Financial savings of households based on micro- and macro-statistical data

2017

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The publication is based on information available for the period ending 31 December 2016.

Published by the Magyar Nemzeti Bank

Publisher in charge: Eszter Hergár

H-1054 Budapest, Szabadság tér 9.

www.mnb.hu

Economic agents usually record their revenues, expenses and wealth, and they regularly report their income and wealth position to other economic agents and authorities concerned. In line with the accounting requirements, economic entities (companies, government institutions, non-profit organisations) prepare statements about their revenues, expenses and wealth that serve as the basis for statistical recording and national accounts compilation as well. However, private individuals and the sole proprietors, who are part of households, are only required to report a portion of their revenues, i.e. their income, while they usually do not disclose or provide administrative data about other parts of their revenues, their expenses and especially their wealth. Therefore, macrostatistics overwhelmingly construct the household sector's production, income distribution, savings and accumulation processes and estimate the sector's financial and non-financial assets and liabilities based on the data from the partner sectors and intermediaries in the transactions. Therefore while the sectoral macrostatistical indicators of financial and non-financial corporations, the general government or the non-profit institutions serving households can usually be further subdivided and detailed with the help of the institution-level administrative data substantiating them, in the case of households, separate surveys are necessary for this.

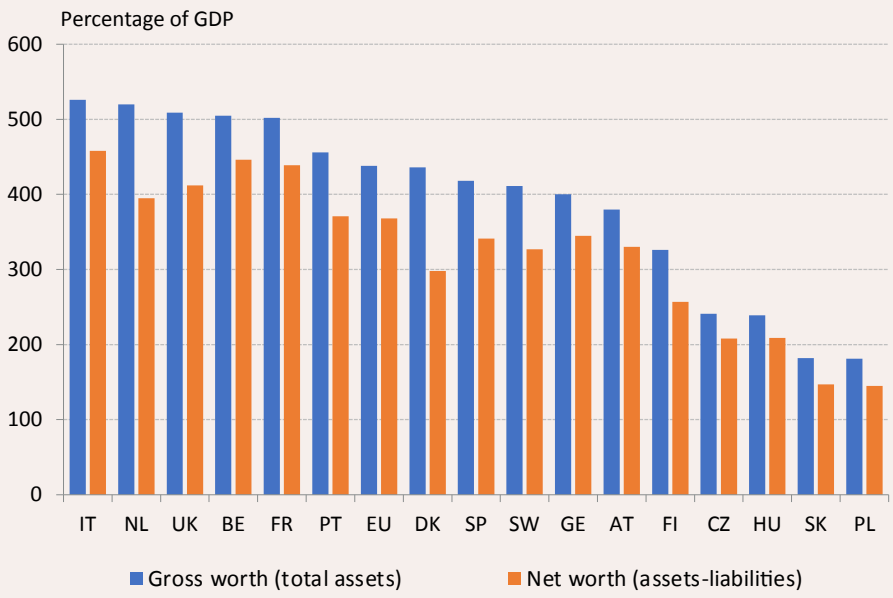
Regular, household-level surveys on income and consumption have been conducted for decades in developed countries; therefore the examination of income disparities within the household sector has a long history. However, due to the lack of appropriate data, the distribution of the various assets and liabilities (wealth) among households has not been part of the examination until recently. Another difference in measuring wealth as compared to the corporate sectors is that household surveys can only be based on sampling due to the large population, and on account of the lack of own records and experience in reporting, the quality of these surveys lags behind those conducted among companies and budgetary or non-profit organisations, which has to be borne in mind when using the data. Nevertheless, the newly appeared household wealth surveys provide much-needed information, paving the way for the household-level examination of stock data. In Hungary, the first comprehensive statistical survey about households' financial and non-financial assets, liabilities and other financial characteristics was conducted in 2014. In addition to the household sector's macro-level data derived from the national accounts, this publication presents the distribution of income and wealth among households based on the results of that survey.

Contents

1 Financial and non-financial assets, liabilities and net worth of households in an international comparison

Based on national accounts, the household sector in the European Union had wealth of over EUR 61,000 billion (438 per cent of GDP) at the end of 2014, of which real assets accounted for nearly EUR 30,000 billion and financial assets for slightly over EUR 31,000 billion. Total liabilities approached EUR 10,000 billion, and so the sector's net worth was EUR 51,400 billion (368 per cent of GDP) at the end of 2014 (Chart 1-1).[1]

Chart 1-1
Gross and net worth of households in the European Union and selected countries, at the end of 2014, as a percentage of GDP



Source: Own estimate based on Eurostat data.

In the countries of Eastern Europe, the volume of financial and non-financial assets held by households is often close to the amount of annual GDP, so the aggregate volume of financial and nonfinancial assets, i.e. the sector's gross worth is generally around 200 per cent of GDP[2]. Meanwhile, household worth in the Central European region is around 400 per cent of GDP, which results in a higher value of financial assets and a volume of real assets that exceeds the volume of financial assets. Certain Western European countries boast sectoral wealth far higher than the EU averages (438 per cent of GDP), where significant volumes of real assets are coupled with substantial financial investments. Aggregate household assets at the end of 2014 amounted to 509 per cent of GDP in the United Kingdom, 520 per cent in the Netherlands, 505 per cent in Belgium, and

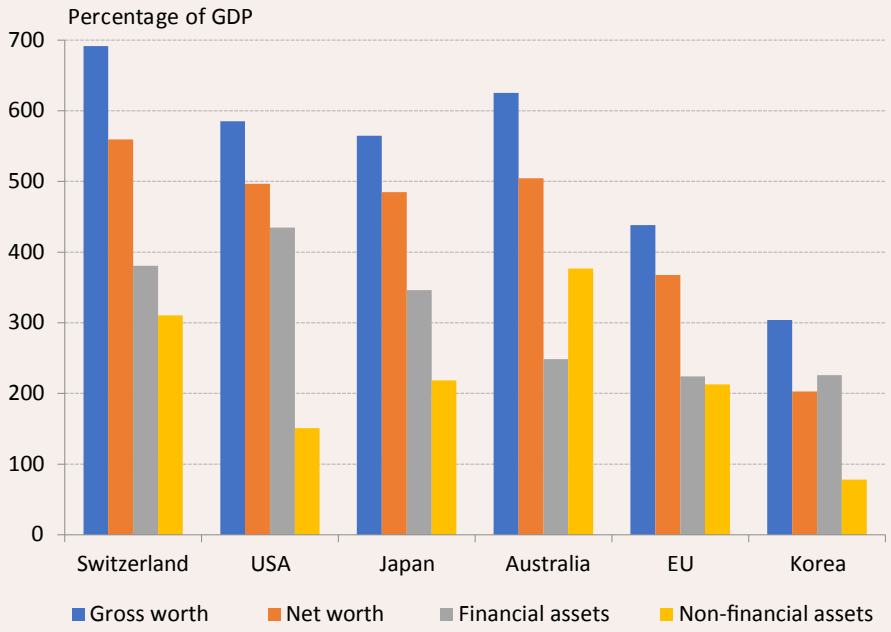
[1] There is no official data available on the worth of households with regard for the entire European Union, as the statistical recording of worth is deficient in several countries. The presented data are estimates performed for this publication using the Eurostat database (see methodology).

[2] At the end of 2014, household assets amounted to 240 per cent of GDP in the Czech Republic, and somewhat higher in Hungary, Bulgaria, Croatia, Latvia, while household assets amounted to less than 200 per cent of GDP in Poland, Slovakia, Romania and Lithuania. The estimate isdifficult due to recognition and valuation uncertainties, and some countries do not disclose the volume of real assets.

526 per cent in Italy. The differences in the size and composition of wealth beyond accounting and valuation idiosyncrasies fundamentally shape the differences in the ownership relations of real estate, the pension system's structure and asset prices.[3]

If we include advanced economies outside the European Union in the overview of the wealth conditions of the household sector, we can conclude that the assets as a percentage of GDP of average European Union households fall significantly short of the assets of Swiss, US, Japanese and Australian households, and none of the member states approaches the average level of assets of the aforementioned countries. Substantial household wealth as a percentage of GDP stems mainly from the large volume of non-financial assets (including substantial holdings of land) in Australia and the high value of financial assets in the United States (Chart 1-2).

Chart 1-2
Gross and net worth, financial and non-financial assets of households in the European Union and other countries, at the end of 2014, as a percentage of GDP

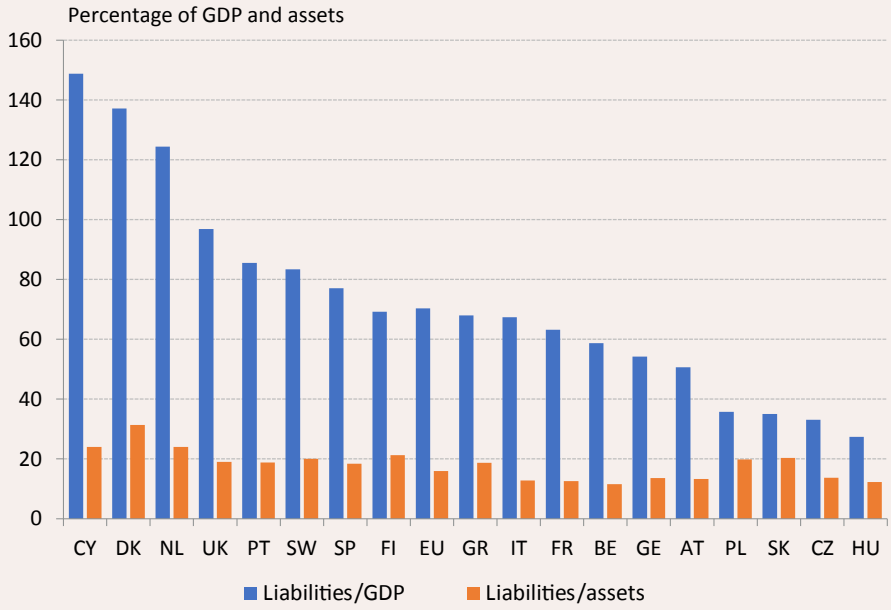


Source: Own estimate based on Eurostat and OECD data.

Besides gross worth, i.e. total assets, another important indicator is the amount of net worth, which is assets minus liabilities. This is the portion of wealth that households can dispose of freely. For households, the vast majority of liabilities are credit debt, alongside commercial loans (liabilities to service providers) and tax-type liabilities.

[3] In a broader sense, the wealth of other sectors also impacts the wealth position of households; however, this can only be taken into account by national account statistics to a limited degree. Among these, the general government plays the biggest role in determining household wealth.

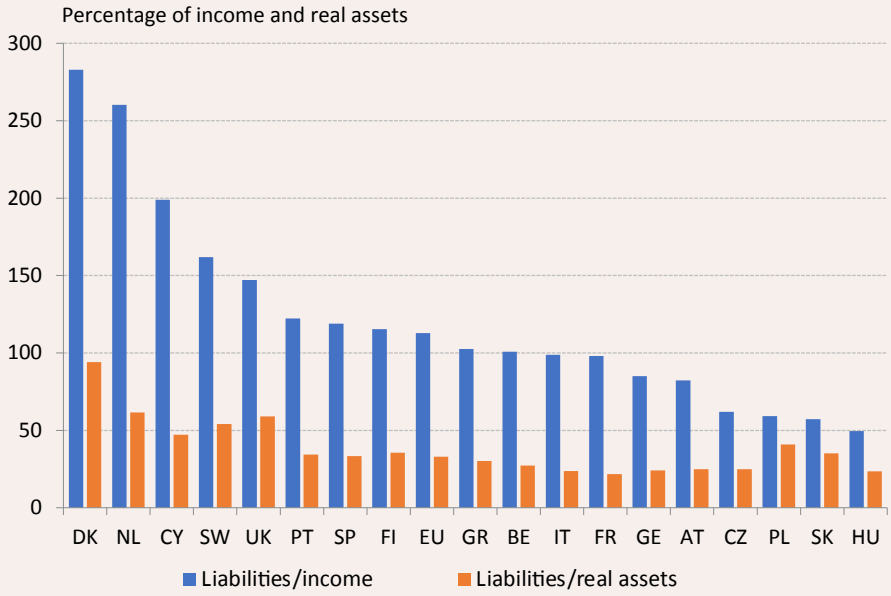
Chart 1-3
Liabilities of households in selected countries of EU, at the end of 2014, as a percentage of GDP and their assets



Source: Own estimate based on Eurostat data.

The differences in household liabilities among European Union member states are similar to the differences in assets. Generally speaking, countries where households hold a larger volume of assets also tend to have higher household liabilities. Cyprus, Denmark and the Netherlands have salient household debt of over 100 per cent of GDP, resulting in only medium net worth despite their substantial gross assets (Chart 1-3). By contrast, both gross and net assets are high in Italy, Belgium and France thanks to the relative low indebtedness of households. Hungary is among the countries with the lowest household indebtedness from every perspective. Household debt relative to assets is among the lowest in Hungary in the European Union, similarly to Bulgaria and Latvia (11 percent).

Chart 1-4
Liabilities of households in selected countries of EU, at the end of 2014, as a percentage of their income and real assets



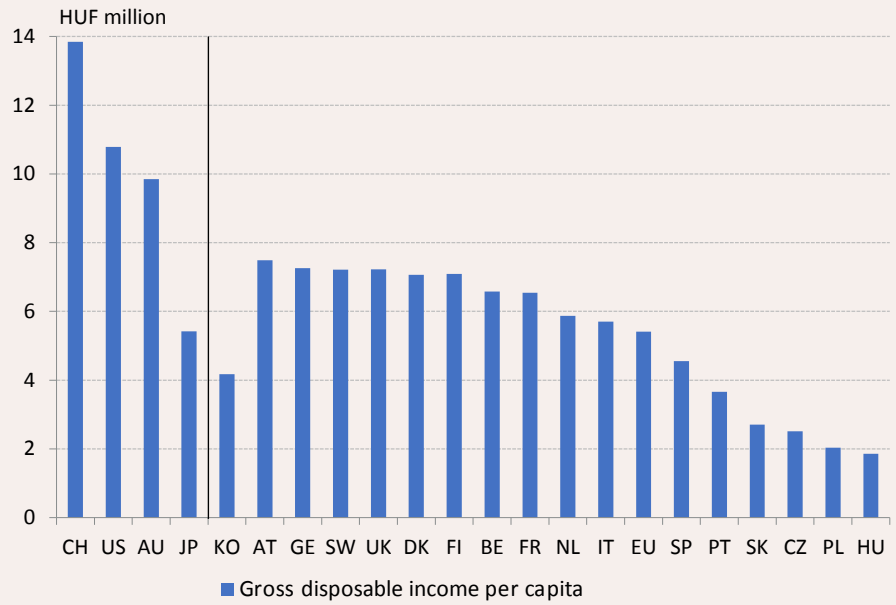
Source: Own estimate based on Eurostat data.

Debt expressed as a percentage of gross disposable income shows a similar picture and country ranking as for GDP-proportionate indicators within the European Union (Chart 1-4.). In Hungary, similarly to Slovenia, Latvia, Lithuania, Romania and Bulgaria, the liabilities of an average household fall short of 50 per cent of disposable income. Meanwhile, household debt relative to income is around 110 per cent in the entire EU and the USA and nearly 200 per cent in Switzerland. Denmark has the most indebted household sector at a sectoral level within the European Union; Danish households have on average accumulated the same volume of liabilities as their real assets. (The European average in this regard is 33 percent, while this figure is 43 per cent in Switzerland and 59 per cent in the USA based on national accounts data for 2014.) In this regard as well, Hungary is among the countries with the lowest household indebtedness rate (at 24 percent).

When it comes to households, per capita indicators, in other words population-proportionate indicators are also used alongside GDP-proportionate and income-proportionate indicators to compare the sector's geographic or temporal characteristics. Per capita indicators are more easy to interpret (the amount of assets that an individual person disposes of on average), however they reflect greater geographic or temporal differences as differences in the general level of economic development are not stripped out (contrary to using income-proportionate indicators).

For informational purposes, we are presenting the average annual gross disposable income per capita based on national accounts statistics for 2014 for the examined European Union countries and a few other advanced economies (Chart 1-5.). Similarly to many other Eastern European countries, disposable household income is around HUF 2 million per capita (this figure is far lower in Bulgaria and Romania) compared to around HUF 6-7 million per capita in most Western European countries. Needless to say, this income divide fosters wealth inequality; however, other causes may also be at play, as the differences in wealth are substantially greater.

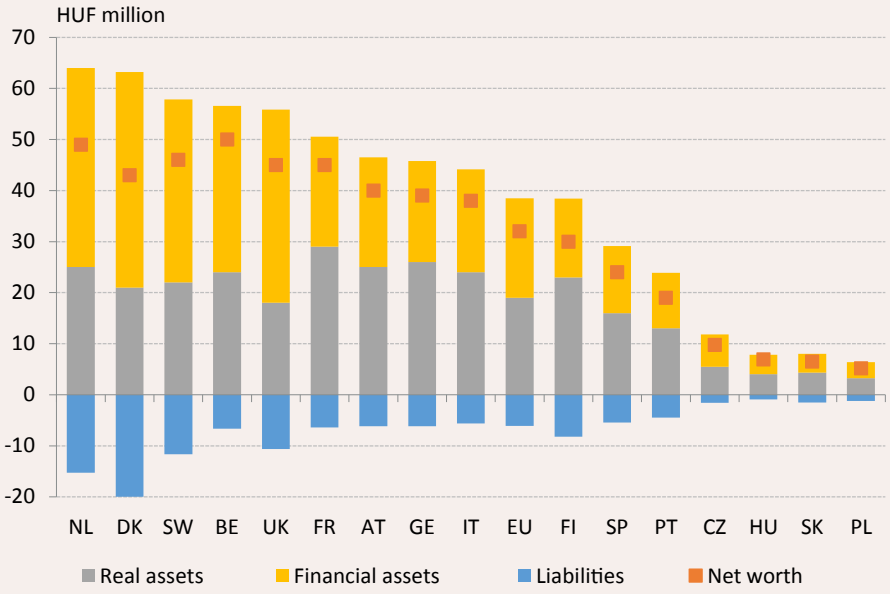
Chart 1-5
Gross disposable income per capita of households in 2014, million HUF



Source: Eurostat, OECD.

We take this account when reviewing per capita wealth data for households based on national accounts within the European Union (Chart 1-6).

Chart 1-6
Real assets, financial assets, liabilities and net worth per capita of households in the European Union and selected countries, at the end of 2014, million HUF



Source: Own estimate based on Eurostat data.

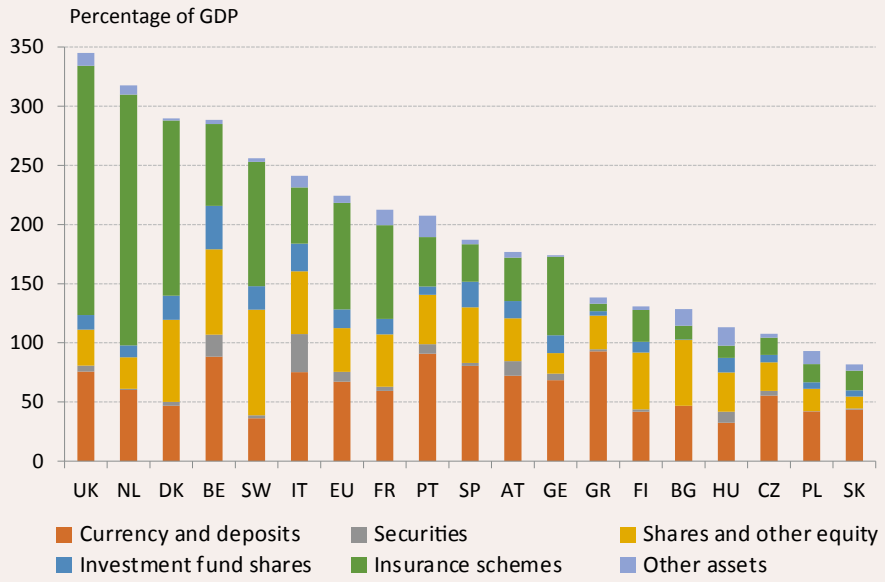
On average, every European Union citizen had assets of HUF 38 million at the end of 2014, consisting of HUF 19 million in financial assets and HUF 19 million in real assets. Every citizen also had HUF 6 million in debt, so an average individual had net wealth equivalent to HUF 32 million. This figure was the equivalent of HUF 42 million in Japan, HUF 64 million in the USA, HUF 73 million in Australia and HUF 114 million in Switzerland. In Europe, only a few Southern countries (Spain with HUF 29 million, Portugal with HUF 24 million and Greece with HUF 19 million) represent a transition between the above-average Western countries and Eastern European countries which only boast a fraction of the average amount. With the exception of the Czech Republic and Slovenia, we did not identify and Eastern European countries where gross per capita household wealth exceeded HUF 10 million. According to national accounts data supplemented with the value of land, gross worth per capita was HUF 9 million and net worth per capita was HUF 8 million in Hungary at the end of 2014. The average value of financial and non-financial assets was nearly identical. Every Hungarian citizen had HUF 1 million in debt on average, such low levels only found within the European Union in Poland, Latvia, Lithuania, Croatia, Romania and Bulgaria.

The geographic or temporal comparison of aggregated sectoral data or average indicators obtained from macrostatistics may signal the broad trends characterising the sector, however the distribution of the reviewed attributes can only be examined using microeconomic data. In the case of Hungary, average per capita net worth of HUF 8 million obviously offers fewer opportunities than the European Union average or the HUF 15 million average net worth in the Benelux states. An important topic is expansion of household wealth, as this is indicative of the expansion of opportunities for individuals. The structure of this wealth, its distribution among households and the covariance of assets and liabilities must also be examined simultaneously. The presentation of average values may be a warning sign in extreme cases (for example liabilities that exceed the value of real assets or obvious cases of poverty); however in most cases it is just misleading. A fortunate fact is that average household indebtedness in Hungary is low by international standards both relative to incomes and assets. However, identifying the households, specifically their income level and wealth backing, where the average debt of HUF 1 million per capita is concentrated requires macroeconomic data.

When comparing household wealth internationally, it is also worth looking at the composition of financial or non-financial assets held by households in different countries. The composition of financial assets by type

exhibits a rather large divergence by country (Chart 1-7). It is clear however that in countries where households have substantial financial worth as a percentage of GDP, it is mostly comprised of insurance technical reserves, mainly pension savings. The more extensive holding of mutual fund shares, debt securities or equity are an alternative to this in a few advanced economies such as Belgium, Sweden and Italy. An interesting fact is that in the majority of European Union countries, households only hold a small volume of securities directly and in some countries, households still keep the majority of their savings and liquid assets, i.e. cash and bank deposits. The level of financial assets is fundamentally determined by the method for recording and valuating equity (shares, other equity) in a given country. Low figures may be suggestive that households' direct corporate investments may not be fully observed in the statistics of several countries (such as Slovakia, Germany or the Netherlands). In Hungary, the composition of households' gross financial assets is particularly well-balanced. The low proportion of deposits compared to the European average is coupled with significant volumes of securities, mutual fund shares and equity.

