung innerhalb der Bevölkerung. In Luxemburg ist sie die einzige Quelle für detaillierte Daten zu Haushaltsbilanzen.

Die Ausgabe 2023 dieser Umfrage basiert auf einer repräsentativen Stichprobe von 3.699 in Luxemburg ansässigen Haushalten. Die Ergebnisse werden gewichtet, um alle Haushalte der Wohnbevölkerung zu repräsentieren. Beim Vergleich der verschiedenen Ausgaben der Umfrage ist zu berücksichtigen, dass die Stichprobe so ausgewählt wird, dass sie für das betreffende Jahr repräsentativ ist, und dass die ausgewählten Haushalte in der Regel von Ausgabe zu Ausgabe unterschiedlich sind.

Die in diesem Bericht vorgestellten Ergebnisse beziehen sich auf die Situation in Luxemburg im Jahr 2023. Seitdem haben mehrere makroökonomische Entwicklungen, darunter die Entwicklung der Inflation und der Zinssätze, Auswirkungen auf das Vermögen und die Verschuldung der privaten Haushalte gehabt. Die Auswirkungen dieser Entwicklungen auf die Finanzen der Haushalte werden in der nächsten Welle bewertet, die voraussichtlich von Oktober bis Dezember 2026 durchgeführt werden wird.

Bruttovermögen der Haushalte

Das Vermögen der Haushalte setzt sich aus Sachwerten und Finanzvermögen zusammen. Im Allgemeinen machen Sachwerte wie Immobilien, Fahrzeuge und Wertsachen den größten Anteil des Vermögens aus. Im Jahr 2023 machten Sachwerte 81% des gesamten Vermögens der Haushalte in Luxemburg aus, und ihr durchschnittlicher Wert betrug 1.058.000 Euro pro Haushalt. Fahrzeuge waren die häufigsten Sachwerte (im Besitz von 84% der Haushalte), gefolgt von selbstgenutztem Wohneigentum (im Besitz von 62% der Haushalte). Andere Immobilien befanden sich im Besitz von 32% der Haushalte und Wertgegenstände im Besitz von 29%. Diese Anteile sind ähnlich wie im Jahr 2021. Gemessen am Wert waren die beiden

wichtigsten Sachwerte der Hauptwohnsitz der Haushalte (59% aller Sachwerte) und andere Immobilien (32%). Andere Komponenten machten einen wesentlich geringeren Anteil aus: 6% entfielen auf das Vermögen selbstständiger Unternehmen, 3% auf Fahrzeuge und 1% auf Wertgegenstände.

Im Jahr 2023 machten Finanzanlagen 19% aller Vermögenswerte der Haushalte aus. Wertmäßig setzten sich die Finanzanlagen aus Bankeinlagen (45%), risikobehafteten Anlagen wie Investmentfonds (19%) oder börsennotierten Aktien (9%) sowie sonstigen Finanzanlagen (27%) zusammen, darunter Anteile an nicht börsennotierten Unternehmen, von Anlageexperten verwaltete Konten, Darlehen an Freunde oder Familienangehörige, Anteile an privaten Unternehmen, Staatsanleihen oder freiwillige Renten-/Lebensversicherungen. Einlagen waren die am weitesten verbreitete Art von Finanzvermögen und befanden sich im Besitz von 97% der Haushalte. Der durchschnittliche Wert des Finanzvermögens betrug 249.000 Euro pro Haushalt.

Verschuldung der Haushalte

Im Jahr 2023 war die Hälfte aller Haushalte verschuldet, was einem Rückgang von 3,5 Prozentpunkten gegenüber 2021 entspricht. Fast ein Drittel der Haushalte hatte Hypothekenschulden, während 29% Nicht-Hypothekenschulden hatte. Wertmäßig machten Hypothekenschulden den größten Anteil an den gesamten Haushaltsschulden aus (90%). Im Durchschnitt aller Haushalte sank der Wert der Gesamtverschuldung um 7% von 161.000 Euro pro Haushalt im Jahr 2021 auf 150.000 Euro im Jahr 2023. Der Anteil der Haushalte mit Verbraucherkrediten ging um fast 4 Prozentpunkte auf 20% im Jahr 2023 zurück.

Die meisten Indikatoren für die Verschuldung der privaten Haushalte zeigen seit 2021 gegenläufige Entwicklungen. Einerseits sanken die Medianwerte des Verhältnisses von Schulden zu Gesamtvermögen und des Verhältnisses von Kredit zu Wert, ebenso wie das Verhältnis von Schulden zu Bruttoeinkommen. Andererseits stiegen der Medianwert der Schuldendienstquote und der Hypothekenschuldendienstquote leicht an, was auf steigende Hypothekenzinsen, insbesondere für variabel verzinsliche Hypothekendarlehen, zurückzuführen ist.

Nettovermögen der privaten Haushalte

Im Jahr 2023 lag der Medianwert des Nettovermögens der privaten Haushalte (nach Abzug der Schulden) bei 676.000 Euro. Im Vergleich zu 2021 entspricht dies einem Rückgang von 6% nominal und 15% real (nach Bereinigung um die Verbraucherpreisinflation).

Dieser Rückgang des Nettovermögens spiegelt hauptsächlich den Rückgang sowohl der Sachwerte als auch der Finanzanlagen wider, der größer war als der entgegenwirkende Rückgang der Verschuldung. Die Sachwerte gingen insgesamt zurück, was auf den Rückgang der Werte des selbstgenutzten Wohneigentums und anderer Immobilien zurückzuführen ist. Der Rückgang des Wertes für selbstgenutztes Wohneigentum war auf einen Rückgang der Eigentumsquote zurückzuführen, während der Durchschnittswert für diejenigen, die selbstgenutztes Wohneigentum besaßen, um 4% stieg. Im Gegensatz dazu stieg der Eigentumsanteil der Haushalte mit anderweitigen Immobilien, während der Durchschnittswert für dieselben sank. Bei den Finanzvermögen sank der Durchschnittswert im Vergleich zu 2021 ebenfalls erheblich (-23%).

Bruttohaushaltseinkommen

Im Jahr 2022 betrug das durchschnittliche Bruttohaushaltseinkommen fast 125.000 Euro, was einem nominalen Anstieg von 8% gegenüber 2020 entspricht (in realen Zahlen gab es keine nennenswerte Veränderung)*. Das Medianeinkommen lag 2022 bei 96.600 Euro, ein Anstieg von 8% gegenüber 2020. Das Einkommensniveau variiert erheblich zwischen verschiedenen Bevölkerungsgruppen und ist bei den Haushalten mit dem höchsten Bildungsniveau und in der Altersgruppe der 45- bis 54-Jährigen am höchsten. Im Durchschnitt war das Bruttoeinkommen bei Mietern deutlich niedriger als bei Haushalten, die eine eigene Immobilie besaßen (mit oder ohne Hypothek).

* Das Einkommen bezieht sich auf das Kalenderjahr vor der Erhebung, während sich die Vermögenswerte und Verbindlichkeiten auf die aktuellen Werte zum Zeitpunkt der Befragung beziehen.

Ungleichheit

Die Vermögensungleichheit, gemessen am Gini-Koeffizienten, ist gegenüber 2021 nahezu unverändert. Im Jahr 2023 besaßen die reichsten 5% der Haushalte ein Drittel des Nettovermögens aller Haushalte, und die reichsten 20% besaßen fast zwei Drittel, wobei beide Indikatoren nahe an der Situation im Jahr 2021 liegen.

Non-technical summary

This report presents the main results of the 2023 wave of the Luxembourg Household Finance and Consumption Survey (LU-HFCS). This representative survey collects data on individual households' assets, liabilities, income and consumption. Such micro-level data can serve to analyse the aggregate composition of household debt and wealth, as well as their distribution across the population. In Luxembourg, the LU-HFCS is the only source of detailed data on the balance sheets of individual households.

The 2023 wave draws on a representative sample of 3,699 households resident in Luxembourg. Results are weighted to represent all households in the resident population. When comparing different waves of the survey, bear in mind that each sample is selected to be representative for the year in question and that the households selected generally differ from one wave to the next.

The results presented in this report refer to Luxembourg in 2023. Since then, various macroeconomic developments, including changes in inflation and interest rates, have affected households' wealth and debt. The impact of these developments on household finances will be evaluated in the next wave, which will be conducted from October to December 2026.

Gross household assets

Household assets include both real assets and financial assets. In general, real assets, such as property, vehicles and valuables represent the largest share of assets. In 2023, real assets accounted for 81% of all assets held by households in Luxembourg and their average value was 1,058,000 euro per household. Vehicles were the most common real asset (owned by 84% of households) followed by the main residence (owned by 62% of households). Other real estate property was owned by 32% of households and valuables by 29%. These shares are similar to those in 2021. In terms of value, the two most important real assets were the household main residence (59%) and other real estate property (32%). Other components accounted for much less: 6% for self-employed business wealth, 3% for vehicles and 1% for valuables.

In 2023, financial assets accounted for 19% of all assets held by households. In terms of value, financial assets were composed of bank deposits (45%), risky assets such as mutual (investment) funds (19%) or listed shares (9%), and other financial assets (27%), including shares in unlisted companies, accounts managed by investment specialists, loans to friends or family, private companies, government bonds or voluntary pensions / life insurance. Bank deposits were the most widely held type of financial asset, owned by 97% of households. The average value of financial assets was 249,000 euro per household.

Household debt

In 2023, half of all households were in debt, a decrease of 3.5% percentage points compared to 2021. Almost a third of households held mortgage debt, while 29% held non-mortgage debt. In terms of value, mortgage debt accounted for the largest share of total household debt (90%). Among all households, the value of total debt declined by 7% on average, from 161,000 euro per household in 2021 to 150,000 euro in 2023. The share of households with consumer loans declined almost 4 percentage points to reach 20% in 2023.

Since 2021, household debt indicators sent conflicting messages. On the one hand, the median values of the debt-to-asset ratio and the loan-to-value ratio declined, as did that of the debt-to-gross income ratio. On the other hand, the median values of the debt service-to-income ratio and of the mortgage debt-service-to-income ratio ticked upward, reflecting rising mortgage rates, in particular for adjustable-rate mortgages.

Household net wealth

In 2023, the median value of household net wealth (after subtracting debt) was 676,000 euro. Compared to 2021, this represents a decline of 6% in nominal terms and of 15% in real terms (adjusting for consumer price inflation).

These declines in net wealth reflect declines in both real assets and financial assets, which exceeded the decline in debt. Real assets fell overall, reflecting declines in property values. The share of homeowners fell, offsetting the 4% increase in the mean value of the household main residence. Instead, the share of households owning other real estate property rose, while

its average value declined. The average value of financial assets also declined considerably (-23%) compared to 2021.

Gross household income

While the values of assets and liabilities are estimated at the time of the survey, household income refers to the calendar year preceding the survey. Thus, in 2022, the average level of gross household income was nearly 125,000 euro, a nominal increase of 8% since 2020 (in real terms, there were no significant changes). The median value of gross income was 96,000 euro in 2022, an increase of 8% compared to 2020. The level of income varies considerably across population groups, peaking among the most highly educated households and households in the age bracket 45-54 years. On average, gross income was significantly lower among renters than among households that owned their own home (with or without a mortgage).

Inequality

Wealth inequality, as measured by the Gini coefficient, is virtually unchanged compared to 2021. In 2023, the wealthiest 5% of households owned a third of aggregate household net wealth, and the wealthiest 20% owned almost two-thirds. Both indicators are close to the situation in 2021.

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1. Introduction

This report presents the main findings of the fifth wave of the Luxembourg Household Finance and Consumption Survey (LU-HFCS) conducted in 2023. This representative survey provides detailed information on assets, liabilities, income and consumption at the level of individual Luxembourg households. Such micro-level data are not only indispensable to analyse the distribution of income, wealth and debt, but also a critical input for assessing the potential heterogeneity of monetary policy transmission across the population. In the Luxembourg context, the LU-HFCS has served widely in empirical research on housing and homeownership, household indebtedness and financial vulnerability. It remains the sole comprehensive source of detailed household-level information on assets, liabilities and income.¹

The 2023 wave of the LU-HFCS was conducted in a markedly different macroeconomic environment compared to the previous edition. In 2021, the Luxembourg economy was recovering from the COVID-19 pandemic. Demand rebounded and supply disruptions persisted, resulting in rising inflation. Following the Russian invasion of Ukraine in February 2022, energy prices rose sharply and euro area y-o-y inflation peaked above 10% in October 2022. By end 2023, when the survey was conducted, the European Central Bank had increased key policy rates by 450 basis points and inflation in the euro area declined to below 3%.

As in previous editions, this technical report places particular emphasis on distributional aspects, as well as the composition of assets and liabilities, wealth and income for the overall sample as well as selected sub-populations.

Regarding the main results of the 2023 survey, the median value of gross household income² increased in line with inflation to almost 97,000 euro and the mean reached 125,000 euro. The composition of gross income by source remained broadly stable between 2020 and 2022. However, household gross income varied substantially across population groups, with the highest levels recorded for those households whose reference person had a high level of education and was 45–54 years old. Gross income was substantially higher among homeowners (with or without a mortgage) than among renters.

¹ For a comprehensive list of publications using this data or data from its accompanying survey among cross-border commuters to Luxembourg, see Appendix A.

² Gross income is before payments of income tax, social security contributions or other payments. Income data always refer to the calendar year preceding the year of the survey.

The median level of household net wealth reached 676,000 euro in 2023, a 5.8% decline in nominal terms compared to 2021 (although the difference is not statistically significant). In real terms, adjusting for consumer price inflation, this corresponds to a statistically significant 15% reduction. The average value of net wealth decreased 8.9% in nominal terms (although the difference is not statistically significant), reaching 1,157,000 euro, equivalent to a statistically significant 18% decline in real terms. The contraction in net wealth reflects reductions in both real and financial assets. Homeownership remained widespread, although its share declined 4 percentage points since 2021. Over the same period, the value of owner-occupied housing (as estimated by homeowners) increased slightly. The median increased by 5% and the mean by 4%. This contrasts strongly with house prices increasing by over 30% between the 2018 and 2021 waves of the survey. This evolution is broadly consistent with aggregate developments in the Luxembourg housing market over this period. According to STATEC aggregate house prices registered a slight decline (-0.4%) between 2021 and 2023.³ However, this masked substantial underlying volatility, as house prices kept rising from 2021 to 2022 (+9.6%), before declining between 2022 and 2023 (-9.1%).

In 2023, half of all households were indebted, a 3.5 percentage point decline compared to 2021. The share of households with mortgage debt was nearly unchanged at around 33%, while the share of households with non-mortgage debt fell to 29%, a drop of almost 6 percentage points. The average level of debt across all households declined by 8% over the same period.

Key household debt burden indicators changed little between 2021 and 2023. The median levels of the debt-to-asset ratio and the debt-to-gross income ratio were almost unchanged, while the median levels of the debt service-to-income ratio and the mortgage debt service-to-income ratio edged upward. The loan-to-value ratio for the household main residence increased. These debt burden indicators capture outstanding mortgages and loans and therefore only gradually adjust to changes in new lending. By the end of 2023, when the survey was conducted, interest rates had risen sharply compared with 2021, leading to higher debt-servicing costs. However, households with fixed-rate mortgages were shielded from these increases until refinancing. The prevalence of fixed-rate mortgages in Luxembourg – rising from 15% in 2010 to 46% in 2023 for the most important mortgage on the household main residence – further reduces households' short-term exposure to interest rate risk.

³ See STATEC series, Short-term indicators - C, Acquisition prices for dwellings, Quarterly series, Edition 26th June 2025, N°01/2025.

Income and wealth inequality, as measured by the Gini coefficient, remained broadly unchanged between 2021 and 2023. In 2023, the top 5% of households owned 33% of total net wealth, while the top 20% owned 63%. These concentration measures are on a modest downward trend since 2018. The bottom 50% owned around 9% of total net wealth, a share that has remained essentially stable since 2010.

This report serves as background reference document for further economic analysis and research with LU-HFCS data. For selected statistics, it also provides comparisons with results from previous waves. For convenience, the structure and content of this report follow closely those of previous reports.⁴ Section 2 provides a general overview of the dataset and sample characteristics, as well as a discussion of how results should be interpreted. Section 3 is devoted to a detailed presentation of household balance sheets, including composition of assets and liabilities, net wealth, income, measures of household debt burden and inequality. Section 4 is a special feature on households' marginal propensity to consume. Section 5 describes the survey mode, fieldwork and data treatment (editing, imputation, weighting and anonymization of the data collected). It also includes a comparison of the HFCS results with other external data sources. Section 6 concludes.

2. General overview and interpretation of results

The LU-HFCS is a cross-sectional survey, conducted by the Banque centrale du Luxembourg (BCL) in collaboration with the Luxembourg Institute of Socio-Economic Research (LISER) since 2010. The LU-HFCS is part of the Eurosystem Household Finance and Consumption Survey (HFCS) (HFCN, 2013, 2016, 2020, 2023). Each wave is designed to be representative of the household population in the reference year of data collection; however, the survey does not follow the same households over time. Consequently, when comparing household assets or liabilities over time, it should be noted that sub-populations may differ significantly between survey waves. Household characteristics refer to those of the “financially knowledgeable person” (FKP) of the household.⁵ In the 2023 wave, household socio-demographic and economic characteristics, assets and liabilities refer to the date of the interview in 2023. However, for the income variables the reference period is the calendar year 2022. All monetary values presented in the text, tables or graphs are rounded depending on

⁴ See Girshina, et al. (2017) for wave 2 in 2014; Chen et al. (2020) for wave 3 in 2018; Mathä et al. (2023a) for wave 4 in 2021.

⁵ In 2023 and 2021, households were asked to self-report who the financially knowledgeable person was, while in prior waves this person was identified with help of the interviewer.

magnitude: Amounts below 1,000 euro are rounded to the nearest 10 euro, those between 1,000 euro and 100,000 euro are rounded to the nearest 100 euro and those above 100,000 euro are rounded to the nearest 1,000 euro.

The report distinguishes between participation rates, indicating whether a household holds a particular type of asset or liability, and the conditional mean or median among those households that hold the particular asset or liability. Instead, the unconditional mean or median refers to statistics for the entire (sub-) population, including households that do not hold the particular asset or liability in question. The report also presents the share of various asset and liability types in the total value of assets or liabilities. The composition of assets and liabilities thus reflects both participation decisions and conditional values.

2.1. The macroeconomic environment in 2021 - 2023

According to the most recent national accounts data, the Luxembourg economy experienced a robust post-pandemic recovery in 2021, followed by a contraction in 2022 and stagnation in 2023. The strong post-COVID rebound in demand and persistent supply bottlenecks as well as the Russian invasion of Ukraine led to historically high inflation in the euro area, triggering a swift normalisation and tightening of monetary policy. In Luxembourg, real GDP grew by 6.9% in 2021 (STATEC, 2025), reflecting strong consumption and investment as the economy reopened. However, the economy contracted by -1.1% in 2022 and grew only 0.1% in 2023. This period was characterised by high inflation (annual HICP inflation was +8.1% in 2022 and +3.0% in 2023) and tighter financing conditions (the ECB increased its key interest rates by 450 basis points between July 2022 and September 2023), as well as weaker external demand.⁶ Employment remained resilient, however, with year-on-year increases of +3.3% in 2022 and +2.0% in 2023.

Residential property prices rose sharply between 2021 and 2022 (+9.6%), but then declined -9.1% between 2022 and 2023.⁷ This period was characterised by higher mortgage rates and reduced affordability. However, according to Eurostat figures, Luxembourg remains the country with one of the highest house price-to-income ratios in the European Union according to Eurostat data.⁸

⁶ For a detailed account, see BCL (2025).

⁷ See Footnote 3.

⁸ See Eurostat, standardised house price-to-income ratio - annual data, series, tipsho60, https://ec.europa.eu/eurostat/databrowser/view/tipsho60/default/table?lang=en&category=prc.prc_hpi, last accessed on 15 December 2025.

The Euro Stoxx 50 price index fell by 14.9% between end-October 2021 and 2022, before rising by 12.3% between end-October 2022 and 2023.⁹

According to national accounts, the gross household saving rate increased to 26% in 2020 during the COVID-19 pandemic¹⁰, but then declined to 18% in 2021 and 13% in 2023¹¹, likely reflecting high inflation and reduced uncertainty.

In summary, Luxembourg experienced a shift from robust post-pandemic growth in 2021 to contraction in 2022 and stagnation in 2023. The labour market remained resilient, but tightening macroeconomic conditions posed challenges to the real estate market and household finances.

2.2. Sample characteristics

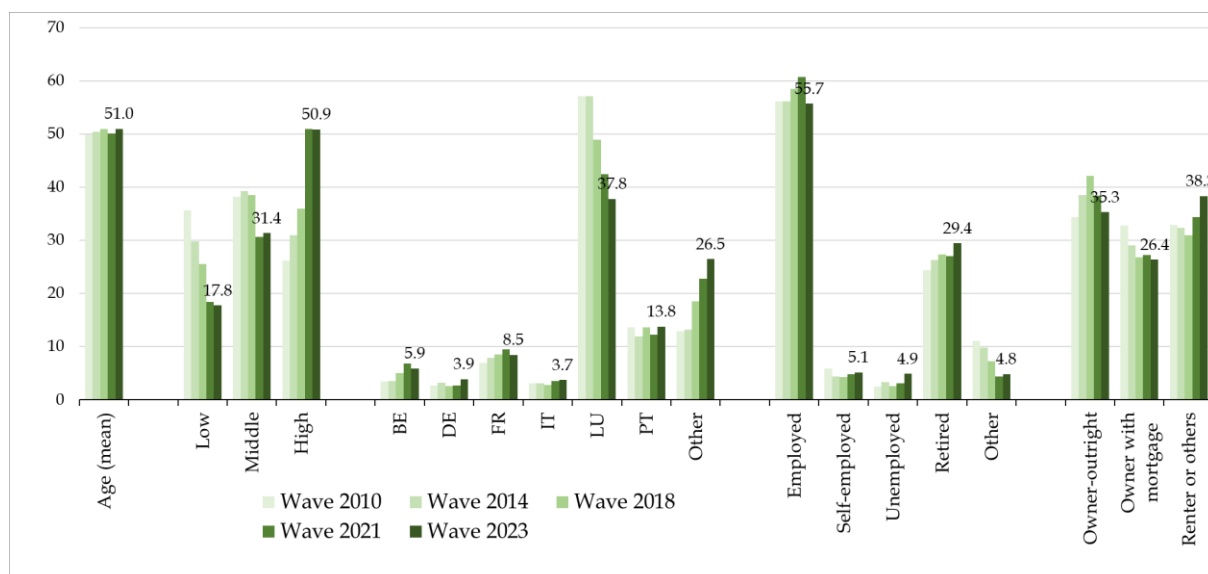
This section provides basic descriptive statistics at the household level (in weighted terms) across various socio-demographic characteristics. An internal coherence and plausibility report by the HFCN confirmed that the LU-HFCS data accurately reflects the composition by age and gender of the Luxembourg population as reported by official statistics. In 2023, the average household in Luxembourg consisted of 2.6 individuals, of which 0.6 were dependent children (defined as persons aged 0-15 or aged 16-24 but not working and living with a parent). The reference person for the household was 51 years old on average, almost a year older than in 2021, although this difference is not statistically significant (Figure 1).

⁹ Wealth variables refer to the date of the interview. For the Euro Stoxx 50 price index, the start of the field phase is used as the reference point since most interviews are conducted at this time. See for example https://www.finanzen.net/index/euro_stoxx_50/historisch, last accessed on 15 December 2025.

¹⁰ LU-HFCS results of 2021 suggested substantial heterogeneity in the savings rate along the income and net wealth distribution in 2020. See Mathä et al. (2023a) for details.

¹¹ See <https://ec.europa.eu/eurostat/databrowser/view/tec00131/default/table?lang=en>, last accessed on 15 December 2025.

Figure 1: Household socio-demographic characteristics, by survey wave



Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

Note: Variables refer to the reference person for the household, the financially knowledgeable person (FKP). Mean age in years, all other characteristics as shares in percentage.

For 38% of households, the reference person was born in Luxembourg, 4 percentage points below the share in 2021. The share of households whose reference person was born abroad has increased in every wave. Unlike in the previous wave, this increase cannot be attributed to differences in the sampling frame, which was extended in 2021 to include resident households that are not affiliated with the Luxembourg social security system, mainly employees of European Union and other supranational institutions in Luxembourg. By country of birth, the next most common group were households where the reference person was born in Portugal, representing 14% of all households in 2023. This was followed by households where the reference person was born in France (8%), Belgium (6%), Italy (4%) and Germany (4%). Collectively, these main groups of those born abroad represented 36% of all households in 2023. For the remaining 26% of households in Luxembourg, the reference person was born in other countries that are not considered separately here. The share of this group keeps increasing, rising by 4 percentage points between 2021 and 2023.

Regarding employment status of the households' reference person, 56% were employed, 5% self-employed %, 5% unemployed and 29% retired. Educational attainment was distributed as follows: 18% of reference persons had low educational attainment (ISCED=0, 1, 2), 31% had

medium education (ISCED=3, 4) and 51% had higher education (ISCED=5-8).¹² The distribution of educational attainment changed substantially over the five waves of the LU-HFCS. Between 2010 and 2023, the share of households with low educational attainment dropped substantially, from 36% to 18%. The share with medium educational attainment was stable around 40% between 2010 and 2018; however, it dropped by nearly 8 percentage points between 2018 and 2021, only to increase marginally in 2023. Instead, the share of households with high educational attainment increased substantially over time, starting from 26% in 2010, to reach 36% in 2018 and 51% in both 2021 and 2023.¹³

For households where the reference person was Luxembourg-born, the shift from low to high education continued between 2021 and 2023, but where the reference person was foreign-born this shift reached a peak in 2021 and stabilised in 2023 (Table 1).¹⁴ Still, immigrant households remain more educated on average than those born in Luxembourg. The gap exceeds 20 percentage points for the highly educated.

¹² See [ISCED](#) for the definition of the various its categories. This is much higher than the 37.2% with higher education reported in 2021 Luxembourg Census (see [Chauvel et al. \(2024\)](#) for details). The Census figures are not comparable for several reasons. First, HFCS figures above refer to the financially knowledgeable person in the household, while the Census focuses on individuals. Considering all individuals in the 2023 LU-HFCS, the highly educated share is 44.9%. Second, in the LU-HFCS the level of education is collected for individuals 16+ years of age and missing values are multiply imputed. In the Census data, the level of education is collected for individuals 15+ years of age, and missing information is not imputed (this variable is missing for 28.5% of observations). Given the high uncertainty surrounding the educational level in Luxembourg, we did not adapt our existing calibration procedures for the construction of weights (see Section 5).

¹³ Four percentage points of the increase between 2018 and 2021 can be attributed to households not affiliated with the Luxembourg social security system. Starting in 2021, the survey is conducted as Computer-Assisted Web-Based Interviews (CAWI) and no longer as Computer Assisted Personal Interviews (CAPI). CAWI surveys are self-administered online interviews, while CAPI surveys are conducted by an interviewer. This switch to CAWI may favour participation among the highly-educated and internet savvy. Variables such as average age, household size, and gender are calibrated against external population statistics, but this is not the case for educational attainment. Participating households are asked to select the financially knowledgeable person (FKP) to answer all questions referring to the household as a whole, for example questions related to assets and liabilities, etc.

¹⁴ Between 2018 and 2021 the share of highly educated increased 22 percentage points among immigrant households, but only 4 percentage points among native households. This can largely be attributed to changes in the sampling frame. In 2021, 83% of households not affiliated with the Luxembourg social security system had attained a high level of education.

Table 1: Education by country of birth

In (%)	2010		2014		2018		2021		2023	
	Mean	Std. Err.	Mean	Std. Err.	Mean	Std. Err.	Mean	Std. Err.	Mean	Std. Err.
Born in Luxembourg - Education level										
Low (ISCED=0:2)	32.0	(2.4)	26.9	(1.8)	21.5	(1.7)	19.5	(1.9)	15.6	(2.4)
Middle (ISCED=3,4)	45.9	(2.5)	47.3	(2.0)	48.4	(2.1)	46.5	(2.3)	47.8	(2.9)
High (ISCED=5-8)	22.0	(1.9)	25.8	(1.6)	30.1	(1.7)	34.1	(2.0)	36.6	(2.6)
Born in other countries - Education level										
Low (ISCED=0:2)	40.5	(2.7)	33.6	(1.9)	29.4	(1.8)	17.6	(1.7)	19.0	(2.1)
Middle (ISCED=3,4)	27.8	(2.6)	28.5	(2.1)	29.0	(2.0)	19.0	(1.8)	21.4	(2.1)
High (ISCED=5-8)	31.7	(2.3)	37.8	(2.0)	41.6	(1.9)	63.3	(2.0)	59.5	(2.3)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

Note: Variables refer to the reference person of the household (Financially Knowledgeable Person, FKP).

2.3. Inflation adjustment

Unless explicitly indicated, values referring to previous waves (2021, 2018, 2014 and 2010) are nominal values, i.e. NOT adjusted for consumer price inflation. Inflation adjustments require the choice of a price index (among several possible alternatives). This is especially challenging in Luxembourg, where, in 2023, 15.6% of household final consumption expenditure took place abroad¹⁵ reflecting that many Luxembourg households shop across the border to take advantage of price differences. Where this paper provides real term comparisons (in the text only), inflation adjustment uses the country-specific *Harmonised Index of Consumer Prices*.¹⁶ Consumer price inflation is calculated by comparing the average level of the HICP index in the reference year 2023 relative to that in earlier waves. Thus, for comparisons across time, monetary values are inflated as follows: year 2021: 1.113; year 2018: 1.171 [= 1.113 × 1.052]; year 2014: 1.220 [= 1.113 × 1.052 × 1.043]; year 2010: 1.332 [= 1.113 × 1.052 × 1.043 × 1.093].

2.4. Multiple imputation and statistical uncertainty

As the underlying data are multiply imputed (Section 5.6.1), the results in this report, including shares, means and medians, are always calculated across five imputates using 1,000 replicate weights. Point estimates are calculated by averaging point estimates across the five imputates, and standard errors are estimated accounting for both between- and within-imputation variance. This procedure provides proper treatment of sampling uncertainty and the sampling design features (see Heeringa et al., 2010). The median, its standard error and confidence interval is calculated using the STATA command EPCTILE, version 1.2. Point

¹⁵ See Luxembourg National Accounts produced by STATEC, table E2106, accessed 10/12/2025.

¹⁶ The data used comes from Eurostat (prc_hicp_aind). The inflation adjustment method and the index used in this report ensures comparability with ECB figures and previous results, as the same index was used in the technical report of waves 2021, 2018 and 2014 (Mathä et al., 2023a, Chen et al., 2020, Girshina et al., 2017) and in the ECB results report of previous waves (HFCN, 2023, 2020, 2016).

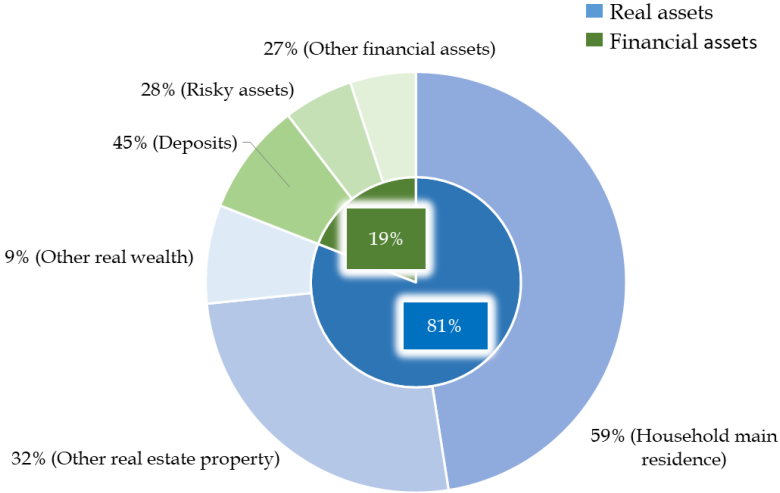
estimates are reported with standard errors and confidence bands to indicate their precision. For example, if a particular value appears to have changed from one wave to another, the standard errors help to infer whether the change is statistically significant. The confidence band presented provides the lower and upper bounds of the interval within which we expect the true value to lie with conventional levels of probability. The confidence attached to a reported value depends, among other factors, on the sampling variability of the outcome and on the sample size.

3. Main findings

3.1. Household assets

Household assets consist of real assets and financial assets. Real assets include the household main residence, other real estate property, vehicles and valuables. Together, these real assets are generally the most important component of the overall household portfolio. In fact, real assets accounted for 81% of all household assets in 2023 (Figure 2). Financial assets, which include deposits, mutual (investment) funds¹⁷, publicly quoted shares, private pension and insurance accounts, accounted for 19% of all assets. We present results for real and financial assets separately, starting with real assets.

Figure 2: Assets by composition, wave 2023



Source: Own calculations based on the LU-HFCS wave 2023; data are multiply imputed and weighted.

¹⁷ The HFCS defines it as “A form of collective investment that pools money from many investors and invests their money in stocks, bonds, short-term money-market instruments, and/or other securities”.

3.1.1. Real assets

In 2023, the most common real asset held by Luxembourg households was Vehicles (84% of households), followed by the Household Main Residence (HMR) (62% of households), Other Real Estate Property (OREP) (32%), Valuables (29%) and Self-employed Business Wealth (7%) (Figure 3, left panel).

Across all households, the average gross value of real assets (i.e. before deducting any mortgages or loans) was nearly 1,058,000 euro, a decline of 5% compared to 2021 (Figure 3). In 2023, the household main residence and other real estate property together accounted for 91% of real assets, unchanged from 2021.

Regarding individual components of real assets, the value of the household main residence and that of other real estate property both decreased in value from 2021 to 2023. The share of homeowners declined while the share of households owning other real estate property increased, as was the case between 2018 and 2021.

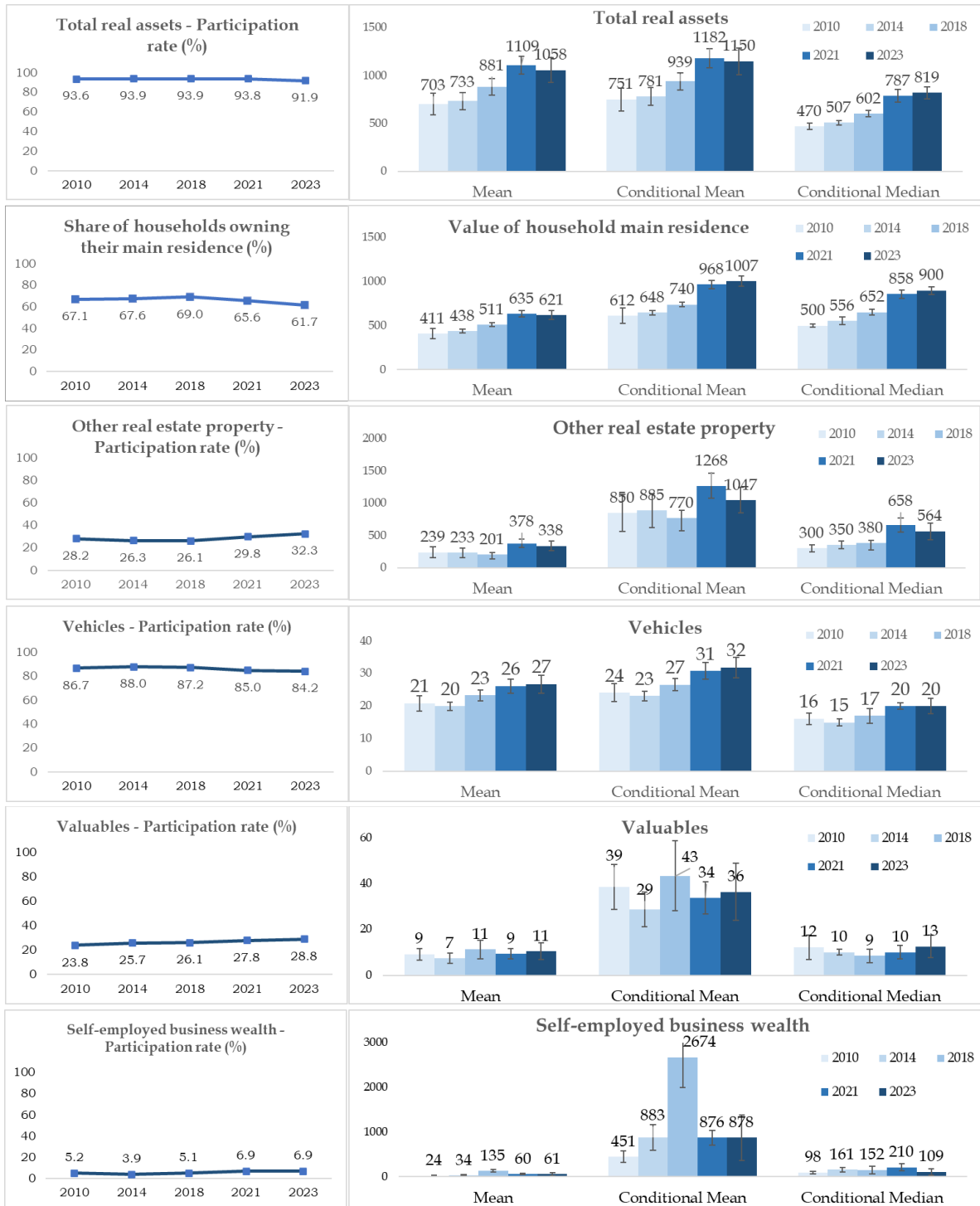
Among homeowners, the median value of the household main residence was 900,000 euro in 2023, while its mean value was 1,007,000 euro. For the median, this represents an almost 5% increase from 2021, after a 32% increase from 2018 to 2021. The mean level increased 4% from 2021 to 2023 after a 31% increase from 2018 to 2021. STATEC's official housing price index (including both new and existing dwellings) grew by 44% from 2018 to 2021 but declined slightly (-0.4%) between 2021 and 2023.^{18 19}

The median value of other real estate property among households who owned them was 564,000 euro in 2023, while its mean value was 1,047,000 euro. Both represent marked declines since 2021 (-14.3% and -17.4%). In addition, the median and average value of vehicles remained largely stable from 2021 to 2023. For valuables the median and mean increased. For self-employed business wealth, the median value decreased from 2021 to 2023, while their average value rose marginally.

¹⁸ The housing price index rose 9.6% between 2021 and 2022 and declined 9.1% between 2022 and 2023. See STATEC - Indicateurs rapides, Series C - Acquisition prices for dwellings - annual series, <https://statistiques.public.lu/en/donnees/indicateurs-court-terme.html>, last accessed on 15 December.

¹⁹ For a more detailed discussion of house price developments using different sources see section 5.7.2.

Figure 3: Real assets and components, key statistics (1,000 euro)



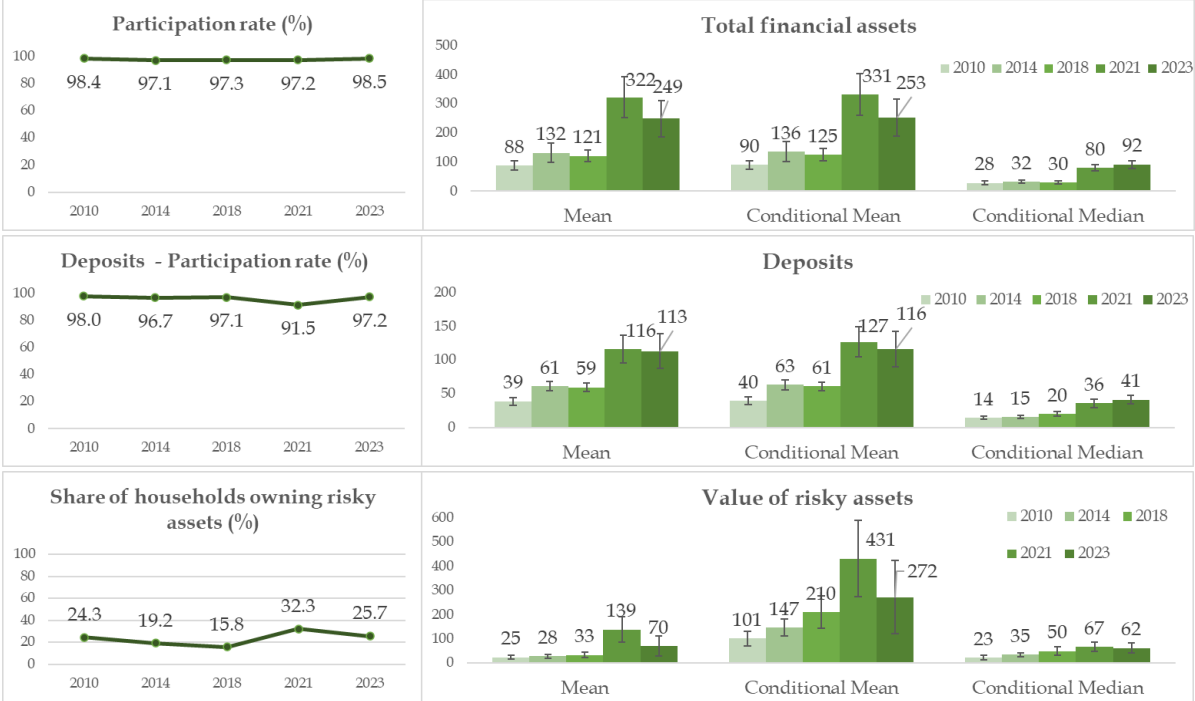
Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

Note: Error bars denote 95% confidence interval. Values rounded to nearest 1,000 euro.

3.1.2. Financial assets

Financial assets represented 19% of households’ total assets in 2023. Financial assets are composed of deposits (45%), risky assets (28%), and other financial assets (27%).

Figure 4: Financial assets and components, key statistics (1,000 euro)



Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.
 Note: Error bars show 95% confidence interval. Deposits include sight and savings accounts. Risky assets include mutual investment funds and listed shares. Values rounded to nearest 1,000 euro.

Deposits remained the most widespread type of financial asset, held by 97% of households in Luxembourg (Figure 4). Deposits are composed of sight accounts (held by 95% of households) and savings accounts (held by 66%). The share of households with a savings account dipped during the low-interest rate environment, especially in 2021, but returned to almost its 2010 level in 2023 following the increase in interest rates.

The flip side is the reduced popularity of risky assets. In 2021, many households invested in risky assets because the return on savings accounts was negligible and stock markets recovered strongly from the short-lived COVID-19 crisis, also fuelled by central bank asset purchase programmes. The value of risky assets increased sharply between 2018 and 2021, which is consistent with the 43% increase in the Euro Stoxx 50 price index, despite the intervening global health pandemic.

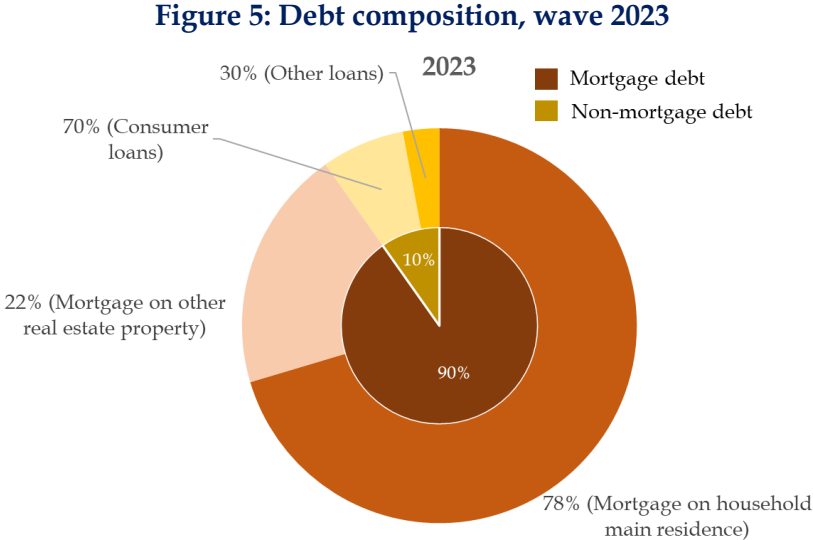
In 2023, risky assets, including mutual (investment) funds and listed shares, were held by 26% of households in 2023, down from 32% in 2021. Among households who owned risky assets,

their mean value was 272,000 euro in 2023, a 37% decline compared 2021. Therefore, for the population as a whole the mean value of risky assets decreased both because fewer households held them and because their value was lower. In addition, fewer households held mutual (investment) funds and shares.

Other financial assets include voluntary pensions and life insurance, which were owned by 60% of households in 2023, with a mean value of 50,100 euro over the whole population. Remaining financial assets amounted to 16,900 euro on average in 2023. They include bonds held by 2.9%, non-self-employed business wealth (3.2%), managed accounts (0.9%), loans to other households (8.5%) and other assets (3.2%).

3.2. Household debt

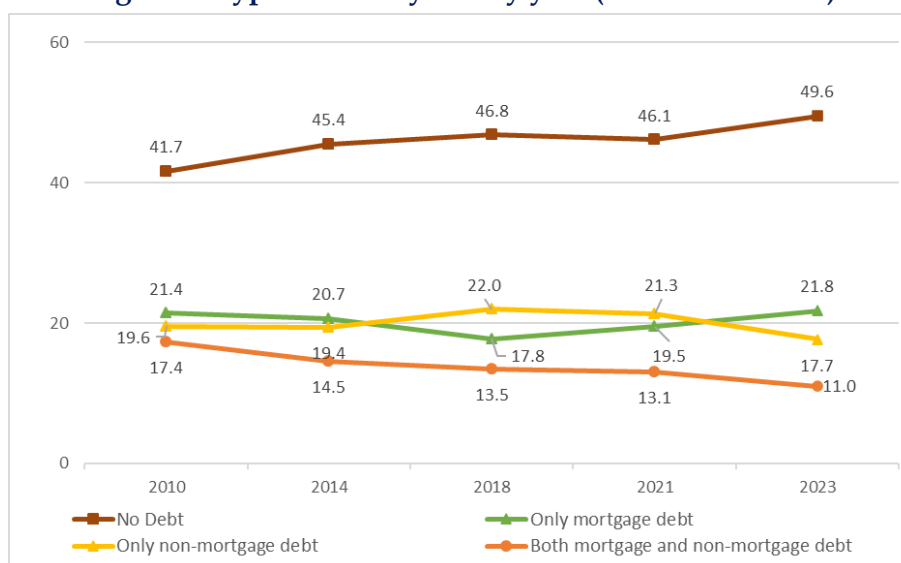
Household debt can be decomposed into mortgage debt and non-mortgage debt (Figure 5). Mortgage debt accounted for 90% of total household debt in 2023, almost unchanged from 2021. Mortgage debt on the household main residence accounted for 78% of total debt in 2023, a 13-percentage point increase compared to 2021.



Source: Own calculations based on the LU-HFCS wave 2023; data are multiply imputed and weighted.

Figure 6 plots the shares of households with no debt, with only mortgage debt, with only non-mortgage debt and with both types of debt. The share of households with no debt has been rising over time. In 2023, almost 50% of households in Luxembourg had no debt, up from 46% in 2021. Fewer households held non-mortgage debt only (-3.6pp) or both mortgage and non-mortgage debt (-2.1pp). In contrast, the share of households with mortgage debt only increased (+2.3pp).

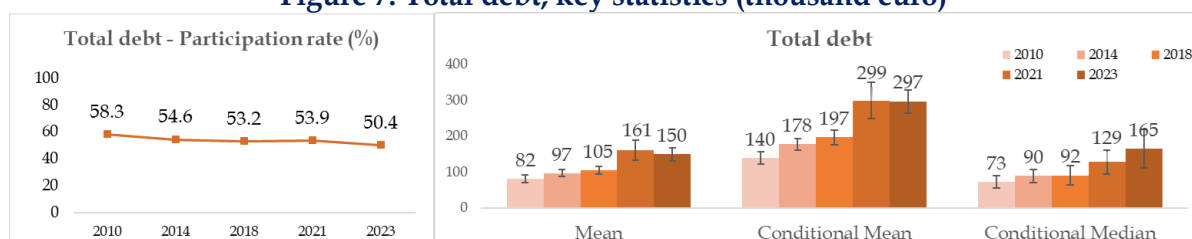
Figure 6: Type of debt by survey year (% of households)



Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

Figure 7 provides more detail concerning these changes in total debt since 2010. The share of households without any debt keeps increasing over time. In 2023, the share of households with debt is 3.5 percentage points lower than in 2021. At the same time, the conditional median increased while the mean was almost unchanged between 2021 and 2023.

Figure 7: Total debt, key statistics (thousand euro)



Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

Note: Error bars show 95% confidence interval. Values rounded to nearest 1,000.

3.2.1. Mortgage debt

In 2023, mortgage debt represented 92% of total debt (see Figure 5), unchanged compared to 2021, 2018 or 2014. One third of households held mortgage debt, almost unchanged from 2021 (Figure 8). Only 26% of households had a mortgage on their household main residence and 11% had a mortgage on other real estate property. Among households with mortgage debt, the average outstanding amount in 2023 was 413,000 euro, an 8% decline from 2021. The median amount was 343,000 euro, a 9% increase (Figure 8).

Figure 8: Mortgage debt and components, key statistics (1,000 euro)



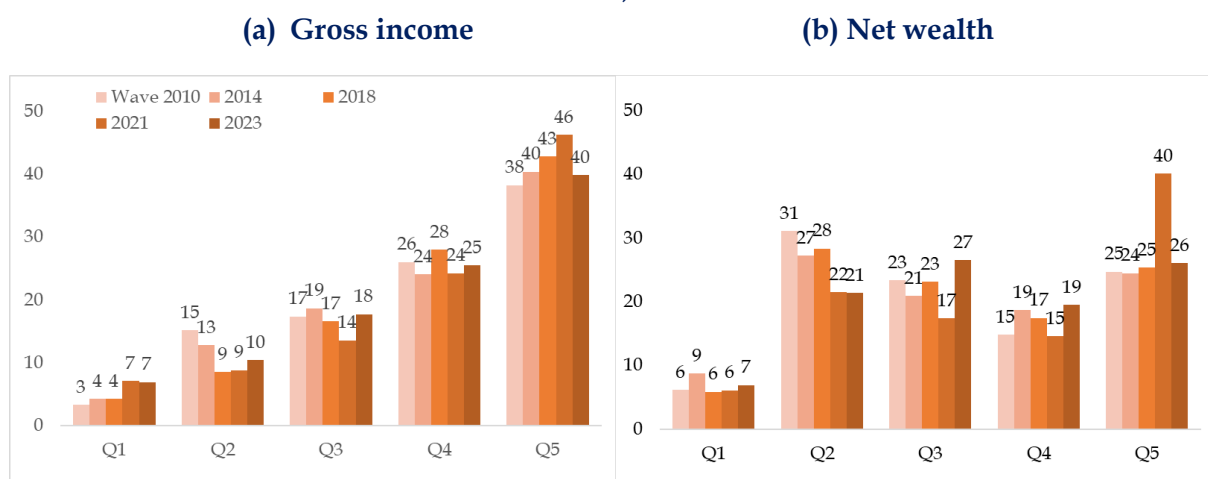
Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

Note: Error bars show 95% confidence interval. Values rounded to nearest 1,000.

