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# Household Finance and Consumption Survey in Malta: Main results from the Third Wave 

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#### Abstract

This report presents the main statistical findings from the third wave of the Household Finance and Consumption Survey (HFCS) for Malta, which was conducted in 2017. The HFCS is part of a co-ordinated research project led by the European Central Bank and involves national central banks of all euro area countries and selected non-euro area EU member states. The results presented in this report are obtained from micro-data collected during 2017 from households residing in Malta and provide detailed information on households' real and financial assets, their liabilities, net wealth, income, consumption and savings. The report also compares these variables, with results from the two previous waves of the Survey carried out in 2010 and in 2014. These household-level data can contribute to a better understanding of the economic behaviour of Maltese households and of developments underlying macro statistics.


JEL classification: D1, D3

Keywords: Household finance, consumption, wealth, survey data

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## 1. Introduction

This report presents the main results of the third wave of the Household Finance and Consumption Survey (HFCS; henceforth the Survey). ${ }^{2}$ This survey is part of a co-ordinated research project led by the European Central Bank (ECB) and involving national central banks (NCBs) of all euro area countries and selected non-euro area EU member states. The Survey provides detailed information on households' real and financial assets, their liabilities, net wealth, income, consumption and savings. The results are obtained from householdlevel data collected during 2017 from households residing in Malta.

The granular collection of household-level data contributes to a better understanding of the economic behaviour of Maltese households and of developments underlying aggregate statistics. The Survey is also important in evaluating the impact of shocks, policies and institutional changes, on households and other institutional sectors; as well as for building and calibrating realistic economic models. Furthermore, this Survey is important to analyse issues related to inequality, the transmission of monetary policy and financial stability.

Since this survey has now been carried out three times, it is also possible to analyse evolving trends in domestic household behaviour over time. HFCS data have been used extensively by the Eurosystem, international organisations such as the OECD and the IMF, as well as by numerous academic researchers for a large variety of topics. ${ }^{3}$ This in turn enables a comparison of Maltese households' behaviour with that of households in other countries.

Unlike other household surveys, such as the European Union Survey of Income and Living Conditions (EU-SILC) and the Household Budget Survey (HBS), the HFCS does not only focus on income and consumption expenditures, but also covers in depth the level and type of household assets and liabilities.

The remainder of this report outlines the methodology of the survey and main household demographic characteristics. Subsequently, the report presents information on Maltese households' assets and liabilities, net wealth and incomes, including their distribution. It also reports on consumption patterns and savings. The final section of the report focuses on the limitations of the HFCS and the scope for further research using these data. A statistical annex containing disaggregated data on the variables discussed in the report is presented on the basis of the household's income and net wealth distributions, demographic characteristics of the household (e.g. age of reference person, household size), education level and labour market status.

[^2]
## 2. The questionnaire and survey design

The HFCS questionnaire consists of two main parts. The first part relates to the household as a whole, with questions on real asset holdings and their financing, other liabilities incurred by the household and its credit constraints. It also collects information on private businesses owned, financial assets, intergenerational transfers and gifts, as well as consumption and saving. The second part of the Survey relates to individual household members and covers demographics, employment, pension entitlements and income (for household members aged 16 and over).

The results presented in this report rely on the median statistic, unless otherwise stated. The median is preferred on the mean as the former is less sensitive to extreme values, especially when dealing with highly skewed distributions, such as that of net wealth.

Data are presented in nominal terms throughout. Data on households' assets and debt relate to end-2016, whereas data on income and consumption relate to the entire calendar year 2016.

Given the confidential and sensitive nature of the questions asked, the statistical results should be treated with caution. It should be further emphasised that the results are not a substitute for official national accounts and financial accounts statistics. In this regard, three main differences ought to be highlighted, namely that the Survey, (i) focuses on private households; (ii) it excludes future income from public and occupational pensions; and (iii) findings on wealth are based on the respondents' subjective self-assessment.

The Bank, with the help of the National Statistics Office selected a representative sample of Maltese households. A systematic sample selection was implemented; this involved sorting households by characteristics and selecting households at specific intervals. The initial sample consisted of 1,547 addresses. In total 1,004 households participated in the 2017 survey, in line with the pre-set target of 1,000 complete questionnaires. The panel component, that is, households that also participated in the 2014 survey (second wave) consisted of 539 households, whereas the remaining 465 households participated for the first time.

The overall response rate was of $64.9 \%$, notably higher than the $51.0 \%$ achieved in the second wave. Table 1 below summarises the sample response rates of the two sample components. As expected, the response rate of the panel component was significantly higher than the response rate from the new sample. The unit of analysis is the household and no equivalisation is made to account for differences in household size or composition. It should be noted that in the HFCS a household is defined as a person living alone or a group of people who live together in the same private dwelling and share expenditures, including the joint provision of the essentials for living.

Table 1: Response Rates

| Response rate Panel (\%) | $79.8 \%$ |
| :--- | :--- |
| Response rate New (\%) | $53.6 \%$ |
| Response rate Overall (\%) | $\mathbf{6 4 . 9 \%}$ |

## 3. Household characteristics

Table 2 sheds light on a range of characteristics of the surveyed households. According to the Survey, in 2016 there were close to 170,000 households in Malta, with an average of 2.5 members per household, down marginally from 2.6 in 2013. The prevalent household structure relates to households with two members. This category accounts for close to $30 \%$ of households. One-person households were the second largest category, with a share of almost $25 \%$. Moreover, the importance of this category has increased over time. In contrast, the share of larger households, that is, those with four or more persons, has been in decline, and amounted to slightly less than one-fourth in 2016 compared with $33 \%$ in 2010. These trends are also in line with other surveys, including the SILC.

With reference to housing status, the share of households owning their main residence (either outright or with a mortgage) edged up to $80.6 \%$, from $80.1 \%$ in 2013 , while the remaining $19.4 \%$ of households were tenants occupying their residence through rent, usufruct or rent-free agreements. The rise in the share of home owners is largely driven by an increase in the number of home-owners with a mortgage. The results from the Survey are in line with the outcomes from the SILC for the same period. ${ }^{4}$

The distribution of households based on the age of the reference person ${ }^{5}$ remained broadly similar to that observed in the second wave. The share of households whose reference person is employed continued to rise, reaching $42.9 \%$ in the latest wave. At the same time, the share of households with a self-employed reference person decreased by around one percentage point in the period 2010 to 2016, remaining the smallest household category on the basis of labour market status. On average, the educational level of the Maltese households has improved; $18.7 \%$ of the households in the 2017 wave had a reference person with a tertiary level of education, compared to $15.2 \%$ in 2010. Although, the prevalence of households with primary and secondary education decreased by 1.6 and 1.9 percentage points, respectively, households whose reference person has a secondary level of education continue to dominate, accounting for almost $60 \%$ of all households.

[^3]Table 2: Household structure (in \% of households)

|  | 2010 | 2013 | 2016 |
| :---: | :---: | :---: | :---: |
| Household size |  |  |  |
| 1 person | 18.8 | 23.6 | 24.6 |
| 2 persons | 25.7 | 28.7 | 29.0 |
| 3 persons | 22.3 | 21.5 | 21.6 |
| 4 persons | 22.1 | 18.6 | 18.4 |
| 5 and more persons | 11.1 | 7.5 | 6.4 |
| Housing status |  |  |  |
| Owner-outright | 64.9 | 64.3 | 63.5 |
| Owner-with mortgage | 12.4 | 15.8 | 17.1 |
| Other | 22.7 | 19.9 | 19.4 |
| Age (in years) of reference person |  |  |  |
| 16-34 | 8.8 | 12.8 | 12.7 |
| 35-44 | 22.2 | 17.2 | 18.2 |
| 45-54 | 21.0 | 20.0 | 18.0 |
| 55-64 | 23.1 | 20.3 | 20.4 |
| 65+ | 24.9 | 29.7 | 30.6 |
| Work status of reference person |  |  |  |
| Employee | 36.2 | 39.5 | 42.9 |
| Self-employed | 7.3 | 7.8 | 6.4 |
| Retired | 27.3 | 28.8 | 28.2 |
| Other | 29.3 | 23.9 | 22.4 |
| Education level |  |  |  |
| Primary | 23.2 | 23.8 | 21.6 |
| Secondary | 61.6 | 59.4 | 59.7 |
| Tertiary | 15.2 | 16.8 | 18.7 |

Source: HFCS

## 4. Household assets

This section focuses on the composition of households' assets, both real and financial. At $86.7 \%$, real assets continued to constitute the largest share of households' total assets, with financial assets accounting for the remaining 13.3\%. When compared to the previous two Surveys, these ratios remained broadly unchanged, with the share of real assets in 2016 increasing by half a percentage point on three years earlier. As expected, households' main residence (HMR) continued to account for the majority of their assets, highlighting the importance of the main residence as a store of value across time.

