The Wealth Position of Hungarian Households based on HFCS*

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Capturing the unique characteristics of market participants, micro-level statistics have gained significance in recent years, as macro data are not always detailed enough to give sufficient insight into the motivations of households. After the crisis, changes in borrowing attitudes, the subdued improvement in consumption and problems with monthly loan payments focused the attention on micro statistics. This gave rise to widespread demand for a European database on household wealth. Hungary joined the second wave of the survey. Presenting the results of the survey, this article provides a detailed overview of the real and financial wealth of households as well as the distribution and main statistical characteristics of their loans. In addition, we identified the demographic features that influence the saving and borrowing habits of Hungarian households. According to the data obtained, the value of their main residence tends to be the major asset for households: the most frequent motivation behind their saving or borrowing is to acquire or renovate their residential property. Since the majority of households hold a certain size of residential property accordingly, jointly, their net – real and financial – assets can be considered evenly distributed by international standards.

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1. Introduction

The economic downturn and unfavourable labour market and income prospects resulting from the global financial crisis have changed the savings behaviour of the household sector significantly: as consumption faltered, households' outstanding debt fell sharply while their net savings began to edge higher. Indebted in a disadvantageous structure, households' debt burden rose sharply in the wake

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of the crisis due the depreciation of the forint and higher lending rates, and the debt service capacity of the sector deteriorated continuously. The forced savings necessitated by unfavourable income and labour market prospects and rising debt burdens affected specific groups of society differently. Households in an adverse income and wealth position were hit harder by the difficulties accompanying the increase in debt burdens. The global financial crisis demonstrated that aggregate indicators can conceal numerous phenomena relevant to the functioning of the economy. The need to understand and explore these phenomena shifted the attention from traditional indicators to more in-depth statistics. In recent years, the need has arisen to review and broaden, as appropriate, the information content of registration and accounting systems. For example, discussing the reforms of the available statistical accounts in detail, the *Stiglitz – Sen – Fitoussi* Report (*2009*) proposes a comprehensive assessment of wealth. According to the report, the relevant information of aggregate financial accounts should be supplemented by indicators that reflect the distribution of income, consumption and wealth.

In addition to income, it is the distribution of wealth that determines who has access to the goods and services produced in society, and to what extent. Indeed, consumption can deviate from income significantly: consumption can be expanded by using assets or taking on debt (negative financial wealth) and reduced by savings and the accumulation of assets. Therefore, there is a need to consider income and consumption jointly with wealth. Another important aspect to consider is the fact that income and wealth are distributed fairly unequally within a society. As the richest few members of society hold a significant part of financial assets, only a small segment of households may have a leading role in shaping aggregate statistics. Consequently, a single set of descriptive statistics (typically the arithmetic mean) cannot provide information on the financial well-being of various segments of the national economy.

In order to ensure the availability of the distribution indicators mentioned above, micro (individual or household) level information should be generated with respect to the target groups to be reviewed. High and low income households, wealthy and poor families, credit and liquidity constrained consumers or over-indebted households are all key groups that may respond to economic shocks very differently. Being aware of their behavioural responses supports policy decisions and generally assists in monitoring the evolution of aggregates more closely. Introduced in 2016, the MNB's new monetary policy forecasting model[1] is also intended to capture the diverging consumption and saving behaviour of individual groups, and the utilisation of the results of micro level surveys may help calibrate the model. In order to monitor the consumption, income and wealth status of households, the OECD

[1] For more detail about the forecasting model, see: Magyar Nemzeti Bank: Inflation Report, March 2016 (http://www.mnb.hu/letoltes/boritoval-hun-ir.pdf).

(Organisation for Economic Cooperation and Development) and the ECB (European Central Bank) designed a household survey for the euro area (HFCS – Household Finance and Consumption Survey) based on a uniform methodology. In addition to the compulsory participation of the euro-area Member States, Hungary and Poland voluntarily joined the second wave of the programme. For the purposes of this article, we used data from the "What do we live in?" household survey exploring the living standards and wealth of Hungarian households. The statistical characteristics, sample size and representativeness of the survey, as well as the main statistical features of the sample are discussed in detail in the study of *Simon – Valentiny* (*2016*) and are therefore excluded from this analysis.

In the first section of this study, we provide an overview of the relevant Hungarian and international literature. Each of the subsequent sections is devoted to the main results of the Hungarian survey from the aspects of concentration, real assets, financial instruments and loans. The structure of the sections discussing the results are the same: after introducing the relevant international literature (including the results of the first wave of the HFCS), we present a table summarising the most important characteristics affecting the given topic. We then propose stylised facts based on the results of the Hungarian and the international survey, which we attempt to justify by figures or tables.

2. Questionnaire surveys in Hungary and the HFCS

The survey that forms the basis of this article is the first detailed database on the real and financial assets of Hungarian households. Covering a broad range of wealth components, the questionnaire of the survey also inquired about the income, as well as the consumption and saving habits of household members. Consequently, the database is not only suitable for performing a disaggregate analysis of the assets and liabilities of households, but also for exploring systematic relationships between households' income and other demographic characteristics. Although the HFCS is not the first questionnaire-based survey on households' balance sheets, it is the first comprehensive survey covering household-level information on the total wealth, income and debt of the population. In the following, we outline a number of surveys that were dedicated to analyse household wealth from various aspects.

2.1. Previous questionnaire-based surveys on wealth in Hungary

Two surveys are conducted on a regular basis regarding Hungarian households: the Household Budget and Living Conditions Survey (*HBLS*) *and the Household Monitor. First and foremost, they collect data on consumption, income and demographic characteristics and also address wealth and saving attitudes.* Starting from 1993, the HCSO conducts the Household Budget and Living Conditions Survey (HBLS) every year, collecting detailed income, consumption and demographic data at

the household level. In recent years, the survey has included questions regarding subjective living conditions (*Gáspár – Varga 2009*). The second regular survey is Tárki's Household Monitor. Introduced in 1992, the Household Monitor's main focus is households' income situation, and it also provides details on additional information such as wealth, savings and consumption (*Szivós – Tóth 2013*). Moreover, the HCSO regularly collects micro-level questionnaire data on the stock of dwellings in its "What do we live in?" survey (*HCSO 2016*).

Based on the micro-level data available, *Cserháti and Keresztély* (*2010*) attempt to explore the harmonisation of macroeconomic releases and the micro-level data of the HBLS. Their intention is to utilise the data to facilitate a more accurate examination of households' income status by individual social groups. By imputation and by reweighting the data – depending on the availability of additional information – the authors succeeded in mitigating the deviations between micro and macro-level data (resulting from the time lag of HBLS data releases and the incorrect data supply of respondents) with different results in individual income categories. Examining the international methodology, *Szabó* (*2004*) found that the surveys differ from country to country depending on national traditions and survey objectives and are difficult to standardise despite the harmonisation attempts of EUROSTAT.

2.2. Results of previous Hungarian surveys

Researchers have been mainly interested in the assets side, in particular, real wealth, in the recent period. Bukodi and Róbert (*2000*) explored Hungarian households' access to durable goods, individual assets and cultural activity over time and among specific social groups. According to their results, households' wealth largely depends on education and various labour market parameters (position, activity). Examining the groups defined on the basis of income categories they found that financial standing did not improve in proportion to the increase in income; the wealth of income earners in the highest income quintile was spectacularly greater compared to the rest of the groups, while the analysis of age groups revealed that the wealth status of middle-aged families was more favourable than that of younger or older generations. Tárki's Household Monitor also addresses the issue: in a 2012 survey, it presented households' estimated value of housing in a demographic and geographic breakdown (*Szivós – Tóth 2013*). In the Tárki survey (*Szivós – Tóth 2015*) – the results of which are compared in subsequent chapters to data derived from the Hungarian section of the HFCS survey – the vulnerability of households was examined in more detail through the characteristics of their assets – in particular, real property and financial assets – and loans.

Previously published studies processing additional Hungarian questionnaire-based surveys relevant to our paper were mainly focused on the topic of lending. According to the questionnaire-based survey conducted before the crisis, the shock-absorbing capacity of indebted Hungarian households appeared to be adequate from the

aspect of banking portfolio quality (*Holló 2007*). At the same time, the study pointed out that a more significant depreciation and interest rate increase, as well as rising unemployment, could substantially raise the ratio of debt at risk (potential non-performing loans). Articles published after the crisis investigated the adjustment of households. According to the micro-simulation performed on the basis of the HBLS (*Gáspár – Varga 2009*), the households that found themselves in difficulty after the crisis were mainly the ones whose debt-to-income ratio exceeded 40 per cent; loss of employment played a lesser role in this regard. After the crisis, the increasing monthly instalments resulting from the effective depreciation of the forint exchange rate and rising interest rates caused payment difficulties mainly among the low-income strata due to the overstretched income position of these households, while the main challenge for the medium-income strata was loss of employment (*Hosszú 2011*). Examining the over-indebtedness of households, *Balás* (*2013*) demonstrated using the HBLS database that the debt service burden increases in line with a decline in incomes. 14 per cent of households – mainly low-income families – faced critically high instalment levels seeing more than half of their income spent on monthly payments. In a subsequent study, staff members of the central bank surveyed in detail the demographic background of distressed households (*Dancsik et al. 2015*). The study provides a comprehensive overview of the characteristics of non-performing loans, describes the demographic and geographic characteristics of the affected households (age, education, residence) and evaluates their financial standing and income situation (loans/wealth, payment-to-income ratio).