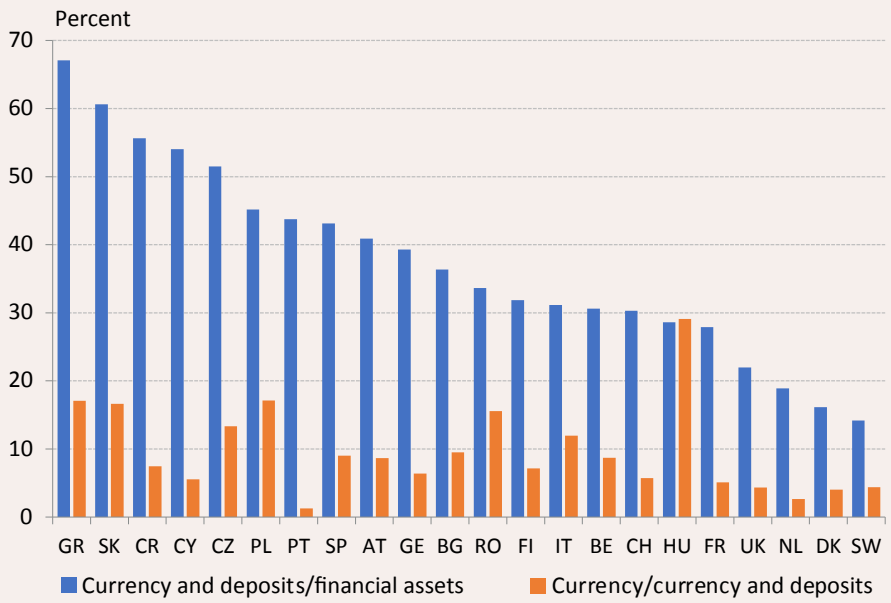
Chart 1-7
Composition of financial assets of households in selected countries of the EU, at the end of 2014, as a percentage of GDP



Source: Own estimate based on Eurostat data.

However, the high proportion of cash holdings within liquid assets (both cash and bank deposits) by Hungarian households is unique within the European Union (Chart 1-8). The currency ratio of households is higher in Eastern European and Southern European countries relative to Western and Northern Europe; however, Hungary's ratio is salient even by regional standards. However, the volume of cash held by Hungarian households is not exceptional relative to the total volume of financial assets (8 percent). Households in Poland, Slovakia, the Czech Republic and Slovenia hold cash in similar proportions. The quantity of cash relative to GDP and cash holdings per capita in Hungary are also closer to average rather than exceptional in the European Union.

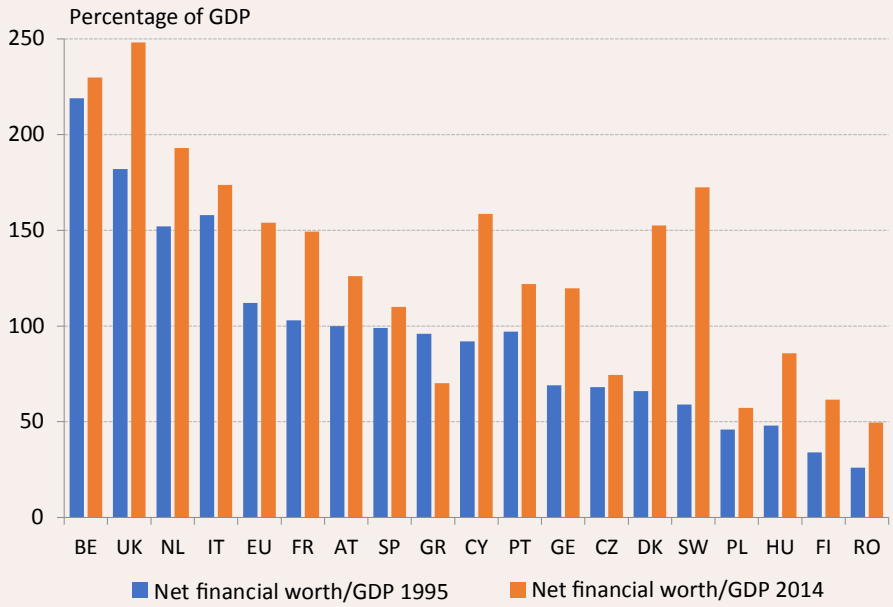
Chart 1-8
Share of currency and deposits inside financial assets and share of currency inside currency and deposits in selected countries of the EU, at the end of 2014, percentage



Source: Own estimate based on Eurostat data.

The data sources of national accounts generally only provide insight for a comprehensive analysis of the stock and flow data of financial and non-financial wealth on the previous 20 years (until 1995) for European Union countries. We therefore present in the following section the degree of change in household financial and non-financial wealth and the drivers thereof between 1995 and 2014 in the European Union and certain member states. We will attempt to answer to what degree the trends of the previous two decades may have impacted the wealth position of households in the various countries at the end of 2014. As we are performing a comparison in time and space, we will use GDP proportionate indicators. Even with that said, we can only make fairly restricted and general observations as the use of diverging currencies and trends in GDP substantially shape the results.

Chart 1-9
Net financial worth of households at the end of 1995 and 2014, as a percentage of GDP

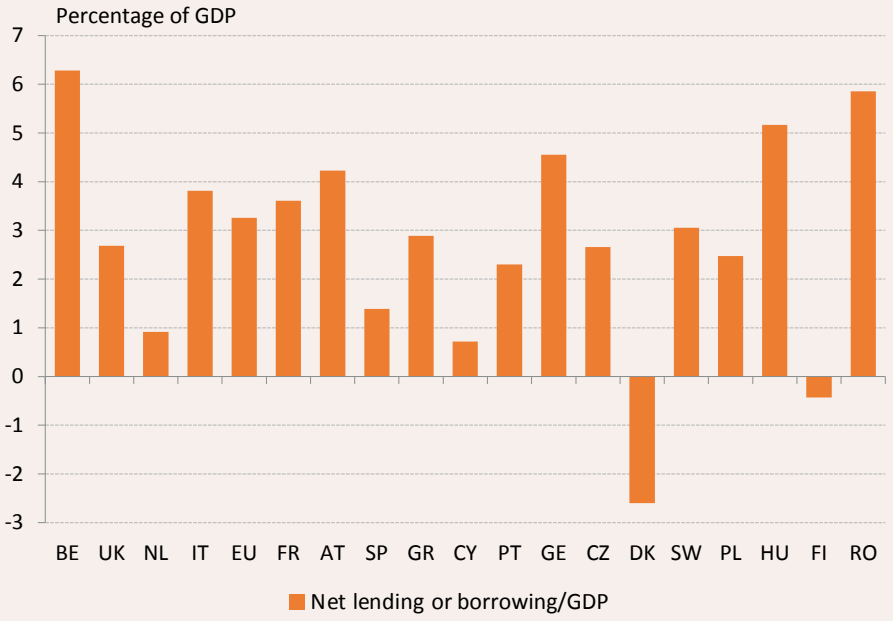


Source: Own estimate based on Eurostat data.

The financial net worth of households as a percentage of GDP has risen over the past 20 years in every European Union member state with the exception of Greece. Danish, Swedish and Cypriot households achieved significant expansion in their wealth during this period, and English, German, French and Hungarian households also achieved more significant wealth expansion (Chart 1-9). In nominal terms, Romania achieved the greatest measurable change, seeing the net financial worth of its households increase by 10-fold between 1995 and 2014, Sweden by over six-fold and Hungary by over five-fold. Wealth expanded by 2.6-fold within the EU overall, which is roughly in line with the increase in household wealth in France, Germany, the Netherlands and Spain.

In Belgium, Australia, Germany, Hungary and Romania, high household financial savings (i.e. their net lending) is what mainly drove the increase in net financial worth (Chart 1-10). By contrast, the growth in wealth was mainly driven by a significant positive revaluation rather than households' financial savings in Sweden, Denmark, Finland and particularly Cyprus, the Netherlands and the United Kingdom. In other words, countries where households' financial savings remained enduringly close to zero or in the negative range nevertheless achieved notable increase in wealth. Broadly speaking, the appreciation of financial wealth and the increase in net wealth stemming from transactions (capital formation, investments and financial savings) contributed equally to the average growth in household wealth within the European Union over the past 20 years. However, truly significant increase in wealth only occurred in economies where revaluation contributed to expanding wealth.

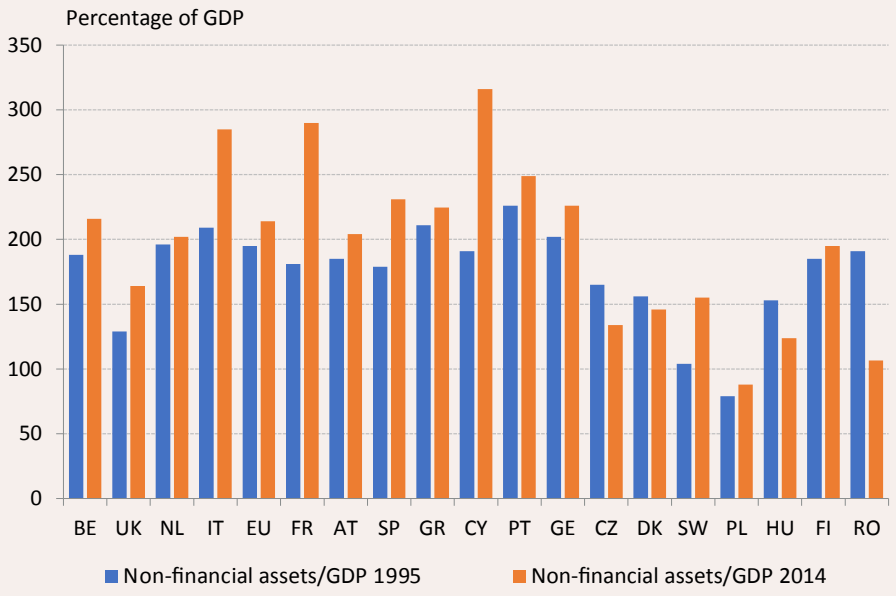
Chart 1-10
Net lending of households in selected countries, between 1995 and 2014, as a percentage of GDP



Source: Own estimate based on Eurostat data. (The average of annual net lending as a percentage of GDP.)

In terms of the value of non-financial assets held by households as a percentage of GDP, in the larger more developed part of the European Union, the volume of real assets increased, however this increase, with the exception of a few salient cases, was smaller and more uniform than the increase in financial assets. In Eastern European countries, the average value of real assets, property relative to GDP tended to decrease over the past 20 years (Chart 1-11).

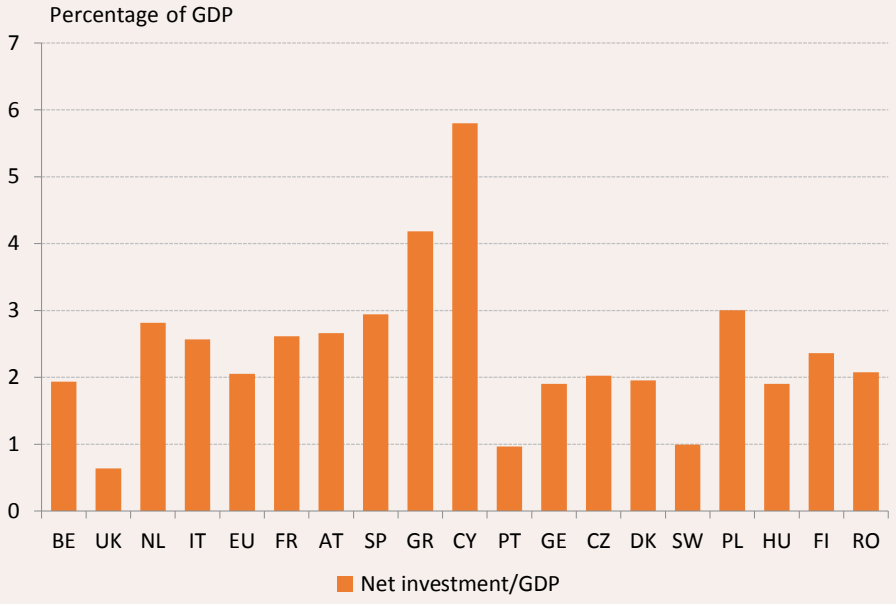
Chart 1-11
Net financial worth of households at the end of 1995 and 2014, as a percentage of GDP



Source: Own estimate based on Eurostat data.

The most significant price increase occurred in France and Cyprus; in these countries, this price increased determined the significant expansion in the volume of real assets, while in Cyprus, extraordinary net investment (gross capital formation minus amortisation) also contributed to the notable increase in households' real assets (Chart 1-12).

Chart 1-12
Net investments of households in real assets in selected countries, between 1995 and 2014, as a percentage of GDP



Source: Own estimate based on Eurostat data. (Average of annual net investments /decreased by amortisation/ as a percentage of GDP.)

Between 1995 and 2014, households' average financial savings (net lending) were quite low in Sweden, Cyprus, Finland, Spain and the Netherlands. With the exception of Sweden, household real asset investments were more significant in these countries. In Belgium, Italy, France, Austria, Germany, Hungary and Romania, average or significant investments also took place alongside substantial household financial savings over the past 20 years. While the average European household invested 3 per cent of GDP in financial assets, investment in real assets amounted to 2 per cent of GDP during the period under review. The financial savings of Hungarian households were far higher than the European average (5.2 per cent of GDP) while the sector's investment in real assets was in line with the European average.

2 The household sector's real economy and financing processes, financial and non-financial assets and liabilities and net worth according to Hungarian macro statistics

Introduction

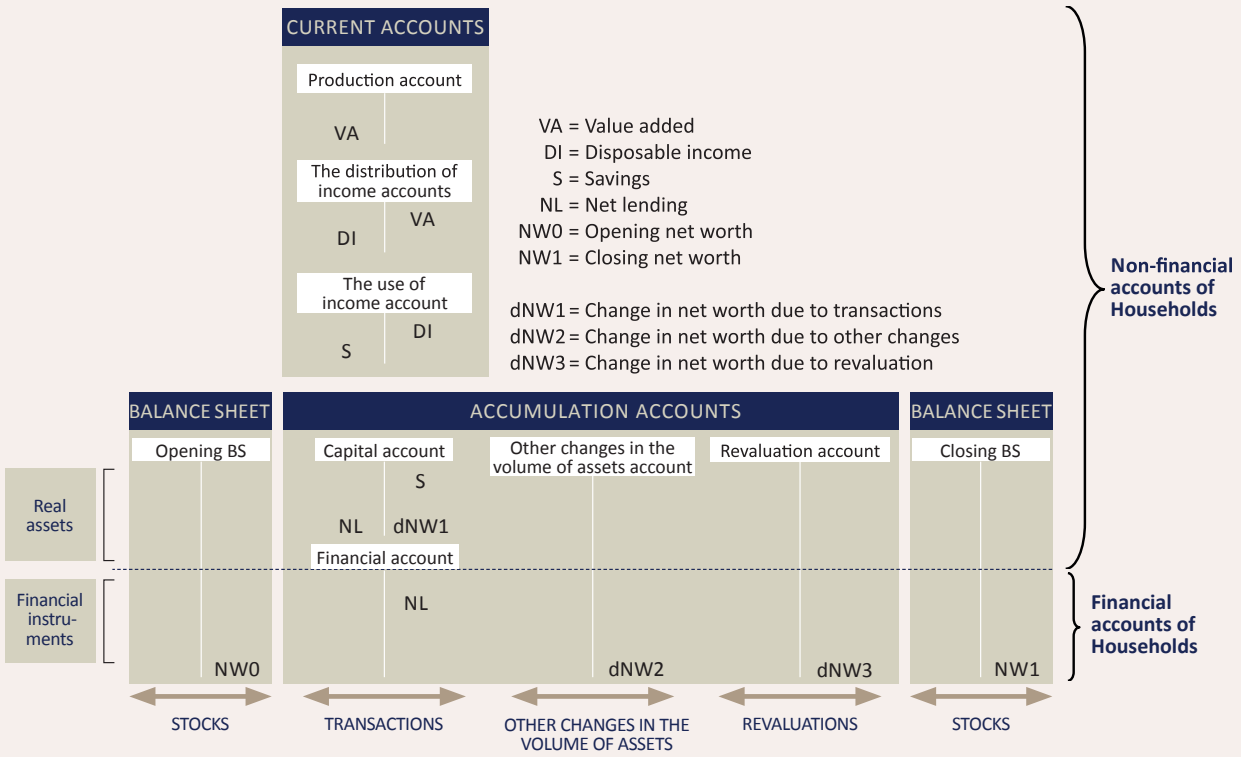
The system of national accounts is a macro statistics tool for describing the income or wealth position of a given economy or one of its sectors consistently in terms of space and time. The accounts lead from the production processes, i.e. the generation of income, through the distribution and use of income to the accumulation of wealth, and present the other reasons behind the changes in wealth. And the balance sheets linked to the accounts provide information on the stock of wealth (financial and non-financial assets, liabilities) at the end of a period. Furthermore, detailed accounts also show the financial relationships between the sectors. Since the whole system of accounts is highly complex, national accounts are usually compiled and used in parts. Therefore non-financial accounts describing real economy processes and financial accounts capturing financial processes tend to be treated separately. The integrated or sector accounts are typically presented for individual sectors, providing a comprehensive overview about their income, savings and financing situation. Balance of payments statistics about the national economy's real economy and financial processes with the rest of the world, and government finance statistics (GFS) about the revenues, expenditures and financing of the general government are classic examples of this integrated approach. In the macro statistics overview, the integrated accounts and balance sheets of the household sector are presented. During this, we detail households' financing processes and wealth, and we differentiate between the public and sole proprietors within the sector.

2.1 THE INTEGRATED NATIONAL ACCOUNTS OF THE HOUSEHOLD SECTOR

The system of national accounts describes the operation and situation of the economy as a whole, and presents the operation of all the domestic economic sectors in general, as well as the economic ties between them and between residents and non-residents. The national accounts function as a closed system, resources and uses and financial assets and liabilities offset each other in the economy as a whole. The whole system of accounts is so complex that it is usually compiled and presented in parts. Users of statistical data are often interested in the operation of a single sector in the economy rather than the whole economy. For example the government finance statistics (GFS) describes the operation of the general government, presenting the economic processes of the sector, while the balance of payments statistics cover the ties between resident and non-resident economic agents. Of course, the accounts describing individual sectors are not closed in themselves, i.e. the resources and uses and the financial assets and liabilities do not necessarily equal each other.

The household sector accounts form a vertical segment of the national accounts, describing the economic activity and position of the household sector. The presentation of the household sector's accounts basically mirrors that of national accounts or the balance of payments: they comprise current accounts, accumulation accounts and balance sheets. The integrated accounts show the role played by resident households in the processes of production, income distribution, consumption, real and financial investment, as well as their wealth in real assets and financial assets and liabilities (Chart 2-1-1).

Chart 2-1-1
Structure of integrated economic accounts of households



The upper part of the integrated accounts shows real flows, and real assets and the changes in their stocks. This part is often referred to as non-financial accounts, while the lower portion of the accounts, showing stocks of financial instruments and the changes in stocks, is often called financial accounts. In line with the division of labour that developed in Hungary, the Hungarian Central Statistical Office (HCSO) compiles the non-financial accounts of the sectors (including households), while financial accounts are compiled by the Magyar Nemzeti Bank. The separation of these two parts of the national accounts is warranted by the fact that they comprise instruments of completely different content that can be observed differently. Real economy transactions are usually observed directly by statistics, whereas financial transactions, which finance real economy operations, are usually calculated from stock data, and stocks are not observed from the side of households but from a partner sector that is more accessible and that provides better information, or based on the information of the financial intermediary. The integrated system of accounts refers to the merging of these account parts that are compiled from different data sources and in different ways.

Stocks, changes in stocks and transactions

In the household national accounts and in the system of national accounts, balance sheets show the stock of real and financial assets and liabilities at a given point of *time*. The accounts represent economic processes in a given *period*. There are three types of economic processes: transactions, other changes in volume and revaluations. Transactions are processes that happen with the mutual agreement of economic agents (sales transactions, exchanges or transfers). Other changes in volume are changes in stocks that happen due to technical or special, extraordinary reasons related to unusual economic processes (reclassifications, loan write-offs). Revaluations describe the changes in stocks arising out of the price changes in balance sheet items, assets and liabilities (exchange rate changes and market price changes). The current accounts only include transactions, i.e. revaluations and other changes in volume do not influence the processes of production, income distribution and use of income. In addition to transactions, accumulation accounts include revaluations and other changes in volume. However, transaction accounts are key in the system of national accounts. Accumulation means

the production and acquisition of financial and non-financial assets and incurring liabilities. The accumulation of financial and non-financial assets is usually called investment, while incurring liabilities is called financing.

Households' transaction accounts describe households' real economy and financial transactions, i.e. the way they participate in the processes of production, income distribution, consumption, investment and financing. The right side of current accounts shows households' resources, i.e. the "received" transactions (income) that increase households' wealth. The left side of current accounts shows households' uses, and these "paid" transactions (expenditure) decrease households' wealth. The balancing items, i.e. the differences between resources and uses are the most important indicators in the system of accounts; they include value added, disposable income, savings and net lending (financial savings).

The accounts are interconnected, i.e. the closing balance of one is also the opening item of another. Financial and non-financial accounts are connected by net lending calculated in a "top-down" manner from the side of the capital account, and by net lending calculated "bottom-up" from the financial account. In theory, the values of these indicators are the same, since they measure the same economic phenomenon from different sides (the amount of money left in the sector after consumption and investment that can be used to finance excessive consumption and investments in other sectors by investing in financial assets). However, in practice the values of these indicators differ, since neither data collection nor the estimations employed provide perfect information during the compilation of the statistics. The difference between the indicators, the statistical discrepancy, is one of the measures of the data's reliability. Table 2-1-1 shows the time series of households' transaction accounts.

Since households take part in economic processes in various capacities (as producers, owners, employees, social benefit recipients, taxpayers, consumers, investors etc.), the structure of non-financial accounts is highly complex and their full form is too detailed for a quick overview. This line-by-line presentation of the system of accounts is primarily used to derive the balancing items. In the case of households, just like in the case of the general government, the transactions of non-financial accounts should also be presented in the form of revenues (income) and expenditures. Revenues mean transactions that increase households' financial wealth, and expenditures mean those that decrease it. The balance of all income and expenditure equals the balance of the capital account, net lending (in the case of surplus income) or net borrowing (in the case of surplus expenditure) (see Table 2-1-2).