Among households with mortgage debt on their household main residence, the outstanding mean of this type of debt was 401,000 euro in 2023, a 15% increase on 2021. Among households with mortgages on other real estate property, the average outstanding amount of this type of debt in 2023 was 270,000 euro, a 47% decline on 2021.

Households in higher income quintiles have substantially higher shares of total mortgage debt. Figure 9 plots the share of total mortgage debt held by households in different quintiles of the gross income distribution (left panel) or the net wealth distribution (right panel). In the left-hand panel, the share of outstanding mortgages increases steadily with gross income. The top two quintiles accounted for 65% of total mortgage debt in 2023, down 5 percentage points from 2021. However, households in the bottom income quintile held only 7% of total outstanding mortgage debt in 2023, unchanged from 2021.

Figure 9: Share of outstanding mortgage debt, by gross income and net wealth quintile (in %)



Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

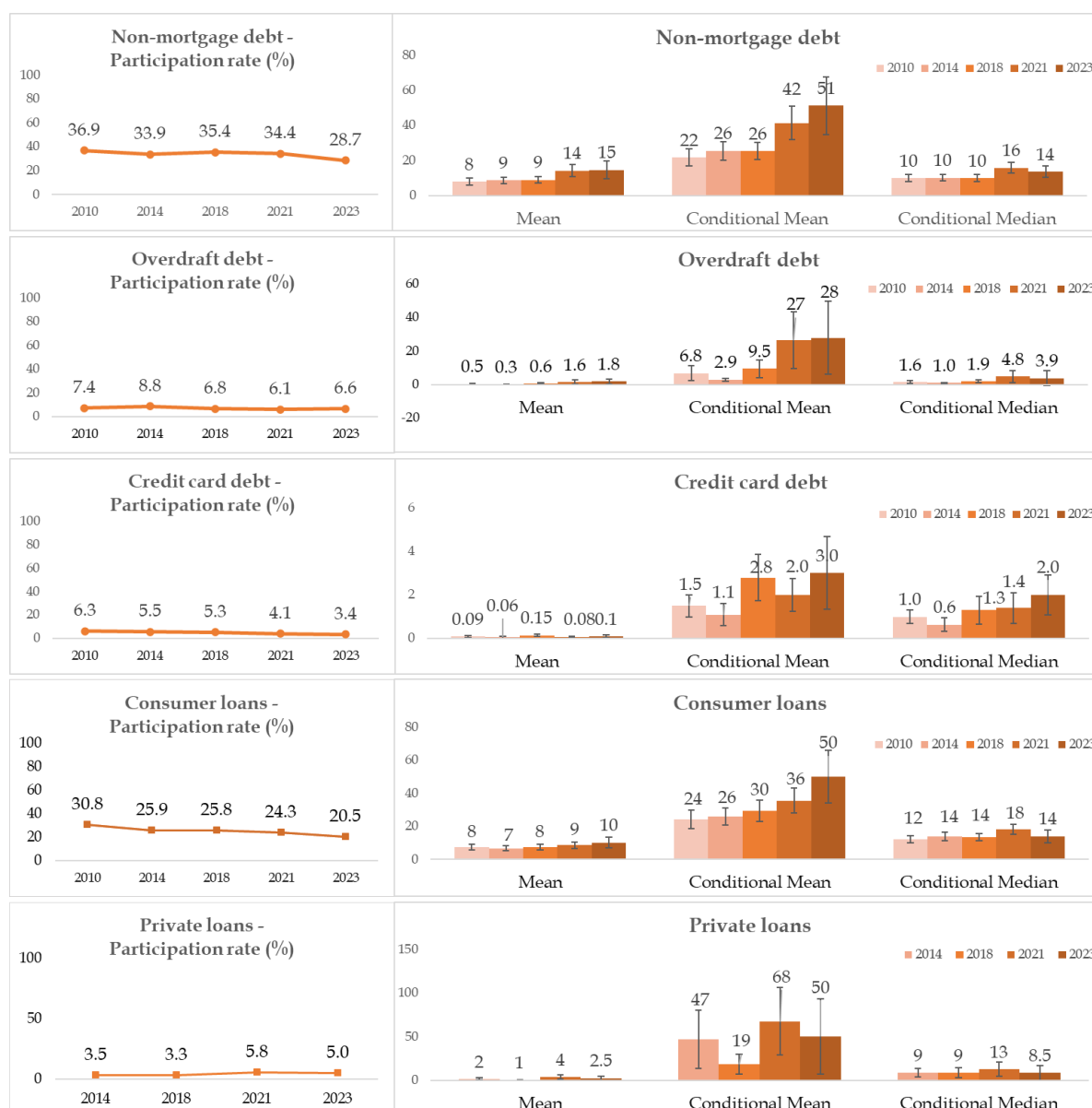
Note: Values expressed in 1,000 euro. Values rounded to nearest 1,000.

In the right-hand panel, the distribution of total mortgage debt across net wealth quintiles is more difficult to interpret. Households in the lowest quintile consistently had the lowest share of total outstanding mortgage debt (only 7% in 2023). This also reflects a lower share of homeowners and values for their main residence (and therefore smaller mortgages). Households in the second net wealth quintile held 21% of total outstanding mortgage debt in 2023, almost unchanged from 2021. Households in the top net wealth quintile held about 26% of outstanding mortgage debt in 2023, similar to the 2018 value but substantially lower than in 2021, when the average in this quintile was influenced by a single household with an exceptionally high level of mortgage debt.

3.2.2. Non-mortgage debt

In 2023, non-mortgage debt was only 10% of total debt, which is comparable to 2021. The share of households holding non-mortgage debt was 29% in 2023, down almost 5 percentage points from 2021 (Figure 10). Over all households, the average level of outstanding non-mortgage debt was 14,700 euro in 2023 euro. Among households with non-mortgage debt, the average value was 51,300 euro, almost 10,000 euro more compared to 2021. The median value was 13,600 euro in 2023, down 2,300 euro from 2021. Differences between 2021 and 2023 are statistically not significant for the conditional median or mean.

Figure 10: Non-mortgage debt and components, key statistics (1,000 euro)



Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

Note: Error bars show 95% confidence interval. Values rounded to nearest 1,000.

Turning to the individual components of non-mortgage debt, the share of households with overdraft debt increased slightly (6.6% in 2023 from 6.1% in 2021), while the share of those with credit card debt decreased slightly (3.4% in 2023 from 4.1% in 2021). The share of households with consumer loans decreased (20% in 2023 from 24% in 2021), consistent with the increase in interest rates since 2021.

Among households with overdraft debt, the average amount increased slightly to 27,800 euro in 2023. Among households with credit card debt, the average amount was somewhat larger

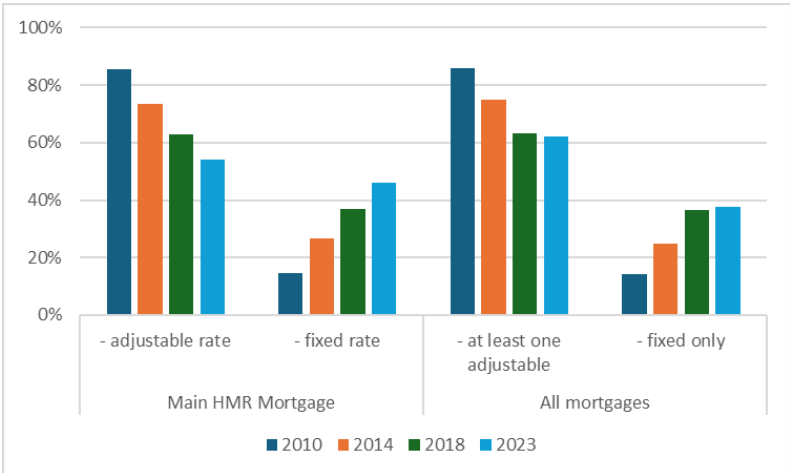
than in 2021. Among households with consumer loans, the average amount increased from 35,600 to 50,000 euro. None of these increases was statistically significant.

3.2.3. Interest rate developments

After holding the key interest rates at very low levels for an extended period, the Governing Council of the ECB began rapidly normalising, then tightening monetary policy as from July 2022 (Section 2.1).²⁰ The HFCS data can serve to track how monetary policy is transmitted to household borrowing costs over time, highlighting differences across loan types and contract structures. More specifically, we study how changes in monetary policy rates are reflected in the average rate on *outstanding* loans recorded in the LU-HFCS.

The low-interest rate environment prevailing from 2014 until 2022 changed the prevalence of adjustable- and fixed-rate mortgages in Luxembourg. In 2010, most HFCS households had adjustable-rate mortgages (Figure 11). However, fixed-rate mortgages gradually gained in popularity, rising by 30 percentage points to reach 46% in 2023. The relative decline in adjustable -rate mortgages is confirmed by CSSF (2025), who report that the (volume weighted) share of outstanding adjustable -rate mortgages declined from 51.4% at end-2019 to 33.5% at end-2023.

Figure 11: Shares of fixed and adjustable-rate mortgages



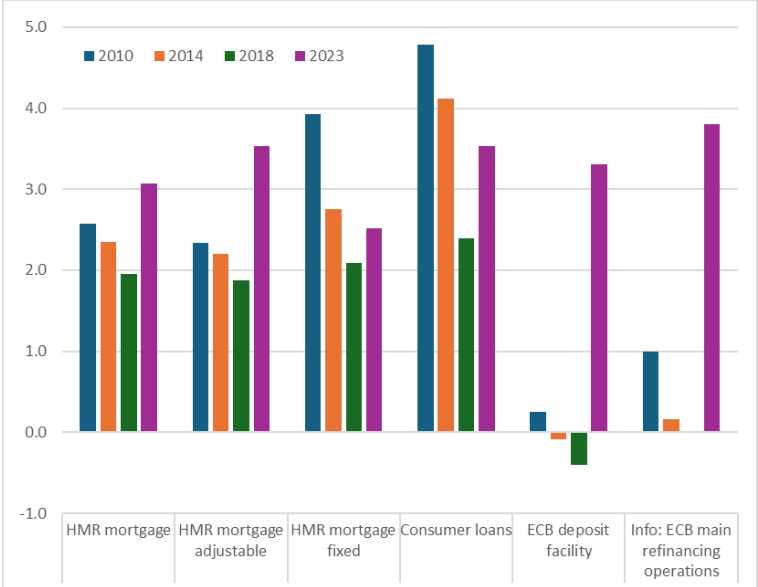
Source: Own calculations based on LU-HFCS waves 2023, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

Note: Data on contract type not available for 2021. HMR: Household main residence.

²⁰ For an account of the ECB’s key interest rates and how the Deposit Facility Rate (DFR) replaced the Main Refinancing Operation (MRO) interest rate to signal the Governing Council’s monetary policy stance in the aftermath of the Great Financial Crisis in 2008, see Reinesch (2024).

Concerning average interest rates on outstanding loans, Figure 12 shows a sharper decline in rates of fixed-rate mortgages which is likely attributable to the delayed adjustment to higher interest rates in the years leading up to 2008. Average rates on outstanding fixed-rate mortgages were still at 3.9% in 2010, while average adjustable rates were already down to 2.3%. The gradual replacement of older fixed-rate mortgages (some contracts mature, others are renegotiated or paid back in advance) with newer mortgages at lower fixed-rates resulted in a larger drop in the average rate on fixed-rate contracts in 2014 and 2018. The large drop in average interest rates for mortgages and consumer loans between 2010 and 2014 also supports this.

Figure 12: Average interest rate in %



Source: Own calculations based on LU-HFCS waves 2023, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.
 Note: The interest rate type (fixed versus adjustable) is unavailable for 2021.
 HMR: Household main residence.

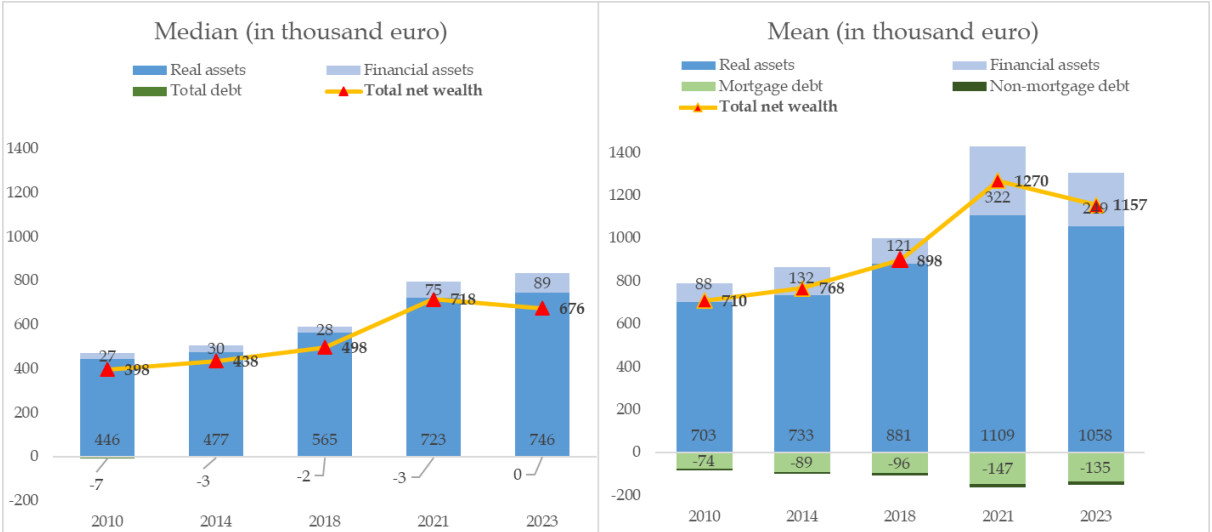
From July 2022 to September 2023, the Governing Council of the ECB increased key policy rates rapidly. Unlike adjustable-rate mortgages, outstanding fixed-rate mortgages are temporarily shielded against interest rate increases. Therefore, the monetary policy tightening is less reflected in *outstanding* fixed-term mortgages than in adjustable-rate mortgages. Again, only part of the older, low-rate mortgages is replaced each year by new higher rate mortgages, resulting in a more gradual increase in interest rates on *outstanding* fixed-rate mortgages. For adjustable-rate mortgages the changes in market conditions take effect more directly. Consumer loans generally follow the same pattern as mortgage loans, although their rates are

higher because they carry no collateral, implying more risk for the lender. Figure 12 additionally displays the annual average of the ECB’s key interest rates for comparison.

3.3. Household net wealth

Total net wealth is defined as the sum of real assets (including housing) and financial assets (excluding public and occupational pensions) minus all liabilities (debt including mortgages). This section reports levels in 2023 and changes since 2021 for the whole population. These changes reflect both changes at the external margin (ownership) and internal margin (amount). Between 2021 and 2023, median household net wealth declined by 5.8% to nearly 676,000 euro. For the average household, net wealth declined by 8.9% to reach 1,157,000 euro in 2023 (Figure 13 and Table 2). However, neither of these declines is statistically significant. Instead, taking into account changes to the consumer price index between 2021 and 2023, the median value of net wealth declined by 15.4% and the average value declined by 18.1%. These declines in real terms are statistically significant at the 5% significance level.

Figure 13: Household net wealth



Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted.
 Note: Total financial assets exclude public and occupational pension plans. Values rounded to nearest 1,000 euro.

Total assets consist of real assets (including real estate, business wealth, vehicles and valuables) as well as financial assets. Real assets (1,058,000 euro on average in 2023) were far more important than financial assets (249,000 euro), partly because of the high level of real estate prices in Luxembourg. The reduction in net wealth from 2021 to 2023 reflects reductions in the value of both real assets and financial assets (Figure 3 and Figure 13). The former is linked to a reduction in the share of homeowners, and the latter to a reduced financial market

participation of households as well as the modest stock market performance between 2021 and 2023 (e.g. the Euro Stoxx 50 price index declined (-4.5%) between end of October 2021 and end of October 2023).²¹

The mean value of real assets shrank by 4.6%, contributing 4.1 percentage points to the 8.7% reduction in mean net wealth. Within real assets, real estate is the dominant component (Section 3.1.1). According to valuations by survey participants, the average value of the household main residence declined by 2.2%, while that of other real estate property declined by 10.6%. However, the median value of real assets increased 3.2% to 746,000 euro (Table 2).

Table 2: Composition of total net wealth, mean and median

Household balance sheet - Mean										
Variable	2010		2014		2018		2021		2023	
	Value	Std. Err.	Value	Std. Err.	Value	Std. Err.	Value	Std. Err.	Value	Std. Err.
Total assets	792.0	(59.1)	866.0	(54.2)	1,003.0	(47.6)	1,431.0	(66.8)	1,307.0	(80.7)
Real assets	703.0	(56.7)	733.0	(45.7)	881.0	(44.3)	1,109.0	(47.9)	1,058.0	(66.8)
Financial assets	88.4	(7.7)	132.0	(16.5)	121.0	(10.2)	322.0	(35.6)	249.0	(31.7)
Total debt	81.8	(5.1)	97.3	(4.9)	105.0	(5.4)	161.0	(14.3)	150.0	(9.2)
Total net wealth	710.0	(58.2)	768.0	(53.4)	898.0	(46.8)	1,270.0	(62.8)	1,157.0	(78.8)

Household balance sheet - Median										
Variable	2010		2014		2018		2021		2023	
	Value	Std. Err.	Value	Std. Err.	Value	Std. Err.	Value	Std. Err.	Value	Std. Err.
Total assets	494.0	(19.9)	539.0	(17.0)	634.0	(16.5)	852.0	(32.7)	881.0	(37.5)
Real assets	446.0	(18.0)	477.0	(15.5)	565.0	(16.7)	723.0	(26.8)	746.0	(33.9)
Financial assets	26.7	(3.2)	30.1	(2.3)	28.2	(2.5)	75.4	(5.9)	89.4	(6.7)
Total debt	7.0	(1.8)	3.1	(1.3)	1.6	(1.0)	3.4	(2.1)	0.3	(1.0)
Total net wealth	398.0	(17.1)	438.0	(17.5)	498.0	(23.4)	718.0	(30.7)	676.0	(47.8)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

Note: Total financial assets exclude public and occupational pension plans. Values expressed in 1,000 euro. Values exceeding 100,000 euro rounded to nearest 1,000. Other values rounded to nearest 100.

On the liability side, the average value of total debt declined by more than 6.8% to 150,000 euro. The average value of the mortgage on the household main residence increased by 11% (about 10,600 euro). Instead, the average value of mortgages on other real estate property decreased by 42% (about 21,500 euro). The latter result contrasts with those in previous waves, which were characterised by (sometimes very rapid) growth in mortgage debt and its components (Section 3.2.1).

²¹ The Euro Stoxx 50 price index fell by 14.9% between the end of October 2021 and the end of October 2022, before rising by 12.3% between the end of October 2022 and the end of October 2023. See https://www.finanzen.net/index/euro_stoxx_50/historisch.

Net wealth by population group

Mean and median net wealth vary substantially across population groups. Table B2 and Table B3 in the Appendix report the median and the mean of net wealth for different population groups. Both generally increase with age. Differences are particularly large between the groups [45-54] years of age and [55-64] years of age. Across survey waves, mean and median net wealth is regularly higher in households whose reference person is male than those whose reference person is female. Both median and mean net wealth is lower for single households than for couples, divorced or widowed households. Median and mean net wealth are higher for households with medium or high level of educational attainment. Outright homeowners are wealthier than homeowners with a mortgage, who in turn are wealthier than renters. This result was already reported for previous waves of the LU-HFCS (Girshina et al., 2017; Chen et al., 2020; Mathä et al, 2023a).

3.4. Household income

Household income is measured in gross terms, before deducting tax payments and social security contributions. Gross income includes employment income, self-employment income, pensions, unemployment benefits and other social transfers.

In 2022, the average value of gross household income was 125,000 euro. This represents an increase of almost 8% between 2020 and 2022. The median level of income was 96,600 euro, up almost 8% on 2021. The increase in the mean is statistically significant at the 10% level, while the change in the median is borderline significant at the 10% level (p-value of 0.107). In real terms, the changes between 2023 and 2021 are not significantly different, reflecting the dominance of labour income in total household income and wage indexation in Luxembourg.

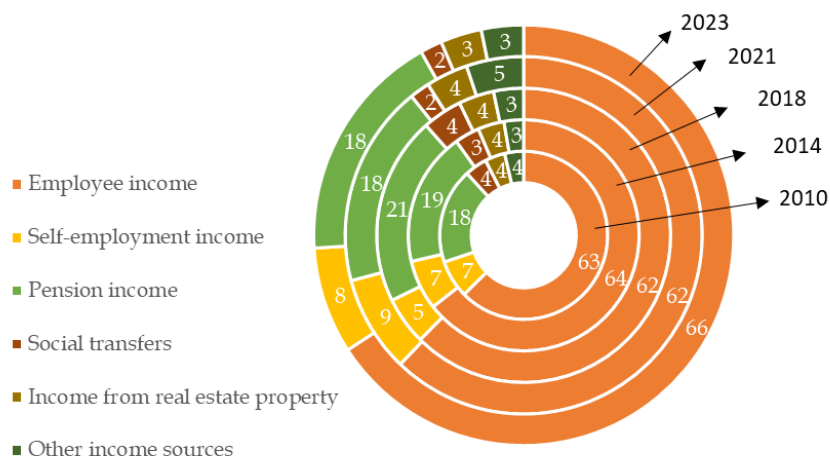
In 2023, employment income was received by 79% of households, a 2-percentage point increase on 2021 (Table 3). Income from self-employment was received by 13% of households in 2023, 2.4 percentage points lower than in 2021. Public pensions were received by around 33% of households, 5.7 percentage points higher than in 2021. Other social transfers went to 18% of households, 2 percentage points up on 2021. Unemployment benefits were received by 6.6% of households, down 1.2 percentage points on 2021.

Employment income represented 66% of total household income in 2023 (Figure 14), an increase of 3.5 percentage points on 2021. Among households with at least one employee, employment income averaged at 104,000 euro 2023, up more than 10,000 euro on 2021 (Panel

b in Table 4). The corresponding median values was 83,900 euro in 2023 and 77,600 euro in 2021 (Panel c in Table 4).

While fewer households earned self-employment income than in 2021, the conditional mean of this income component increased to 77,600 euro in 2023. The conditional median declined slightly to 41,200 euro.

Figure 14: Composition of mean household gross income (in %)



Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights. Note: Income from family and friends is not included.

Table 3: Share of households receiving each income component (% of households)

Participation rate in (%)	2010		2014		2018		2021		2023	
	Share	Std. Err.	Share	Std. Err.	Share	Std. Err.	Share	Std. Err.	Share	Std. Err.
Employee income	71.4	(1.0)	71.6	(0.8)	71.6	(0.9)	77.3	(1.2)	79.2	(1.5)
Self-employment income	10.3	(0.9)	8.4	(0.6)	7.3	(0.6)	15.6	(1.1)	13.2	(1.3)
Pension income	35.0	(0.9)	34.5	(0.8)	34.8	(0.7)	29.9	(1.0)	35.3	(1.2)
Public pension income	34.6	(0.9)	34.0	(0.8)	34.7	(0.7)	27.6	(1.0)	33.3	(1.2)
Occupational and private pension	2.9	(0.7)	2.6	(0.5)	3.4	(0.6)	5.8	(0.7)	7.3	(1.2)
Social transfers	41.7	(1.3)	36.1	(1.1)	40.8	(1.1)	21.9	(1.3)	23.0	(1.5)
Unemployment benefits	4.3	(0.8)	4.9	(0.7)	4.2	(0.6)	7.8	(0.9)	6.6	(1.0)
Other social transfers	39.2	(1.2)	33.7	(1.0)	38.7	(1.0)	16.2	(1.1)	18.2	(1.3)
Income from real estate property	13.3	(1.2)	12.5	(0.9)	13.7	(1.0)	16.2	(1.1)	14.8	(1.3)
Income from financial investment	45.2	(1.9)	40.2	(1.4)	27.8	(1.3)	16.7	(1.1)	18.5	(1.5)
from financial assets	44.8	(1.9)	40.1	(1.4)	27.4	(1.2)	15.9	(1.1)	18.2	(1.5)
from private business*	1.0	(0.3)	0.4	(0.2)	0.5	(0.2)	0.9	(0.4)	0.3	(0.3)
Income from regular private transfers	5.9	(0.9)	5.7	(0.6)	7.1	(0.7)	8.4	(0.9)	15.5	(1.2)
Income from other income sources	2.2	(0.5)	1.6	(0.4)	2.2	(0.4)	3.1	(0.6)	2.0	(0.5)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

Note: Income from friends is not included. * other than self-employment.

Table 4: Household gross income statistics, by income component

Panel (a): Mean gross income

Mean in 1,000 euro	2010		2014		2018		2021		2023	
	Value	Std. Err.	Value	Std. Err.	Value	Std. Err.	Value	Std. Err.	Value	Std. Err.
Employee income	52.4	(1.7)	56.1	(1.5)	58.1	(1.3)	72.4	(1.7)	82.4	(2.3)
Self-employment income	6.1	(0.8)	6.1	(0.7)	4.9	(0.6)	10.2	(1.1)	10.3	(1.7)
Pension income	15.3	(0.7)	16.3	(0.6)	19.3	(0.7)	21.3	(0.9)	22.3	(1.2)
<i>Public pension income</i>	14.7	(0.6)	15.8	(0.5)	18.1	(0.6)	19.0	(0.8)	19.3	(1.0)
<i>Occupational and private pension</i>	0.7	(0.2)	0.5	(0.2)	1.2	(0.4)	2.3	(0.4)	3.0	(0.9)
Social transfers	3.6	(0.2)	3.0	(0.2)	4.1	(0.2)	2.1	(0.3)	2.1	(0.2)
<i>Unemployment benefits</i>	0.6	(0.2)	0.7	(0.1)	0.5	(0.1)	1.1	(0.2)	0.9	(0.2)
<i>Other social transfers</i>	3.0	(0.1)	2.4	(0.1)	3.5	(0.2)	1.0	(0.1)	1.2	(0.1)
<i>e from real estate property</i>	3.2	(0.9)	3.2	(0.5)	3.6	(0.4)	4.4	(0.5)	4.0	(0.6)
<i>e from financial investment</i>	1.2	(0.2)	1.4	(0.2)	1.6	(0.6)	3.1	(0.9)	1.2	(0.3)
<i>from financial assets</i>	0.9	(0.2)	1.4	(0.2)	0.9	(0.5)	2.4	(0.8)	1.0	(0.3)
<i>from private business*</i>	0.3	(0.1)	0.1	(0.0)	0.7	(0.2)	0.7	(0.4)	0.2	(0.2)
Income from regular private transfers	0.4	(0.1)	0.3	(0.0)	0.5	(0.1)	0.6	(0.2)	0.9	(0.1)
Income from other income sources	1.4	(0.7)	0.7	(0.3)	1.0	(0.5)	2.4	(1.0)	2.0	(1.5)
Total gross household income	83.7	(2.3)	87.2	(2.0)	93.1	(1.9)	116.0	(2.9)	125.0	(3.4)

Panel (b): Mean gross income conditional on participation

Conditional mean in 1,000 euro	2010		2014		2018		2021		2023	
	Value	Std. Err.	Value	Std. Err.	Value	Std. Err.	Value	Std. Err.	Value	Std. Err.
Employee income	73.4	(2.4)	78.4	(1.9)	81.2	(1.8)	93.6	(2.0)	104.0	(2.9)
Self-employment income	58.9	(7.0)	72.5	(7.7)	66.8	(7.3)	65.4	(6.2)	77.6	(10.5)
Pension income	43.8	(1.9)	47.3	(1.5)	55.4	(1.9)	71.2	(2.3)	63.3	(3.3)
<i>Public pension income</i>	42.4	(1.8)	46.6	(1.4)	52.0	(1.6)	68.7	(2.1)	58.0	(2.7)
<i>Occupational and private pension</i>	23.1	(5.2)	19.4	(7.5)	35.9	(10.4)	39.0	(5.8)	41.4	(10.3)
Social transfers	8.6	(0.4)	8.4	(0.4)	10.0	(0.5)	9.6	(1.0)	9.3	(0.9)
<i>Unemployment benefits</i>	13.9	(2.5)	14.0	(1.5)	12.6	(1.3)	13.6	(2.2)	14.2	(2.3)
<i>Other social transfers</i>	7.7	(0.3)	7.0	(0.3)	9.2	(0.5)	6.4	(0.6)	6.6	(0.5)
Income from real estate property	24.4	(6.3)	25.5	(3.4)	26.4	(2.9)	27.5	(2.5)	27.0	(2.9)
Income from financial investment	2.7	(0.5)	3.6	(0.6)	5.8	(2.0)	18.3	(5.4)	6.6	(1.7)
<i>from financial assets</i>	2.0	(0.4)	3.4	(0.6)	3.3	(1.9)	15.0	(5.2)	5.8	(1.5)
<i>from private business*</i>	32.3	(14.6)	19.1	(6.4)	136.0	(46.1)	77.9	(30.2)	48.8	(66.2)
Income from regular private transfers	6.7	(1.2)	5.3	(0.5)	6.4	(0.7)	7.3	(1.8)	5.5	(0.5)
Income from other income sources	64.3	(31.4)	40.3	(19.4)	46.0	(24.8)	76.0	(29.8)	101.0	(62.2)
Total gross household income	84.2	(2.3)	87.2	(2.0)	93.1	(1.9)	116.0	(2.9)	125.0	(3.4)

Panel (c): Median gross income conditional on participation

Conditional median in 1,000 euro	2010		2014		2018		2021		2023	
	Value	Std. Err.	Value	Std. Err.	Value	Std. Err.	Value	Std. Err.	Value	Std. Err.
Employee income	58.7	(2.4)	61.4	(1.8)	64.6	(2.0)	77.6	(3.0)	83.9	(3.2)
Self-employment income	30.0	(5.4)	35.6	(8.2)	43.8	(6.6)	42.8	(7.1)	41.2	(9.6)
Pension income	38.8	(2.6)	41.6	(1.7)	46.4	(2.0)	67.0	(3.3)	52.0	(3.9)
<i>Public pension income</i>	37.8	(2.8)	41.2	(1.6)	44.4	(2.0)	67.0	(3.2)	50.4	(3.9)
<i>Occupational and private pension</i>	23.0	(10.1)	6.0	(3.2)	6.4	(5.5)	26.4	(10.9)	16.0	(6.4)
Social transfers	7.0	(0.4)	6.0	(0.3)	7.1	(0.3)	5.9	(0.6)	6.0	(0.7)
<i>Unemployment benefits</i>	8.8	(3.2)	14.0	(2.6)	9.2	(3.1)	9.4	(2.2)	9.7	(3.3)
<i>Other social transfers</i>	6.4	(0.4)	5.6	(0.3)	6.4	(0.4)	4.6	(0.6)	5.0	(0.5)
Income from real estate property	10.2	(1.3)	12.4	(1.3)	15.0	(1.0)	15.2	(1.3)	16.2	(1.8)
Income from financial investment	0.5	(0.0)	0.4	(0.1)	0.2	(0.0)	1.4	(0.4)	1.2	(0.3)
<i>from financial assets</i>	0.5	(0.0)	0.4	(0.1)	0.2	(0.0)	1.1	(0.3)	1.1	(0.3)
<i>from private business*</i>	11.6	(6.4)	22.0	(6.1)	60.6	(38.2)	69.4	(63.6)	27.0	(17.2)
Income from regular private transfers	5.1	(0.8)	3.7	(0.7)	4.4	(0.8)	3.4	(0.4)	3.9	(0.5)
Income from other income sources	20.0	(4.7)	5.4	(3.6)	15.2	(5.4)	21.6	(13.7)	23.0	(22.5)
Total gross household income	64.9	(1.8)	64.6	(1.6)	71.1	(2.0)	89.7	(2.5)	96.6	(3.3)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

Note: Income from family and friends is not included. * other than self-employment. Values expressed in 1,000 euro and rounded to nearest 100.

Gross income by population group

Household gross income differed substantially across population groups, as reported in Table B37 and Table B38 in the Appendix. In 2023, median and mean gross income steadily increases from the youngest age group to peak among households whose reference person is between

45 and 54 years old. Median and mean gross income were lower for the oldest age group (65+), reflecting reduced income in retirement. For households with a female reference person, average gross income was only 79% of that in households with a male reference person (without taking into account other characteristics including age, employment status or education). The household reference person is selected by the participating household and may not be the highest earner. Table B37 and Table B38 indicate that gross income rises with educational attainment, especially for households in the top group.

On average, households who rent their main residence have lower incomes than homeowners (with or without mortgages). Among homeowners, those who still pay a mortgage tend to have higher income than those who own their main residence outright. This likely reflects different age profiles and stages in the life cycle. Households usually acquire their home after they have started working and start a family. They gradually pay off their mortgage as they age. On arriving at retirement age, income declines (pensions) while the mortgage is typically paid off.

3.5. Household debt burden

HFCS data is regularly used to calculate various debt burden measures for individual households (e.g., HFCN, 2013; Giordana and Ziegelmeyer, 2023). Table 5 reports several of these measures.

Table 5: Main debt burden indicators

Debt burden indicators	2010		2014		2018		2021		2023	
	Median	Std. Err.	Median	Std. Err.	Median	Std. Err.	Median	Std. Err.	Median	Std. Err.
Debt-to-asset ratio	18.2	(2.1)	22.1	(2.1)	19.4	(2.1)	19.6	(1.4)	21.3	(2.1)
Debt-to-gross income ratio	86.9	(11.2)	114.1	(10.6)	95.5	(14.4)	133.1	(18.0)	125.8	(17.3)
Debt-service-to-income ratio	16.2	(0.8)	15.0	(0.7)	13.4	(0.8)	14.6	(0.8)	14.8	(0.9)
Mortgage-debt-service-to-income ratio	16.3	(0.7)	17.6	(0.7)	17.8	(0.8)	18.0	(0.8)	18.9	(1.0)
Loan-to-value ratio of household main residence	27.5	(2.6)	34.6	(2.8)	39.0	(2.5)	34.9	(2.4)	41.8	(3.0)
Net liquid assets to gross income ratio for indebted households	12.2	(2.2)	11.5	(1.7)	10.6	(2.3)	17.9	(3.7)	24.0	(3.5)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

Note: HMR: Household main residence. The results for the debt service-to-income ratio differ from the figures in in Girshina et al (2017) with regard to debt service payments, as leasing payments are now included.

The median value of the *debt-to-asset ratio*, calculated as the household’s outstanding debt divided by its assets (including housing), was 21 in 2023, which is slightly lower than in 2021. There is however considerable variation across household groups (Table B39 in the Appendix).

For households who owned their main residence outright this ratio was close to 2%. For households who were renting, the median debt-to-asset ratio declined from 25% in 2021 to 19% in 2023. This development can be due to a change in the population taking out consumer loans or/and change in the cost structure of this type of liability. For homeowners with a mortgage, the median debt-to-asset ratio increased from 27% in 2021 to 32% in 2023. Across income quintiles, the debt-to-asset ratio seems to follow a hump shape, peaking in the third income quintile. It generally declines with age. The median debt-to-asset ratio was 40% for those 16-34 years of age but only 3.9% for those 65+ years of age. Low ratios for older households were also visible in the breakdown by work status, with pensioners reporting the lowest ratio (5.9%).

The median value of the *debt-to-income ratio*, calculated as a household's outstanding debt divided by its annual gross income, was 126% in 2023 (the 7pp decline compared to 2021 is not statistically significant at the 10% level). Its median value was particularly high (>200) for four household groups: homeowners with a mortgage, households in the second and third net wealth quintiles and households whose reference person is aged 35 to 44 (Table B40 in the Appendix).

The *debt-service-to-income ratio* is calculated as a household's monthly debt payments divided by its monthly gross income. Unlike the debt-to-asset ratio or the debt-to-income ratio, the debt service-to-income ratio is generally more sensitive to changes in policy rates. However, its median level among indebted households was nearly 15%, similar to 2021. The stability of this ratio implies that income generally increased along with interest payments. Differences in the debt-service-to-income ratio do not always align with those in the debt-to-asset ratio. In particular, renters have a higher debt-to-asset ratio but a lower debt-service-to-income ratio (Table B41 in the Appendix). This reflects the fact that renters have no housing assets and the non-mortgage debt they service is usually much smaller than mortgage debt serviced by homeowners. The debt-service-to-income ratio peaks among households between 35 and 44. This group is more likely to purchase a home and start paying a mortgage. Across the net wealth distribution, the debt-service-to-income ratio is higher for the second and third quintile, largely mirroring the pattern for the debt-to-income ratio.

The *mortgage-debt service-to-income ratio* focuses only on households with mortgage debt (33% of Luxembourg households in 2023). Its median value in 2023 was 19%, which is higher than the overall debt-service-to-income ratio (15%). The debt-service-to-income ratio for mortgage holders has increased continuously since 2010. The mortgage-debt service-to-income ratio is

lowest for outright homeowners²² and renters (both 12%) and highest for homeowners with a mortgage (20%) (Table B42 in the Appendix).

The *outstanding loan-to-value ratio (LTV)* is calculated as the mortgage amount remaining to be paid on the household main residence divided by its current estimated value.²³ In 2023, the median value of this ratio was 42%, well above the 35% level estimated for 2021. The LTV ratio was highest for households in the bottom quintile of the net wealth distribution (151% in 2023) or in the youngest age group (96%) (Table B43 in the Appendix). One should bear in mind that only 7.7% of households in the bottom net wealth quintile were homeowners (Table C7) and only 6.6% had a mortgage on their main residence (Table B28 in the Appendix). The LTV ratio is considerably lower for households in the top quintile of the net wealth distribution (72%) or in the oldest age group (around 66%), as it is for pensioners (76%). Differences across income quintiles were less pronounced than those across net wealth quintiles. In 2023, the outstanding LTV ratio was 104% in the lowest gross income quintile and 84% in the highest.

The *ratio of net liquid assets to gross annual income* provides information on funds readily available to households if they face income shocks. Among households holding debt in 2023, the median level of this ratio was 24%, a substantial increase from its 2021 level (18%), although not statistically significant. This indicator is substantially higher for homeowners, suggesting that they tend to hold more liquid assets than renters (Table B44 in the Appendix). It is also higher towards the top quintiles of the income and wealth distribution, and increases with age and education.

3.6. Income and wealth inequality

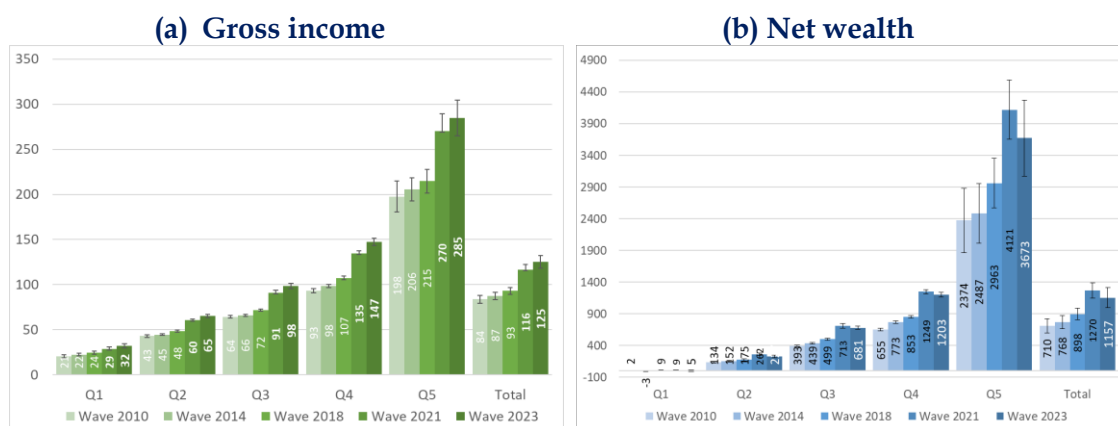
3.6.1. Gross income and net wealth distribution

Net wealth (as defined in Section 3.3) rises steadily with gross income (as defined in Section 3.4), with a particularly steep increase between gross income quintiles Q4 and Q5 (Figure 15). As illustrated by the confidence intervals, the uncertainty surrounding net wealth estimates is relatively low for income quintiles Q1-Q4, but rather high for quintile Q5, reflecting heterogeneity across households within the top quintile. Similarly, uncertainty surrounding gross income estimates is very low in income quintiles Q1-Q4 but larger in quintile Q5 (Figure 15).

²² Outright homeowners (as well as renters) have no mortgage on their main residence, but may have mortgage debt on OREP.

²³ The *outstanding loan-to-value ratio (LTV)* is not calculated at loan origination but on the outstanding amount.

Figure 15: Mean gross income and net wealth, by gross income quintile (1,000 euro)



Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.
 Note: Income from family and friends is not included. Note: Error bars show 95% confidence interval. Values rounded to nearest 1,000.

3.6.2. Income inequality

Income inequality across households changed little between 2021 and 2023. Table 6 reports several measures of inequality using either gross income or net income (defined as gross income minus taxes and social security contributions).²⁴

Rows two to five report ratios that compare different percentiles of the income distribution. The second row reports the ratio of the median or 50th percentile (50% of households have an income below this value) to the 10th percentile (10% of households have an income below this value). The third row compares the 80th percentile to the 20th percentile, the fourth row compares the 90th to the 50th and the fifth row compares the 90th to the 10th percentile. First, all ratios are lower for **net** income than for gross income, confirming the progressive nature of the tax and benefit system in Luxembourg, which reduces income inequality through redistribution. Second, there is no trend that would suggest that income inequality has substantially changed since 2010.

²⁴ After completion of all gross income components for each individual, the questionnaire presents the household with their reported total household income and asks directly what their net income would be.

Table 6: Inequality measures – Household income

	Gross Income				
	2010	2014	2018	2021	2023
P50 in euro	64,800	64,600	71,100	89,600	96,600
P50/P10	2.83	2.69	2.81	3.10	2.85
P80/P20	3.50	3.45	3.53	3.60	3.73
P90/P50	2.39	2.61	2.49	2.53	2.53
P90/P10	6.75	7.03	7.01	7.83	7.19
Gini coeff.	0.42	0.42	0.41	0.41	0.40
	Net income				
	2010	2014	2018	2021	2023
P50 in euro	na	50,000	51,000	64,800	66,000
P50/P10	na	2.59	2.57	2.82	2.70
P80/P20	na	3.15	3.01	3.01	3.13
P90/P50	na	2.30	2.25	2.22	2.27
P90/P10	na	5.95	5.77	6.26	6.15
Gini coeff.	na	0.38	0.36	0.36	0.37

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted.

Note: Income from family and friends is not included. Values in euro rounded to nearest 100. Net income was not collected in the 2010 survey.

Percentile ratios are limited in the information they provide, because they only compare two specific points in the distribution. Therefore, the final rows of Table 6 report the Gini Coefficient, a popular measure of inequality ranging from 0 (perfect equality) to 1 (perfect inequality). The Gini coefficient gives less importance to the tails of the distribution, where differences may be driven by a small number of atypical individuals.

The Gini coefficient for net income indicates less inequality than the Gini coefficient for gross income, as could be expected. In 2023, the Gini coefficient is 0.40 for gross income, similar to its value in 2021 and 0.37 for net income, again confirming the progressive nature of the Luxembourg tax and transfer system.

3.6.3. Wealth inequality

Wealth inequality is more challenging to measure than income inequality. First, net wealth may be negative, while income is usually positive. This is a problem for the Gini coefficient, which is no longer bounded between 0 and 1 if negative values are present. Second, the theory of the life cycle suggests that income and wealth will be low for young households, increase with age as households progress in their work career, and then decline with age as households retire and consume their savings. Although income and wealth follow similar trajectories over the life cycle, the profile for wealth is more pronounced.

Table 7 reports the same inequality measures, but this time calculated using net wealth. Household net wealth is the sum of real assets (e.g. housing) and financial assets (excluding public and occupational pensions) minus liabilities (including mortgage debt).

Table 7: Inequality measures – Household net wealth

Net wealth					
Year	2010	2014	2018	2021	2023
P50 in euro	398,000	438,000	498,000	718,000	676,000
P50/P10	79.0	98.5	70.6	48.1	41.7
P80/P20	25.7	31.3	23.9	21.2	20.4
P90/P50	3.5	3.5	3.7	4.0	3.7
P90/P10	273.0	344.3	262.8	191.9	153.1
Gini coeff	0.66	0.65	0.65	0.64	0.63

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted.

Note: P50 rounded to nearest 1,000 euro.

Evidence from other countries indicates that net wealth is generally distributed more unequally than income, so that inequality measures calculated with net wealth tend to be higher than those calculated with income (e.g. Cowell and Van Kerm, 2015). Therefore, it is not surprising that in 2023, the P90/P10 ratio for income was 7.2 (Table 6), but it was 153 for net wealth (Table 7).

Considering changes over time, the various percentile ratios convey conflicting signals. After an increase between 2010 and 2014, the P90/P10 ratio for net wealth declined considerably since 2014. This ratio is however prone and known to exhibit a relatively high variability due to low values for P10. While substantially smaller in magnitude, the P90/P50 ratio for net wealth increased from 2014 to 2021, reaching the value of 4 for the first time. It decreased between 2021 and 2023. The P50/P10 measure suggests a continued reduction in net wealth inequality since 2014. However, the Gini coefficient, which takes into account the whole distribution, barely moves. If anything, one could argue there was a slight decrease in inequality since 2010.

To provide more detail, Table 8 reports the shares of net wealth held by the wealthiest 1%, 5%, 10% and 20% of households. In 2023, the wealthiest 1 percent of households in Luxembourg owned around 13% of total net wealth, the wealthiest 5 percent owned 33%, the wealthiest 10 percent owned 47%, and the top 20 percent owned 63% (each of these top shares is slightly smaller than in 2021). The bottom 50 percent of households owned less than 9% of total net

wealth (unchanged from previous years). The concentration of net wealth at the top of the distribution appears in Figure 16.

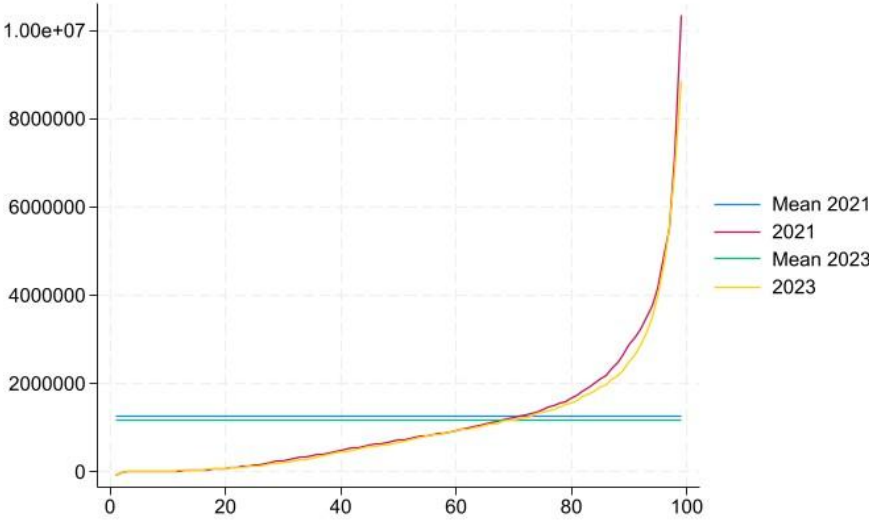
Table 8: Top shares - Household net wealth (in %)

	Share - Net wealth				
	2010	2014	2018	2021	2023
Top 1%	21.3	19.1	20.5	15.2	13.3
Top 5%	40.0	36.4	38.0	34.5	33.4
Top 10%	51.4	48.7	50.3	47.9	46.7
Top 20%	66.7	64.6	65.9	64.9	63.5
Bottom 50%	8.5	8.7	8.7	9.0	8.8

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

In 2023, only 2% of households in Luxembourg reported negative net wealth (more debt than assets). Towards the upper end of the distribution, the value of net wealth increases substantially. Average net wealth was 1,157,000 euro in 2023, substantially above the median (P50 = 676,000 euro). Figure 14 shows a remarkably similar distribution of net wealth for 2023 and 2021, suggesting little change in wealth inequality.

Figure 16: Distribution of Household Net Wealth in Luxembourg



Source: Own calculations based on LU-HFCS waves 2023 and 2021.

4. Special Feature: On the Marginal Propensity to Consume

4.1. Introduction

When a central bank sets key policy rates, it affects spending and investment in the economy. Policy rate changes affect household finances through their cash flow impact on assets and debts. However, how much this leads to increased spending depends, among others, on the Marginal Propensity to Consume (MPC). Individuals with higher MPCs are likely to spend a higher share of any additional income or wealth following a monetary or fiscal stimulus. For individuals with lower MPCs, an interest rate cut may induce a weaker consumption response because households may choose to save more of the extra income. To give a specific example: If the household MPC is 0.8, an additional 100 euro in income leads to an 80 euro increase in consumption, which can contribute to raising aggregate demand. However, if the household MPC is only 0.2, the same 100 euro increase in income would only lead to a 20 euro increase in consumption.

There are reasons to believe that household MPC varies across different population groups, and may also vary over time with economic conditions or consumer confidence. Lower-income households tend to have a higher MPC because they are more likely to spend additional income on essential goods and services, whereas higher-income households have already satisfied their (basic) consumption needs and may therefore save more. This means the level of heterogeneity in the population may affect monetary policy transmission. For example, central bank actions that predominantly affect wealthier individuals (e.g., through asset price increases in the stock market) may boost consumption less than actions that affect lower-income households through changes in employment and labour income. The aggregate MPC for the population will also reflect existing (income) inequality in the economy. In economies with high income inequality, a larger portion of overall income goes to individuals with a relatively low MPC, so the aggregate MPC may be lower.

This special feature starts with a short review of the relevant academic literature (Section 4.2). Section 4.3 presents first estimates of Luxembourg MPCs using LU-HFCS data. Section 4.4 concludes.