### 4.1. Real assets

According to the Survey, the HMR was the most significant asset held in 2016, representing $54.8 \%$ of the value of total real assets held by Maltese households. This compares with $53.5 \%$ in 2013. The importance of the HMR relative to total real assets was more pronounced for the lowest income quintile, households whose reference person had a below secondary level of education and also households whose reference person was an employee. Similarly, the relative importance of vehicles in the value of total assets was also higher for the lower wealth income quintiles.

Other key real assets held by households were self-employment businesses with a share of $18.9 \%$ as opposed to $20.3 \%$ in 2013 , and other real estate assets, the share of which increased from $17.1 \%$ in 2013 to $23.1 \%$ in 2016 . At the same time, the shares of vehicles and valuables in total real assets remained negligible, and largely unchanged from the previous wave of the Survey.

Chart 1 presents the distribution of different real asset components in each of the five quintiles of net wealth. As can be seen, the relative weight of the main residence declines as net wealth increases, in favour of other real-estate property and self-employment businesses. Indeed, for those within the highest net wealth quintile, only $37.8 \%$ of real assets were attributed to the HMR compared to $76.2 \%$ for those within the lowest net wealth quintile. In contrast, in the highest net wealth quintile, $30.8 \%$ and $29.3 \%$ of real assets were in the form of 'other real estate' and self-employment business assets, respectively. At the other end of the spectrum, the bottom quintile held only $8.8 \%$ of their real assets in other real estate and only $1.2 \%$ in self-employed business assets.

Chart 1: Distribution of real assets by net wealth quintiles


Chart 2 shows the distribution of real assets from the $1^{\text {st }}$ to $99^{\text {th }}$ percentile in 2016. The analysis covers all households, including households with no real assets (for which a zero value was assigned). The distribution of real assets grows fairly slowly between the $15^{\text {th }}$ and the $85^{\text {th }}$ percentile, reflecting the relatively evenly distributed self-assessed values for the HMR. Increases in the value of real asset holdings become more pronounced from the 85th percentile upwards, particularly above the 95th percentile. Apart from more valuable main residences, this result is largely driven by a wider portfolio of other real estate property holdings and assets related to self-employment businesses.

Chart 2: Percentile distribution of real assets (EUR)


Overall, $95.4 \%$ of all households held some type of real asset in 2016. Vehicles were the most commonly held asset, with $82.9 \%$ of Maltese households owning this type of asset in 2016, followed closely by HMR, at $81.4 \%$ (see Chart 3a). The Survey also indicates that $35.0 \%$ of households owned other forms of property, including second homes, garages, commercial premises and agricultural land parcels. Moreover, $12.9 \%$ of households were owners of self-employment business assets. A similar ranking prevailed in the previous two waves.

The breakdown of participation rates by age cohorts shows that the youngest and older households have a lower home-ownership rate in relation to the other age groups. With regards to other real estate property, participation rate increases gradually with age until it peaks at 45-54 and drops thereafter. At the same time, in relation to vehicle ownership, the age group of $35-44$ years enjoyed the highest ownership rate compared to other age groups (see Chart 3b).

Charts 3a and 3b: Participation rates in real assets (\%)


In general, the level of education, the number of persons in employment and the household's placement along the income and wealth distribution are positively related with the likelihood of owning HMR and other real assets. The aforementioned tendency is also prevalent as regards ownership of vehicles and valuables.

Whilst participation rates provide interesting insights on which different types of assets are held by households, it is also useful to examine the (median) values of those assets. For example, a particular asset may be held by a considerable number of households (this would show up in elevated participation rates), but its value could be low in relation to that of other assets, and in this sense the ownership of such asset may not contribute much to greater wealth equality.

The median value of real assets held was $€ 225,752$. The conditional mean value, which is based on households who own real assets, stood at $€ 382,895$ and lies above the
unconditional mean of $€ 317,020$. In the 2013 Survey the conditional and unconditional mean values of surveyed households stood at $€ 339,746$ and $€ 292,014$, respectively.

Charts 4a and 4b display the median values of different real assets for the sampled households, as well as by age groups. HMR constitutes the most valuable real asset in the household portfolio with a median value of $€ 200,000$. This value is more than double the median value of other real estate property ( $€ 87,501$ ), which is the second most valuable real asset. Self-employment businesses come third, with a median value of $€ 74,736$, while the values for vehicles and valuables are, as expected, markedly lower.

Charts 4 a and 4b: Median value of real assets by type and age cohorts (EUR)


The highest median value for real estate asset holdings is reported for those aged between 55 and 64 years. At the same time, the most valuable total real assets were held by those aged between 35 and 64 years, with little difference between the three age brackets (see Chart 4b). The value of assets was also found to be positively associated with income and net wealth, and it is considerably larger for households with self-employed reference persons in comparison to other employment statuses (employees, retired persons or unemployed).

The median value of real assets held by Maltese households increased from $€ 193,511$ in 2010 to $€ 225,752$ in the latest wave (see Chart 5). ${ }^{6}$

[^4]Chart 5: Real assets: medians and participation rates


Growth in the median value of total real assets was largely on account of increases in the self-assessed values of main residences and self-employment businesses. By contrast, the median value of 'other real estate' assets declined over the three Surveys. This drop can be partly explained by strong growth in real assets held by the bottom two net wealth quintiles (see Chart 6). The latter households tend to buy lower value properties, including garages. It is important to remark that although the median values of 'other real estate' assets declined, the mean values increased markedly over the period under study.

However, the median value of real assets grew across all quintiles when compared to 2013. As can be seen in the Chart below, the bottom and top quintiles experienced the largest growth in their median value of real assets, up by $22.4 \%$ and $14.1 \%$, respectively.

Chart 6: Growth rate in median value of real assets by net wealth quintiles (\%)


### 4.2. Financial assets

The Survey suggests that $97.1 \%$ of all households have at least one type of financial asset, two percentage points more than in the 2013 wave. The percentage of households holding financial assets is 1.8 percentage points more than those holding real assets, possibly reflecting the fact that younger households as well as households in lower income quintiles who do not own real estate at least hold financial assets.

Chart 7 plots the percentile distribution of financial assets. The median value of financial assets stood at $€ 22,512$ while the conditional mean value was estimated at $€ 57,498$, which is slightly higher than the unconditional mean of $€ 55,823$ (see Chart 7). In relative terms, both means are significantly larger than the median, indicating a high positive skewness of the distribution. This is confirmed by the value of around 2.55 mean-to-median ratio, compared to around 1.69 for real assets. This is further confirmed by steeper increase in the financial assets holding, especially above the $75^{\text {th }}$ percentile. Financial wealth is more unequally distributed than holdings of real assets.


Ownership of financial assets and their portfolio allocation is linked to a combination of a household's characteristics, such as household income and financial literacy. However, households' investment in more complex assets such as financial securities, funds or voluntary pension funds reflects other factors including educational attainment, risk appetite, age and employment status of the reference person.