Table 2-1-1
Integrated economic accounts of households presenting annual transactions, billion HUF

Item		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Output	Received	5,901	5,942	6,146	5,842	5,777	5,999	5,928	6,118	6,406	6,601
Intermediate consumption	Paid	2,046	2,014	2,011	1,923	1,864	1,896	1,837	1,880	1,935	2,076
Value added, gross		**3,856**	**3,928**	**4,135**	**3,919**	**3,913**	**4,104**	**4,091**	**4,238**	**4,470**	**4,525**
Compensation of employees	Paid	491	473	463	435	432	461	484	567	604	630
Other taxes on production	Paid	14	15	18	22	23	21	22	46	52	60
Subsidies	Received	97	114	134	151	153	195	200	233	257	271
Operating surplus and mixed income, gross		**3,447**	**3,554**	**3,789**	**3,612**	**3,611**	**3,816**	**3,784**	**3,857**	**4,071**	**4,107**
Compensation of employees	Received	10,923	11,555	12,169	11,650	11,711	12,238	12,708	13,366	14,245	14,936
Property income	Received	1,201	1,420	1,438	1,535	1,242	1,298	1,513	1,373	1,291	1,283
Property income	Paid	264	428	553	534	428	451	424	315	205	141
Balance of primary incomes, gross		**15,307**	**16,101**	**16,843**	**16,263**	**16,136**	**16,901**	**17,580**	**18,281**	**19,403**	**20,186**
Current taxes on income, wealth, etc.	Paid	1,707	1,926	2,146	1,994	1,840	1,478	1,657	1,673	1,775	1,894
Net social contributions	Paid	3,694	4,182	4,528	4,176	3,997	4,152	4,186	4,393	4,709	5,030
Social benefits other than social transfers in kind	Received	3,696	4,047	4,433	4,446	4,437	4,544	4,571	4,628	4,667	4,662
Other current transfers	Received	480	524	359	359	385	387	385	428	485	546
Other current transfers	Paid	468	500	415	401	424	405	461	457	504	538
Disposable income, gross		**13,614**	**14,064**	**14,546**	**14,497**	**14,697**	**15,796**	**16,232**	**16,815**	**17,567**	**17,932**
Social transfers in kind	Received	3,253	3,207	3,429	3,426	3,411	3,435	3,415	3,469	3,728	4,012
Adjusted disposable income, gross		**16,867**	**17,270**	**17,975**	**17,923**	**18,108**	**19,231**	**19,647**	**20,284**	**21,295**	**21,944**
Final consumption expenditure	Paid	12,497	13,466	14,076	13,651	13,761	14,374	14,922	15,207	15,730	16,205
Consumption of social transfers in kind	Paid	3,253	3,207	3,429	3,426	3,411	3,435	3,415	3,469	3,728	4,012
Adjustment for the change in pension entitlements	Received	464	472	570	530	498	148	67	84	91	84
Saving, gross		**1,581**	**1,069**	**1,041**	**1,376**	**1,433**	**1,571**	**1,377**	**1,692**	**1,928**	**1,811**
Gross capital formation	Paid	1,095	1,256	1,357	1,299	1,060	832	787	828	868	856
Capital transfers	Received	131	132	125	109	82	255	301	89	206	807
Capital transfers	Paid	31	27	38	35	35	22	22	17	20	22
Acquisitions less disposals of non-financial non-produced assets	Paid	27	–7	4	–2	0	0	–5	–11	–21	–8
Net lending (+) /net borrowing (-)		**558**	**–75**	**–234**	**152**	**421**	**971**	**874**	**947**	**1,267**	**1,748**
Discrepancy with the financial net lending/net borrowing (B9F-B9)		–210	–481	–515	–754	–763	–501	–573	–510	–497	–875
Net lending (+) /net borrowing (-) in the financial account		**768**	**407**	**281**	**906**	**1,183**	**1,472**	**1,448**	**1,457**	**1,764**	**2,623**
Transactions of financial assets		2,078	1,915	1,678	881	861	525	566	1,027	1,489	1,495
Transactions of liabilities		1,310	1,508	1,397	–25	–322	–947	–882	–430	–275	–1,128

Source: HCSO (non-financial national accounts), MNB (financial accounts).

Production account
The distribution of income accounts
The use of income accounts
Capital account
Financial account

Table 2-1-2
Non-financial accounts of households grouped by revenues and expenditures, billion HUF

Item	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Revenues										
Output	5,901	5,942	6,146	5,842	5,777	5,999	5,928	6,118	6,406	6,601
Subsidies	97	114	134	151	153	195	200	233	257	271
Compensation of employees	10,923	11,555	12,169	11,650	11,711	12,238	12,708	13,366	14,245	14,936
Property income	1,201	1,420	1,438	1,535	1,242	1,298	1,513	1,373	1,291	1,283
Social benefits other than social transfers in kind	3,696	4,047	4,433	4,446	4,437	4,544	4,571	4,628	4,667	4,662
Other current transfers	480	524	359	359	385	387	385	428	485	546
Social transfers in kind	3,253	3,207	3,429	3,426	3,411	3,435	3,415	3,469	3,728	4,012
Adjustment for the change in pension entitlements	464	472	570	530	498	148	67	84	91	84
Capital transfers	131	132	125	109	82	255	301	89	206	807
Total revenue	**26,146**	**27,413**	**28,804**	**28,048**	**27,696**	**28,498**	**29,087**	**29,788**	**31,376**	**33,201**
Expenditures										
Intermediate consumption	2,046	2,014	2,011	1,923	1,864	1,896	1,837	1,880	1,935	2,076
Compensation of employees	491	473	463	435	432	461	484	567	604	630
Other taxes on production	14	15	18	22	23	21	22	46	52	60
Property income	264	428	553	534	428	451	424	315	205	141
Current taxes on income, wealth, etc.	1,707	1,926	2,146	1,994	1,840	1,478	1,657	1,673	1,775	1,894
Net social contributions	3,694	4,182	4,528	4,176	3,997	4,152	4,186	4,393	4,709	5,030
Other current transfers	468	500	415	401	424	405	461	457	504	538
Final consumption expenditure	12,497	13,466	14,076	13,651	13,761	14,374	14,922	15,207	15,730	16,205
Consumption of social transfers in kind	3,253	3,207	3,429	3,426	3,411	3,435	3,415	3,469	3,728	4,012
Gross capital formation	1,095	1,256	1,357	1,299	1,060	832	787	828	868	856
Capital transfers	31	27	38	35	35	22	22	17	20	22
Acquisitions less disposals of non-financial non-produced assets	27	–7	4	–2	0	0	–5	–11	–21	–8
Total expenditure	**25,588**	**27,487**	**29,039**	**27,895**	**27,275**	**27,527**	**28,213**	**28,842**	**30,109**	**31,454**
Revenues minus expenditures (Net lending/net borrowing)	**558**	**–75**	**–234**	**152**	**421**	**971**	**874**	**947**	**1,267**	**1,748**

Source: HCSO (non-financial national accounts).

The transactions presented in the financial accounts do not appear among income and expenditure because
- if a transaction affects the financial account and a non-financial account as well, the non-financial part is already recorded among revenue or expenditure, and
- if a transaction affects only the financial account, it has no impact on financial net worth.

The simplified version of the transaction accounts

Table 2-1-1, which details households' transaction accounts, is unclear, since it contains many items, it shows received and paid transactions separately for each item, and it contains the statistical discrepancy, i.e. the difference between net lending calculated with the top-down and the bottom-up method. The balancing items were eliminated from Table 2-1-2, however, this way the identification of the major indicators affecting wealth is facilitated less by the detailed presentation of gross income and expenditure. This is because in order to distinguish the payments related to various partner sectors, and to enable the comparison of the measures of production, income distribution and accumulation despite the different organisational and ownership structures or pension systems in the different countries, several imputed and grossed-up items are included in the accounts. Table 2-1-3 shows a time series containing simplified transaction accounts in which the received and paid transactions of the individual items are merged, capital transfers are represented together with current transfers, and the adjustment due to the changes in pension entitlements reduces social contributions payable. The statistical error that arose during the compilation of financial and non-financial accounts was incorporated into property income. The table derived this way presents the time series of households' transactions through the main economic categories in a clear manner.[4]

Table 2-1-3
Simplified integrated economic accounts of households, billion HUF

Item		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Value added, gross		**3,856**	**3,928**	**4,135**	**3,919**	**3,913**	**4,104**	**4,091**	**4,238**	**4,470**	**4,525**
Compensation of employees, received minus paid	(+)	10,432	11,082	11,707	11,215	11,279	11,777	12,223	12,799	13,640	14,306
Social benefit and transfers	(+)	6,949	7,253	7,862	7,872	7,848	7,978	7,986	8,097	8,395	8,674
Property income and other transfers, received minus paid	(+)	1,258	1,603	1,431	1,786	1,585	1,562	1,865	1,612	1,751	2,810
Taxes, social contributions and adjustment for the change in pension entitlements	(–)	4,855	5,537	5,987	5,511	5,210	5,309	5,599	5,795	6,188	6,627
Total disposable income, gross		**17,641**	**18,329**	**19,147**	**19,281**	**19,416**	**20,113**	**20,567**	**20,950**	**22,069**	**23,687**
Consumption	(–)	15,750	16,673	17,505	17,077	17,172	17,808	18,337	18,676	19,458	20,217
Savings, gross		**1,891**	**1,656**	**1,642**	**2,203**	**2,244**	**2,304**	**2,230**	**2,274**	**2,611**	**3,470**
Investment	(–)	1,123	1,249	1,361	1,297	1,060	832	782	817	847	848
Financial saving		**768**	**407**	**281**	**906**	**1,183**	**1,472**	**1,448**	**1,457**	**1,764**	**2,623**
Transactions of financial assets	(+)	2,078	1,915	1,678	881	861	525	566	1,027	1,489	1,495
Transactions of liabilities	(–)	1,310	1,508	1,397	–25	–322	–947	–882	–430	–275	–1,128

Source: Authors' calculations based on HCSO and MNB data. The data in red were derived residually.

Households' main sources of income include entrepreneurial activities, employment, providing assets and social benefits. Entrepreneurial activity may increase households' disposable income through value added or in the form of the compensation of employees or property income, and these income categories cannot always be distinguished (since the business is part of the household). The compensation of employees contains remuneration in cash or in kind for their work, together with the income taxes and social security contributions

[4] Total disposable income in the table differs from the adjusted disposable income in the national accounts by capital transfers, the changes in pension entitlements and the statistical discrepancy. The same difference can be observed in the case of savings, too. Investment equals the net acquisition of real assets.

paid by employers and employees. (Taxes and contributions are later deducted; therefore disposable income is influenced only by the sum of net wages and other income. Compensation of employees paid by private individuals to each other, which is paid, for example, by the self-employed to their employees, does not affect disposable income.) The most important social benefits are pensions and retirement benefits, but they also include unemployment or social benefits and subsidies.

Accumulation accounts and balance sheets

In a broader sense, integrated accounts also include balance sheets, as the various assets acquired as a result of the accumulation processes (investment, financing) are recorded here. Households' balance sheets and accumulation accounts show the stock of real and financial assets and liabilities and the components of changes in stocks (flows).

The following correlation holds true for the stock and flow data of all assets or liabilities:

Opening stock + changes in stocks due to transactions + other changes in volume + revaluation = closing stock.

The capital account and the financial account connect transaction accounts to the accounts presenting total flows. The capital account shows the changes in stocks due to transactions in real assets, while the financial account shows the same in financial assets and liabilities. Real asset purchases and creation are recognised in the capital account as an increase in the value of real assets, while real asset sales and consumption of fixed capital are recognised as a reduction. In the financial accounts, net acquisition of financial assets and the net changes in liabilities are recognised as changes in stocks. The increase in stock arising out of accrual of interest and the reinvestment of income should also be recognised as transactions in the financial account. The other changes in volume account includes changes in stocks that happened due to special or technical reasons such as the impact of natural disasters, reclassifications across sectors or instruments or write-downs. The revaluation account shows the changes in stocks arising out of the price changes affecting assets and liabilities. According to the statistical methodology, these other changes in stock do not directly affect households' output, income, consumption, investment and savings.

The quantifiable relationship between balance sheets and accumulation accounts is presented in Section 2.3.

2.2 FACTORS INFLUENCING HOUSEHOLDS' FINANCIAL SAVINGS

In line with the simplified economic accounts presented, households' savings depend on the amount they spend on consumption from their total disposable income.

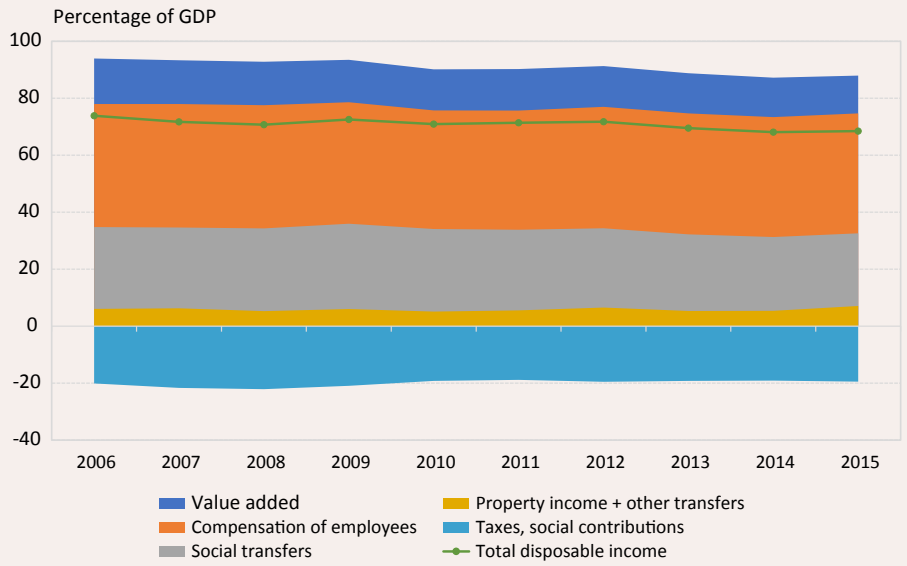
Total disposable income – consumption = savings

Unused income is accumulated in the form of financial or non-financial assets. The accumulation of non-financial assets is described as investment, while the net accumulation of financial assets is shown as financial savings (net lending). (In gross terms, the accumulation of financial assets is called investment, while that of liabilities is called financing.) Therefore financial savings, or in other words net lending, is the difference between savings and investment.

Savings – investment = financial savings (net lending)

Total disposable income consists of income from production (i.e. value added), the compensation of employees, social benefits and property income, or more precisely the sum of these less income taxes and social security contributions paid by households (see Table 2-1-3).

Chart 2-2-1
Generation of total disposable income of households, as a percentage of GDP

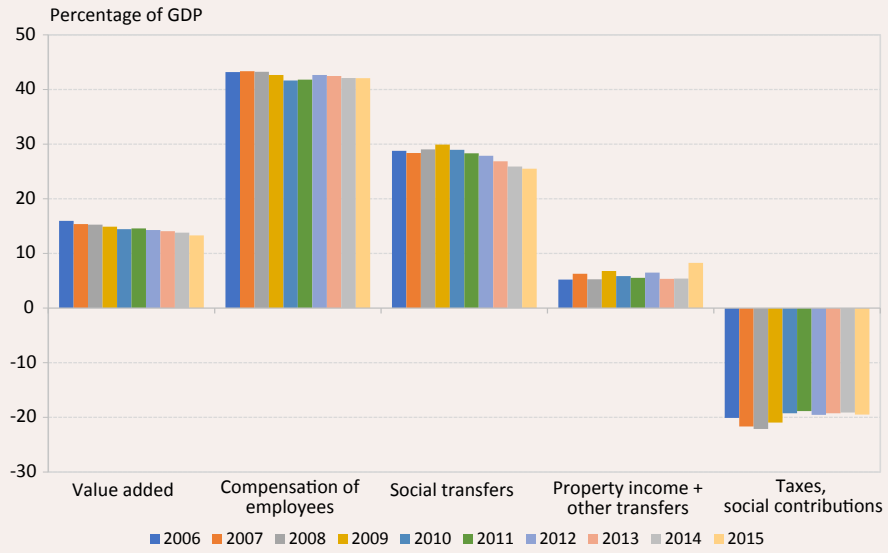


Source: Authors' calculations based on HCSO data (national accounts).

In 2015, households' total disposable income amounted to 68 per cent of GDP. In the same year, the portion of total disposable income directly derived from production (the value added of households) amounted to 13 per cent of GDP, the portion representing compensation of employees amounted 42 per cent of GDP, the portion from social benefits amounted to 33 per cent of GDP, while the portion from property income was 7 per cent of GDP. Nevertheless, households' disposable income was reduced by the fact that in 2015 they paid income taxes and social security contributions amounting to 19 per cent of GDP (Chart 2-2-1).

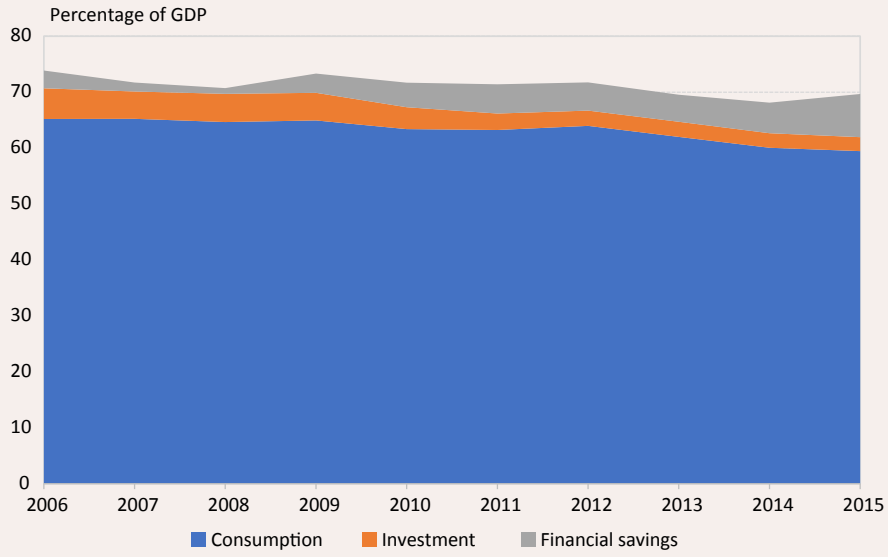
In the household sector in the period under review (2006–2015), value added relative to GDP dropped from 16 to 13 per cent, the compensation of employees fluctuated between 42 and 43 per cent of GDP, social benefits fell from 29 to 26 per cent of GDP, while property income and other transfers varied between 5 and 8 per cent of GDP. In the same period, income taxes and social security contributions paid by households amounted to 19–22 per cent of GDP (Chart 2-2-2). The compensation of employees contains income taxes and contributions paid by households (or by employer after households); therefore the variation in taxes and contributions also affects the compensation of employees. The major part of property income comprises net interest income, and nominal interest income is heavily influenced by inflation and its changes. Here, other transfers also include capital transfers, which were quite substantial in some years during the period under review (in 2011, 2012, 2014 and especially 2015 on account of the payments related to foreign currency lending and the reimbursements from the deposit insurance fund and the investor protection fund).

Chart 2-2-2
Changes in the components of total disposable income of households, as a percentage of GDP



Source: Authors' calculations based on HCSO data (national accounts).

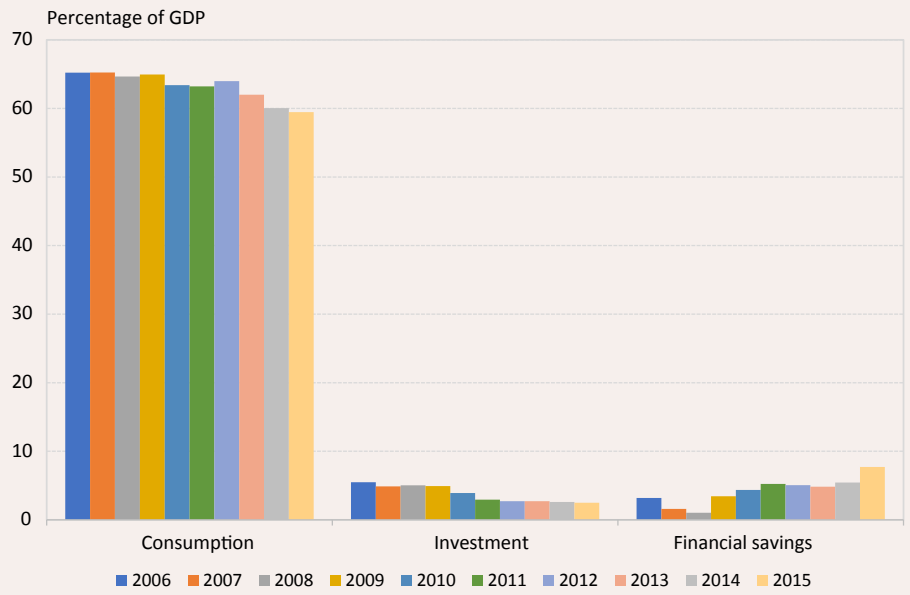
Chart 2-2-3
Use of total disposable income of households, as a percentage of GDP



Source: Authors' calculations based on HCSO data (national accounts).

With respect to the use of income, households consume the majority of their total disposable income, a smaller share is invested, and the rest comprises their financial savings (net lending). In the household sector in 2015, consumption, investment and financial savings amounted to 59, 2 and 8 per cent of GDP. Capital transfers (compensation) from the financial corporation sector contributed to the high level of net lending in 2015 by an especially vast figure amounting to over 2 per cent of GDP. In 2016, the sector's financial savings returned to around 5 per cent of GDP.

Chart 2-2-4
Changes in the components of use of total disposable income of households, as a percentage of GDP



Source: Authors' calculations based on HCSO data (national accounts).

In the household sector in the period under review (2006–2015), consumption shrank from 65 to 59 per cent of GDP, while investment declined from 5 to 2 per cent of GDP. This entailed a rise in households' financial savings between 2006 and 2015 from 3 to 8 per cent of GDP. Of course, these data show the sectoral totals, which include households with both positive and negative financial savings (net lending, net borrowing). These intra-sectoral differences can be identified with the help of households' micro data.

2.3 GROSS WEALTH AND NET WORTH OF THE HOUSEHOLD SECTOR

The macrostatistical data show households share in the various forms of wealth. Two basic categories are distinguished: the stock of financial and non-financial wealth, i.e. gross wealth,[5] and net worth, which can be derived by deducting liabilities.

In the national accounts, households' balance sheet includes the stock of homes and other buildings (garage, workshop, storage space, holiday home, other property), and the value of the tools (machines, equipment) necessary for the productive activities of households as well as the value of the tangible assets (livestock, plantations) related to agricultural activities. Currently, the official Hungarian statistics cover the stock of produced non-financial assets (fixed assets, inventories), without the stock of non-produced assets (land, natural resources). This means that for the time being, the balance sheet does not include households' land ownership or the value of the land or plot connected to the property, therefore, for the purposes of this publication, the macrostatistical data were supplemented with the estimated values for these. According to the statistical methodology requirements, households' wealth does not include the stock of tangible assets used independently from production, therefore the acquisition of these durable goods (e.g. vehicles, furniture, durable consumer goods) is recorded in the national accounts as consumption rather than accumulation. In a similar fashion, wealth does not include inventories for consumption (e.g. food, clothing, tools).

[5] In the present publication, (gross) wealth means total assets at market value. In gross wealth, the market value of non-financial assets is estimated with the net statistical value, i.e. the depreciated asset value. In the case of financial assets, there is no such differentiation in asset value. Therefore gross wealth does not mean that some items are recorded at their gross value, but that they are not reduced or netted with the value of liabilities. See the notes on methodology as well.