2.3. General characteristics of the Hungarian HFCS survey

The HFCS is the first internationally harmonised statistical dataset, collecting information in a single analytical framework on households' consumption, income, real and financial assets and loans. Numerous countries had previously conducted surveys on households' assets and sources of finance. In the United States, the population has been queried about its financial standing triennially since the 1980s, and similar surveys were conducted several times in some European countries even before the financial crisis. The data demand arising in the wake of the financial crisis prompted the European Central Bank to launch the HFCS survey based on a uniform methodology and questionnaire. The initial field work was carried out between 2008 and 2010 with the participation of 15 euro-area Member States. During the second wave starting in 2014, five additional countries were added to the original group of survey participants: Ireland (a euro-area member that did not take part in the first wave), Latvia which joined the euro area following the first wave, and Poland and Hungary which joined the data collection voluntarily. Since the results of the second wave are not available as at the date of this study, except for Hungarian and Irish data, the international comparisons presented in the paper

refer to the results of the first wave. It is important to keep in mind that this may influence the comparisons in some cases.

In the previous wave of the HFCS, the aggregate variables derived from micro-level data were cross-checked with national account level information in several countries. The comparison may assist in evaluating the quality of the survey and answering questions about the usability of the database. It may also serve as a baseline for the breakdown of aggregate figures, which allows for a more in-depth analysis of specific wealth components. In the case of Austria, Finland, Italy and the Netherlands, the analysis also examined the extent to which aggregate figures derived from the national accounts were reflected in microdata (*Andreasch – Lindner 2014, Honkkila – Kavonius 2013*). In this paper, we added Hungarian data to the ratios published for these countries (*Table 1*).

Numerous methodological problems previously arose with regard to questionnaire-based surveys, which were also encountered in relation to the database underlying the findings of this study. The data quality of the surveys conducted in the first wave is heterogeneous. While the coverage of real assets was above 80 per cent and 40–90 per cent of the credit variables were identified, in the case of financial assets the coverage was only in the range of 20–50 per cent. Analysts attempted to resolve this problem by over-representing wealthy households (*Simon – Valentiny 2016*).

In general, the survey underestimates the financial assets of households: consolidated, less than half of the macro-level financial assets are reflected in the HFCS database (*Table 1*). Proportions between micro and macrodata vary in different countries across the examined asset categories. The Italian survey produced the smallest coverage for individual instruments, but the survey identified relatively few components of household wealth even in Austria. By contrast, an explicitly large portion of (grossed up) data computed from the Finnish HFCS for individual instruments was consistent with macrostatistics, which may be explained by the addition of administrative sources to the questionnaire-based survey (*Honkkila – Kavonius 2013*). Compared to international data, the Hungarian HFCS database has relatively high coverage. According to aggregate data computed from the Hungarian survey, in analysing individual instruments on the assets side, financial account categories were identified in a relatively high proportion. With respect to loans, however, the coverage ratio falls significantly short of the Finnish and Dutch data.

Table 1
Ratio of aggregate HFCS financial assets to financial accounts data
(by asset category)

	Finland	Italy	Netherlands	Austria	Hungary
Deposits	55%	33%	49%	35%	73%
Bonds and other debt securities	15%	17%	55%	33%	64%
Insurance (pension, life)	21%	16%	24%	37%	52%
Investment funds	69%	28%	67%	51%	52%
Quoted shares	87%	36%	21%	30%	19%
Total financial wealth	39%	22%	30%	44%	47%
Loans	90%	45%	92%	n.a.	65%

Note: The coverage of the HFCS database is relatively low in the case of total financial wealth, which may reflect the fact that the survey does not include the full range of certain country-specific financial assets. In Hungary, for example, receivables from the government with respect to the private pension fund are included in the financial accounts, whereas HFCS data do not contain information regarding this instrument.
Source: Andreasch – Lindner (2014), Honkkila – Kavonius (2013) and own calculations based on the HFCS and financial accounts.

International literature has also attempted to identify the factors that may account for the differences. Variations may arise from differences in micro and macrodata approaches, temporal and methodological differences in data collection, the coverage of households and the sampling procedure. Moreover, while macrodata may contain the assets and loans of the self-employed, sole proprietors and non-profit organisations as well, they are not included in the household survey. Low coverage rates with respect to wealthier households may also give rise to data collection difficulties, restricting the information available on high-value wealth components (*Honkkila – Kavonius 2013*).

Although some of the differences listed above may be resolved during the sampling procedure (e.g. by over-representing high-income households, the difference between the two databases may be mitigated at the tail end of the distribution), due to the unresolvable differences, the two statistical datasets are not meant to replace each other. At the same time, HFCS data may complement financial accounts during analyses, as the distribution of wealth across individual asset categories is similar in both data sources (*Andreasch – Lindner 2014*).

3. Concentration of net wealth[2]

The concentration of wealth is one of the key indicators of economies in several regards. According to some studies, for instance, a higher concentration of wealth may reduce economic growth. On the one hand, a higher concentration of wealth may constrain the consumption of masses of people at the bottom of the distribution, which may decelerate economic growth. On the other hand, as the OECD pointed out, with a higher level of wealth concentration too many people may be forced out of high-quality education with severe negative impact on the economy and on the well-being of society (*OECD 2015*).

3.1. Relevant results of the first wave

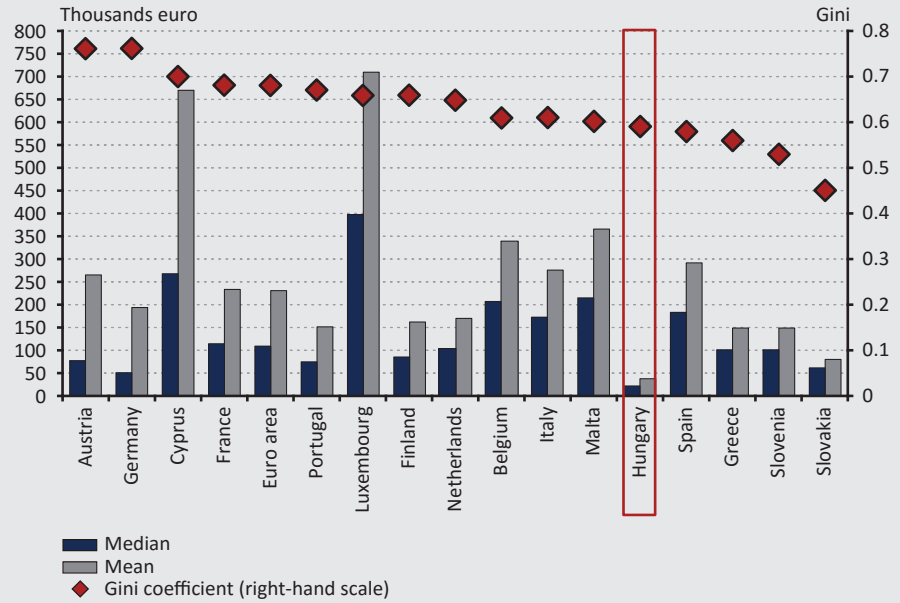
The concentration of wealth can be measured in a number of different ways. The most frequently used representation is the Lorenz curve, which shows the distribution of wealth components compared with perfect equality. The farther away the distribution curve from the 45 degree line of perfect equality, the more unequal the distribution of the given wealth component is among the members of society. The Gini index condenses the information content of the Lorenz curve into a single coefficient, which is especially useful for cross-sectional comparisons. In addition, inequality is often gauged by indicators that measure the distance between certain deciles. One of the most frequently used indicators is the quotient of two selected percentile values (e.g.: p90/p50), which measures the concentration of a certain part (e.g. the top) of the distribution.

The results of the first wave of the survey show that mean net wealth exceeds the median value significantly – albeit to a different degree – in all countries, which is indicative of the distribution's strong positive skewness. Disparities in the net wealth of households are most prominent[3] in Cyprus, Luxembourg, Germany and Austria, while inequalities are more moderate in countries with lower net wealth, such as Hungary, Greece, Slovakia and Slovenia (*Figure 1*). This is confirmed by the measure of concentration, the Gini coefficient, which is relatively high in all participating countries; its value for the euro area as a whole is 0.68. Similar to Slovakian, Slovenian and Greek households, the concentration of the net wealth of Hungarian households is below 0.6 per cent, while that of German, Austrian and Cyprian households is above average, over 0.7 per cent (*Bezrukovs 2013*).

[2] The description of households' wealth components is intended to be aligned to the financial accounts, the most detailed macro-level statistics of households' financial assets and liabilities. Accordingly, the financial assets (or gross financial assets, as appropriate) of households include the financial receivables held by households (e.g. bank deposits, securities, stocks and cash). Households' liabilities, in turn, are mainly understood as loans to households. As is the case with the financial accounts, the net financial assets of households are computed as the difference between two items (financial assets minus liabilities). Since the survey also covers real assets, adding the value of households' real assets – mainly their real estate holdings – to their net financial assets will give us the total wealth of households.

[3] A household's net wealth is the sum of its real assets and financial assets minus loans.