In general, bank deposits are the most commonly held financial assets by households. Indeed, bank deposits were the most prevalent financial asset with a participation rate of $96.4 \%$ of all sampled households in 2016 (see Chart 8a). Deposit holdings are also widespread in lower income and wealth quintiles, where the participation rate exceeds $90 \%$
(see Chart 8b). Ownership rates of other forms of financial assets were relatively limited; securities were owned by $21.7 \%$ of all households, while around $15.9 \%$ of households had mutual funds and listed shares. Furthermore, $13.3 \%$ of households disclosed that they were covered by voluntary pension scheme or by a life insurance policy.

An assessment of the different components of financial asset holdings by the age of the household's reference person also confirms the prevalence of deposits. On average, participation rates are above $95 \%$ across all age cohorts. Ownership of securities increases up to 45-54 years and levels off thereafter. Furthermore, those aged between 35 and 44 years are the cohort most covered by pension schemes or life insurance (see Chart 8b).

Charts 8a and 8b: Participation rates in financial assets (\%)


When looking at the distribution of financial assets by net wealth quintiles it emerges that deposits account for close to $90 \%$ of all financial assets held by the bottom quintile. This share decreases gradually as wealth increases. By contrast, an inverse relationship can be noted as regards securities, mutual funds and listed shares, which tend to account for a more sizeable share of financial asset holdings in the wealthier quintiles (see Chart 9). The Survey also indicates that voluntary pension schemes and life insurance policies constitute a considerable share of the financial assets held by the second quintile of the surveyed households. The latter can be partly attributable to marketing efforts by financial intermediaries targeting households in this age cohort, who tend to have the means and the incentive to allocate part of their portfolio to such products.

Chart 9: Distribution of financial assets by net wealth quintiles


When comparing the median values of financial instruments over the three waves of the Survey one can note a broadly unchanged scenario (see Chart 10). The median value of total financial assets held by Maltese households edged up marginally when compared to the 2013 wave; rising from $€ 22,150$ to $€ 22,512$ in 2016 , but still lower than the value of $€ 23,454$ in 2010. The increase since 2013 reflects higher median values of voluntary pension scheme and life insurance, investment funds and listed shares, securities, and other instruments. Whilst increases in the median values of voluntary pension scheme and life insurance, and of investment funds and listed shares appear to be substantial, it is important to caution that participation rates in these instruments declined when compared to previous rounds.

Overall, the build-up of financial assets by the median household was weaker than that of real assets; this can be partly attributable to the generally low interest rate environment and the boom in the property market, which may have limited the attractiveness of certain instruments such as deposits relative to real estate.


- 2010 Participation (secondary axis) ■ 2013 Participation (secondary axis) 42016 Participation (secondary axis)


## 5. Household Liabilities

The Survey results show that slightly more than one-third of all households (34.2\%) held some form of liability in 2016; this is slightly less than the rate observed in 2013. Mortgage debt amounted to $87.5 \%$ of total households' debt in 2016.

In general, households with a reference person aged up to 44 years and those with a tertiary level of education were more likely to have outstanding debt. On the contrary, households in the bottom quintiles of the income and wealth distributions were less likely to have outstanding debt. Similarly, households with a retired reference person, particularly those aged over 65, were also less likely to have outstanding liabilities.

Chart 11 shows the distribution of household debt from the 1st to the 99th percentile. The median value of total household debt, which includes both mortgage and non-mortgage debt, such as debt on credit cards and other assets, was estimated at $€ 40,000$, significantly more than in the previous wave. The unconditional mean of household liabilities amounted to $€ 21,877$, while the conditional mean (the mean value of debt for those households having some form of debt) stood at $€ 63,937$.

Chart 11: Percentile distribution of household debt (EUR)


When compared to the previous two rounds of the Survey, it is evident that the increase in the median value of total debt was predominantly driven by higher mortgage debt, whereas non-mortgage liabilities remained small in comparison. The median value of mortgage debt rose to $€ 80,000$ in the latest wave, from just above $€ 60,000$ in the previous wave (see Chart 12). The conditional mean value of mortgage debt at the end of 2016 amounted to $€ 92,032$. Overall, $20.8 \%$ of households held mortgage related debt where a property was used as collateral. Whilst participation in non-mortgage debt, namely consumer credit and debit cards, exceeded that of mortgage debt, the median value of the former stood at only $€ 3,502$.

As can be seen in Chart 13 the proportion of indebted households decreased since 2013. This was reflected across all quintiles of net wealth. However, participation fell mostly in the lower three quintiles. When compared to the 2010 and 2013 Surveys, the decrease in the proportion of households holding liabilities was entirely attributable to a decline in the participation rate of non-mortgage debt (see Chart 12). On the contrary, a higher proportion of households held mortgage liabilities in 2016, in line with the strong growth in this form of credit in official monetary and banking statistics.

Chart 12: Median value of debt and participation rate by debt component across the three waves (EUR, percent)


Chart 13: Median value of debt and participation rate by net wealth quintile across the three waves (EUR, percent)


The median mortgage debt to gross household income ratio stood at $221.7 \%$ in 2016, an increase of $8.8 \%$ from the 2013 Survey (see Chart 14). The increase in this ratio compared to the previous wave reflects the abovementioned increase in median mortgage debt, which may partly reflect increasing property prices and longer loan maturities.

Notwithstanding the increase in the median mortgage debt, the mortgage debt servicing cost as a proportion of the gross household income of indebted households was estimated at $14.5 \%$, only half a percentage point more than in the previous round. The Survey shows that the median value of monthly payments on mortgage liabilities stood at $€ 460$.

The sustainability of households' financial burden can also be measured by comparing their outstanding debt levels with gross household wealth. Over the three waves one can note a gradual increase in the debt burden measured on this basis. Debt to household wealth stood at $14.5 \%$ in 2016, up from $9.0 \%$ in 2013.

Chart 14: Debt burden ratios (medians)


## 6. Net wealth

The Survey shows that household median net wealth, defined as holdings of real and financial assets net of liabilities, stood at $€ 236,529$ in 2016 , while average net wealth was estimated at $€ 402,611$ (see Chart 15). Both values vary considerably across wealth quintiles; the median net wealth value of the lowest quintile of households stood at $€ 12,612$, increasing to $€ 366,585$ for the fourth quintile, before almost doubling to $€ 692,554$ for the wealthiest quintile of households.

Whilst the mean and median net wealth values for the second to the fourth quintiles of households follow each other closely, a notable discrepancy can be noted at the two extremes of the spectrum. The latter may indicate that the degree of inequality is more pronounced amongst the bottom and top parts of the distribution.

Chart 15: Distribution of net wealth by net wealth quintile (EUR)


As can be seen in Chart 15, the net wealth of the top quintile is substantially larger than the median of the other quintiles. Skewness is more pronounced at the far end of the distribution. Chart 16 shows that the wealthiest $5 \%$ of households had a median net wealth equal to almost 4.5 times the median net wealth of all households. This ratio is very similar to that obtained in the previous round of the Survey in 2013. At the same time, the wealthiest $1 \%$ of households held more than 17 times the median net wealth amount, significantly. By way of comparison in the previous wave an almost nine-fold difference was estimated. The HFCS-based Gini coefficient, which measures inequality, shows that in 2016, inequality in household net wealth edged up to 0.60 in 2016, up from 0.56 in 2013 and 0.57 in 2010, indicating a marginal increase in the level of inequality over the last two waves of the Survey.

Chart 16: Comparison with households at the top end of the net wealth distribution (medians, EUR)


Over the three rounds of the Survey, the median value of net wealth increased across all household quintiles (see Chart 17). The most notable increase can be noted in the top quintile, where the median value of net wealth increased by $€ 64,026$ to $€ 692,554$ compared with 2013. The mean value of net wealth has also increased in comparison to the first and second waves (see Chart 18). However, whilst average net wealth rose by $24.0 \%$ over the three waves, the increase in the median value was more moderate, up by $15.4 \%$ from 2010.