Information on the accumulation of financial assets can be gained from financial accounts. The main categories included in the statistics are the following: currency (cash holdings), deposits, debt securities, credit or loans granted, shares and other equity in companies, investment fund shares/units and insurance technical reserves. The largest item among liabilities is loans, but the category also includes unpaid invoices and other debt from tax liabilities and contributions.

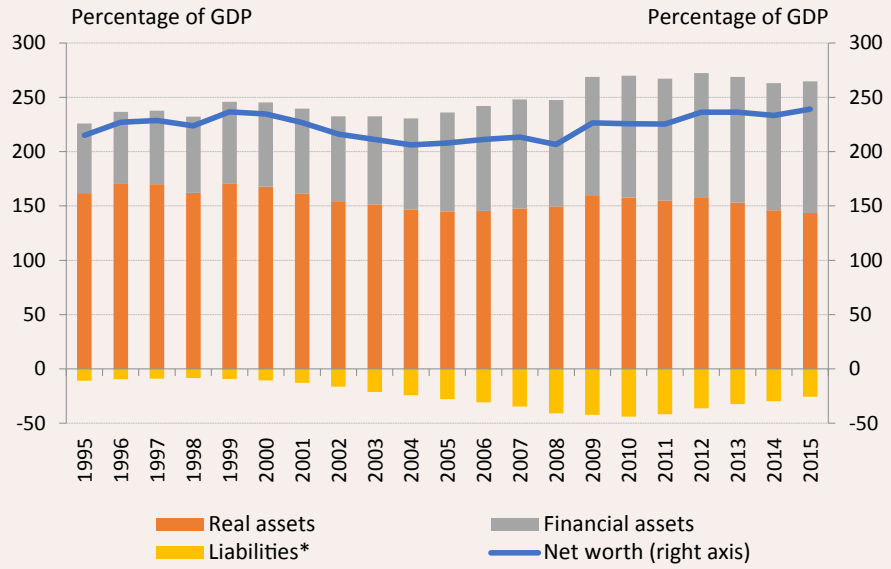
Table 2-3-1
Balance sheet of the households sector, stocks and components of changes in stocks, billion HUF

Stocks	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Non-financial assets of households	32,495	35,162	37,719	40,502	42,059	42,749	43,646	45,249	46,159	47,264	48,794
Fixed assets (net)	25,826	28,011	30,148	32,312	33,494	34,104	34,733	35,381	35,875	36,393	37,028
Inventories	160	158	153	148	142	141	143	143	141	146	146
Land	6,509	6,993	7,418	8,042	8,423	8,504	8,770	9,725	10,143	10,725	11,620
Financial assets of households	20,528	23,308	25,656	26,539	28,615	30,332	31,614	32,818	34,787	37,991	41,219
Currency and deposits	7,253	7,854	8,537	9,683	10,139	10,017	10,730	10,716	10,201	10,653	11,429
Debt securities	1,203	1,313	1,174	1,442	1,380	1,591	1,726	2,134	2,752	3,052	3,756
Equity and investment fund shares	7,109	8,280	9,338	9,106	9,700	10,615	11,095	11,694	13,338	15,237	16,729
Insurance technical reserves	3,182	3,919	4,624	4,348	5,381	6,002	3,035	3,088	3,194	3,455	3,569
Other accounts receivable (loans, financial derivatives, other)	1,781	1,942	1,984	1,961	2,015	2,107	5,028	5,184	5,302	5,593	5,736
Gross worth of households	**53,023**	**58,470**	**63,375**	**67,041**	**70,674**	**73,080**	**75,260**	**78,066**	**80,946**	**85,254**	**90,013**
Liabilities	6,269	7,435	8,832	11,080	11,143	11,934	11,792	10,364	9,770	9,672	8,703
Net worth of households	**46,754**	**51,036**	**54,543**	**55,961**	**59,531**	**61,146**	**63,468**	**67,702**	**71,176**	**75,582**	**81,310**
Transactions											
Non-financial assets	1,218	1,323	1,249	1,361	1,297	1,060	832	782	817	847	848
Financial assets	1,953	2,078	1,915	1,678	881	861	525	566	1,027	1,489	1,495
Liabilities	1,104	1,310	1,508	1,397	–25	–322	–947	–882	–430	–275	–1,128
Changes in net worth due to transactions	**2,066**	**2,091**	**1,656**	**1,642**	**2,203**	**2,244**	**2,304**	**2,230**	**2,274**	**2,611**	**3,470**
Revaluation											
Non-financial assets	495	1,345	1,308	1,422	260	–371	65	821	93	258	683
Financial assets	870	702	433	–792	1,195	877	749	675	943	1,681	1,809
Liabilities	42	–135	–81	894	161	1,226	917	–394	8	339	359
Revaluation of net worth	**1,323**	**2,181**	**1,821**	**–265**	**1,294**	**–719**	**–103**	**1,890**	**1,028**	**1,600**	**2,133**

Source: HCSO (national accounts), MNB (financial accounts). The stock of land and all real assets for 2015 include the authors' estimates.

According to the supplemented national accounts data, the gross wealth of households at the end of 2014 was HUF 85 trillion, the majority of which, HUF 47 trillion, comprised the stock of real assets, and the wealth held in financial assets was somewhat less, HUF 38 trillion. Households' debt was close to HUF 10 trillion, thus the net worth of the sector was HUF 76 trillion, 233% of GDP at the end of 2014.

Chart 2-3-1
Gross and net worth of households, as a percentage of GDP

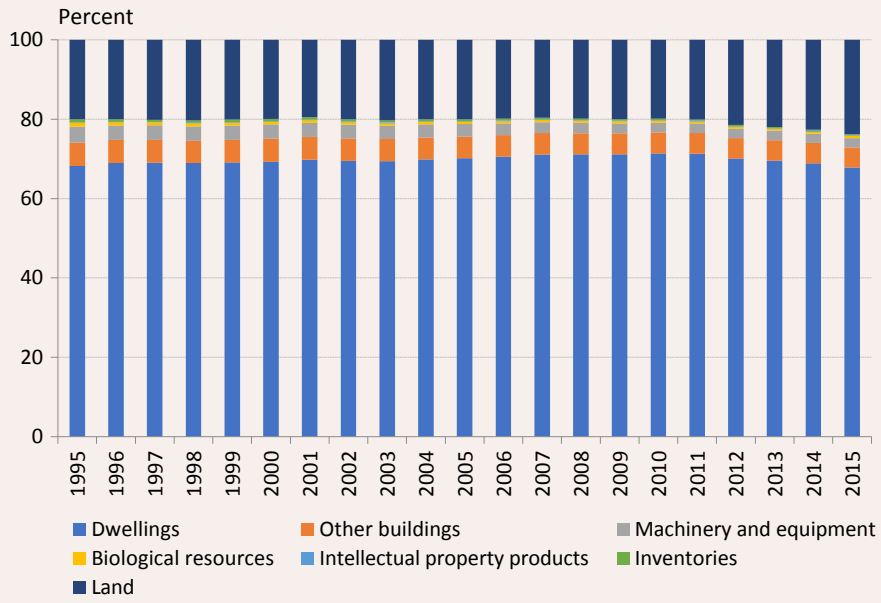


** Liabilities relative to GDP are represented with a negative sign on the chart, in order to show their effect on net worth*
Source: HCSO (national accounts), MNB (financial accounts). Real asset data include the authors' estimates.

The stock of real assets in the gross wealth of households exceeded that of financial assets all throughout the period. However, in the past 20 years, stocks in financial wealth have increased more, almost doubling from 64 to 117 per cent of GDP. Meanwhile, real wealth relative to GDP fluctuated in a narrower band, dropping from 162 to 146 per cent of GDP during the period. At the end of 2014, the value of the two forms of wealth came close to each other, and the value of both real assets and financial assets exceeded that of annual GDP. The increased momentum in household lending in the 2000s resulted in a decline in households' net worth relative to GDP, while the decrease in debt characteristic of the recent years entailed a rise in net worth. Households' net worth in the period under review was around 210–230 per cent of GDP.

The stock of financial assets relative to GDP exhibits a steady upward trend, except for 2008, when households' savings shrank due to the financial crisis. Within this, stock of currency and deposits relative to GDP have been relatively stable at approximately 33 per cent. Ultimately, the expansion of financial wealth was not attributable to holding these instruments that are considered traditional forms of investment but the emergence of new forms of investment. This is because with the development of the financial intermediary system and the increasingly prominent role of the central government, investment opportunities expanded continuously, and bonds, investment fund shares/units and life insurance and pension fund savings gained prominence. The combined value of these investments rose from 7 to 33 per cent of GDP in the period under review. Currently, the greatest part in households' increasing financial wealth is represented by share and equity wealth, which exceeded households' stock of accumulated cash and deposits at the end of 2014.

Chart 2-3-2
Composition of non-financial assets of households, percentage



Source: HCSO (national accounts). The value of land and all real assets for 2015 include the authors' estimates.

The distribution of households' wealth by asset types

The high proportion of households' real assets is due to widespread home ownership. This is because the overwhelming majority of Hungarian households are owner-occupiers in their homes; therefore the traditional main goal among households is to acquire real estate. No significant shift could be observed in the composition of households' real wealth; around 70 per cent of real wealth is made up of the stock of dwellings, while 30 per cent consists of other tangible assets related to households' productive activities and land owned by households and connected to homes.

Portfolio realignment in the forms of investments within households' financial wealth could be observed several times in the recent period. In the case of investment fund shares/units (the proportion of which has increased considerably since 1995), larger declines in stocks could be observed in 2003, 2008 and 2011. In these years, due to the rise in market yields, prices dropped, therefore households realised substantial revaluation losses on these holdings on the one hand, and investors withdrew a substantial amount of capital from bond and money market funds on the other hand. At the same time, the household sector typically boosted its savings held in bank deposits.

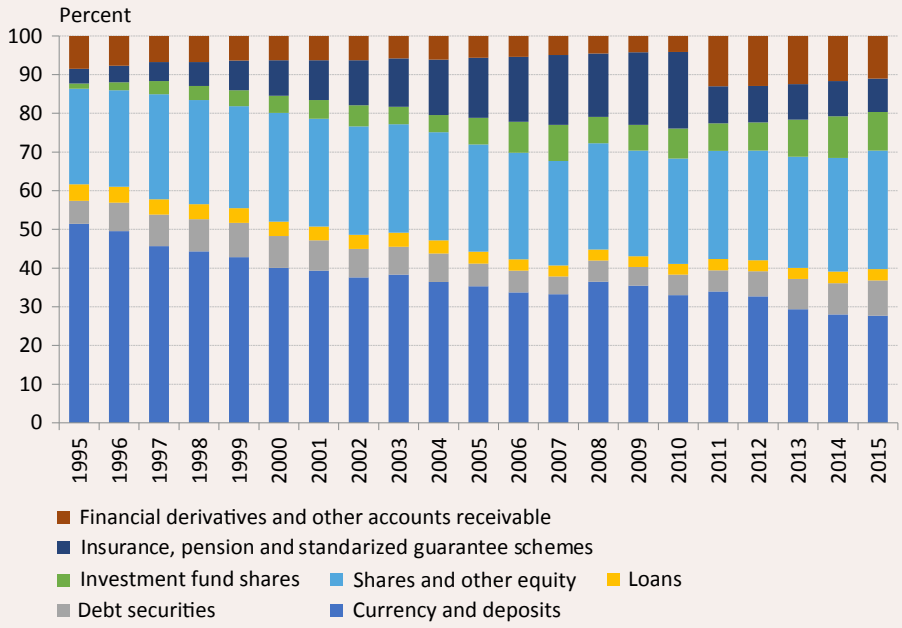
The share of debt securities within financial assets does not exhibit a continuous upward trend in the period under review either, and the demand for the various papers changed as well. Bond issues can be linked to primarily two sectors, the central government and domestic credit institutions. The portfolio realignment towards bank bonds can be observed between 2004 and 2011, and in the periods before and after this, households' investments were dominated by the demand for government securities. Currently, the wealth accumulated in short-term treasury bills exceeds that in long-term government bonds, representing two-thirds of the total stock.

Long-term investment opportunities principally include life insurance and pension fund savings. Their share within financial wealth was 9% at the end of 2014. The rapid expansion in such holdings characteristic of the initial period was the result of the mandatory contributions to private pension funds. In 2010, the pension contribution system was overhauled, the mandatory private pension fund payments ceased, and with the return to the social security system in 2011 the overwhelming majority of private pension fund wealth was transferred

to the central government, and from then on the related household claims were recorded in the statistics as other accounts receivable rather than insurance technical reserves. This item amounted to HUF 2,900 billion, and the proportion of insurance technical reserves within financial wealth dropped from 20 to 10 per cent in 2011 due to its relocation within the instruments. In the period after this, within financial assets, the share of insurance technical reserves accumulated from insurance and pension fund contributions declined continuously.

At present, shares and other equity represent the largest volume within households' financial assets, with the instruments' proportion within financial wealth having risen from 25 to 31 per cent in the past 20 years. Within equity stakes, other equity wealth dominates, which is more than five times larger than share holdings. The weight of quoted shares is negligible, their proportion within financial assets was the largest in 1997 (at 4.7 per cent), at the time of privatisation share purchases. After that, their proportion diminished, now standing at barely above 1 per cent.

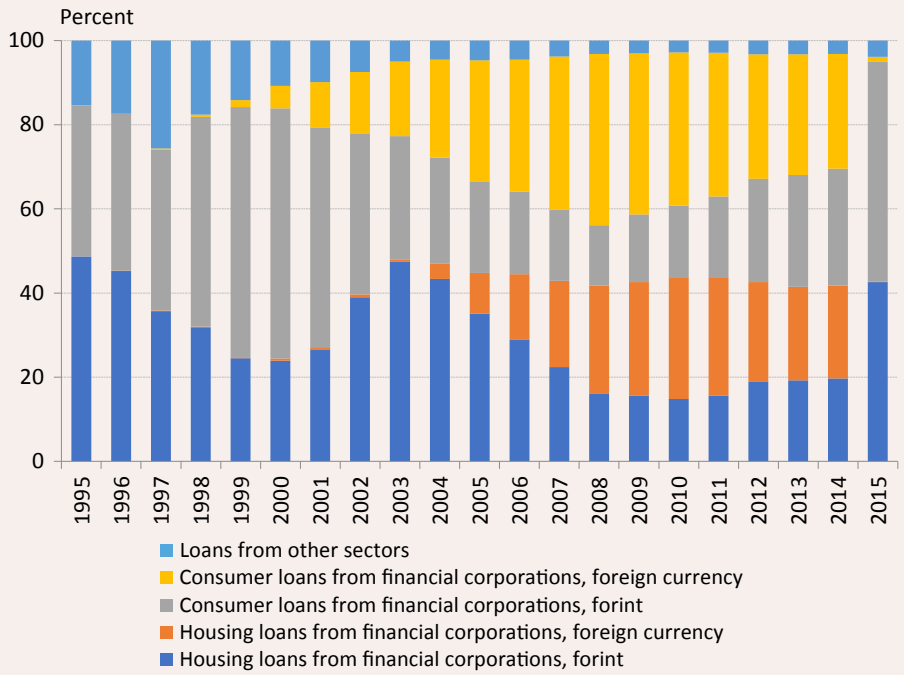
Chart 2-3-3
Composition of financial assets of households, percentage



Source: MNB (financial accounts). Gross holdings of financial assets (not reduced with liabilities).

The majority of the households' liabilities are loans. Household lending gained momentum in 2000–2008, when the share of property loans within total credit increased continuously, finally stabilising at 42–44 per cent. The rise was initially triggered by the introduction of state-subsidised housing loan schemes, and then foreign currency loans became increasingly popular. At the end of 2008, two-thirds of total credit were foreign currency loans, in the case of both property loans and consumer credit. After the crisis, lending experienced a major change: due to the depreciation of the forint and the rising repayment instalments, household demand for credit waned, and as a result of the government measures aimed at early repayment and the forint conversion, the FX structure of these loans also changed considerably. By the end of 2015, the proportion of foreign currency loans within total credit amounted to merely 2.4 per cent.

Chart 2-3-4
Composition of liabilities of households, percentage



Source: MNB (financial accounts).

The components of the changes in wealth

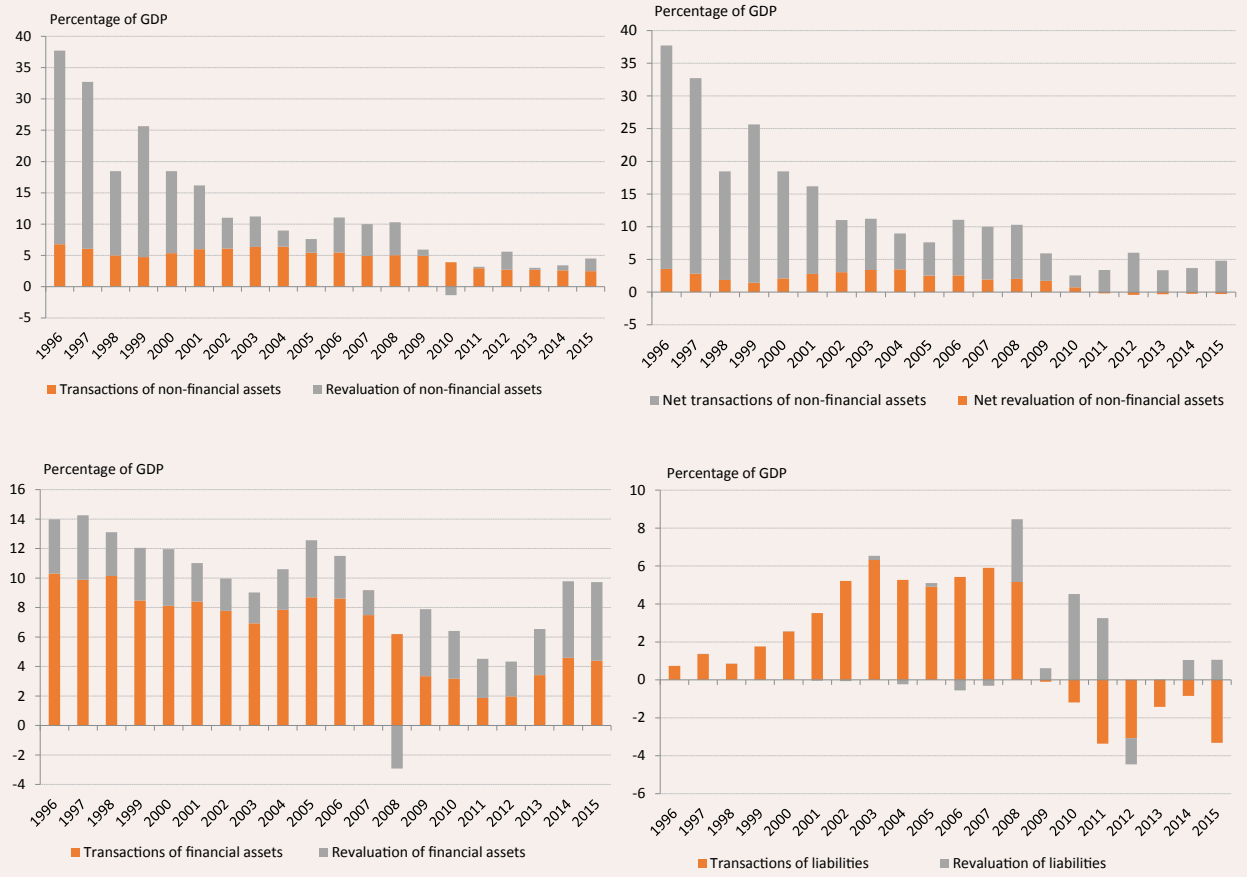
The change in households' net worth basically depends on two factors, transactions and revaluation. The increase derived from the transactions in households' gross wealth was mainly attributable to the investments in financial assets, and these transactions usually exceeded the expansion in real assets, while revaluation mostly affected real wealth growth. This difference is even more striking if consumption of fixed capital (i.e. depreciation) is considered revaluation rather than a transaction. (The change in the net value of fixed assets is determined by price changes, investment [gross fixed capital formation] and other items modifying their volume as well as the depreciation of assets.) In the past five years, the value of investments has been lower than depreciation, therefore in this approach the variation in stocks in real assets was completely a result of revaluation in this period.

Prior to the 2008 crisis, households' gross fixed capital formation (mainly housing investments) was around 5–6 per cent of GDP, while the increase in financial asset holdings due to transactions amounted to 8–10 per cent of GDP in the individual years. In the initial period, the introduction of government housing subsidies and the emergence of favourable borrowing opportunities stimulated investment growth, while the development of the financial intermediary system and the appearance of new forms of investment boosted investments in financial assets. After the crisis, households' gross fixed capital formation fell to 2–3 per cent, while financial asset transactions temporarily dropped below that in 2009–2012; however, after this they once again exceeded investments relative to GDP. The development of net financial savings was also influenced by credit transactions. Household indebtedness increased before the crisis, rising from 0 to 6–7 per cent of GDP. After this, households became net repayers of debt, which entailed the expansion in net financial savings.

Different degrees of revaluation were observed in the case of the different assets in the period under review. Especially at the beginning of the period, in 1995–2000, soaring property prices entailed considerable wealth increases. Revaluation affected financial wealth less, although the instruments where the changes in market prices and exchange rates affect the value of wealth increasingly appear in households' investments. Among financial assets, the greatest revaluation can be usually observed in equity through the growth in the profits reflected in companies' share and equity capital. In many cases, this offsets the potential revaluation losses incurred on other investments (quoted share, bond, investment fund shares, insurance technical reserves). The greatest negative revaluation in financial assets happened in 2008, when households incurred significant revaluation losses due to the exchange rate movements on the market. Revaluation can be observed on the stock of liabilities due to the exchange rate movements of foreign currency loans, which considerably influenced the changes in the value of such loans in 2008–2012. However, after the forint conversion and the reduction of FX credit, this effect was minimised.

Chart 2-3-5 shows two decompositions of the variation in stocks in real assets depending on whether consumption of fixed capital (depreciation) is classified as a transaction or a revaluation. According to the logic of national accounts, this type of depreciation is considered a transaction (its owner uses up the asset), however, economic agents tend to experience it as revaluation.

Chart 2-3-5
Components of changes in financial and non-financial worth of households, as a percentage of GDP



Source: Authors' calculations based on HCSO (national accounts) and MNB (financial accounts) data. Revaluations calculated residually.