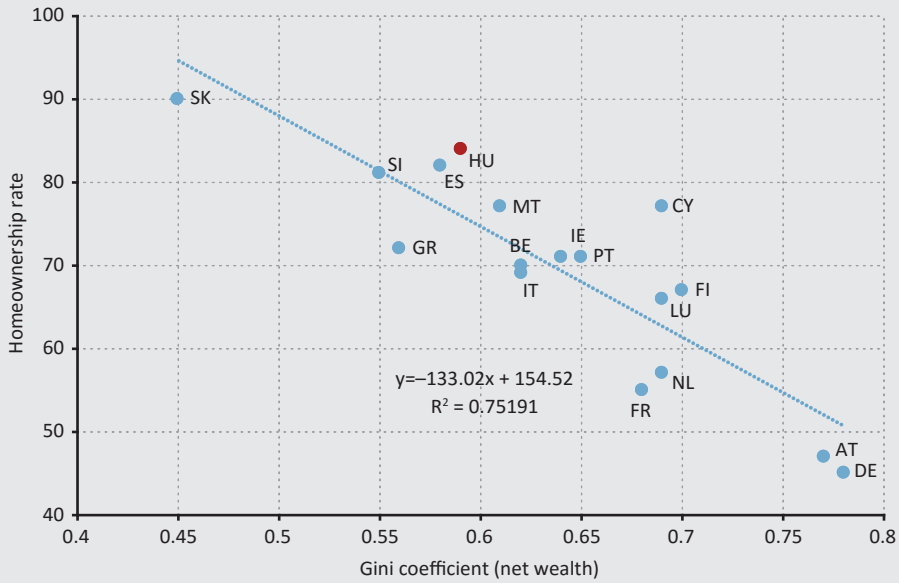
Figure 1
International comparison of households' net wealth and its concentration



** Data were collected in 2014 in Hungary and in the first wave of the survey between 2009 and 2010 in the rest of the countries.*
Source: ECB (2013).

In an international comparison, the net wealth of Hungarian households (including their financial assets and liabilities and their real assets) is distributed relatively evenly across households, which is mainly related to their relatively high holdings of real estate properties. Several studies have shown that inequality and the holding of real estate assets are negatively correlated. Examining wealth inequality on data pertaining to German households, *Bezrukovs* (*2013*) found that real estate holdings had the largest downward effect on inequality, while the role of financial assets and valuables was negligible. Accordingly, the holding of real estate property is negatively correlated with the Gini index measuring inequality (*Figure 2*). Purchasing the main residence is the most important form of saving for the poorer half of households (*Kaas 2015*). This correlation may partly account for the higher wealth inequality observed in less developed countries.

Figure 2
Wealth inequality and homeownership

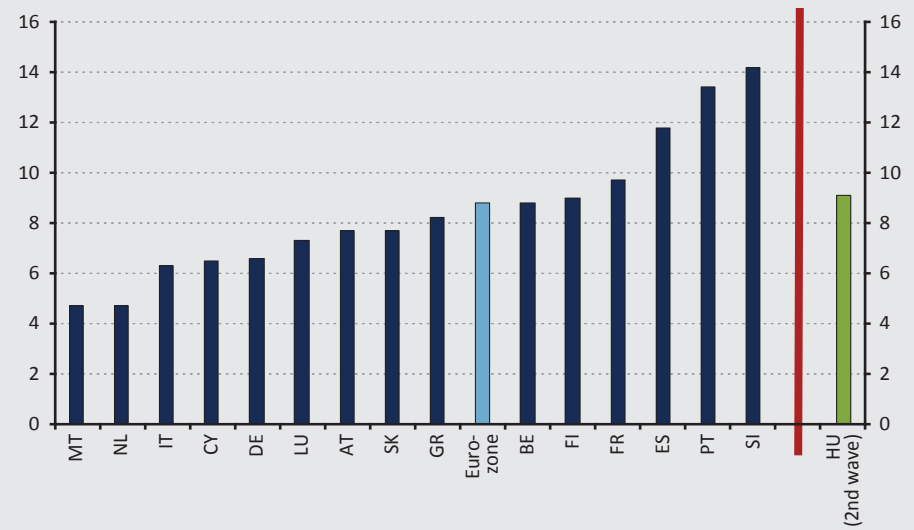


Source: HFCS, Kaas (2015).

3.2. International and Hungarian results related to concentration and stylised facts

Similar to other countries, the concentration of financial assets is significant among Hungarian households. Regarding financial assets, international literature found evidence of considerable concentration in general. According to a Belgian study relying on data from the first wave, in the euro area the financial wealth of households in the ninth decile is more than nine times higher than that of households in the medium decile (*Du Caju 2013*). This indicator (p90/p50) points to a nine-fold difference in the case of Hungarian households as well, which means that Hungary is among the countries characterised by relatively high inequality (*Figure 3*). At the same time, the indicator considerably exceeds the Hungarian value in Slovenia, Portugal and Spain. It should be noted, however, that the Hungarian survey took place 3 or 4 years later which, especially after the financial crisis, may have a considerable impact on the comparison. Indeed, post-crisis precautionary considerations may have prompted households to accumulate savings; thus the financial assets of wealthier households with higher income may have increased more sharply.

Figure 3
Concentration of financial assets
(p90/p50)



Source: HFCS, Du Caju (2013).

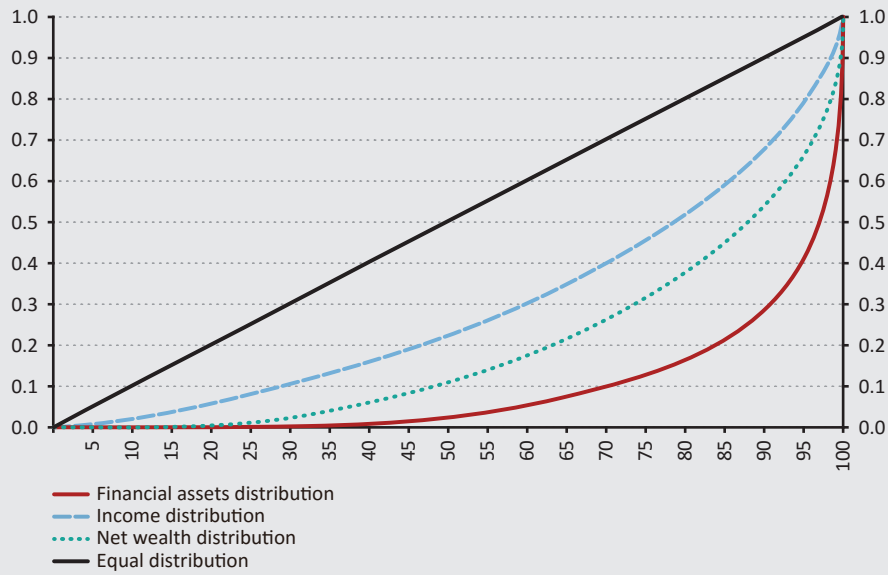
Comparing real assets with financial assets, financial assets tend to be more concentrated among Hungarian households. Data compiled during the questionnaire-based survey in the autumn of 2014 indicate that around 40 per cent of Hungarian households do not have any appreciable financial wealth (*Figure 4*); moreover, 80 per cent of financial assets are held by about 15 per cent of households. The Gini coefficient quantifying the concentration stands at 0.82 (where 0 expresses perfect equality and 1 indicates the concentration of wealth in the hands of a single individual). Importantly, some studies emphasise that the concentration ratio may be even higher than that; the observation of such occurrences, however, is cumbersome, due to limited availability and willingness to respond. The distribution of real assets, on the other hand, indicates a higher degree of equality, which can be attributed to the fact that – as discussed below – the vast majority of households own their own main residence. For this reason, real assets are distributed far more evenly than financial assets, with a Gini coefficient of merely 0.50.

Owing to the dominance of real estate wealth, the distribution of net wealth – which includes households' financial and real assets as well as their loans – is almost as even as in the case of real assets. Since Hungarian households are characterised by a high ratio of homeowners, in order to gain a more accurate picture of the concentration of wealth, in addition to net financial wealth we also examined the

concentration of real estate property. Although we observed a far greater degree of wealth equality, the wealth held by nearly half of the population is still only around 10 per cent of total wealth. The more even distribution of net wealth is also reflected in the value of the Gini coefficient: its value declined from 0.82 – which considered financial assets only – to 0.59.

It should also be noted that several analysts found that the distribution of financial assets is heavily concentrated and distributed much more unequally than income (*Fessler – Schürz 2015*). According to the survey, this is also true for Hungary: the concentration coefficient of income[4] is only 0.43, far lower than the concentration of financial wealth or net wealth.

Figure 4
Lorenz curves expressing the concentration of the net wealth – including real estate property and loans – and incomes of households



Source: HFCS.

[4] On the basis of the dataset, all household incomes were taken into account: in addition to wages and salaries they include, among other things, returns on investments, pensions, capital incomes, rental incomes from real estate property and other household incomes.

4. Real assets of households

As indicated by the more moderate concentration of net wealth relative to financial wealth, Hungarian households attach key significance to acquiring real wealth, in particular, real estate property. With some exaggeration, we can state that nearly all households own real estate property – if not, they strive to acquire some. In the paragraph below we examine in detail the characteristics of Hungarian households' real estate holdings. Due to the limitations of this study, we merely touch upon the data on other real assets (vehicles, valuables).

4.1. Relevant results of the first wave

Taken together, the real asset wealth of the population of the countries participating in the survey can be considered significant, with the majority of households owning their main residence. Real assets (real estate property, vehicles, valuables) account for around 85 per cent of households' financial and non-financial assets, of which household main residence is the most predominant asset category (*Arrondel et al. 2014*). The share of households owning their main residence is 60.1 per cent on average; however, cross-country variation is significant: while less than half of German and Austrian households live in their own residence, the corresponding ratio exceeds 80 per cent in Spain, Slovakia and Slovenia (*Table 2*). Based on the results of the HFCS, at EUR 500,000 the median value of residential properties is extremely high in Luxembourg, while it is below EUR 100,000 in Slovakia and Portugal. Expressed in euro, the value of Hungarian real estate properties falls significantly short of the values observed in other countries; this difference, however, may also reflect the time difference between the data collections: the Hungarian survey was conducted in 2014 – four years later than the rest of the surveys – when Hungarian real estate prices may have bottomed out. In addition, real estate values may also have been influenced by the fact that, similar to other financial assets, the real estate values stated in the survey were based on households' self-assessment.