4.2. Relevant academic literature

The traditional (macro-)economic literature uses a representative agent approach to analyse policy transmission to households. This approach is inherently limited in its ability to account

for population heterogeneity. More recent approaches, such as Heterogeneous Agent New Keynesian (HANK) models, incorporate differences in household income, wealth and consumption, offering a more realistic depiction of how policy operates in the real economy. HANK models reveal new channels of monetary policy transmission beyond intertemporal substitution of consumption, including redistributive effects linked to household interest-rate exposure and income composition.²⁵ For example, [Kaplan et al. \(2018\)](#) and [Auclert \(2019\)](#) use U.S. data to show that monetary policy effects also depend on the extent of redistribution among households with different levels of income, wealth, or liquidity. Specifically, their findings suggest that monetary policy primarily affects aggregate consumption through its impact on labour demand and income. Rich microdata, such as the U.S. Survey of Consumer Finances or the Eurosystem HFCS, are essential for calibrating these models and capturing the mechanisms through which monetary policy affects households differently across the distribution.

Microdata also reveal that households adjust consumption differently in response to shocks. MPCs vary substantially across households due to differences in liquidity, income risk, indebtedness and other factors ([Jappelli and Pistaferri, 2014](#); [Kaplan and Violante, 2014](#)). Recent empirical studies confirm that MPCs are much higher for liquidity-constrained or low-wealth households (e.g., [Carroll et al., 2017](#) and [Fisher et al., 2020](#)), and for those holding significant household debt, which amplifies cuts to household spending during downturns (e.g., [Andersen et al., 2016](#)). Likewise, [Di Maggio et al. \(2017\)](#) find that borrowers with lower incomes and housing wealth have significantly higher marginal propensities to consume, while [Pesce and Zhang \(2025\)](#) show that MPCs are lower in the year of mortgage refinancing.

[Drescher et al. \(2020\)](#) show that household MPCs also differ across euro area countries in response to a positive income shock simulating “helicopter money”-type transfers. [Albacete et al. \(2025\)](#) estimate average MPCs ranging from 0.33 in the Netherlands to 0.57 in Lithuania and show that aggregate consumption responds more strongly to targeted policy interventions when heterogeneity is considered.

These empirical findings carry important implications for monetary policy transmission. In particular, household MPCs are likely to be more heterogenous if the distribution of asset holdings is skewed. [Adam and Tzamourani \(2016\)](#) and [Lenza and Slacalek \(2024\)](#) use HFCS data to explore the distributional effects of monetary policy in the euro area. [Adam and](#)

²⁵ See [Pascal \(2025\)](#) for a comprehensive review of this literature.

Tzamourani show that asset price inflation affects households unevenly: equity gains benefit the wealthy, while housing gains support the middle class. Lenza and Slacalek find that the ECB's Expanded Asset Purchase Programme reduced income inequality by improving employment among low-income households, but had limited impact on wealth inequality due to offsetting portfolio effects. Hence, the overall impact is likely to depend on differences in the distribution of assets and liabilities.

In times of economic uncertainty, individuals' MPCs may be lower because they save more to insure against potential future risks (such as unemployment or economic downturns). For example, Coibion et al. (2024) use survey data from 6 major euro area economies and show that higher macroeconomic uncertainty induces households to significantly and persistently spend less. Indeed, economic uncertainty likely contributed to the increase in involuntary household savings during the COVID-19 pandemic.²⁶ When households consume less, monetary stimulus (such as cutting interest rates) might lead to a weaker than anticipated response in household spending.

In the euro area, the single monetary policy interacts with heterogeneous national economies and households may be affected differently depending on national institutions, mortgage markets, and household balance sheets.

4.3. How large is the MPC in Luxembourg?

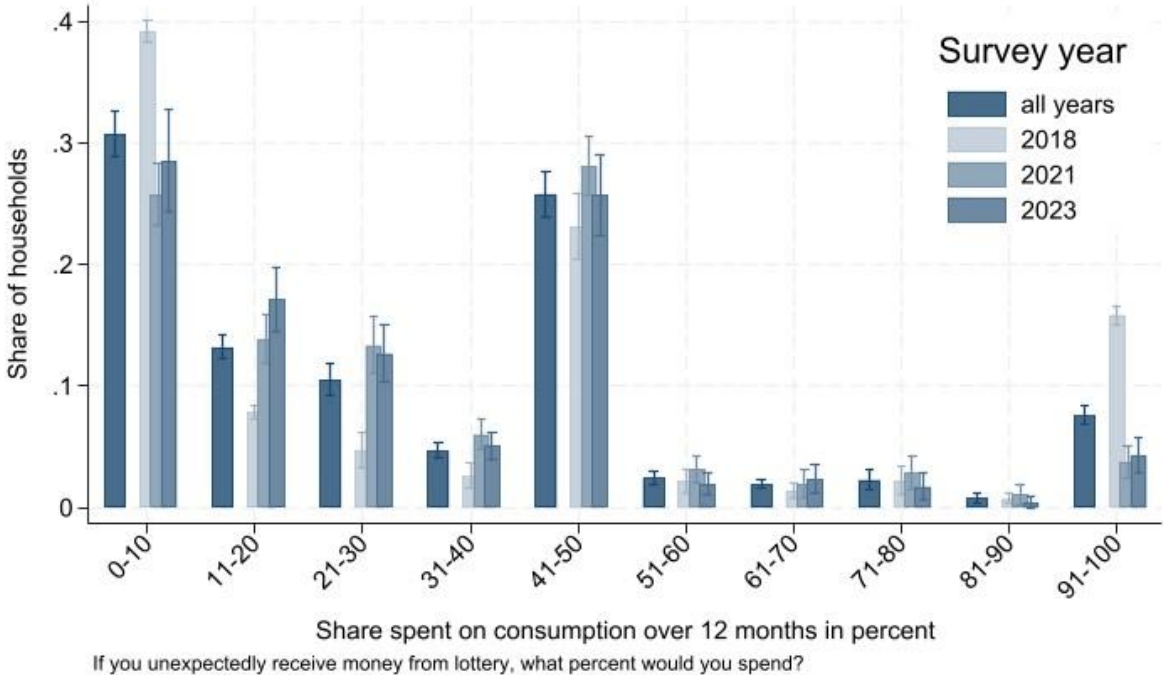
Since direct observation of the MPC is difficult, surveys typically ask households how they would react to a hypothetical windfall gain. This approach provides a link from household balance sheets to the impact of monetary policy. Specifically, the HFCS asks households to answer the question: *"Imagine you unexpectedly receive money from a lottery equal to one month of household income. What percentage would you spend on goods and services over the next 12 months?"* Responses range from 0 to 100 percent and can be interpreted as the MPC in response to a temporary income shock. The Luxembourg HFCS waves of 2018, 2021 and 2023 all contain this question, which we will use to present our initial findings. While these results offer valuable insights, they should be viewed as preliminary and serve as a starting point for a more comprehensive investigation in future work.

Three results emerge: First, MPCs vary widely with a substantial mass between zero and 10% (Figure 17). This suggests that many households would consume almost none of a temporary

²⁶ See Yannelis and Amato (2023) for a review of the consumption decline and savings increase during COVID-19. For evidence from Luxembourg, see Mathä et al. (2023b).

income increase, prioritising savings or debt repayment instead. A second and a third peak occur between 41% and 50% and between 91% and 100%, suggesting that a given income change can elicit very different consumption reactions across households.

Figure 17: Distribution of MPC responses

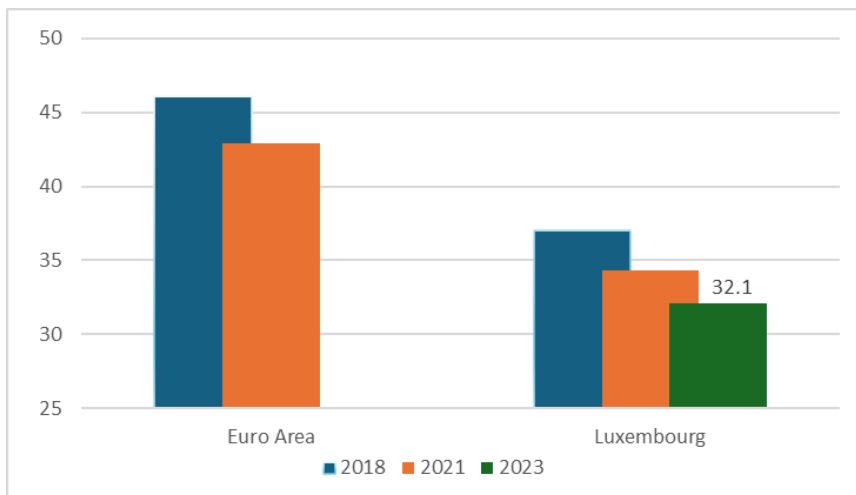


Source: LU-HFCS waves 2023, 2021, 2018.

Second, in each survey wave, Luxembourg’s average MPC was lower than the average for the euro area (Figure 18).²⁷ Furthermore, the average MPC in Luxembourg declined between 2018 and 2023, much as the euro area average declined from 2018 to 2021.²⁸ This decline may be consistent with heightened uncertainty and stronger self-insurance motives, as mentioned above.²⁹ Note, that the relatively high MPC in 2018 coincides with a low interest rate environment in which there is little incentive for additional savings.

²⁷ At the time of writing, Eurosystem HFCS data for wave 5 (2023) were not yet available.
²⁸ Own calculations based on Eurosystem HFCS data for waves 3 (2017) and 4 (2021). A similar decline in MPC is also observed in Spain from 2017 to 2022 (see Basso and Gomez-Garcia, 2025).
²⁹ See the Economic Policy Uncertainty Index, <https://policyuncertainty.com> last accessed 18/02/2026.

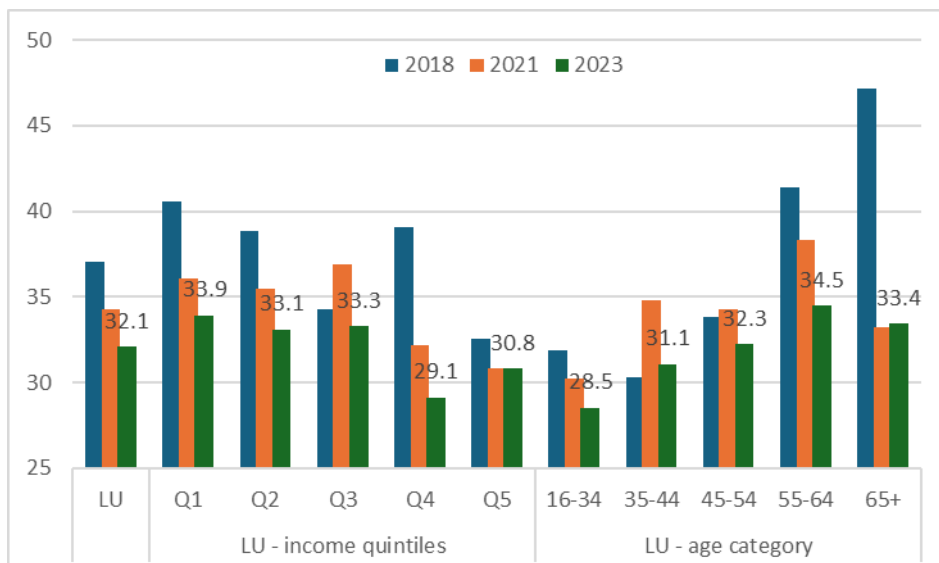
Figure 18: Average MPC, Euro Area and Luxembourg, in %, 2018–2023



Source: Eurosystem HFCS wave 3 (2017) and 4 (2021); LU-HFCS, waves 3 (2018), 4 (2021) and 5 (2023).

Third, the self-reported MPCs differ across several dimensions. In particular, MPCs tend to be higher for low-income households, for those with lower amounts of financial assets and for households where the reference person is younger (Figure 19).

Figure 19: MPC in Luxembourg, income quintile and age category



Source: LU-HFCS waves 2023, 2021, 2018.

The decline observed over different survey waves is also visible in most income quintiles and age categories, and hence seems to be a broad phenomenon in society.

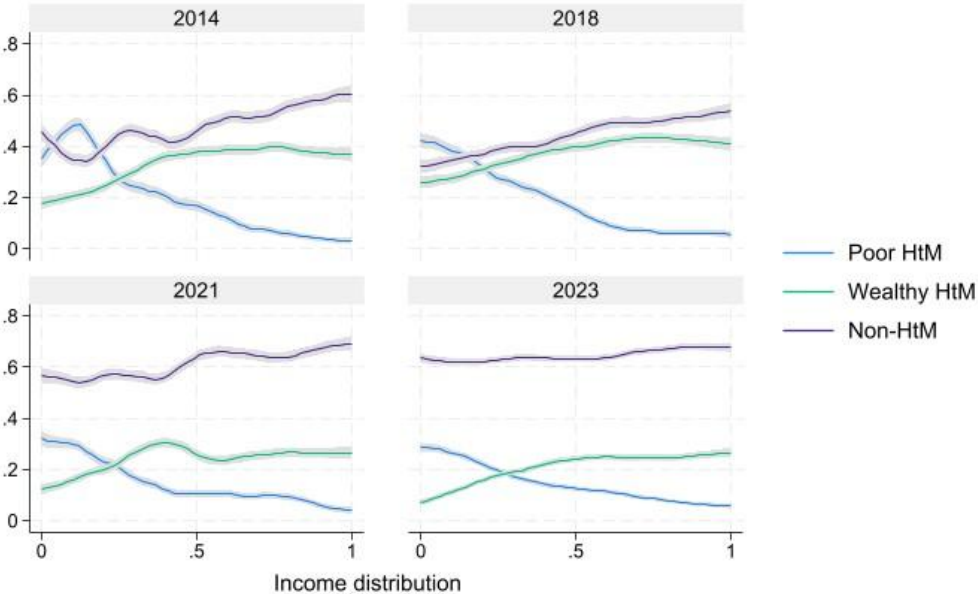
To analyse this more formally, we use an Ordinary Least Squares (OLS) regression to estimate type-specific differences in MPC via

$$MPC_i = \alpha + \theta Z_i + \beta'X_i + \varepsilon_i$$

where Z_i are specific dummy variables distinguishing Hand-to-Mouth (HtM) households and non-HtM households, X_i are socio-economic controls (such as age, gender, education, migration, occupation, marital status), and ε_i is the error term.

HtM households are defined as those whose level of liquid financial assets³⁰ is less than half their annual gross income (see also Kaplan and Violante, 2014). We can further distinguish poor HtM households, i.e., those with no real assets, from wealthy HtM households, i.e. those that own their home, other real estate property or business assets.³¹ This is a simple, yet intuitive way to link financial buffers to behaviour. However, it is a relative measure, in that there can be HtM households that are otherwise high-income households, and non-HtM households that can be found in lower income groups.

Figure 20: Shares of Hand-to-Mouth and non-HtM households in Luxembourg



Source: Own estimations based on LU-HFCS waves 2023, 2021, 2018.

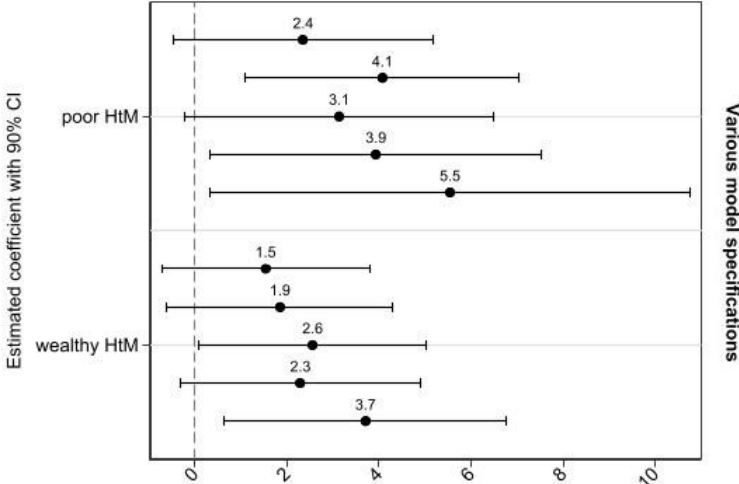
Figure 20 shows the distribution of these types of households across the population for different survey waves. The share of HtM households declines along the income distribution

³⁰ We use all financial assets (da2100 in the ECB HFCS user data base) as an indicator of *liquid* financial assets.
³¹ Households owning only a car but no other real assets are still classified as poor HtM if their liquid financial assets are below 50% of their annual gross income.

and over time. In fact, we can see the Non-HtM households curve flattening and generally rising over the different survey waves.³² We also observe a decline in the share of poor HtM households along the income distribution and over time, even though their share remains higher at lower income levels.

Figure 21 reports regression results from different specifications confirming that MPCs are significantly higher for poor HtM households than for non-HtM households, controlling for standard socioeconomic covariates. This suggests that policy transmission may be more pronounced for these households. As the share of poor HtM households in the population declines over time, the contribution of this particular monetary policy transmission channel may have weakened in Luxembourg.

Figure 21: Regression results – HtM MPC vs non-HtM MPC



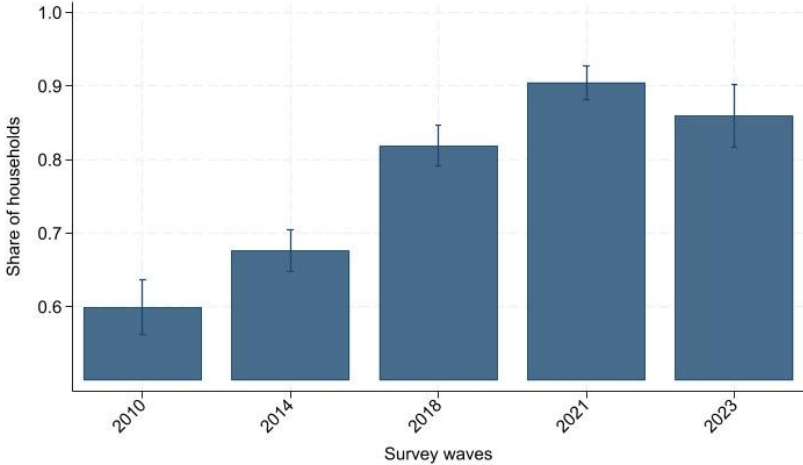
Source: Own estimations based on LU-HFCS 2023, 2021, 2018.
 Note: Coefficient estimates relative to reference category non-HtM households. All specifications (read from top to bottom) include the HtM indicator. Spec.(ii) adds controls and is estimated on pooled data for 2018–2023. Spec. (iii), repeats Spec. (i) for 2021 and 2023 only. Spec (iv) adds controls to Spec (iii). Spec (v) adds interactions terms to Spec. (iv) allowing the estimated HtM coefficients to vary over time.

Second, we check whether changes in the precautionary savings motive³³ are linked to the decline in average MPC. Intuitively, if people feel the need to self-insure, they save more of

³² This can partly be related to differences in the sample composition in 2021 and 2023 compared to earlier waves. See discussion in Section 5.3.
³³ Note: Households whose income exceeded expenses in the last 12 months were asked to state their savings motives: It reads: “Now I’d like to ask you some questions about your attitudes about savings. People have different reasons for saving, even though they may not be saving all the time. What are your (household’s) most important reasons for saving?” Households could select one or more of 12 different motives, one of which was provision for unexpected events.

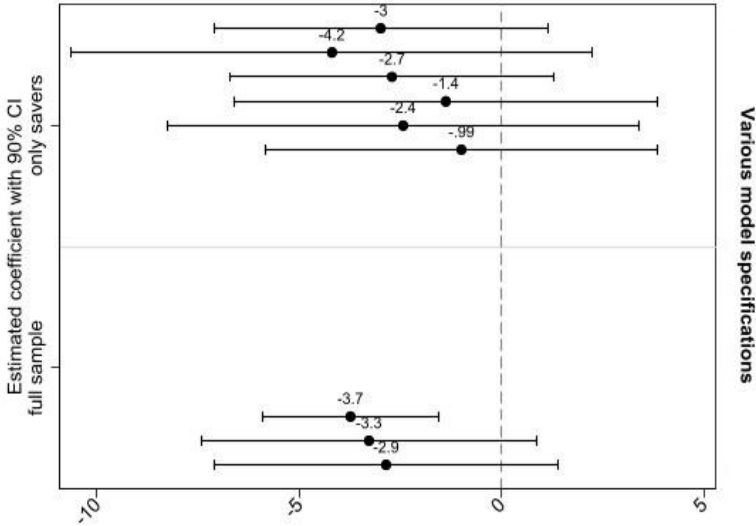
their windfall gains, potentially weakening the consumption channel. Figure 22 shows that the share of households reporting this motive has generally increased over time, which suggests that individuals feel a stronger need to self-insure which, in turn, may help to explain the decline in the average MPC.

Figure 22: Share citing precautionary savings motive (among households able to save)



Source: LU-HFCS waves 2023, 2021, 2018.

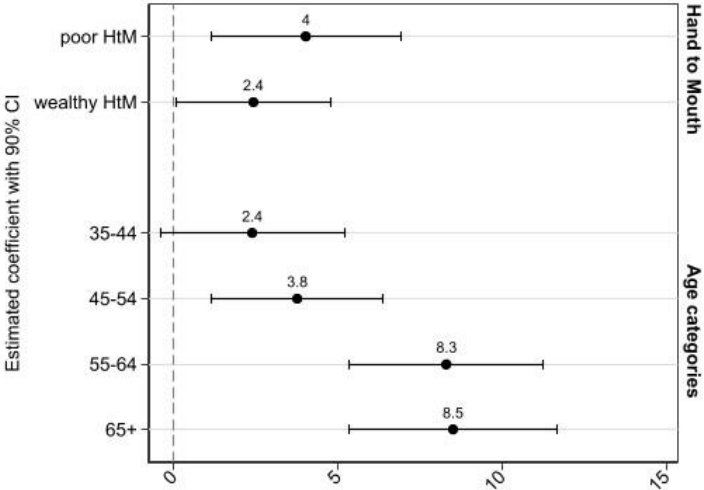
Figure 23: Regression results – Precautionary savings motive & MPC



Source: Own estimations based on LU-HFCS waves 2023, 2021, 2018.
 Notes: Coefficient estimates refer to a dummy variable indicating whether a household has a precautionary savings motive. Spec. (i)–(vi) are estimated for households able to save. Read from top to bottom, Spec. (i) only includes the precautionary-motives indicator. Spec. (ii) adds interaction terms allowing varyijg effects over time. Spec. (iii) adds further controls. These specifications are estimated for 2018–2023. Spec. (iv)–(vi) instead use data for 2021 and 2023 only. Spec. (vii)–(ix) use all households, assigning households unable to save a precautionary-motive dummy a value of zero. We report the baseline specification, the specification with internaction terms, and the specifcaton with additional controls for 2018–2023.

Regression results in Figure 23 suggest a negative link between precautionary motives and the MPC, although differences are not statistically significant. In part, this is because only households with savings capacity answered the survey question on the precautionary savings motive.³⁴ Finally, the estimated self-assessed MPCs are higher for households where the reference person is older (Figure 24).

Figure 24: Regression results – Age & MPC



Source: Own estimations based on LU-HFCS waves 2023, 2021, 2018.
 Note: Coefficient estimates relative to reference category non-HTM households, or households with reference person aged between 18 and 34. The figure reports results from a single baseline regression without additional controls for 2018-2023.

4.4. Summary

This is special feature provided at first assessment of the MPC in Luxembourg. The observed decline in households’ MPC in Luxembourg likely reflects several reinforcing mechanisms:

1. Composition: The decline in the prevalence of (poor) Hand-to-Mouth households mechanically reduces the aggregate MPC even if the (high) MPC within this group remains unchanged.
2. Risk and self-insurance: An increase in the precautionary savings motive would be consistent with the observed increase in financial assets. That is, higher perceived risk increases the target savings buffer, temporarily lowering the MPC until the target buffer is reached. The (imprecisely estimated) negative link between the MPC and precautionary

³⁴ The share of households answering this question varies between 47% and 65% over the survey waves.

savings motive, combined with the latter's increase over time, would be consistent with this explanation.

3. Stronger buffers and a higher return to liquidity: With fewer households facing liquidity constraints and a higher payoff to holding liquid assets, the marginal value of an extra euro consumed is lower for many households, reducing MPCs even among households that are not facing credit constraints. This is consistent with the decline in the share of Hand-to-Mouth households and the rise in the reported precautionary savings motive.

5. Methodology and data treatment

This section provides a detailed description of methodological choices applied in the LU-HFCS. Approximately following chronological order, it describes the many steps involved in designing the sampling procedure, elaborating the questionnaire, conducting fieldwork, analysing participant response behaviour and collecting paradata. It briefly discusses data editing, imputation and anonymization procedures.³⁵ Finally, it concludes with a detailed comparison of HFCS estimates with statistics from other data sources.

5.1. Questionnaire

The LU-HFCS is a cross-sectional household survey that incorporates the core questionnaire developed by the Eurosystem. Each wave is designed to be representative of the household population in the reference year for which data are collected, so the different waves do not follow the same households over time. The questionnaire covers both household- and person-specific questions. Person-specific questions should be answered by individual household members and household-specific questions by the person who is best informed about the household's finances (referred to as the "financially knowledgeable person" or "FKP").

The questionnaire is composed of 9 main sections:

1. General characteristics of the household (personal questions)
2. Real assets and their financing (household questions)
3. Other liabilities / credit constraints (household questions)
4. Private businesses and financial assets (household questions)
5. Employment (personal questions)
6. Pensions and insurance policies (personal questions)
7. Income (personal questions)
8. Intergenerational transfers/ gifts (household questions)
9. Consumption (household questions)

³⁵ This section relies heavily on the final report of LISER, which conducted the fieldwork (Bienvenue, et al., 2023).

The questionnaire was substantially shortened in 2021, when the survey switched from computer-assisted personal interviews (CAPI) to Computer-assisted web interviews (CAWI). In 2023, some of the core questions that had previously been dropped were added to the questionnaire again, reducing the number of dropped core questions by around 50% to 27 (e.g. information on previous employment for the unemployed and the retired, details on self-employment business wealth, purchase of vehicles, ...).

5.2. Survey mode

Starting with the 2021 wave, the LU-HFCS is collected by Computer Assisted Web-based Interviews (CAWI), requiring participating households to complete the questionnaire themselves online. In previous waves, it was conducted as a Computer Assisted Personal Interview (CAPI), with interviewers visiting households in person to collect the data. While the latter is the preferred survey methodology within the Eurosystem Household Finance and Consumption Network (HFCN), the COVID-19 pandemic required the switch to Computer Assisted Web-based Interviews (CAWI).

In 2021, the switch to CAWI led to a substantial drop in the response rate, despite the shortened questionnaire. In part, this may be because interviewers no longer visited selected households at their main residence to encourage participation. The switch to CAWI also means that participation required a computer and internet access, eliminating some potential participants.

In 2023, the incentive scheme was successfully modified, and the response rate almost returned to levels predating the COVID-19 pandemic. However, the switch to CAWI may have altered the net sample composition, which limits comparability of the 2023 and 2021 waves to earlier waves. The online survey mode in 2021 and 2023 is more accessible to households with higher levels of education, who are more likely to have the required digital devices with an internet connection, and are more likely to be interested in participating. The weighting procedure (see Section 5.6.2) can only partly adjust for these changes in the sample composition.

5.3. Sampling

The target population covers all private households and their members residing in Luxembourg on 31 December 2023. As there is no perfect sampling frame for this target population, we apply an indirect sampling frame (Lavallée, 2007). This considers all administrative households included in Luxembourg's social security system (*Inspection*

Générale de la Sécurité Sociale, IGSS) and / or the national population register (*Registre National des Personnes Physiques, RNPP*).³⁶ The indirect sampling unit is an administrative household. A private household may comprise several administrative households, as private households are not limited to members sharing marital or parental ties. Therefore, the link between indirect sampling unit (i.e. the administrative household) and target unit (i.e. the private household) can be either one-to-one or many-to-one, and the weighting procedure needs to take this into account appropriately.

Starting with the 2021 wave, the gross sample included Luxembourg residents employed by EU institutions and other international organisations (e.g. the European Commission, European Investment Bank, NATO, etc.). This sub-population was not directly sampled in the first three waves (2010, 2014 and 2018), because these households are not covered by the national social security register. Since the 2021 wave, these households were sampled through the national population register, improving coverage of the target population from around 90% to almost 100%.³⁷

The reference date for the sampling frame is 31 December 2022. The sample was drawn from 369,707 administrative households, identified by the characteristics of the reference person associated with the administrative household. Around 88% of the resident population were registered in the national social security register at the reference date. For this population, IGSS provides auxiliary information concerning their nationality, occupational status and income, which was used to stratify the sampling. The remaining households were drawn from the RNPP, which distinguishes between nationals and foreigners, but does not contain information on employment status.

The inclusion of households outside the national social security system and use of the CAWI mode ensure good comparability of 2023 results with those from the 2021 wave, but comparability with earlier waves may be more limited. Households in Luxembourg that are not affiliated with social security are typically highly educated. As a result, households who participated in the 2021 and 2023 waves were more highly educated than the population reflected in the 2021 census.

³⁶ Individuals living in collective households and in institutions, such as retirement homes, are not part of the sampling frame.

³⁷ For a discussion of how the improved sampling of these households affects aggregate statistics, see Section 5.3 in [Mathä et al. \(2023a\)](#), which presents results from the 2021 wave.

The gross sample in 2023 consisted of 20,000 households, covering 5.4% of the target population. The sampling procedure was based on stratified random sampling. Stratification is based on nationality, occupational status (including the distinction between blue- and white-collar workers), as well as individual labour income declared to social security.³⁸ In total, the sampling procedure used 26 different strata, including two strata for individuals not affiliated with Luxembourg social security.

Table 9 : Sampling design and implementation - overview

Wave	2010	2014	2018	2021	2023
Sample frame	IGSS	IGSS	IGSS	IGSS + RNPP	IGSS + RNPP
Sampling unit	Resident administrative households (indirect sampling frame)				
Target population	Private households and their members residing in Luxembourg on				
	31 Dec. 2010	31 Dec. 2013	31 Dec. 2017	31 Dec. 2021	31 Dec. 2023
Gross sample size	5,000	7,300	7,100	20,000	20,000
Share of target population	2.01%	2.73%	2.50%	5.66%	5.41%
Oversampling of wealthy	20%	20%	20%	20%	20%
<i>Net Sample size</i>					
# households	950	1,601	1,616	2,010	3,699
# target	1,000	1,500	1,600	1,600	1,600
<i>Representative of</i>					
# households	186,440	210,965	226,378	268,916	261,498
# individuals	462,618	508,248	544,303	645,397	672,050
Number of strata	20 (nationality, employment status, income)			26 (20 + blue-collar + white-collar + RNPP native + RNPP foreign)	

Note: IGSS (*Inspection Générale de la Sécurité Sociale*) refers to the national social security system. RNPP (*Registre national des personnes physiques*) refers to the national population register.

First, 80% of the gross sample was drawn proportionally across the 26 strata. Second, following the HFCN guideline recommendation to oversample wealthy households, the remaining 20% of the gross sample was drawn from the high-income strata (gross mean labour income at or above the 9th decile, 10,128 euro per month).³⁹ One aim of oversampling the wealthy is to increase the number of observations for asset types that are mainly owned by wealthier

³⁸ If the administrative household includes more than one member with labour income, then the stratum is identified using the member with the highest individual income.

³⁹ For strata 2, 4, 10, 12, 14, 16, 20, 22 and 24 a minimum of 100 administrative households were included in the gross sample (where possible) and the rest of the sample was allocated proportionally across the remaining strata. In strata 19, the minimum of 100 units was reached by reallocating 79 units 19 from strata 5 to strata 19.

households and therefore relatively infrequent among the general population. This improves the statistical precision of estimates for these asset types and improves estimation of the upper tail of the wealth distribution, leading to better coverage with respect to national accounts statistics.⁴⁰

Unit non-response, which is a household refusing to participate in the survey, is a key concern for data quality, particularly if responding and non-responding shares of the population differ in characteristics of interest. The response rate in 2021 was very low compared to the previous wave, likely resulting from a mix of factors including the switch from CAPI to CAWI, the COVID-19 pandemic and changes to the incentive scheme. In 2023, the response rate was 19.2%⁴¹, almost back to the level in 2010. Contributing factors include a redesigned incentive scheme, replacing the lottery used in 2021, with a 20-euro token of appreciation for all participants, who could choose between an Amazon voucher (68%), a Lëtzshop voucher (5%), or a donation to a recognised charity in Luxembourg (28%).

⁴⁰ It was not possible to include households not affiliated with the national security system in the oversampling of the wealthy, since the national population register includes no information on labour income.

⁴¹ Unlike Figure 25, this response rate excludes out-of-sample households from the gross sample.

Table 10: 2023 Sampling design and response behaviour, by stratum

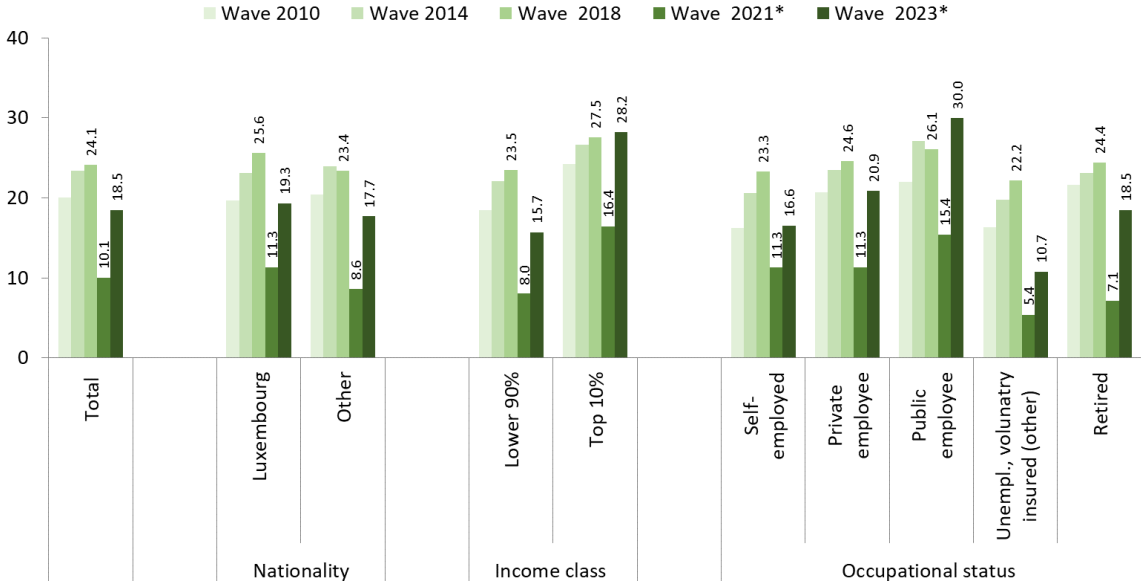
Nationality	Employment status	Individual income decile	Stratum ID	Population size	Allocation		Sample size		n/N	Address out of sample/ Other	Interview completed but discarded	n/N adjusted
					1	2	Gross N	Net n				
Luxembourg	Self-employed	≤ 9th	1	8,051	349		349	54	15.5	2	4	15.6
		> 9th	2	114	5	109	114	28	24.6	3	2	25.2
	Blue collar	≤ 9th	3	19,050	824		824	91	11.0	9	28	11.2
		> 9th	4	132	6	126	132	28	21.2	2	1	21.5
	White collar	≤ 9th	5	47,464	1,975		1,975	404	20.5	34	41	20.8
		> 9th	6	8,055	349	755	1,104	313	28.4	9	8	28.6
	Public employee	≤ 9th	7	18,164	786		786	227	28.9	4	14	29.0
		> 9th	8	8,911	386	835	1,221	377	30.9	0	10	30.9
	Unemployed, voluntary insured (other)	≤ 9th	9	18,170	786		786	76	9.7	36	15	10.1
		> 9th	10	74	3	71	74	18	24.3	6	2	26.5
	Retired	≤ 9th	11	51,077	2,210		2,210	246	11.1	60	23	11.4
		> 9th	12	1,727	75	162	237	61	25.7	4	2	26.2
Foreign	Self-employed	≤ 9th	13	5,537	240		240	28	11.7	12	0	12.3
		> 9th	14	70	3	67	70	18	25.7	3	2	26.9
	Blue collar	≤ 9th	15	39,763	1,721		1,721	163	9.5	77	41	9.9
		> 9th	16	211	9	202	211	62	29.4	8	2	30.5
	White collar	≤ 9th	17	48,844	2,114		2,114	520	24.6	122	29	26.1
		> 9th	18	12,823	555	1,201	1,756	497	28.3	74	11	29.5
	Public employee	≤ 9th	19	496	100		100	26	26.0	1	1	26.3
		> 9th	20	262	11	251	262	80	30.5	1	2	30.7
	Unemployed, voluntary insured (other)	≤ 9th	21	19,176	830		830	79	9.5	61	8	10.3
		> 9th	22	157	7	150	157	25	15.9	36	2	20.7
	Retired	≤ 9th	23	17,676	765		765	79	10.3	20	8	10.6
		> 9th	24	74	3	71	74	20	27.0	7	0	29.9
Luxemb.	RNPP		25	7,312	316		316	31	9.8	21	6	10.5
Foreign	RNPP		26	36,317	1,572		1,572	148	9.4	163	15	10.5
			Total	369,707	16,000	4,000	20,000	3,699	18.5	775	277	19.2

Source: Bienvenue et al. (2024), based on Inspection Générale de la Sécurité Sociale (IGSS), Registre National des Personnes Physiques (RNPP), 31 December 2022.

Note: Sampling unit corresponds to an "administrative household". Some responses were discarded due to too low quality or high item non-response.

Response rates varied considerably across strata (Table 10). The lowest response rate, 11%, was recorded for employment status “Other” (which includes unemployed, students, trainees, interns, etc.). The highest response rate, 30%, was recorded for “public employees” (Figure 25). In general, there is a tendency for households with higher incomes to have lower unit non-response rates. This pattern was observed in all four waves, but became much more prominent after switching to CAWI in 2021. In 2018, 2021 and 2023, response rates were lower among the foreign-born than among households where the reference person was born in Luxembourg.

Figure 25: Response rates by stratum characteristic and survey year



Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010, non-imputed and unweighted.
 Note: * Numbers for 2023 and 2021 are based on responses over the gross sample and hence represent a lower bound. RNPP strata are national and foreign households only. Socio-economic characteristics based on information in the sampling frame.

5.4. Fieldwork

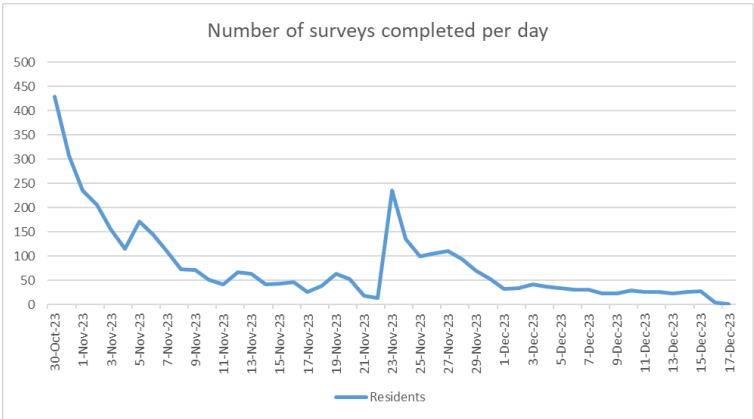
The target net sample size was 1,600 completed questionnaires, as in the 2021 and 2018 waves. In 2023, the number of completed interviews was 3,699, far above those completed in the 2010 wave (Table 9). BCL and LISER announced the start of the field phase in a joint press release on 3 November 2023. This provided a link to the dedicated web page on the BCL website for the interested public, providing general information regarding the 2023 LU-HFCS wave and a list of publications related to the previous wave (hfcs.bcl.lu). Sampled households were contacted via an introductory letter (in both French and German) signed by the Governor of the BCL and the CEO of LISER. The letter presented the motivation of LU-HFCS, described the sampling procedure, stressed that participation was voluntary and assured that collected information would be treated as confidential. To encourage households to participate, the

letter also contained a leaflet summarising the key results from the fourth wave and offered participating households a 20-euro token of appreciation. The survey was conducted online, starting on 30th October 2023 and ending on 17th December 2023.

Compared to the CAPI mode used before 2021, CAWI has the benefit of shortening the field phase to approximately two months. However, one of its major disadvantages is that it is not possible to collect additional information such as the reason for non-participation or so-called paradata (i.e. data collected by the interviewer before and after the interview, for example concerning the surroundings of the dwelling). Furthermore, a trained interviewer no longer assists the household in navigating the questionnaire and validating the answers. More importantly, the switch to CAWI probably affected the net sample composition, which limits comparability of results from the 2023 and 2021 waves to those from previous waves in 2018, 2014 or 2010.

Figure 26 plots participation by day through the fieldwork phase. The daily responses were relatively high at the beginning and then declined until the indicated deadline of 20th November 2023. At this point, 2,575 interviews were collected. To increase the response rate, a reminder letter was sent out with a new deadline of 15th December. The effect of the reminder letter and its timing is clearly visible.

Figure 26: Evolution of completed questionnaires, by day, 2023 survey year



Source: Bienvenue, et al., (2023), non-imputed and unweighted.
 Note: "completed surveys" refers to those households reaching the end of the questionnaire.

A total of 4,836 households logged in and began answering the online survey. Of these, 860 did not complete section 7, which asks about income. This section is the minimum requirement for a household to be included in the net sample. Of those households that had completed section 7, 59 had not reached the end of the questionnaire. Answers of all households

completing at least section 7 underwent additional scrutiny based on two criteria. First, their item non-response rate needed to be 25% at most across all applicable questions (without counting bracket values as missing). Second, their index value, which assesses their responses to the most important survey questions, needed to be 75% or more.⁴² 217 households failed both criteria and were dropped from the final net sample. An additional 60 households were discarded from the net sample due to the poor quality of their responses.

In total, 3,699 household interviews were included in the final net sample. This corresponds to a response rate of 19.2%, a substantial increase from the 10.1% in 2021. The net sample exceeds the target size of 1,600 completed interviews by more than 100%.

The final data sample is representative of 261,498 households and 672,050 individuals residing in Luxembourg on 31st December 2023. The reference period for assets and liabilities is always the day of the interview (between end October and end December 2023). The reference period for yearly income is 2022 (calendar year) in accordance with the HFCN guideline (ECB/2025/3).

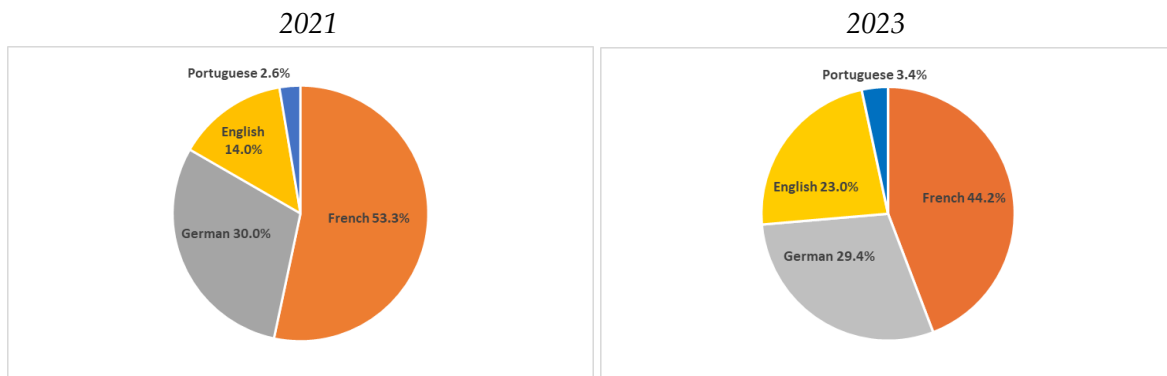
5.5. Interview language and duration

With regard to the languages in which the interview was conducted, there was again a marked change in 2023. As in the previous wave, households could choose among French, German, English and Portuguese.⁴³ 44% of households chose French, 29% German, 23% English, and 3% Portuguese. Compared with the previous survey, the share of interviews conducted in German and Portuguese remained almost unchanged. However, the share of interviews conducted in English increased substantially, reducing the share of interviews conducted in French.

⁴² As in wave 4, an index was constructed based on the importance of the most relevant questions in the domains of wealth, income and demographic characteristics. Since the HFCS is primarily a wealth survey, the wealth domain contributes 50%, while the other two domains contribute 25% each. The index equals 100% if all the selected questions are answered and 0% if none of the selected questions are answered.

⁴³ A telephone helpline was also available to all households. In some cases, help was provided via email.

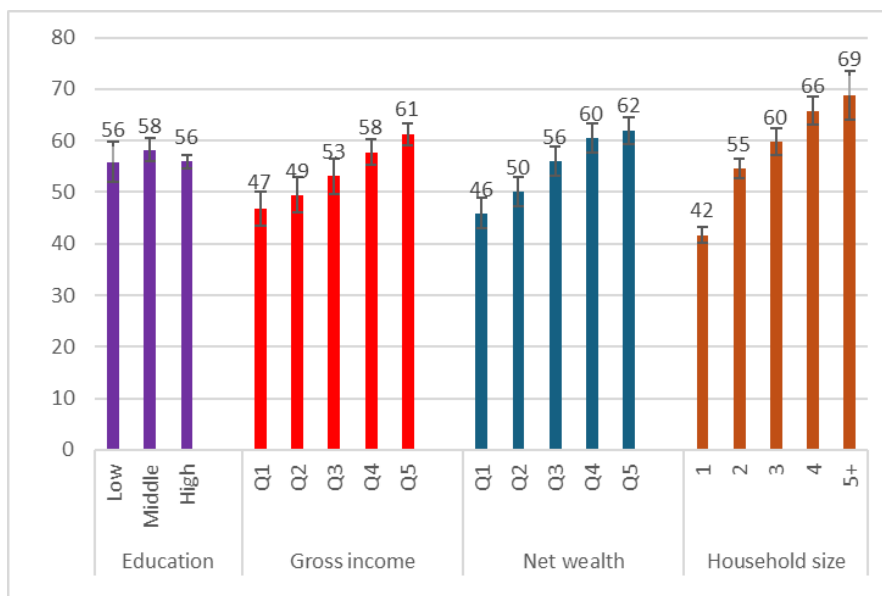
Figure 27: Language of interview



Source: Own calculations based on the 2023 and the 2021 LU-HFCS waves, non-imputed and unweighted.
 Note: Based on interviews included in the net sample.

As shown in Figure 28, interview duration generally increased with household size, gross income and net wealth quintile. After eliminating outliers, the average interview duration in 2023 was 59 minutes and the median duration was 54 minutes (two minutes longer for the mean and seven minutes longer for the median than in 2021), while the inter-quartile range was 29 minutes.

Figure 28: Median duration of interview (minutes) by socio-economic characteristics



Source: Own calculations based on the 2023 LU-HFCS wave, non-imputed and unweighted.

5.6. Data treatment

The data treatment consisted of four parts: analysis of unit non-response, editing, imputation and weighting. The *editing* procedure was carried out in cooperation with LISER and closely followed the procedure detailed for wave 2 (see Girshina et al., 2017, Section 2.6.2).

5.6.1. Imputation

Item non-response is non-negligible in complex surveys on income and wealth, and simply dropping households with missing values for some questions would severely reduce the size of the net sample and distort distributional statistics and multivariate analyses. Therefore, missing values were treated using multiple imputation under the assumption that item non-response can be explained by variables observed in the survey and by auxiliary information (i.e. missing at random, MAR) (see Mathä et al., 2012a and Girshina et al., 2017, Section 2.6.3).

General approach and software

As in previous waves, missing values were imputed with the ECB Multiple Imputation Routine (EMIR), a collection of SAS programs specifically developed for the Eurosystem HFCS and based on the Federal Reserve's FRITZ procedure for the US Survey of Consumer Finances. EMIR produces five multiply imputed datasets (five implicates), which are then analysed using standard complete-data methods, combining estimates and variances according to Rubin's rules (Rubin, 1996).

Before imputation, the edited dataset was split into four components: (i) household-level information (H), (ii) basic demographic personal information (R), (iii) other personal information (P), and (iv) the sample register file (S). For H, R and P, EMIR uses "flag" files to identify missing observations that need to be imputed. The S-file is not imputed and is not released to final users, but its variables are used as covariates in the imputation models. EMIR then executes a sequence of modules:

1. *Log flow*: checks consistency between values and flags and reports routing or coding inconsistencies.
2. *Diagnostics*: reports the number and type of missing values for each variable.
3. *Data overview*: provides descriptive statistics and estimates models that help identify predictors of item non-response to be used as covariates.
4. *Preparation*: merges H, R, P and S into a wide dataset at the household level and replicates it five times to serve as the initial basis for the multiple imputations.
5. *Imputation*: runs the actual multiple-imputation algorithm as a Markov chain, iterating until convergence criteria are met.

Question design and use of brackets

To support imputation, all monetary amounts were collected using a three-step scheme. First, respondents were asked for an exact value. If this was not provided, they were asked for a respondent-specific lower and upper bound. If this also failed, they were offered a set of predefined brackets. These ranges were treated as binding bounds on the imputed values and, where available, substantially improved the precision of imputations.

Imputation models

The imputation module applies different models depending on the variable type:

1. *Categorical variables* are imputed by hot-deck within adjustment cells. Respondents and non-respondents are grouped into cells defined by variables that are strongly correlated with the variable to be imputed. Missing values are replaced by random draws from respondents within the same cell.
2. *Continuous variables* are imputed using a randomised least-squares model. For each variable, a linear regression on a covariate vector is estimated on observed cases. Missing values are then replaced with the predicted value plus a random residual from a Normal distribution or from empirical residuals, with all draws constrained to lie within specified lower and upper bounds. For some highly skewed monetary variables, the natural logarithm is imputed instead of the level. The imputation model is estimated on the log scale and missing log-values are replaced by the predicted value plus a random residual, subject to the usual bounds. Imputed amounts in euros are then obtained by exponentiating the imputed log values.
3. *Binary variables* are imputed with a linear probability model, using the same structure as for continuous variables but with a 0/1 dependent variable (e.g. ownership indicators or receipt of a particular income type).

In total, several hundred variables were imputed, with questionnaire routing acting as an additional constraint. For each variable, EMIR includes a broad set of covariates to preserve the joint distribution of the data: survey-design information, variables from the sample register, predictors of item non-response, demographic characteristics, household composition, and income and wealth variables (including suitable interactions). When necessary, the covariate set was reduced to avoid overfitting or multicollinearity in small sub-samples.

Bounds, MAR assumption and convergence

The imputation assumes a MAR mechanism and therefore seeks to make this assumption as plausible as possible by conditioning on many observed variables and their interactions. To ensure internal consistency, EMIR enforces three types of bounds during imputation:

1. *General bounds* derived from the empirical distribution (e.g., restricting imputed values to lie between the 1st and 99th percentiles of observed values).
2. *Respondent-provided bounds* from brackets or respondent-specific ranges.
3. *Dynamic bounds* implied by other variables (e.g. sum-constraints or logical/institutional restrictions).