2.4 DISTINGUISHING THE WEALTH OF THE SOLE PROPRIETORS WITHIN THE HOUSEHOLD SECTOR

According to the methodology of national accounts, households are consumers living from wages and salaries, property income or social benefits on the one hand, and entrepreneurs producing market goods or goods for their own consumption on the other hand. In statistics, mainly those households are recorded as producing for their own final consumption that provide (imputed) own home services to themselves, and this category also includes certain agricultural producers, while market producers are the self-employed that are inseparable from households organisationally. Therefore only those productive activities can be shown in the household sector that are organisationally inseparable from the private individuals engaged in such activities. Nonetheless, in a certain sense the data for household production and producers can in fact be distinguished from consumers' in the national accounts. The production account shows entrepreneurial activities and the provision and intermediate consumption of market production and own home services and their added value. Meanwhile, certain instruments (e.g. inventories, machines, equipment, vehicles, land, deposits, loans, trade credits and advances) can be distinguished in the accumulation account and on the balance sheets that are connected to households' productive activities. This distinction may be important because it enables us to analyse, even at the level of macro data, how much households' change in wealth can be attributed to the asset and liability needs of the entrepreneurial activity and how much to households' private savings. Awareness of the size of households' private and entrepreneurs' wealth contributes to understanding and appropriately using the data from the household survey.

Stock data, when coupled with estimates, can be used to establish the balance sheet of the self-employed (previously known as sole proprietors), and the wealth of households and the self-employed (sole proprietors) can be distinguished within the household sector. Only those assets and liabilities can be attributed to businesses that the businesses acquire, use, record or report in that capacity. Mixed-use assets or those recorded as household private assets are shown in households' private wealth rather than in entrepreneurial wealth. The assets linked to households' economic activities not directly observed are also recorded in household private wealth if they are not excluded from macro statistics. In addition to the information in the national accounts, the balance sheet of the self-employed is estimated using the aggregate tax return data for sole proprietors and small enterprises (with a balance sheet total of HUF 0–30 million).

Table 2-4-1
Balance sheet and annual revenues of small non-financial corporations, billion HUF

Balance sheet of corporations, billion HUF	2005	2007	2010	2012	2015
Fixed assets	406	419	438	478	487
Intangible assets	11	12	13	15	16
Tangible assets	384	395	402	437	475
Financial investments	11	13	23	27	29
Current assets	925	989	1,089	1,219	1,348
Inventories	177	196	213	228	241
Receivables	287	328	509	547	521
of which trade accounts receivable	165	185	226	250	239
Securities	8	10	11	13	14
Cash and deposits	453	455	355	431	645
of which cash in hand	170	170	112	157	270
Prepaid expenses and accrued income	13	15	28	36	34
Total assets	**1,342**	**1,423**	**1,556**	**1,733**	**1,981**
Shareholder's equity + Provisions	676	744	765	884	1,102
Long-term liabilities	137	141	140	146	143
Short-term liabilities	516	524	626	677	700
of which trade accounts payable	116	130	147	161	166
of which bank loan	69	72	76	69	61
of which liabilities to shareholders	130	138	155	160	171
Accrued expenses and deferred income	14	14	25	28	36
Net sales revenues	2,859	3,125	3,354	3,443	3,636

Source: MNB corporate statistics database based on NAV (National Tax and Customs Administration) (corporate tax returns) and IM (Ministry of Justice) (annual reports) data.

The production-related data for the 260 thousand companies with the smallest balance sheet total in the non-financial corporations sector have basically not changed for years on end, while the volume of their financial assets has increased and their debt liabilities have contracted. This was offset by owners' various contributions and retained profits, therefore their equity expanded considerably. The financial data linked to production and business activity (inventories, trade credits and advances, receivables and payables against employees and the tax authority) are features of the various economic activities independent from organisational structure, therefore they should appear in the case of the self-employed as well. However, ownership ties are not applicable between the self-employed and the households operating them, therefore equity capital is truly own fund, i.e. net wealth, part of households net worth.

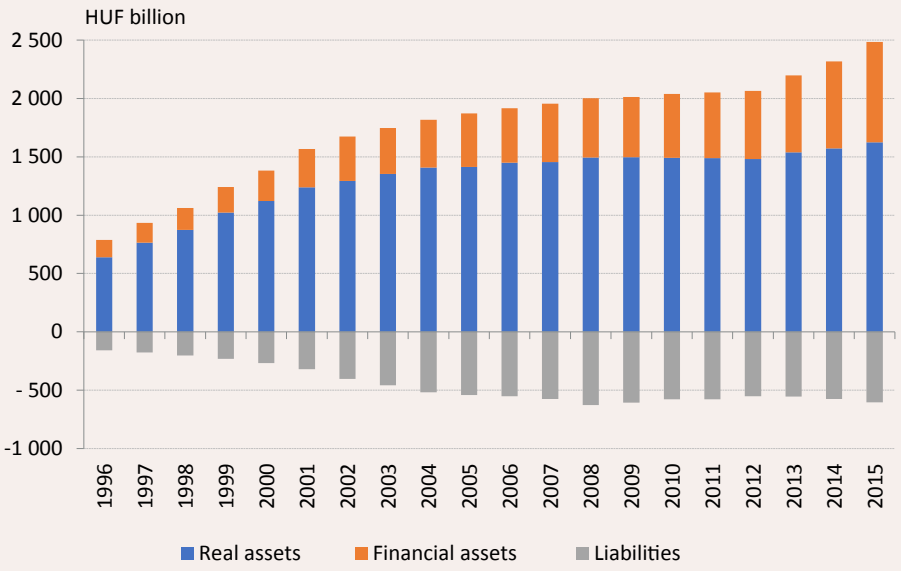
Table 2-4-2
Estimated balance sheet of sole proprietors for statistical purposes, billion HUF

Balance sheet of sole proprietors, billion HUF	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Fixed assets	1,409.0	1,413.0	1,449.0	1,454.0	1,494.0	1,497.0	1,491.0	1,488.0	1,481.0	1,539.0	1,573.0	1,624.0
Intangible assets	55.0	60.0	67.0	69.0	74.0	79.0	76.0	74.0	77.0	77.0	80.0	83.0
Tangible assets	1,199.0	1,193.0	1,224.0	1,232.0	1,272.0	1,276.0	1,274.0	1,271.0	1,261.0	1,321.0	1,347.0	1,395.0
Inventories	155.0	160.0	158.0	153.0	148.0	142.0	141.0	143.0	143.0	141.0	146.0	146.0
Financial assets	407.2	459.7	465.9	500.6	508.8	515.0	547.4	563.0	582.4	657.2	743.1	861.0
Cash in hand	90.1	110.1	110.7	124.8	124.9	124.0	136.2	139.5	144.7	177.1	212.3	263.0
Deposits	90.1	110.1	110.7	124.8	124.9	124.0	136.2	139.5	144.7	177.1	212.3	263.0
Securities	5.0	5.5	5.5	6.0	6.0	6.0	6.0	7.0	8.0	9.0	10.0	11.0
Trade accounts receivable	129.0	135.0	135.0	135.0	135.0	135.0	135.0	135.0	135.0	135.0	140.0	145.0
Prepaid expenses and accrued income	8.0	9.0	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.5	19.0
Other receivables	85.0	90.0	95.0	100.0	107.0	114.0	121.0	128.0	135.0	143.0	151.0	160.0
Total assets	**1,816.2**	**1,872.7**	**1,914.9**	**1,954.6**	**2,002.8**	**2,012.0**	**2,038.4**	**2,051.0**	**2,063.4**	**2,196.2**	**2,316.1**	**2,485.0**
Shareholder's equity (own wealth)	1,299.0	1,330.1	1,363.6	1,378.2	1,376.1	1,406.1	1,460.2	1,473.2	1,511.6	1,642.4	1,740.7	1,880.6
Loan liabilities	267.2	277.1	280.3	299.4	345.2	318.9	285.7	279.8	248.3	244.8	260.9	284.4
Trade accounts payable	100.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0
Accrued expenses and deferred income	10.0	10.5	11.0	12.0	13.5	15.0	16.5	18.0	19.5	21.0	22.5	24.0
Other liabilities	140.0	145.0	150.0	155.0	158.0	162.0	166.0	170.0	174.0	178.0	182.0	186.0

Source: Authors' estimate based on HCSO (national accounts), MNB (financial accounts), NAV (various tax returns) and IM (annual reports).

The development of the aggregate financial indicators of the self-employed over time is similar to the development of the corresponding indicators of small non-financial corporations (and this is not only because a part of the former's data was modelled on the latter). The rise in the number and especially in the wealth of sole proprietorships in the 1990s experienced a slowdown in the early 2000s, then in parallel with the fall in the number of businesses, the group's wealth stayed unchanged in nominal terms until the end of 2012. Their wealth started expanding once again in 2013, which is primarily attributable to the rapid growth in the stock of financial assets (Chart 2-4-1).

Chart 2-4-1
Estimated stocks of assets and liabilities of sole proprietors, billion HUF

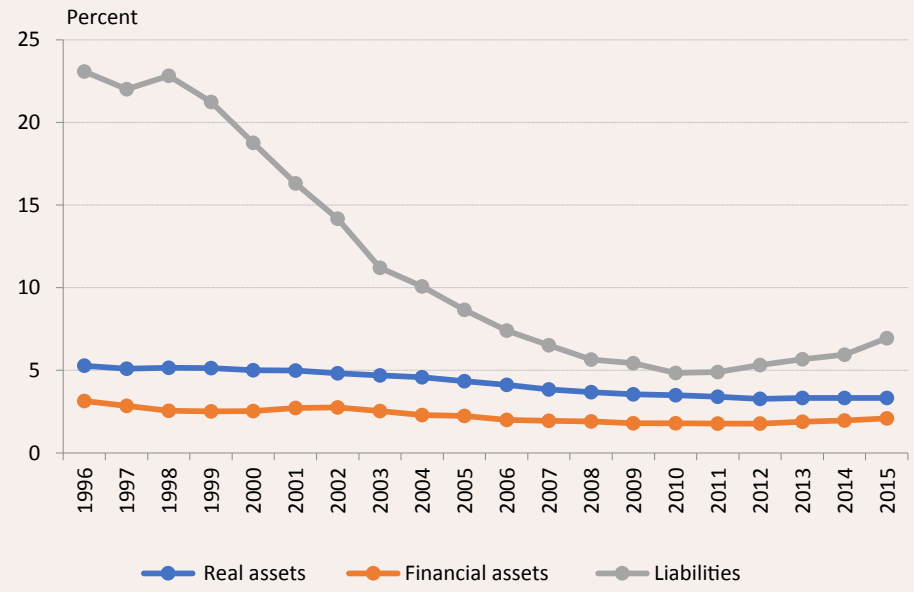


Source: The data used for Table 2-4-2 (HCSO, MNB, NAV, IM, authors' estimates).

With respect to the whole period covered by the national accounts, the wealth of sole proprietors is dominated by non-financial assets, in contrast to the wealth composition of non-financial corporations and households in general, where the value of financial and non-financial assets is almost the same. The substantial value and proportion of non-financial assets contrasts with the experience among businesses that smaller firms operate with relatively lower asset needs (relative to their revenue). This suggests that not all assets for business purposes were distinguished from the financial assets of the households concerned, and due to the fact that in this case households and businesses are institutionally inseparable, the profits of a business may be transferred immediately to household private savings, without increasing the wealth of the business. Nevertheless, the weight of financial assets rises continuously in the wealth of all entity groups.

Overall, the wealth of the self-employed that can be distinguished comprises only a few percentages within households' gross wealth, and their non-financial assets' share in the sector's real assets is 3 per cent, while the proportion of their financial assets is 2 per cent (Chart 2-4-2). Their liabilities amounted to 20–25 per cent of the household sector debt in the 1990s, however, with the spread of household mortgage loans and consumer credit, business debt had gradually declined to 5 per cent by 2010. The value of households' capital investments in partnerships and companies is almost seven times greater than the own wealth or net worth of sole proprietorships. 20 years ago, this ratio was only double.

Chart 2-4-2
Share of assets and liabilities of sole proprietors inside the households sector, percentage



Source: The data used for Table 2-4-2 (HCSO, MNB, NAV, IM, authors' estimates).

3 Financial and non-financial assets, liabilities and net worth of households based on the first domestic wealth survey

Introduction

Individual (personal or household level) data on the various incomes and consumption expenditures of households are traditionally available from statistical data collection and administrative data sources, which partly form the information base for macrostatistics (national accounts) as well. In addition, the housing conditions and various economic activities of households have also been surveyed in the context of direct statistical data collections for a long time. However, there is no direct consensus on the capital formation processes (investments) of households or the value of the various assets and liabilities accumulated, the value of household wealth. We have some survey data on the share of certain financial and nonfinancial assets that households may hold, however data has not been collected on their value until recently. This may stem from the fact that similarly to income, this constitutes sensitive data that is difficult to survey. The fact that respondents often do not keep track of or sometimes even recognise capital formation and wealth data, or are unable to estimate its value, or the fact that large sum, concentrated items are often left unobserved makes it difficult to survey this data. That said, the composition and distribution of household wealth is an important factor in the study of incomes, consumption and savings as the level and composition of assets and liabilities impacts the future financial opportunities and constraints of households. But the value of wealth depends not only on earlier savings (capital formation), but also decisions on households' portfolio and external circumstances (revaluation) affect it. Therefore the size of wealth cannot be clearly quantified or cumulated based on historical data, and cannot be accurately estimated or forecast based on future savings.

Micro data on the size, composition and intra-sectoral distribution of household wealth helps decision-makers and stakeholder economic agents get a fuller picture of the financial risks affecting various household groups and strata, mitigate the risks and avoiding loss of wealth while achieving the desired investment level and wealth composition by choosing the right tools (such as deleveraging foreign-currency loans).

To obtain the required micro data, in 2014 the MNB, with the involvement of the HCSO, joined the ECB's Household Finance and Consumption Survey (HFCS), which at the time was in its second wave in 20 European Union member states based on a unified methodology and surveys. The HFCS provides a comprehensive picture of households' financial and non-financial assets, liabilities, revenues and expenditures, housing and living conditions. The results of the survey are accessible and can also be independently used for cross-sectional and time series analyses, and are also an important supplement to macrostatistics and sectoral national accounts data. When designing the survey, comparability with national accounts data was an important consideration, however this was only achieved in practice after certain adjustments, as in many cases, households could not be asked about the categories featured in the national accounts (due to lack of comprehension or familiarity with them), and due to the fact that the results of a sample-based survey are generally less accurate compared to the robust data of macrostatistics, supported by multiple data sources. We first provide a summary of the features and available results of the Hungarian HFCS, then compare them with data from other data sources and adjust them to national accounts data in several steps, focusing on wealth (stock) data. In other words, we use the information from the survey to break down the sectoral data of household accounts and balance

sheets according to wealth size categories, income size categories and other attributes. This provides insight on the intra-sectoral distribution of the aggregate stock of wealth reflected in financial accounts and non-financial national accounts, the strata where this wealth is concentrated and the degree there of, the occurrence of assets and liabilities and their covariance with each other and other household attributes. The integration of micro and macro data presented here ensures that the strengths of various data sources are leveraged and enables the use and extension of the macrostatistical framework and categories used by analysts and researchers to the level of more in-depth data. The analyses in the last part of the chapter are based on these integrated data. The ECB and several other countries are making similar attempts at integration, with the aim of providing more detail and distribution information on the sectoral-level time series of households' financial accounts.

3.1 PRESENTATION OF THE SURVEY'S KEY RESULTS

The European Central Bank, with the involvement of member state central banks, launched a project in the late 2000s (HFCN – Household Finance and Consumption Network) to create a unified and comprehensive European level household financial survey, the Household Finance and Consumption Survey (HFCS), carried out regularly every three years. The novelty of the survey is that it measures the living and housing circumstances, social and labour market position, and financial (income, consumption, capital formation) circumstances of households along with the stock of the various assets and liabilities held by households. The first wave of the HFCS was conducted between 2010 and 2011 in 15 countries, surveying over 62,000 households. Hungary joined the second wave of the survey conducted in 2014-2015 in 20 countries, involving 84,000 households. The Hungarian survey (What do we live from?) was conducted in autumn of 2014, the reference date was 30 September and contains the income, consumption and wealth data of 6207 households, i.e. 14,623 individuals. The survey's large sample and national representativeness allows for the in-depth examination of the wealth of Hungarian households, its composition and distribution within the sector. In this section, we first present the data from the survey that is extrapolated to the entire population. We then restructure, supplement and modify the survey's database according to the purpose of use and present these results. This modified data set serves as the baseline in the following section of the chapter for adjusting the data to the national accounts and for breaking down the sectoral level national accounts indicators presented earlier.

Presentation of the key data obtained from the survey[6]

The HSCS attempts to capture all assets (representing economic value) and liabilities of households, to assess them in terms of quantity and value, including the assets and liabilities serving both private and entrepreneurial objectives. Based on the survey, **real assets** (Table 3-1-1) include residential property (the household's place of residence), other property, vehicles and other vehicles and other property of higher value (valuables). Taking into account the data from the survey, the wealth of Hungarian households held in the form of real assets amounted to HUF 51,504 billion in autumn 2014. In terms of their distribution by type, own residential property accounts for three fourths of real assets (HUF 39,354 billion), followed by other property which accounts for 18 per cent (HUF 9,336 billion), while vehicles account for only 4 per cent (HUF 2,176 billion). The declared value of other vehicles (HUF 307 billion) and other valuables (HUF 330 billion) is negligible compared to the total volume of real assets.

[6] The data included in all of the tables presented in this section originate from the domestic household financial survey (HFCS – What do we live from?), so the data source is not specified separately for the tables. The selection and classification of data for this publication was prepared by the MNB, so the data may differ slightly from other publications. The survey's methodological background, structure and data were presented earlier in a Simon-Valentiny (2016) paper and a HCSO study (2017).

Table 3-1-1
Summary data on real assets measured in HFCS, billion HUF

Real assets	Number of affected households (piece)	Ammount in HFCS (billion HUF)	Weighted number of households (piece)	Weighted ammount in HFCS (billion HUF)
Main residence	5,262	61.3	3,476,029	39,354
Other properties	1,504	14.6	947,618	9,336
Cars	3,158	3.5	2,043,229	2,176
Other vehicles	342	0.5	254,238	307
Other valuables	301	0.5	185,649	330

Based on the extrapolated data, 84.2 per cent of Hungarian households (3,476,000 households) own or partially own a dwelling, 9.3 per cent (384,000 households) rent a dwelling and 6.5 per cent (267,000 households) use their dwelling free of charge. The average value of dwellings owned by households is HUF 11 million and the median value is HUF 7 million. The average size of properties among the surveyed households is 77 m² and the median value is 70 m².

Besides dwellings, the number of value of other property owned by households was also surveyed. Nearly one out of four households (extrapolated figure: 948,000 households) said that they owned other property besides their dwelling. In terms of property type, nearly 60 per cent is classified as a house, apartment or summer home, 15 per cent as a land or an enclosed garden and just 6 per cent as a garage. The remaining nearly 20 per cent is classified as an entire condominium, industrial area or warehouse, or retail unit or office.

The extrapolated value of vehicles, the third largest group of real assets, was HUF 2,176 billion based on the survey. Half of the surveyed households (3,158 households) said that a member of the household owns a vehicle. The average value of own vehicles was in excess of HUF 1 million and the median value was HUF 700,000. Based on the replies, the most valuable vehicle was worth HUF 25 million while the least valuable vehicle was worth just HUF 50,000. The extrapolated number of households with other vehicles was over 250,000. The greatest number of households, i.e. three out of four reported owning a motorcycle as the other vehicle. One out of 10 households owning other vehicles owned an airplane, boat or yacht according to the HFCS.

Among the assets included in the survey, **financial assets** (Table 3-1-2) include cash held at home,[7] current accounts and fixed bank deposits (collectively referred to as bank deposits), debt securities (bonds, government securities) and loans granted to other individuals, corporate shares and other equity (partnerships, stock exchange and other shares), mutual fund shares and pension and life insurance. According to the survey, Hungarian households held a total of HUF 17,583 billion in financial wealth at the end of 2014 Q3. In terms of the composition of financial assets by type, corporate shares and other equity accounted for the largest chunk portion, i.e. 32 per cent (HUF 5,709 billion) followed by bank deposits representing 30 per cent (HUF 5,315 billion). Mutual fund shares (HUF 2,041 billion) and debt securities (HUF 1,924 billion) accounted for the third largest portion of financial assets in nearly equal proportions (12 and 11 percent). Pension and life insurance (HUF 1,616 billion) private loans extended (HUF 733 billion) and cash held that home (HUF 245 billion) accounted for less than 10 percent.

[7] The quantity of cash held at home was asked in the Hungarian survey but was not part of the standard series of questions.

Table 3-1-2
Summary data on financial assets measured in HFCS, billion HUF

Financial assets	Number of households affected (piece)	Ammount in HFCS (billion HUF)	Weighted number of households (piece)	Weighted ammount in HFCS (billion HUF)
Cash	6,207	0.4	4,127,671	245
Deposits	5,012	8.1	3,349,095	5,315
Securities	496	3.0	301,859	1,924
Private loans (assets)	524	1.1	392,734	733
Shares and equities	474	8.2	334,948	5,709
Investment fund shares	474	3.1	303,588	2,041
Pension-, life insurance	894	2.3	630,370	1,616

Nearly 3,350,000 households had bank deposits, i.e. more than 80 per cent of all households. Bank deposits amounted to HUF 5,315 billion, with current account deposits amounting to HUF 1,644 billion and fixed deposits to HUF 3,671 billion according to data pertaining to the end of September 2014. The number of households own securities was nearly 302,000 according to the survey, amounting to a securities investment of HUF 1,924 billion. Within this category, 191,000 households owned government securities (worth HUF 670 billion), 48,000 households owned securities issued by a bank or other financial organisation (worth HUF 212 billion) while 11,000 households owned securities issued by nonfinancial organisations (worth HUF 24 billion). The surveyed households were unable to identify the type of the remaining securities, worth nearly HUF 1,000 billion.

A total of over 392,000 households had loan receivables from other households in a value of HUF 733 billion and 408,000 households had loan debt to other households, in a value of HUF 448 billion. The number of households holding corporate shares and equity was 335,000 (excluding sole proprietorships) and investments amounted to HUF 5,710 billion in autumn 2014. A total of 304,000 households owned mutual fund shares worth HUF 2,041 billion. A total of 499,000 households had pension fund savings and 264,000 households reported having life insurance for their retirement, adding up to a total value of HUF 1,616 billion in autumn 2014.

The **credit debt** of households amounted to HUF 5,896 billion in total according to the survey, affecting 1,522,000 households (38 per cent of households). A total of 830,000 households had a mortgage loan and more than 1 million households had other credit debt according to the survey (Table 3-1-3).

Table 3-1-3
Summary data on mortgages and other loans measured in HFCS, billion HUF

Mortgages and other loans (debts of households)	Number of households affected (piece)	Ammount in HFCS (billion HUF)	Weighted number of households (piece)	Weighted ammount in HFCS (billion HUF)
Mortgage loans	**1,192**	**6.8**	**830,101**	**4,606**
Morgage of household main residence	1,099	5.6	774,206	3,889
Morgage of other properties	118	1.2	73,489	717
Other debts	**1,494**	**1.8**	**1,052,395**	**1,290**
Current account overdraft	677	0.2	473,861	114
Credit-, commercial cards debt	245	0.1	161,135	42
Private loans (debts)	559	0.7	407,655	485
Other financial liabilities	696	0.8	504,981	649

Less than half of households with mortgage loans backed by their dwelling (370,000 household) borrowed to purchase their main residence. Over 230,000 households used the loan to renovate their dwelling. The remaining nearly 230,000 households used loans to purchase other property, settle other debt or to finance their business or studies. Mortgage loans backed by other property were used to purchase other property by nearly one third of households (26,000) while 14,000 households use these loans to purchase the property serving as their main residence. The remaining more than 23,000 households used mortgage loans to renovate property, finance their business or to settle other debt.