Along with residential property, vehicles constitute the most prevalent part of households' real wealth: according to the first round of the HFCS, the ratio of vehicle owner households is above 70 per cent in all participating countries except Finland and Slovakia, where the ratio is somewhat lower, at 60–70 per cent (*ECB 2013*). Hungary recorded the lowest ratio of vehicle ownership: only one half of Hungarian households own a vehicle.

Based on the data collected during the survey, after Slovakia, Hungary boasts the second highest ratio of main residence ownership among the respondent countries. The lowest percentages of households owning their main residence were recorded in Germany, Austria and France, presumably because of their highly developed rental property markets.

Table 2
Participation in real assets in respondent countries

	Household Main Residence (%)	Median HMR values (EUR thousand)	Any real assets (%)
Slovakia (2010)	89.9	55.9	96.0
Hungary (2014)	84.2	29.1	85.6
Spain (2008)	82.7	180.3	95.3
Slovenia (2010)	81.8	110.9	96.2
Malta (2010)	77.7	186.6	94.8
Cyprus (2010)	76.7	240.3	95.8
Greece (2009)	72.4	100.0	92.2
Portugal (2010)	71.5	90.0	90.1
Ireland (2013)	70.5	150.0	95.5
Belgium (2010)	69.6	250.0	89.8
Italy (2010)	68.7	200.0	97.7
Finland (2009)	67.8	129.7	84.3
Luxembourg (2010)	67.1	500.0	93.6
Netherlands (2009)	57.1	240.0	89.8
France (2010)	55.3	193.8	100.0
Austria (2010)	47.7	200.0	84.8
Germany (2010)	44.2	168.0	80.2

Source: HFCS, Arrondel et al. (2014), Lawless et al. (2015)

4.2. Main characteristics of the real wealth of Hungarian households and stylised facts

In general, it can be stated that, due to the specificities of the housing market, home ownership is a key consideration for Hungarian households. As opposed to many Western European countries, it is important for Hungarian – and based on the previous round of the HFCS, Slovakian – households to own the residential property in which they live. In Hungary, this is reflected by the fact that more than 84 per cent of households reside in homes which (in part or in full) they own (*Table 3*). At the same time, the value of the real property owned by Hungarian households is extremely heterogeneous, partly as a result of the geographical disparities of income distribution. The value (as well as the ownership ratio) of residential properties tends to be higher in the higher-income quintiles; in other words, higher incomes allow households to purchase more valuable real estate properties. Examining the median value for each income quintile we find that in the top quintile it is 2.5 times the value of the first quintile, while the difference is even higher with respect to net financial wealth. In the autumn of 2014, the median value of real estate properties was close to HUF 8 million. According to the survey, another 7 per cent of households do not need to pay for the property they rent even though they are not the homeowners, while 9 per cent of households own their main residence. These figures are largely consistent with the proportions derived from the HCSO's "What do we live in?" survey (*HCSO*

2016). It can also be observed that the likelihood of the ownership of residential property increases only moderately with an increase in education (from 81 per cent to 85 per cent) – presumably due to the higher income earned with a higher education level – while the median value of such properties shows considerable improvement.

Only a smaller fraction of households (*23 per cent*) *own a second real estate property, the value of which is typically lower than that of the main residence.* While the value of the first residence is close to HUF 8 million, households owning a second real estate property estimate its value at only HUF 6 million. The lower value might be explained by the fact that the second property often implies a vacation home, a hobby garden, a garage or a family farm, usually of lesser value than the main residence. As regards income quintiles, second homes are far less frequently owned than first homes in all quintiles. Compared to the rest of the groups, the frequency of ownership tends to be higher in the top income and wealth quintiles and among those with tertiary education. The median value of the second real estate property is higher in the lowest wealth quintile, which may be indicative of bank financing or suggest that the real estate is a family farm.

Table 3
Households' participation in real estate wealth

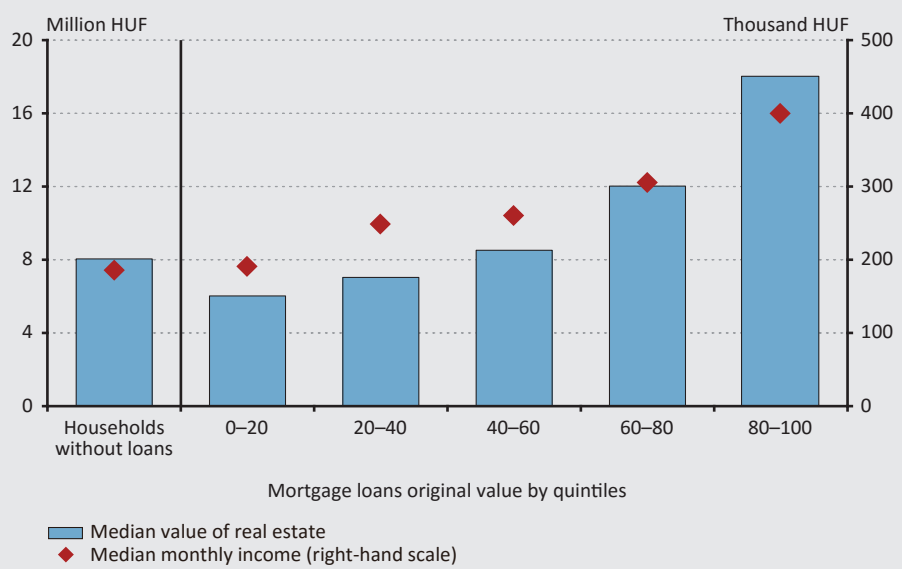
	Household Main Residence		Second real estate property	
	median value (HUF)	participation rate (%)	median value (if any) (HUF)	participation rate (%)
Total households	8,016,000	84.2	5,952,000	23.0
By income				
Less than 20	5,010,000	77.9	3,006,000	10.7
20–39	6,012,000	82.1	3,006,000	15.5
40–59	8,016,000	84.6	6,012,000	21.8
60–79	9,019,000	86.3	5,010,000	26.6
80–100	14,029,000	90.2	8,016,000	40.1
By net wealth				
Less than 20	1,503,000	34.2	5,010,000	14.3
20–39	3,507,000	91.3	2,505,000	13.0
40–59	6,513,000	98.9	3,006,000	17.5
60–79	11,022,000	98.8	4,008,000	23.5
80–100	20,041,000	97.9	8,957,000	46.6
By education				
Primary or less	4,509,000	81.0	2,505,000	8.8
Secondary	8,016,000	84.8	4,008,000	20.2
Tertiary	13,027,000	85.4	8,016,000	37.5

Source: HFCS.

Stylised fact 1: Larger loan amounts improve households' access to real estate properties or more valuable real estate. Borrowing allows households to invest or consume their future incomes in the present. This is especially apparent when the value of households' real estate property is examined. Indeed, the value of the real estate property owned by a household increases in line with the amount the household has borrowed in the past. Therefore, questionnaire data also confirm that borrowing expands the investment opportunities of households and raises the value of the property they can purchase. Moreover, the median value of the real estate owned by the borrowers of larger amounts (starting from the fourth quintile) exceeds the median value of the real estate properties held by non-borrowers.

Stylised fact 2: An increase in monthly (regular) income will also raise the value of the real estate owned and the loan amount. Households were surveyed in September 2014, before the MNB's payment-to-income ratio and loan-to-value ratio came into effect in early 2015. Even at the time, however, it was clear that higher loan amounts – and higher expected incomes – correlated positively with higher-value real estate properties. This indicates that households earning higher incomes can afford to spend a higher portion of their income on loan repayment; consequently, they are capable of borrowing more substantial amounts which allows them to purchase higher-value properties (*Figure 5*). By and large, the value of the property owned by a household increases in parallel with the value of its housing

Figure 5
Monthly income and value of real estate held by households with housing loans and non-borrowers

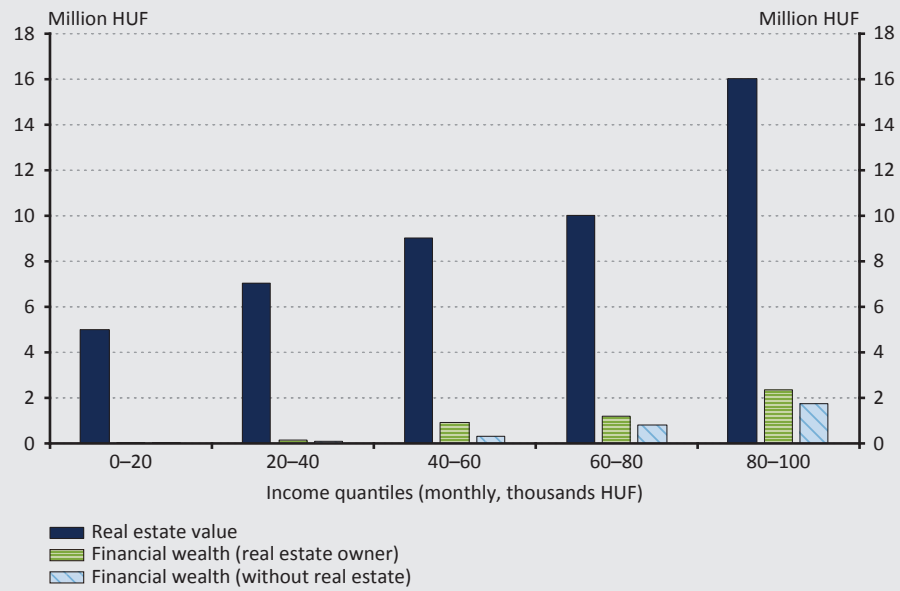


Source: HFCS.

loan which, in turn, partly depends on the household's income level. Obviously, this also reflects banks' risk management: an excessively high loan-to-value ratio is monitored closely by credit institutions.