The imputation was implemented as a Markov chain multiple imputation procedure. For each implicate, EMIR cycled through all variables (respecting questionnaire routing and the chosen ordering), imputed missing values given the current state of all other variables, and repeated this process over several iterations. Convergence was assessed using the Gelman and Rubin (1992) diagnostic computed for the mean and median of all continuous variables across iterations. Iterations were stopped once the diagnostic for most variables fell below a conventional threshold (around 1.1), indicating convergence of the Markov chains. Normally five iterations were sufficient.

Implementation refinements over the waves

The core imputation framework (EMIR, MAR assumption, three model classes, bounds, five implicates, Rubin's rules) remained conceptually stable across waves. However, a number of refinements were introduced and maintained:

1. *Software evolution*

Wave 1 used the original ECB EMIR routines documented in Biancotti (2010) and applied to the LU-HFCS in Mathä et al. (2012a).

From wave 2 onwards, the updated EMIR 2.2 release was used. This further standardised the implementation across HFCS countries and incorporated technical improvements documented in Biancotti et al. (2014).

2. *Initial "naïve" imputation (introduced in wave 2)*

Starting with wave 2, a pre-imputation step was run: continuous variables were filled with weighted means, and dummies/categorical variables were imputed via unconditional hot-

deck. This produced an initial complete dataset that allowed all covariates to be included from the very first proper iteration of the EMIR algorithm, which was helpful in a highly multivariate setting.

3. Variable ordering and conditioning scheme

In wave 1, EMIR followed the standard strategy of progressing from variables with low to high item non-response. Starting in wave 2, a more practical implementation was adopted: imputation started with person-level demographic variables, continued with person-level employment characteristics, and proceeded through the remaining sections in questionnaire order. This ordering remained fixed across iterations and was combined with a broad conditioning strategy that included: (i) predictors of the variable of interest, (ii) predictors of item non-response, (iii) theoretically relevant determinants, and (iv) covariates useful for other imputation models. Covariates were selected using backward elimination (SAS routines), dropping the least significant variables until a balance between parsimony and explanatory power was obtained.

4. Refinements since the 2021 wave

The imputation procedure was subject to three additional methodological refinements starting with the 2021 wave (for details see [Mathä et al., 2023](#)):

i. Penalised regression for variable selection in continuous-variable models

When the number of potential predictors is large relative to the number of observations, or when strong multicollinearity is present, standard backward elimination can produce very deterministic models and unstable imputations. To mitigate this, a LASSO-type penalised regression was used for continuous variables whenever backward selection leads to (near-)deterministic models. The LASSO penalty parameter was chosen using the Schwarz Bayesian information criterion, favouring parsimonious models that still fit the data well. This step was applied within the EMIR framework, so that imputed values are still based on stochastic draws around the selected model.

ii. Use of survey weights in imputation regressions

In earlier waves, final survey weights entered the imputation models as additional covariates. Starting with the 2021 wave, the final survey weights were used as regression weights when estimating the imputation models. This ensures that the conditional distributions used for imputation reflect the weighted population structure rather than the unweighted sample, which is particularly relevant given the deliberate oversampling of wealthy households.

iii. Joint imputation of residents and cross-border workers

Since 2021, the separate XB-HFCS survey of cross-border workers residing in Germany, France or Belgium but working in Luxembourg was conducted in parallel to the main resident survey using the same interview methodology and questionnaire. While cross-border households were excluded from all official LU-HFCS estimates, their records were used in the imputation phase: the datasets for residents and cross-border workers were imputed jointly. The enlarged combined sample improved the performance of imputation models, especially for variables with relatively few observed cases (for example, questions relating to household members other than the reference person and spouse). Appropriate control variables distinguishing residents from cross-border workers were included in all models, so that systematic differences between the two populations were captured separately rather than absorbed in the imputations.

Current wave

The imputation for the current LU-HFCS wave applies the same EMIR-based framework and conventions as in previous waves, incorporating refinements introduced for the 2021 wave: penalised regression as a complement to backward elimination in complex continuous-variable models, weighted imputation regressions using final survey weights, and (where applicable) the use of the cross-border worker sample solely to improve imputation quality while excluding it from all published statistics. Apart from wave-specific choices of covariates and bounds, no further methodological changes were made to the imputation procedure.

Use of the imputed data

All descriptive statistics and econometric analyses in this report are based on the five multiply imputed datasets. Point estimates were computed as the average of the corresponding estimates across the imputates. Variance estimates combined within- and between-imputation variability according to Rubin's rules. This ensured that both sampling uncertainty and imputation uncertainty were properly reflected in the reported standard errors and confidence intervals.

5.6.2. Weighting and anonymisation

Observations in the sample were weighted to make it representative for the target population, which comprises all households residing in Luxembourg on 31 December 2023 (excluding collective households such as hospitals, prisons and retirement homes). On average, each of the 3,699 households in the net sample represents 47 households of the target population.

The final *survey weights* were calculated following a 5-step approach. First, design weights were obtained as the inverse of the selection probability. Second, design weights were adjusted for households that were no longer eligible (for example, if household members died or moved abroad). Third, the weights were adjusted for unit non-response. Fourth, the weights were adjusted for multiple selection probabilities, taking into account the most recent data on household size from the 2021 Census (for the previous wave, the 2011 Census was used). Finally, the weights were calibrated using statistics from external data sources, taking into account household size from the 2021 Census and individual-level information on age, gender, and nationality, based on the IGSS/RNPP register on 31 December 2023.

The final sampling weights range from a single household representing only itself in the target population, to one household representing 861 households (with a standard deviation of around 77). The household weights were calibrated to match the official number of 672,050 inhabitants on 31 December 2023 (STATEC, 2024). *Replicate weights* were calculated by repeating steps 1 to 5 using the Rao and Wu (1988) rescaling bootstrap method for a stratified simple random sample. In total 1,000 replicate weights were provided to properly calculate the variance surrounding point estimates.

The *anonymization* procedure for the user database (UDB) closely follows the procedure in previous waves (see Girshina et al., 2017, Section 2.6.4).

5.7. Comparison with statistics from other data sources

This section compares results with statistics from other data sources. First, LU-HFCS estimates of financial assets and liabilities are compared to the balance sheets of the household sector (S.14) in the Financial Accounts (FA). Second, LU-HFCS data on the household main residence (HMR) is compared to data from the “Observatoire de l’Habitat” and official STATEC data on real estate transactions.

5.7.1. Financial Accounts

A like-for-like comparison is only possible for a subset of financial assets, as the HFCS and Financial Accounts use different definitions and classifications. However, the ESCB Expert Group on Linking macro and micro data for the household sector (2020) agreed that certain financial assets can be considered highly comparable across these sources, including bank deposits, mutual funds, bonds and quoted shares. Table 11 compares the nominal values of these household sector financial assets in Luxembourg according to the LU-HFCS and to the Financial Accounts published by STATEC, the national statistical institute.

The last four columns of Table 11 report LU-HFCS coverage ratios for the per capita financial assets in the Financial Accounts. Survey data typically underreport the amount of financial assets relative to the Financial Accounts. The coverage ratio for comparable financial assets was 65% in 2023. This ratio was lowest in 2010 at 36% and highest in 2021 at 92%. While the definitions of these financial assets are similar between the two sources, estimation and measurement errors in surveys can lead to significant variability.

First, the distribution of financial wealth is highly skewed to the right (the richest households own most financial wealth). Therefore, survey data estimates of financial wealth are sensitive to the coverage of wealthy households, especially when estimating sub-components of financial wealth that are only owned by few individuals. For example, Table 11 indicates that the per capita value of bonds in the LU-HFCS was lower than in the Financial Accounts, despite substantial efforts to oversample wealthier households. Until the 2021 wave, the LU-HFCS survey did not include international civil servants.

Second, surveyed households may report a false value or incorrectly declare that they do not own such assets. Both these factors can account for the divergence between micro and macro statistics. For “sight and saving accounts” the coverage ratio remained similar between 2021 and 2023. For mutual funds and shares, the aggregate value reported in the 2023 wave was below that in the Financial Accounts. In 2021, the opposite was the case, with coverage ratios exceeding 150%. This indicates that households with higher shares of risky financial assets were overrepresented in the 2021 sample, when the response rate fell to nearly 10%.

Table 11 also reports coverage for less comparable financial assets. In 2023, the coverage ratio for private non-self-employed business wealth (participations in companies that are not publicly traded) was 63%. For private/occupational pension wealth, the coverage ratio was 72%, substantially above previous waves. The pension section of the questionnaire changed extensively in 2018, leading to a strong decline in measured participation in private pensions and life insurance.

Table 11: Comparison between LU-HFCS and Financial Accounts estimates

Variable	HFCS					Financial accounts (FA - S.14)					HFCS in % of FA				
	2010	2014	2018	2021	2023	2010	2014	2018	2021	2023	2010	2014	2018	2021	2023
	Euro per capita					Euro per capita									
Sight accounts & savings accounts	15,578	25,459	24,723	48,276	43,783	45,982	53,456	64,623	74,025	71,975	34%	48%	38%	65%	61%
Mutual funds	7,312	8,682	10,483	40,065	18,214	10,582	13,835	16,301	26,430	21,777	69%	63%	64%	152%	84%
Bonds	2,189	1,097	650	1,032	1,029	14,963	8,544	5,641	4,489	6,355	15%	13%	12%	23%	16%
Quoted shares	2,565	2,989	3,335	17,897	8,927	4,551	6,686	6,944	11,325	9,850	56%	45%	48%	158%	91%
Comparable financial assets	27,644	38,228	39,191	107,269	71,953	76,077	82,520	93,509	116,269	109,958	36%	46%	42%	92%	65%
Amount owed to household	784	1,138	701	2,926	845	1,011	1,217	1,456	1,695	1,825	71%	94%	49%	173%	46%
Private non-self-employed business wealth	180	5,163	7,203	5,799	2,903	6,946	5,014	4,800	4,544	4,604	2%	60%	100%	128%	63%
Private/occupational pension	8,714	11,818	6,665	14,814	19,490	14,984	18,829	22,525	28,801	26,985	57%	61%	27%	51%	72%
Any other financial assets & managed accounts	239	732	175	3,205	1,786	-	-	-	-	-	-	-	-	-	-
Total financial assets	37,561	57,080	53,934	134,014	96,978	99,018	107,581	122,290	151,310	143,371	38%	51%	43%	89%	68%
Total debt	32,960	39,713	43,313	65,396	58,392	45,100	54,256	64,994	75,579	81,455	73%	73%	67%	87%	72%
Number of individuals	462,618	508,248	544,303	645,397	672,050	512,400	563,000	613,900	645,400	672,050					

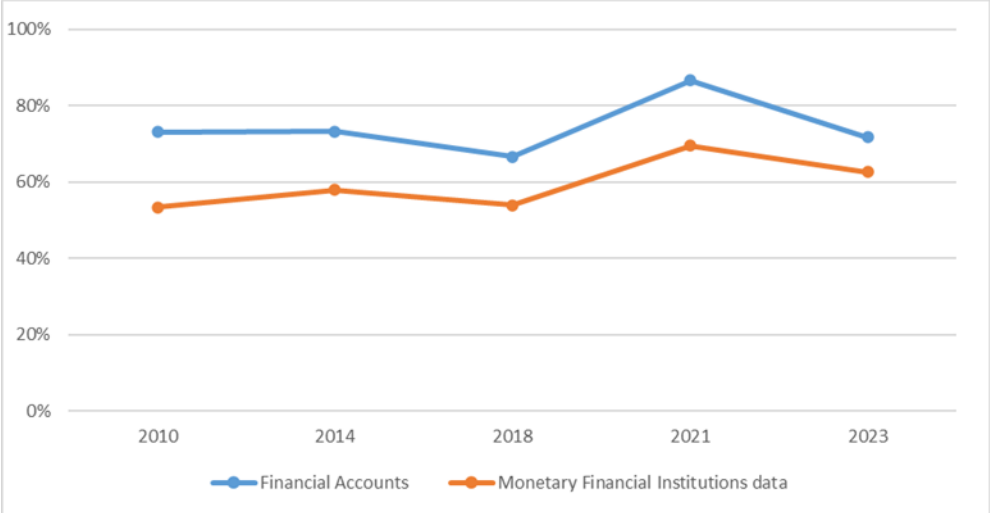
Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; Statistics BCL and STATEC.

Note: LU-HFCS data are multiply imputed and weighted. Financial accounts data used in the table are based on (unpublished) data for the household sector (S.14), excluding non-profit institutions serving households (NPISHs, S.15).⁴⁴ Weighted HFCS totals for each asset type are divided by the population covered by each survey year, and financial accounts totals are divided by total population estimates from STATEC of 1st January of the following year. Revisions to Financial Accounts modified previously published estimates of the coverage ratios.

⁴⁴ The Financial Accounts published by BCL is only available as statistics for the household sector (S.14) and non-profit institutions serving households (NPISHs, S.15) sector combined.

However, as mentioned above, the underlying concepts and classifications differ between the LU-HFCS and the Financial Accounts. For example, the 2023 LU-HFCS continues to exclude occupational pensions, although these are counted in the financial accounts. Therefore, a comparison of total financial assets would provide an inappropriate assessment of the quality of survey data. In any event, both financial accounts and HFCS data have their weaknesses (Expert Group on Linking macro and micro data for the household sector, 2020).

Figure 29: Household liabilities - HFCS coverage of estimates from other sources



Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; Statistics BCL and MFI ECB.
 Note: The graph depicts the ratio of per capita household liabilities in the LU-HFCS relative to FA and MFI statistics.

Figure 29 compares per capita household total liabilities in the LU-HFCS to estimates from the Financial Accounts (blue line) and from the Central Bank statistics on the balance sheets of Monetary Financial Institutions (orange line).⁴⁵ Coverage is relatively good since the distribution of liabilities across the population is less skewed than the distribution of financial assets. The blue line indicates that the 2023 LU-HFCS covers 72% of total household sector debt in the Luxembourg financial accounts, a decrease compared to 2021 but in line with the previous waves. The orange line indicates that the 2023 LU-HFCS covers only 63% of Monetary and Financial Institution lending to households reported to the central bank. Data reported to the central bank is not subject to the balancing adjustments applied to the Financial Accounts. In addition, reporting data is adjusted for loans originated by Monetary Financial Institutions but no longer recorded on their balance sheets following securitization or sales of

⁴⁵ (<https://data.ecb.europa.eu/>) BSI.M.LU.N.A.A20.A.1.U2.2250.Z01.E, BSI.M.LU.N.A.A21.A.1.U2.2250.Z01.E, BSI.M.LU.N.A.A22.A.1.U2.2250.Z01.E, BSI.M.LU.N.A.A23.A.1.U2.2250.Z01.E

non-performing loans. This adjustment increases the comparability of liabilities between these two sources (HFCN, 2016). However, MFI-BSI statistics combine the household sector with non-profit institutions serving households, which may explain why the orange line is lower.

Overall, Table 11 and Figure 29 indicate that coverage ratios of comparable items improved in 2023 compared to the 2010, 2014 and 2018 waves, but decreased compared to 2021 wave, when the response rate was exceptionally low.

5.7.2. The value and size of the Household Main Residence

Housing typically represents the main part of household wealth (see Section 4.1). Changes in its value not only affect estimates of household net wealth, but may also affect household spending and savings decisions. Therefore, an accurate measure of (aggregate) housing prices is essential to study their effects on the economy. However, developing such a measure is challenging because of the heterogeneity of housing and the low frequency of repeated sales of the same property.

Information from the LU-HFCS can complement aggregate price indices, as respondents are asked to assess the current value of their main residence. Mathä et al. (2017b) used LU-HFCS information on HMR value at acquisition to study price changes for the same property over time. Naidin et al. (2025) replaced subjective values reported by participants in the LU-HFCS with - imputed values using hedonic models estimated on observable market data. These objectified estimates serve to construct macroeconomic measures, such as the price-to-rent ratio, price-to-income ratio and rent-to-income ratio for the entire housing stock (not just the part actually sold each year) and to conduct micro-simulations, e.g. on housing affordability. They find that at current housing market conditions only 18% of renters could theoretically afford to purchase the dwelling they currently occupy and that, on average, sales prices reported by homeowners were only slightly higher than imputed prices using observable market data. This contrasts with renters who are much more likely to underreport the market value of their residence.

The top panels of Figure 30 report the average self-assessed value of the household main residence (separately for houses and apartments) from each LU-HFCS wave and compares it to two aggregate measures of residential property prices. One is the average advertised price for the sale, as provided by the “*Observatoire de l’Habitat*” established by the Ministry of Housing. The other is the average transaction price computed from notarised individual

residential property sales as provided by the tax administration⁴⁶. This second measure considers sales of existing dwellings for the last quarter of each LU-HFCS survey year, during which the fieldwork took place. The corresponding average advertised prices refer to the survey year instead.⁴⁷

Figure 30: Average HMR value/price and size, by type and survey year



Source: Own calculations based on LU-HFCS data of 2023, 2021, 2018, 2014 and 2010, Observatoire de l'Habitat and l'Administration de l'Enregistrement et des domaines et de la TVA.
 Note: Error bars are only shown for the LU-HFCS estimates and represent the 95% confidence interval. The tax administration does not collect size information for houses. Observatoire de l'Habitat prices refer to the whole year in question.

According to advertised prices from the “Observatoire” and transaction prices from the tax administration, the value of apartments and houses increased from 2010 to 2021 and fell from 2021 to 2023. In contrast, self-reported values in the HFCS are stable for houses and moderately increased for apartments compared to the changes witness from 2018 to 2021. First, this

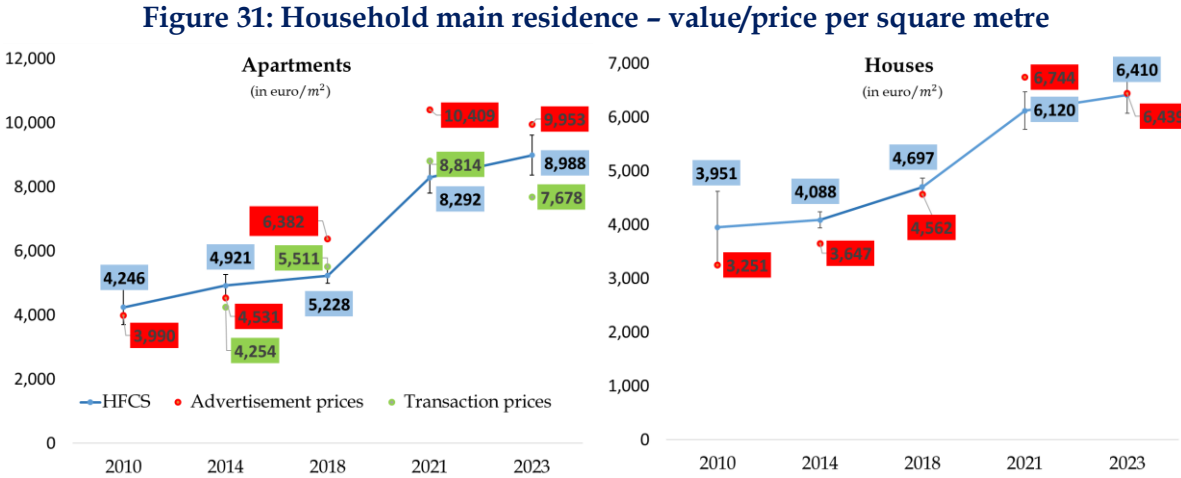
⁴⁶ Administration de l'enregistrement, des domaines et de la TVA.
⁴⁷ The “Observatoire de l'Habitat” discontinued its quarterly report, so the yearly figure is used throughout.

divergence may reflect the fact that advertised and transaction prices only refer to a small share of the housing stock at any given time, while HFCS estimates are weighted to represent the whole population. There may be systematic differences between the total housing stock and the real estate that is currently being transacted. These differences could explain some of the variation in price between the two sources. Second, the drop in aggregate prices coincided with a collapse in the number of transactions from 2022 to reach a historical minimum in 2023Q4, when the HFCS survey was conducted. During this period, transactions were probably concentrated on cases where the seller was under pressure to sell, even at a reduced price, and sellers may have stopped advertising their property. Most of the homeowners included in the LU-HFCS did not need to sell their residence at a substantial discount to the next best buyer. They reported higher self-assessed values than transaction prices in the last quarter of 2023. Third, HFCS respondents may have considered the widely reported decline in prices to be temporary (they recovered steadily starting in 2024Q1), as house prices did not decline between 2010 and 2022, introducing an upward bias in their estimate of current value. Fourth, households are sluggish in forming their expectations. It is unsurprising that self-assessed values collected in Q4 of 2023 did not yet reflect the current state of the housing market, given that even publications of recent housing trends are always released with some delay.

The lower panels of Figure 30 indicate that the average surface size of apartments diminishes slightly over time. However, for houses both the LU-HFCS and the “Observatoire de l’Habitat” data suggest a steady increase in average size until 2021. While the Observatoire de l’Habitat figures suggest a continued increase between 2021 and 2023, HFCS figures suggest a decline over this period. Advertised sales prices from the Observatoire de l’Habitat are systematically above transaction prices recorded by the Administration de l’Enregistrement, which should not come as a surprise. It confirms that advertised prices are generally higher than the reservation price that sellers are willing to accept.

In 2023, average self-assessed values in the LU-HFCS were lower than average advertised prices but higher than average transaction prices. For apartments, the average advertised price was 13% higher than the average self-assessed value. For houses, the average self-assessed value was 38% higher than the average transaction value. The standard deviation for self-assessed values is only 33,000 euro compared to 300,000 euro for transaction prices, suggesting that the dispersion of transaction prices is higher than that of the stock of houses.

The LU-HFCS data also allows us to adjust respondents' self-assessed value of their household main residence for their reported surface, providing an average price per square metre. Given the large heterogeneity across dwellings, this measure may better reflect property values. In particular, this measure avoids giving more weight to dwellings with larger surfaces. Figure 31 reports the evolution of average price per square metre for both apartments and houses. Between 2021 and 2023, apartment prices per square metre dropped by -18% according to individual transaction data and by -4.5% according to advertisements. Again, HFCS prices per square metre do not show this decline.



Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010. Observatoire de l'Habitat and l'Administration de l'Enregistrement et des domaines et de la TVA.
 Note: HFCS data are multiply imputed and weighted. Error bars represent the 95% confidence interval.

6. Concluding remarks

This technical report presents the main results of the fifth wave of the Luxembourg Household Finance and Consumption Survey (LU-HFCS) conducted in 2023 by the Banque centrale du Luxembourg (BCL) in collaboration with the Luxembourg Institute of Socio-Economic Research (LISER). The fifth wave is based on a representative sample of 3,699 households residing in Luxembourg.

Results suggest gross household income increased from 2021 to 2023⁴⁸, reaching almost 97,000 euro at the median and 125,000 euro at the mean. Differences from the 2021 values were statistically significant in nominal terms, but not after accounting for the surge in inflation. Gross income remains substantially higher among homeowners (with or without a mortgage) than among renters.

⁴⁸ Gross income is before deduction of income tax, social security contributions or other payments.

The median value of household net wealth declined between 2021 and 2023 by 5.4% in nominal terms and 15% in real terms, i.e. after adjusting for consumer price inflation. The average value of household net wealth also declined 8.7% in nominal terms and 18% in real terms. The contraction in net wealth reflects reductions in both real and financial assets. Income and wealth inequality, as measured by the Gini coefficient or various concentration measures, remained broadly unchanged between 2021 and 2023. If anything, these indicators show a modest decline in inequality since 2018.

In 2023, half of all households were indebted, a decline of 3.5 percentage points compared to 2021. Around one third of households had mortgage debt (practically unchanged), but less than 30% held non-mortgage debt, a drop of almost 6 percentage points. The average level of debt across all households declined by 8% over the same period.

Key indicators of the household debt burden changed little between 2021 and 2023. The median values of the debt-to-asset ratio or the debt-to-gross income ratio remained almost unchanged, while the median value of the debt service-to-income ratio and the mortgage debt service-to-income ratio increased slightly. The loan-to-value ratio for the household main residence increased 6 percentage points. These indicators adjust only gradually, as they are determined by outstanding loans and mortgages, of which many are on fixed interest rate contracts. By the end of 2023, when the survey was conducted, interest rates were much higher than in 2021, raising debt servicing costs. However, the share of fixed-rate mortgages in Luxembourg rose from 15% in 2010 to 46% in 2023, reducing households' short-term exposure to higher interest rates.

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8. Appendix A: Selective list of publications using LU-HFCS or XB-HFCS data

A. Technical reports (in reverse chronological order)

- Mathä, T.Y., A. Montes-Viñas, G. Pulina and M. Ziegelmeier (2024): The Cross-border Household Finance and Consumption Survey (XB-HFCS): Results from the fourth wave in 2021, *BCL Working Paper* 188.
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Table B1: Main household characteristics

Variable	2010		2014		2018		2021		2023	
	Mean	Std. Err.	Mean	Std. Err.	Mean	Std. Err.	Mean	Std. Err.	Mean	Std. Err.
Age of reference person	49.9	(0.3)	50.4	(0.2)	50.9	(0.2)	50.1	(0.3)	51.0	(0.4)
Household size	2.5	(0.0)	2.4	(0.0)	2.4	(0.0)	2.4	(0.0)	2.6	(0.0)
Number of dependent children In (%)	0.7	(0.0)	0.6	(0.0)	0.6	(0.0)	0.6	(0.0)	0.6	(0.0)
Male	59.5	(1.4)	56.5	(1.1)	58.0	(1.0)	62.1	(0.8)	59.5	(1.1)
Civil status										
Single	24.7	(1.4)	27.2	(1.2)	26.7	(1.1)	32.0	(0.9)	28.1	(1.0)
Couple	52.8	(1.2)	49.6	(1.0)	50.2	(0.9)	53.0	(0.8)	56.9	(1.0)
Divorced	13.4	(1.3)	13.7	(1.0)	14.3	(1.0)	11.8	(0.7)	11.2	(0.8)
Widowed	9.1	(1.0)	9.5	(0.8)	8.8	(0.8)	3.2	(0.5)	3.9	(0.6)
Country of birth										
Belgium	3.4	(0.6)	3.6	(0.5)	5.0	(0.6)	6.9	(0.7)	5.9	(0.9)
Germany	2.7	(0.6)	3.2	(0.5)	2.6	(0.4)	2.7	(0.4)	3.9	(0.8)
France	7.0	(0.9)	7.9	(0.7)	8.5	(0.8)	9.5	(0.8)	8.5	(0.9)
Italy	3.1	(0.6)	3.2	(0.5)	2.8	(0.5)	3.5	(0.5)	3.7	(0.7)
Luxembourg	57.1	(1.3)	57.1	(1.1)	48.9	(1.1)	42.4	(1.1)	37.8	(1.5)
Portugal	13.7	(0.9)	11.9	(0.6)	13.6	(0.8)	12.2	(0.9)	13.8	(1.2)
Other countries	12.9	(1.0)	13.2	(0.8)	18.5	(1.0)	22.8	(1.3)	26.5	(1.5)
Education level										
Low (ISCED=0:2)	35.7	(1.7)	29.8	(1.2)	25.5	(1.2)	18.4	(1.3)	17.8	(1.6)
Middle (ISCED=3,4)	38.2	(1.8)	39.2	(1.5)	38.5	(1.5)	30.7	(1.4)	31.4	(1.7)
High (ISCED=5,6 or 5:8)	26.2	(1.4)	31.0	(1.2)	36.0	(1.3)	50.9	(1.5)	50.9	(1.7)
Employment status										
Employed	56.1	(1.2)	56.1	(1.1)	58.5	(1.0)	60.7	(1.2)	55.7	(1.5)
Self-employed	5.9	(0.6)	4.4	(0.4)	4.3	(0.5)	4.8	(0.6)	5.1	(0.8)
Unemployed	2.5	(0.5)	3.3	(0.5)	2.6	(0.5)	3.1	(0.6)	4.9	(0.9)
Retired	24.3	(1.1)	26.3	(0.8)	27.3	(0.9)	27.0	(0.9)	29.4	(1.1)
Other	11.1	(1.2)	9.8	(0.9)	7.2	(0.8)	4.4	(0.7)	4.8	(0.9)
Homeowner status										
Owner-outright	34.3	(1.4)	38.5	(1.2)	42.2	(1.3)	38.4	(1.4)	35.3	(1.7)
Owner with mortgage	32.8	(1.5)	29.1	(1.2)	26.8	(1.1)	27.2	(1.3)	26.4	(1.5)
Renter or other	32.9	(1.5)	32.4	(1.3)	31.0	(1.3)	34.4	(1.4)	38.3	(1.7)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

**Table B2: Median household net wealth
by household characteristic**

Variable	2010		2014		2018		2021		2023	
	Median	Std.Err.	Median	Std.Err.	Median	Std.Err.	Median	Std.Err.	Median	Std.Err.
All households	398.0	(17.1)	438.0	(17.5)	498.0	(23.4)	718.0	(30.7)	676.0	(47.8)
Gender										
Male	447.0	(34.1)	518.0	(27.5)	566.0	(35.4)	761.0	(36.1)	725.0	(64.1)
Female	359.0	(30.2)	367.0	(28.9)	404.0	(35.3)	608.0	(72.9)	615.0	(65.3)
Age of reference person										
16-34	59.0	(14.3)	109.0	(31.9)	161.0	(28.5)	183.0	(50.5)	130.0	(28.4)
35-44	286.0	(34.0)	277.0	(21.4)	323.0	(46.0)	464.0	(64.4)	447.0	(73.3)
45-54	427.0	(42.1)	545.0	(36.1)	520.0	(70.6)	824.0	(78.0)	677.0	(90.0)
55-64	562.0	(71.7)	629.0	(45.4)	680.0	(61.8)	1,003.0	(82.5)	1,027.0	(94.0)
65+	605.0	(40.1)	723.0	(40.6)	802.0	(54.1)	1,278.0	(107.6)	1,217.0	(122.9)
Civil status										
Single	93.8	(38.7)	256.0	(39.1)	248.0	(40.2)	310.0	(45.6)	244.0	(49.1)
Couple	510.0	(40.1)	723.0	(40.6)	802.0	(54.1)	947.0	(56.4)	1,217.0	(122.9)
Divorced	312.0	(47.0)	328.0	(44.9)	289.0	(74.7)	709.0	(96.2)	496.0	(114.1)
Widowed	511.0	(43.3)	523.0	(63.7)	694.0	(74.6)	1,268.0	(230.3)	940.0	(220.1)
Country of birth										
Luxembourg	522.0	(23.8)	568.0	(23.7)	706.0	(31.0)	960.0	(57.8)	985.0	(59.3)
Outside Luxembourg	161.0	(36.7)	246.0	(25.9)	261.0	(37.2)	423.0	(53.1)	465.0	(54.1)
Education level										
Low (ISCED=0:2)	277.0	(39.1)	290.0	(34.4)	335.0	(47.8)	557.0	(80.5)	506.0	(118.5)
Middle (ISCED=3,4)	445.0	(34.4)	488.0	(34.7)	508.0	(45.7)	789.0	(53.2)	760.0	(77.0)
High (ISCED=5-8)	519.0	(58.2)	539.0	(39.5)	632.0	(42.9)	737.0	(49.0)	701.0	(69.9)
Employment status										
Employed	273.0	(24.7)	328.0	(28.8)	380.0	(22.1)	510.0	(41.1)	474.0	(38.1)
Self-employed	495.0	(173.4)	839.0	(119.1)	617.0	(337.1)	1,171.0	(374.5)	1,145.0	(312.1)
Unemployed	17.0	(35.9)	15.8	(32.3)	36.2	(42.6)	40.9	(87.4)	88.5	(137.8)
Retired	642.0	(43.2)	696.0	(37.8)	848.0	(44.2)	1,213.0	(75.6)	1,156.0	(81.0)
Other	400.0	(60.5)	293.0	(94.6)	387.0	(111.6)	262.0	(310.3)	422.0	(282.3)
Housing status										
Owner-outright	680.0	(45.4)	769.0	(30.1)	845.0	(29.6)	1,242.0	(45.8)	1,276.0	(69.8)
Owner with mortgage	428.0	(23.8)	498.0	(29.6)	503.0	(32.2)	779.0	(45.2)	799.0	(59.4)
Renter or other	22.1	(4.1)	18.3	(3.6)	23.0	(4.4)	61.4	(9.9)	82.9	(15.4)
Gross Income quintile										
Q1	45.4	(31.3)	33.2	(18.6)	86.9	(40.3)	109.0	(51.8)	150.0	(74.1)
Q2	184.0	(93.9)	290.0	(49.4)	272.0	(90.3)	493.0	(102.2)	383.0	(92.1)
Q3	370.0	(47.5)	396.0	(47.4)	487.0	(61.5)	710.0	(62.0)	605.0	(79.8)
Q4	529.0	(31.9)	603.0	(31.1)	644.0	(40.6)	890.0	(64.6)	940.0	(81.6)
Q5	865.0	(65.8)	977.0	(48.5)	1,119.0	(68.8)	1,642.0	(146.2)	1,438.0	(110.5)
Net wealth quintile										
Q1	5.1	(1.6)	4.5	(1.2)	7.1	(1.1)	14.9	(3.8)	16.5	(3.9)
Q2	121.0	(18.4)	142.0	(12.5)	157.0	(11.1)	254.0	(18.1)	208.0	(16.1)
Q3	400.0	(9.9)	438.0	(9.9)	499.0	(15.2)	718.0	(18.8)	678.0	(26.3)
Q4	638.0	(18.3)	757.0	(13.1)	840.0	(16.5)	1,230.0	(21.5)	1,179.0	(28.1)
Q5	1,379.0	(58.7)	1,529.0	(61.2)	1,858.0	(95.4)	2,862.0	(148.7)	2,482.0	(149.6)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

Note: Values provided in 1,000 euro. Values <1,000 are rounded to the nearest 10 euro, those >1,000 euro and <100,000 euro are rounded to the nearest 100 euro and those >100,000 euro are rounded to the nearest 1,000 euro. Standard errors <1,000 are rounded to the nearest multiple of 10, those >10,000 are rounded to the nearest multiple of 100.

**Table B3: Mean household net wealth
by household characteristic**

Variable	2010		2014		2018		2021		2023	
	Mean	Std.Err.	Mean	Std.Err.	Mean	Std.Err.	Mean	Std.Err.	Mean	Std.Err.
All households	710.0	(58.2)	768.0	(53.4)	898.0	(46.8)	1,270.0	(62.8)	1,157.0	(78.8)
Gender										
Male	767.0	(70.4)	826.0	(58.3)	1,087.0	(76.2)	1,458.0	(85.9)	1,324.0	(108.3)
Female	626.0	(106.3)	694.0	(95.3)	636.0	(41.7)	966.0	(88.7)	911.0	(108.0)
Age of reference person										
16-34	209.0	(31.4)	278.0	(43.0)	348.0	(37.4)	420.0	(45.3)	316.0	(36.5)
35-44	503.0	(92.1)	486.0	(41.6)	688.0	(121.2)	715.0	(60.8)	668.0	(63.5)
45-54	851.0	(180.7)	913.0	(130.7)	812.0	(67.6)	1,216.0	(114.3)	1,052.0	(100.3)
55-64	895.0	(78.4)	1,155.0	(219.8)	1,108.0	(135.5)	1,654.0	(225.1)	1,707.0	(280.5)
65+	1,096.0	(171.9)	1,035.0	(88.9)	1,461.0	(179.6)	2,372.0	(239.3)	1,902.0	(229.3)
Civil status										
Single	435.0	(117.5)	502.0	(47.4)	535.0	(84.0)	643.0	(69.9)	556.0	(70.0)
Couple	904.0	(171.9)	1,035.0	(88.9)	1,461.0	(179.6)	1,516.0	(107.6)	1,902.0	(229.3)
Divorced	445.0	(65.3)	689.0	(159.5)	583.0	(73.4)	1,569.0	(268.9)	970.0	(313.9)
Widowed	723.0	(165.2)	835.0	(110.6)	1,646.0	(419.1)	1,921.0	(467.9)	1,217.0	(232.5)
Country of birth										
Luxembourg	933.0	(97.2)	920.0	(78.9)	1,183.0	(88.5)	1,484.0	(89.2)	1,423.0	(123.2)
Outside Luxembourg	413.0	(45.2)	567.0	(63.9)	625.0	(64.6)	1,102.0	(88.2)	995.0	(103.3)
Education level										
Low (ISCED=0:2)	434.0	(53.9)	505.0	(42.7)	479.0	(39.3)	848.0	(142.0)	833.0	(228.9)
Middle (ISCED=3,4)	742.0	(108.0)	706.0	(42.3)	975.0	(106.5)	1,113.0	(76.5)	986.0	(81.6)
High (ISCED=5-8)	1,040.0	(144.5)	1,100.0	(157.0)	1,113.0	(95.6)	1,517.0	(103.5)	1,375.0	(120.9)
Employment status										
Employed	535.0	(76.7)	603.0	(50.5)	651.0	(46.5)	869.0	(48.4)	787.0	(46.4)
Self-employed	1,530.0	(294.8)	1,444.0	(174.5)	1,920.0	(525.1)	2,043.0	(313.5)	2,878.0	(888.4)
Unemployed	141.0	(54.3)	219.0	(56.5)	206.0	(71.3)	359.0	(107.1)	479.0	(138.5)
Retired	1,077.0	(146.3)	1,119.0	(159.4)	1,429.0	(147.4)	2,229.0	(208.6)	1,734.0	(186.9)
Other	487.0	(68.1)	657.0	(127.0)	535.0	(105.8)	690.0	(145.0)	763.0	(200.2)
Housing status										
Owner-outright	1,353.0	(152.3)	1,266.0	(115.7)	1,452.0	(110.9)	1,985.0	(156.5)	1,953.0	(158.0)
Owner with mortgage	619.0	(65.6)	785.0	(80.7)	854.0	(89.8)	1,300.0	(100.0)	1,183.0	(91.5)
Renter or other	130.0	(20.9)	162.0	(26.7)	182.0	(38.7)	448.0	(69.0)	405.0	(124.7)
Gross Income quintile										
Q1	255.0	(46.3)	246.0	(29.2)	306.0	(47.2)	460.0	(68.2)	488.0	(86.6)
Q2	361.0	(61.7)	426.0	(41.6)	530.0	(110.8)	712.0	(72.5)	679.0	(131.2)
Q3	477.0	(46.5)	531.0	(47.1)	626.0	(48.0)	895.0	(61.2)	888.0	(96.7)
Q4	722.0	(107.5)	816.0	(60.1)	924.0	(68.8)	1,272.0	(122.0)	1,273.0	(139.5)
Q5	1,741.0	(266.3)	1,829.0	(240.4)	2,110.0	(188.9)	3,033.0	(249.4)	2,468.0	(298.0)
Net wealth quintile										
Q1	2.3	(2.6)	(3.4)	(3.8)	9.2	(1.6)	9.0	(5.2)	5.1	(7.0)
Q2	134.0	(7.1)	152.0	(6.2)	175.0	(6.8)	262.0	(11.1)	227.0	(9.9)
Q3	393.0	(6.6)	439.0	(6.1)	499.0	(7.0)	713.0	(18.7)	681.0	(12.4)
Q4	655.0	(10.2)	773.0	(10.5)	853.0	(11.6)	1,249.0	(17.1)	1,203.0	(17.4)
Q5	2,374.0	(258.7)	2,487.0	(239.2)	2,963.0	(200.3)	4,121.0	(237.8)	3,673.0	(306.6)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

Note: Values provided in 1,000 euro. Values <1,000 are rounded to the nearest 10 euro, those >1,000 euro and <100,000 euro are rounded to the nearest 100 euro and those >100,000 euro are rounded to the nearest 1,000 euro. Standard errors <1,000 are rounded to the nearest multiple of 10, those >10,000 are rounded to the nearest multiple of 100.

**Table B4: Total real assets, participation rate
by household characteristic**

Participation rate (in %) Variable	2010		2014		2018		2021		2023	
	Share	Std.Err.	Share	Std.Err.	Share	Std.Err.	Share	Std.Err.	Share	Std.Err.
All households	93.6	(0.9)	93.9	(0.8)	93.9	(0.8)	93.8	(0.9)	91.9	(1.1)
Gender										
Male	95.4	(1.1)	94.5	(1.1)	93.6	(1.0)	94.1	(1.0)	92.1	(1.4)
Female	91.1	(1.8)	93.0	(1.4)	94.4	(1.1)	93.4	(1.6)	91.7	(1.8)
Age of reference person										
16-34	92.2	(2.5)	92.7	(2.1)	94.8	(1.6)	86.1	(2.8)	83.5	(3.1)
35-44	92.4	(2.1)	92.7	(2.2)	89.9	(2.1)	89.9	(2.7)	88.3	(3.0)
45-54	92.3	(2.2)	93.9	(1.7)	94.6	(1.6)	97.2	(1.1)	95.0	(1.9)
55-64	95.1	(2.2)	94.0	(1.8)	95.6	(1.5)	98.7	(0.8)	95.6	(2.0)
65+	96.7	(1.6)	95.8	(1.6)	94.8	(1.7)	97.0	(1.3)	95.8	(2.2)
Civil status										
Single	84.9	(2.7)	87.5	(2.2)	90.5	(1.8)	85.8	(2.4)	84.2	(2.8)
Couple	98.3	(0.7)	98.2	(0.7)	97.2	(0.7)	97.9	(0.6)	95.8	(1.1)
Divorced	91.9	(3.0)	92.4	(2.3)	87.4	(3.0)	95.0	(2.1)	90.6	(3.5)
Widowed	93.1	(3.7)	91.4	(3.4)	95.8	(2.4)	98.9	(1.1)	91.2	(6.1)
Country of birth										
Luxembourg	96.1	(1.0)	95.7	(0.9)	97.7	(0.7)	97.9	(0.7)	96.5	(1.4)
Outside Luxembourg	90.4	(1.8)	91.4	(1.6)	90.3	(1.3)	90.7	(1.5)	89.2	(1.5)
Education level										
Low (ISCED=0:2)	90.0	(2.0)	91.9	(1.8)	88.5	(2.1)	96.8	(1.8)	90.8	(3.3)
Middle (ISCED=3,4)	94.2	(1.4)	94.7	(1.3)	95.4	(1.0)	94.6	(1.7)	95.1	(1.6)
High (ISCED=5-8)	97.8	(1.2)	94.7	(1.4)	96.2	(1.1)	92.3	(1.2)	90.4	(1.5)
Employment status										
Employed	93.0	(1.4)	94.8	(1.1)	94.3	(1.0)	92.5	(1.2)	92.7	(1.2)
Self-employed	99.5	(0.5)	100.0	-	96.1	(3.6)	100.0	-	94.3	(5.2)
Unemployed	83.4	(8.9)	70.9	(8.2)	78.5	(7.8)	85.0	(8.0)	70.6	(9.3)
Retired	97.7	(1.2)	96.4	(1.3)	95.8	(1.3)	99.0	(0.5)	96.0	(1.8)
Other	87.3	(4.0)	86.5	(3.8)	87.6	(3.7)	79.1	(7.8)	78.3	(7.4)
Housing status										
Owner-outright	100.0	-	100.0	-	100.0	-	100.0	-	100.0	-
Owner with mortgage	100.0	-	100.0	-	100.0	-	100.0	-	100.0	-
Renter or other	80.7	(2.7)	81.0	(2.3)	80.3	(2.3)	82.1	(2.4)	79.0	(2.7)
Gross Income quintile										
Q1	76.1	(3.9)	77.4	(3.4)	81.8	(2.9)	79.2	(3.6)	79.6	(3.9)
Q2	94.8	(2.2)	95.3	(1.9)	92.3	(2.0)	95.0	(1.8)	90.1	(2.7)
Q3	98.8	(1.4)	98.5	(1.0)	96.4	(1.3)	96.9	(1.6)	95.5	(1.9)
Q4	98.8	(1.0)	98.4	(1.1)	99.5	(0.4)	98.9	(0.9)	96.7	(1.8)
Q5	100.0	-	100.0	(0.1)	99.6	(0.4)	99.7	(0.4)	98.0	(1.7)
Net wealth quintile										
Q1	71.7	(4.0)	70.5	(3.4)	73.4	(3.3)	76.4	(3.6)	69.8	(4.3)
Q2	96.7	(1.8)	98.8	(0.9)	96.2	(1.6)	93.5	(2.2)	90.8	(2.7)
Q3	100.0	-	100.0	-	100.0	-	99.8	-	99.3	(1.0)
Q4	100.0	-	100.0	-	100.0	-	99.8	(0.3)	99.9	(0.1)
Q5	100.0	-	100.0	-	100.0	-	99.6	-	100.0	-

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

**Table B5: Total real assets, conditional median
by household characteristic**

Conditional median Variable	2010		2014		2018		2021		2023	
	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.
All households	470.0	(15.6)	507.0	(12.7)	602.0	(16.5)	787.0	(34.0)	819.0	(31.5)
Gender										
Male	501.0	(20.2)	563.0	(25.6)	644.0	(20.5)	841.0	(43.8)	873.0	(47.4)
Female	443.0	(23.8)	454.0	(19.0)	535.0	(25.7)	714.0	(47.6)	764.0	(46.2)
Age of reference person										
16-34	243.0	(64.7)	305.0	(36.7)	384.0	(50.6)	397.0	(84.2)	216.0	(146.4)
35-44	465.0	(34.2)	447.0	(34.8)	575.0	(36.0)	704.0	(50.9)	746.0	(68.4)
45-54	496.0	(37.2)	582.0	(43.2)	637.0	(29.5)	841.0	(64.6)	863.0	(84.2)
55-64	549.0	(69.2)	658.0	(44.9)	674.0	(51.0)	915.0	(71.1)	974.0	(73.5)
65+	573.0	(43.2)	646.0	(43.7)	725.0	(54.1)	1,081.0	(81.9)	965.0	(89.8)
Civil status										
Single	285.0	(30.8)	376.0	(32.7)	397.0	(41.9)	495.0	(46.3)	500.0	(65.2)
Couple	548.0	(24.6)	612.0	(21.0)	726.0	(23.7)	979.0	(38.1)	992.0	(39.5)
Divorced	398.0	(44.4)	410.0	(44.0)	419.0	(45.9)	721.0	(71.9)	677.0	(115.0)
Widowed	491.0	(37.6)	481.0	(61.0)	614.0	(52.3)	940.0	(204.3)	834.0	(167.0)
Country of birth										
Luxembourg	538.0	(21.1)	597.0	(26.1)	746.0	(23.0)	964.0	(39.9)	1,007.0	(36.0)
Outside Luxembourg	291.0	(38.8)	361.0	(22.5)	447.0	(29.5)	628.0	(52.9)	669.0	(50.2)
Education level										
Low (ISCED=0:2)	381.0	(27.1)	368.0	(22.3)	478.0	(36.6)	657.0	(57.0)	678.0	(94.6)
Middle (ISCED=3,4)	494.0	(23.6)	530.0	(25.6)	613.0	(25.2)	851.0	(45.7)	829.0	(52.4)
High (ISCED=5-8)	609.0	(48.4)	675.0	(39.6)	738.0	(37.7)	842.0	(53.8)	893.0	(50.8)
Employment status										
Employed	421.0	(21.5)	479.0	(21.8)	565.0	(19.8)	694.0	(25.9)	704.0	(36.9)
Self-employed	630.0	(102.8)	958.0	(155.0)	926.0	(227.9)	1,084.0	(240.1)	1,324.0	(308.2)
Unemployed	8.5	(84.9)	85.0	(101.3)	170.0	(136.6)	111.0	(230.0)	316.0	(269.3)
Retired	603.0	(45.4)	647.0	(34.8)	774.0	(42.8)	1,030.0	(62.5)	977.0	(58.0)
Other	436.0	(46.5)	431.0	(58.8)	497.0	(66.4)	769.0	(281.5)	758.0	(233.6)
Housing status										
Owner-outright	616.0	(31.7)	685.0	(21.3)	762.0	(31.9)	1,052.0	(46.4)	1,043.0	(56.4)
Owner with mortgage	528.0	(19.4)	628.0	(27.2)	730.0	(23.7)	992.0	(42.2)	1,079.0	(52.2)
Renter or other	16.5	(4.2)	15.0	(2.1)	14.6	(2.0)	20.7	(2.7)	25.7	(5.5)
Gross Income quintile										
Q1	216.0	(62.3)	161.0	(101.2)	284.0	(59.0)	406.0	(104.9)	363.0	(146.8)
Q2	306.0	(41.6)	355.0	(25.2)	387.0	(40.8)	539.0	(47.8)	545.0	(92.6)
Q3	434.0	(36.8)	450.0	(27.0)	591.0	(38.8)	718.0	(53.6)	754.0	(60.2)
Q4	562.0	(33.5)	637.0	(28.2)	708.0	(26.9)	973.0	(61.7)	1,024.0	(58.3)
Q5	842.0	(33.6)	986.0	(40.3)	1,128.0	(58.1)	1,533.0	(96.0)	1,476.0	(105.3)
Net wealth quintile										
Q1	7.2	(1.2)	8.2	(.9)	8.8	(1.5)	12.9	(3.1)	13.0	(2.2)
Q2	222.0	(27.5)	233.0	(25.1)	258.0	(29.2)	366.0	(43.0)	171.0	(47.3)
Q3	425.0	(15.8)	450.0	(11.4)	541.0	(14.4)	701.0	(18.5)	723.0	(27.9)
Q4	616.0	(14.6)	717.0	(13.2)	810.0	(13.7)	1,140.0	(40.1)	1,053.0	(33.1)
Q5	1,241.0	(67.0)	1,339.0	(65.0)	1,634.0	(79.8)	2,408.0	(154.6)	2,178.0	(151.3)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

Note: Values provided in 1,000 euro. Values <1,000 are rounded to the nearest 10 euro, those >1,000 euro and <100,000 euro are rounded to the nearest 100 euro and those >100,000 euro are rounded to the nearest 1,000 euro. Standard errors <1,000 are rounded to the nearest multiple of 10, those >10,000 are rounded to the nearest multiple of 100.