The **total surveyed income** of households (Table 3-1-4) amounted to HUF 13,619 billion between October 2013 and September 2014 when extrapolated to the entire population. From this amount, surveyed revenues amounted to HUF 925 billion measured for entire households and HUF 12,694 billion measured at individual level. Social benefits, benefits received from other households, and gross revenues from property rental and financial investments were recorded at the household level. Incomes recorded at the individual level include employee and entrepreneurial incomes, as well as pensions and unemployment benefits. According to the survey, over 30,000 households (extrapolated figure) did not have any real income during the year under review. The survey also covered regular monthly **consumption expenditure** necessary for subsistence and housing, representing an extrapolated annual amount of HUF 6,202 billion in the one-year period ending in September 2014. For a total of 840 of the surveyed households, the surveyed regular expenditure was not covered by the declared net incomes, representing 10 per cent of households within the total population.

Table 3-1-4
Summary data on main revenues and expenditures measured in HFCS, billion HUF

Annual income and consumptions	Number of households affected (piece)	Ammount in HFCS (billion HUF)	Weighted number of households (piece)	Weighted ammount in HFCS (billion HUF)
Total annual income	**6,178**	**20.7**	**4,102,188**	**13,619**
Total households income	4,148	1.4	2,794,308	925
of which real estate rent	190	0.1	127,093	89
of which financial investment	3,303	0.4	2,181,428	249
Total personal income	6,052	19.4	4,007,239	12,694
of which employee income	3,556	12.3	2,544,292	8,588
of which entrepreneurial income	589	1.1	432,187	895
of which pension	3,346	5.8	1,946,438	3,142
Regular consumption expenditure	**6,207**	**9.6**	**4,127,671**	**6,202**

Presentation of the modified survey data

It is recommended to make some modifications on the available database of the household survey for the purposes of additional analysis. These modifications (provision of missing data, correction of outlier data and elimination of inconsistencies) do not fundamentally change the main characteristics and aggregates of the survey, but they improve the matching of income and wealth data, and contribute to a broader use of the results and to the alignment to these results to other data sources. The data sets affected by the modifications are as follows:

– definition of the stock of leasing liabilities and their incorporation into debt liabilities;
– increase the value of real assets and bank deposits with the missing assets of sole proprietorships;
– ad-hoc correction of the value of enterprises, corporate capital investments;
– replacement of missing current accounts or term deposits in case other instruments exist;
– adjustment of the outlier values of real estate properties, vehicles, granted private loans and credit related debt;
– replacement of missing owner earnings (dividends, interests) related to financial assets.

Nearly 240 households (or 160,000, if extrapolated) had leasing liabilities and roughly half of them did not have any other credit debt, i.e., the number of households affected by credit debt increased by this amount. Nearly 120,000 households (or 80,000, if extrapolated) had a current account, who did not have one according to the survey results. The occurrence data of other instruments did not really change, the number of households presented in the previous Section remain valid. Table 3-1-5 summarises the effect of the performed modifications on the aggregate volume and income indicators of the survey.[8]

Table 3-1-5
Main variables calculated from the original and the modified HFCS, billion HUF

Main indicators	Financial assets	Equity of	Deposits	Private loans	Real assets	Loan debts	Total income	Household's income
Original	17,583	5,709	5,315	733	51,504	5,896	13,619	925
Modified	17,853	6,054	5,393	577	50,419	6,140	14,042	1,348

The household finances survey provides information as to how many households have assets and liabilities and how these assets are distributed among the various household groups formed based on different criteria[9]. It is recommended to present these statistics based on the modified data of the data survey. We present first **the proportions of owned assets and liabilities** by different social layers (Table 3-1-6). Every household possesses some financial assets because at least cash is certainly used by every household. However, in case of other financial assets, it is important to know how widespread their usage is among households. 90 per cent of households said they hold non-financial assets (3,719,000 households). 0.6 per cent of households (representing 25,000 households if extrapolated) stated that they did not obtain any income during the one year prior to the survey, according to the modified survey data. Among the individuals with the lowest income, income measured on household level (various forms of allowances and subsidies) prevails the most often, while personal level income is mainly represented by pensions and unemployment benefits.

Table 3-1-6
Share of households having certain instruments by wealth deciles, percentage

Wealth deciles	Equity investments	of which more companies	of which stock company	Deposits	Private loans (assets)	Insurance, pension assets	Total loan debts	Individual proprietorship	Total income < consumptions
X.	35	12	7	98	19	43	37	14	10
IX.	17	2	2	94	11	26	40	7	11
VIII.	9	0	1	92	10	21	45	12	13
VII.	5	0	1	89	5	19	43	7	18
VI.	2	0	0	83	9	15	44	5	15
V.	3	0	1	86	7	7	41	2	13
IV.	2	0	0	81	8	7	38	1	15
III.	2	0	0	72	9	7	36	3	13
II.	1	0	0	71	8	6	33	3	17
I.	1	0	0	62	9	3	26	0	23
Total	8	2	1	83	10	15	38	5	15

Source: Modified data of Hungarian HFCS.

[8] The description of the modifications is contained in the chapter on Methodological notes.

[9] We apply a household level grouping, because a large part of incomes and assets and other characteristics have been surveyed not on a personal level, but with respect to the entire household, and there is no substantive difference between the indicators defined on household and on personal level. The description of the modifications is contained in the chapter on Methodological notes. A grouping criteria of households may be gross or net worth, or the size of the annual income or that of consumption expenditure, the age of the reference person or his/her other characteristics, the number of persons living in the household and their geographic location. The most significant from among these are the distributions based on the scale of income and wealth. The distributions calculated based on the various criteria are different from one another; therefore we shall describe several of these in order to present a more comprehensive picture.

From among **financial assets** – not counting cash – most Hungarian households have a current-account and a fixed deposit, 83 per cent of households had at least one bank account during the survey. The richest and the highest-income individuals are generally using banking services, but as their wealth and annual income decreases, so does not only the average volume of their fixed deposits (in terms of wealth decile, from HUF 6 million to HUF 200,000), but also the proportion of households having an account and deposit (only 62 per cent in the lowest wealth decile.) The group of households having some corporate capital investment (shares, equity), securities, life insurance or pension savings was a lot more concentrated. These instruments are present in significant numbers only within those households' financial assets that accumulated the largest wealth. From among financial assets, only the number of corporations and enterprise held by households is known. Households with the most sizeable wealth or highest income tend to have ownership in several companies. As opposed to this, sole proprietorship is not especially the form of enterprise of the wealthiest strata.

According to the modified HFCS data, 38 per cent of households had some **credit debt** in the fall of 2014. Nearly half of the households with higher income reported some credit debt in the survey (Table 3-1-7). The number of households taking out a loan diminished in parallel with the decrease in income (from 50 per cent to around 20 per cent), which primarily reflects a stronger decline in the number of households having a mortgage loan, while the number of households with consumer or other credits shows a more moderate decrease. (35 per cent of the higher income households indicated one or more consumer credits or loans, the proportion of households having a loan other than a mortgage loan within the lowest income groups was around 20 per cent.) According to the extrapolated data, credit debts of 285,000 households exceeded the value of their real assets in the fall of 2014 (7 per cent of households) and from among them, the value of the total net worth was negative in the case of 169,000 households (that is, debt liabilities also exceeded the value of the total real assets assessed). The number of households having accumulated more credit debt than their assets is negligible within the upper two income deciles (4,500 and 12,000 households), and it does not otherwise clearly depend on the size of the income, it represents nearly 20,000 households per income decile (or 5 per cent).

Table 3-1-7
Share of households having certain instruments by income deciles, percentage

Income deciles	Equity investments	Deposits	Debt securities	Investment fund shares	Private loans (assets)	Insurance, pension assets	Total loans debt	Individual proprietorship	Own cars
X.	29	100	32	36	17	45	50	13	85
IX.	15	99	8	9	12	29	56	9	75
VIII.	13	97	6	6	10	23	47	6	69
VII.	7	95	6	4	11	14	47	7	62
VI.	5	90	6	4	8	11	40	5	54
V.	5	82	6	3	7	9	36	4	44
IV.	2	77	4	6	7	7	29	4	40
III.	2	70	3	3	7	6	32	2	25
II.	2	56	3	1	8	4	19	2	19
I.	2	65	2	1	8	6	27	1	21
Total	8	83	7	7	10	15	38	5	50

Source: Modified data of Hungarian HFCS.

In terms of the occurrence of real assets, it can be stated that more than 90 per cent of the highest-income households live in their own property, and nearly 50 per cent of them owned some additional real estate (17 per cent of them had even several other properties), and 85 per cent of them had their own car. The share of households with own residential property decreased slightly as income declined (to 84 per cent in the neighbourhood of the median and to 74 per cent in the lowest income decile), while the share of those owning other property or motor vehicle displayed a more robust decline (to 20-25 and 40-45 per cent near the median, and to 11 and 21 per cent in the lowest income decile).

We are also presenting the occurrence frequency and the average value of the survey's main financial indicators in a **breakdown by age of reference person.** Within the wealth of retired age households, financial assets had only a small share and their composition was the simplest. Half of the households with reference person older than 75 years of age mentioned that they have a bank account or bank deposit, 5 per cent held debt securities (primarily government papers) and nearly 2 per cent held investment fund shares according to the survey data. The ratio of households having a bank account, bank deposit increases as age decreases, and parallel to this, the scope of financial investments and financial assets is also expanding (Table 3-1-8).

Table 3-1-8
Share of households having certain instruments by age categories, percentage

Reference person's age, year	Equity investments	Deposits	Debt securities	Investment fund shares	Private loans (assets)	Insurance, pension assets	Total loans debt	Individual proprietorship	Number of households, thousand
76-109	1.1	51.1	5.2	1.9	2.4	0.4	5.8	0.2	424
66-75	4.5	69.3	7.4	5.3	5.6	2.3	18.3	2.8	671
56-65	9.2	85.1	7.9	6.9	7.3	15.4	36.7	7.2	890
46-55	11.3	89.6	7.3	10.0	11.1	26.8	45.3	6.8	749
36-45	10.1	94.9	8.6	9.8	13.3	24.9	58.1	7.2	795
17-35	9.0	92.7	6.1	7.5	15.2	12.9	51.4	5.0	599

Source: Modified data of Hungarian HFCS.

ncy of the various assets, but their average value also changes in line with the households' lifecycle (Table 3-1-9). For example, the average deposit amount of households placing deposits was only HUF 1.3 million in the extreme age groups, while in the middle age groups it was close to HUF 2 million. The share of households taking out credit is the highest in the 36-45 age group (58 per cent), and the average amount of debt per one affected household also reaches its peak in this segment (HUF 4.6 million). By contrast, in the oldest age group (aged 76 to 109) the average debt amount is HUF 1.4 million, while in the youngest age group is HUF 3.9 million.

Overall, the survey results suggest that the accumulation of various assets in parallel with the increase in income characterizes the first part of lifecycle of households. We see the highest incomes and the most sizeable wealth in the households in the middle of their active life period. Thereafter, both the occurrence frequency and the average value of the various asset components decline.

Table 3-1-9
Outstanding amount of certain instruments per household by age categories, percentage

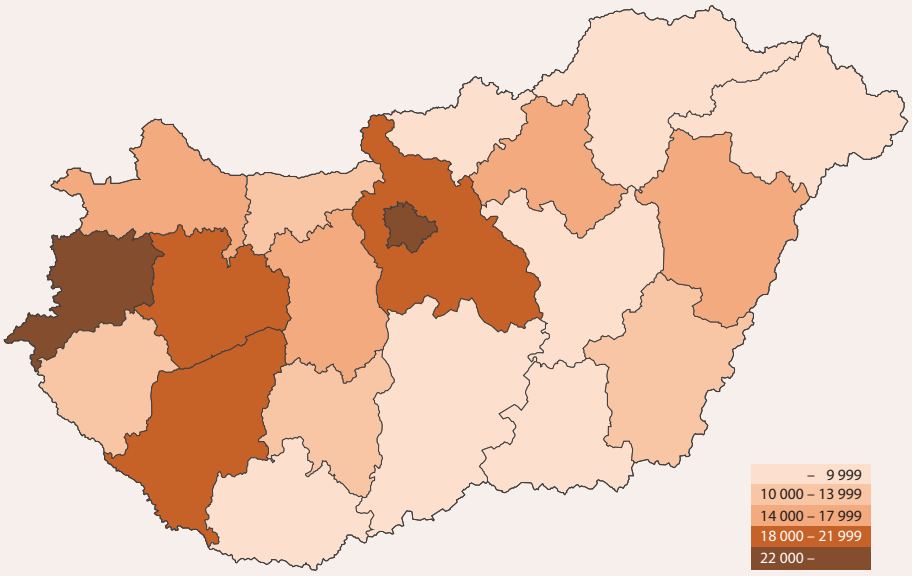
Reference person's age, year	Total assets	Real assets	Financial assets	Deposits	Total loans debt	Total income	Total employee income	Entrepre-neurial income	Pension	Consump-tion expenditure
76-109	9.8	8.6	1.2	0.7	0.1	1.8	0.1	0.0	1.6	1.2
66-75	13.8	11.6	2.2	1.1	0.4	2.3	0.4	0.1	1.7	1.3
56-65	18.2	14.2	4.1	1.7	1.2	3.2	1.6	0.2	1.0	1.5
46-55	19.9	14.8	5.1	1.4	1.9	4.2	3.3	0.2	0.3	1.6
36-45	20.2	12.4	7.8	1.4	2.7	4.4	3.2	0.3	0.1	1.7
17-35	12.9	9.2	3.7	1.2	2.0	3.9	3.0	0.3	0.1	1.6

Source: Modified data of Hungarian HFCS.

In the following Section, we present the **territorial distribution of the (per household) average net worth and the gross income of households**, using the modified HFCS data. According to the survey data, households of Vas County and the capital city had the highest net worth per household (HUF 24 million and HUF 22 million) in

the fall of 2014. Pest, Somogy and Veszprém Counties were part of the second wealthiest group with average net worth of around HUF 20 million. As opposed to this, a net worth per household of below HUF 10 million was measured in Bács-Kiskun, Baranya, Borsod-Abaúj-Zemplén, Csongrád, Jász-Nagykun-Szolnok, Nógrád and Szabolcs-Szatmár-Bereg Counties (Chart 3-1-1). A more than fourfold difference was observed between the net asset volume per household of the richest and of the poorest county.

Chart 3-1-1
Mean value of net worth per household by county, thousand HUF

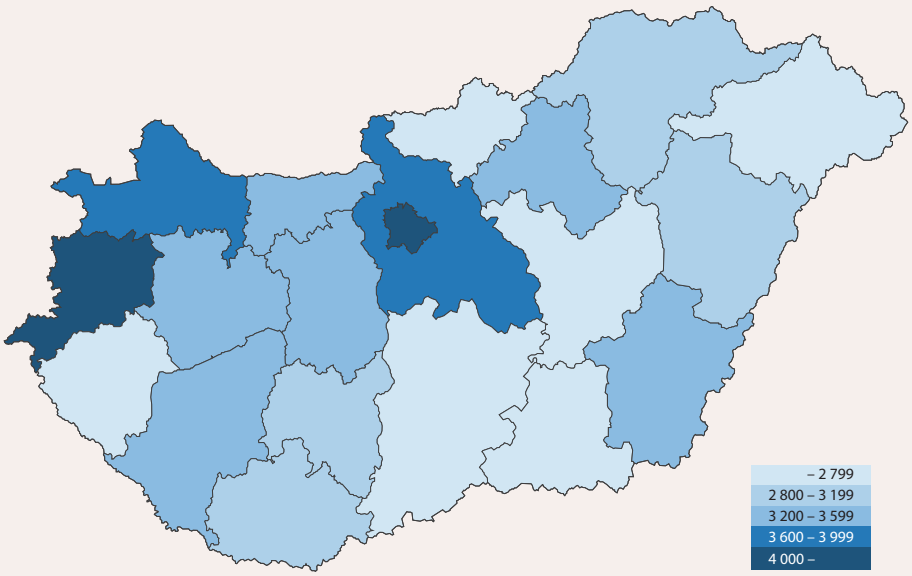


Source: Modified data of Hungarian HFCS.

The territorial distribution of the total annual income per household is very similar to that of net worth, but the differences are smaller. The households with the largest average income can also be found in the capital city and in Vas County according to the survey data (HUF 4.3 and 4.6 million). They are followed by the households in Győr-Moson-Sopron County (HUF 3.9 million) and the ones in Pest County (HUF 3.6 million). The lowest, below HUF 2.8 million average household incomes were registered in Bács-Kiskun, Csongrád, Jász-Nagykun-Szolnok, Nógrád, Szabolcs-Szatmár-Bereg and Zala counties during the survey (Table 3-1-2). The data for the county with the highest average income is double of the county with the lowest average income.

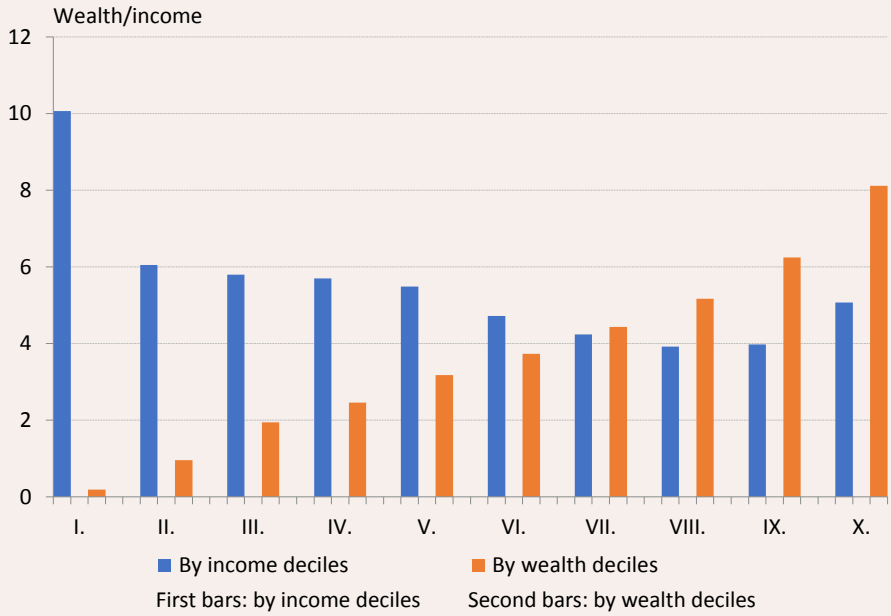
In terms of the distribution of household incomes and wealth the survey results confirm that overall the distribution of household wealth is more concentrated than the distribution of incomes, but the explicit measure of concentration largely depends on the chosen presentation method. If we order the households by the size of gross wealth, we can conclude that the wealthiest 10 per cent of households hold a gross wealth eight times its annual gross incomes, while the gross wealth of 20 per cent of the households with the smallest wealth does not even reach the level of their annual gross incomes. But if we rank Hungarian households by the size of their annual incomes, there is no substantive difference in the distribution of incomes and the value of gross wealth, households generally have assets 4 to 6 times their annual income (see Chart 3-1-3).

Chart 3-1-2
Mean value of net worth per household by county, thousand HUF



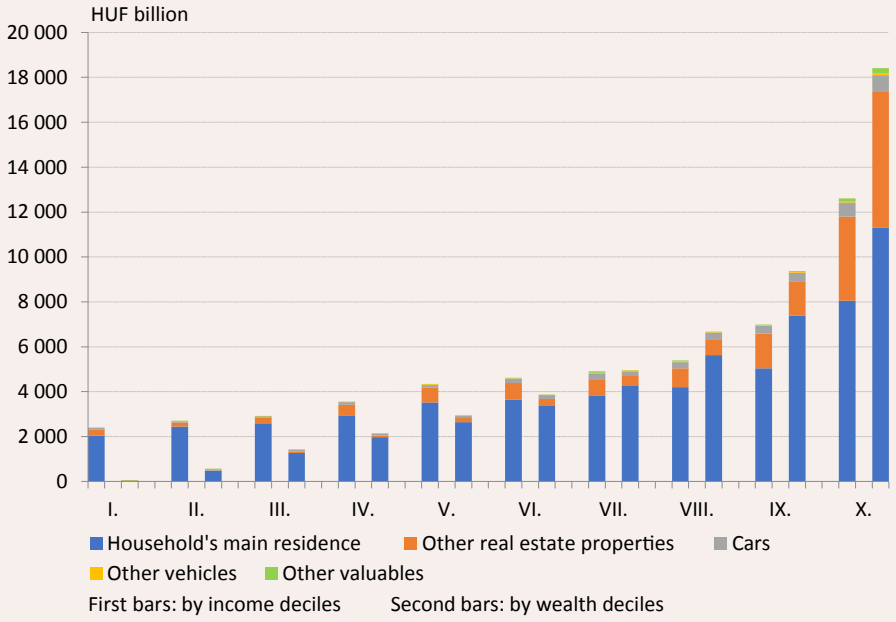
Source: Modified data of Hungarian HFCS.

Chart 3-1-3
Household wealth and gross income ratio by household deciles
(First bars by income deciles, second bars by wealth deciles)



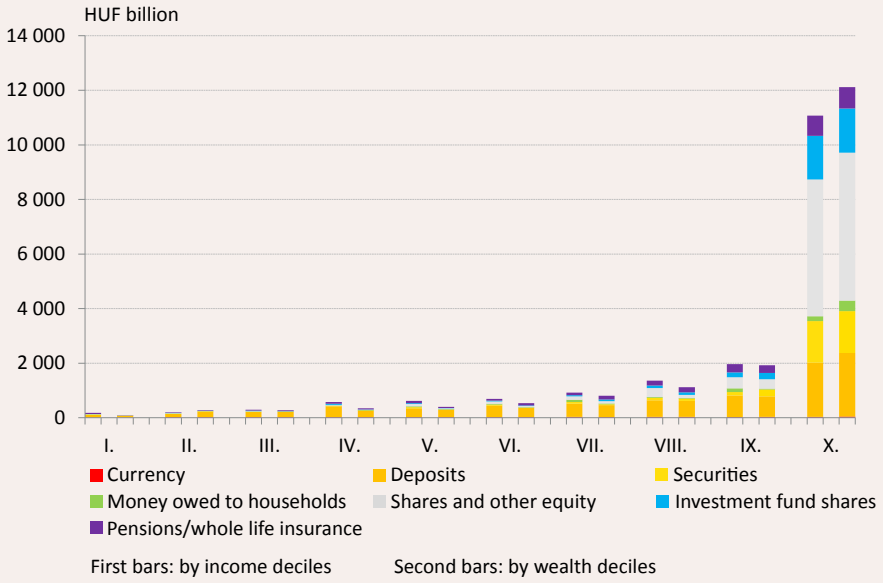
Source: Modified data of Hungarian HFCS.