Chart 17: Median net wealth by net wealth quintiles across all three waves


Chart 18: Net wealth (mean, median and interquartile range)


The Survey also indicates that net wealth varies according to the age of the reference person, with median net wealth peaking in the $45-54$ age bracket, at $€ 283,493$; before declining again for the older age cohorts. Net wealth is also positively associated with the number of members per household. Households whose reference person is self-employed or a university graduate also tend to report a higher value of net wealth.

## 7. Income

In the HFCS, gross household income is defined as the sum of all pre-tax income and social contributions, including labour / pension income, rents from real estate assets, return from financial assets, regular social / private transfers, and any income from other sources.

As Chart 19 shows, employee income was the main source of income, totalling $67.4 \%$ of total gross household income. Income from self-employment activities represented $8.8 \%$ of the total income of Maltese households in 2016. Income from pension and social transfers accounted for $13.6 \%$ and $2.9 \%$, respectively, whilst income from financial investment stood at only $2.1 \%$ of total household income.

The distribution of income by gross income quintile shows that the highest three quintiles derived most of their income from employment income. On the contrary, the bottom two quintiles relied significantly on pensions and regular social transfers. Income generated from productive engagement in the labour market, either as employees or self-employed, amounted to only $7.4 \%$ of total income of the bottom quintile, drastically less than the $84.8 \%$ for the top quintile.

Chart 19: Distribution of income by gross income quintiles


The Survey shows that the median gross income of Maltese households in 2016 stood at $€ 25,417$, whilst the average income stood higher, at $€ 31,203$ (see Chart 20). These figures are slightly lower than the comparable mean and median from the SILC.

Chart 20: Percentile distribution of household gross income (EUR)


In general, households' income increases as net wealth increases (the highest levels of income were accredited to highest net wealth quintiles). An exception can be noted for those aged over 65 years, where income is low but the accumulated total net wealth is relatively large. Median and mean incomes were also found to vary according to the educational level of the household; the Survey shows that the income of households whose reference person completed tertiary level education was significantly higher than that of those with a lower level of education. Indeed, the median gross income of households whose reference person was a university graduate in 2016 amounted to $€ 45,297$; $65 \%$ more than that of households whose reference person had a secondary level of education and almost four times that of households where the reference person's education was below secondary level.

Chart 21: Median incomes by age cohorts (EUR)


When it comes to gross households' income classification according to the labour market status of the reference person, employees were the highest income earners with a median value of $€ 37,919$ in 2016 . Households whose reference person earns some form of selfemployment income reported a median income of $€ 31,659$.

Similar to wealth, income also varies according to the life cycle, increasing with age, peaking for households whose reference person was aged between 35 to 44 years in 2016, before decreasing gradually for those aged till 64 years. Thereafter, a marked decline in gross household income can be noted for those reference persons older than 65 years (see Chart 21).

The median value of gross household income increased by $11.9 \%$ to $€ 25,417$ since 2013, mostly reflecting an increase in employee income. The latter increased by around $€ 3,700$, or $15.2 \%$, from 2013 (see Chart 22). Changes in the other components were limited.

The participation rate of households receiving employee income in 2016 rose to $65.1 \%$, from $62.3 \%$ three years earlier, thus returning to the rate estimated in the first wave of the Survey.

Whilst participation rates and median income values remained broadly unchanged for households claiming self-employed income and pensions, a considerable increase in participation rates was noted for households receiving regular social transfers other than pensions. The latter may reflect an increase in the share of households eligible for children's allowance. In contrast, the proportion of households receiving income from financial investments declined significantly when compared to previous rounds of the Survey.

Chart 22: Gross income (median and participation) across the three waves (EUR, per cent)


Median gross income in this wave was $11.9 \%$ higher than the $€ 25,417$ estimated in the previous survey. Although the median income increased across all quintiles since 2013, the most significant increase was estimated for those households in the fourth quintile, where median income is estimated to have grown by $12.4 \%$ on 2013. The lowest growth rate in
median income over this period was registered in the top quintile, where gross income is estimated to have increased by only $1.4 \%$ on three years earlier (see Chart 23).

As can be seen in Chart 24, the mean and median incomes by quintile move closely together for the bottom $80 \%$ of households; however, a notable discrepancy can be noted for the top quintile. The latter is leading to a higher overall mean income of households. The Survey-based GINI co-efficient for gross household income edged up to 0.36 in 2016, from 0.34 in 2013 and from 0.33 in 2010. This indicates a marginal increase in the level of inequality over the period under review.

Chart 23: Growth rate of median income by gross income quintiles


Chart 24: Distribution of gross income by gross income quintile (EUR)


## 8. Consumption and saving

The median value of household consumption of goods and services in 2016 was estimated at $€ 9,006$, whereas the average household spent $€ 10,241$. The median consumption varies notably across the percentiles, particularly for the top $5 \%$ of households (see Chart 25).

Results show that median and mean levels of consumption are positively related to the households' gross income, number of members and employed persons in the household, and the education level of the reference person. At the same time, differences between households with the reference person being employed and those being self-employed were found to be minimal. Once again, consumption level appears to vary according to the life cycle of the reference person, where both the median and mean values peak for the 35-44 age cohort; whilst the lowest consumptions levels were for the those older than 65 years.

The Survey shows that the median spending on food and beverage consumption at home reached $€ 5,400$, while spending on food and beverages in bars and restaurants stood at $€ 720$. Furthermore, spending on utilities reached a median value of $€ 1,500$ in 2016 . ${ }^{7}$ In general, median spending of the top quintile based on gross income is double that of the bottom quintile. However, a different pattern can be noted for the median value of food and beverages consumed outside home, in this case, the top quintile spends ten times more than the bottom quintile. When it comes to savings, only around $25 \%$ of the bottom quintile claimed that they are able to save some of their income (see Chart 26). This ratio averages $45 \%$ for the middle three quintiles before increasing to close to $70 \%$ for the top quintile by gross household income. When households were asked to highlight the main purpose for their savings, the three most frequent replies related to provision for unexpected events, travelling and holidays, and old-age provision.

Chart 25: Percentile distribution of annual consumption


[^5]Chart 26: Ability to save by income quintile


## 9. Limitations of the survey and avenues for further research

The main limitation of the HFCS relies on the subjective self-assessed valuation of assets, including real assets and self-employment businesses. Whilst perceptions and preferences are crucial for understanding individual economic behaviour, such self-assessments are normally imprecise. In general, households tend to under-report or underestimate (or understate) the value of their assets and under-declare income. However, the opposite can ensue when market prices of certain assets, particularly of real estate, are on the rise. In Malta, similar to other countries, wealth is unequally distributed, and hence a relatively small number of households possess a larger portion of total wealth. In order to capture these households correctly, over-sampling of wealthier households is usually conducted in countries were administrative data sources are available. This over-sampling exercise was not possible in the case of Malta since administrative data was not available to the administrators of the Survey. Should such data become available, this would enable better coverage of the upper part of the wealth distribution. Due to a relatively small sample size, another limitation of the Survey relates to a possible lack of representation of particular population sub-groups. The latter is a concern, particularly when capturing households of foreign nationals living in Malta and other sub-categories that make it difficult to extract meaningful results from a small number of observations.

The Survey provides a wealth of information that is not available from official statistics, thus opening up various avenues for research. The evolution of income and wealth inequality, jointly, and over time, using Malta's HFCS data were examined in an earlier study by Georgakopoulos (2019). This study provides a more in depth analysis of how income and wealth are distributed over different socio-economic characteristics. As the joint distribution of income, consumption and wealth is of particular interest to many institutions and
policymakers it is also important to evaluate the HFCS results in light of the comparable outcomes emerging from the EU-SILC and the HBS. Moreover, other important research areas using micro-level structural information on households' assets and liabilities relate to: households' debt and financial pressures; portfolio choice and demand for assets; saving, liquidity constraints, consumption smoothing and studies on the marginal propensity to consume; stress testing of the household sector for financial stability purposes. Furthermore, the disaggregated information from this survey is useful for the calibration of macroeconomic models.