**Table B6: Total real assets, conditional mean
by household characteristic**

Conditional mean Variable	2010		2014		2018		2021		2023	
	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.
All households	751.0	(60.6)	781.0	(48.3)	939.0	(46.8)	1,182.0	(51.1)	1,150.0	(71.8)
Gender										
Male	778.0	(72.2)	819.0	(47.6)	1,109.0	(76.7)	1,322.0	(69.6)	1,279.0	(91.4)
Female	710.0	(111.7)	732.0	(92.0)	706.0	(40.6)	953.0	(74.4)	960.0	(114.8)
Age of reference person										
16-34	322.0	(38.7)	393.0	(46.5)	455.0	(39.0)	554.0	(52.8)	462.0	(44.3)
35-44	619.0	(100.1)	594.0	(42.2)	872.0	(127.3)	898.0	(62.8)	882.0	(69.8)
45-54	903.0	(191.9)	887.0	(99.5)	880.0	(64.3)	1,296.0	(149.5)	1,101.0	(98.1)
55-64	886.0	(85.0)	1,111.0	(209.5)	1,036.0	(129.2)	1,358.0	(106.4)	1,566.0	(265.4)
65+	1,001.0	(162.8)	934.0	(85.2)	1,376.0	(185.7)	1,700.0	(154.8)	1,535.0	(175.0)
Civil status										
Single	547.0	(141.9)	553.0	(49.8)	588.0	(85.7)	678.0	(73.0)	654.0	(70.2)
Couple	909.0	(91.1)	932.0	(85.8)	1,061.0	(62.9)	1,396.0	(67.3)	1,382.0	(92.5)
Divorced	489.0	(67.4)	621.0	(73.8)	687.0	(77.4)	1,289.0	(214.9)	1,026.0	(333.4)
Widowed	670.0	(130.0)	790.0	(105.6)	1,607.0	(438.9)	1,493.0	(343.8)	1,038.0	(208.2)
Country of birth										
Luxembourg	951.0	(98.7)	927.0	(75.3)	1,190.0	(88.7)	1,463.0	(86.1)	1,413.0	(109.4)
Outside Luxembourg	469.0	(48.1)	579.0	(45.8)	679.0	(67.1)	945.0	(60.1)	978.0	(93.9)
Education level										
Low (ISCED=0:2)	486.0	(49.5)	538.0	(41.2)	544.0	(41.8)	854.0	(112.7)	879.0	(244.9)
Middle (ISCED=3,4)	779.0	(113.3)	732.0	(41.8)	1,022.0	(110.1)	1,140.0	(91.1)	981.0	(69.3)
High (ISCED=5-8)	1,045.0	(144.7)	1,072.0	(138.0)	1,108.0	(90.9)	1,332.0	(76.6)	1,356.0	(104.6)
Employment status										
Employed	613.0	(81.6)	641.0	(38.3)	737.0	(46.3)	969.0	(50.3)	893.0	(49.2)
Self-employed	1,616.0	(306.3)	1,467.0	(172.9)	1,996.0	(514.3)	2,164.0	(445.8)	2,787.0	(873.8)
Unemployed	174.0	(71.4)	281.0	(75.6)	296.0	(96.7)	420.0	(103.3)	547.0	(148.1)
Retired	977.0	(139.0)	1,025.0	(149.0)	1,323.0	(149.5)	1,574.0	(119.3)	1,440.0	(146.3)
Other	549.0	(69.6)	722.0	(140.6)	630.0	(120.3)	811.0	(151.7)	953.0	(272.9)
Housing status										
Owner-outright	1,223.0	(147.4)	1,109.0	(105.3)	1,324.0	(106.9)	1,548.0	(83.8)	1,632.0	(125.6)
Owner with mortgage	744.0	(67.4)	898.0	(49.2)	1,033.0	(86.3)	1,590.0	(115.8)	1,454.0	(83.0)
Renter or other	151.0	(26.0)	170.0	(30.9)	183.0	(42.0)	291.0	(43.7)	323.0	(130.7)
Gross Income quintile										
Q1	324.0	(55.9)	300.0	(33.8)	365.0	(51.2)	562.0	(76.8)	539.0	(100.8)
Q2	408.0	(68.6)	430.0	(40.0)	562.0	(111.4)	647.0	(60.7)	668.0	(101.8)
Q3	505.0	(44.1)	552.0	(47.1)	645.0	(45.2)	848.0	(58.5)	902.0	(93.5)
Q4	737.0	(104.2)	825.0	(57.6)	937.0	(55.8)	1,198.0	(86.4)	1,266.0	(130.4)
Q5	1,661.0	(258.2)	1,676.0	(203.5)	2,049.0	(182.8)	2,507.0	(190.8)	2,228.0	(254.1)
Net wealth quintile										
Q1	38.1	(11.1)	54.9	(14.7)	45.1	(10.5)	71.8	(17.3)	83.5	(18.3)
Q2	224.0	(15.6)	242.0	(14.2)	286.0	(17.3)	366.0	(27.8)	307.0	(26.7)
Q3	443.0	(12.9)	483.0	(13.9)	576.0	(17.0)	736.0	(23.5)	746.0	(28.7)
Q4	640.0	(14.6)	746.0	(17.1)	851.0	(18.8)	1,182.0	(27.6)	1,125.0	(28.4)
Q5	2,199.0	(255.7)	2,165.0	(205.3)	2,680.0	(194.4)	3,249.0	(177.0)	3,091.0	(267.2)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

Note: Values provided in 1,000 euro. Values <1,000 are rounded to the nearest 10 euro, those >1,000 euro and <100,000 euro are rounded to the nearest 100 euro and those >100,000 euro are rounded to the nearest 1,000 euro. Standard errors <1,000 are rounded to the nearest multiple of 10, those >10,000 are rounded to the nearest multiple of 100.

**Table B7: Household main residence, participation rate
by household characteristic**

Participation rate (in %) Variable	2010		2014		2018		2021		2023	
	Share	Std.Err.	Share	Std.Err.	Share	Std.Err.	Share	Std.Err.	Share	Std.Err.
All households	67.1	(1.5)	67.6	(1.3)	69.0	(1.3)	65.6	(1.4)	61.7	(1.7)
Gender										
Male	63.9	(2.2)	68.2	(1.8)	67.8	(1.7)	66.8	(1.8)	61.4	(2.1)
Female	71.8	(2.6)	66.9	(2.1)	70.6	(2.1)	63.7	(2.6)	62.0	(2.9)
Age of reference person										
16-34	45.7	(4.2)	49.7	(3.7)	53.3	(3.8)	45.3	(3.8)	37.2	(3.5)
35-44	62.1	(3.5)	60.7	(3.3)	62.7	(3.3)	60.2	(3.4)	58.4	(3.7)
45-54	65.0	(3.6)	70.1	(3.0)	72.2	(2.7)	67.4	(3.1)	63.0	(3.9)
55-64	77.9	(3.8)	73.6	(3.1)	67.3	(3.3)	71.5	(3.2)	71.2	(3.9)
65+	86.0	(3.2)	83.4	(2.6)	86.4	(2.4)	82.4	(3.0)	74.0	(4.8)
Civil status										
Single	47.1	(3.7)	54.7	(3.1)	55.3	(3.1)	49.9	(3.0)	47.5	(3.2)
Couple	75.7	(1.9)	74.5	(1.7)	76.6	(1.7)	74.0	(1.8)	68.4	(2.2)
Divorced	57.5	(5.4)	58.2	(4.1)	57.2	(3.9)	66.3	(4.4)	54.6	(5.5)
Widowed	86.1	(4.9)	81.7	(4.3)	86.6	(3.9)	76.2	(7.2)	72.2	(9.0)
Country of birth										
Luxembourg	83.6	(1.8)	79.5	(1.7)	85.7	(1.5)	84.0	(1.7)	81.6	(2.3)
Outside Luxembourg	45.1	(2.7)	51.8	(2.2)	53.0	(2.1)	51.2	(2.1)	49.6	(2.3)
Education level										
Low (ISCED=0:2)	59.2	(3.1)	62.9	(2.7)	63.3	(2.9)	67.8	(4.1)	56.2	(5.2)
Middle (ISCED=3,4)	72.4	(2.7)	71.1	(2.2)	72.1	(2.3)	74.2	(2.6)	70.6	(3.1)
High (ISCED=5-8)	70.2	(3.1)	67.7	(2.5)	69.8	(2.2)	59.6	(2.0)	58.0	(2.3)
Employment status										
Employed	61.5	(2.3)	63.9	(1.8)	63.6	(1.8)	60.8	(1.9)	57.2	(2.0)
Self-employed	54.8	(5.7)	77.9	(5.0)	71.0	(6.9)	58.3	(7.0)	70.5	(8.0)
Unemployed	25.5	(10.2)	28.1	(7.3)	39.0	(8.9)	37.0	(9.1)	32.1	(8.7)
Retired	83.9	(3.1)	82.2	(2.4)	84.9	(2.2)	84.1	(2.5)	75.3	(3.8)
Other	74.8	(4.7)	58.5	(4.9)	62.2	(5.8)	46.3	(9.4)	50.1	(9.4)
Housing status										
Owner-outright	100.0	-	100.0	-	100.0	-	100.0	-	100.0	-
Owner with mortgage	100.0	-	100.0	-	100.0	-	100.0	-	100.0	-
Renter or other	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-
Gross Income quintile										
Q1	40.0	(4.8)	38.4	(3.5)	47.2	(3.7)	43.1	(4.2)	38.0	(4.6)
Q2	55.5	(4.8)	61.6	(3.8)	58.9	(3.9)	60.8	(4.1)	53.3	(4.5)
Q3	71.5	(4.1)	72.1	(3.2)	72.8	(3.6)	67.5	(3.4)	65.0	(3.8)
Q4	85.2	(3.1)	80.7	(2.7)	81.3	(2.8)	75.5	(3.0)	73.1	(3.8)
Q5	83.7	(2.9)	85.5	(2.2)	85.0	(2.2)	81.6	(2.7)	79.3	(3.7)
Net wealth quintile										
Q1	3.8	(1.6)	4.8	(1.6)	4.1	(1.4)	5.6	(2.1)	7.7	(2.0)
Q2	48.2	(4.2)	52.6	(3.5)	56.4	(3.5)	52.7	(4.6)	36.5	(4.0)
Q3	93.9	(2.3)	91.9	(2.0)	92.5	(1.9)	87.3	(2.7)	81.2	(3.2)
Q4	95.7	(1.5)	94.4	(1.7)	96.8	(1.0)	93.0	(1.8)	91.0	(3.0)
Q5	94.4	(1.5)	94.5	(1.4)	95.6	(1.2)	89.4	(2.4)	92.2	(2.7)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

**Table B8: Household main residence, conditional median
by household characteristic**

Conditional median Variable	2010		2014		2018		2021		2023	
	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.
All households	500.0	(8.4)	556.0	(22.9)	652.0	(16.6)	858.0	(23.6)	900.0	(22.5)
Gender										
Male	500.0	(19.6)	600.0	(19.0)	700.0	(20.0)	874.0	(35.1)	964.0	(35.0)
Female	451.0	(22.0)	500.0	(20.9)	600.0	(24.4)	850.0	(30.6)	868.0	(33.7)
Age of reference person										
16-34	400.0	(23.0)	463.0	(30.2)	562.0	(38.0)	700.0	(44.5)	708.0	(49.8)
35-44	500.0	(13.1)	561.0	(38.6)	650.0	(36.3)	816.0	(41.3)	898.0	(34.8)
45-54	500.0	(36.1)	650.0	(35.8)	682.0	(39.6)	900.0	(42.4)	982.0	(50.3)
55-64	500.0	(22.9)	619.0	(30.8)	722.0	(35.8)	890.0	(36.0)	1,000.0	(40.8)
65+	514.0	(42.0)	543.0	(47.6)	676.0	(44.1)	906.0	(34.2)	916.0	(48.5)
Civil status										
Single	400.0	(23.3)	486.0	(27.3)	506.0	(24.1)	624.0	(41.7)	708.0	(47.7)
Couple	530.0	(29.3)	650.0	(19.4)	744.0	(27.4)	956.0	(32.3)	1,000.0	(16.3)
Divorced	440.0	(29.9)	500.0	(26.8)	514.0	(43.7)	806.0	(60.9)	820.0	(49.8)
Widowed	450.0	(33.8)	471.0	(39.3)	600.0	(45.4)	900.0	(80.9)	827.0	(126.5)
Country of birth										
Luxembourg	500.0	(7.9)	600.0	(17.0)	700.0	(20.5)	892.0	(27.3)	950.0	(37.2)
Outside Luxembourg	460.0	(39.2)	509.0	(29.7)	600.0	(21.1)	848.0	(25.6)	900.0	(28.8)
Education level										
Low (ISCED=0:2)	450.0	(25.7)	469.0	(20.6)	532.0	(35.0)	734.0	(51.4)	802.0	(49.4)
Middle (ISCED=3,4)	496.0	(22.1)	595.0	(27.9)	650.0	(21.0)	850.0	(26.9)	890.0	(38.5)
High (ISCED=5-8)	568.0	(36.9)	696.0	(31.6)	800.0	(25.3)	914.0	(28.9)	1,000.0	(22.9)
Employment status										
Employed	482.0	(19.4)	550.0	(21.7)	650.0	(17.0)	838.0	(26.1)	884.0	(28.8)
Self-employed	699.0	(87.0)	719.0	(71.0)	874.0	(98.6)	1,016.0	(191.6)	1,000.0	(103.2)
Unemployed	365.0	(124.6)	433.0	(121.5)	400.0	(50.3)	630.0	(150.1)	928.0	(155.8)
Retired	516.0	(39.7)	600.0	(35.8)	702.0	(32.0)	900.0	(25.5)	944.0	(41.6)
Other	450.0	(37.7)	500.0	(36.3)	562.0	(68.5)	958.0	(114.9)	880.0	(151.2)
Housing status										
Owner-outright	500.0	(18.0)	552.0	(27.0)	658.0	(24.7)	894.0	(29.5)	900.0	(28.9)
Owner with mortgage	459.0	(24.2)	571.0	(30.9)	650.0	(21.3)	850.0	(27.2)	926.0	(41.7)
Renter or other	-	-	-	-	-	-	-	-	-	-
Gross Income quintile										
Q1	434.0	(42.7)	400.0	(25.8)	456.0	(40.8)	664.0	(50.8)	752.0	(82.8)
Q2	400.0	(23.1)	440.0	(35.4)	496.0	(27.0)	654.0	(55.5)	754.0	(45.7)
Q3	450.0	(23.2)	498.0	(22.6)	600.0	(27.4)	814.0	(39.6)	852.0	(39.6)
Q4	500.0	(12.6)	624.0	(28.2)	700.0	(24.3)	902.0	(37.3)	982.0	(43.6)
Q5	700.0	(32.3)	775.0	(38.1)	930.0	(50.7)	1,160.0	(90.3)	1,180.0	(86.1)
Net wealth quintile										
Q1	216.0	(72.7)	375.0	(97.8)	396.0	(152.1)	492.0	(175.0)	446.0	(115.6)
Q2	300.0	(24.9)	342.0	(17.6)	352.0	(25.6)	484.0	(32.1)	590.0	(46.2)
Q3	400.0	(10.0)	432.0	(26.4)	502.0	(12.0)	678.0	(26.4)	710.0	(29.1)
Q4	550.0	(32.7)	654.0	(20.2)	750.0	(15.9)	992.0	(25.3)	956.0	(33.5)
Q5	800.0	(27.9)	900.0	(46.5)	1,000.0	(43.0)	1,360.0	(94.5)	1,360.0	(105.1)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

Note: Values provided in 1,000 euro. Values <1,000 are rounded to the nearest 10 euro, those >1,000 euro and <100,000 euro are rounded to the nearest 100 euro and those >100,000 euro are rounded to the nearest 1,000 euro. Standard errors <1,000 are rounded to the nearest multiple of 10, those >10,000 are rounded to the nearest multiple of 100.

**Table B9: Household main residence, conditional mean
by household characteristic**

Conditional mean Variable	2010		2014		2018		2021		2023	
	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.
All households	612.0	(45.1)	648.0	(12.0)	740.0	(13.6)	968.0	(24.2)	1,007.0	(30.8)
Gender										
Male	598.0	(17.9)	675.0	(16.2)	783.0	(19.7)	977.0	(25.0)	1,062.0	(43.9)
Female	630.0	(102.0)	612.0	(19.4)	683.0	(19.5)	955.0	(50.6)	927.0	(40.9)
Age of reference person										
16-34	434.0	(25.6)	530.0	(27.5)	616.0	(26.1)	760.0	(45.4)	777.0	(43.9)
35-44	584.0	(54.8)	619.0	(23.8)	703.0	(28.3)	951.0	(65.2)	925.0	(36.3)
45-54	757.0	(190.1)	699.0	(26.6)	749.0	(27.4)	989.0	(38.8)	1,054.0	(78.5)
55-64	635.0	(45.7)	734.0	(34.1)	831.0	(39.1)	982.0	(34.3)	1,071.0	(60.5)
65+	585.0	(32.1)	627.0	(24.0)	763.0	(31.7)	1,058.0	(61.1)	1,067.0	(74.9)
Civil status										
Single	645.0	(234.1)	545.0	(21.7)	578.0	(22.1)	732.0	(33.0)	761.0	(38.0)
Couple	652.0	(30.6)	716.0	(17.2)	834.0	(19.9)	1,059.0	(31.6)	1,101.0	(39.7)
Divorced	492.0	(31.7)	596.0	(34.2)	664.0	(47.0)	912.0	(56.9)	920.0	(77.4)
Widowed	479.0	(32.5)	571.0	(43.0)	664.0	(37.6)	1,163.0	(211.1)	985.0	(164.6)
Country of birth										
Luxembourg	643.0	(61.2)	674.0	(15.4)	789.0	(18.5)	1,005.0	(38.0)	1,027.0	(37.6)
Outside Luxembourg	535.0	(30.8)	594.0	(19.9)	665.0	(20.3)	922.0	(29.0)	988.0	(48.6)
Education level										
Low (ISCED=0:2)	521.0	(30.2)	531.0	(19.8)	572.0	(23.7)	849.0	(64.4)	879.0	(77.7)
Middle (ISCED=3,4)	548.0	(23.1)	638.0	(18.3)	710.0	(19.3)	956.0	(49.6)	938.0	(37.4)
High (ISCED=5-8)	812.0	(152.7)	765.0	(24.3)	882.0	(27.2)	1,027.0	(29.9)	1,103.0	(47.2)
Employment status										
Employed	608.0	(80.5)	628.0	(14.8)	714.0	(15.7)	943.0	(30.4)	959.0	(36.2)
Self-employed	1,030.0	(227.1)	858.0	(68.7)	1,025.0	(116.3)	1,140.0	(135.4)	1,167.0	(147.3)
Unemployed	477.0	(152.7)	523.0	(76.5)	415.0	(45.0)	694.0	(116.7)	932.0	(102.6)
Retired	594.0	(27.9)	666.0	(24.4)	780.0	(27.0)	999.0	(44.3)	1,053.0	(58.5)
Other	521.0	(63.6)	599.0	(49.0)	633.0	(44.6)	1,002.0	(92.9)	1,038.0	(138.1)
Housing status										
Owner-outright	693.0	(86.1)	642.0	(16.5)	746.0	(19.0)	978.0	(36.7)	1,016.0	(48.1)
Owner with mortgage	527.0	(15.6)	656.0	(19.2)	731.0	(20.9)	955.0	(28.5)	996.0	(34.5)
Renter or other	-	-	-	-	-	-	-	-	-	-
Gross Income quintile										
Q1	497.0	(62.4)	474.0	(34.4)	530.0	(37.5)	814.0	(106.8)	768.0	(84.4)
Q2	441.0	(27.9)	504.0	(25.0)	538.0	(32.0)	728.0	(38.1)	830.0	(76.1)
Q3	490.0	(23.3)	569.0	(27.6)	648.0	(28.7)	863.0	(35.6)	941.0	(71.3)
Q4	578.0	(102.5)	680.0	(23.6)	771.0	(29.4)	1,001.0	(48.4)	1,040.0	(69.4)
Q5	920.0	(160.8)	867.0	(28.1)	1,046.0	(30.8)	1,289.0	(56.7)	1,268.0	(55.1)
Net wealth quintile										
Q1	233.0	(65.0)	463.0	(68.0)	469.0	(108.6)	507.0	(110.5)	523.0	(89.6)
Q2	333.0	(15.4)	354.0	(13.5)	398.0	(19.2)	513.0	(28.5)	578.0	(34.1)
Q3	416.0	(12.3)	452.0	(11.4)	534.0	(13.8)	712.0	(21.2)	747.0	(23.5)
Q4	560.0	(13.8)	676.0	(14.2)	745.0	(16.0)	1,009.0	(25.1)	967.0	(22.0)
Q5	1,018.0	(147.0)	985.0	(28.3)	1,148.0	(33.1)	1,475.0	(66.8)	1,486.0	(75.4)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

Note: Values provided in 1,000 euro. Values <1,000 are rounded to the nearest 10 euro, those >1,000 euro and <100,000 euro are rounded to the nearest 100 euro and those >100,000 euro are rounded to the nearest 1,000 euro. Standard errors <1,000 are rounded to the nearest multiple of 10, those >10,000 are rounded to the nearest multiple of 100.

**Table B10: Other real estate property, participation rate
by household characteristic**

Participation rate (in %) Variable	2010		2014		2018		2021		2023	
	Share	Std.Err.	Share	Std.Err.	Share	Std.Err.	Share	Std.Err.	Share	Std.Err.
All households	28.2	(1.6)	26.3	(1.2)	26.1	(1.2)	29.8	(1.3)	32.3	(1.7)
Gender										
Male	32.1	(2.3)	29.4	(1.6)	30.4	(1.8)	33.4	(1.7)	36.6	(2.3)
Female	22.4	(2.5)	22.4	(1.8)	20.2	(1.7)	24.0	(2.2)	26.1	(2.6)
Age of reference person										
16-34	17.3	(3.2)	12.0	(2.3)	12.1	(2.1)	12.4	(2.2)	13.8	(2.6)
35-44	20.3	(2.8)	21.6	(2.6)	22.4	(2.6)	23.3	(2.7)	26.2	(3.2)
45-54	31.1	(3.6)	29.1	(2.7)	27.1	(2.6)	31.1	(2.9)	34.0	(3.6)
55-64	36.6	(4.0)	37.6	(3.1)	33.4	(3.3)	37.5	(3.2)	38.6	(4.1)
65+	37.1	(4.6)	32.1	(3.1)	34.2	(3.0)	43.9	(3.8)	45.5	(5.0)
Civil status										
Single	17.1	(2.7)	18.1	(2.1)	18.3	(2.2)	19.3	(2.1)	19.0	(2.8)
Couple	34.7	(2.3)	32.1	(1.8)	32.7	(1.9)	35.2	(1.9)	40.3	(2.4)
Divorced	25.1	(4.7)	22.7	(3.4)	17.1	(2.6)	27.2	(4.1)	27.6	(4.9)
Widowed	24.9	(6.2)	25.0	(4.7)	26.4	(4.7)	47.3	(8.2)	23.7	(7.8)
Country of birth										
Luxembourg	29.1	(2.2)	26.3	(1.7)	27.4	(1.8)	31.9	(2.1)	32.0	(2.6)
Outside Luxembourg	26.9	(2.5)	26.5	(1.9)	24.8	(1.8)	28.1	(1.9)	32.5	(2.3)
Education level										
Low (ISCED=0:2)	22.8	(2.9)	22.8	(2.2)	21.2	(2.4)	16.6	(3.2)	23.0	(4.3)
Middle (ISCED=3,4)	25.6	(2.7)	23.6	(2.0)	22.4	(2.0)	25.8	(2.5)	27.2	(3.1)
High (ISCED=5-8)	39.2	(3.1)	33.3	(2.4)	33.5	(2.2)	37.0	(1.9)	38.8	(2.3)
Employment status										
Employed	24.0	(2.1)	23.2	(1.6)	23.3	(1.6)	25.1	(1.6)	28.3	(1.9)
Self-employed	45.7	(5.5)	48.3	(5.8)	35.3	(6.4)	47.4	(6.9)	47.7	(8.1)
Unemployed	8.1	(5.5)	14.4	(5.5)	5.2	(3.6)	15.9	(6.4)	16.9	(6.4)
Retired	40.0	(4.0)	33.4	(2.7)	34.1	(2.7)	41.9	(3.1)	41.9	(4.1)
Other	18.7	(4.9)	20.0	(3.9)	20.3	(4.5)	10.5	(4.3)	20.6	(8.3)
Housing status										
Owner-outright	39.6	(3.2)	33.1	(2.1)	32.5	(2.1)	34.7	(2.5)	39.1	(3.1)
Owner with mortgage	21.0	(2.4)	22.5	(2.1)	25.1	(2.3)	31.7	(2.4)	32.4	(2.8)
Renter or other	23.4	(2.8)	21.8	(2.1)	18.2	(2.0)	22.8	(2.3)	26.0	(2.9)
Gross Income quintile										
Q1	11.6	(3.1)	12.1	(2.3)	7.4	(2.0)	10.8	(2.6)	18.2	(4.2)
Q2	17.3	(3.6)	16.6	(2.6)	18.7	(3.0)	21.8	(3.5)	21.6	(4.1)
Q3	26.5	(4.5)	23.6	(2.9)	24.0	(3.3)	28.7	(3.1)	29.3	(4.4)
Q4	35.9	(4.4)	32.8	(3.0)	33.0	(3.2)	37.3	(3.3)	39.1	(3.9)
Q5	49.7	(3.6)	46.9	(2.8)	47.6	(3.1)	51.0	(3.0)	53.8	(3.8)
Net wealth quintile										
Q1	5.1	(2.2)	4.2	(1.4)	2.9	(1.0)	4.1	(1.4)	4.2	(1.8)
Q2	23.8	(3.9)	19.6	(2.7)	15.7	(2.7)	16.3	(2.6)	20.1	(3.7)
Q3	17.2	(3.8)	18.4	(2.7)	20.2	(3.0)	21.6	(2.8)	26.5	(3.7)
Q4	24.7	(4.1)	24.9	(2.9)	25.5	(2.9)	34.0	(3.5)	35.4	(4.1)
Q5	70.4	(3.4)	64.7	(3.0)	66.5	(3.1)	73.1	(3.1)	75.6	(3.8)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

**Table B11: Other real estate property, conditional median
by household characteristic**

Conditional median Variable	2010		2014		2018		2021		2023	
	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.
All households	300.0	(28.2)	350.0	(30.0)	380.0	(22.0)	658.0	(55.9)	564.0	(66.9)
Gender										
Male	316.0	(41.2)	377.0	(43.0)	433.0	(44.7)	738.0	(68.8)	573.0	(81.1)
Female	300.0	(64.3)	322.0	(47.2)	269.0	(46.8)	500.0	(83.3)	550.0	(97.8)
Age of reference person										
16-34	250.0	(63.1)	277.0	(48.7)	400.0	(88.9)	416.0	(69.3)	433.0	(132.7)
35-44	305.0	(78.1)	310.0	(61.7)	369.0	(46.5)	398.0	(105.7)	401.0	(85.6)
45-54	231.0	(43.9)	278.0	(38.9)	318.0	(51.0)	603.0	(117.9)	496.0	(108.9)
55-64	364.0	(112.2)	450.0	(70.3)	400.0	(55.1)	792.0	(176.3)	659.0	(131.6)
65+	431.0	(167.2)	472.0	(82.5)	434.0	(105.0)	851.0	(170.2)	779.0	(176.2)
Civil status										
Single	245.0	(68.6)	406.0	(69.9)	291.0	(51.2)	323.0	(75.3)	424.0	(110.9)
Couple	340.0	(30.1)	350.0	(33.5)	400.0	(38.2)	779.0	(81.6)	621.0	(89.8)
Divorced	361.0	(130.6)	286.0	(78.6)	396.0	(115.7)	828.0	(223.4)	539.0	(133.6)
Widowed	300.0	(368.5)	350.0	(235.7)	316.0	(116.8)	684.0	(258.4)	760.0	(365.5)
Country of birth										
Luxembourg	388.0	(69.0)	456.0	(41.2)	421.0	(62.4)	775.0	(81.3)	700.0	(93.1)
Outside Luxembourg	200.0	(18.7)	270.0	(31.8)	280.0	(48.8)	504.0	(75.3)	485.0	(68.5)
Education level										
Low (ISCED=0:2)	197.0	(23.9)	184.0	(54.3)	162.0	(44.1)	548.0	(320.6)	390.0	(172.8)
Middle (ISCED=3,4)	352.0	(56.0)	395.0	(66.6)	432.0	(82.5)	570.0	(77.7)	456.0	(103.8)
High (ISCED=5-8)	382.0	(80.1)	410.0	(34.0)	445.0	(40.4)	716.0	(65.3)	674.0	(94.1)
Employment status										
Employed	229.0	(23.9)	300.0	(21.1)	375.0	(28.5)	542.0	(73.8)	491.0	(52.8)
Self-employed	707.0	(120.2)	654.0	(154.6)	480.0	(184.2)	684.0	(265.3)	1,130.0	(426.1)
Unemployed	135.0	(122.9)	110.0	(219.4)	170.0	(317.8)	350.0	(225.3)	262.0	(112.8)
Retired	385.0	(107.3)	400.0	(60.1)	414.0	(89.6)	765.0	(111.8)	706.0	(132.4)
Other	286.0	(158.1)	426.0	(222.8)	180.0	(95.3)	1,170.0	(706.8)	575.0	(499.9)
Housing status										
Owner-outright	361.0	(101.0)	456.0	(48.7)	428.0	(65.4)	728.0	(103.8)	708.0	(119.2)
Owner with mortgage	312.0	(65.2)	322.0	(45.0)	352.0	(42.2)	720.0	(115.6)	674.0	(87.1)
Renter or other	200.0	(27.6)	239.0	(47.8)	299.0	(111.3)	512.0	(106.1)	361.0	(71.1)
Gross Income quintile										
Q1	146.0	(70.4)	100.0	(40.9)	135.0	(39.4)	530.0	(242.0)	378.0	(194.7)
Q2	241.0	(106.9)	216.0	(82.8)	178.0	(63.0)	406.0	(104.9)	328.0	(129.1)
Q3	237.0	(99.3)	270.0	(33.8)	266.0	(55.2)	408.0	(89.0)	386.0	(91.2)
Q4	338.0	(78.0)	350.0	(41.2)	382.0	(42.6)	502.0	(87.3)	594.0	(104.5)
Q5	396.0	(76.6)	622.0	(90.1)	686.0	(74.4)	1,424.0	(136.3)	920.0	(135.0)
Net wealth quintile										
Q1	205.0	(75.9)	36.0	(108.2)	83.5	(146.8)	273.0	(191.4)	62.4	(77.3)
Q2	142.0	(24.6)	110.0	(21.2)	146.0	(23.3)	246.0	(40.2)	179.0	(33.3)
Q3	171.0	(55.6)	235.0	(54.0)	223.0	(43.2)	265.0	(62.1)	350.0	(65.1)
Q4	238.0	(64.0)	223.0	(40.3)	236.0	(36.3)	396.0	(66.5)	449.0	(85.8)
Q5	742.0	(64.3)	766.0	(63.6)	744.0	(56.7)	1,437.0	(97.3)	1,146.0	(133.6)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

Note: Values provided in 1,000 euro. Values <1,000 are rounded to the nearest 10 euro, those >1,000 euro and <100,000 euro are rounded to the nearest 100 euro and those >100,000 euro are rounded to the nearest 1,000 euro. Standard errors <1,000 are rounded to the nearest multiple of 10, those >10,000 are rounded to the nearest multiple of 100.

**Table B12: Other real estate property, conditional mean
by household characteristic**

Conditional mean Variable	2010		2014		2018		2021		2023	
	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.
All households	850.0	(145.7)	885.0	(136.0)	770.0	(59.8)	1,268.0	(99.4)	1,047.0	(101.5)
Gender										
Male	906.0	(179.8)	779.0	(90.5)	834.0	(72.6)	1,395.0	(120.7)	1,149.0	(140.3)
Female	731.0	(257.7)	1,067.0	(326.7)	635.0	(102.1)	983.0	(169.5)	834.0	(105.2)
Age of reference person										
16-34	403.0	(130.4)	619.0	(279.5)	531.0	(113.7)	540.0	(111.2)	505.0	(97.3)
35-44	696.0	(375.1)	525.0	(66.3)	708.0	(136.2)	824.0	(127.0)	672.0	(115.9)
45-54	859.0	(338.2)	803.0	(173.5)	659.0	(92.5)	1,355.0	(281.7)	890.0	(127.5)
55-64	798.0	(170.9)	1,147.0	(451.9)	866.0	(150.8)	1,377.0	(186.6)	1,355.0	(304.0)
65+	1,159.0	(345.3)	1,042.0	(191.4)	884.0	(126.1)	1,585.0	(206.7)	1,268.0	(208.4)
Civil status										
Single	719.0	(214.8)	709.0	(149.9)	542.0	(92.5)	652.0	(124.7)	784.0	(195.9)
Couple	958.0	(209.1)	938.0	(208.9)	814.0	(81.7)	1,372.0	(112.0)	1,151.0	(136.2)
Divorced	474.0	(96.3)	832.0	(228.5)	883.0	(205.1)	1,894.0	(548.5)	784.0	(137.6)
Widowed	774.0	(375.7)	964.0	(260.2)	822.0	(236.6)	1,158.0	(328.5)	886.0	(217.0)
Country of birth										
Luxembourg	1,109.0	(235.9)	1,069.0	(214.9)	977.0	(92.5)	1,504.0	(172.2)	1,312.0	(198.6)
Outside Luxembourg	477.0	(96.6)	643.0	(124.6)	550.0	(65.7)	1,059.0	(106.3)	888.0	(107.6)
Education level										
Low (ISCED=0:2)	417.0	(108.2)	588.0	(115.9)	423.0	(124.1)	1,257.0	(336.6)	714.0	(170.7)
Middle (ISCED=3,4)	1,101.0	(350.8)	797.0	(102.6)	924.0	(116.4)	1,151.0	(224.0)	786.0	(133.7)
High (ISCED=5-8)	952.0	(197.7)	1,160.0	(321.5)	815.0	(85.3)	1,320.0	(116.6)	1,228.0	(150.5)
Employment status										
Employed	654.0	(211.4)	601.0	(73.9)	658.0	(66.0)	1,024.0	(99.1)	814.0	(101.8)
Self-employed	1,537.0	(398.3)	1,120.0	(161.5)	1,054.0	(250.2)	1,736.0	(649.1)	1,952.0	(496.1)
Unemployed	201.0	(131.7)	290.0	(216.6)	395.0	(237.9)	454.0	(196.8)	407.0	(211.6)
Retired	1,048.0	(278.0)	1,199.0	(368.7)	937.0	(122.7)	1,544.0	(188.6)	1,212.0	(203.0)
Other	369.0	(106.4)	1,257.0	(474.4)	487.0	(166.9)	1,143.0	(350.1)	969.0	(526.0)
Housing status										
Owner-outright	1,172.0	(266.1)	1,183.0	(260.8)	969.0	(95.1)	1,381.0	(157.0)	1,312.0	(191.5)
Owner with mortgage	755.0	(283.3)	754.0	(143.1)	552.0	(59.5)	1,507.0	(224.1)	1,087.0	(136.1)
Renter or other	365.0	(58.1)	468.0	(72.1)	545.0	(112.3)	815.0	(111.5)	645.0	(141.6)
Gross Income quintile										
Q1	239.0	(79.9)	316.0	(144.3)	207.0	(90.3)	751.0	(302.2)	635.0	(201.8)
Q2	722.0	(293.5)	475.0	(151.2)	463.0	(153.4)	568.0	(86.0)	572.0	(140.3)
Q3	455.0	(95.7)	440.0	(92.6)	453.0	(102.4)	622.0	(76.5)	687.0	(174.0)
Q4	517.0	(89.6)	632.0	(117.4)	685.0	(130.7)	855.0	(115.7)	979.0	(191.8)
Q5	1,490.0	(383.7)	1,580.0	(349.8)	1,198.0	(126.0)	2,348.0	(229.8)	1,625.0	(226.0)
Net wealth quintile										
Q1	220.0	(56.6)	204.0	(106.3)	223.0	(110.9)	374.0	(105.3)	168.0	(72.6)
Q2	151.0	(20.1)	166.0	(23.7)	192.0	(31.8)	298.0	(35.6)	218.0	(28.3)
Q3	181.0	(40.7)	238.0	(40.6)	260.0	(38.5)	355.0	(46.5)	370.0	(40.6)
Q4	267.0	(36.4)	297.0	(40.0)	337.0	(50.6)	513.0	(44.1)	541.0	(59.2)
Q5	1,500.0	(282.0)	1,560.0	(264.4)	1,252.0	(108.8)	2,157.0	(175.9)	1,790.0	(193.5)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

Note: Values provided in 1,000 euro. Values <1,000 are rounded to the nearest 10 euro, those >1,000 euro and <100,000 euro are rounded to the nearest 100 euro and those >100,000 euro are rounded to the nearest 1,000 euro. Standard errors <1,000 are rounded to the nearest multiple of 10, those >10,000 are rounded to the nearest multiple of 100.

**Table B13: Total financial assets, participation rate
by household characteristic**

Participation rate (in %) Variable	2010		2014		2018		2021		2023	
	Share	Std.Err.	Share	Std.Err.	Share	Std.Err.	Share	Std.Err.	Share	Std.Err.
All households	98.4	(0.5)	97.1	(0.5)	97.3	(0.5)	97.2	(0.6)	98.5	(0.5)
Gender										
Male	97.8	(0.7)	97.4	(0.7)	97.3	(0.7)	97.3	(0.8)	98.7	(0.6)
Female	99.3	(0.5)	96.6	(0.9)	97.2	(0.8)	97.2	(0.9)	98.3	(0.9)
Age of reference person										
16-34	97.0	(1.6)	95.4	(1.6)	97.9	(1.0)	93.2	(2.4)	97.4	(1.5)
35-44	97.9	(1.2)	97.5	(1.1)	97.7	(1.2)	98.0	(0.9)	97.6	(1.2)
45-54	100.0	(0.0)	98.8	(0.8)	97.5	(1.0)	97.8	(1.1)	99.5	(0.7)
55-64	96.3	(1.8)	96.1	(1.5)	96.7	(1.3)	98.1	(1.0)	99.1	(0.9)
65+	100.0	-	97.2	(1.2)	96.6	(1.3)	98.5	(0.9)	98.9	(1.1)
Civil status										
Single	97.8	(1.0)	95.4	(1.3)	96.3	(1.3)	95.0	(1.5)	98.6	(0.9)
Couple	98.9	(0.6)	98.5	(0.5)	98.2	(0.6)	98.3	(0.6)	98.6	(0.6)
Divorced	96.5	(2.1)	96.9	(1.6)	95.7	(1.7)	97.4	(1.7)	97.4	(2.1)
Widowed	100.0	-	94.5	(2.7)	97.2	(2.0)	100.0	-	100.0	-
Country of birth										
Luxembourg	99.2	(0.4)	98.3	(0.5)	98.8	(0.5)	97.8	(0.8)	98.9	(0.7)
Outside Luxembourg	97.3	(1.0)	95.4	(1.1)	95.8	(0.9)	96.8	(0.9)	98.3	(0.6)
Education level										
Low (ISCED=0:2)	97.6	(1.0)	92.8	(1.6)	95.4	(1.3)	95.7	(1.7)	98.3	(1.3)
Middle (ISCED=3,4)	98.3	(0.8)	99.0	(0.4)	97.4	(0.9)	97.5	(1.0)	98.3	(1.0)
High (ISCED=5-8)	99.6	(0.4)	98.7	(0.7)	98.5	(0.6)	97.6	(0.8)	98.7	(0.6)
Employment status										
Employed	97.7	(0.8)	97.6	(0.7)	97.5	(0.7)	97.6	(0.7)	98.9	(0.5)
Self-employed	98.9	(1.1)	98.5	(1.5)	98.8	-	100.0	-	99.5	-
Unemployed	95.5	(4.5)	94.9	(3.8)	100.0	-	95.0	-	96.3	(3.3)
Retired	100.0	-	96.0	(1.3)	96.3	(1.2)	98.3	(0.8)	98.8	(0.9)
Other	98.5	(1.0)	97.2	(1.6)	97.0	(1.5)	83.8	(7.6)	94.0	(4.3)
Housing status										
Owner-outright	100.0	-	97.5	(0.9)	96.8	(0.9)	98.0	(0.8)	99.4	(0.5)
Owner with mortgage	98.4	(0.9)	98.9	(0.6)	99.2	(0.4)	98.7	(0.7)	98.9	(0.7)
Renter or other	96.7	(1.2)	94.9	(1.3)	96.2	(1.2)	95.2	(1.4)	97.5	(1.1)
Gross Income quintile										
Q1	96.9	(1.4)	91.5	(2.1)	91.4	(2.2)	94.4	(2.1)	96.4	(1.8)
Q2	98.3	(1.1)	98.1	(1.1)	98.3	(1.1)	94.9	(1.8)	98.6	(1.1)
Q3	97.4	(1.5)	97.3	(1.6)	98.2	(1.0)	98.5	(0.8)	98.7	(0.9)
Q4	99.3	(0.7)	99.3	(0.8)	99.3	(0.5)	98.8	(0.9)	99.5	(0.6)
Q5	100.0	-	99.1	(0.8)	99.2	(0.6)	99.8	(0.3)	99.5	(0.6)
Net wealth quintile										
Q1	94.8	(1.9)	91.5	(2.2)	94.3	(1.8)	92.0	(2.3)	95.3	(2.1)
Q2	98.6	(1.1)	96.8	(1.2)	96.6	(1.3)	98.7	(1.0)	99.2	(0.8)
Q3	100.0	-	98.6	(0.9)	99.3	(0.5)	98.4	(0.9)	99.0	(1.0)
Q4	100.0	-	98.3	(1.0)	96.9	(1.3)	97.6	(1.2)	99.4	(0.8)
Q5	98.5	(1.0)	100.0	-	99.2	(0.9)	99.6	(0.3)	99.7	-

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

**Table B14: Total financial assets, conditional median
by household characteristic**

Conditional median Variable	2010		2014		2018		2021		2023	
	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.
All households	27.9	(3.3)	32.1	(2.9)	30.3	(2.2)	80.4	(6.0)	91.7	(6.7)
Gender										
Male	36.9	(6.2)	39.7	(4.4)	39.9	(4.4)	97.7	(7.5)	102.0	(9.5)
Female	21.0	(3.1)	26.6	(3.4)	20.1	(2.9)	53.3	(7.3)	80.0	(10.0)
Age of reference person										
16-34	19.6	(4.3)	16.1	(4.1)	18.3	(4.1)	39.3	(7.2)	49.4	(8.2)
35-44	30.4	(5.6)	28.7	(5.6)	26.4	(5.0)	51.1	(8.4)	72.5	(11.3)
45-54	31.2	(7.6)	34.1	(6.4)	28.5	(5.1)	94.4	(12.3)	84.4	(13.8)
55-64	35.8	(10.6)	50.2	(8.8)	33.0	(7.4)	114.0	(18.8)	118.0	(19.7)
65+	32.8	(7.7)	55.0	(12.6)	65.6	(11.7)	152.0	(23.0)	177.0	(33.3)
Civil status										
Single	20.4	(3.4)	21.0	(5.9)	26.7	(4.4)	53.1	(7.2)	55.9	(9.9)
Couple	38.3	(4.7)	44.0	(5.2)	38.7	(4.4)	105.0	(8.9)	116.0	(11.9)
Divorced	22.8	(5.1)	24.7	(4.9)	15.8	(4.0)	63.3	(16.9)	68.1	(18.0)
Widowed	22.7	(9.3)	26.2	(11.2)	41.9	(14.3)	140.0	(51.0)	139.0	(68.2)
Country of birth										
Luxembourg	41.9	(3.9)	43.6	(5.3)	44.7	(6.0)	96.6	(8.5)	107.0	(10.8)
Outside Luxembourg	17.6	(2.5)	22.5	(3.1)	18.5	(2.7)	68.2	(8.2)	80.6	(8.6)
Education level										
Low (ISCED=0:2)	10.7	(2.6)	13.5	(2.4)	10.4	(2.9)	31.3	(8.4)	52.6	(13.1)
Middle (ISCED=3,4)	33.1	(6.7)	33.3	(5.6)	22.4	(3.7)	59.2	(8.3)	81.9	(12.1)
High (ISCED=5-8)	58.8	(11.8)	75.0	(10.0)	63.7	(6.6)	115.0	(11.4)	121.0	(14.5)
Employment status										
Employed	29.6	(4.1)	30.4	(2.8)	25.0	(2.8)	61.8	(5.0)	78.6	(6.0)
Self-employed	59.0	(15.2)	76.9	(18.0)	64.5	(17.9)	155.0	(40.1)	134.0	(55.1)
Unemployed	4.2	(4.2)	3.0	(3.1)	5.0	(2.1)	17.0	(12.8)	31.6	(26.1)
Retired	38.2	(8.5)	50.7	(7.9)	61.5	(11.4)	145.0	(18.2)	157.0	(27.4)
Other	10.5	(4.5)	15.9	(8.7)	6.9	(5.1)	37.6	(31.3)	41.4	(27.8)
Housing status										
Owner-outright	48.8	(7.2)	66.5	(9.4)	56.4	(7.7)	123.0	(12.6)	152.0	(19.2)
Owner with mortgage	37.2	(5.0)	37.5	(4.9)	31.7	(2.9)	86.1	(9.0)	88.8	(10.1)
Renter or other	10.6	(3.4)	10.1	(2.2)	8.4	(2.1)	39.6	(7.4)	52.1	(8.7)
Gross Income quintile										
Q1	4.7	(1.7)	5.5	(1.3)	5.8	(1.4)	20.2	(5.1)	36.3	(9.9)
Q2	14.6	(3.8)	21.1	(3.6)	14.1	(3.2)	46.9	(7.6)	62.1	(11.3)
Q3	22.8	(3.9)	29.8	(6.0)	32.4	(5.7)	82.5	(12.4)	79.9	(12.8)
Q4	53.8	(6.6)	56.1	(6.0)	50.8	(8.2)	115.0	(15.7)	124.0	(18.2)
Q5	108.0	(13.0)	125.0	(13.7)	110.0	(11.5)	217.0	(22.7)	238.0	(29.3)
Net wealth quintile										
Q1	3.2	(.8)	2.6	(.7)	3.5	(.7)	11.1	(2.3)	14.8	(2.8)
Q2	27.9	(5.1)	26.6	(3.0)	28.9	(4.3)	58.3	(9.6)	87.4	(10.1)
Q3	25.2	(5.2)	27.8	(4.9)	24.2	(3.4)	75.0	(11.0)	78.0	(11.6)
Q4	50.6	(7.2)	74.7	(10.2)	58.1	(8.5)	131.0	(13.1)	167.0	(23.0)
Q5	135.0	(17.9)	209.0	(24.6)	169.0	(22.0)	412.0	(51.0)	343.0	(41.7)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

Note: Values provided in 1,000 euro. Values <1,000 are rounded to the nearest 10 euro, those >1,000 euro and <100,000 euro are rounded to the nearest 100 euro and those >100,000 euro are rounded to the nearest 1,000 euro. Standard errors <1,000 are rounded to the nearest multiple of 10, those >10,000 are rounded to the nearest multiple of 100.

**Table B15: Total financial assets, conditional mean
by household characteristic**

Conditional mean Variable	2010		2014		2018		2021		2023	
	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.
All households	89.9	(7.9)	136.0	(17.0)	125.0	(10.5)	331.0	(36.6)	253.0	(32.2)
Gender										
Male	109.0	(9.3)	159.0	(28.3)	158.0	(16.9)	419.0	(56.5)	311.0	(52.6)
Female	62.9	(13.9)	107.0	(13.3)	78.3	(9.4)	188.0	(27.8)	167.0	(17.0)
Age of reference person										
16-34	37.2	(4.7)	57.3	(11.3)	69.6	(17.2)	77.2	(9.0)	98.6	(13.6)
35-44	64.6	(7.1)	98.7	(13.7)	90.3	(16.2)	142.0	(27.5)	129.0	(11.2)
45-54	96.2	(14.5)	192.0	(73.3)	107.0	(14.3)	227.0	(28.3)	208.0	(31.4)
55-64	114.0	(18.4)	176.0	(29.2)	171.0	(33.2)	439.0	(175.9)	325.0	(72.1)
65+	139.0	(30.4)	156.0	(18.0)	183.0	(29.3)	773.0	(151.7)	471.0	(130.1)
Civil status										
Single	53.1	(8.2)	113.0	(14.6)	90.7	(13.6)	172.0	(28.0)	136.0	(24.7)
Couple	110.0	(9.7)	131.0	(11.8)	157.0	(19.5)	345.0	(76.5)	316.0	(54.7)
Divorced	66.5	(19.0)	209.0	(115.2)	67.5	(11.4)	578.0	(185.1)	172.0	(44.1)
Widowed	105.0	(56.2)	126.0	(33.1)	135.0	(32.2)	528.0	(176.3)	306.0	(80.8)
Country of birth										
Luxembourg	107.0	(12.4)	139.0	(11.6)	136.0	(15.8)	229.0	(23.4)	239.0	(39.3)
Outside Luxembourg	66.3	(7.7)	132.0	(37.4)	114.0	(13.3)	407.0	(61.6)	262.0	(46.3)
Education level										
Low (ISCED=0:2)	45.2	(15.6)	63.7	(9.2)	48.2	(7.1)	126.0	(42.0)	117.0	(20.8)
Middle (ISCED=3,4)	86.1	(9.8)	103.0	(10.3)	97.8	(16.2)	195.0	(26.1)	180.0	(36.0)
High (ISCED=5-8)	155.0	(16.2)	244.0	(52.1)	206.0	(22.9)	485.0	(67.3)	345.0	(57.6)
Employment status										
Employed	74.6	(7.0)	131.0	(28.0)	105.0	(10.5)	169.0	(21.2)	163.0	(10.1)
Self-employed	138.0	(22.7)	214.0	(41.5)	172.0	(40.1)	350.0	(73.1)	489.0	(224.8)
Unemployed	20.2	(10.4)	51.2	(18.2)	24.0	(7.4)	102.0	(35.2)	183.0	(90.4)
Retired	143.0	(26.1)	164.0	(22.7)	192.0	(29.3)	744.0	(141.9)	418.0	(97.3)
Other	38.7	(12.6)	86.5	(18.2)	39.6	(9.4)	120.0	(30.7)	97.0	(25.5)
Housing status										
Owner-outright	151.0	(20.6)	184.0	(17.2)	168.0	(20.9)	482.0	(111.2)	368.0	(62.5)
Owner with mortgage	73.9	(8.5)	157.0	(52.7)	124.0	(16.6)	192.0	(18.7)	198.0	(30.2)
Renter or other	39.7	(4.7)	59.6	(8.0)	65.3	(14.0)	271.0	(60.6)	183.0	(60.2)
Gross Income quintile										
Q1	24.8	(6.8)	38.0	(8.4)	32.5	(10.6)	84.4	(15.7)	118.0	(29.4)
Q2	35.0	(7.4)	82.7	(16.5)	60.9	(19.6)	186.0	(51.6)	157.0	(53.6)
Q3	51.7	(9.4)	82.1	(10.6)	92.2	(15.4)	187.0	(31.0)	165.0	(25.3)
Q4	101.0	(14.8)	124.0	(12.9)	139.0	(31.9)	290.0	(71.1)	245.0	(36.0)
Q5	234.0	(30.2)	348.0	(79.2)	291.0	(31.1)	891.0	(154.6)	576.0	(138.6)
Net wealth quintile										
Q1	8.5	(1.7)	8.0	(1.4)	8.3	(1.1)	23.7	(3.5)	24.0	(3.4)
Q2	39.7	(4.1)	43.5	(4.4)	46.0	(3.8)	91.2	(8.5)	108.0	(8.3)
Q3	44.5	(4.8)	58.7	(5.7)	51.0	(4.6)	120.0	(11.4)	136.0	(13.6)
Q4	76.5	(8.0)	118.0	(13.1)	96.8	(8.1)	192.0	(14.1)	219.0	(18.7)
Q5	279.0	(35.3)	439.0	(80.0)	414.0	(46.0)	1,197.0	(167.5)	767.0	(145.6)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

Note: Values provided in 1,000 euro. Values <1,000 are rounded to the nearest 10 euro, those >1,000 euro and <100,000 euro are rounded to the nearest 100 euro and those >100,000 euro are rounded to the nearest 1,000 euro. Standard errors <1,000 are rounded to the nearest multiple of 10, those >10,000 are rounded to the nearest multiple of 100.