Stylised fact 3: The first priority of Hungarian households is to own their main residence which, based on the data available, appears to be more important than the accumulation of financial assets. Despite substantial write-downs during the financial crisis, the main priority of Hungarian households is to own their main residence. As regards households' participation in wealth, based on the survey the value of the financial assets held by households in the lowest quartile of financial wealth is below HUF 1 million (*Figure 6*). Presumably, this is below the required downpayment and – unless the given household is a homeowner – it is insufficient to cover the purchase of a real estate property (the median of non-homeowners' financial assets amounts to only HUF 130,000).

Figure 6
Median value of the total real estate property and financial wealth of households by income quintile



Source: HFCS.

An analysis of the relationship between housing wealth and financial assets reveals that only in 200,000 households did the value of financial assets exceed the value of housing wealth, while real estate holdings represent a higher value in the case of more than 4,100,000 households. Households holding financial assets in excess of their housing wealth account for less than 5 per cent of all households.

Median financial wealth amounts to as high as HUF 6 million in the case of those holding financial assets in excess of the value of their residential property, while the financial wealth of the top decile exceeds HUF 21 million. In other words, we may assume that households with financial assets in excess of the median wealth make a conscious decision to accumulate wealth in various forms of financial savings rather than in real estate – given that the median value of residential property was below HUF 9 million and thus presumably, this group may well be able to purchase (an even more valuable) real estate property. The ratio of those with higher education is slightly higher among households where the value of financial assets exceeds the value of the real estate assets owned, although the difference cannot be considered significant.

5. Financial wealth of households

In the HFCS survey, the gross financial wealth of households is constructed in such a way that it essentially maps the headings of the financial accounts. The survey specifically requests households to indicate the individual instruments (e.g. time deposits, current accounts, bonds, mutual funds) in which they hold their savings. Moreover, the survey was designed to assess households' participation in business wealth which, similar to the financial accounts, is considered to be a financial asset category.

5.1. Relevant results of the first wave

Besides real assets, financial assets account for the lesser half of the wealth in participating countries, and the vast majority of such assets comprise savings in safe financial instruments. The HFCS surveys found that nearly all households own some financial assets irrespective of income and wealth position; the value of such assets, however, falls significantly short of the real assets held by the households in question. Taking all participating countries together, the median value of real asset holdings is EUR 145,000, but the median value of financial assets is less than 8 per cent of this value, just over EUR 11,000. Safe assets have a predominant share in all financial assets, with bank deposits representing the most popular asset category. With the exception of Greece and Cyprus, participation in bank deposits is above 90 per cent in all countries. Although these assets comprise the bulk of financial savings, the median value of savings held in bank deposits remains below EUR 20,000 in most countries and does not exceed EUR 140,000 even among the wealthiest households. In other words, the amount of savings held in bank deposits is limited, as rich households diversify their portfolios (*Arrondel et al. 2014*).

Based on international experience, the portfolio allocation choices of households show a rather one-sided picture. Generally speaking, a large share of households hold financial assets, but the distribution of these assets across various asset

categories is fairly monotonous. The vast majority of households opt to hold traditional banking products (bank deposits, current accounts for transaction purposes), while they have little interest in financial investment products (mutual fund shares, bonds, stocks). It was found that, despite considerable cross-country differences and variations across individual social groups with respect to portfolio composition, only a small fraction of households (5–15 per cent) own risky investments, bond or stock market interests. Participation in more sophisticated financial products such as mutual fund shares, bonds and stocks is more prevalent among high-income households with greater net wealth, which may suggest that diversification considerations play a more prominent role in the asset allocation decision of wealthier households (*ECB 2013; Arrondel et al. 2014*).

5.2. Main characteristics of the financial wealth of Hungarian households and stylised facts

As regards the financial wealth of Hungarian households, while almost all households have a bank account, only a fifth of them have investments. In analysing household wealth, we classified savings into two groups, distinguishing between "less risky" (bank deposits, pensions) and "risky" (all other financial investments) forms of saving. Based on the literature, some pension-type investments might be considered risky; however, given that pension fund savings are long term and that employer's payments are also considerable in Hungary – which makes the decision less premeditated – for the purposes of our analysis such savings were deemed to be "less risky". The survey found that even though the share of risky assets is much smaller in households' assets, the median amount invested into these forms of savings (almost HUF 4 million) is much higher than the median value (around HUF 300,000) of less risky financial assets.

The financial wealth of households increases in line with an increase in income, and households in the top income category typically own more risky assets. According to the survey, the share of households with investments (riskier assets) gradually increases with growth in income: compared to 3.2 per cent in the lowest income quintile, nearly 30 per cent of households in the highest income quintile hold financial assets (*Table 4*). As income grows, the median value of financial savings – both in the case of less risky and risky assets – edges up gradually. In lower income categories, households tend to hold their savings in less risky assets – typically bank deposits – while participation in riskier assets (investments) is higher among households with higher incomes. The top income quintile holds the bulk of the investments; in the case of these households, the median value of investments approaches HUF 13 million. Moreover, the share of deposits is lower among households in the higher income categories, as they typically prefer riskier investment forms. It should be noted that even though this group has the largest share of riskier assets, only one third of the households concerned hold such

savings; consequently, risk appetite is assumed to be low even in the top income category.

An increase in net wealth also raises the value of financial assets. The participation of households holding investments in addition to deposits also increases in line with net wealth; however, the median value of savings held by individual groups is lower than we have seen in the case of income categories. When we compare the median values of investments in a breakdown by income and net financial wealth, we find that in the case of the latter the values are lower. This could be attributed, for example, to the fact that the household has lower net wealth due to its mortgage debt (which puts it in the first quintile) even though it has higher income, and thus, more investments. Based on this, we can presume that the value of financial assets is fundamentally determined by income. Indeed, the survey data confirm our hypothesis that higher-income or wealthier households (accumulated real assets included) typically dispose over more financial assets. It is worth remembering, however, that – as shown in the section on the concentration of financial assets – the stock of financial assets is extremely low in the lowest income bracket, and that the value of the financial assets held by the top income quintile is significantly higher than the value of the assets held by the rest of society together.

The breakdown of households by education level is similar to what we have observed with income and net financial wealth: individuals with primary education typically have a lesser share in financial assets and predominantly hold their savings in bank deposits. The household's share in investments is much higher in the case of families where the head of the household has a higher education level, given that the share of such households in financial assets is also higher. This suggests that better educated households have higher risk appetite and are more prone to diversify their financial assets.

Table 4
Financial assets of households

	Deposits and pensions	Investments	
	median value (HUF)	median value (if any) (HUF)	participation rate (%)
Total households	300,000	4,008,000	11.8
Percentile of income			
Less than 20	17,000	1,002,000	3.3
20–39	100,000	1,335,000	6.7
40–59	500,000	2,458,000	9.1
60–79	1,020,000	3,006,000	11.0
80–100	1,647,000	12,696,000	28.7
Percentile of net wealth			
Less than 20	66,000	501,000	2.2
20–39	100,000	1,002,000	4.5
40–59	207,000	1,469,000	4.2
60–79	670,000	2,004,000	11.7
80–100	1,500,000	8,016,000	36.2
Education of reference person			
Primary or less	23,000	902,000	2.3
Secondary	208,000	2,484,000	8.3
Tertiary	1,075,000	5,317,000	24.2

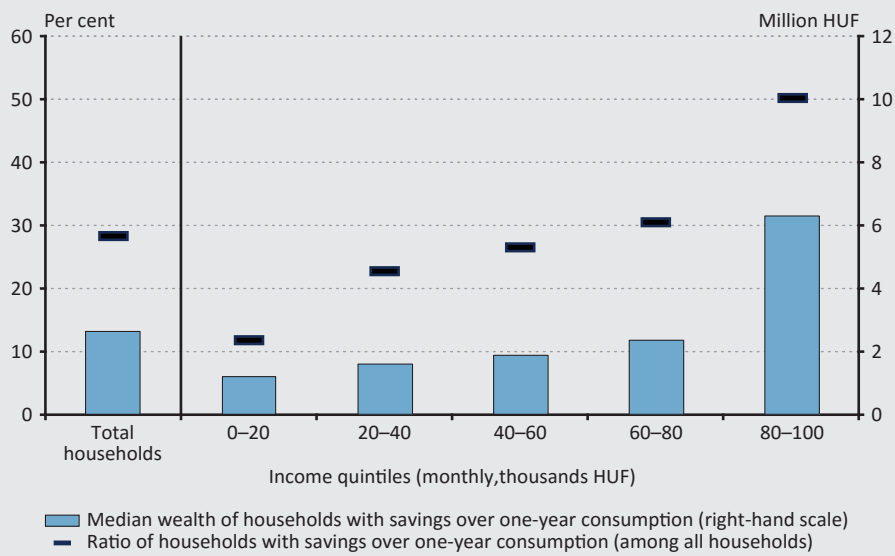
Note: The deposits and pensions category includes current accounts and deposit accounts as well as pension accounts. The investments category includes bonds, investment funds, stocks and other investments.
Source: HFCS.