Cross-country comparisons using HFCS data are also valuable for researchers and international institutions, however such assessment can only be made once all the euro area and the other EU countries publish their third wave results, and this is not expected to occur before mid-2020. Comparisons with other countries allow the researcher to observe the distribution of wealth at given points in time resulting from the interaction of structural, institutional and macroeconomic factors.

## 10. Annex

Table A1: Median value of household real assets conditional on participation


[^6]Table A2: Median value of household financial assets conditional on participation


[^7]Table A3: Median value of household debt conditional on participation

| EUR |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Household characteristics | Total mortgage debt | Other nonmortgage debt | Total debt | Total repayments |
| Gross Income Percentile |  |  |  |  |
| Less than 20 | . | : | : |  |
| Between 20 and 40 |  | : | 20,000 |  |
| Between 40 and 60 | 80,000 | 3,000 | 30,751 | 303 |
| Between 60 and 80 | 63,000 | 4,900 | 34,400 | 397 |
| Between 80 and 100 | 109,000 | 3,000 | 82,000 | 550 |
| Age of the Reference Person* |  |  |  |  |
| Under 35 | 93,898 | 1,052 | 87,801 | 500 |
| 35-44 | 72,346 | 3,502 | 62,501 | 464 |
| 45-54 | 40,000 | 4,500 | 12,000 | 282 |
| 55-64 | : | 3,751 | 7,200 | 298 |
| Over 65 | : | 932 | 1,500 |  |
| Labour Market Situation of Reference Person |  |  |  |  |
| Employee | 87,501 | 3,400 | 58,000 | 423 |
| Self-Employed | : | : | 61,751 |  |
| Retired | : | 932 | 1,751 | 180 |
| Other | : | 4,500 | 13,200 | 301 |
| Level of Education of the Reference Person |  |  |  |  |
| Below secondary education | : | 1,500 | 2,000 | 140 |
| Secondary Education | 63,000 | 4,083 | 26,000 | 370 |
| University Education | 118,000 | 3,500 | 110,000 | 700 |
| Status of the Main Residence |  |  |  |  |
| Owneship (Full or Part) | 80,000 | 3,751 | 45,000 | 435 |
| Other | : | 2,700 | 2,700 | 184 |
| Number of household members in employment |  |  |  |  |
| None | : | : | 1,500 |  |
| One | 87500.5 | 4,000 | 42,501 | 400 |
| Two | 87500.5 | 3,500 | 70,000 | 454 |
| More than 3 | 30000.5 | 7,000 | 13,063 | 301 |
| Number of household members |  |  |  |  |
| One | : | : | : |  |
| Two | 125,001 | 1,300 | 42,551 | 480 |
| Three | 80,000 | 6,150 | 45,946 | 350 |
| Four | 38,000 | 3,502 | 17,600 | 390 |
| More than four | : | : | 55,500 | 454 |
| Net Wealth Percentile |  |  |  |  |
| Less than 20 | : | 2,700 | 24,600 | 301 |
| Between 20 and 40 | 80,000 | 2,000 | 77,000 | 402 |
| Between 40 and 60 | 85,000 | 3,000 | 37,500 | 382 |
| Between 60 and 80 | 40,000 | 3,200 | 15,000 | 356 |
| Between 80 and 100 | 72,346 | 10,000 | 45,000 | 530 |
| All Households | 80,000 | 3,502 | 40,000 | 402 |
| S.E. | 4,261 | 428 | 4,753 | 18 |

[^8]Table A4: Household net wealth
EUR

| Household characteristics | Mean | Median |
| :---: | :---: | :---: |
| Gross Income Percentile |  |  |
| Less than 20 | 215,536 | 144,367 |
| Between 20 and 40 | 320,740 | 208,318 |
| Between 40 and 60 | 265,781 | 198,098 |
| Between 60 and 80 | 425,561 | 270,000 |
| Between 80 and 100 | 781,411 | 377,458 |
| Age of the Reference Person* |  |  |
| Under 35 | 258,892 | 127,266 |
| 35-44 | 467,372 | 230,450 |
| 45-54 | 462,499 | 283,493 |
| 55-64 | 460,979 | 281,006 |
| Over 65 | 349,627 | 212,694 |
| Labour Market Situation of Reference Person |  |  |
| Employee | 399,906 | 228,301 |
| Self-Employed | 888,480 | 488,631 |
| Retired | 313,313 | 230,286 |
| Other | 379,359 | 212,694 |
| Level of Education of the Reference Person |  |  |
| Below secondary education | 276,121 | 181,923 |
| Secondary Education | 382,795 | 237,751 |
| University Education | 609,514 | 304,216 |
| Status of the Main Residence |  |  |
| Owneship (Full or Part) | 481,252 | 287,002 |
| Other | 42,290 | 11,000 |
| Number of household members in employment |  |  |
| None | 303,397 | 186,917 |
| One | 519,007 | 208,318 |
| Two | 373,268 | 251,032 |
| More than 3 | 447,011 | 343,422 |
| Number of household members |  |  |
| One | 368,930 | 151,901 |
| Two | 412,630 | 231,894 |
| Three | 397,735 | 242,600 |
| Four | 468,514 | 299,254 |
| More than four | 311,468 | 279,972 |
| Net Wealth Percentile |  |  |
| Less than 20 | 24,065 | 12,612 |
| Between 20 and 40 | 129,732 | 133,001 |
| Between 40 and 60 | 233,804 | 236,529 |
| Between 60 and 80 | 373,891 | 366,585 |
| Between 80 and 100 | 1,261,605 | 692,554 |
| All Households | 402,611 | 236,529 |
| S.E. | 29,009 | 6,563 |

* Reference Person is taken to be the person that replied to the questionnaire on behalf of the household
: Number of observations is less than 21.
S.E. show s standard erros for the results of all households

Source: Maltese Household Finance and Consumption Survey

Table A5: Median household debt burden (All debt)