**Table B16: Deposits, participation rate
by household characteristic**

Participation rate (in %) Variable	2010		2014		2018		2021		2023	
	Share	Std.Err.	Share	Std.Err.	Share	Std.Err.	Share	Std.Err.	Share	Std.Err.
All households	98.0	(0.5)	96.7	(0.6)	97.1	(0.5)	91.5	(0.9)	97.2	(0.6)
Gender										
Male	97.4	(0.8)	97.0	(0.7)	97.0	(0.7)	92.5	(1.1)	97.3	(0.8)
Female	98.9	(0.6)	96.3	(0.9)	97.2	(0.8)	89.8	(1.7)	97.2	(1.1)
Age of reference person										
16-34	96.9	(1.6)	95.1	(1.7)	97.2	(1.2)	84.9	(3.1)	95.9	(1.7)
35-44	97.2	(1.4)	97.2	(1.2)	97.5	(1.2)	89.1	(2.3)	95.8	(1.6)
45-54	99.0	(0.9)	98.2	(0.9)	97.5	(1.0)	93.3	(1.8)	97.2	(1.4)
55-64	96.3	(1.8)	95.6	(1.6)	96.7	(1.3)	94.4	(1.6)	98.0	(1.2)
65+	100.0	-	96.9	(1.3)	96.6	(1.3)	95.2	(1.6)	98.9	(1.1)
Civil status										
Single	97.1	(1.2)	95.2	(1.3)	95.7	(1.3)	88.6	(2.0)	97.7	(1.1)
Couple	98.8	(0.6)	98.0	(0.6)	98.2	(0.6)	92.1	(1.2)	97.1	(0.9)
Divorced	94.8	(2.5)	96.9	(1.6)	95.7	(1.7)	95.1	(2.1)	95.6	(2.5)
Widowed	100.0	-	93.8	(2.7)	97.2	(2.0)	93.3	(4.1)	99.7	-
Country of birth										
Luxembourg	98.9	(0.5)	97.9	(0.6)	98.8	(0.5)	94.8	(1.0)	97.9	(0.9)
Outside Luxembourg	96.7	(1.1)	95.0	(1.1)	95.5	(0.9)	89.0	(1.4)	96.8	(0.9)
Education level										
Low (ISCED=0:2)	96.9	(1.2)	92.6	(1.6)	95.4	(1.3)	90.4	(2.5)	97.0	(1.6)
Middle (ISCED=3,4)	97.9	(0.9)	98.5	(0.5)	97.4	(0.9)	91.5	(1.8)	96.6	(1.3)
High (ISCED=5-8)	99.6	(0.4)	98.3	(0.8)	98.1	(0.7)	91.8	(1.3)	97.7	(0.8)
Employment status										
Employed	97.0	(0.9)	97.4	(0.7)	97.2	(0.7)	90.8	(1.2)	97.1	(0.8)
Self-employed	98.9	(1.1)	98.5	(1.5)	98.8	-	100.0	-	99.5	(1.3)
Unemployed	95.5	(4.5)	94.9	(3.8)	100.0	-	83.5	(7.6)	93.0	(4.7)
Retired	100.0	-	95.7	(1.3)	96.3	(1.2)	95.9	(1.2)	98.3	(1.0)
Other	98.5	(1.0)	95.2	(2.2)	97.0	(1.5)	69.0	(8.6)	94.0	(4.3)
Housing status										
Owner-outright	99.5	(0.5)	97.1	(0.9)	96.8	(0.9)	94.1	(1.2)	98.3	(0.8)
Owner with mortgage	98.3	(0.9)	98.9	(0.6)	99.2	(0.4)	94.1	(1.5)	97.6	(1.0)
Renter or other	96.0	(1.3)	94.2	(1.4)	95.7	(1.2)	86.4	(2.0)	95.9	(1.3)
Gross Income quintile										
Q1	95.3	(1.9)	90.7	(2.2)	90.9	(2.2)	85.3	(3.0)	94.6	(2.1)
Q2	98.0	(1.3)	97.5	(1.1)	98.3	(1.1)	89.4	(2.6)	97.2	(1.4)
Q3	97.3	(1.5)	97.3	(1.6)	98.0	(1.1)	92.0	(1.8)	97.3	(1.4)
Q4	99.3	(0.7)	99.0	(0.9)	99.3	(0.5)	93.3	(2.0)	98.2	(0.9)
Q5	100.0	-	98.9	(0.8)	99.2	(0.6)	97.3	(1.2)	98.8	(0.9)
Net wealth quintile										
Q1	93.6	(2.1)	90.4	(2.2)	94.1	(1.9)	81.8	(3.3)	93.6	(2.3)
Q2	98.6	(1.1)	96.8	(1.2)	96.1	(1.4)	91.8	(2.4)	97.6	(1.3)
Q3	99.1	(0.9)	97.9	(1.1)	99.3	(0.5)	93.0	(2.4)	97.3	(1.4)
Q4	100.0	-	98.3	(1.0)	96.9	(1.3)	92.2	(2.2)	98.2	(1.2)
Q5	98.5	(1.0)	100.0	-	99.2	(0.9)	98.5	(0.8)	99.3	(0.6)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

**Table B17: Deposits, conditional median
by household characteristic**

Conditional median Variable	2010		2014		2018		2021		2023	
	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.
All households	14.3	(1.4)	15.4	(1.0)	20.1	(1.7)	35.7	(3.4)	40.8	(3.2)
Gender										
Male	17.2	(1.7)	16.7	(1.4)	25.3	(2.8)	43.7	(4.4)	44.0	(4.9)
Female	10.4	(1.6)	14.1	(1.4)	13.7	(2.4)	29.4	(3.8)	38.6	(5.1)
Age of reference person										
16-34	10.8	(3.1)	11.2	(2.0)	9.9	(2.6)	20.8	(3.5)	22.4	(4.6)
35-44	12.1	(1.9)	11.4	(2.1)	17.0	(2.6)	23.6	(4.1)	27.4	(5.3)
45-54	13.1	(3.0)	13.1	(2.0)	16.2	(3.9)	39.6	(9.6)	28.7	(6.7)
55-64	19.2	(4.2)	20.0	(4.3)	19.6	(5.7)	47.2	(12.6)	54.5	(9.4)
65+	20.2	(3.9)	30.1	(6.3)	44.4	(7.9)	95.2	(14.2)	96.7	(18.3)
Civil status										
Single	11.5	(2.2)	10.4	(2.1)	15.8	(3.3)	28.6	(3.8)	26.5	(4.9)
Couple	17.7	(2.1)	18.2	(2.0)	24.1	(2.5)	42.5	(5.4)	50.5	(4.7)
Divorced	9.6	(2.5)	10.4	(1.9)	8.7	(2.7)	30.8	(7.1)	25.4	(8.0)
Widowed	16.7	(8.2)	20.4	(6.1)	36.8	(9.2)	121.0	(45.1)	73.1	(34.3)
Country of birth										
Luxembourg	19.3	(2.3)	18.7	(2.3)	32.6	(3.3)	50.0	(5.0)	52.7	(5.6)
Outside Luxembourg	8.8	(1.6)	11.4	(1.4)	10.9	(1.6)	30.0	(2.9)	33.9	(4.4)
Education level										
Low (ISCED=0:2)	6.2	(1.4)	7.6	(1.2)	8.1	(2.2)	12.9	(5.0)	24.2	(8.9)
Middle (ISCED=3,4)	14.7	(2.4)	14.3	(1.6)	15.0	(2.3)	28.8	(4.3)	33.0	(5.4)
High (ISCED=5-8)	30.2	(4.4)	32.6	(4.5)	36.8	(3.8)	54.9	(4.4)	52.1	(5.3)
Employment status										
Employed	13.4	(1.6)	14.9	(1.3)	16.0	(2.1)	28.3	(2.6)	32.9	(3.3)
Self-employed	19.2	(4.5)	26.8	(11.7)	32.4	(12.8)	70.4	(15.3)	43.5	(26.7)
Unemployed	4.0	(3.1)	1.7	(1.0)	5.0	(1.8)	2.3	(6.9)	8.9	(9.3)
Retired	21.4	(3.9)	26.8	(3.6)	42.7	(6.5)	86.8	(11.8)	77.7	(14.0)
Other	7.1	(2.6)	8.7	(2.5)	5.0	(3.2)	26.5	(27.0)	12.2	(13.0)
Housing status										
Owner-outright	24.3	(3.3)	32.3	(5.8)	39.3	(3.8)	62.0	(10.2)	73.0	(10.8)
Owner with mortgage	13.3	(1.9)	15.5	(1.4)	20.9	(2.2)	36.8	(5.6)	38.3	(4.7)
Renter or other	4.9	(1.2)	5.3	(1.1)	5.9	(.8)	16.6	(3.7)	19.8	(4.3)
Gross Income quintile										
Q1	3.3	(1.3)	3.7	(.8)	4.2	(1.0)	9.8	(2.7)	17.1	(6.1)
Q2	7.4	(1.3)	12.1	(2.8)	9.1	(2.5)	28.3	(4.9)	25.4	(7.0)
Q3	14.5	(2.5)	12.1	(2.5)	22.8	(3.9)	37.4	(8.3)	38.8	(7.2)
Q4	21.7	(4.0)	24.0	(3.6)	29.6	(4.9)	53.1	(6.7)	53.2	(8.2)
Q5	46.1	(6.5)	45.9	(6.1)	63.4	(7.1)	90.8	(10.0)	98.1	(16.1)
Net wealth quintile										
Q1	2.2	(.7)	2.1	(.4)	2.9	(.4)	3.8	(1.3)	7.0	(1.6)
Q2	12.8	(2.1)	12.2	(1.8)	18.3	(4.1)	22.4	(4.0)	35.6	(5.9)
Q3	12.0	(3.0)	16.1	(2.4)	18.3	(3.3)	33.0	(6.4)	35.1	(6.1)
Q4	23.3	(3.1)	28.1	(5.8)	40.4	(6.3)	62.4	(9.2)	72.7	(11.0)
Q5	52.0	(10.9)	76.3	(14.8)	82.3	(7.9)	159.0	(22.6)	138.0	(17.0)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

Note: Values provided in 1,000 euro. Values <1,000 are rounded to the nearest 10 euro, those >1,000 euro and <100,000 euro are rounded to the nearest 100 euro and those >100,000 euro are rounded to the nearest 1,000 euro. Standard errors <1,000 are rounded to the nearest multiple of 10, those >10,000 are rounded to the nearest multiple of 100.

**Table B18: Deposits, conditional mean
by household characteristic**

Conditional mean Variable	2010		2014		2018		2021		2023	
	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.
All households	39.5	(2.8)	63.4	(3.8)	61.2	(3.2)	127.0	(11.4)	116.0	(13.5)
Gender										
Male	46.1	(3.9)	67.8	(4.8)	71.3	(4.6)	141.0	(16.5)	136.0	(21.6)
Female	29.8	(4.0)	57.7	(6.9)	47.3	(4.4)	103.0	(13.3)	85.5	(9.3)
Age of reference person										
16-34	22.7	(3.2)	36.8	(8.9)	30.8	(3.7)	46.0	(7.1)	57.1	(9.8)
35-44	32.3	(3.7)	52.3	(10.0)	45.3	(5.9)	63.1	(7.7)	63.5	(6.8)
45-54	36.3	(5.2)	55.0	(6.2)	56.0	(5.4)	104.0	(11.6)	94.8	(18.1)
55-64	54.3	(8.1)	77.2	(8.7)	86.6	(11.5)	137.0	(19.5)	165.0	(51.1)
65+	54.3	(9.4)	95.7	(10.9)	85.8	(7.8)	276.0	(52.8)	186.0	(33.9)
Civil status										
Single	26.2	(3.7)	61.6	(10.4)	44.2	(4.8)	83.2	(9.3)	72.2	(10.5)
Couple	48.1	(4.3)	67.3	(4.9)	70.9	(4.7)	114.0	(8.5)	140.0	(22.7)
Divorced	21.7	(4.3)	48.9	(7.5)	48.8	(9.6)	225.0	(75.5)	71.0	(10.6)
Widowed	49.7	(12.4)	69.5	(16.0)	76.1	(11.0)	268.0	(75.4)	159.0	(50.0)
Country of birth										
Luxembourg	48.1	(4.4)	77.4	(5.8)	73.9	(4.4)	118.0	(9.7)	137.0	(29.7)
Outside Luxembourg	27.7	(3.2)	44.3	(4.2)	48.6	(4.6)	134.0	(18.8)	103.0	(11.6)
Education level										
Low (ISCED=0:2)	17.6	(3.2)	36.7	(5.5)	40.1	(6.7)	55.1	(8.2)	75.5	(16.7)
Middle (ISCED=3,4)	39.3	(4.6)	53.6	(5.3)	54.9	(5.2)	104.0	(14.9)	103.0	(32.3)
High (ISCED=5-8)	68.5	(7.6)	100.0	(9.8)	82.5	(6.0)	166.0	(20.4)	137.0	(16.3)
Employment status										
Employed	34.2	(2.8)	55.2	(5.4)	50.2	(3.4)	74.9	(4.9)	81.2	(5.8)
Self-employed	51.7	(9.4)	87.8	(15.7)	71.9	(15.5)	132.0	(27.7)	151.0	(44.9)
Unemployed	9.0	(3.4)	34.0	(17.7)	16.9	(5.7)	40.6	(13.7)	122.0	(88.9)
Retired	60.0	(8.6)	86.8	(9.4)	95.6	(8.5)	250.0	(38.9)	184.0	(39.7)
Other	20.3	(4.0)	47.3	(11.7)	31.7	(7.7)	80.1	(21.7)	48.7	(15.7)
Housing status										
Owner-outright	61.2	(6.7)	103.0	(8.7)	88.1	(6.2)	147.0	(11.9)	177.0	(33.8)
Owner with mortgage	34.1	(3.9)	51.6	(6.0)	53.6	(5.4)	82.2	(6.3)	81.5	(7.5)
Renter or other	21.4	(2.9)	26.1	(3.1)	31.0	(4.0)	140.0	(32.2)	81.8	(13.3)
Gross Income quintile										
Q1	14.5	(2.7)	24.2	(5.6)	21.8	(6.6)	38.9	(6.6)	57.5	(10.9)
Q2	22.4	(7.2)	56.6	(12.1)	37.8	(6.9)	99.4	(21.2)	65.4	(12.4)
Q3	30.2	(5.0)	49.8	(7.6)	51.3	(5.8)	98.8	(14.6)	89.0	(14.8)
Q4	44.1	(5.2)	64.8	(6.9)	62.8	(7.1)	115.0	(15.3)	123.0	(20.9)
Q5	84.6	(8.3)	119.0	(9.8)	129.0	(11.1)	269.0	(46.8)	241.0	(58.5)
Net wealth quintile										
Q1	5.9	(1.0)	5.4	(.9)	6.7	(.9)	14.4	(2.3)	14.9	(2.7)
Q2	24.5	(2.8)	24.0	(2.4)	35.1	(3.2)	48.3	(5.0)	59.3	(6.0)
Q3	23.5	(3.4)	40.8	(4.5)	38.4	(3.9)	68.8	(6.9)	76.4	(10.4)
Q4	43.3	(6.9)	69.8	(12.7)	68.5	(5.9)	110.0	(9.8)	114.0	(10.8)
Q5	98.8	(9.6)	170.0	(16.0)	154.0	(12.0)	364.0	(50.3)	307.0	(61.0)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

Note: Values provided in 1,000 euro. Values <1,000 are rounded to the nearest 10 euro, those >1,000 euro and <100,000 euro are rounded to the nearest 100 euro and those >100,000 euro are rounded to the nearest 1,000 euro. Standard errors <1,000 are rounded to the nearest multiple of 10, those >10,000 are rounded to the nearest multiple of 100.

**Table B19: Risky assets, participation rate
by household characteristic**

Participation rate (in %) Variable	2010		2014		2018		2021		2023	
	Share	Std.Err.	Share	Std.Err.	Share	Std.Err.	Share	Std.Err.	Share	Std.Err.
All households	24.3	(1.5)	19.2	(1.1)	15.8	(1.0)	32.3	(1.4)	25.7	(1.5)
Gender										
Male	29.5	(2.1)	23.5	(1.6)	19.8	(1.4)	37.5	(1.7)	31.1	(2.1)
Female	16.8	(2.1)	13.6	(1.5)	10.3	(1.4)	23.8	(2.3)	17.7	(2.3)
Age of reference person										
16-34	17.0	(3.1)	10.6	(2.1)	10.8	(2.3)	25.3	(3.0)	27.2	(3.2)
35-44	24.9	(3.2)	17.7	(2.3)	15.8	(2.2)	26.3	(2.8)	21.7	(2.7)
45-54	29.5	(3.3)	21.6	(2.5)	14.9	(1.8)	29.8	(2.7)	20.1	(2.7)
55-64	26.7	(3.7)	23.1	(2.6)	14.9	(2.2)	34.2	(3.2)	26.8	(3.5)
65+	23.0	(3.9)	22.9	(2.9)	21.5	(2.5)	46.3	(3.7)	32.9	(4.6)
Civil status										
Single	19.8	(2.9)	17.1	(2.2)	13.7	(2.0)	29.8	(2.6)	25.4	(2.9)
Couple	30.0	(2.2)	22.3	(1.6)	19.0	(1.4)	34.1	(1.9)	27.3	(2.1)
Divorced	17.2	(3.8)	15.2	(2.8)	10.1	(2.0)	30.0	(4.2)	17.6	(3.6)
Widowed	14.3	(5.1)	14.7	(3.7)	12.9	(3.5)	33.9	(8.2)	28.4	(8.9)
Country of birth										
Luxembourg	27.6	(2.2)	20.8	(1.5)	18.4	(1.5)	32.3	(2.1)	26.0	(2.4)
Outside Luxembourg	20.0	(2.1)	17.0	(1.6)	13.3	(1.3)	32.2	(1.9)	25.5	(2.0)
Education level										
Low (ISCED=0:2)	8.1	(1.9)	6.4	(1.3)	6.8	(1.4)	16.8	(3.2)	10.0	(3.1)
Middle (ISCED=3,4)	23.5	(2.6)	18.3	(1.8)	10.7	(1.4)	26.0	(2.5)	17.6	(2.5)
High (ISCED=5-8)	47.6	(3.3)	32.6	(2.4)	27.6	(2.0)	41.6	(2.0)	36.1	(2.3)
Employment status										
Employed	25.0	(2.0)	17.6	(1.4)	14.6	(1.2)	29.2	(1.6)	25.5	(1.7)
Self-employed	42.7	(5.6)	29.9	(5.1)	21.4	(6.4)	29.0	(6.2)	28.5	(7.0)
Unemployed	12.7	(8.3)	9.8	(4.3)	3.2	(2.9)	17.6	(6.7)	13.4	(5.7)
Retired	26.2	(3.5)	22.4	(2.4)	21.4	(2.3)	44.8	(3.2)	30.2	(3.7)
Other	9.8	(3.8)	18.2	(3.7)	5.1	(2.4)	11.5	(5.0)	9.8	(5.3)
Housing status										
Owner-outright	31.7	(2.9)	26.3	(2.0)	19.9	(1.8)	39.9	(2.6)	30.2	(3.0)
Owner with mortgage	27.9	(2.8)	19.4	(1.9)	15.9	(1.7)	31.6	(2.4)	26.8	(2.5)
Renter or other	13.1	(2.1)	10.6	(1.7)	10.1	(1.5)	24.3	(2.3)	20.8	(2.4)
Gross Income quintile										
Q1	4.1	(2.0)	5.9	(1.8)	2.3	(1.2)	15.0	(3.2)	10.7	(3.0)
Q2	9.1	(2.7)	7.2	(2.3)	8.2	(2.3)	22.1	(3.8)	18.1	(3.7)
Q3	17.0	(3.5)	15.6	(2.8)	15.9	(2.6)	37.6	(3.7)	23.7	(3.5)
Q4	32.6	(4.2)	26.9	(3.1)	19.3	(2.5)	36.4	(3.4)	35.1	(3.9)
Q5	59.1	(3.6)	40.5	(2.7)	33.4	(2.7)	50.6	(3.2)	41.2	(4.0)
Net wealth quintile										
Q1	4.0	(1.9)	2.0	(1.1)	1.6	(1.1)	7.7	(1.7)	9.9	(2.1)
Q2	16.9	(3.2)	9.3	(2.2)	10.5	(2.0)	28.5	(3.2)	21.2	(3.2)
Q3	18.7	(3.3)	13.9	(2.3)	9.2	(1.9)	28.1	(3.2)	19.8	(3.0)
Q4	30.4	(4.0)	24.2	(3.0)	19.1	(2.8)	35.2	(3.7)	26.6	(3.7)
Q5	52.0	(4.1)	46.6	(3.1)	38.6	(3.1)	61.8	(3.2)	50.9	(4.1)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

**Table B20: Risky assets, conditional median
by household characteristic**

Conditional median Variable	2010		2014		2018		2021		2023	
	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.
All households	22.6	(4.3)	34.7	(7.4)	50.0	(8.9)	67.0	(10.0)	61.6	(10.7)
Gender										
Male	25.6	(7.5)	33.9	(8.1)	55.8	(11.1)	86.0	(11.4)	60.8	(11.3)
Female	16.9	(6.7)	39.2	(18.4)	42.9	(17.3)	35.9	(14.7)	75.8	(33.3)
Age of reference person										
16-34	4.9	(3.0)	8.7	(4.9)	20.8	(12.4)	13.5	(5.8)	18.8	(5.9)
35-44	14.8	(3.1)	25.0	(8.9)	23.0	(12.8)	34.2	(9.1)	31.2	(10.5)
45-54	27.4	(9.4)	33.6	(15.1)	34.8	(11.9)	55.2	(16.6)	71.6	(18.5)
55-64	32.3	(8.9)	56.9	(23.5)	62.6	(41.2)	139.0	(38.9)	93.0	(31.4)
65+	123.0	(87.2)	92.0	(31.7)	112.0	(41.1)	141.0	(39.1)	217.0	(78.8)
Civil status										
Single	15.3	(4.7)	29.7	(15.3)	41.8	(13.3)	36.4	(12.3)	29.3	(9.6)
Couple	22.7	(6.4)	32.4	(7.6)	63.0	(16.5)	93.0	(13.3)	89.6	(17.9)
Divorced	39.8	(25.2)	24.4	(27.6)	27.0	(16.6)	56.0	(42.9)	54.0	(34.3)
Widowed	63.2	(160.0)	183.0	(79.0)	82.0	(163.4)	200.0	(351.7)	270.0	(202.9)
Country of birth										
Luxembourg	29.2	(8.0)	33.0	(10.1)	57.8	(12.4)	55.0	(12.4)	61.5	(16.6)
Outside Luxembourg	18.4	(3.5)	36.0	(13.7)	43.5	(14.3)	80.6	(14.6)	61.6	(13.9)
Education level										
Low (ISCED=0:2)	19.5	(31.4)	33.6	(31.1)	36.4	(16.1)	34.8	(26.1)	47.6	(42.3)
Middle (ISCED=3,4)	31.1	(9.1)	36.8	(13.2)	61.6	(26.2)	58.5	(12.5)	48.6	(23.9)
High (ISCED=5-8)	20.0	(4.7)	36.1	(11.3)	52.0	(13.2)	81.9	(14.4)	68.2	(14.4)
Employment status										
Employed	16.5	(2.8)	25.0	(4.5)	36.3	(8.2)	39.2	(7.2)	36.1	(7.0)
Self-employed	26.3	(8.8)	25.3	(27.2)	61.2	(133.6)	112.0	(72.0)	113.0	(92.3)
Unemployed	9.3	(71.7)	81.1	(72.6)	8.0	(10.3)	40.0	(177.5)	66.6	(58.7)
Retired	74.0	(34.3)	80.2	(27.0)	102.0	(31.9)	138.0	(33.4)	180.0	(66.2)
Other	23.8	(50.4)	53.1	(33.2)	26.2	(70.4)	265.0	(206.2)	35.0	(63.5)
Housing status										
Owner-outright	59.8	(14.5)	63.9	(21.2)	89.0	(19.3)	98.4	(17.9)	117.0	(42.4)
Owner with mortgage	19.2	(3.5)	19.2	(5.3)	40.0	(14.3)	46.3	(9.0)	40.2	(10.9)
Renter or other	13.1	(3.0)	23.0	(12.2)	20.2	(6.5)	58.2	(19.5)	43.9	(13.4)
Gross Income quintile										
Q1	27.3	(133.4)	22.0	(51.9)	43.0	(172.7)	70.0	(34.0)	67.1	(92.8)
Q2	13.3	(9.2)	6.3	(31.1)	32.5	(47.3)	45.8	(36.1)	40.2	(39.8)
Q3	19.6	(13.2)	23.0	(18.2)	60.0	(23.0)	28.5	(9.8)	42.1	(16.3)
Q4	21.0	(10.4)	31.7	(10.7)	37.4	(17.4)	61.4	(16.2)	58.0	(23.0)
Q5	30.6	(7.9)	64.9	(19.9)	67.2	(21.5)	145.0	(31.8)	96.9	(19.8)
Net wealth quintile										
Q1	14.2	(6.3)	2.7	(7.5)	26.2	(21.2)	6.5	(2.9)	7.5	(3.0)
Q2	9.4	(3.4)	11.0	(12.8)	15.9	(7.2)	25.0	(12.0)	26.2	(6.4)
Q3	12.6	(7.8)	17.0	(6.1)	8.9	(8.2)	36.7	(18.3)	43.9	(15.4)
Q4	20.0	(4.6)	29.5	(14.3)	42.3	(10.8)	50.8	(12.4)	75.8	(27.8)
Q5	87.9	(20.3)	102.0	(17.9)	125.0	(38.3)	262.0	(49.8)	201.0	(71.0)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

Note: Values provided in 1,000 euro. Values <1,000 are rounded to the nearest 10 euro, those >1,000 euro and <100,000 euro are rounded to the nearest 100 euro and those >100,000 euro are rounded to the nearest 1,000 euro. Standard errors <1,000 are rounded to the nearest multiple of 10, those >10,000 are rounded to the nearest multiple of 100.

**Table B21: Risky assets, conditional mean
by household characteristic**

Conditional mean Variable	2010		2014		2018		2021		2023	
	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.
All households	101.0	(15.3)	147.0	(18.6)	210.0	(34.2)	431.0	(80.3)	272.0	(77.3)
Gender										
Male	107.0	(16.7)	160.0	(25.8)	228.0	(42.4)	515.0	(108.9)	303.0	(104.1)
Female	83.5	(35.7)	116.0	(22.6)	164.0	(60.1)	220.0	(64.1)	190.0	(41.9)
Age of reference person										
16-34	15.8	(5.5)	32.2	(21.6)	39.9	(9.6)	52.4	(15.9)	50.7	(16.6)
35-44	42.7	(11.0)	81.3	(16.9)	126.0	(55.0)	156.0	(77.8)	69.2	(13.2)
45-54	89.1	(25.2)	178.0	(59.1)	188.0	(62.0)	189.0	(59.0)	221.0	(92.6)
55-64	86.6	(23.1)	200.0	(45.7)	224.0	(41.4)	575.0	(308.7)	313.0	(135.8)
65+	254.0	(59.3)	171.0	(31.5)	348.0	(95.2)	864.0	(221.9)	546.0	(245.9)
Civil status										
Single	37.2	(14.9)	138.0	(40.4)	138.0	(53.7)	202.0	(64.2)	122.0	(64.1)
Couple	109.0	(17.4)	121.0	(15.8)	242.0	(54.2)	424.0	(142.6)	324.0	(121.5)
Divorced	137.0	(67.4)	209.0	(117.7)	78.5	(24.4)	932.0	(390.8)	305.0	(174.5)
Widowed	173.0	(124.3)	287.0	(92.0)	343.0	(172.9)	656.0	(296.0)	318.0	(106.4)
Country of birth										
Luxembourg	112.0	(22.3)	126.0	(18.9)	200.0	(49.3)	226.0	(43.7)	190.0	(72.6)
Outside Luxembourg	79.2	(16.2)	180.0	(40.6)	224.0	(45.2)	584.0	(137.0)	322.0	(116.2)
Education level										
Low (ISCED=0:2)	126.0	(56.8)	167.0	(58.7)	57.0	(23.7)	241.0	(161.1)	114.0	(50.7)
Middle (ISCED=3,4)	88.4	(20.3)	129.0	(26.3)	152.0	(40.2)	207.0	(44.0)	146.0	(33.9)
High (ISCED=5-8)	104.0	(22.0)	155.0	(30.2)	262.0	(53.4)	543.0	(117.9)	324.0	(106.2)
Employment status										
Employed	57.7	(13.1)	121.0	(26.6)	155.0	(32.1)	155.0	(54.6)	108.0	(16.5)
Self-employed	66.4	(14.3)	167.0	(72.7)	229.0	(125.1)	410.0	(157.9)	465.0	(264.9)
Unemployed	63.9	(53.7)	93.8	(47.3)	11.6	(9.5)	203.0	(126.0)	119.0	(49.8)
Retired	216.0	(44.2)	190.0	(36.9)	302.0	(79.1)	856.0	(218.8)	522.0	(208.7)
Other	66.9	(56.3)	142.0	(58.7)	34.4	(68.4)	234.0	(127.2)	98.7	(66.4)
Housing status										
Owner-outright	173.0	(32.0)	168.0	(24.4)	258.0	(59.4)	621.0	(189.4)	359.0	(95.6)
Owner with mortgage	44.2	(7.7)	140.0	(45.4)	177.0	(47.6)	138.0	(23.2)	164.0	(85.2)
Renter or other	38.4	(9.7)	92.9	(30.0)	129.0	(64.5)	385.0	(108.2)	250.0	(191.9)
Gross Income quintile										
Q1	146.0	(102.2)	82.9	(39.3)	126.0	(172.0)	180.0	(64.3)	252.0	(169.3)
Q2	22.4	(9.9)	115.0	(81.5)	199.0	(184.3)	325.0	(150.3)	253.0	(154.7)
Q3	50.1	(22.6)	107.0	(35.7)	156.0	(60.9)	133.0	(42.5)	129.0	(55.9)
Q4	104.0	(37.7)	95.4	(21.0)	166.0	(54.4)	343.0	(181.6)	177.0	(45.1)
Q5	122.0	(23.0)	210.0	(37.0)	269.0	(58.1)	843.0	(209.3)	447.0	(214.2)
Net wealth quintile										
Q1	12.6	(6.0)	7.7	(6.4)	22.7	(13.0)	25.9	(14.6)	14.4	(3.9)
Q2	17.7	(5.6)	30.8	(10.7)	28.6	(8.1)	61.9	(15.6)	45.4	(9.7)
Q3	26.5	(6.8)	32.2	(8.9)	33.3	(10.4)	66.3	(16.7)	73.6	(18.0)
Q4	39.8	(8.7)	75.3	(13.8)	76.0	(20.4)	107.0	(20.7)	134.0	(27.1)
Q5	197.0	(32.4)	247.0	(35.9)	377.0	(70.7)	1,004.0	(201.1)	565.0	(183.8)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

Note: Values provided in 1,000 euro. Values <1,000 are rounded to the nearest 10 euro, those >1,000 euro and <100,000 euro are rounded to the nearest 100 euro and those >100,000 euro are rounded to the nearest 1,000 euro. Standard errors <1,000 are rounded to the nearest multiple of 10, those >10,000 are rounded to the nearest multiple of 100.

**Table B22: Total household debt, participation rate
by household characteristic**

Participation rate (in %) Variable	2010		2014		2018		2021		2023	
	Share	Std.Err.	Share	Std.Err.	Share	Std.Err.	Share	Std.Err.	Share	Std.Err.
All households	58.3	(1.6)	54.6	(1.4)	53.2	(1.4)	53.9	(1.6)	50.4	(1.8)
Gender										
Male	59.6	(2.3)	55.6	(1.9)	52.4	(1.8)	54.4	(1.9)	52.0	(2.3)
Female	56.6	(2.6)	53.1	(2.2)	54.3	(2.2)	53.1	(2.8)	48.2	(2.9)
Age of reference person										
16-34	70.3	(4.0)	65.8	(3.6)	68.6	(3.5)	54.1	(3.8)	57.5	(3.9)
35-44	77.8	(3.3)	67.1	(3.2)	66.2	(3.4)	62.9	(3.5)	57.6	(3.7)
45-54	70.1	(3.6)	68.5	(2.9)	67.7	(2.8)	71.3	(3.0)	67.1	(3.8)
55-64	54.9	(4.4)	55.6	(3.4)	44.4	(3.4)	56.2	(3.6)	50.8	(4.3)
65+	16.2	(3.3)	17.0	(2.5)	21.7	(2.8)	22.4	(3.1)	21.2	(4.0)
Civil status										
Single	60.2	(3.7)	51.7	(3.2)	49.9	(2.9)	53.5	(2.8)	48.6	(3.4)
Couple	63.8	(2.2)	61.3	(1.8)	60.6	(1.8)	57.3	(2.0)	55.0	(2.3)
Divorced	64.3	(5.1)	59.5	(4.0)	54.6	(3.9)	51.5	(4.6)	49.8	(5.7)
Widowed	12.7	(4.2)	20.5	(4.3)	18.9	(3.9)	27.5	(7.7)	17.4	(7.0)
Country of birth										
Luxembourg	56.2	(2.2)	53.4	(1.8)	53.2	(1.9)	52.5	(2.4)	55.5	(2.8)
Outside Luxembourg	61.2	(2.9)	56.1	(2.2)	53.2	(2.1)	55.0	(2.1)	47.4	(2.4)
Education level										
Low (ISCED=0:2)	52.0	(3.2)	40.8	(2.7)	45.6	(2.8)	58.4	(4.2)	42.1	(5.0)
Middle (ISCED=3,4)	56.8	(2.8)	57.3	(2.3)	54.4	(2.4)	54.3	(2.9)	52.4	(3.5)
High (ISCED=5-8)	69.3	(3.3)	64.3	(2.6)	57.4	(2.4)	52.0	(2.0)	52.2	(2.5)
Employment status										
Employed	73.1	(2.2)	68.0	(2.0)	65.2	(1.9)	62.6	(1.9)	61.7	(2.2)
Self-employed	71.5	(5.3)	64.2	(5.2)	76.3	(6.4)	61.7	(6.8)	61.1	(8.8)
Unemployed	44.7	(11.6)	49.8	(8.2)	41.4	(9.7)	78.3	(7.7)	45.4	(10.0)
Retired	26.2	(3.5)	29.7	(2.7)	27.4	(2.5)	32.6	(3.1)	29.9	(3.4)
Other	50.2	(5.9)	41.4	(5.0)	44.0	(5.7)	39.6	(9.0)	39.8	(9.5)
Housing status										
Owner-outright	29.6	(2.8)	29.2	(2.1)	33.0	(2.1)	30.9	(2.6)	27.5	(2.8)
Owner with mortgage	100.0	-	100.0	-	100.0	-	100.0	-	100.0	-
Renter or other	46.8	(3.3)	43.9	(2.7)	40.1	(2.7)	43.0	(2.9)	37.5	(3.0)
Gross Income quintile										
Q1	39.6	(4.5)	30.7	(3.5)	32.8	(3.6)	47.3	(4.3)	33.9	(4.4)
Q2	51.5	(4.7)	46.7	(3.8)	51.8	(3.8)	49.8	(4.0)	46.0	(4.5)
Q3	59.9	(5.8)	64.8	(3.8)	52.6	(3.4)	53.3	(3.8)	53.5	(4.2)
Q4	68.4	(4.9)	62.7	(3.4)	62.9	(3.4)	59.2	(3.4)	58.3	(4.3)
Q5	72.5	(3.8)	68.2	(2.8)	66.1	(2.9)	60.0	(3.7)	60.9	(4.3)
Net wealth quintile										
Q1	47.3	(4.7)	42.1	(3.6)	41.8	(3.8)	47.4	(4.0)	45.2	(4.5)
Q2	68.6	(4.1)	67.1	(3.4)	62.8	(3.8)	61.4	(3.9)	52.3	(4.7)
Q3	70.4	(4.0)	57.5	(3.6)	58.6	(3.4)	60.9	(4.5)	59.8	(4.6)
Q4	53.0	(4.5)	55.2	(3.3)	52.3	(3.4)	52.7	(4.0)	47.7	(4.3)
Q5	52.4	(3.9)	50.9	(2.9)	50.4	(3.2)	47.1	(3.6)	47.2	(4.4)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

**Table B23: Total household debt, conditional median
by household characteristic**

Conditional median Variable	2010		2014		2018		2021		2023	
	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.
All households	73.4	(8.8)	89.8	(9.4)	91.7	(13.9)	129.0	(16.9)	165.0	(27.3)
Gender										
Male	66.5	(13.5)	90.0	(12.9)	92.5	(19.8)	149.0	(27.6)	187.0	(34.9)
Female	79.6	(13.7)	88.1	(16.8)	92.3	(19.5)	89.9	(32.2)	135.0	(40.0)
Age of reference person										
16-34	135.0	(32.2)	150.0	(31.9)	109.0	(54.8)	63.4	(53.4)	89.9	(90.5)
35-44	121.0	(17.5)	180.0	(31.6)	205.0	(25.7)	304.0	(42.1)	345.0	(43.1)
45-54	50.8	(14.2)	66.8	(19.4)	85.4	(15.4)	142.0	(30.2)	186.0	(42.3)
55-64	29.0	(7.2)	28.0	(6.0)	29.4	(12.1)	55.0	(17.0)	93.0	(23.1)
65+	36.4	(12.1)	23.6	(8.6)	19.0	(4.6)	49.6	(16.7)	48.8	(38.3)
Civil status										
Single	51.7	(21.1)	103.0	(26.9)	78.1	(29.3)	79.1	(32.5)	138.0	(48.9)
Couple	86.4	(8.4)	102.0	(14.6)	112.0	(17.7)	156.0	(31.3)	194.0	(37.0)
Divorced	59.0	(15.7)	50.7	(21.7)	57.4	(32.6)	102.0	(37.4)	116.0	(54.4)
Widowed	17.2	(13.9)	19.1	(6.0)	23.5	(23.8)	170.0	(129.0)	67.8	(122.2)
Country of birth										
Luxembourg	90.0	(10.8)	97.5	(16.4)	100.0	(18.4)	157.0	(24.2)	201.0	(37.4)
Outside Luxembourg	52.0	(13.3)	85.0	(12.6)	80.4	(20.4)	109.0	(25.6)	138.0	(34.9)
Education level										
Low (ISCED=0:2)	42.2	(9.9)	45.9	(10.4)	27.6	(15.4)	56.5	(26.3)	59.7	(43.2)
Middle (ISCED=3,4)	71.5	(12.4)	53.2	(13.8)	54.2	(19.7)	81.3	(20.1)	114.0	(37.9)
High (ISCED=5-8)	122.0	(20.2)	163.0	(23.0)	170.0	(30.3)	232.0	(28.2)	246.0	(39.8)
Employment status										
Employed	95.0	(11.0)	130.0	(12.1)	135.0	(15.1)	159.0	(27.1)	227.0	(29.4)
Self-employed	130.0	(60.5)	213.0	(67.6)	139.0	(60.7)	301.0	(90.0)	326.0	(121.4)
Unemployed	16.7	(33.8)	19.0	(20.5)	17.6	(54.5)	35.3	(48.4)	31.4	(90.4)
Retired	29.8	(7.3)	20.7	(4.6)	20.1	(3.5)	47.0	(11.4)	80.2	(26.0)
Other	35.0	(13.4)	22.2	(11.9)	32.0	(26.4)	16.9	(63.1)	24.2	(65.1)
Housing status										
Owner-outright	21.6	(4.2)	19.2	(3.9)	20.0	(2.4)	20.9	(3.6)	30.8	(11.2)
Owner with mortgage	145.0	(16.2)	220.0	(13.7)	246.0	(19.5)	349.0	(19.5)	402.0	(21.7)
Renter or other	10.0	(2.3)	16.7	(3.0)	9.7	(1.6)	20.1	(4.3)	17.3	(3.9)
Gross Income quintile										
Q1	8.6	(3.9)	13.4	(7.5)	12.1	(5.5)	29.9	(14.8)	26.8	(33.5)
Q2	42.1	(19.9)	57.6	(29.3)	19.0	(8.5)	44.2	(28.6)	67.3	(33.0)
Q3	73.3	(23.5)	85.6	(17.0)	98.2	(33.3)	76.0	(33.5)	122.0	(46.1)
Q4	96.2	(18.7)	98.8	(22.5)	142.0	(29.3)	246.0	(43.1)	243.0	(61.4)
Q5	132.0	(23.5)	195.0	(28.1)	214.0	(29.4)	318.0	(56.9)	364.0	(56.0)
Net wealth quintile										
Q1	9.0	(2.5)	12.6	(2.2)	7.9	(1.6)	17.5	(4.6)	15.6	(4.8)
Q2	154.0	(29.8)	166.0	(28.8)	199.0	(34.5)	216.0	(53.3)	232.0	(79.7)
Q3	88.4	(14.8)	94.3	(23.9)	172.0	(20.3)	155.0	(25.0)	255.0	(39.0)
Q4	66.4	(15.7)	81.8	(18.4)	60.7	(18.9)	90.2	(40.7)	154.0	(43.2)
Q5	78.1	(17.6)	109.0	(22.9)	104.0	(22.3)	313.0	(57.1)	220.0	(71.3)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

Note: Values provided in 1,000 euro. Values <1,000 are rounded to the nearest 10 euro, those >1,000 euro and <100,000 euro are rounded to the nearest 100 euro and those >100,000 euro are rounded to the nearest 1,000 euro. Standard errors <1,000 are rounded to the nearest multiple of 10, those >10,000 are rounded to the nearest multiple of 100.

**Table B24: Total household debt, conditional mean
by household characteristic**

Conditional mean Variable	2010		2014		2018		2021		2023	
	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.
All households	140.0	(8.4)	178.0	(8.5)	197.0	(10.0)	299.0	(25.8)	297.0	(16.2)
Gender										
Male	136.0	(11.1)	185.0	(12.1)	198.0	(13.0)	357.0	(39.9)	309.0	(20.7)
Female	147.0	(13.7)	170.0	(11.3)	196.0	(15.1)	202.0	(16.3)	279.0	(25.9)
Age of reference person										
16-34	176.0	(17.8)	215.0	(22.2)	221.0	(20.9)	238.0	(29.2)	289.0	(33.0)
35-44	170.0	(13.8)	240.0	(17.6)	278.0	(21.8)	368.0	(30.7)	411.0	(31.1)
45-54	112.0	(13.3)	160.0	(14.5)	185.0	(20.5)	372.0	(85.4)	300.0	(31.1)
55-64	104.0	(34.8)	105.0	(17.1)	108.0	(13.1)	208.0	(31.1)	223.0	(36.1)
65+	65.0	(19.5)	75.6	(19.9)	89.4	(26.7)	183.0	(43.5)	162.0	(57.6)
Civil status										
Single	135.0	(19.3)	174.0	(17.0)	170.0	(15.3)	192.0	(16.6)	265.0	(27.4)
Couple	154.0	(10.9)	199.0	(12.0)	224.0	(15.2)	331.0	(24.7)	321.0	(21.4)
Divorced	108.0	(15.9)	146.0	(18.9)	150.0	(19.9)	424.0	(173.0)	258.0	(43.9)
Widowed	42.7	(17.4)	29.9	(7.2)	132.0	(36.7)	309.0	(125.1)	203.0	(122.3)
Country of birth										
Luxembourg	154.0	(13.2)	195.0	(12.3)	213.0	(15.1)	331.0	(50.6)	316.0	(23.3)
Outside Luxembourg	123.0	(10.4)	157.0	(10.8)	182.0	(13.1)	274.0	(23.6)	284.0	(21.9)
Education level										
Low (ISCED=0:2)	91.9	(9.8)	119.0	(12.8)	106.0	(11.6)	171.0	(29.7)	192.0	(45.4)
Middle (ISCED=3,4)	135.0	(15.9)	155.0	(13.2)	174.0	(15.3)	287.0	(69.1)	235.0	(22.1)
High (ISCED=5-8)	196.0	(16.9)	241.0	(16.6)	271.0	(19.1)	358.0	(26.2)	366.0	(25.5)
Employment status										
Employed	147.0	(8.4)	194.0	(10.1)	225.0	(12.6)	307.0	(20.4)	327.0	(18.1)
Self-employed	300.0	(55.6)	365.0	(58.3)	221.0	(35.1)	763.0	(377.5)	388.0	(71.4)
Unemployed	53.5	(26.0)	57.8	(22.1)	122.0	(45.3)	122.0	(37.0)	184.0	(82.4)
Retired	78.4	(31.9)	89.8	(20.1)	87.6	(17.3)	185.0	(36.9)	203.0	(41.8)
Other	58.8	(10.2)	124.0	(29.7)	124.0	(26.4)	132.0	(62.2)	186.0	(99.0)
Housing status										
Owner-outright	71.7	(21.9)	77.6	(10.9)	106.0	(20.6)	115.0	(23.7)	163.0	(37.3)
Owner with mortgage	197.0	(11.2)	268.0	(12.4)	303.0	(12.5)	479.0	(46.6)	467.0	(20.9)
Renter or other	64.4	(11.8)	74.9	(12.8)	69.5	(14.5)	114.0	(17.8)	78.3	(13.4)
Gross Income quintile										
Q1	40.0	(10.8)	68.8	(15.2)	69.2	(15.3)	136.0	(25.5)	162.0	(39.6)
Q2	118.0	(25.7)	137.0	(18.8)	93.6	(14.5)	160.0	(26.0)	169.0	(24.2)
Q3	122.0	(17.1)	143.0	(15.5)	164.0	(18.8)	207.0	(29.5)	256.0	(30.4)
Q4	155.0	(16.6)	190.0	(19.9)	233.0	(28.4)	334.0	(29.2)	334.0	(33.6)
Q5	213.0	(20.4)	279.0	(20.4)	333.0	(28.1)	593.0	(106.4)	473.0	(42.4)
Net wealth quintile										
Q1	70.0	(18.4)	117.0	(29.6)	75.8	(20.3)	143.0	(31.5)	169.0	(34.7)
Q2	176.0	(15.5)	193.0	(13.1)	231.0	(17.9)	278.0	(31.3)	306.0	(35.3)
Q3	134.0	(13.8)	176.0	(19.1)	217.0	(22.8)	231.0	(18.5)	323.0	(30.0)
Q4	115.0	(16.1)	162.0	(20.5)	174.0	(27.8)	224.0	(28.6)	290.0	(30.3)
Q5	190.0	(32.2)	230.0	(23.4)	255.0	(30.7)	654.0	(131.7)	388.0	(51.7)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

Note: Values provided in 1,000 euro. Values <1,000 are rounded to the nearest 10 euro, those >1,000 euro and <100,000 euro are rounded to the nearest 100 euro and those >100,000 euro are rounded to the nearest 1,000 euro. Standard errors <1,000 are rounded to the nearest multiple of 10, those >10,000 are rounded to the nearest multiple of 100.