Stylised fact 1: Among households earning higher incomes, the share of those with enough financial assets to sustain them for a year is higher, and accumulated financial wealth grows in line with income. More than 70 per cent of Hungarian households do not have sufficient financial wealth to cover the household's consumption needs for a year, but 60 per cent do not even have sufficient wealth to sustain the household for a period of six months (*Figure 7*). Looking at the variation across income, it is only in the top income category where the ratio of households that are capable of financing consumption from previously accumulated financial assets over the long run approaches 50 per cent. Only 10 per cent of the households residing in the lowest income quintile hold sufficient financial wealth to cover the household's consumption for a period of one year.

Despite the low participation rate, even the lowest income category includes households with substantial savings. Although the median value of financial

assets is rather low overall among households in the lowest income quintile, the financial assets of those in possession of financial wealth in excess of their yearly consumption needs amount to nearly HUF 1.2 million, which – save for those in the top quintile – only slightly falls short of the wealth of those in higher income categories. The median value of the financial assets of those who hold financial assets in excess of their yearly consumption needs increases only slightly across the first four income quintiles and exhibits a spectacular rise in the top income quintile. Consequently, the level of financial wealth improves gradually across income categories, which indicates that in the long run, only those in the top income category are capable of accumulating a substantial amount of financial wealth. Our results are consistent with the findings of the survey by *Bukodi and Róbert* (*2000*) in relation to durable consumer goods. The authors also registered a sharp improvement in the wealth status of households in the highest income quintile.

Figure 7
Share of households with financial assets covering consumption needs for longer than one year and the median value of asset portfolios

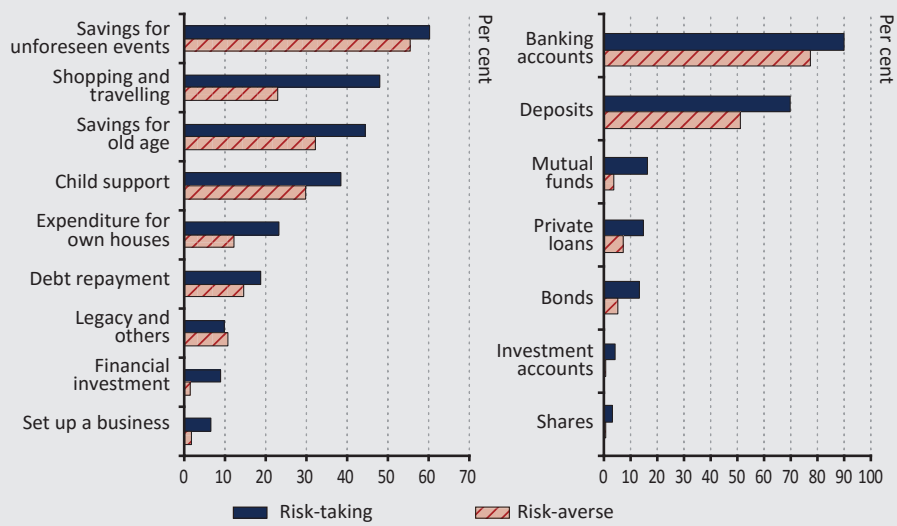


Source: HFCS.

Stylised fact 2: Hungarian households have a preference for more liquid forms of saving. Nearly all households have a current account and more than one half of households also have time deposits; this means that Hungarian households prefer to hold their savings in readily available, liquid assets. The questionnaire also asked heads of households to indicate whether they considered themselves to have a risk-taking or a risk-averse attitude with respect to savings (*Figure 8*). Although

a higher percentage of risk-taking households hold banking instruments, the difference is far more perceivable in the case of investment-type assets. Households considering themselves risk-taking are much more likely to hold mutual fund shares and bonds despite the fact that in Hungary, the most prominent investment instruments in these two categories are government bonds; i.e. securities that are considered to be especially safe (bond funds, government bonds). Only risk-taking households reported to have investment accounts and stocks. In line with the above, accumulating reserves for unforeseen expenditures and saving money for consumption purposes are the two most frequently reported saving motives. The latter is more typical among risk-takers. The prominence of saving for old age among the saving motives is somewhat surprising, especially in view of the limited popularity of long-term savings. By contrast, the least popular saving motives are financial investments and saving to build up own business, which presumably reflects the fact that it is typically higher-income segments that can afford longer-term investments. Similarly, willingness to take risks is more typical among wealthier households or higher-income groups and accordingly, risk-takers – who are more likely to invest in long-term instruments – have a dominant share in all saving motives.

Figure 8
Household saving habits by investment attitude

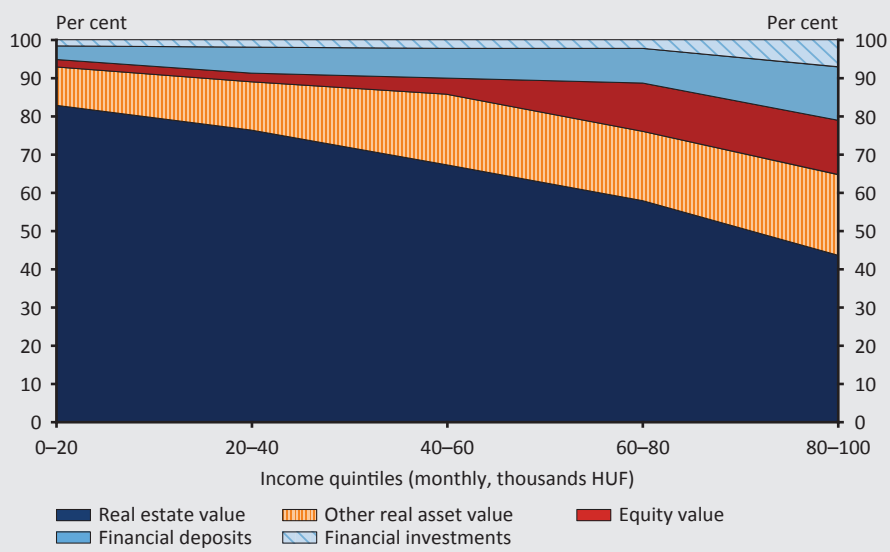


Note: Respondent households were allowed to select more than one savings objective. The figure shows the percentage of households selecting the given savings motive, as well as the percentage of households holding their savings in the given instrument.
Source: HFCS.

In the first wave of the HFCS, precautionary savings represented the most important saving motive besides saving for old-age provision. Interestingly, precautionary motives were the most prominent in the Netherlands (92 per cent) and the least important in Germany (42 per cent). Preferences for other saving motives were rather heterogeneous across countries. Saving to pay off debts tended to be more important in countries with relatively substantial household indebtedness (*Le Blanc et al. 2014*), such as Hungary.

Stylised fact 3: Households with higher income tend to distribute their wealth increasingly evenly across individual asset categories. Looking at the total asset portfolio by income quintile, it can be observed that the higher a household's income, the smaller share its main residence represents within the household's total wealth (*Figure 9*). While households' main residence accounts for more than 80 per cent of the total wealth of households in the lowest income quintile, this ratio is only 40 per cent of the total wealth of households in the top income quintile. At the same time, the share of other real assets – additional real estate, vehicles and other valuables – increases in parallel with income. Moreover, lower-income households have no business share to speak of, while business share accounts for about 20 per cent of the wealth of high-income households in the fourth and fifth quintiles. Presumably, this means that those with equity stakes are capable of earning a higher income than those without such interests. The share of financial assets within the total wealth of the population is fairly low, irrespective of the income quintile and

Figure 9
Distribution of household assets by income quintile



Source: HFCS

it is only considerable in the case of 20 per cent of households in the top income bracket. The financial assets of households in the highest income quintile comprise 20 per cent of total assets, while the share of financial assets among the rest of the households ranges between 5 and 10 per cent only. Financial investments represent a negligible weight within financial assets in the first four income quintiles, but their share is more substantial in the case of households in the highest income category.

6. Household debt

Having discussed the assets side, this chapter provides details about the liabilities of households. We determine the percentage of households with debt holdings for various debt types (mortgage loans, consumer credit) and the typical value of the loans disbursed. Similar to previous chapters, we explain how specific demographic characteristics may influence the debtor's willingness to borrow/borrowing capacity and loan size. In the first step, we compare the data collected during the Hungarian survey to international experiences.

6.1. Results of the first wave

As regards participation rates, the indebtedness of Hungarian households cannot be considered high compared to other European countries. Among HFCS participants only Slovakia recorded lower participation rates than Hungary, although the number of indebted households also does not differ significantly from the figures reported by some Southern European countries. Drawing comparisons is somewhat difficult as households in general attempted to downsize their debts after the crisis. Since the Hungarian survey was conducted 3–4 years later, the adjustment of Hungarian households may have been more significant compared to the data collected in 2010 during the first wave of the HFCS. In addition, the relatively low participation of debtors may also be explained by Hungary's relative underdevelopment compared to euro-area Member States (both in terms of income conditions and the financial system's level of development).

As regards mortgage-based housing loans, the Hungarian participation rate is somewhat higher but regarding consumer loans, it is somewhat lower than the average of the countries participating in the first wave. In terms of the share of Hungarian households with mortgage debt within the total population, Hungarian households are in the middle of the group (*Table 5*). Hungary's high participation rate compared to its relative level of development may reflect households' preference for owning their main residence, which is rather prominent by international standards. Hungarian consumer credit figures, however, are somewhat lower than those reported in the euro area, which might be attributed to lower income levels and to the relatively underdeveloped financial system. Numerous studies have been published in recent years processing the data of the liabilities side of households' balance sheets. Below is a summary of the most important findings.