Chart 3-1-4
Value of households' real assets by household deciles, billion HUF
(First bars by income deciles, second bars by wealth deciles)



Source: Modified data of Hungarian HFCS.

Chart 3-1-5
Value of households financial assets by household deciles, billion HUF
(First bars by income deciles, second bars by wealth deciles)



Source: Modified data of Hungarian HFCS.

Chart 3-1-6
Value of households' total gross income by household deciles, billion HUF
(First bars by income deciles, second bars by wealth deciles)

Source: Modified data of Hungarian HFCS.

Based on the results of the household survey it can be stated categorically that **financial assets are significantly more concentrated** in the society than real assets. 10 per cent of households having the highest-income hold one quarter of the value of real assets, while they dispose over more than 60 per cent of the declared financial assets. The wealthiest 10 per cent of Hungarian households own nearly 40 per cent of the value of real assets and nearly 70 per cent of the value of financial assets (Charts 3-1-4 and 3-1-5). From among financial assets, bank deposits represent the instrument with the highest share for the vast majority of households, and there is no major difference in the value of such instruments among households. The appearance of outstandingly high asset volumes held by the wealthiest and highest-income households is caused by the more frequent presence and substantial amount of equity holdings (shares, other equity), debt securities and mutual fund shares (see Chart 3-1-5). Real estate properties play a similar stabilizing role among non-financial assets (properties serving as residence for households), which represent the majority of the real assets held by the lower income and lower wealth households. Within the higher wealth and higher income groups, in addition to higher value residential properties, the appearance of additional properties primarily increases the value of real wealth.

Summarizing the results regarding the distribution of the volume of assets, the top ten per cent of households by wealth hold 45 per cent of the sector's assessed gross wealth (HUF 68,271 billion), and 60 per cent of these assets worth over HUF 30,000 billion are non-financial assets, while 40 per cent of them are financial assets. The top five per cent of the households by wealth hold more than 60 per cent of the declared value of gross wealth, and within this, the value of financial assets represents barely 20 per cent according to the survey data. (Therefore, as from the second wealth decile, financial assets represent only a negligible ratio within gross wealth.) Households with the most sizeable wealth do not necessarily belong in the group of the highest-income households; the average annual gross income of households within the highest wealth decile is HUF 9 million, while the same was HUF 11 million for the highest-income households. The value of gross assets of the top 10 per cent of households by wealth exceeds the assets of the lowest 10 per cent in terms of wealth by more than 200 times. At the time of the survey, households in the former group had an average of HUF 74 million in wealth and the households in the latter group held an average of HUF 0.3 million in wealth.

While evaluating the survey results, it must be considered that the value coverage of financial assets is partial, therefore they appear within the overall wealth with a lower than actual weight, reducing the value of wealth and the possible differences in its distribution (because the occurrence of financial assets is considerably more concentrated than real assets). We can obtain a more accurate picture regarding the size and value of total household wealth from the data of the household survey aligned to the national accounts. (Sections 3.2 and 3.3 of the chapter includes an example for this.) But we can assume that the occurrence of various assets and obligations (does the given household have certain assets or liabilities) was properly registered by the survey (some extreme cases may possibly have been left out), therefore the findings made in connection with this issue may still be valid.

3.2 ALIGNING SURVEY RESULTS TO THE INDICATORS OF THE NATIONAL ACCOUNTS

Combining the information regarding the individual economic agents appearing in microstatistics with macro-statistics enables us to break down and detail macro data according to certain criteria. Cross-checking with macro data may also improve the quality and the coverage of the information obtained from the survey. However, aligning the two types of statistics is not an unambiguous and simple task in view of the existing differences in methodology, coverage and presentation. In this Chapter, we present the main differences between the household finance survey and the national accounts and propose a solution to unify the results of these two statistics thanks to which we can obtain a data set regarding the wealth of households in line with the national accounts, applicable for deeper analysis.

Similarities and differences in the contents and structure of the HFCS and the national accounts

The household finance survey and the national accounts essentially describe the same economic trends and want to capture the same assets, but the survey uses more articulate concepts and simpler categories. The national accounts are the consistent set of current accounts, accumulation accounts (flow data) and balance sheets (stock data), which present the origination and the use of incomes together with financing processes, the components of changes in wealth and the size of wealth (see details in Section 2.1). Of this, HFCS can directly capture the various incomes (revenues) and part of the use (consumption, accumulation), and the stock of wealth as at the end of the period. Consumption expenditure only contain the regular spending necessary for subsistence and housing, while regarding the accumulation of non-financial assets, only the year of purchase of the property serving as residence, and the value of motor vehicles purchased less than a year ago are known; there is no information available on the acquisition and sales of other assets. We obtain partial information from the survey on incurrence and repayment of debt from among the financial operations appearing in the financial accounts, but not about the accumulation of financial assets. The survey done every three years makes it possible to estimate the magnitude of change in wealth, but we are unable to accurately define the accumulation data (transactions) due to the presence of revaluation and data entry errors. Thus, based on the data featured in the household survey, we obtain information on various household incomes and the stock of household assets and liabilities with a contents measurable against the national accounts.

The household finance survey takes account of all types of financial **income and revenue** that households and household members are capable of recognizing. The survey presents the incomes stemming from work or ownership on a gross basis, in the aggregate sum, also including taxes paid by individuals. The current account of the national accounts contains numerous income categories of which the gross disposable income is the most comprehensive one (Table 3-2-1). Within this, wages and salaries, property income, and social security benefits in cash (pensions) are easily comparable categories. Based on the simple comparison we can establish that the modified HFCS data cover three fourths of the value of household income appearing in the national accounts. From among revenues, observing property and enterprenial income seems to be the most difficult (also in general in household surveys). However, the coverage of consumption expenditure is considerably lower in the HFCS, which indicates, on the one hand, the shortage of one-off, larger expenditures

(travel, renovation, purchase of consumer durable goods, etc.), and the shortage of imputed consumption (own-account production).[10] The HFCS questions do not cover these.

Table 3-2-1
Comparison of flow items in household survey and national accounts, billion HUF

Description	Original survey data (billion HUF)	Modified survey data (billion HUF)	Modified national accounts data* (billion HUF)	Coverage (%)
a	b	c	d	c/d*100
Gross disposable income	**13,619**	**14,042**	**18,063**	**78**
of which wages and salaries	8,588	8,588	11,529	74
of which gross mixed and property income	917	1,327	4,253	31
of which social security benefits in cash (pension, retirement allowances)	3,142	3,142	3,554	88
Final consumption expenditure	**6,202**	**6,202**	**15,730**	**39**

** Data of national accounts for 2014 adjusted by the statistical error between non-financial and financial accounts (concerned items are marked in blue). Data source: HCSO*

Within national accounts, current accounts describing the origination, the distribution and the use of incomes form a complex system and are produced based on a complicated methodology. Numerous grossing-ups and artificial items are incorporated into the accounts (imputed own housing service, agricultural production for own consumption, rerouting of employer contributions, social benefits in kind, employee benefits in kind, reinvested property incomes etc.) so that certain macro indicators can be produced uniformly. However, households do not know this information and methods, therefore these items cannot appear in the household surveys which hinders the comparison and the harmonization of this part of the micro data with the statistical macro data. Irrespective of this, the HFCS income related data are of satisfactory quality and can be independently used to present the income status of households. Later on, the information stemming from the household survey will also be compared with other micro-statistics and administrative data sources in order to draw further conclusions regarding the quality and the usability of the data.

The contents and the classification of **non-financial assets** differ in the household finance survey and the national accounts, therefore the categories applied cannot be matched one-for-one. The financial survey differentiates four asset groups: property serving as the household's main residence, other property, motor vehicles and other vehicles and other valuables of greater value. As opposed to this, national accounts split non-financial assets into produced and non-produced assets; the former group contains fixed assets, inventories and valuables while the latter group contains land and other natural resources. The official Hungarian statistics on stocks of non-financial assets are currently available only for fixed assets and inventories, but no data is available in the national accounts regarding the value of land representing substantial wealth, be it the plot underneath a residential property, an independent plot, arable land or other agricultural land area. By contrast, the household survey also inquired about the value of plots and lands owned by households and it is likely that households also included the value of the land underneath their residential property into the property's value. Land has substantial value, so for the sake of comparability, an estimation was prepared regarding the stock of land [11], which was incorporated into the data of the national accounts up to the scope of the analysis. The other relevant difference in case of non-financial assets is that the value of non-productive machinery, vehicles and other assets featured in the household survey are not included either in the national accounts. The statistical methodology requires that the purchase of these former items be recorded as consumption,

[10] A methodological feature of the national accounts statistics is that consumer durable goods not serving production and business purposes are being consumed immediately upon acquisition (including vehicles as well). As opposed to this, the HFCS accumulates them.
[11] The estimation regarding land value is presented under the Chapter on methodological notes.

while the value of the latter items is left out of the national accounts for practical reasons, thus none of these stocks are included in the balance sheets.[12] The value of these items shall not be taken into account during future alingment process. In addition to the above, there is considerable disparity in the recording of properties purchased abroad, since the national accounts statistics interpret the property assessed as tangible asset as a financial asset, as equity investment held in a non-resident company. The significance of the previous issue is small in the case of Hungarian households (HUF 400 billion in the survey, HUF 25 billion in the national accounts), therefore we do not perform a separate reclassification among the survey data.

Crosschecking the household survey and the national accounts is considerably easier in the area of **financial assets** and **liabilities.** Cash, deposits, debt securities, shares and equity, mutual fund shares appear in both statistics with identical contents, in a clearly identifiable way. While pension and life insurance savings featured in the household survey partly cover the insurance technical reserves of the national accounts. As for granted credits, the household questionnaire only inquired about the amount of private credits among households, but in the national (financial) accounts only the credits granted by households to corporations are included, but not the private credits among households (no survey was done for these so far). For the sake of alignment, the value of private credits will also be incorporated into the national accounts both on the asset and the liabilities sides up to the scope of the analysis[13]. With this supplementation, outstanding loans become fully in line with one another in the micro and macro data in terms of contents. The amount of two instruments featured in the national accounts, i.e. financial derivatives and other receivables/payables, are completely missing from the household survey, which will have to be incorporated later into the micro data through estimation for the sake of conformity with the macro data.

When comparing the data of the household finance survey and of the national accounts (Table 3-2-2), it is important how to handle the households' entrepreneurial activities. In the standard presentation of the national accounts, self-employed persons are not separated from other households (from the other part of the households); their non-financial assets, financial assets and liabilities are part of the households' wealth, therefore investment in shares and equity is to be recognized only in connection with corporations belonging to the corporations sectors (for more details see Section 2.4). By contrast, in the household finance survey, households also declared the value of their sole proprietorship in addition to their joint partnership in the set of questions inquiring about the wealth of their private businesses. We assume that when taking account of their assets and liabilities, households took into account the items related to their sole proprietorships for the appropriate categories (and the required adjustments were made previously) therefore the declared value of sole proprietorships is only an indicative data, it must be left out of both non-financial assets and financial assets (also see under Section 3.1).

[12] Some of the vehicles may also be business assets, but their value may not be separated based on the information of the household finance survey, therefore we consider the entire volume as consumer goods and leave them out of accumulated non-financial assets during the alignment to the national accounts.

[13] Private credits effect the asset and liability sides by the same amount, therefore they do not affect the value of net (financial) worth.

Table 3-2-2
Comparison of wealth items in household survey and national accounts, billion HUF

Description	Original survey data (billion HUF)	Modified survey data (billion HUF)	Modified national accounts data* (billion HUF)	Coverage (%)
a	b	c	d	c/d*100
Net worth	**63,191**	**62,132**	**75,583**	**82**
Non-financial assets	**51,504**	**50,419**	47,264	**107**
Net financial worth	**11,687**	**11,714**	**28,319**	**41**
Financial assets	**17,583**	**17,853**	**38,670**	**46**
Currency	245	245	3,087	8
Deposits	5,315	5,393	7,566	71
Debt securities	1,924	1,924	3,052	63
Loans	733	577	1,832	32
Shares and other equity	5,709	6,054	11,166	54
Investment fund shares	2,041	2,041	4,072	50
Insurance and pension schemes	1,616	1,618	3,455	47
Financial derivatives	0	0	69	0
Other accounts receivable	0	0	4,371	0
Liabilities	**5,896**	**6,139**	**10,351**	**59**
Loans and lease liabilities	5,896	6,139	8,953	69
Financial derivatives	0	0	4	0
Other accounts payable	0	0	1,394	0

**According to the data of national accounts pertaining to the end of 2014, supplemented with the value of lands (HUF 10,725 billion) and inter-household credits (HUF 679 billion) (the concerned instruments are marked in blue). Data source: HCSO (national accounts) and the MNB (financial accounts).*

Process of aligning the household survey to the national accounts

We adjust the modified wealth data of HFCS presented under Section 3.1 to the stock data as at the end of 2014 of the national accounts. By and large, the lag of the value of net worth, as calculated by the survey, from the national accounts is not significant (82 percent), but this is the result of the strong underestimation of the value of financial assets (46 percent) and liabilities (59 percent) and the overestimation (107 percent) of the value of real assets. Crosschecking by instrument for financial assets reveals an even more differentiated discrepancy; therefore it is advisable to perform the adjustment by instrument. In this respect, we consider non-financial assets as one instrument (due to the dominance of property) and we handle financial assets in the presented details (see Table 3-2-2).

A fundamental question is whether data shortages and surpluses found in the survey results are of quantitative origin (scope, coverage) or relate to values (relating to valuation). Generally, the results of household surveys are "leaning to the centre" in several respects. On the one hand, the groups with the lowest and the highest income and wealth cannot be reached (limitation of scope), and, on the other hand, data are corrected and supplemented using average values. In addition, we encounter a systematic underestimation of financial assets as these are more personal and more difficult to recognize, which generally appears on the level of households as a difference in value. (The respondents are unable to account for every financial asset of every household member.) Below, we examine the effect of these factors based on HFCS's quality characteristics and the comparison of other micro data.

From among the **qualitative attributes** of the Hungarian household survey, we review the possible effects on the results of the unit level (household level) and item level (question level) non-response. The HFCS unit

level non-response rate in Hungary (complete rejection of the survey) was fairly low compared to the other countries[14]. Only 15 per cent of the visited households declined responding, but an additional 52 per cent did not provide any data for the survey for other reasons. The territorial distribution of failed attempts is not even, proportionately fewer data were successfully captured from regions in a better position compared to the planned level (this is adjusted by weighting). The item level non-response pertains to the shortcomings and missing data within the surveys classified as successful, which are substituted by estimations during data processing and data correction. In the Hungarian survey a very small proportion of non-financial assets had to be supplemented in terms of quantity and value alike, however, in terms of financial assets, a substantial quantity of data had to be supplemented or corrected (Table 3-2-3).

Table 3-2-3
Number and effect of imputed data in Hungarian household survey, billion HUF and percentage

Description	Original survey data* (billion HUF)	Imputed values** (billion HUF)	Imputed values (%)	Items affected by correction*** (%)
a	b	c	c/b*100	e
Non-financial assets	51,504	816	2	5
Deposits	5,315	2,491	47	49
Debt securities	1,924	1,515	79	44
Shares and other equity	5,709	1,919	34	53
Investment fund shares	2,041	308	15	23
Insurance and pension schemes	1,616	1,020	63	48
Loans	5,896	-570	-10	6

**Original data of the household finance survey not containing data corrections*
*** Volume values inserted in the course of data processing, data correction or imputation*
****The various instruments are composed of several variables, and all of them are featured in the item numbers*

The above examples confirm the experiences obtained while comparing the micro and macro data, i.e., that real assets were observed with greater coverage and better quality than financial assets. We can assume that after data supplementation, the occurrence of financial assets, the scope of the affected households became nearly complete; the deviation from stock data in the national accounts (financial accounts) is primarily caused by the omission of households with exeptionally high wealth and the distortion in data valuation affecting every household.

Crosschecking the HFCS with other micro data is primarily possible for income and consumption data, because no other direct data source is available to assess the value of household wealth.[15] **The Statistics on Income and Living Conditions,** an annual publication of the HCSO, is suitable to compare income and consumption data which relies on similar basis than the household finance survey (Table 3-2-4). The number of households and persons and the distribution of per capita incomes by income decile is nearly identical in the two surveys, while the results of the HFCS are somewhat more differentiated than those of the Statistics on Income and Living Conditions. Based on these findings we cannot suspect data shortages or disproportions in the HFCS.

[14] The indicators of only three countries are lower; participation was mandatory for households in two out of these three countries (in Portugal and France) while in the third country (Finland) numerous data were captured not as part of interviews, but they were directly defined or estimated from administrative data sources.

[15] As regards household borrowing (loans from domestic financial institutions) it is possible to compare the data obtained from the Central Credit Register System (KHR) and the survey data, but first we have to overcome the conceptual differences between two types of data sources (aligning personal and household level information).

Table 3-2-4
Comparison of EU-SILC and HFCS data by income deciles, thousand HUF

Description	Total (HUF thousand)	Deciles (HUF thousand)									
		I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	X.
Statistics on Income and Living Conditions (EU-SILC)*											
Number of households and persons											
Number of households, grossed up (thousand)	4,129	291	292	319	351	416	433	443	500	502	582
Number of persons, grossed up (thousand)	9,695	970	969	967	972	971	969	970	968	970	969
Average size of households	2.3	3.3	3.3	3.0	2.8	2.3	2.2	2.2	1.9	1.9	1.7
Annual per capita incomes											
Gross income	**1,373**	**349**	**627**	**847**	**977**	**1,160**	**1,307**	**1,431**	**1,692**	**2,054**	**3,291**
Of which:											
income from employment	826	143	395	583	650	694	779	836	982	1,223	1,974
income from self-employment	110	6	22	42	48	62	46	83	86	157	553
Household finance and consumption survey (HFCS)**											
Number of households and persons											
Number of households, grossed up (thousand)	4,128	293	307	373	423	431	484	423	448	462	484
Number of persons, grossed up (thousand)	9,700	972	969	970	970	968	970	970	972	970	968
Average size of households	2.3	3.3	3.2	2.6	2.3	2.2	2.0	2.3	2.2	2.1	2.0
Annual per capita incomes											
Gross income	**1,447**	**248**	**534**	**744**	**923**	**1,076**	**1,238**	**1,428**	**1,673**	**2,144**	**4,469**
Of which:											
income from employment	885	114	300	420	489	598	634	883	1,054	1,496	2,870
income from self-employment	137	9	31	37	42	32	75	60	70	99	915

** According to the results of the Statistics on Income and Living Conditions (EU-SILC) for 2014 published by the HCSO*

*** According to the modified results of the household finance survey (HFCS) presented under Section 3.1*

The data pertaining to **personal income tax returns** enable a more accurate comparison of income from employment and property income. According to the aggregate data of tax returns, in 2014 the incomes subject to consolidated taxation amounted to HUF 9,430 billion while the incomes subject to separate taxation amounted to HUF 746 billion. The highest declared annual consolidated income (income from employment) evolved somewhat above HUF 1 billion while the hundredth highest consolidated income amounted to some HUF 150 million. The average of the first 100 highest consolidated income is nearly HUF 300 million. The highest declared income subject to separate taxation (property income) is HUF 4.3 billion, while incomes between HUF 300 and 500 million occupied the hundredth position. The average of these is above HUF 700 million. Therefore the largest incomes stemming from employment or business are considerably lower than property incomes. In Hungary, the highest known personal incomes derive from dividends, typically from abroad. Accordingly, the largest financial assets held by households, possibly in the magnitude of HUF 100 billion, exist in the form of equity holdings (corporate shares, other equity). We can assume that individuals and households accumulate considerably less wealth from any other asset.

Hungarian publications and data compilations **about the top 100 wealthiest individuals** also confirm the same. These publications only take into account the legally obtained equity wealth, corporate investments, and determine the wealth of the concerned individuals and families (ranging from HUF 5 billion to 150 billion) to be above HUF 2,000 billion overall for 2014.[16] The **corporate database** used for the compilation of the national (financial) accounts, relying on corporate tax returns and annual statements, is a further relevant addition to the analysis of the distribution of equity held by individuals and households by wealth value and by wealth size; it can be determined from this database as to how many shares and other equity are held by individuals and in what value. At the end of 2014, the biggest Hungarian corporate investment was HUF 75 billion, while the average value of the 100 biggest equity was around HUF 20 billion (at corporate shareholders' equity value). Individuals hold equity worth over HUF 1 billion in some 1,500 companies according to the corporate data as at the end of 2014 (Table 3-2-5).

Table 3-2-5
Distribution of number and value of unlisted equity holdings of households by value categories

Description	Value of unlisted equity holdings by company value category						Total
	<1	1 - 5	5 - 10	10 - 100	100 - 1000	1000<	
	million HUF						
National accounts*							
Number of companies (pcs)	226,940	101,929	43,374	76,279	15,773	1,455	465,750
Value of unlisted equity holdings (billion HUF)	6	288	319	2,459	4,361	3,267	10,700
Household finance and consumption survey (HFCS)**							
Number of companies (pcs)	58,309	151,698	74,785	57,107	8,745	0	350,644
Value of unlisted equity holdings (billion HUF)	33	512	584	1,645	3,065	0	5,839

** Based on the corporate database of the MNB used for financial accounts. Source: NAV (corporate tax returns) and IM (annual reports).*

*** According to the modified results of the household finance survey (HFCS) presented under Section 3.1*

According to the modified data of the household finance survey, the total annual income of the household with the highest income is only HUF 124 million (so the income relating to one taxpayer is therefore less than that) and incomes from employment represent a significant proportion also within the incomes of households with the highest income. This means that the highest-income group could not be reached. According to corporate micro data, one third of the share and equity investments of households is made up of items in the magnitude of billions, while the household survey does not contain amounts of such magnitude at all (see Table 3-2-5). Therefore, the data of some households that could represent the households with the highest wealth and income are missing from the survey, so we substitute these by adding two sample households. On the one

[16] For the present estimation, we used The 100 richest Hungarian persons publication of Napi.hu.

hand, we prepare an estimate for the characteristics of the household representing the 100 households with the biggest wealth and income. Their average income, as derived from the data of their tax returns, is somewhat above HUF 1 billion, of which income from employment is HUF 300 million and property income is HUF 750 million[17]. Based on the assumptions, their wealth is composed on average of equity holdings worth HUF 20 billion, deposits worth HUF 150 million and securities worth HUF 1 billion. On the other hand, we prepare an estimate for the data of the household representing additional 600 households not covered by the HFCS, with total income of HUF 240 million, real assets of HUF 570 million and financial assets of HUF 1.9 billion. The main indicators of the 10 highest-income households of the modified household survey are summarized in Table 3-2-6, supplemented with the appropriate characteristics of the two sample households added afterwards.