**Table B25: Total mortgage debt, participation rate
by household characteristic**

Participation rate (in %) Variable	2010		2014		2018		2021		2023	
	Share	Std.Err.	Share	Std.Err.	Share	Std.Err.	Share	Std.Err.	Share	Std.Err.
All households	38.8	(1.6)	35.2	(1.3)	31.2	(1.2)	32.6	(1.4)	32.8	(1.6)
Gender										
Male	38.7	(2.2)	35.8	(1.8)	31.3	(1.5)	34.5	(1.7)	35.5	(2.1)
Female	38.8	(2.5)	34.4	(2.0)	31.2	(1.9)	29.4	(2.3)	28.8	(2.6)
Age of reference person										
16-34	44.9	(4.3)	39.7	(3.6)	37.3	(3.6)	25.4	(3.2)	27.6	(3.3)
35-44	58.7	(3.7)	51.9	(3.4)	47.9	(3.5)	43.3	(3.4)	42.9	(3.6)
45-54	47.7	(3.9)	46.9	(3.0)	44.2	(2.8)	48.4	(3.4)	46.5	(4.1)
55-64	31.0	(4.1)	31.5	(3.0)	22.2	(2.5)	30.8	(3.3)	36.3	(4.0)
65+	7.6	(2.3)	5.6	(1.4)	5.8	(1.4)	11.4	(2.4)	10.1	(3.1)
Civil status										
Single	35.6	(3.7)	32.4	(2.9)	27.0	(2.6)	27.4	(2.4)	29.3	(2.9)
Couple	46.1	(2.2)	42.6	(1.9)	38.8	(1.8)	37.0	(2.0)	37.2	(2.3)
Divorced	38.3	(5.1)	34.0	(3.8)	28.8	(3.2)	32.3	(4.2)	31.4	(4.7)
Widowed	5.5	(2.0)	6.6	(2.4)	5.3	(1.8)	19.6	(6.5)	9.4	(5.8)
Country of birth										
Luxembourg	39.4	(2.2)	33.9	(1.6)	33.1	(1.7)	35.5	(2.2)	37.0	(2.6)
Outside Luxembourg	37.9	(2.7)	36.9	(2.0)	29.4	(1.8)	30.3	(1.9)	30.2	(2.1)
Education level										
Low (ISCED=0:2)	29.7	(2.8)	24.8	(2.3)	20.1	(2.2)	28.0	(3.9)	21.4	(4.3)
Middle (ISCED=3,4)	37.9	(2.8)	33.6	(2.2)	30.5	(2.2)	32.2	(2.5)	30.8	(3.1)
High (ISCED=5-8)	52.4	(3.4)	47.3	(2.6)	39.9	(2.3)	34.4	(1.9)	38.0	(2.2)
Employment status										
Employed	51.7	(2.5)	48.1	(1.9)	42.4	(1.7)	39.8	(1.9)	41.6	(2.1)
Self-employed	52.5	(5.7)	52.2	(5.4)	51.5	(7.3)	47.2	(7.2)	45.4	(8.4)
Unemployed	24.6	(9.9)	22.3	(7.2)	13.0	(5.4)	25.7	(7.9)	20.2	(8.2)
Retired	13.1	(2.5)	12.5	(1.8)	7.9	(1.4)	17.5	(2.5)	18.3	(3.0)
Other	25.7	(5.0)	18.9	(3.8)	24.2	(4.8)	13.9	(5.6)	18.8	(7.2)
Housing status										
Owner-outright	6.6	(1.3)	6.4	(1.0)	5.6	(0.9)	5.5	(1.1)	7.9	(1.8)
Owner with mortgage	100.0	-	100.0	-	100.0	-	100.0	-	100.0	-
Renter or other	11.3	(2.0)	11.3	(1.7)	6.6	(1.2)	9.4	(1.5)	9.5	(1.7)
Gross Income quintile										
Q1	12.1	(3.0)	12.7	(2.5)	11.0	(2.2)	17.6	(3.2)	13.7	(3.0)
Q2	30.8	(4.8)	26.4	(3.3)	20.4	(2.9)	22.8	(3.2)	25.2	(3.7)
Q3	40.3	(6.1)	39.7	(3.8)	32.6	(3.5)	29.8	(3.4)	34.8	(3.7)
Q4	54.2	(4.9)	43.3	(3.4)	41.2	(3.5)	44.6	(3.3)	41.7	(3.7)
Q5	56.8	(3.7)	54.1	(2.9)	51.1	(3.1)	48.5	(3.4)	48.8	(4.0)
Net wealth quintile										
Q1	8.4	(2.8)	5.7	(1.8)	5.4	(1.6)	7.0	(2.2)	8.2	(1.9)
Q2	51.2	(4.1)	52.1	(3.6)	44.5	(3.6)	43.5	(4.4)	34.7	(3.9)
Q3	56.2	(4.6)	41.8	(3.3)	39.9	(3.4)	43.2	(4.2)	47.0	(4.4)
Q4	41.0	(4.3)	37.3	(3.1)	30.6	(2.9)	30.1	(3.7)	36.2	(4.1)
Q5	37.2	(3.5)	39.1	(2.8)	35.9	(2.8)	39.0	(3.2)	37.9	(4.1)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

**Table B26: Total mortgage debt, conditional median
by household characteristic**

Conditional median Variable	2010		2014		2018		2021		2023	
	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.
All households	127.0	(10.9)	200.0	(16.6)	233.0	(15.7)	316.0	(23.3)	343.0	(25.1)
Gender										
Male	125.0	(14.8)	180.0	(20.5)	236.0	(19.0)	361.0	(32.1)	335.0	(29.7)
Female	133.0	(19.6)	216.0	(22.0)	231.0	(24.9)	270.0	(38.3)	356.0	(46.4)
Age of reference person										
16-34	230.0	(19.2)	280.0	(16.8)	350.0	(25.8)	388.0	(31.4)	482.0	(48.0)
35-44	169.0	(19.0)	242.0	(14.3)	289.0	(21.9)	414.0	(40.1)	438.0	(42.3)
45-54	90.0	(12.7)	150.0	(16.4)	161.0	(21.2)	243.0	(42.6)	328.0	(46.5)
55-64	48.0	(10.0)	84.0	(16.3)	125.0	(14.5)	171.0	(51.2)	149.0	(36.1)
65+	60.0	(37.7)	64.0	(61.4)	121.0	(66.7)	148.0	(105.8)	130.0	(108.1)
Civil status										
Single	138.0	(23.2)	210.0	(21.4)	249.0	(24.9)	284.0	(32.8)	326.0	(43.5)
Couple	127.0	(16.3)	200.0	(22.6)	232.0	(23.6)	350.0	(24.1)	355.0	(32.1)
Divorced	117.0	(29.6)	163.0	(47.1)	185.0	(31.8)	230.0	(62.3)	288.0	(81.4)
Widowed	85.4	(48.2)	42.9	(23.5)	350.0	(99.2)	322.0	(151.6)	174.0	(225.1)
Country of birth										
Luxembourg	134.0	(15.6)	230.0	(18.0)	234.0	(24.5)	274.0	(26.9)	348.0	(32.5)
Outside Luxembourg	119.0	(16.2)	150.0	(18.5)	233.0	(21.6)	368.0	(31.9)	338.0	(36.5)
Education level										
Low (ISCED=0:2)	104.0	(16.7)	111.0	(24.3)	164.0	(17.2)	190.0	(47.2)	286.0	(94.4)
Middle (ISCED=3,4)	119.0	(19.0)	165.0	(31.0)	210.0	(34.7)	270.0	(40.0)	271.0	(44.8)
High (ISCED=5-8)	176.0	(22.6)	238.0	(16.1)	289.0	(21.5)	382.0	(33.5)	386.0	(27.6)
Employment status										
Employed	150.0	(13.8)	214.0	(15.0)	242.0	(16.8)	340.0	(19.3)	371.0	(26.1)
Self-employed	250.0	(44.1)	312.0	(73.8)	301.0	(94.0)	420.0	(80.8)	394.0	(100.9)
Unemployed	61.0	(63.1)	62.8	(55.8)	308.0	(93.0)	286.0	(100.2)	364.0	(196.6)
Retired	42.5	(13.6)	72.0	(28.4)	138.0	(39.8)	129.0	(53.3)	148.0	(69.7)
Other	68.0	(15.8)	146.0	(78.8)	146.0	(64.0)	218.0	(173.0)	264.0	(132.4)
Housing status										
Owner-outright	65.5	(33.9)	149.0	(50.3)	240.0	(56.2)	295.0	(86.1)	124.0	(50.6)
Owner with mortgage	127.0	(13.4)	210.0	(15.7)	233.0	(17.8)	334.0	(20.5)	394.0	(22.1)
Renter or other	143.0	(39.5)	106.0	(35.1)	230.0	(93.5)	222.0	(46.5)	103.0	(31.8)
Gross Income quintile										
Q1	78.5	(39.4)	82.6	(46.5)	142.0	(30.7)	247.0	(74.1)	298.0	(91.2)
Q2	133.0	(29.2)	174.0	(33.3)	179.0	(26.0)	270.0	(61.4)	218.0	(41.6)
Q3	113.0	(26.9)	150.0	(34.6)	218.0	(40.7)	233.0	(47.7)	316.0	(62.7)
Q4	114.0	(21.6)	198.0	(33.6)	257.0	(30.2)	342.0	(34.2)	364.0	(44.2)
Q5	191.0	(27.9)	249.0	(16.5)	301.0	(30.2)	404.0	(39.0)	434.0	(55.8)
Net wealth quintile										
Q1	199.0	(54.5)	480.0	(183.2)	387.0	(160.7)	470.0	(80.7)	476.0	(105.3)
Q2	224.0	(24.9)	234.0	(22.1)	290.0	(31.2)	323.0	(39.8)	414.0	(52.4)
Q3	102.0	(17.2)	162.0	(36.5)	216.0	(20.3)	225.0	(37.5)	319.0	(39.8)
Q4	90.4	(15.5)	160.0	(31.3)	146.0	(29.3)	288.0	(52.6)	278.0	(60.6)
Q5	108.0	(26.3)	155.0	(28.1)	215.0	(41.3)	408.0	(57.3)	319.0	(56.3)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

Note: Values provided in 1,000 euro. Values <1,000 are rounded to the nearest 10 euro, those >1,000 euro and <100,000 euro are rounded to the nearest 100 euro and those >100,000 euro are rounded to the nearest 1,000 euro. Standard errors <1,000 are rounded to the nearest multiple of 10, those >10,000 are rounded to the nearest multiple of 100.

**Table B27: Total mortgage debt, conditional mean
by household characteristic**

Conditional mean Variable	2010		2014		2018		2021		2023	
	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.
All households	190.0	(10.8)	252.0	(11.3)	306.0	(14.1)	450.0	(39.6)	413.0	(20.2)
Gender										
Male	190.0	(16.2)	269.0	(18.2)	284.0	(13.5)	539.0	(70.3)	414.0	(25.3)
Female	182.0	(14.2)	250.0	(16.2)	309.0	(22.3)	322.0	(21.9)	411.0	(35.5)
Age of reference person										
16-34	260.0	(19.6)	347.0	(33.5)	372.0	(26.6)	477.0	(48.1)	501.0	(37.9)
35-44	206.0	(16.0)	310.0	(22.2)	365.0	(26.4)	471.0	(28.7)	503.0	(31.4)
45-54	139.0	(17.9)	214.0	(19.6)	214.0	(16.0)	547.0	(142.8)	406.0	(35.3)
55-64	122.0	(54.5)	124.0	(21.1)	177.0	(24.2)	352.0	(60.2)	285.0	(46.8)
65+	105.0	(40.1)	192.0	(56.5)	193.0	(85.1)	296.0	(84.9)	292.0	(109.1)
Civil status										
Single	197.0	(31.7)	250.0	(22.5)	277.0	(19.4)	322.0	(21.5)	380.0	(30.2)
Couple	189.0	(12.4)	274.0	(17.1)	309.0	(17.6)	475.0	(36.9)	434.0	(27.2)
Divorced	164.0	(21.7)	244.0	(32.3)	252.0	(32.3)	687.0	(314.5)	369.0	(58.1)
Widowed	107.0	(21.2)	72.1	(19.6)	371.0	(184.4)	509.0	(261.8)	345.0	(163.7)
Country of birth										
Luxembourg	190.0	(15.4)	283.0	(18.9)	289.0	(17.5)	453.0	(86.2)	421.0	(27.9)
Outside Luxembourg	181.0	(15.3)	231.0	(14.4)	301.0	(18.4)	473.0	(40.1)	407.0	(28.5)
Education level										
Low (ISCED=0:2)	135.0	(14.1)	184.0	(20.8)	200.0	(18.5)	312.0	(54.7)	338.0	(68.5)
Middle (ISCED=3,4)	175.0	(19.9)	233.0	(19.0)	276.0	(22.3)	473.0	(126.1)	328.0	(26.8)
High (ISCED=5-8)	240.0	(20.8)	328.0	(21.9)	348.0	(19.3)	509.0	(39.2)	470.0	(28.4)
Employment status										
Employed	196.0	(10.6)	264.0	(13.4)	305.0	(14.2)	441.0	(28.3)	436.0	(20.2)
Self-employed	378.0	(107.8)	443.0	(75.4)	293.0	(41.9)	1,276.0	(776.0)	471.0	(75.0)
Unemployed	103.0	(43.8)	126.0	(74.7)	370.0	(75.1)	281.0	(70.4)	383.0	(112.5)
Retired	79.6	(23.3)	127.0	(31.0)	193.0	(46.1)	310.0	(76.4)	300.0	(63.2)
Other	90.5	(18.4)	254.0	(60.8)	224.0	(43.5)	372.0	(92.3)	368.0	(167.2)
Housing status										
Owner-outright	-	-	-	-	-	-	-	-	-	-
Owner with mortgage	187.0	(11.0)	261.0	(12.4)	295.0	(12.4)	463.0	(46.4)	454.0	(20.3)
Renter or other	-	-	-	-	-	-	-	-	-	-
Gross Income quintile										
Q1	94.4	(24.7)	152.0	(31.3)	190.0	(33.9)	300.0	(46.4)	343.0	(75.7)
Q2	181.0	(46.1)	197.0	(22.4)	178.0	(23.0)	279.0	(44.5)	280.0	(32.4)
Q3	151.0	(18.7)	205.0	(19.8)	242.0	(21.8)	340.0	(42.2)	344.0	(34.4)
Q4	184.0	(20.1)	266.0	(28.7)	315.0	(23.3)	410.0	(35.7)	412.0	(33.6)
Q5	239.0	(21.9)	364.0	(28.5)	389.0	(28.9)	752.0	(154.7)	551.0	(45.8)
Net wealth quintile										
Q1	216.0	(97.8)	784.0	(199.3)	614.0	(171.1)	773.0	(226.6)	567.0	(85.3)
Q2	237.0	(17.5)	249.0	(14.3)	312.0	(19.7)	384.0	(32.4)	416.0	(32.4)
Q3	154.0	(16.7)	223.0	(22.9)	271.0	(22.6)	302.0	(23.8)	381.0	(33.4)
Q4	134.0	(20.4)	212.0	(24.8)	243.0	(36.4)	349.0	(37.7)	363.0	(35.4)
Q5	235.0	(46.1)	305.0	(36.6)	311.0	(39.0)	887.0	(219.7)	463.0	(58.8)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

Note: Values provided in 1,000 euro. Values <1,000 are rounded to the nearest 10 euro, those >1,000 euro and <100,000 euro are rounded to the nearest 100 euro and those >100,000 euro are rounded to the nearest 1,000 euro. Standard errors <1,000 are rounded to the nearest multiple of 10, those >10,000 are rounded to the nearest multiple of 100.

**Table B28: HMR mortgage debt, participation rate
by household characteristic**

Participation rate (in %) Variable	2010		2014		2018		2021		2023	
	Share	Std.Err.	Share	Std.Err.	Share	Std.Err.	Share	Std.Err.	Share	Std.Err.
All households	32.8	(1.5)	29.1	(1.2)	26.8	(1.1)	27.2	(1.3)	26.4	(1.5)
Gender										
Male	31.9	(2.1)	29.3	(1.7)	25.7	(1.5)	28.7	(1.6)	28.1	(1.9)
Female	34.1	(2.5)	28.8	(1.9)	28.4	(1.9)	24.7	(2.2)	23.8	(2.4)
Age of reference person										
16-34	38.7	(4.1)	33.5	(3.5)	34.6	(3.4)	20.0	(3.0)	23.3	(3.0)
35-44	52.6	(3.7)	44.5	(3.3)	41.7	(3.4)	38.2	(3.3)	37.8	(3.4)
45-54	37.0	(3.7)	39.3	(2.9)	38.9	(2.8)	41.0	(3.1)	39.0	(3.8)
55-64	25.0	(3.9)	23.9	(2.8)	16.5	(2.3)	25.2	(3.0)	27.6	(3.6)
65+	7.1	(2.3)	3.7	(1.2)	3.5	(1.1)	8.2	(2.0)	3.8	(1.8)
Civil status										
Single	30.2	(3.5)	25.9	(2.8)	23.8	(2.5)	22.6	(2.3)	24.6	(2.7)
Couple	38.3	(2.2)	36.1	(1.8)	33.4	(1.7)	31.4	(1.9)	29.6	(2.0)
Divorced	36.0	(5.1)	26.2	(3.5)	24.2	(3.0)	28.1	(4.1)	25.2	(4.2)
Widowed	3.0	(1.2)	5.8	(2.3)	2.7	(1.3)	11.0	(4.5)	6.1	(5.0)
Country of birth										
Luxembourg	35.7	(2.1)	29.2	(1.6)	28.7	(1.6)	29.8	(2.0)	31.6	(2.4)
Outside Luxembourg	28.9	(2.5)	29.0	(1.9)	25.0	(1.7)	25.2	(1.8)	23.1	(2.0)
Education level										
Low (ISCED=0:2)	24.9	(2.6)	20.2	(2.2)	17.9	(2.1)	25.4	(3.6)	18.0	(4.0)
Middle (ISCED=3,4)	33.3	(2.7)	29.3	(2.1)	27.2	(2.1)	28.8	(2.4)	25.5	(2.8)
High (ISCED=5-8)	42.8	(3.4)	37.3	(2.5)	32.9	(2.2)	26.9	(1.7)	29.8	(2.0)
Employment status										
Employed	44.9	(2.4)	40.6	(1.9)	37.1	(1.7)	34.5	(1.8)	34.9	(2.0)
Self-employed	31.0	(5.4)	42.9	(5.3)	42.6	(7.0)	30.2	(6.6)	34.8	(7.8)
Unemployed	19.5	(9.2)	14.5	(6.3)	12.5	(5.4)	22.1	(7.3)	16.8	(7.6)
Retired	11.3	(2.4)	9.7	(1.7)	4.8	(1.1)	13.4	(2.2)	12.3	(2.4)
Other	22.9	(4.9)	14.1	(3.3)	22.7	(4.7)	11.6	(5.2)	14.7	(6.6)
Housing status										
Owner-outright	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-
Owner with mortgage	100.0	-	100.0	-	100.0	-	100.0	-	100.0	-
Renter or other	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-
Gross Income quintile										
Q1	9.4	(2.6)	9.6	(2.2)	10.1	(2.1)	14.9	(2.8)	10.8	(2.7)
Q2	25.3	(4.4)	22.8	(3.2)	17.8	(2.8)	19.3	(3.1)	19.9	(3.3)
Q3	35.1	(5.8)	35.9	(3.8)	28.4	(3.2)	25.8	(3.1)	29.6	(3.6)
Q4	49.0	(5.3)	35.5	(3.2)	36.7	(3.3)	37.7	(3.4)	33.6	(3.4)
Q5	45.3	(3.7)	41.9	(2.8)	41.3	(2.9)	38.8	(3.3)	38.0	(3.7)
Net wealth quintile										
Q1	3.5	(1.6)	4.6	(1.6)	3.6	(1.3)	4.3	(1.9)	6.6	(1.8)
Q2	43.6	(4.2)	42.1	(3.6)	40.7	(3.6)	38.0	(4.2)	27.7	(3.6)
Q3	52.1	(4.5)	37.2	(3.2)	38.3	(3.3)	40.5	(4.2)	41.4	(4.1)
Q4	37.4	(4.3)	34.5	(3.0)	26.6	(2.8)	26.5	(3.9)	31.8	(3.9)
Q5	27.5	(3.3)	27.1	(2.5)	25.0	(2.5)	26.9	(2.9)	24.3	(3.2)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

**Table B29: HMR mortgage debt, conditional median
by household characteristic**

Conditional median Variable	2010		2014		2018		2021		2023	
	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.
All households	122.0	(9.8)	190.0	(17.4)	206.0	(17.1)	302.0	(16.9)	370.0	(24.1)
Gender										
Male	114.0	(14.1)	165.0	(18.9)	202.0	(18.4)	324.0	(29.4)	356.0	(29.8)
Female	127.0	(18.0)	216.0	(25.0)	212.0	(25.5)	264.0	(35.3)	388.0	(36.4)
Age of reference person										
16-34	241.0	(18.3)	280.0	(15.4)	350.0	(27.1)	394.0	(28.2)	504.0	(40.3)
35-44	152.0	(21.9)	240.0	(14.3)	259.0	(22.2)	372.0	(35.5)	444.0	(38.5)
45-54	81.3	(14.3)	130.0	(17.0)	140.0	(14.9)	225.0	(33.0)	350.0	(41.2)
55-64	47.0	(7.8)	48.0	(16.1)	125.0	(16.7)	159.0	(49.7)	143.0	(38.7)
65+	60.0	(41.5)	72.9	(114.7)	49.5	(52.9)	120.0	(98.0)	159.0	(152.0)
Civil status										
Single	133.0	(24.9)	208.0	(21.4)	249.0	(25.7)	288.0	(32.2)	350.0	(38.7)
Couple	122.0	(13.9)	183.0	(25.2)	200.0	(18.3)	324.0	(23.7)	388.0	(30.2)
Divorced	111.0	(26.9)	167.0	(46.4)	180.0	(27.7)	242.0	(72.5)	316.0	(71.3)
Widowed	108.0	(27.7)	52.6	(23.2)	369.0	(132.7)	300.0	(114.8)	668.0	(253.9)
Country of birth										
Luxembourg	125.0	(12.7)	214.0	(21.3)	200.0	(23.1)	254.0	(27.5)	352.0	(31.9)
Outside Luxembourg	117.0	(19.9)	155.0	(19.5)	210.0	(21.2)	350.0	(23.9)	384.0	(32.3)
Education level										
Low (ISCED=0:2)	103.0	(16.5)	126.0	(28.6)	160.0	(14.9)	191.0	(51.3)	300.0	(87.3)
Middle (ISCED=3,4)	105.0	(15.8)	147.0	(21.6)	192.0	(25.9)	264.0	(40.2)	302.0	(44.7)
High (ISCED=5-8)	172.0	(27.3)	240.0	(16.7)	265.0	(23.5)	352.0	(22.4)	406.0	(26.2)
Employment status										
Employed	148.0	(14.4)	201.0	(15.5)	220.0	(18.1)	330.0	(19.5)	398.0	(24.0)
Self-employed	160.0	(79.0)	243.0	(64.9)	212.0	(68.4)	410.0	(114.3)	394.0	(79.1)
Unemployed	112.0	(64.2)	85.0	(55.9)	295.0	(82.8)	240.0	(111.8)	515.0	(201.9)
Retired	40.5	(10.4)	48.0	(20.5)	101.0	(51.2)	120.0	(38.3)	165.0	(77.6)
Other	68.0	(18.3)	222.0	(77.7)	178.0	(66.3)	352.0	(181.3)	285.0	(123.9)
Housing status										
Owner-outright	-	-	-	-	-	-	-	-	-	-
Owner with mortgage	122.0	(9.8)	190.0	(17.4)	206.0	(17.1)	302.0	(16.9)	370.0	(24.1)
Renter or other	-	-	-	-	-	-	-	-	-	-
Gross Income quintile										
Q1	75.7	(36.7)	89.4	(50.6)	147.0	(31.6)	254.0	(87.8)	338.0	(72.4)
Q2	139.0	(35.2)	166.0	(28.2)	175.0	(23.3)	244.0	(79.5)	260.0	(47.8)
Q3	113.0	(25.0)	133.0	(24.8)	219.0	(38.3)	232.0	(53.3)	348.0	(51.1)
Q4	115.0	(20.9)	217.0	(37.8)	251.0	(28.1)	338.0	(29.8)	404.0	(44.4)
Q5	154.0	(29.9)	230.0	(24.3)	226.0	(37.7)	374.0	(43.9)	427.0	(47.7)
Net wealth quintile										
Q1	183.0	(69.6)	501.0	(161.0)	470.0	(180.1)	514.0	(154.3)	544.0	(110.4)
Q2	230.0	(19.2)	243.0	(17.2)	285.0	(24.8)	358.0	(34.6)	464.0	(39.2)
Q3	101.0	(15.4)	153.0	(33.3)	210.0	(21.7)	235.0	(40.3)	338.0	(38.1)
Q4	85.4	(15.5)	148.0	(28.1)	130.0	(27.1)	260.0	(46.8)	278.0	(57.5)
Q5	99.3	(22.7)	126.0	(21.3)	145.0	(33.7)	314.0	(58.4)	336.0	(58.3)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

Note: Values provided in 1,000 euro. Values <1,000 are rounded to the nearest 10 euro, those >1,000 euro and <100,000 euro are rounded to the nearest 100 euro and those >100,000 euro are rounded to the nearest 1,000 euro. Standard errors <1,000 are rounded to the nearest multiple of 10, those >10,000 are rounded to the nearest multiple of 100.

**Table B30: HMR mortgage debt, conditional mean
by household characteristic**

Conditional mean Variable	2010		2014		2018		2021		2023	
	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.
All households	169.0	(8.1)	230.0	(10.2)	265.0	(10.1)	350.0	(17.1)	401.0	(15.9)
Gender										
Male	167.0	(11.2)	231.0	(14.5)	257.0	(11.5)	382.0	(24.4)	398.0	(19.7)
Female	170.0	(12.7)	228.0	(13.9)	274.0	(17.9)	291.0	(19.8)	406.0	(30.1)
Age of reference person										
16-34	253.0	(17.6)	318.0	(25.7)	359.0	(23.9)	420.0	(26.9)	524.0	(31.9)
35-44	190.0	(13.9)	268.0	(16.8)	310.0	(17.8)	424.0	(25.4)	479.0	(27.5)
45-54	122.0	(14.9)	184.0	(17.6)	191.0	(14.7)	342.0	(41.4)	386.0	(30.7)
55-64	70.9	(15.3)	106.0	(18.3)	161.0	(22.1)	218.0	(30.2)	241.0	(32.5)
65+	104.0	(40.2)	189.0	(56.8)	155.0	(66.9)	250.0	(71.1)	232.0	(94.4)
Civil status										
Single	160.0	(16.6)	235.0	(19.7)	259.0	(17.8)	300.0	(19.6)	382.0	(28.1)
Couple	176.0	(11.1)	233.0	(13.3)	275.0	(14.0)	376.0	(24.0)	413.0	(20.8)
Divorced	154.0	(20.2)	226.0	(31.9)	227.0	(24.0)	352.0	(62.7)	363.0	(52.8)
Widowed	107.0	(21.2)	64.9	(16.4)	249.0	(80.5)	241.0	(73.2)	485.0	(182.8)
Country of birth										
Luxembourg	166.0	(10.1)	245.0	(15.2)	263.0	(15.0)	301.0	(20.0)	387.0	(21.4)
Outside Luxembourg	173.0	(14.2)	209.0	(12.8)	267.0	(14.5)	397.0	(27.8)	412.0	(23.6)
Education level										
Low (ISCED=0:2)	134.0	(14.1)	177.0	(20.2)	186.0	(17.4)	254.0	(38.0)	333.0	(58.8)
Middle (ISCED=3,4)	155.0	(13.4)	200.0	(14.8)	252.0	(19.0)	312.0	(28.9)	341.0	(25.2)
High (ISCED=5-8)	211.0	(17.0)	286.0	(17.9)	306.0	(14.6)	408.0	(25.2)	446.0	(21.7)
Employment status										
Employed	185.0	(9.5)	237.0	(11.2)	274.0	(11.3)	373.0	(19.9)	431.0	(18.2)
Self-employed	218.0	(40.2)	310.0	(50.8)	270.0	(40.0)	405.0	(65.3)	407.0	(64.5)
Unemployed	103.0	(43.8)	94.4	(48.8)	274.0	(72.1)	264.0	(68.1)	435.0	(108.2)
Retired	76.4	(22.9)	121.0	(29.5)	167.0	(36.5)	215.0	(47.5)	249.0	(47.1)
Other	87.9	(17.9)	239.0	(58.0)	215.0	(42.8)	349.0	(88.3)	292.0	(72.9)
Housing status										
Owner-outright	-	-	-	-	-	-	-	-	-	-
Owner with mortgage	169.0	(8.1)	230.0	(10.2)	265.0	(10.1)	350.0	(17.1)	401.0	(15.9)
Renter or other	-	-	-	-	-	-	-	-	-	-
Gross Income quintile										
Q1	94.4	(24.7)	149.0	(31.4)	181.0	(28.7)	294.0	(46.4)	356.0	(47.5)
Q2	144.0	(22.6)	191.0	(21.4)	177.0	(23.7)	271.0	(45.6)	310.0	(34.6)
Q3	148.0	(17.7)	187.0	(17.0)	232.0	(21.1)	299.0	(32.9)	360.0	(33.5)
Q4	179.0	(19.0)	237.0	(22.5)	293.0	(21.5)	363.0	(30.3)	426.0	(33.3)
Q5	203.0	(18.8)	299.0	(24.2)	320.0	(22.2)	434.0	(45.4)	472.0	(33.0)
Net wealth quintile										
Q1	193.0	(62.1)	645.0	(140.5)	557.0	(131.8)	688.0	(177.2)	601.0	(100.3)
Q2	235.0	(16.4)	246.0	(14.5)	301.0	(19.5)	369.0	(30.7)	464.0	(30.0)
Q3	150.0	(16.6)	201.0	(19.2)	258.0	(20.7)	282.0	(22.0)	388.0	(29.7)
Q4	124.0	(17.9)	196.0	(21.7)	217.0	(31.1)	294.0	(26.0)	330.0	(30.6)
Q5	155.0	(20.5)	217.0	(26.5)	223.0	(26.3)	432.0	(60.7)	388.0	(39.5)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

Note: Values provided in 1,000 euro. Values <1,000 are rounded to the nearest 10 euro, those >1,000 euro and <100,000 euro are rounded to the nearest 100 euro and those >100,000 euro are rounded to the nearest 1,000 euro. Standard errors <1,000 are rounded to the nearest multiple of 10, those >10,000 are rounded to the nearest multiple of 100.

**Table B31: Other real estate property mortgage debt, participation rate
by household characteristic**

Participation rate (in %) Variable	2010		2014		2018		2021		2023	
	Share	Std.Err.	Share	Std.Err.	Share	Std.Err.	Share	Std.Err.	Share	Std.Err.
All households	8.4	(0.9)	9.4	(0.8)	7.2	(0.7)	10.1	(0.8)	11.0	(1.0)
Gender										
Male	9.2	(1.4)	10.2	(1.1)	8.2	(1.0)	11.7	(1.2)	12.5	(1.5)
Female	7.1	(1.3)	8.3	(1.2)	5.7	(0.9)	7.4	(1.2)	8.9	(1.6)
Age of reference person										
16-34	8.7	(2.5)	9.0	(2.1)	4.2	(1.4)	7.5	(1.8)	6.6	(2.0)
35-44	10.5	(2.1)	13.1	(2.2)	12.5	(2.2)	10.6	(1.7)	12.5	(2.0)
45-54	13.1	(2.5)	13.2	(2.0)	9.9	(1.5)	15.7	(2.3)	15.5	(2.7)
55-64	8.2	(2.2)	9.3	(1.8)	6.8	(1.3)	11.7	(2.1)	12.4	(2.7)
65+	0.8	(0.4)	2.1	(0.8)	2.5	(0.9)	4.2	(1.5)	7.3	(2.7)
Civil status										
Single	6.6	(1.8)	8.4	(1.6)	4.6	(1.1)	6.9	(1.3)	7.6	(1.8)
Couple	11.2	(1.4)	11.1	(1.2)	9.4	(1.1)	12.2	(1.2)	13.6	(1.6)
Divorced	4.6	(2.1)	10.5	(2.5)	6.8	(1.7)	9.0	(2.2)	10.0	(3.1)
Widowed	2.5	(1.6)	1.1	(0.9)	3.0	(1.3)	10.8	(5.3)	3.3	(3.0)
Country of birth										
Luxembourg	6.9	(1.1)	8.1	(1.0)	6.9	(0.9)	10.7	(1.3)	10.3	(1.6)
Outside Luxembourg	10.3	(1.7)	11.0	(1.3)	7.4	(1.0)	9.6	(1.1)	11.5	(1.4)
Education level										
Low (ISCED=0:2)	5.5	(1.5)	5.6	(1.3)	3.8	(1.0)	4.5	(1.7)	5.2	(2.2)
Middle (ISCED=3,4)	6.2	(1.3)	7.3	(1.2)	5.4	(1.0)	7.2	(1.2)	8.2	(2.0)
High (ISCED=5-8)	15.6	(2.3)	15.6	(1.8)	11.5	(1.4)	13.9	(1.3)	14.8	(1.6)
Employment status										
Employed	10.0	(1.5)	11.8	(1.2)	8.9	(1.0)	10.9	(1.1)	12.9	(1.4)
Self-employed	29.0	(5.0)	23.3	(4.7)	15.0	(4.8)	28.1	(6.4)	22.4	(6.6)
Unemployed	5.1	(4.6)	9.0	(4.4)	5.2	(3.6)	5.9	(3.4)	3.9	(3.5)
Retired	2.3	(0.9)	3.0	(0.9)	3.2	(0.9)	6.7	(1.7)	7.8	(2.3)
Other	3.2	(2.0)	6.3	(2.2)	4.3	(2.3)	3.0	(2.2)	4.3	(3.8)
Housing status										
Owner-outright	6.6	(1.3)	6.4	(1.0)	5.6	(0.9)	5.5	(1.1)	7.9	(1.8)
Owner with mortgage	7.3	(1.5)	11.1	(1.6)	10.3	(1.6)	17.4	(1.9)	17.4	(2.3)
Renter or other	11.3	(2.0)	11.3	(1.7)	6.6	(1.2)	9.4	(1.5)	9.5	(1.7)
Gross Income quintile										
Q1	2.7	(1.6)	3.3	(1.4)	1.1	(0.6)	3.5	(1.6)	3.5	(1.7)
Q2	5.8	(2.2)	4.0	(1.5)	3.2	(1.3)	4.5	(1.8)	6.8	(2.3)
Q3	6.8	(2.4)	6.8	(2.0)	6.2	(1.9)	6.9	(1.9)	8.1	(2.3)
Q4	8.1	(2.1)	11.3	(2.1)	7.0	(1.6)	13.0	(2.1)	13.6	(2.6)
Q5	18.6	(2.7)	21.5	(2.3)	18.4	(2.2)	22.8	(2.5)	23.1	(3.0)
Net wealth quintile										
Q1	5.1	(2.2)	2.3	(1.0)	1.9	(0.9)	3.2	(1.0)	2.0	(1.0)
Q2	8.2	(2.4)	11.3	(2.4)	6.2	(1.6)	8.5	(2.1)	8.9	(2.4)
Q3	5.4	(2.1)	8.2	(1.9)	3.8	(1.2)	6.0	(1.6)	10.1	(2.5)
Q4	7.2	(2.1)	5.9	(1.5)	6.8	(1.6)	7.4	(1.8)	11.4	(2.6)
Q5	16.0	(2.5)	19.2	(2.2)	17.1	(2.2)	25.3	(2.8)	22.7	(3.5)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

Table B32: Other real estate property mortgage debt, conditional median by household characteristic

Conditional median Variable	2010		2014		2018		2021		2023	
	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.
All households	116.0	(19.5)	150.0	(19.3)	235.0	(35.9)	238.0	(41.1)	143.0	(24.9)
Gender										
Male	111.0	(19.5)	150.0	(25.2)	250.0	(40.3)	265.0	(62.4)	146.0	(31.3)
Female	131.0	(51.3)	150.0	(30.5)	165.0	(59.2)	214.0	(42.5)	128.0	(40.9)
Age of reference person										
16-34	95.0	(43.8)	210.0	(72.4)	254.0	(130.1)	216.0	(73.1)	106.0	(74.6)
35-44	136.0	(34.3)	190.0	(35.1)	304.0	(86.9)	338.0	(97.5)	184.0	(54.1)
45-54	120.0	(37.6)	142.0	(27.0)	222.0	(39.2)	272.0	(69.7)	146.0	(35.0)
55-64	62.0	(82.2)	170.0	(56.9)	132.0	(39.4)	194.0	(68.7)	150.0	(54.8)
65+	34.5	(62.3)	40.0	(27.7)	256.0	(110.3)	230.0	(166.4)	104.0	(92.8)
Civil status										
Single	153.0	(72.5)	157.0	(59.4)	150.0	(115.1)	196.0	(59.4)	114.0	(62.4)
Couple	108.0	(21.4)	170.0	(20.8)	239.0	(38.4)	270.0	(53.0)	150.0	(29.0)
Divorced	128.0	(119.3)	136.0	(39.6)	166.0	(68.0)	188.0	(98.7)	176.0	(82.4)
Widowed	25.0	(7.6)	14.5	(50.2)	350.0	(136.9)	450.0	(343.3)	89.2	(71.9)
Country of birth										
Luxembourg	120.0	(34.1)	204.0	(29.6)	257.0	(35.4)	288.0	(68.9)	206.0	(50.3)
Outside Luxembourg	117.0	(24.8)	112.0	(21.6)	158.0	(47.4)	210.0	(42.9)	109.0	(24.3)
Education level										
Low (ISCED=0:2)	85.0	(46.8)	50.9	(35.4)	144.0	(69.1)	204.0	(175.2)	86.0	(84.1)
Middle (ISCED=3,4)	141.0	(37.2)	208.0	(46.3)	314.0	(52.9)	195.0	(65.6)	104.0	(30.8)
High (ISCED=5-8)	111.0	(21.1)	160.0	(23.1)	222.0	(44.9)	259.0	(57.3)	174.0	(32.3)
Employment status										
Employed	105.0	(22.6)	153.0	(22.3)	242.0	(39.4)	254.0	(45.2)	150.0	(25.7)
Self-employed	250.0	(55.3)	210.0	(74.9)	263.0	(122.1)	339.0	(131.4)	256.0	(95.0)
Unemployed	15.0	(.0)	46.2	(102.9)	140.0	(170.1)	226.0	(119.4)	41.2	(100.0)
Retired	146.0	(249.8)	156.0	(81.2)	250.0	(68.1)	210.0	(140.3)	111.0	(68.6)
Other	45.0	(28.8)	100.0	(73.6)	34.0	(47.6)	180.0	(193.6)	446.0	(1,100.3)
Housing status										
Owner-outright	65.5	(33.9)	149.0	(50.3)	240.0	(56.2)	295.0	(86.1)	124.0	(50.6)
Owner with mortgage	99.9	(30.5)	183.0	(22.6)	242.0	(45.6)	243.0	(79.9)	206.0	(42.1)
Renter or other	143.0	(39.5)	106.0	(35.1)	230.0	(93.5)	222.0	(46.5)	103.0	(31.8)
Gross Income quintile										
Q1	150.0	(64.9)	42.0	(83.8)	87.0	(143.9)	187.0	(149.4)	76.0	(125.6)
Q2	110.0	(173.8)	300.0	(166.8)	218.0	(196.1)	288.0	(196.9)	90.1	(41.6)
Q3	72.0	(79.2)	162.0	(61.6)	131.0	(69.9)	195.0	(110.8)	96.0	(34.7)
Q4	67.8	(36.8)	122.0	(30.1)	230.0	(78.2)	208.0	(70.5)	135.0	(51.7)
Q5	149.0	(34.8)	174.0	(25.6)	262.0	(29.3)	295.0	(70.5)	242.0	(59.7)
Net wealth quintile										
Q1	247.0	(106.2)	145.0	(331.2)	225.0	(294.0)	450.0	(141.2)	259.0	(132.6)
Q2	106.0	(44.8)	113.0	(36.1)	126.0	(105.1)	170.0	(61.3)	101.0	(34.2)
Q3	147.0	(61.5)	175.0	(43.5)	194.0	(75.8)	172.0	(36.7)	97.8	(33.3)
Q4	94.0	(27.8)	185.0	(70.9)	171.0	(96.4)	264.0	(132.7)	137.0	(50.4)
Q5	87.4	(37.6)	170.0	(30.8)	276.0	(31.2)	340.0	(76.8)	204.0	(56.2)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

Note: Values provided in 1,000 euro. Values <1,000 are rounded to the nearest 10 euro, those >1,000 euro and <100,000 euro are rounded to the nearest 100 euro and those >100,000 euro are rounded to the nearest 1,000 euro. Standard errors <1,000 are rounded to the nearest multiple of 10, those >10,000 are rounded to the nearest multiple of 100.

**Table B33: Other real estate property mortgage debt, conditional mean
by household characteristic**

Conditional mean Variable	2010		2014		2018		2021		2023	
	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.
All households	220.0	(36.9)	234.0	(21.7)	345.0	(42.0)	508.0	(106.7)	270.0	(36.1)
Gender										
Male	208.0	(44.8)	258.0	(32.5)	352.0	(54.7)	582.0	(148.7)	284.0	(44.6)
Female	243.0	(71.6)	195.0	(24.4)	331.0	(67.5)	320.0	(48.1)	241.0	(56.8)
Age of reference person										
16-34	182.0	(70.5)	271.0	(47.5)	373.0	(113.3)	371.0	(83.2)	248.0	(70.2)
35-44	229.0	(48.9)	248.0	(45.8)	346.0	(58.5)	500.0	(105.5)	279.0	(41.0)
45-54	183.0	(37.5)	197.0	(28.1)	402.0	(111.2)	699.0	(313.3)	244.0	(44.4)
55-64	353.0	(201.5)	282.0	(67.5)	213.0	(40.2)	415.0	(102.1)	300.0	(104.7)
65+	88.3	(41.5)	67.3	(21.8)	381.0	(152.5)	263.0	(96.3)	282.0	(140.7)
Civil status										
Single	376.0	(140.7)	257.0	(58.2)	305.0	(80.1)	295.0	(58.3)	233.0	(55.7)
Couple	191.0	(36.5)	246.0	(26.5)	370.0	(59.7)	463.0	(58.5)	289.0	(47.7)
Divorced	164.0	(97.9)	165.0	(36.2)	256.0	(50.4)	1,156.0	(882.8)	242.0	(57.2)
Widowed	17.6	(6.0)	46.1	(42.9)	420.0	(117.6)	527.0	(271.3)	74.7	(38.1)
Country of birth										
Luxembourg	286.0	(76.4)	284.0	(31.0)	389.0	(70.5)	656.0	(218.9)	324.0	(61.7)
Outside Luxembourg	161.0	(22.5)	185.0	(30.1)	306.0	(48.7)	379.0	(48.5)	240.0	(43.3)
Education level										
Low (ISCED=0:2)	142.0	(38.7)	112.0	(22.2)	186.0	(42.2)	442.0	(227.7)	244.0	(178.5)
Middle (ISCED=3,4)	275.0	(107.1)	290.0	(46.6)	329.0	(54.7)	786.0	(450.8)	174.0	(37.8)
High (ISCED=5-8)	226.0	(42.7)	243.0	(29.9)	390.0	(66.2)	430.0	(51.0)	306.0	(44.9)
Employment status										
Employed	148.0	(22.9)	215.0	(24.0)	375.0	(53.2)	446.0	(52.1)	244.0	(26.0)
Self-employed	462.0	(120.3)	412.0	(96.0)	282.0	(81.1)	1,107.0	(764.4)	322.0	(73.8)
Unemployed	15.0	(.0)	113.0	(74.7)	253.0	(127.6)	213.0	(67.8)	105.0	(91.5)
Retired	358.0	(267.3)	278.0	(121.6)	328.0	(98.6)	338.0	(106.5)	311.0	(126.9)
Other	60.9	(25.0)	139.0	(47.5)	56.0	(40.0)	218.0	(159.0)	648.0	(559.5)
Housing status										
Owner-outright	200.0	(90.1)	193.0	(29.6)	429.0	(105.9)	440.0	(109.5)	306.0	(105.9)
Owner with mortgage	246.0	(90.9)	281.0	(36.8)	292.0	(46.0)	648.0	(220.3)	305.0	(48.1)
Renter or other	216.0	(35.9)	220.0	(41.6)	319.0	(60.7)	348.0	(57.4)	200.0	(36.4)
Gross Income quintile										
Q1	126.0	(48.0)	140.0	(87.3)	198.0	(115.7)	236.0	(115.4)	242.0	(226.8)
Q2	339.0	(218.1)	330.0	(148.0)	296.0	(126.8)	296.0	(90.6)	127.0	(35.4)
Q3	178.0	(102.1)	230.0	(71.1)	218.0	(68.7)	328.0	(94.8)	161.0	(43.4)
Q4	106.0	(36.3)	202.0	(42.5)	370.0	(163.5)	323.0	(44.2)	211.0	(40.5)
Q5	263.0	(52.2)	248.0	(28.3)	395.0	(62.4)	755.0	(228.7)	390.0	(66.5)
Net wealth quintile										
Q1	314.0	(102.9)	414.0	(250.5)	412.0	(195.6)	500.0	(151.6)	357.0	(146.3)
Q2	147.0	(39.4)	153.0	(32.8)	208.0	(60.7)	214.0	(47.1)	179.0	(44.8)
Q3	146.0	(49.5)	219.0	(51.6)	305.0	(174.3)	231.0	(55.0)	178.0	(45.3)
Q4	115.0	(42.7)	262.0	(76.7)	373.0	(149.7)	395.0	(73.9)	233.0	(47.1)
Q5	304.0	(91.6)	258.0	(35.9)	381.0	(70.6)	708.0	(209.4)	359.0	(75.9)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

Note: Values provided in 1,000 euro. Values <1,000 are rounded to the nearest 10 euro, those >1,000 euro and <100,000 euro are rounded to the nearest 100 euro and those >100,000 euro are rounded to the nearest 1,000 euro. Standard errors <1,000 are rounded to the nearest multiple of 10, those >10,000 are rounded to the nearest multiple of 100.

**Table B34: Non-mortgage debt, participation rate
by household characteristic**

Participation rate (in %) Variable	2010		2014		2018		2021		2023	
	Share	Std.Err.	Share	Std.Err.	Share	Std.Err.	Share	Std.Err.	Share	Std.Err.
All households	36.9	(1.8)	33.9	(1.3)	35.4	(1.4)	34.4	(1.4)	28.7	(1.6)
Gender										
Male	38.8	(2.4)	35.1	(1.8)	32.6	(1.8)	34.0	(1.8)	27.5	(2.1)
Female	34.2	(2.8)	32.3	(2.0)	39.4	(2.2)	35.1	(2.7)	30.4	(2.6)
Age of reference person										
16-34	41.7	(4.5)	42.6	(3.7)	46.6	(3.6)	38.6	(3.7)	39.3	(4.1)
35-44	45.1	(3.8)	36.8	(3.1)	39.9	(3.3)	38.1	(3.3)	29.4	(3.3)
45-54	45.5	(3.9)	40.7	(3.1)	44.0	(3.0)	41.2	(3.3)	36.4	(3.9)
55-64	40.6	(4.2)	37.1	(3.3)	31.7	(3.4)	38.2	(3.4)	27.7	(3.7)
65+	11.8	(3.0)	13.6	(2.4)	16.9	(2.5)	15.2	(2.5)	12.9	(3.3)
Civil status										
Single	38.7	(3.8)	29.5	(2.9)	33.1	(2.7)	36.2	(2.8)	28.5	(3.2)
Couple	40.3	(2.3)	37.8	(1.9)	39.4	(1.9)	36.5	(1.9)	30.5	(2.2)
Divorced	40.1	(5.2)	39.5	(3.9)	39.1	(3.9)	30.9	(4.2)	27.8	(5.1)
Widowed	8.4	(3.8)	18.0	(4.2)	14.2	(3.6)	10.7	(4.6)	13.8	(6.6)
Country of birth										
Luxembourg	35.1	(2.4)	34.6	(1.8)	35.3	(1.9)	31.0	(2.1)	31.0	(2.5)
Outside Luxembourg	39.5	(2.9)	32.9	(2.2)	35.5	(2.1)	37.1	(2.1)	27.2	(2.2)
Education level										
Low (ISCED=0:2)	37.7	(3.3)	28.2	(2.4)	35.5	(2.7)	45.2	(4.2)	30.3	(4.6)
Middle (ISCED=3,4)	36.2	(2.8)	38.8	(2.3)	39.0	(2.4)	36.5	(2.8)	33.1	(3.1)
High (ISCED=5-8)	37.1	(3.4)	33.1	(2.5)	31.6	(2.2)	29.2	(1.9)	25.3	(2.2)
Employment status										
Employed	43.5	(2.5)	40.2	(1.9)	42.2	(1.9)	38.8	(1.8)	34.3	(2.2)
Self-employed	46.7	(5.8)	24.6	(4.7)	46.2	(7.1)	31.6	(6.5)	26.2	(7.6)
Unemployed	27.1	(10.5)	32.4	(7.6)	34.0	(9.2)	64.3	(9.1)	36.6	(9.8)
Retired	19.9	(3.3)	22.9	(2.6)	21.6	(2.3)	22.0	(2.5)	17.0	(3.0)
Other	38.3	(5.8)	32.0	(4.8)	27.2	(5.1)	31.4	(8.8)	29.5	(8.8)
Housing status										
Owner-outright	25.0	(2.7)	24.9	(2.0)	29.2	(2.1)	27.2	(2.4)	21.7	(2.5)
Owner with mortgage	47.2	(3.2)	42.6	(2.6)	44.8	(2.6)	41.9	(2.7)	34.6	(3.1)
Renter or other	39.2	(3.3)	36.8	(2.7)	35.8	(2.7)	36.5	(2.8)	30.9	(3.0)
Gross Income quintile										
Q1	31.3	(4.4)	22.3	(3.1)	25.7	(3.4)	37.1	(4.5)	25.0	(4.1)
Q2	32.4	(4.5)	30.0	(3.5)	41.3	(3.8)	36.6	(4.1)	28.9	(4.0)
Q3	37.4	(4.9)	42.1	(3.9)	34.8	(3.2)	34.3	(4.5)	30.3	(4.0)
Q4	43.8	(4.6)	40.1	(3.5)	42.8	(3.2)	33.6	(3.4)	31.2	(4.1)
Q5	40.0	(3.7)	35.1	(2.6)	32.7	(2.8)	30.2	(3.5)	27.9	(3.7)
Net wealth quintile										
Q1	42.6	(4.4)	39.4	(3.4)	38.7	(3.6)	45.1	(4.0)	41.1	(4.5)
Q2	39.1	(4.3)	41.0	(3.5)	39.6	(3.7)	36.8	(4.0)	29.8	(4.4)
Q3	42.8	(4.6)	31.7	(3.3)	38.2	(3.5)	36.9	(3.7)	28.9	(4.0)
Q4	31.5	(4.1)	33.0	(3.2)	35.9	(3.3)	30.9	(3.3)	24.6	(3.5)
Q5	28.6	(3.4)	24.1	(2.6)	24.8	(2.8)	22.3	(2.9)	18.8	(3.5)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

**Table B35: Non-mortgage debt, conditional median
by household characteristic**

Conditional median Variable	2010		2014		2018		2021		2023	
	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.
All households	10.0	(1.0)	10.1	(.9)	10.0	(1.0)	15.9	(1.6)	10.5	(1.3)
Gender										
Male	10.5	(1.3)	10.1	(1.5)	11.9	(1.7)	18.0	(1.7)	14.6	(2.3)
Female	9.8	(1.6)	10.3	(1.3)	9.0	(.9)	14.4	(2.7)	12.0	(2.5)
Age of reference person										
16-34	8.7	(1.9)	13.0	(2.5)	10.0	(1.5)	17.9	(2.3)	13.8	(3.3)
35-44	12.2	(1.4)	10.7	(2.4)	9.6	(1.8)	17.7	(3.6)	15.5	(3.0)
45-54	11.0	(1.9)	11.0	(1.6)	10.2	(1.9)	15.1	(3.5)	13.5	(2.8)
55-64	9.5	(2.2)	8.2	(1.7)	13.8	(3.4)	14.0	(2.5)	13.9	(4.1)
65+	9.9	(9.4)	7.7	(3.6)	8.1	(3.8)	20.0	(3.0)	8.4	(15.6)
Civil status										
Single	7.7	(1.1)	10.0	(1.8)	9.5	(1.2)	15.5	(2.2)	10.1	(2.6)
Couple	13.0	(1.0)	13.2	(1.9)	11.5	(1.6)	18.5	(1.9)	15.0	(2.2)
Divorced	9.5	(2.7)	7.0	(1.7)	7.8	(2.0)	8.8	(3.2)	13.6	(9.1)
Widowed	10.0	(10.9)	7.1	(4.8)	18.0	(8.6)	13.2	(11.0)	17.3	(8.9)
Country of birth										
Luxembourg	12.2	(1.2)	12.9	(1.7)	14.4	(1.4)	18.2	(1.8)	15.3	(2.8)
Outside Luxembourg	9.0	(1.0)	9.1	(1.2)	8.0	(.7)	13.0	(2.7)	12.2	(2.3)
Education level										
Low (ISCED=0:2)	9.0	(.8)	10.0	(2.1)	9.0	(1.3)	17.2	(3.0)	12.1	(3.7)
Middle (ISCED=3,4)	12.0	(1.7)	10.0	(1.2)	10.7	(2.1)	12.6	(1.8)	13.3	(2.7)
High (ISCED=5-8)	12.4	(3.0)	12.9	(2.8)	10.8	(1.5)	18.0	(2.0)	14.3	(2.5)
Employment status										
Employed	11.7	(1.3)	12.2	(1.3)	11.4	(1.5)	17.2	(1.9)	14.6	(1.7)
Self-employed	13.7	(4.2)	3.7	(4.3)	9.2	(3.6)	50.0	(39.1)	12.5	(40.5)
Unemployed	8.3	(4.7)	3.7	(3.0)	7.2	(3.6)	9.2	(11.6)	15.2	(6.7)
Retired	9.5	(3.1)	7.4	(1.8)	9.9	(3.0)	15.2	(2.5)	11.4	(4.9)
Other	8.6	(1.7)	10.5	(4.4)	3.0	(2.8)	5.8	(5.5)	3.2	(2.8)
Housing status										
Owner-outright	16.8	(2.5)	11.3	(2.6)	15.1	(2.4)	17.5	(2.3)	16.6	(3.4)
Owner with mortgage	11.8	(1.3)	11.0	(1.9)	10.6	(1.8)	16.9	(2.2)	14.6	(2.8)
Renter or other	8.0	(1.0)	10.0	(1.4)	8.0	(1.1)	14.6	(2.8)	11.0	(2.2)
Gross Income quintile										
Q1	5.8	(1.0)	5.8	(1.4)	5.4	(1.8)	13.6	(4.3)	7.3	(3.5)
Q2	9.0	(2.2)	8.0	(2.8)	7.3	(1.6)	13.1	(3.0)	10.4	(2.4)
Q3	12.4	(3.2)	10.8	(2.1)	9.9	(1.8)	16.0	(3.1)	14.2	(2.9)
Q4	10.7	(1.9)	14.9	(2.3)	19.1	(2.0)	17.8	(3.0)	17.6	(5.5)
Q5	16.8	(2.3)	15.0	(2.3)	14.2	(2.9)	20.8	(3.6)	18.4	(5.2)
Net wealth quintile										
Q1	8.1	(1.3)	10.8	(1.8)	6.7	(1.6)	11.4	(3.8)	11.8	(3.3)
Q2	8.4	(1.3)	9.8	(2.3)	9.8	(1.7)	17.3	(2.8)	12.0	(3.4)
Q3	11.3	(2.1)	9.8	(2.4)	15.9	(3.4)	19.0	(3.0)	15.8	(3.1)
Q4	15.2	(2.3)	11.0	(2.1)	12.1	(2.4)	14.3	(3.0)	14.3	(3.8)
Q5	15.6	(3.1)	14.4	(3.4)	18.0	(3.1)	17.0	(4.9)	15.9	(6.7)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

Note: Values provided in 1,000 euro. Values <1,000 are rounded to the nearest 10 euro, those >1,000 euro and <100,000 euro are rounded to the nearest 100 euro and those >100,000 euro are rounded to the nearest 1,000 euro. Standard errors <1,000 are rounded to the nearest multiple of 10, those >10,000 are rounded to the nearest multiple of 100.