Table 5
Household participation by loan type, percentages

	Total debt	Household main residence mortgage	Other property mortgage	Non-mortgage debt
Hungary (2014)	32.2	20.1	8.1	26.6
Euro area (first wave)	43.7	19.0	5.6	29.3
Belgium (2010)	44.8	28.5	3.2	24.2
Germany (2010)	47.4	18.0	6.0	34.6
Greece (2009)	36.6	13.9	3.9	26.1
Spain (2008)	50.0	26.8	7.3	30.7
France (2010)	46.9	16.9	10.1	32.8
Italy (2010)	25.2	9.60	1.6	17.8
Cyprus (2010)	65.4	35.0	15.4	47.9
Luxembourg (2010)	58.3	32.8	8.4	36.9
Malta (2010)	34.1	12.1	4.5	25.2
Netherlands (2009)	65.7	43.9	2.5	37.3
Austria (2010)	35.6	16.6	2.4	21.4
Portugal (2010)	37.7	24.5	3.3	18.3
Slovenia (2010)	44.5	12.5	1.6	38.9
Slovakia (2010)	26.8	9.3	0.6	19.9
Finland (2009)	59.8	32.8	M	M
Ireland (2013)	56.8	33.9	5.9	41.4

Source: HFCS, Arrondel et al. (2014), Lawless et al. (2015).

Similar to the results of the Hungarian survey during the second wave, international data collected during the first wave of the HFCS indicate the prominence of HMR mortgage debt within total household debt (*Bover et al., 2013*; *ECB, 2013*). Income levels also affect the indebtedness of households, as those with higher earnings have access to a broader range of loans compared to low-income households. Households' indebtedness is also shaped by socio-demographic characteristics such as income, age and education. It is characteristic of all countries participating in the survey that more substantial debt holdings are observed in households with higher real wealth and higher education levels and in which the reference person is aged 35–44. Their loans are mainly mortgage-related.

The borrowing habits of households within specific groups can be shaped both by demand and supply processes. Presumably, households with more substantial financial wealth or those whose reference person is older or self-employed make a conscious decision not to apply for larger loans, whereas households with low-income or unemployed reference persons are likely to face credit constraints

(*Costa – Farinha 2012*). We tested both statements – i.e. that wealthier households are less likely to borrow and that lower-income households have no access to loans – on Hungarian data.

Among the studies processing the data of the first wave, several papers analysed the determinants of liquidity constraints. Based on the statistical analysis presenting the main results (*ECB 2013*) on international data, it appears that income and wealth are the most important determinants of access to credit. Liquidity constraints were examined on the basis of specific survey questions, which asked the respondents whether they had (partly or fully) rejected loan applications, or whether they decided not to apply for a loan or credit for fear of being rejected by the bank. Since the answers were based on self-assessment with a high probability of non-response, several studies introduced such proxy variables as the possession of credit cards or overdraft facilities, or the existence of low net (liquid) financial assets. Including these two additional indicators in the analysis of international data, according to the probit model proposed by *Le Blanc et al.* (*2014*), the self-assessment based question did not show a significant variation within the lower-income segment, but in the case of the other two indicators (no credit facility/no credit card; low net financial assets) the probability of liquidity constraints declined in line with an increase in income. Growing wealth reduced the chances of liquidity constraints in the case of all three indicators.

6.2. Main results concerning household debt and stylised facts

One quarter of Hungarian households have some type of consumer credit, and one fifth of the respondents reported to have mortgage loans. The median value of consumer credit is HUF 350,000, and the median of mortgage loans is HUF 3.5 million. The participation rate of households in mortgage loans and in consumer credit is 20 and 26 per cent, respectively. According to *Tárki's Household Monitor* (*2014*), more than 18 per cent of households are indebted to banks; therefore, the level of indebtedness should be significantly higher based on the HFCS. This may be attributed to the fact that the HFCS database includes, in addition to bank loans, private debt and leasing contracts as well.

Income and the magnitude of borrowing are positively correlated. The survey found that participation in mortgage loans gradually increases in line with income levels: in the lowest income quintile 11 per cent of households reported to have mortgage loans, compared to more than 30 per cent in the top quintile (*Table 6*). Participation also increases in the case of consumer credit; however, the two highest quintiles do not show significant differences between the groups. Both in the case of mortgage loans and consumer credit, the median value of outstanding borrowing gradually increases in line with income levels. This means that in the case of consumer credit, it is not the ratio of indebtedness that increases in the top income category, but rather the value of the amounts borrowed.

The participation of households in debt declines gradually in line with an increase in net wealth; in the case of the median value, however, such a clear correlation has not been established. We also examined borrowing characteristics according to net wealth. By definition, a significant fraction of indebted households fall in the first wealth quintile, given that the loan amount reduces net wealth. Accordingly, indebtedness is relatively high within this group, and this category reported the highest median debt value as well. In this regard, however, it should be noted that the group with the lowest level of net (financial) wealth also includes non-homeowner households, which – given the lack of mortgage loans among such households – reduces the share of indebted households in the first quintile. The share of homeowner households – and thus, the level of indebtedness – is higher in the second quintile. Growing wealth reduces the indebtedness of households exponentially, but the median value of outstanding borrowings remains consistently within the range of HUF 3–3.5 million in the case of mortgage loans, while the median value ranges between HUF 250,000 and 350,000 in the case of consumer credit. In other words, although the ratio of indebted households is generally lower in higher wealth categories, the loan amount itself is higher. We address this correlation in more detail below.

Households whose reference person has higher education are more likely to become indebted and the disbursed loan amount is also higher in their case. Households were classified into groups according to the education level of the best-educated member of the given household (primary, secondary or tertiary education). Since education and income are positively correlated, it is not surprising that persons with university/college degrees are more likely to apply for loans compared to those with primary education, and the loan amount is also higher in their case. As is the case with the income variable, in terms of participation in consumer credit or mortgage loans, there is no perceivable difference between households with secondary and higher education. It appears that households in the highest education category are not more likely to become indebted – even though they could – while persons with primary education face credit constraints. We examine the liquidity constraints of the lowest income and education categories in more detail below.

Table 6
Main characteristics of Hungarian household debt

	Mortgage debt		Consumer (non-mortgage) credit	
	median value (HUF)	participation rate (%)	median value (HUF)	participation rate (%)
Total households	3,500,000	20.1	360,000	27.4
Percentile of income				
Less than 20	2,500,000	11.4	300,000	17.3
20–39	2,500,000	12.5	260,000	22.5
40–59	3,000,000	19.5	350,000	27.3
60–79	3,500,000	26.2	380,000	33.6
80–100	5,000,000	30.1	500,000	36.5
Percentile of net wealth				
Less than 20	5,330,000	20.6	500,000	36.1
20–39	3,000,000	25.5	260,000	29.5
40–59	3,000,000	20.7	380,000	26.0
60–79	3,500,000	16.4	260,000	25.4
80–100	3,500,000	17.2	400,000	20.1
Education of reference person				
Primary or less	2,100,000	12.3	190,000	18.5
Secondary	3,000,000	21.9	300,000	30.1
Tertiary	5,000,000	22.8	678,000	28.2

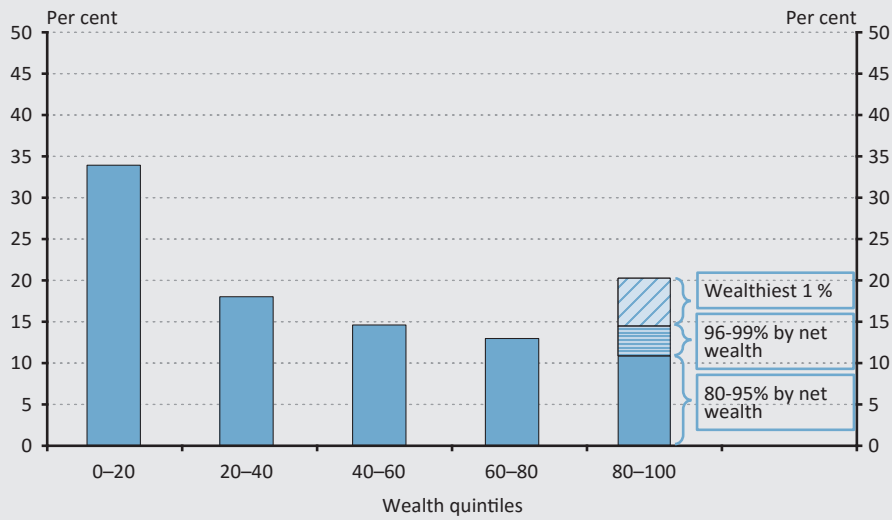
Source: HFCS.

After the presentation of the most important debt-related findings of the survey, we analyse in detail the distribution of outstanding borrowing across wealth categories, the characteristics of liquidity-constrained households and the borrowing motives of households.

Stylised fact 1: Households with more substantial net wealth apply for loans less frequently as they are more inclined to finance their consumption and investments from existing assets. According to *Table 6,* households in the first wealth quintile were more likely to become indebted: they reported the highest median loan amount and their participation rate is also high. As we examine total outstanding borrowing separately in each net wealth quintile, we find that 35 per cent of the loans outstanding were taken by households residing in the first quintile (*Figure 10*). Accordingly, the percentage of loans outstanding declines, albeit to a different degree, as we progress upwards in the medium wealth quintiles. In the top wealth

quintile, however, the percentage of debt becomes higher once again; moreover, the top 1 per cent of the highest net wealth quintile included in the survey hold 5 per cent of total debt. This is consistent with the findings of the study presenting the results of the survey conducted among Irish households, where debt was higher among the wealthiest households than among those with medium wealth (*TASC 2015*). The question arises: what motivates households in the bottom and top income quintiles to apply for loans? Is it borrowing for consumption, or do wealthy households tend to finance residential investment from the debt?