| Household characteristics | Ratio of debt payments to gross household income | Ratio of debt to gross household income | Ratio of debt to gross household wealth | Ratio of debt payments to gross household income of household main residence | Ratio of household main residence to loan value | Ratio of liquidity to household income |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gross Income Percentile |  |  |  |  |  |  |
| Less than 20 | : | : | : | : | . | 183.7 |
| Between 20 and 40 | : | 166.7 | 7.4 | : | : | 118.3 |
| Between 40 and 60 | 15.8 | 121.7 | 16.2 | 18.6 | 44.0 | 35.2 |
| Between 60 and 80 | 11.4 | 94.4 | 13.3 | 13.6 | 36.4 | 47.4 |
| Between 80 and 100 | 11.7 | 131.2 | 14.9 | 11.5 | 42.1 | 55.5 |
| Age of the Reference Person* |  |  |  |  |  |  |
| Under 35 | 18.3 | 293.8 | 42.6 | 17.7 | 55.6 | 21.0 |
| 35-44 | 15.2 | 153.1 | 16.2 | 13.8 | 32.2 | 41.2 |
| 45-54 | 7.8 | 20.6 | 2.6 | 12.4 | : | 39.9 |
| 55-64 | 8.9 | 24.6 | 3.8 | : |  | 93.5 |
| Over 65 | : | 8.7 | 1.2 | : | : | 176.6 |
| Labour Market Situation of Reference Person |  |  |  |  |  |  |
| Employee | 13.0 | 141.2 | 21.1 | 14.4 | 43.8 | 44.2 |
| Self-Employed | : | 267.8 | 7.4 | : | : | 45.6 |
| Retired | 7.9 | 8.7 | 1.2 | : | : | 181.0 |
| Other | 13.1 | 43.3 | 4.7 | : | : | 64.6 |
| Level of Education of the Reference Person |  |  |  |  |  |  |
| Below secondary education | 7.6 | 8.1 | 1.1 | : | : | 117.9 |
| Secondary Education | 12.6 | 77.2 | 8.0 | 13.6 | 38.3 | 55.7 |
| University Education | 15.7 | 219.3 | 28.5 | 15.7 | 53.3 | 86.2 |
| Status of the Main Residence |  |  |  |  |  |  |
| Owneship (Full or Part) | 13.5 | 129.6 | 12.9 | 14.5 | 42.1 | 72.9 |
| Other | 9.5 | 23.0 | 21.1 | : | : | 55.4 |
| Number of household members in employment |  |  |  |  |  |  |
| None | : | 20.8 | 1.4 | : | : | 193.2 |
| One | 16.7 | 125.9 | 16.6 | 20.6 | 41.2 | 64.6 |
| Two | 13.5 | 153.1 | 21.1 | 13.1 | 44.0 | 37.0 |
| More than 3 | 7.8 | 25.3 | 3.8 | 8.0 | : | 40.1 |
| Number of household members |  |  |  |  |  |  |
| One | : | : | : | : | : | 116.0 |
| Two | 13.8 | 156.1 | 28.5 | 15.7 | 53.3 | 116.7 |
| Three | 13.1 | 110.6 | 16.6 | 14.5 | 42.1 | 51.7 |
| Four | 10.9 | 37.6 | 5.6 | 11.0 | 16.5 | 37.9 |
| More than four | 12.2 | 124.1 | 15.1 | : | : | 34.0 |
| Net Wealth Percentile |  |  |  |  |  |  |
| Less than 20 | 12.0 | 147.0 | 56.4 | : | : | 19.9 |
| Between 20 and 40 | 15.7 | 181.1 | 36.0 | 16.7 | 47.1 | 32.7 |
| Between 40 and 60 | 12.4 | 81.9 | 13.3 | 15.0 | 42.1 | 71.9 |
| Between 60 and 80 | 12.6 | 47.8 | 4.1 | 12.5 | 16.5 | 96.8 |
| Between 80 and 100 | 12.9 | 80.4 | 3.9 | 13.6 | : | 156.8 |
| All Households | 13.1 | 110.6 | 14.5 | 14.4 | 42.1 | 69.5 |
| S.E. | 0.7 | 16.1 | 2.3 | 1.0 | 2.2 | 4.5 |

[^9]Table A6: Median value of household gross income conditional on participation
EUR

| Household characteristics | Employee income | Self-employed Income | Income from pensions (including widows and disability) | Regular social transfers (except pensions) | Financial Investment | Other household income | Total household gross income |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gross Income Percentile |  |  |  |  |  |  |  |
| Less than 20 | . |  | 6,997 | 1,841 | 100 | 500 | 7,637 |
| Between 20 and 40 | 13,331 |  | 11,286 | 1,478 | 301 | 774 | 14,551 |
| Between 40 and 60 | 21,251 | 9,451 | 8,859 | 918 | 51 | 2,575 | 25,568 |
| Between 60 and 80 | 32,194 | 12,051 | 9,336 | 671 | 301 | 1,131 | 38,015 |
| Between 80 and 100 | 52,046 | 18,075 | 10,525 | 550 | 301 | 8,000 | 58,642 |
| Age of the Reference Person* |  |  |  |  |  |  |  |
| Under 35 | 30,000 | : | : | 875 | 51 | : | 31,636 |
| 35-44 | 35,001 | 15,000 | : | 918 | 51 | 1,751 | 36,031 |
| 45-54 | 31,252 | 16,051 | 8,780 | 798 | 300 | 1,751 | 34,518 |
| 55-64 | 23,426 | 9,000 | 7,723 | 1,033 | 301 | 3,751 | 27,501 |
| Over 65 | 17,921 | : | 8,764 | 719 | 301 | 600 | 10,959 |
| Labour Market Situation of Reference Person |  |  |  |  |  |  |  |
| Employee | 35,000 | 8,400 | 8,751 | 736 | 51 | 2,300 | 37,919 |
| Self-Employed | 15,600 | 16,051 | : | 721 | 301 |  | 31,659 |
| Retired | 18,000 | 7,608 | 9,336 | 730 | 301 | 600 | 12,690 |
| Other | 21,512 | 12,810 | 7,093 | 1,869 | 51 | 2,640 | 16,931 |
| Level of Education of the Reference Person |  |  |  |  |  |  |  |
| Below secondary education | 17,155 | : | 7,872 | 1,382 | 301 | 301 | 11,623 |
| Secondary Education | 26,000 | 12,810 | 8,764 | 918 | 120 | 1,751 | 27,370 |
| University Education | 45,305 | : | 10,243 | 918 | 301 | 5,800 | 45,295 |
| Status of the Main Residence |  |  |  |  |  |  |  |
| Owneship (Full or Part) | 30,001 | 12,387 | 8,932 | 867 | 301 | 2,300 | 28,787 |
| Other | 19,840 | : | 7,569 | 1,873 | 51 | 600 | 15,755 |
| Number of household members in employment |  |  |  |  |  |  |  |
| None | : | : | 8,395 | 1,845 | 301 | 600 | 9,414 |
| One | 18,801 | 13,000 | 8,780 | 918 | 301 | 4,000 | 23,233 |
| Two | 35,001 | 12,051 | 8,082 | 719 | 51 | 1,032 | 38,848 |
| More than 3 | 42,351 | 11,684 | 10,525 | 572 | 301 | 2,300 | 50,640 |
| Number of household members |  |  |  |  |  |  |  |
| One | 19,202 | : | 7,110 | 1,648 | 301 | 4,300 | 10,375 |
| Two | 26,000 | 12,051 | 9,705 | 721 | 301 | 1,751 | 21,073 |
| Three | 27,501 | 12,051 | 8,780 | 459 | 180 | 1,200 | 32,958 |
| Four | 34,492 | 13,000 | 9,349 | 918 | 51 | 2,300 | 36,683 |
| More than five | 32,080 | : | 8,439 | 1,431 | 51 | : | 38,302 |
| Net Wealth Percentile |  |  |  |  |  |  |  |
| Less than 20 | 20,054 | : | 7,540 | 1,801 | 51 | 600 | 17,118 |
| Between 20 and 40 | 27,000 | : | 7,897 | 918 | 51 | : | 21,957 |
| Between 40 and 60 | 30,000 | : | 7,984 | 861 | 301 | 600 | 26,418 |
| Between 60 and 80 | 29,700 | 13,393 | 8,969 | 688 | 301 | 2,400 | 28,800 |
| Between 80 and 100 | 38,000 | 15,000 | 10,243 | 472 | 500 | 6,251 | 39,023 |
| All Households | 28,000 | 12,051 | 8,502 | 918 | 301 | 1,751 | 25,417 |
| S.E. | 929 | 695 | 222 | 16 | 47 | 413 | 868 |