**Table B36: Non-mortgage debt, conditional mean
by household characteristic**

Conditional mean Variable	2010		2014		2018		2021		2023	
	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.	Value	Std.Err.
All households	21.8	(2.4)	25.6	(2.7)	25.5	(2.5)	41.5	(4.8)	42.5	(7.1)
Gender										
Male	21.3	(3.0)	25.7	(3.3)	27.0	(3.5)	47.3	(6.8)	49.4	(10.0)
Female	22.5	(4.4)	25.5	(4.4)	23.7	(3.8)	32.6	(6.5)	53.9	(14.0)
Age of reference person										
16-34	24.6	(7.3)	25.2	(4.6)	25.1	(5.9)	42.7	(9.4)	70.2	(20.1)
35-44	18.0	(2.6)	25.7	(4.4)	27.8	(6.2)	43.2	(10.3)	71.7	(26.6)
45-54	21.1	(4.6)	29.2	(5.9)	25.2	(3.9)	38.1	(7.8)	35.4	(9.1)
55-64	25.8	(7.0)	18.5	(5.4)	22.3	(3.8)	34.5	(7.6)	34.8	(10.6)
65+	21.2	(6.1)	32.0	(15.0)	26.9	(9.3)	61.9	(31.8)	37.2	(22.2)
Civil status										
Single	20.7	(5.9)	24.3	(5.1)	26.9	(6.3)	40.5	(7.4)	60.7	(22.3)
Couple	23.6	(3.1)	27.2	(3.4)	24.1	(2.6)	41.1	(5.7)	49.9	(9.7)
Divorced	16.4	(4.2)	26.9	(8.6)	25.2	(8.4)	50.0	(26.1)	45.7	(18.8)
Widowed	21.8	(11.6)	10.4	(2.8)	38.1	(15.2)	17.2	(8.5)	23.1	(10.6)
Country of birth										
Luxembourg	21.5	(3.2)	27.8	(3.6)	30.4	(4.0)	45.9	(6.3)	63.3	(11.8)
Outside Luxembourg	22.1	(3.9)	22.6	(4.2)	20.8	(3.3)	38.7	(6.9)	43.0	(11.4)
Education level										
Low (ISCED=0:2)	17.5	(3.4)	23.0	(5.7)	22.7	(4.4)	34.5	(8.6)	27.5	(8.1)
Middle (ISCED=3,4)	21.9	(3.7)	23.3	(3.8)	21.9	(3.9)	25.6	(3.8)	67.0	(16.6)
High (ISCED=5-8)	27.5	(5.7)	31.2	(5.3)	32.4	(5.2)	57.5	(9.7)	48.5	(12.8)
Employment status										
Employed	22.7	(3.3)	25.4	(2.7)	27.3	(3.2)	38.9	(4.7)	58.6	(10.6)
Self-employed	27.3	(6.4)	21.4	(12.5)	24.2	(8.8)	119.0	(37.5)	89.2	(70.5)
Unemployed	11.0	(2.7)	13.9	(12.5)	9.0	(2.4)	38.0	(28.7)	17.2	(6.7)
Retired	17.8	(3.6)	28.1	(8.9)	25.0	(6.2)	39.3	(15.8)	35.5	(13.9)
Other	19.3	(6.8)	27.9	(13.2)	12.4	(5.2)	15.2	(8.6)	16.7	(10.3)
Housing status										
Owner-outright	32.1	(6.9)	41.9	(7.4)	38.0	(5.6)	42.5	(8.1)	95.3	(25.3)
Owner with mortgage	22.0	(3.5)	16.8	(1.5)	18.6	(2.0)	37.8	(6.6)	37.8	(9.2)
Renter or other	14.7	(3.2)	21.7	(4.4)	19.0	(4.7)	44.2	(10.1)	33.3	(8.8)
Gross Income quintile										
Q1	11.3	(4.1)	9.5	(2.1)	8.8	(1.9)	32.4	(7.7)	31.6	(15.1)
Q2	13.8	(2.6)	24.2	(8.1)	18.6	(5.9)	38.7	(11.4)	25.5	(10.4)
Q3	24.2	(6.3)	23.2	(4.5)	20.0	(3.8)	30.7	(6.2)	57.4	(25.5)
Q4	23.2	(5.5)	31.1	(6.5)	30.5	(4.7)	57.4	(16.4)	71.9	(20.7)
Q5	32.7	(6.9)	33.8	(6.6)	46.8	(9.2)	51.9	(14.0)	66.6	(21.8)
Net wealth quintile										
Q1	24.8	(6.9)	27.9	(6.7)	9.7	(1.6)	50.6	(13.5)	71.8	(24.6)
Q2	16.2	(4.7)	21.1	(4.5)	24.6	(6.6)	34.2	(8.1)	50.7	(21.3)
Q3	20.1	(5.2)	27.3	(7.3)	42.8	(8.8)	33.7	(6.5)	49.7	(15.8)
Q4	20.5	(2.9)	19.5	(3.1)	22.3	(3.7)	34.9	(10.5)	27.8	(6.8)
Q5	28.8	(7.0)	35.9	(8.7)	29.6	(5.7)	57.2	(14.9)	41.0	(14.7)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

Note: Values provided in 1,000 euro. Values <1,000 are rounded to the nearest 10 euro, those >1,000 euro and <100,000 euro are rounded to the nearest 100 euro and those >100,000 euro are rounded to the nearest 1,000 euro. Standard errors <1,000 are rounded to the nearest multiple of 10, those >10,000 are rounded to the nearest multiple of 100.

**Table B37: Median household gross income
by household characteristic**

Variable	2010		2014		2018		2021		2023	
	Median	Std.Err.	Median	Std.Err.	Median	Std.Err.	Median	Std.Err.	Median	Std.Err.
All households	64.8	(1.8)	64.6	(1.6)	71.1	(2.0)	89.6	(2.5)	96.6	(3.3)
Gender										
Male	69.9	(2.3)	71.5	(2.7)	79.0	(2.6)	98.6	(3.5)	108.0	(5.4)
Female	52.9	(4.1)	58.7	(2.3)	60.3	(3.0)	74.8	(4.1)	85.8	(4.3)
Age of reference person										
16-34	53.3	(4.0)	57.5	(3.5)	65.7	(4.0)	70.7	(4.3)	83.6	(5.7)
35-44	72.0	(4.6)	71.5	(4.0)	78.9	(4.3)	87.6	(6.3)	102.0	(8.2)
45-54	75.1	(5.9)	81.9	(5.0)	83.7	(4.7)	103.0	(6.8)	108.0	(9.6)
55-64	72.1	(5.4)	70.2	(7.9)	72.4	(6.0)	107.0	(7.4)	100.0	(9.5)
65+	53.9	(4.5)	52.1	(2.9)	58.8	(4.1)	90.2	(4.8)	88.0	(10.5)
Civil status										
Single	49.7	(4.0)	54.4	(2.8)	61.4	(3.2)	67.5	(4.0)	76.9	(4.0)
Couple	77.6	(4.5)	52.1	(2.9)	58.8	(4.1)	117.0	(5.3)	88.0	(10.5)
Divorced	51.3	(8.7)	48.4	(6.6)	49.3	(2.9)	70.4	(6.0)	73.2	(9.7)
Widowed	36.0	(5.6)	44.2	(4.9)	49.6	(4.9)	69.6	(12.2)	61.7	(12.9)
Country of birth										
Luxembourg	70.4	(2.8)	73.8	(2.8)	80.8	(2.9)	99.6	(3.3)	106.0	(7.0)
Outside Luxembourg	55.5	(3.6)	57.6	(1.9)	60.5	(2.3)	81.2	(3.6)	90.9	(4.4)
Education level										
Low (ISCED=0:2)	48.0	(3.7)	46.2	(2.4)	47.8	(1.6)	65.1	(7.1)	65.5	(6.6)
Middle (ISCED=3,4)	61.7	(3.4)	64.1	(2.0)	65.6	(2.6)	85.7	(4.5)	86.8	(4.9)
High (ISCED=5-8)	107.0	(4.1)	97.5	(5.2)	108.0	(5.0)	105.0	(5.1)	120.0	(5.2)
Employment status										
Employed	70.5	(2.4)	73.5	(2.9)	79.3	(2.7)	89.7	(3.3)	104.0	(4.9)
Self-employed	103.0	(16.0)	124.0	(19.1)	106.0	(24.5)	133.0	(12.9)	134.0	(26.2)
Unemployed	40.3	(8.2)	38.7	(6.0)	38.3	(12.2)	50.4	(15.9)	57.2	(17.1)
Retired	60.6	(3.8)	57.5	(2.5)	64.5	(3.3)	93.8	(5.1)	90.4	(7.6)
Other	42.5	(5.8)	48.0	(3.9)	38.0	(4.7)	39.9	(14.0)	48.7	(14.9)
Housing status										
Owner-outright	69.0	(3.7)	73.2	(3.5)	76.0	(3.0)	93.9	(4.0)	111.0	(6.8)
Owner with mortgage	84.2	(3.9)	85.4	(4.6)	99.2	(4.1)	119.0	(5.7)	129.0	(6.4)
Renter or other	41.6	(2.8)	42.7	(2.4)	48.3	(2.8)	65.7	(3.7)	70.6	(4.0)
Gross Income quintile										
Q1	22.9	(.8)	24.0	(.6)	25.5	(1.2)	29.3	(1.7)	34.1	(1.7)
Q2	42.9	(1.1)	44.9	(.9)	48.0	(.7)	60.0	(.8)	65.6	(1.5)
Q3	64.8	(1.1)	64.8	(1.0)	71.2	(1.3)	90.0	(1.5)	97.5	(2.2)
Q4	92.9	(1.5)	97.2	(2.1)	106.0	(1.7)	132.0	(2.1)	146.0	(3.4)
Q5	155.0	(5.1)	169.0	(4.0)	177.0	(3.4)	227.0	(6.7)	244.0	(9.3)
Net wealth quintile										
Q1	34.6	(3.5)	34.4	(2.2)	40.0	(2.0)	48.1	(4.2)	56.4	(5.2)
Q2	59.8	(4.5)	58.9	(2.6)	64.7	(3.7)	73.6	(4.8)	82.2	(5.2)
Q3	62.4	(4.2)	61.7	(2.5)	69.1	(3.8)	90.0	(4.0)	97.7	(6.7)
Q4	77.6	(5.2)	84.6	(5.6)	81.5	(3.1)	102.0	(6.5)	120.0	(8.5)
Q5	113.0	(5.9)	118.0	(5.7)	135.0	(7.7)	167.0	(10.9)	167.0	(12.4)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

Note: Income from family and friends is not included. Values provided in 1,000 euro. Values <1,000 are rounded to the nearest 10 euro, those >1,000 euro and <100,000 euro are rounded to the nearest 100 euro and those >100,000 euro are rounded to the nearest 1,000 euro. Standard errors <1,000 are rounded to the nearest multiple of 10, those >10,000 are rounded to the nearest multiple of 100.

**Table B38: Mean household gross income
by household characteristic**

Variable	2010		2014		2018		2021		2023	
	Mean	Std.Err.	Mean	Std.Err.	Mean	Std.Err.	Mean	Std.Err.	Mean	Std.Err.
All households	83.7	(2.3)	87.2	(2.0)	93.1	(1.9)	116.0	(2.9)	125.0	(3.4)
Gender										
Male	92.4	(3.5)	95.4	(3.0)	104.0	(3.0)	127.0	(3.8)	137.0	(5.0)
Female	70.8	(3.3)	76.5	(2.5)	77.6	(2.3)	99.4	(4.5)	108.0	(5.1)
Age of reference person										
16-34	66.5	(3.7)	68.3	(3.4)	81.6	(3.8)	90.6	(5.8)	101.0	(5.8)
35-44	88.4	(5.6)	92.6	(4.5)	93.4	(3.6)	104.0	(5.8)	127.0	(7.2)
45-54	97.3	(5.9)	107.0	(5.5)	109.0	(5.5)	129.0	(6.4)	139.0	(8.5)
55-64	102.0	(8.5)	98.9	(6.0)	101.0	(6.2)	135.0	(7.3)	135.0	(10.9)
65+	65.5	(6.1)	69.8	(3.8)	80.7	(4.8)	123.0	(9.4)	120.0	(9.5)
Civil status										
Single	63.4	(3.4)	73.7	(4.0)	71.9	(2.8)	85.5	(4.0)	96.1	(5.1)
Couple	104.0	(6.1)	69.8	(3.8)	80.7	(4.8)	141.0	(5.0)	120.0	(9.5)
Divorced	63.3	(5.3)	72.7	(5.6)	69.2	(4.5)	102.0	(10.2)	100.0	(10.4)
Widowed	50.6	(5.9)	62.2	(6.4)	64.5	(5.0)	96.5	(12.1)	79.4	(12.5)
Country of birth										
Luxembourg	87.1	(3.1)	92.1	(2.5)	103.0	(2.9)	124.0	(4.2)	133.0	(6.2)
Outside Luxembourg	79.1	(3.9)	80.7	(3.5)	83.7	(2.9)	110.0	(4.3)	121.0	(4.6)
Education level										
Low (ISCED=0:2)	57.1	(3.0)	59.1	(2.7)	57.0	(2.2)	83.4	(5.6)	86.0	(7.1)
Middle (ISCED=3,4)	75.4	(3.7)	79.7	(2.7)	83.3	(3.1)	99.6	(3.9)	112.0	(7.1)
High (ISCED=5-8)	132.0	(6.6)	124.0	(5.0)	129.0	(4.6)	138.0	(4.9)	147.0	(5.2)
Employment status										
Employed	88.7	(3.2)	93.0	(2.6)	98.3	(2.4)	116.0	(3.3)	130.0	(4.0)
Self-employed	154.0	(17.5)	167.0	(15.8)	155.0	(21.4)	150.0	(12.5)	193.0	(24.2)
Unemployed	39.8	(5.2)	49.7	(6.2)	60.9	(11.3)	87.1	(27.7)	91.5	(21.1)
Retired	75.0	(5.3)	76.8	(3.9)	86.0	(4.1)	123.0	(7.3)	121.0	(8.4)
Other	50.1	(5.0)	59.0	(5.0)	53.2	(5.5)	73.9	(14.1)	64.3	(8.7)
Housing status										
Owner-outright	90.1	(4.8)	94.0	(3.6)	99.8	(3.6)	125.0	(5.7)	138.0	(7.2)
Owner with mortgage	98.0	(3.4)	109.0	(4.0)	117.0	(4.1)	142.0	(5.7)	153.0	(6.5)
Renter or other	62.6	(4.6)	59.9	(3.0)	63.2	(2.6)	86.4	(4.5)	94.4	(5.1)
Gross Income quintile										
Q1	20.7	(.9)	22.2	(.7)	24.4	(.9)	28.5	(1.2)	32.0	(1.2)
Q2	43.0	(.7)	44.6	(.5)	48.4	(.5)	60.4	(.7)	65.4	(.9)
Q3	64.3	(.6)	65.8	(.7)	71.5	(.6)	90.7	(1.5)	98.4	(1.5)
Q4	93.5	(1.2)	98.5	(1.0)	107.0	(1.1)	135.0	(1.4)	147.0	(2.1)
Q5	198.0	(8.8)	206.0	(6.5)	215.0	(6.7)	270.0	(9.6)	285.0	(10.2)
Net wealth quintile										
Q1	40.0	(2.5)	41.8	(1.9)	48.1	(2.6)	64.3	(4.9)	72.0	(6.1)
Q2	65.1	(3.5)	68.5	(3.2)	74.0	(3.7)	91.2	(5.4)	98.6	(6.3)
Q3	74.0	(3.9)	72.8	(3.2)	81.8	(4.1)	102.0	(6.1)	114.0	(5.9)
Q4	96.0	(7.6)	96.9	(4.0)	96.9	(3.5)	125.0	(5.8)	136.0	(8.2)
Q5	144.0	(8.1)	156.0	(7.7)	165.0	(8.0)	200.0	(10.2)	205.0	(12.7)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

Note: Income from family and friends is not included. Values provided in 1,000 euro. Values <1,000 are rounded to the nearest 10 euro, those >1,000 euro and <100,000 euro are rounded to the nearest 100 euro and those >100,000 euro are rounded to the nearest 1,000 euro. Standard errors <1,000 are rounded to the nearest multiple of 10, those >10,000 are rounded to the nearest multiple of 100.

**Table B39: Median Debt-to-Asset ratio
by household characteristics**

	2010		2014		2018		2021		2023	
	Median	Std.Err.	Median	Std.Err.	Median	Std.Err.	Median	Std.Err.	Median	Std.Err.
All households	18.2	(2.1)	22.1	(2.1)	19.4	(2.1)	19.6	(1.4)	21.3	(2.1)
Gender										
Male	16.4	(2.1)	21.3	(2.5)	18.2	(1.8)	18.9	(1.9)	20.0	(2.9)
Female	22.6	(3.8)	23.4	(3.2)	25.1	(4.9)	20.0	(2.3)	22.9	(3.8)
Age of reference person										
16-34	54.9	(5.2)	50.3	(4.6)	41.6	(6.3)	39.2	(6.5)	40.0	(7.1)
35-44	25.2	(4.4)	32.7	(3.7)	34.3	(2.4)	29.1	(3.2)	35.4	(3.7)
45-54	13.1	(2.5)	15.9	(2.3)	13.9	(2.4)	18.0	(2.2)	20.5	(3.0)
55-64	5.7	(1.2)	6.5	(1.4)	8.6	(2.4)	7.8	(1.7)	7.9	(1.7)
65+	4.3	(1.9)	4.0	(1.8)	1.6	(0.7)	7.5	(3.1)	3.9	(4.0)
Civil status										
Single	32.7	(6.7)	31.4	(4.5)	31.4	(4.9)	23.4	(3.6)	32.8	(4.5)
Couple	14.8	(1.1)	18.7	(2.8)	16.2	(2.4)	18.1	(2.0)	17.8	(2.3)
Divorced	18.6	(4.5)	20.9	(4.0)	31.8	(6.4)	19.1	(3.2)	24.1	(7.8)
Widowed	8.3	(47.9)	4.2	(2.3)	3.3	(4.8)	22.1	(10.5)	9.8	(20.3)
Country of birth										
Luxembourg	14.4	(2.0)	16.3	(2.8)	14.5	(1.9)	16.4	(1.7)	17.4	(2.7)
Outside Luxembourg	25.0	(3.7)	27.3	(3.1)	28.9	(3.5)	22.6	(2.9)	24.1	(3.1)
Education level										
Low (ISCED=0:2)	26.1	(6.1)	22.9	(4.7)	18.7	(3.4)	17.5	(4.1)	17.0	(7.9)
Middle (ISCED=3,4)	14.9	(2.5)	17.9	(2.9)	18.4	(4.0)	19.0	(2.4)	20.3	(3.6)
High (ISCED=5-8)	18.8	(3.0)	25.3	(2.6)	21.1	(3.5)	21.2	(2.3)	23.3	(2.6)
Employment status										
Employed	25.0	(3.3)	28.1	(2.5)	26.1	(2.8)	21.7	(1.9)	28.0	(2.2)
Self-employed	13.7	(3.6)	20.9	(6.1)	17.4	(7.0)	17.5	(5.0)	15.3	(5.7)
Unemployed	52.4	(34,766.1)	24.1	(6.9)	11.9	(13,861.6)	41.9	(67.5)	17.8	(19.8)
Retired	4.7	(1.3)	5.3	(1.6)	2.9	(0.9)	6.2	(1.2)	5.9	(2.2)
Other	7.7	(4.7)	18.0	(8.3)	27.0	(12.7)	60.2	(65,532.6)	11.7	(15.9)
Housing status										
Owner-outright	2.8	(0.5)	1.8	(0.4)	2.0	(0.3)	2.3	(0.3)	2.4	(0.6)
Owner with mortgage	22.6	(2.3)	28.2	(1.9)	33.0	(1.9)	27.2	(1.6)	31.8	(2.1)
Renter or other	39.9	(7.5)	41.4	(6.8)	36.3	(6.6)	25.3	(6.4)	18.6	(4.6)
Gross Income quintile										
Q1	26.7	(13.9)	28.8	(7.6)	28.7	(9.7)	37.3	(10.1)	29.9	(8.8)
Q2	37.6	(10.6)	34.6	(6.2)	19.6	(8.2)	13.0	(5.3)	22.1	(5.9)
Q3	21.8	(7.1)	26.1	(5.0)	23.4	(8.2)	18.4	(3.5)	22.3	(5.5)
Q4	15.7	(2.4)	15.2	(4.5)	22.5	(5.1)	21.0	(2.2)	21.0	(4.1)
Q5	13.8	(2.1)	14.6	(1.6)	16.0	(2.4)	16.4	(2.1)	17.9	(3.1)
Net wealth quintile										
Q1	84.0	(15.5)	91.1	(12.6)	64.3	(7.5)	89.3	(16.7)	70.6	(21.7)
Q2	52.2	(5.8)	47.4	(3.8)	50.5	(3.3)	40.8	(5.6)	45.7	(7.8)
Q3	17.7	(3.1)	18.2	(3.5)	27.4	(3.2)	18.8	(2.7)	28.2	(3.2)
Q4	8.9	(2.1)	9.8	(2.2)	6.0	(1.8)	7.1	(2.9)	11.8	(2.8)
Q5	4.4	(0.8)	5.6	(1.2)	5.2	(0.9)	9.0	(1.5)	6.6	(1.5)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

**Table B40: Median Debt-to-Income ratio
by household characteristics**

	2010		2014		2018		2021		2023	
	Median	Std.Err.	Median	Std.Err.	Median	Std.Err.	Median	Std.Err.	Median	Std.Err.
All households	86.9	(11.2)	114.1	(10.6)	95.5	(14.4)	133.1	(18.0)	125.8	(17.3)
Gender										
Male	73.5	(12.0)	99.9	(14.5)	85.7	(17.2)	147.3	(15.3)	127.0	(21.9)
Female	117.0	(22.4)	128.6	(16.5)	108.4	(20.7)	89.6	(30.3)	125.0	(28.9)
Age of reference person										
16-34	190.6	(56.2)	195.6	(49.0)	144.5	(73.5)	84.8	(43.3)	127.9	(86.4)
35-44	149.1	(15.6)	198.6	(25.7)	234.1	(24.4)	245.8	(35.9)	261.8	(35.3)
45-54	58.7	(9.6)	83.4	(14.9)	86.9	(17.7)	147.8	(19.5)	131.4	(31.2)
55-64	27.0	(8.1)	36.2	(6.4)	37.8	(14.1)	49.4	(13.6)	82.2	(18.5)
65+	38.4	(17.6)	34.9	(16.8)	22.8	(6.2)	62.5	(22.8)	41.1	(29.2)
Civil status										
Single	88.3	(30.0)	141.7	(32.0)	112.5	(38.3)	118.1	(39.3)	160.7	(53.8)
Couple	88.4	(10.3)	112.5	(12.1)	91.8	(16.6)	142.0	(21.1)	125.2	(20.1)
Divorced	128.5	(38.8)	106.1	(25.8)	116.3	(37.7)	108.0	(50.2)	103.9	(35.7)
Widowed	19.0	(18.0)	32.6	(20.1)	41.8	(26.3)	198.3	(245.5)	72.6	(87.8)
Country of birth										
Luxembourg	98.0	(15.9)	111.6	(16.4)	105.1	(15.4)	137.8	(21.4)	152.0	(29.2)
Outside Luxembourg	62.8	(18.8)	115.9	(13.7)	82.8	(23.3)	126.8	(26.2)	107.8	(23.5)
Education level										
Low (ISCED=0:2)	61.7	(19.4)	94.1	(22.4)	53.5	(21.0)	84.7	(43.2)	64.1	(56.6)
Middle (ISCED=3,4)	88.7	(16.9)	69.0	(19.3)	75.0	(20.8)	90.4	(23.4)	108.2	(30.7)
High (ISCED=5-8)	109.6	(20.1)	145.7	(12.2)	133.9	(20.4)	173.7	(19.7)	149.8	(25.2)
Employment status										
Employed	125.7	(14.0)	143.4	(11.5)	129.7	(16.0)	159.6	(16.4)	162.2	(21.7)
Self-employed	84.4	(39.5)	162.5	(46.3)	114.4	(43.4)	249.1	(71.1)	144.9	(70.9)
Unemployed	55.1	(58.6)	27.9	(26.4)	30.7	(133.1)	56.3	(96.2)	50.1	(77.1)
Retired	33.1	(9.5)	31.8	(8.8)	25.3	(5.8)	50.1	(11.5)	70.8	(26.6)
Other	53.9	(17.4)	44.7	(20.7)	100.5	(75.1)	79.0	(108.1)	42.5	(90.1)
Housing status										
Owner-outright	23.8	(4.4)	19.6	(5.3)	21.9	(3.1)	24.0	(3.9)	26.0	(8.3)
Owner with mortgage	171.1	(16.2)	239.1	(18.4)	270.1	(14.7)	276.1	(22.7)	306.9	(22.4)
Renter or other	24.6	(4.6)	31.1	(5.0)	17.3	(2.6)	32.5	(12.1)	22.7	(5.1)
Gross Income quintile										
Q1	45.2	(29.0)	83.8	(44.1)	45.9	(27.6)	146.1	(99.4)	87.3	(106.6)
Q2	92.1	(48.9)	139.6	(64.3)	35.2	(17.9)	75.3	(44.1)	94.9	(48.9)
Q3	115.3	(32.4)	138.3	(25.6)	133.4	(44.2)	78.7	(39.3)	126.1	(45.6)
Q4	103.4	(20.9)	106.2	(23.6)	133.3	(26.7)	183.8	(28.6)	162.7	(41.4)
Q5	71.4	(15.6)	100.4	(13.4)	111.1	(14.9)	126.9	(24.2)	123.8	(23.1)
Net wealth quintile										
Q1	30.6	(8.6)	32.3	(6.1)	16.0	(3.4)	28.5	(17.0)	25.8	(10.6)
Q2	262.8	(42.0)	280.3	(30.3)	289.8	(36.3)	239.8	(63.8)	243.2	(69.7)
Q3	121.1	(23.3)	143.5	(25.5)	195.6	(29.7)	157.9	(25.5)	243.5	(34.5)
Q4	72.9	(19.5)	79.5	(20.1)	70.1	(21.2)	71.6	(28.7)	125.9	(25.5)
Q5	61.7	(11.4)	73.3	(13.6)	64.2	(14.9)	164.9	(35.3)	106.9	(19.6)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

**Table B41: Median Debt Service-to-Income ratio
by household characteristics**

	2010		2014		2018		2021		2023	
	Median	Std.Err.	Median	Std.Err.	Median	Std.Err.	Median	Std.Err.	Median	Std.Err.
All households	16.2	(0.8)	15.0	(0.7)	13.4	(0.8)	14.6	(0.8)	14.8	(0.9)
Gender										
Male	14.7	(1.1)	14.4	(0.7)	12.5	(1.1)	14.6	(1.0)	14.8	(1.1)
Female	17.5	(0.9)	16.7	(1.1)	14.3	(1.4)	14.5	(1.5)	14.8	(2.1)
Age of reference person										
16-34	18.5	(2.5)	17.1	(2.0)	15.6	(2.2)	12.1	(2.3)	14.1	(3.3)
35-44	18.4	(1.3)	19.7	(1.3)	17.2	(1.5)	19.5	(2.0)	19.0	(2.2)
45-54	14.0	(1.9)	14.7	(0.8)	13.7	(1.1)	15.7	(1.9)	15.0	(1.9)
55-64	11.3	(1.5)	9.2	(1.3)	8.5	(1.6)	11.2	(1.9)	14.5	(2.1)
65+	11.0	(4.8)	10.3	(2.2)	7.6	(1.6)	12.1	(2.0)	8.2	(2.3)
Civil status										
Single	16.0	(2.3)	17.4	(1.7)	12.6	(1.6)	13.6	(1.4)	17.1	(2.7)
Couple	16.1	(0.8)	14.8	(0.9)	13.6	(0.9)	14.9	(1.1)	14.4	(1.1)
Divorced	17.9	(3.3)	14.8	(1.6)	15.3	(2.5)	14.5	(2.8)	13.9	(3.7)
Widowed	6.2	(5.0)	7.4	(3.7)	10.1	(3.1)	13.3	(9.8)	17.3	(8.4)
Country of birth										
Luxembourg	16.8	(0.9)	15.6	(0.9)	13.5	(1.0)	14.6	(1.1)	16.1	(1.5)
Outside Luxembourg	14.9	(1.0)	14.6	(0.9)	13.2	(1.2)	14.4	(1.2)	14.1	(1.4)
Education level										
Low (ISCED=0:2)	15.4	(1.5)	18.4	(1.5)	11.6	(1.4)	16.1	(2.8)	12.7	(4.1)
Middle (ISCED=3,4)	16.9	(1.8)	14.1	(1.0)	12.9	(1.2)	13.1	(1.2)	13.6	(1.6)
High (ISCED=5-8)	16.2	(1.1)	14.7	(0.8)	14.6	(1.1)	14.9	(1.1)	16.2	(1.4)
Employment status										
Employed	17.1	(1.0)	17.1	(0.8)	15.0	(1.0)	15.8	(1.0)	16.3	(1.1)
Self-employed	14.7	(2.6)	14.0	(3.9)	12.9	(5.4)	22.1	(4.8)	15.1	(3.8)
Unemployed	17.5	(7.0)	9.6	(4.3)	7.3	(5.8)	0.0	(4.2)	6.6	(8.2)
Retired	12.4	(2.6)	8.8	(1.0)	7.5	(1.3)	12.2	(1.4)	11.4	(2.6)
Other	13.1	(2.9)	9.7	(3.6)	11.4	(5.6)	6.8	(7.0)	9.3	(11.3)
Housing status										
Owner-outright	8.3	(1.2)	6.9	(0.7)	7.1	(0.8)	7.4	(0.9)	7.3	(1.0)
Owner with mortgage	20.1	(0.9)	21.2	(0.6)	21.4	(0.7)	21.5	(1.0)	23.5	(1.2)
Renter or other	10.6	(1.2)	9.2	(0.9)	5.8	(0.8)	7.2	(1.4)	6.2	(1.1)
Gross Income quintile										
Q1	17.0	(4.1)	19.8	(3.5)	11.2	(4.1)	20.1	(6.0)	20.0	(9.6)
Q2	20.3	(2.1)	19.6	(3.3)	10.2	(1.7)	15.6	(2.7)	17.7	(3.3)
Q3	18.7	(2.7)	17.8	(1.9)	16.8	(2.3)	14.3	(2.2)	15.7	(2.0)
Q4	17.2	(1.6)	14.6	(1.0)	16.1	(1.1)	15.2	(1.4)	14.9	(1.9)
Q5	11.4	(1.2)	11.7	(0.9)	12.2	(1.0)	11.8	(1.0)	12.1	(1.5)
Net wealth quintile										
Q1	11.9	(1.7)	9.9	(1.5)	5.4	(1.0)	5.6	(2.0)	5.7	(1.7)
Q2	21.3	(1.7)	21.6	(1.3)	19.7	(2.1)	19.3	(3.1)	18.2	(3.1)
Q3	17.0	(1.2)	17.8	(1.3)	17.5	(1.7)	16.6	(1.5)	19.3	(2.4)
Q4	12.7	(1.8)	13.8	(1.4)	13.6	(1.9)	12.0	(1.7)	15.7	(1.9)
Q5	13.0	(1.8)	11.3	(1.1)	11.4	(1.3)	15.4	(2.4)	13.6	(1.9)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

**Table B42: Median Mortgage Debt Service-to-Income ratio
by household characteristics**

	2010		2014		2018		2021		2023	
	Median	Std.Err.	Median	Std.Err.	Median	Std.Err.	Median	Std.Err.	Median	Std.Err.
All households	16.3	(0.7)	17.6	(0.7)	17.8	(0.8)	18.0	(0.8)	18.9	(1.0)
Gender										
Male	14.9	(1.2)	16.0	(1.2)	16.9	(1.0)	18.0	(0.9)	17.5	(1.2)
Female	17.0	(1.2)	18.3	(0.9)	19.1	(1.2)	18.4	(1.9)	21.7	(2.4)
Age of reference person										
16-34	20.9	(1.7)	21.3	(1.9)	22.9	(1.3)	20.3	(2.5)	24.2	(2.8)
35-44	16.7	(1.0)	19.0	(1.3)	18.0	(1.1)	20.5	(1.5)	20.9	(1.8)
45-54	13.3	(1.7)	14.8	(1.1)	15.2	(1.2)	18.0	(1.3)	17.5	(1.6)
55-64	13.3	(1.3)	14.0	(1.4)	14.0	(1.8)	14.0	(2.5)	15.4	(2.5)
65+	22.0	(4.9)	20.2	(4.8)	23.3	(6.9)	13.0	(3.0)	14.2	(5.5)
Civil status										
Single	18.6	(2.6)	21.6	(1.4)	19.5	(2.1)	18.6	(1.7)	22.7	(2.5)
Couple	15.2	(0.9)	15.4	(0.9)	17.3	(0.9)	17.2	(1.0)	17.4	(1.4)
Divorced	19.9	(2.6)	17.5	(1.8)	21.4	(2.5)	20.6	(3.5)	21.5	(4.5)
Widowed	5.7	(6.2)	11.1	(7.7)	17.9	(5.6)	14.8	(15.2)	17.4	(9.8)
Country of birth										
Luxembourg	16.6	(0.9)	18.3	(0.8)	16.6	(1.3)	17.4	(1.1)	19.7	(1.4)
Outside Luxembourg	15.1	(1.1)	16.1	(1.0)	18.7	(1.0)	18.4	(1.4)	18.1	(1.5)
Education level										
Low (ISCED=0:2)	15.6	(1.5)	19.2	(1.5)	21.3	(2.1)	17.9	(2.7)	19.9	(6.7)
Middle (ISCED=3,4)	18.2	(1.7)	17.6	(1.3)	18.3	(1.6)	17.3	(1.5)	17.9	(2.3)
High (ISCED=5-8)	14.8	(1.1)	15.9	(1.1)	16.8	(1.1)	18.4	(1.2)	19.1	(1.1)
Employment status										
Employed	16.4	(0.7)	17.9	(0.7)	17.6	(0.9)	18.1	(0.9)	19.6	(1.1)
Self-employed	17.1	(3.3)	16.3	(4.3)	20.1	(3.4)	23.3	(5.6)	17.0	(3.9)
Unemployed	18.0	(7.4)	11.0	(5.8)	21.4	(5.8)	21.9	(153.5)	23.0	(12.9)
Retired	14.1	(2.6)	13.9	(2.7)	14.1	(2.9)	15.2	(2.6)	15.3	(3.6)
Other	15.5	(3.8)	20.3	(5.1)	25.0	(11.9)	14.8	(13.3)	28.8	(24.1)
Housing status										
Owner-outright	9.9	(2.5)	8.6	(2.2)	12.8	(2.3)	13.9	(5.6)	12.2	(3.4)
Owner with mortgage	16.4	(0.7)	18.3	(0.6)	18.3	(0.9)	18.3	(1.0)	20.5	(1.1)
Renter or other	16.9	(3.3)	13.2	(3.1)	16.1	(5.5)	14.4	(3.2)	12.2	(2.6)
Gross Income quintile										
Q1	36.0	(8.7)	29.5	(11.5)	45.2	(17.1)	39.6	(13.4)	56.3	(11.4)
Q2	22.6	(2.3)	25.6	(2.7)	24.3	(1.7)	24.3	(2.7)	25.6	(3.1)
Q3	19.4	(1.8)	20.8	(1.5)	20.6	(1.9)	18.0	(0.9)	20.5	(2.4)
Q4	14.6	(1.1)	15.3	(1.6)	16.5	(1.0)	16.3	(1.3)	17.0	(2.0)
Q5	10.9	(1.1)	11.7	(0.8)	13.0	(0.9)	10.8	(1.1)	13.0	(1.4)
Net wealth quintile										
Q1	28.2	(7.5)	41.0	(11.4)	25.3	(4.3)	36.3	(13.3)	30.2	(7.4)
Q2	20.6	(1.9)	21.7	(1.3)	22.1	(1.2)	21.2	(2.5)	22.2	(2.7)
Q3	15.5	(1.1)	17.4	(1.0)	17.5	(1.3)	17.0	(1.3)	19.9	(2.1)
Q4	13.5	(1.3)	14.2	(1.1)	15.1	(1.4)	16.2	(1.8)	16.5	(2.0)
Q5	12.7	(1.6)	11.3	(1.1)	14.6	(1.6)	16.8	(2.9)	14.7	(1.9)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

**Table B43: Median outstanding Loan-to-Value ratio of HMR (stock)
by household characteristics**

	2010		2014		2018		2021		2023	
	Median	Std.Err.	Median	Std.Err.	Median	Std.Err.	Median	Std.Err.	Median	Std.Err.
All households	84.1	(4.6)	78.5	(1.7)	87.8	(1.9)	90.5	(1.6)	88.3	(2.7)
Gender										
Male	80.4	(5.8)	77.8	(2.4)	85.8	(2.3)	90.7	(1.8)	86.6	(3.5)
Female	86.6	(5.6)	79.9	(3.3)	94.0	(4.3)	90.6	(5.0)	92.7	(5.0)
Age of reference person										
16-34	100.0	(1.4)	85.2	(5.2)	89.8	(3.3)	98.6	(5.9)	96.5	(4.0)
35-44	80.7	(5.7)	85.5	(2.9)	90.8	(3.4)	92.8	(2.2)	91.2	(3.2)
45-54	75.0	(4.7)	71.3	(3.6)	79.5	(5.4)	87.8	(4.0)	87.6	(4.9)
55-64	57.2	(13.6)	62.4	(10.0)	88.5	(9.8)	87.5	(8.4)	72.0	(9.7)
65+	92.0	(100.9)	89.1	(28.3)	64.9	(32.8)	83.2	(20.6)	66.0	(55.8)
Civil status										
Single	78.9	(10.9)	79.6	(4.4)	87.3	(3.9)	89.4	(4.4)	88.8	(5.8)
Couple	85.6	(4.6)	80.0	(2.0)	87.6	(2.5)	91.5	(2.0)	88.4	(3.3)
Divorced	77.1	(13.3)	68.9	(8.0)	91.2	(6.3)	89.1	(8.4)	90.4	(9.0)
Widowed	74.1	(27.6)	66.1	(36.1)	86.2	(19.7)	66.7	(22.3)	83.9	(35.7)
Country of birth										
Luxembourg	79.7	(5.5)	74.7	(3.2)	86.1	(3.2)	87.8	(5.8)	84.1	(4.6)
Outside Luxembourg	88.5	(5.6)	84.8	(2.4)	89.6	(2.5)	91.1	(1.7)	91.2	(3.2)
Education level										
Low (ISCED=0:2)	97.5	(7.4)	89.2	(7.1)	91.8	(5.8)	93.1	(8.5)	88.8	(11.6)
Middle (ISCED=3,4)	81.8	(6.8)	76.4	(3.4)	87.5	(3.7)	89.1	(7.5)	94.3	(5.2)
High (ISCED=5-8)	77.6	(6.1)	76.8	(2.4)	86.9	(2.4)	90.4	(1.6)	86.0	(3.3)
Employment status										
Employed	85.3	(4.2)	78.0	(1.7)	87.7	(1.9)	91.1	(1.6)	89.2	(2.5)
Self-employed	66.7	(10.2)	79.1	(6.6)	88.6	(8.6)	88.2	(19.0)	97.3	(16.9)
Unemployed	100.0	(34.5)	77.2	(32.2)	112.5	(11.0)	239.8	(94.5)	84.5	(40.7)
Retired	60.6	(25.3)	55.1	(13.8)	85.0	(21.8)	79.6	(9.7)	76.3	(17.3)
Other	100.0	(12.6)	100.0	(24.0)	84.4	(15.9)	93.5	(61.1)	99.6	(34.4)
Housing status										
Owner-outright										
Owner with mortgage	84.1	(4.6)	78.5	(1.7)	87.8	(1.9)	90.5	(1.6)	88.3	(2.7)
Renter or other										
Gross Income quintile										
Q1	55.5	(13.9)	85.0	(17.0)	80.8	(9.5)	100.3	(13.9)	103.8	(26.8)
Q2	96.1	(7.5)	92.2	(9.5)	92.1	(6.2)	90.4	(6.6)	88.3	(7.8)
Q3	97.9	(7.6)	84.0	(6.1)	91.2	(5.0)	93.5	(3.9)	92.1	(5.7)
Q4	85.1	(6.2)	74.4	(6.6)	90.9	(5.7)	89.7	(3.1)	86.7	(4.2)
Q5	73.4	(5.0)	75.8	(2.3)	85.1	(2.8)	88.7	(3.8)	84.0	(4.5)
Net wealth quintile										
Q1	160.1	(127.4)	125.8	(22.2)	116.2	(13.6)	152.5	(94.8)	151.4	(122.8)
Q2	100.0	(1.6)	99.7	(2.8)	99.1	(2.1)	100.3	(3.2)	100.0	(3.0)
Q3	76.1	(7.5)	74.7	(3.8)	82.0	(5.3)	88.5	(2.5)	87.9	(4.2)
Q4	69.7	(8.2)	66.8	(7.9)	69.1	(6.0)	77.4	(7.6)	76.3	(5.9)
Q5	70.3	(7.8)	60.0	(3.1)	70.9	(8.2)	86.7	(7.5)	71.9	(5.7)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.

**Table B44: Median Net Liquid Assets to Income ratio
by household characteristics**

	2010		2014		2018		2021		2023	
	Median	Std.Err.	Median	Std.Err.	Median	Std.Err.	Median	Std.Err.	Median	Std.Err.
All households	12.2	(2.2)	11.5	(1.7)	10.6	(2.3)	17.9	(3.7)	24.0	(3.5)
Gender										
Male	14.9	(2.9)	10.9	(1.8)	16.6	(3.2)	21.6	(4.7)	29.0	(5.4)
Female	7.1	(3.2)	12.8	(3.2)	4.7	(2.1)	10.4	(5.9)	18.9	(4.8)
Age of reference person										
16-34	10.5	(4.8)	5.5	(3.1)	7.3	(3.1)	1.7	(4.9)	11.8	(4.9)
35-44	12.3	(3.4)	11.4	(2.6)	15.3	(4.3)	15.5	(4.1)	21.3	(6.2)
45-54	10.9	(6.2)	9.7	(2.8)	9.0	(3.7)	26.6	(10.4)	23.3	(5.9)
55-64	9.5	(6.5)	25.0	(7.6)	6.7	(5.2)	33.0	(16.7)	32.9	(8.4)
65+	28.2	(18.7)	23.9	(17.9)	36.0	(30.4)	42.8	(20.2)	72.0	(36.6)
Civil status										
Single	12.7	(6.3)	8.6	(2.8)	10.1	(4.8)	12.0	(5.9)	20.0	(6.1)
Couple	13.7	(2.5)	12.9	(2.0)	13.4	(2.8)	19.9	(4.8)	27.8	(4.5)
Divorced	5.3	(4.8)	6.8	(5.1)	1.2	(2.9)	16.6	(9.9)	18.9	(11.3)
Widowed	12.7	(44.7)	21.5	(16.4)	10.5	(17.1)	69.1	(54.0)	33.0	(57.2)
Country of birth										
Luxembourg	20.6	(5.2)	12.6	(3.1)	16.7	(3.6)	24.3	(5.5)	27.8	(5.4)
Outside Luxembourg	5.9	(2.4)	10.5	(2.1)	5.3	(2.5)	13.2	(4.4)	21.9	(4.9)
Education level										
Low (ISCED=0:2)	-0.3	(1.9)	2.1	(2.5)	1.7	(2.2)	-0.8	(3.8)	6.5	(6.2)
Middle (ISCED=3,4)	16.5	(3.5)	8.0	(2.9)	6.0	(2.8)	12.0	(4.1)	14.2	(5.6)
High (ISCED=5-8)	29.3	(5.3)	26.5	(4.2)	24.5	(3.8)	40.3	(7.1)	37.2	(5.2)
Employment status										
Employed	11.4	(3.0)	12.1	(1.9)	10.2	(2.2)	18.4	(3.5)	22.7	(3.2)
Self-employed	19.3	(10.4)	18.3	(14.6)	26.9	(9.6)	12.8	(20.6)	31.3	(18.7)
Unemployed	-6.1	(31.6)	3.9	(20.5)	-7.3	(9.4)	-0.8	(11.7)	3.2	(35.5)
Retired	26.2	(14.1)	16.5	(8.9)	19.9	(10.0)	39.9	(18.2)	40.4	(18.5)
Other	2.3	(5.3)	1.8	(8.2)	2.2	(3.5)	-11.9	(33.3)	9.8	(18.3)
Housing status										
Owner-outright	26.1	(10.2)	19.2	(9.3)	7.2	(6.1)	16.3	(10.6)	29.7	(13.5)
Owner with mortgage	16.5	(2.8)	15.6	(2.1)	18.9	(2.9)	35.6	(5.8)	31.0	(4.2)
Renter or other	-1.4	(3.2)	-2.9	(2.0)	-1.1	(2.1)	-0.9	(3.0)	6.5	(5.5)
Gross Income quintile										
Q1	-0.7	(5.0)	1.5	(6.7)	-2.1	(1.9)	-5.6	(8.1)	8.0	(11.8)
Q2	8.1	(7.0)	5.6	(2.9)	2.1	(3.7)	7.8	(6.9)	20.8	(9.1)
Q3	6.2	(4.1)	7.8	(3.2)	8.9	(5.6)	21.4	(7.4)	24.3	(7.2)
Q4	20.5	(6.9)	14.1	(4.6)	14.9	(5.5)	20.0	(8.7)	23.7	(6.2)
Q5	28.6	(7.3)	30.3	(5.5)	26.5	(4.0)	45.5	(6.9)	34.2	(8.4)
Net wealth quintile										
Q1	-12.3	(4.1)	-14.9	(3.2)	-4.7	(1.9)	-10.2	(4.1)	-2.6	(3.5)
Q2	10.1	(4.1)	7.5	(2.2)	7.2	(3.3)	12.8	(6.2)	18.8	(6.6)
Q3	10.6	(3.1)	13.9	(3.1)	7.1	(3.6)	13.9	(7.5)	24.6	(7.3)
Q4	25.7	(6.3)	20.8	(6.7)	22.4	(8.4)	39.0	(9.3)	38.9	(8.4)
Q5	69.6	(14.3)	75.8	(13.8)	61.0	(15.8)	100.0	(12.2)	84.5	(16.7)

Source: Own calculations based on LU-HFCS waves 2023, 2021, 2018, 2014 and 2010; data are multiply imputed and weighted; variance estimation based on 1,000 replicate weights.



BANQUE CENTRALE DU LUXEMBOURG

EUROSYSTEME

2, boulevard Royal
L-2983 Luxembourg

Tél.: +352 4774-1
Fax: +352 4774 4910

www.bcl.lu • info@bcl.lu