Figure 10
Debt participation according to net wealth by wealth quintile



Source: HFCS.

To answer these questions we attempted to identify the motivating factors behind households' indebtedness within each wealth quintile. *Figure 11* shows that home purchase/renovation were dominating factors in households' indebtedness in each wealth category. The higher debt observed in the top wealth quintile compared to medium-wealth groups is also primarily related mortgage loans, in particular, housing loans, but the contribution of mortgage-backed loans taken for valuables was also significant, albeit to a lesser degree. Consumer credit is the least prominent contributor in the top wealth quintile: wealthy households are less likely to finance their consumption from credit than relatively poorer households. Mortgage debt dominates the first wealth quintile as well, but the stock of non-mortgage debt is also high. For lack of sufficient financial assets, households with moderate net wealth are more frequently forced to finance their consumption from debt. Based on the above, although a smaller fraction of wealthier households finance

consumption from debt, this category is far more likely to finance their home purchase investments from loans than less wealthy households.

Figure 11
Debt by loan purpose in the bottom, medium and top wealth quintiles

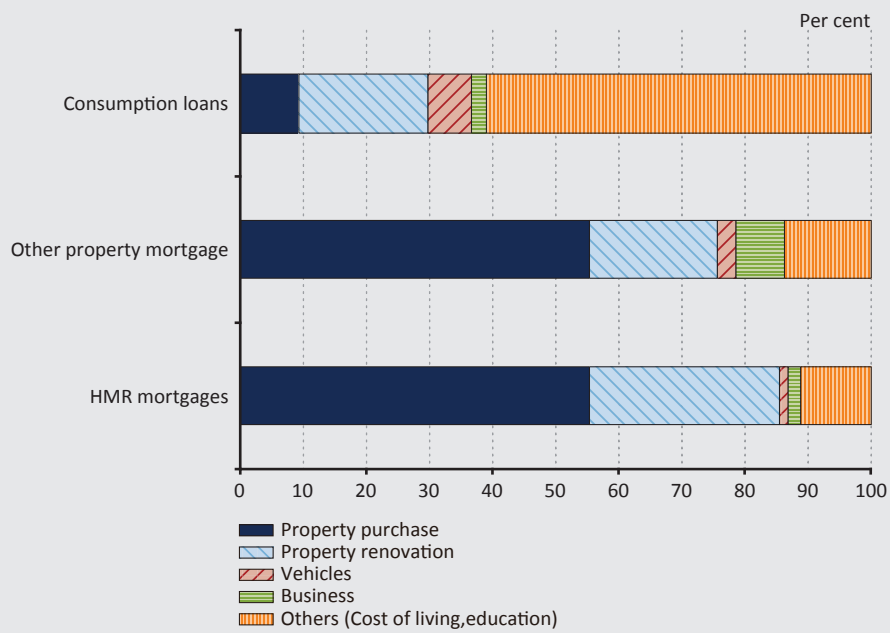
Note: Housing loans: home purchase and renovation. Valuables: second real estate property, vehicle, transportation equipment. Other: Business, repayment of other debt, financing education, financing sustenance.
Source: HFCS.

Stylised fact 2: Borrowing is one of the most important determinants of access to housing; most households apply for loans for the purpose of home purchase. Besides the loan amount disbursed to households, the purposes of the loan are also important factors to consider. During the survey we requested households to identify the purposes of the (mortgage or consumer) loans taken (*Figure 12*). According to the results, nearly 800,000 households had loans collateralised by the household's main residence. In the case of this loan category, the acquisition of a main residence is the primary motivation, affecting nearly half of the population. The second most frequent motive is the renovation of residential property. The number of households identifying the renovation of a residence as the loan purpose was higher than expected, partly because the respondents assumed that the expansion of their main residence should be also included. In addition to the household's main residence, the questionnaire also included questions regarding other real estate property owned by the household. Borrowing motives were fairly similar to those cited in the case of HMR mortgage debt; however, the share of

loans taken for other real estate property is higher in this case; in other words, it is conceivable that households also financed a part of their other property from debt.

Stylised fact 3: Borrowing for consumption is aimed at alleviating liquidity constraints. The picture is more heterogeneous in the case of borrowing for consumption purposes: in addition to loans intended to ease liquidity constraints, borrowing "for investment purposes" (education, home renovation) is also typical. The motives behind borrowing for consumption are more heterogeneous: besides renovation, borrowing for supporting sustenance, borrowing for other purposes and borrowing for the repayment of debt or for the financing of education each represents a nearly identical weight of 10–14 per cent. At the same time, only 7 per cent of households with consumer credit indicated that the loan purpose was vehicle purchase. This may be because households had repaid a substantial portion of their pre-crisis vehicle loans already, and after the crisis they presumably opted for financing their vehicle purchases from own funds. Interestingly, some households applied for consumer credit in order to purchase their main residence – these households may have tried to put up the downpayment required for the home purchase by resorting to consumer loans.

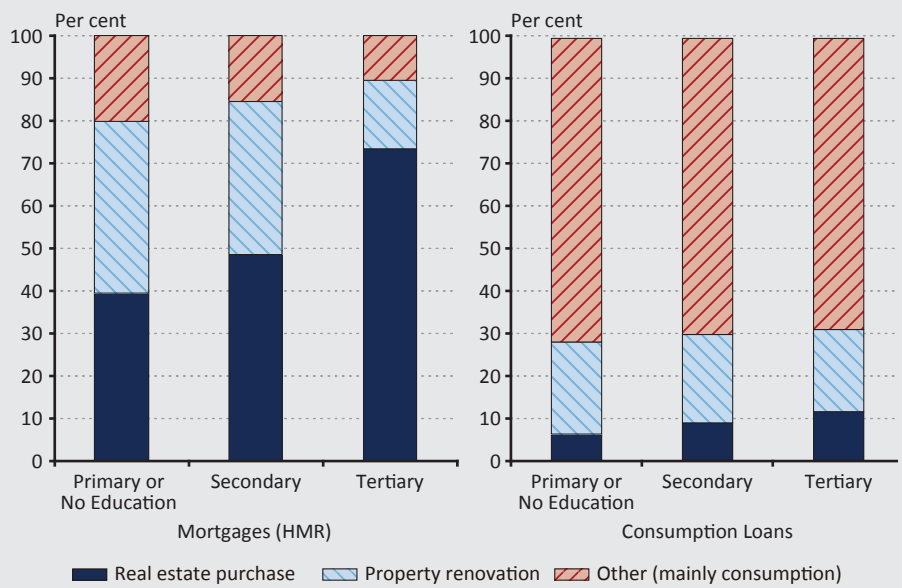
Figure 12
Motivations behind household borrowing by loan category



Source: HFCS.

Stylised fact 4: While poorer households take out loans to support their sustenance needs, wealthier families tend to spend the loan amount on purchasing high-value items, primarily real estate. Borrowing for the acquisition of a household main residence is typical among heads of household with higher education. We also examined whether the motivations behind borrowing change in function of the education level of income-earner, adult household members (*Figure 13*). We then checked the most frequent purposes of mortgage-backed housing loans and consumer loans among these households. As regards mortgage loans, the frequency of housing loans rises in line with the parent's education level. In the case of parents with lower education levels – presumably because of the lower level of household income – the most typical loan purpose is the financing of home renovation or the financing of consumption expenditures. The picture is less heterogeneous in the case of consumer credit: the groups defined on the basis of households' education level reported fairly similar proportions. The analysis performed on the basis of income quintiles yielded very similar results.

Figure 13
Motivations behind household borrowing by education level



Source: HFCS.

7. Summary

This study was intended to provide a detailed account of the main results of the first harmonised, detailed survey on Hungarian households' financial saving and consumption habits. After the crisis, there was a growing need to compile detailed microstatistics in order to provide deeper insight into economic processes. Hungary joined the second wave of the *Household Finance and Consumption Survey* (*HFCS*) initiated by the European Central Bank. Relying on a harmonised methodology to map the wealth position of households, the survey yielded internationally comparable data.

In our study, we presented the main results of the Hungarian survey, comparing them to the currently available international findings of the first wave. We analysed the real and financial assets and loans of households and provided a comprehensive overview of income and wealth distributions. We relied on survey data and the international literature to propose stylised facts that may assist in clarifying the results of the survey even further.

Based on the above, we can establish in general that the key priority of Hungarian households is to own their main residence. This is also the primary purpose of their borrowing in general, allowing them to purchase higher-value residential properties. Examining the financial assets of households in general, we found that, while 40 per cent of households have no considerable financial wealth, a substantial portion of households' assets is concentrated within a single, narrow social segment. Net wealth – including real assets – is distributed more evenly than financial assets, which can be explained by the high percentage of Hungarian households owning their main residence. As regards financial assets, Hungarian households appear to have a preference for more liquid forms of saving. A greater diversification of financial assets can only be observed among higher-income households.

However, covering more than 6,200 households, the database offers numerous additional research opportunities. By exploring the demographic and income processes in more detail, providing a more in-depth analysis of specific topics and using regression analysis, we may gain deeper insight into the saving and borrowing habits of Hungarian households.

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