[^10]Table A7: Median value of household expenses conditional on participation

| Household characteristics | Annual amount spent on food in home | Annual amount spent on food outside home | Annual amount spent on food | Annual amount spent on utilities | Total consumption |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Gross Income Percentile |  |  |  |  |  |
| Less than 20 | 3,606 | 240 | 4,212 | 960 | 6,000 |
| Between 20 and 40 | 4,800 | 606 | 5,580 | 1,320 | 9,000 |
| Between 40 and 60 | 6,000 | 606 | 7,200 | 1,740 | 9,006 |
| Between 60 and 80 | 6,000 | 1,560 | 7,806 | 1,800 | 9,600 |
| Between 80 and 100 | 6,000 | 2,400 | 8,880 | 1,860 | 12,000 |
| Age of the Reference Person * |  |  |  |  |  |
| Under 35 | 4,200 | 1,200 | 6,600 | 1,500 | 9,006 |
| 35-44 | 6,000 | 1,200 | 7,212 | 1,800 | 10,632 |
| 45-54 | 6,000 | 1,200 | 7,806 | 1,800 | 9,060 |
| 55-64 | 5,400 | 606 | 6,960 | 1,440 | 9,006 |
| Over 65 | 4,800 | 600 | 5,520 | 1,200 | 7,200 |
| Labour Market Situation of Reference Person |  |  |  |  |  |
| Employee | 5,400 | 1,200 | 7,212 | 1,800 | 9,600 |
| Self-Employed | 6,000 | 1,200 | 7,800 | 2,100 | 9,060 |
| Retired | 4,800 | 606 | 6,000 | 1,200 | 8,400 |
| Other | 4,800 | 600 | 6,000 | 1,440 | 9,000 |
| Level of Education of the Reference Person |  |  |  |  |  |
| Below secondary education | 4,800 | 600 | 5,400 | 1,116 | 7,200 |
| Secondary Education | 6,000 | 720 | 7,200 | 1,608 | 9,006 |
| University Education | 4,900 | 2,400 | 7,212 | 1,800 | 9,600 |
| Status of the Main Residence |  |  |  |  |  |
| Owneship (Full or Part) | 5,400 | 960 | 7,200 | 1,704 | 9,006 |
| Other | 4,800 | 606 | 5,406 | 1,200 | 8,400 |
| Number of household members in employment |  |  |  |  |  |
| None | 4,800 | 600 | 4,920 | 1,080 | 7,068 |
| One | 4,800 | 840 | 6,600 | 1,500 | 9,006 |
| Two | 6,000 | 1,200 | 7,550 | 1,800 | 10,200 |
| More than 3 | 7,200 | 1,200 | 9,600 | 2,160 | 12,000 |
| Number of household members |  |  |  |  |  |
| One | 3,606 | 606 | 4,800 | 960 | 6,360 |
| Two | 4,800 | 606 | 6,240 | 1,428 | 9,000 |
| Three | 6,000 | 1,200 | 7,800 | 1,800 | 9,600 |
| Four | 7,200 | 1,200 | 8,870 | 2,100 | 11,460 |
| More than four | 6,792 | 606 | 9,006 | 1,980 | 10,200 |
| Net Wealth Percentile |  |  |  |  |  |
| Less than 20 | 4,800 | 606 | 5,400 | 1,200 | 8,400 |
| Between 20 and 40 | 4,800 | 864 | 6,600 | 1,560 | 9,000 |
| Between 40 and 60 | 5,640 | 720 | 7,200 | 1,560 | 9,006 |
| Between 60 and 80 | 6,000 | 720 | 7,200 | 1,560 | 9,006 |
| Between 80 and 100 | 6,000 | 1,200 | 7,680 | 1,800 | 10,800 |
| All Households | 5,400 | 720 | 6,840 | 1,500 | 9,006 |
| S.E. | 229 | 81 | 172 | 42 | 246 |

[^11]Table A8: Mean value of household real assets conditional on participation


[^12]Table A9: Mean value of household financial assets conditional on participation


[^13]Table A10: Mean value of household debt conditional on participation


[^14]Table A11: Conditioanl mean value of household debt burden (All debt)


[^15]Table A12: Mean value of household gross income conditional on participation
EUR

| Household characteristics | Employee income | Self-employed Income | Income from pensions (including widows and disability) | Regular social transfers (except pensions) | Financial Investment | Other household income | Total household gross income |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gross Income Percentile |  |  |  |  |  |  |  |
| Less than 20 |  |  | 6,849 | 2,621 | 428 | 877 | 7,645 |
| Between 20 and 40 | 12,422 |  | 10,748 | 2,419 | 1,028 | 3,086 | 14,978 |
| Between 40 and 60 | 20,439 | 12,201 | 10,633 | 1,902 | 725 | 3,975 | 25,401 |
| Between 60 and 80 | 30,836 | 13,077 | 10,417 | 1,417 | 945 | 4,026 | 37,912 |
| Between 80 and 100 | 55,555 | 27,976 | 13,041 | 932 | 1,910 | 28,324 | 70,330 |
| Age of the Reference Person* |  |  |  |  |  |  |  |
| Under 35 | 32,874 | . | . | 1,695 | 162 | : | 35,643 |
| 35-44 | 35,968 | 15,764 | : | 1,503 | 1,248 | 18,153 | 42,348 |
| 45-54 | 36,318 | 26,716 | 11,445 | 2,128 | 659 | 11,645 | 42,682 |
| 55-64 | 28,147 | 13,395 | 8,962 | 2,289 | 1,068 | 5,530 | 31,071 |
| Over 65 | 21,447 |  | 9,570 | 1,548 | 1,441 | 4,878 | 16,076 |
| Labour Market Situation of Reference Person |  |  |  |  |  |  |  |
| Employee | 36,981 | 12,444 | 8,125 | 1,103 | 813 | 15,228 | 42,945 |
| Self-Employed | 16,641 | 19,450 |  | 1,203 | 807 | : | 33,558 |
| Retired | 22,146 | 9,131 | 10,154 | 1,868 | 1,530 | 4,556 | 18,592 |
| Other | 26,074 | 23,133 | 8,283 | 3,147 | 837 | 7,654 | 23,917 |
| Level of Education of the Reference Person |  |  |  |  |  |  |  |
| Below secondary education | 19,909 |  | 8,697 | 1,897 | 707 | 2,577 | 15,811 |
| Secondary Education | 28,770 | 16,349 | 9,253 | 1,960 | 856 | 6,712 | 30,190 |
| University Education | 47,649 |  | 13,292 | 1,060 | 1,966 | 28,300 | 52,211 |
| Status of the Main Residence |  |  |  |  |  |  |  |
| Owneship (Full or Part) | 33,859 | 17,043 | 9,909 | 1,437 | 1,151 | 11,247 | 33,811 |
| Other | 23,222 |  | 8,214 | 3,209 | 483 | 1,872 | 19,809 |
| Number of household members in employment |  |  |  |  |  |  |  |
| None | : | : | 9,372 | 2,904 | 1,474 | 3,552 | 11,119 |
| One | 22,655 | 17,768 | 9,528 | 1,953 | 872 | 11,540 | 30,336 |
| Two | 36,181 | 16,246 | 7,770 | 1,243 | 877 | 16,972 | 43,849 |
| More than 3 | 45,219 | 15,145 | 14,449 | 1,309 | 783 | 9,360 | 55,499 |
| Number of household members |  |  |  |  |  |  |  |
| One | 26,338 |  | 8,355 | 2,082 | 845 | 10,938 | 16,805 |
| Two | 30,561 | 13,590 | 9,941 | 1,849 | 1,453 | 5,390 | 26,269 |
| Three | 31,484 | 15,780 | 9,355 | 1,542 | 532 | 4,875 | 37,246 |
| Four | 36,410 | 18,941 | 14,185 | 1,507 | 1,461 | 25,321 | 47,184 |
| More than four | 35,414 | : | 8,734 | 2,766 | 248 | : | 42,518 |
| Net Wealth Percentile |  |  |  |  |  |  |  |
| Less than 20 | 23,775 |  | 8,565 | 3,031 | 156 | 1,632 | 20,741 |
| Between 20 and 40 | 29,488 |  | 7,948 | 1,833 | 368 |  | 25,621 |
| Between 40 and 60 | 32,918 |  | 9,212 | 1,423 | 609 | 1,393 | 28,672 |
| Between 60 and 80 | 33,017 | 15,651 | 10,232 | 1,078 | 624 | 4,131 | 31,014 |
| Between 80 and 100 | 41,968 | 21,824 | 11,470 | 1,110 | 3,048 | 21,270 | 50,926 |
| All Households | 32,317 | 16,621 | 9,474 | 1,816 | 1,044 | 10,143 | 31,203 |
| S.E. | 775 | 1,100 | 302 | 87 | 164 | 3,128 | 998 |

[^16]Table A13: Mean value of household expenses conditional on participation


[^17]Table A14: Participation in real assets


[^18]Table A15: Participation in financial assets


[^19]Table A16: Participation in household debt
Percentage

| Household characteristics | Total mortgage debt | Other nonmortgage debt | Total debt |
| :---: | :---: | :---: | :---: |
| Gross Income Percentile |  |  |  |
| Less than 20 | : | : |  |
| Between 20 and 40 | : | : | 15.4 |
| Between 40 and 60 | 21.8 | 25.6 | 38.6 |
| Between 60 and 80 | 29.6 | 33.7 | 50.8 |
| Between 80 and 100 | 43.3 | 38.8 | 58.4 |
| Age of the Reference Person* |  |  |  |
| Under 35 | 54.4 | 25.9 | 61.0 |
| 35-44 | 54.4 | 43.2 | 67.0 |
| 45-54 | 14.7 | 27.4 | 38.0 |
| 55-64 | : | 23.0 | 25.5 |
| Over 65 | : | 6.5 | 7.2 |
| Labour Market Situation of Reference Person |  |  |  |
| Employee | 37.7 | 32.1 | 53.3 |
| Self-Employed | : | : | 44.4 |
| Retired | : | 7.8 | 9.7 |
| Other | : | 20.2 | 25.6 |
| Level of Education of the Reference Person |  |  |  |
| Below secondary education | : | 10.7 | 11.2 |
| Secondary Education | 20.0 | 26.1 | 36.6 |
| University Education | 46.8 | 26.1 | 53.1 |
| Status of the Main Residence |  |  |  |
| Owneship (Full or Part) | 25.2 | 25 | 38.6 |
| Other | : | 14.3 | 14.9 |
| Number of household members in employment |  |  |  |
| None | : | : |  |
| One | 18.4 | 20.3 | 33.9 |
| Two | 42.1 | 35.7 | 55.9 |
| More than 3 | 21.1 | 42.6 | 53.2 |
| Number of household members |  |  |  |
| One | : | : | 15.3 |
| Two | 17.4 | 21.2 | 29.2 |
| Three | 26.5 | 30.2 | 45.6 |
| Four | 25.9 | 34.5 | 47.9 |
| More than four | 37.8 | 34.1 | 51.8 |
| Net Wealth Percentile |  |  |  |
| Less than 20 | : | 19.3 | 27.1 |
| Between 20 and 40 | 33.6 | 22.7 | 42.9 |
| Between 40 and 60 | 20.4 | 24.7 | 33.6 |
| Between 60 and 80 | 16.4 | 22.4 | 32.8 |
| Between 80 and 100 | 23.0 | 25.8 | 36.2 |
| All Households | 20.8 | 22.8 | 34.2 |
| S.E. | 1.0 | 1.1 | 1.2 |

[^20]Table A17: Participation in household gross income
Percentage


[^21]
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[^1]:    ${ }^{1}$ Silvio Attard and llias Georgakopoulos are principal economist and economist, respectively, at the Economic Analysis Department of the Central Bank of Malta. The authors would like to acknowledge the help provided by various officials at the National Statistics Office who were in charge of carrying out this survey and who helped in the compilation of the data, notably Mr. Eusebio Bezzina, Ms. Josianne Galea and Ms. Nikita Ellul. The authors would like to thank Mr. Alexander Demarco, Dr. Aaron G. Grech, Ms. Rita Schembri and Mr. Brian Micallef for their comments and suggestions. The views expressed are those of the authors and do not necessarily reflect the views of the Central Bank of Malta. Any remaining errors are the sole responsibility of the authors.

[^2]:    ${ }^{2}$ In Malta, the first two waves of the survey were carried out in 2010 and 2014, respectively. Additional information on the findings of previous studies related to the Survey is available in the Central Bank of Malta's website at https://www.centralbankmalta.org/en/household-finance-and-consumption-survey.
    ${ }^{3}$ More detailed information on the HFCS can be retrieved from the ECB's website:
    https://www.ecb.europa.eu/pub/economic-research/research-networks/html/researcher_hfcn.en.html

[^3]:    4 More detailed information on the SILC results can be retrieved from: https://nso.gov.mt/en/News_Releases/View_by_Unit/Unit_C1/Living_Conditions_and_Culture_Statisti cs/Documents/2017/News2017_151.pdf
    ${ }^{5}$ The reference person is the person who replied to part 1 of the questionnaire on behalf of the household.

[^4]:    ${ }^{6}$ Figures for the first and second waves may differ slightly from those published earlier due to a reassessment of selected responses following information emerging from the panel component during the third wave.

[^5]:    ${ }^{7}$ Due to the structure of the HFCS questionnaire, the various consumption components do not add up to the total consumption figure.

[^6]:    * Reference Person is taken to be the person that replied to the questionnaire on behalf of the household
    : Number of observations is less than 21.
    S.E shows standard erros for the results of all households

    Source: Maltese Household Finance and Consumption Survey

[^7]:    * Reference Person is taken to be the person that replied to the questionnaire on behalf of the household
    : Number of observations is less than 21.
    S.E shows standard erros for the results of all households

    Source: Mattese Household Finance and Consumption Survey

[^8]:    * Reference Person is taken to be the person that replied to the questionnaire on behalf of the household
    : Number of observations is less than 21.
    S.E. show standard erros for the results of all households

    Source: Maltese Household Finance and Consumption Survey

[^9]:    * Reference Person is taken to be the person that replied to the questionnaire on behalf of the household
    : Number of observations is less than 21.
    S.E show standard erros for the results of all households

    Source: Maltese Household Finance and Consumption Survey

[^10]:    * Reference Person is taken to be the person that replied to the questionnaire on behalf of the household
    : Number of observations is less than 21.
    S.E show s standard erros for the results of all households

    Source: Maltese Household Finance and Consumption Survey

[^11]:    * Reference Person is taken to be the person that replied to the questionnaire on behalf of the household
    : Number of observations is less than 21.
    S.E show s standard erros for the results of all households

    Source: Maltese Household Finance and Consumption Survey

[^12]:    * Reference Person is taken to be the person that replied to the questionnaire on behalf of the household
    : Number of observations is less than 21.
    S.E show standard erros for the results of all households

    Source: Maltese Household Finance and Consumption Survey

[^13]:    * Reference Person is taken to be the person that replied to the questionnaire on behalf of the household
    : Number of observations is less than 21.
    S.E show s standard erros for the results of all households

    Source: Maltese Household Finance and Consumption Survey

[^14]:    * Reference Person is taken to be the person that replied to the questionnaire on behalf of the household
    : Number of observations is less than 21.
    S.E. show s standard erros for the results of all households

    Source: Maltese Household Finance and Consumption Survey

[^15]:    * Reference Person is taken to be the person that replied to the questionnaire on behalf of the household
    : Number of observations is less than 21.
    S.E. shows standard erros for the results of all households

    Source: Maltese Household Finance and Consumption Survey

[^16]:    * Reference Person is taken to be the person that replied to the questionnaire on behalf of the household
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    S.E show s standard erros for the results of all households

    Source: Maltese Household Finance and Consumption Survey

[^17]:    * Reference Person is taken to be the person that replied to the questionnaire on behalf of the household
    : Number of observations is less than 21.
    S.E show s standard erros for the results of all households

    Source: Maltese Household Finance and Consumption Survey

[^18]:    * Reference Person is taken to be the person that replied to the questionnaire on behalf of the household
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    Source: Maltese Household Finance and Consumption Survey

[^19]:    * Reference Person is taken to be the person that replied to the questionnaire on behalf of the household
    : Number of observations is less than 21.
    S.E show s standard erros for the results of all households

    Source: Maltese Household Finance and Consumption Survey

[^20]:    * Reference Person is taken to be the person that replied to the questionnaire on behalf of the household
    : Number of observations is less than 21.
    S.E. show s standard erros for the results of all households

    Source: Maltese Household Finance and Consumption Survey

[^21]:    * Reference Person is taken to be the person that replied to the questionnaire on behalf of the household
    : Number of observations is less than 21.
    S.E show s standard erros for the results of all households

    Source: Maltese Household Finance and Consumption Survey