Table 3-2-6
Main data of top 10 households of the modified HFCS and 2 households added, million HUF

Weight	Number of persons	Income at the household level (million HUF)	Income from employment (million HUF)	Non-financial assets (million HUF)	Financial assets (million HUF)	Liabilities (million HUF)
100	2	1,050	300	1,130	21,251	300
600	2	240	120	570	1,901	150
302	2	124	76	976	581	301
1074	6	117	2	99	963	70
1063	3	82	0	55	159	50
829	2	62	59	38	191	0
430	4	54	1	100	680	0
558	2	53	50	12	120	1
807	3	48	8	27	808	0
942	2	37	36	223	12	0
1741	4	34	2	16	327	6
336	4	33	11	81	81	10

Note: Data of the top 10 highest income households and data of the two households added to the survey (marked in green).

Supplementing the survey results had for purpose to ease the scope and coverage limitations of the survey by incorporating the data of the highest-income and wealthiest households, and to render the survey results more proportionate. Thereafter, any deviation from the stock indicators of the national accounts can be attributed to the issues related to the recording and valuation problems of the entire sample, so in this way, the alignment to the macro data can be implemented by the proportionate multiplication of the assessed value data. Multipliers can be applied for those items that are included in both statistics (Table 3-2-7). For the majority of the instruments, the applied multipliers range between 0.98 and 2.11, only in the case of cash is there an outstandingly high multiplier of 12.58.

[17] Assuming that these are households with few members, and the wealth and the income of the person(s) living with the reference person are not substantial compared to the wealth and the income of the reference person.

Table 3-2-7
Coefficients aligning the extended HFCS to the corresponding macro data, billion HUF

Instruments	Original survey data	Modified survey data	Extended survey data	Coefficient*
Non-financial assets	51,504	50,419	50,873	0.98
Currency	245	245	245	12.58
Deposits	5,315	5,393	5,462	1.39
Debt securities	1,924	1,924	2,064	1.48
Money owed to corporations				–
Money owed to household	733	577	577	1.18
Listed shares	87	215	335	1.39
Unlisted shares and other equity	5,622	5,839	8,619	1.24
Investment fund shares	2,041	2,041	2,181	1.87
Insurance and pension schemes	1,616	1,618	1,634	2.11
Financial derivatives (assets)				–
Other accounts receivable				–
Loans from sectors other than households	5,411	5,654	5,774	1.43
Loans from households	485	485	485	1.40
Financial derivatives (liabilities)				–
Other accounts payable				–

**The multiplier is the quotient of the values contained in the national accounts and the supplemented survey.*

The distribution among households of the assets missing from the household survey, but available in the macrostatistics is possible with the help of some other instrument (projection base) included in the household survey (Table 3-2-8). Credits granted by households to companies are shareholder credits; therefore their projection base may practically be the stock of equity holdings (non-listed equity). The distribution of the stock of financial derivatives may be done based on the volume of mortgage loans taken out by the individual households on the asset side, and based on the distribution of total income on the liability side. (At the end of 2014, the volume of derivative assets was mainly related to the exchange rate pegging of mortgage loans.) Finally, the projection base applicable for other receivables and liabilities may be the total income of households. Typically commercial loans and tax type items can be found here. These items are influenced mainly by the scale of incomes. In addition to this, other receivables also include the households' other pension asset receivables (HUF 2,851 billion in 2014), which is a technical item related to the statistical settlements of private pension fund exits[18]. For the sake of simplicity, this item is also distributed in proportion to the total income.

Table 3-2-8
Method for distribution of macro instruments having no micro equivalent

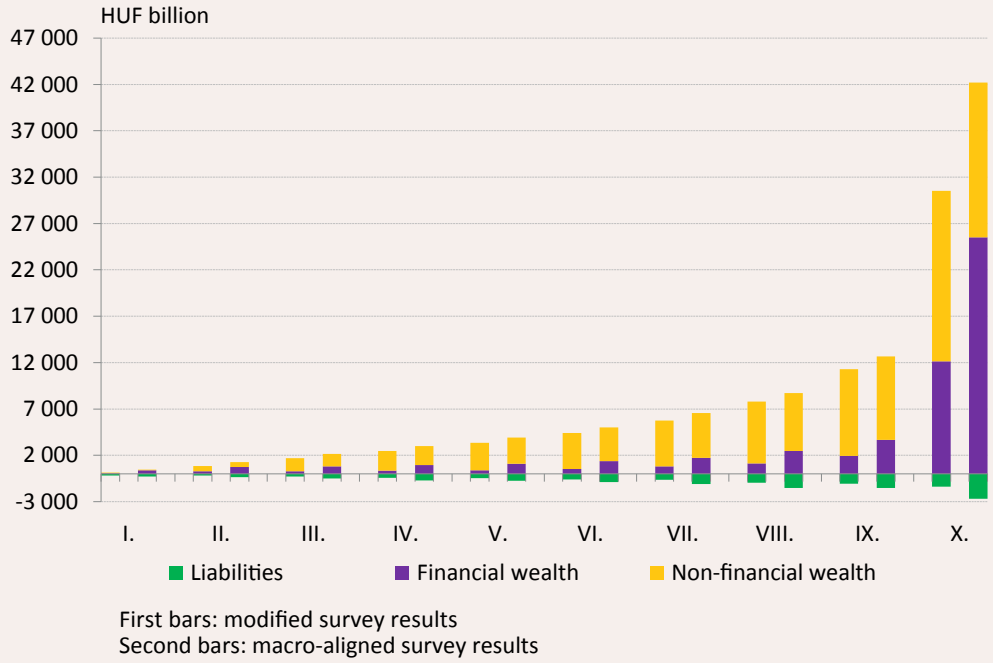
Instruments	Base
Money owed to corporations	Unlisted shares and other equity
Financial derivatives (assets)	Mortgage loans
Other accounts receivable	Income at the household level
Financial derivatives (liabilities)	Income at the household level
Other accounts payable	Income at the household level

[18] A more detailed presentation of other pension asset receivables can be found in Chapter 2.7 titled 'Statistical recording of the exits from private pension funds in the publication titled Hungary's Financial Accounts (2014).

Evaluating the results of the micro and macro alignment

Thanks to the above outlined steps, the micro data of the household finance survey became completely aligned with the national accounts in respect of stock data. The wealth of households has overall increased, and the proportions among the various assets have been restored. In parallel with the increasing share of financial assets and liabilities, the share of non-financial assets decreased, and as a result, the value of net worth practically remained unchanged with the exception of the upper wealth group, and the overall wealth augmented slightly, meaning that the spectacular expansion of wealth is attributable to the top wealth group (Chart 3-2-1). The supplementation of survey results and the alignment of wealth related data with the national accounts regarding the majority of households did not essentially modify the findings regarding the volume of wealth, but it modified the composition (the share of the various asset types) and the distribution of wealth among the groups of the society (in favour of the wealthiest ones).

Chart 3-2-1
Distribution of household wealth by deciles measured from the modified and the macro-aligned survey data, billion HUF
(First bars present modified survey results, second bars present macro-aligned survey results)



Source: HFCS data modified according to this publication and aligned to the national accounts.

Crosschecking HFCS results with other data sources and the national accounts shows that the data quality of such a comprehensive survey may differ by issue. Of these issues, the observation of financial assets carries the most uncertainty, therefore the correction of these data definitely contributed to the specification of the survey results and their broader application.

One of the aims of household financial survey is to help splitting the sectoral stock data of national accounts between the different sub-populations of households[19]. Table 3-2-9, in which the wealth of household sector – covering financial and non-financial assets and liabilities, as well – measured in national accounts at the end of 2014 is presented by wealth deciles, gives an example to this. The conventional stock presentation of national accounts details the wealth of the sector by asset types, additionally, in respect of financial worth the use of who-to-whom breakdown or the maturity and denomination (currency) categories are also widespread.

[19] In this approach, instead of presenting the survey data (aligned to the national accounts), the presentation of national accounts is detailed and broken down based on the information derived from the survey. The key-question is how it can be accomplished with quarterly frequency or with lack of information in respect of those years when no survey data are available.

Consequently, the disaggregation by household characteristics means further dimensions of data details. However, this cannot be initiated at an arbitrary level of detail of macro data, because the household survey does not cover all types of instruments and the detail and quality of covered instruments are not uniform.

Table 3-2-9
Breakdown of household wealth in modified national accounts by deciles, at the end of 2014, billion HUF

Wealth deciles	Total	I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	X.
Non-financial assets	**47,264**	**73**	**557**	**1,354**	**2,073**	**2,835**	**3,653**	**4,812**	**6,261**	**8,973**	**16,674**
Financial assets	**38,670**	**388**	**726**	**804**	**940**	**1,078**	**1,367**	**1,735**	**2,468**	**3,680**	**25,484**
Currency and deposits	10,653	198	421	480	559	599	762	866	1,136	1,504	4,127
Debt securities	3,052	0	1	3	12	9	24	29	80	226	2,667
Loans	1,832	4	16	22	10	26	22	62	45	75	1,551
Equity and investment fund shares	15,238	2	10	13	23	23	67	155	292	677	13,975
Insurance and pension reserves	3,455	3	14	26	36	86	121	224	429	637	1,878
Financial derivatives	69	0	1	3	4	5	6	8	11	12	19
Other accounts receivable	4,371	180	262	258	296	330	365	391	474	548	1,268
Liabilites	**10,351**	**305**	**362**	**490**	**709**	**752**	**895**	**1,113**	**1,495**	**1,587**	**2,644**
Loans	8,953	247	278	407	615	646	778	988	1,343	1,412	2,238
Financial derivatives	4	0	0	0	0	0	0	0	0	0	1
Other accounts payable	1,394	58	83	82	94	105	116	125	151	175	404
Net worth	**75,583**	**157**	**921**	**1,669**	**2,304**	**3,161**	**4,125**	**5,434**	**7,234**	**11,066**	**39,514**

Source: Authors' calculation using macro-aligned HFCS data and financial accounts.

3.3 DISTRIBUTION OF HOUSEHOLD ASSETS AND LIABILITIES WITHIN THE SECTOR

Based on the available data of the survey, it seems that the gross wealth of Hungarian households in the fall of 2014 was HUF 69,087 billion (HUF 7 million per person), while net household wealth (reduced by liabilities) amounted to HUF 63,191 billion (HUF 6.4 million per person). These low amounts were obtained based on the aggregate stock of financial assets worth HUF 17,583 billion and non-financial assets worth HUF 51,504 billion. Accordingly, based on the answers of households, three fourth of the sector's wealth may have been real assets and one fourth may have been financial assets. In general, the household asset representing the highest value is the residential property, which yielded nearly 60 per cent of the sector's assessed wealth. The review and the modification of survey data did essentially not alter the aggregates pertaining to households; gross wealth was modified to HUF 68,272 while net wealth was modified to HUF 62,132, and financial assets represent 26 per cent of gross wealth. The gross wealth of the median household was HUF 9.3 million, the lower 50 per cent possessed 12.4 per cent of the wealth. We can conclude from the HFCS results that the distribution of real assets among households is considerably more uneven than the distribution of income, but the differences observed in the value of financial assets are even greater. More than 84 per cent of households lived in their own property, 83 per cent of them had a bank account, 7 to 8 per cent of households held various securities and 38 per cent of them had some kind of credit debt at the time of the survey.

According to the supplemented data of the national accounts, the gross wealth of households at the end of 2014 was close to HUF 86,000 billion and nearly half of this amount was held in financial assets. On average, barely half the value of financial assets can be identified based on the survey results, while the value of real assets exceeds the known macroeconomic value. Moreover, the composition of financial assets does not accurately reflect either the household portfolio featured in the balance sheet of financial accounts; certain

instruments are missing and the coverage of assets that are concentrated at the wealthy households is lower. As a result of the dominance of non-financial assets and the different composition of financial assets, the survey data underestimate wealth differences within the society, therefore they can be used in themselves only to a limited extent to present the scale, the composition and the distribution of household wealth. **The survey data aligned to the national accounts** provide more accurate information about the composition and the distribution of the gross and net wealth of Hungarian households. However, the alignment presented in the foregoing does not influence in merit the occurrence data of the various instruments (the scope of the affected households) and – with the exception of the wealthiest households – it did not fundamentally modify the absolute amount of household wealth. However, the instrumental composition of wealth changed significantly and the wealth value of those possessing the biggest wealth increased considerably, which influences the distribution indicators. In view of this, we primarily analyse the wealth data aligned to the national accounts in this Section. However, it is important to emphasize that similar concerns can be observed in the household surveys of every country, therefore the presented shortcomings are hindering less the international comparison of results.

Based on the data of macro-statistics, at the end of 2014, every Hungarian person had HUF 9 million gross worth (asset) and HUF 8 million net worth (volume of assets reduced by liabilities), which can be considered as modest by international standards. (If we do not supplement the data of the national accounts with the value of land, the appropriate data is HUF 8 and 7 million.) Hungarian households have assets worth HUF 21 million on average and have debt somewhat in excess of HUF 2 million. According to the macro-statistics supplemented with the micro data stemming from the household survey, the wealthiest household decile possessed half of the sector's gross wealth and a good two thirds of the sector's financial wealth. Its average gross worth was HUF 102 million while its average net worth was HUF 96 million. The median household possessed total assets worth HUF 10.7 million, and as part of this, financial assets worth HUF 3 million and had HUF 2 million in debt. Households possessing less gross wealth than the median value (lower 50 per cent) together shared 12.6 per cent of the sector's wealth and 10 per cent of its financial wealth, while they had more than one fourth of the debt. As a result of a not fully proportionate distribution of assets and liabilities, net worth displays somewhat greater differences. The upper 10 per cent possessed 56 per cent of the sector's gross value of assets reduced by liabilities (representing HUF 75,583 billion) at the end of 2014. The lower 50 per cent of households ranked by the size of net worth held 55 per cent of the sector's debt balance, and their net worth came to barely 9 per cent of the sector's overall net worth. According to the survey data aligned to the national accounts, the net worth of nearly 200,000 households (5 per cent of households) was negative, that is, the size of their liabilities exceeded the value of their assets. These households had more than 26 per cent of the sector's liabilities, and 4 per cent of the sector's gross incomes. A good half of the households had net financial worth lower than their net annual incomes, meaning that their disposable assets were not even sufficient to replenish the loss of income of one year. In contrast, somewhat more than 1 per cent of households possessed enough wealth so that their property income (interest, dividends, rent) covered the household's regular consumption expenditure.

In terms of **the composition of assets,** it can be established that with the exception of the top wealth group, the distribution of the value of financial assets basically follows that of non-financial assets, and represents in general somewhat over 30 per cent of the value of total assets. The distribution of financial assets among households seems to be less homogeneous than that of real assets, because financial assets have a dominant share within the assets of the top wealth group. Financial assets represented 78 per cent of the wealth of the top 1 per cent of households, while only half of the wealth of the remainder of the top 10 per cent on average was kept in financial assets at the end of 2014. The financial assets of most households are dominated by traditional instruments (cash, bank deposits). However, the really sizeable wealth is not generated from these instruments, but rather from equity holdings, that is, from corporate shares and other equity. 93 per cent of the total value of corporate capital investments is attributable to the wealthiest 10 per cent of households, and as part of this, the top 1 per cent held 78 per cent of these assets. So essentially this type of instrument dominated the outstanding wealth of this group. (Only 39 per cent of the value of liquid assets is held by the top household decile.) The distribution of the various securities is also nearly as concentrated as that of equity holdings; 88 per cent of the value of securities held by households were kept by the top wealth decile of

households at the end of 2014. The distribution of the value of insurance technical reserves within the sector forms a transition between the distribution of liquid assets and securities; a good 50 per cent of the total value of this form of investment was held by the top wealth decile during the period under review.

So, based on the available data, it can be established that the, overall well-balanced, asset composition of households featured in the national accounts – where financial and real assets represent a similar proportion – is structured as follows: for the largest part of society, the most important property item they own is their residential property, and their financial assets of modest amount are mainly composed of liquid assets, while the determining part of financial assets, and as part of this, the more recent investment forms are held by the really wealthy groups. Although the biggest private investors do take advantage of the investment opportunities offered by banks and the market, but their assets representing the most significant value were generated through direct capital investment (purchase of equity, granting of credit). For households with lower income and smaller wealth, in addition to traditional bank savings, mainly insurance and pension savings and certain securities investments offer the possibility to enlarge their financial wealth.

Currency holding habits in Hungarian households

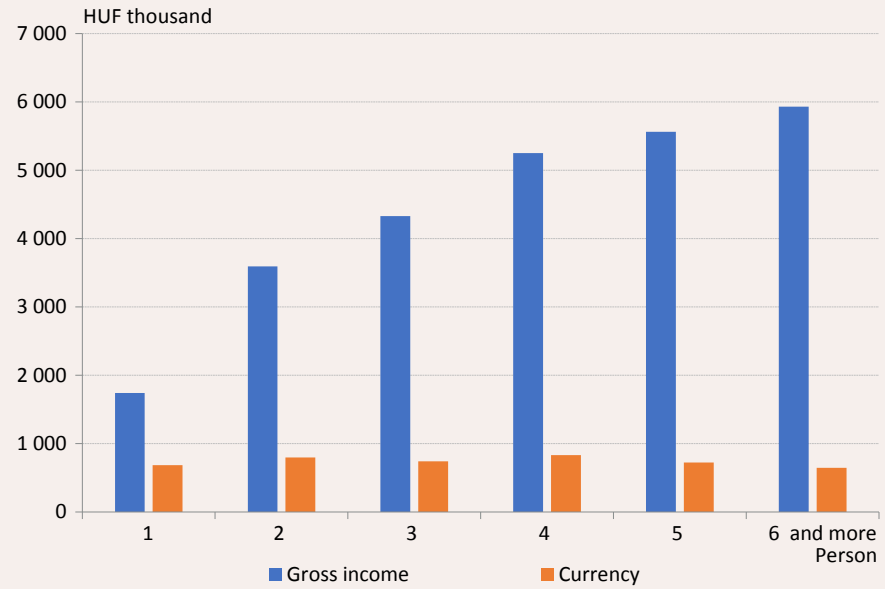
At the end of 2014 and 2015, households held HUF 3,087 billion and HUF 3,695 billion in cash, respectively; of this, the volume of foreign currency represented HUF 149 billion and HUF 304 billion according to the data of the financial accounts. The amount of forint and foreign currency held by households is determined in macrostatistics based on estimates due to the lack of direct household data collection.[20] But the first household wealth survey about the currency holdings of households does not show a more accurate picture either, since the data extrapolated based on the declared volume cover only 8 per cent of the macro statistical value.[21] Therefore examining currency holding habits is possible only to a limited extent.

The survey data aligned to the national accounts suggest that every household has some amount of cash, but the most important financial instrument of some 1,300,000 households (31 per cent) was cash, and what is more, 15 per cent of households (650,000 households) had no other financial assets for payment or investment purposes (deposit, debt securities, granted credit, equity, insurance technical reserve) than cash at the time of the survey. Practically without exception, this group includes those households where the reference person is elderly, 66 being the average age in their case, and the average value of cash held was HUF 700,000 (the declared and extrapolated value of which is HUF 56,000).

The distribution of cash among households is considerably more balanced than that of other types of assets. In terms of the average quantity of cash held, the difference between the upper and lower decile of households generated based on the size of gross wealth is fourfold, while the difference between the upper and lower decile of households generated based on the size of gross incomes is two and a half fold. A considerably greater proportion of households with lower income hold cash among their financial assets than those with higher income. For the lower 50 per cent of households, we can observe the dominance of cash and bank deposits, representing 60 per cent of their financial assets. Other forms of savings are concentrated in the top income decile, and parallel to this, the share of cash decreases in their case, representing only 2 per cent. When examining the distribution of currency holdings and other financial characteristics by household size, it can be concluded that while income, regular consumption expenditure and the average value of various assets increase depending on the number of household members, for cash no such correlation can be detected; the amount of cash kept by households does not depend on household size according to the survey results (Chart 3-3-1). This may refer to the fact that respondents could only give account of their own currency holdings, but not that of the other household members.

[20] We obtain the quantity of cash held by households by deducting the known amounts of other currency holding sectors from the quantity of forint denominated cash issued by the MNB, while the estimate for foreign currency is prepared based on flow data.
[21] Asking about the cash kept at home is not part of the HFCS in most countries in view of the sensitivity of the data.

Chart 3-3-1
Distribution of gross income and currency holdings per household by household size, thousand HUF



Source: HFCS data aligned to the national accounts.

A novelty in the Hungarian financial accounts statistics: observation of inter-household lending among credits granted and borrowed by households

With regards household liabilities, the household survey inquires about both mortgage loans (housing loans, property backed loans) and other loans (leasing debts, credit cards, instalment loans, employer credits, student loans etc.), and also covers households credits received from and granted to other individuals. **This is the first time that we can analyse the extent, the scope and the characteristics of inter-household lending.** Currently, inter-household loans are not included in the financial accounts, but we can give an estimate for that based on the survey results. However, the HFCS failed to assess loans granted by households to corporations, but the financial account statistics does have information on these items from corporate data sources.

Table 3-3-1
Inter-household lending measured in the original and macro-aligned survey, in 2014, billion HUF

Instrument	Number of households (original survey)	Amount in the sample (billion HUF)	Weighted number of households	Weighted amount, original (billion HUF)	Weighted amount, modified (billion HUF)	Amount in the macro-aligned survey (billion HUF)
Lending to households	524	0.8	392,734	733	577	679
Borrowing from households	559	0.7	407,655	485	485	679

The financial accounts currently show credits granted for corporations **on the asset side of the household balance sheet**, that can be linked to the wealthier households holding shares or equity investments. The volume of these shareholder credits was HUF 1,153 billion and HUF 1,208 billion at the end of 2014 and 2015, respectively. More than 10 per cent of Hungarian companies owned by households could have received some credit from their owner on top of their capital, which could concern some 50 to 60,000 households. In contrast, lending to other households is also popular among less wealthy households. Nearly 400,000 households could have such claims at the end of 2014 in an average value of HUF 1.7 million. 30 per cent of the creditors belong into the highest income and highest wealth quintile, they grant half of the total value of private credits. At the same time, households having some receivables are also evenly distributed in the lower income and lower wealth groups,

but the average amount of loans granted decreases as wealth and incomes diminish. The common characteristic of the households concerned is that the amount of the granted credit represents a substantial share, i.e. 10 to 25 per cent of their financial assets. The portfolio of the less wealthy creditors is typically dominated by financial assets as opposed to non-financial assets, which is also attributable to credit claims.

Within the financial accounts, 85 per cent of **household liabilities** come from loans, and as part of this, bank loans make up the most significant part within loans, in excess of 80 per cent. Based on the survey, 20 per cent of households granting credit to individuals have some credits borrowed from other individuals. At the end of 2014, the value of private credit liabilities represented barely 8 per cent of the household sector's total liabilities. Private credits were mainly requested to finance the cost of living, to settle other debt or to purchase real estate. Two thirds of those who borrowed some credit had debt to one individual, in the other cases, households typically had 2 to 3 such credits, but it also happened that the they borrowed money from someone on 8 to 10 occasions (several smaller amounts). Two thirds of those with a private credit also had some other loans (mortgage loan, leasing debt, other loans), and the amount borrowed from another individuals represented 25 per cent of their total credit debt. One fourth of the households borrowing a private credit also applied for a bank loan over the past three years, half of which were declined or the amount granted was less than requested. In the wealthiest household decile every 10th household had some private credit debt, and their aggregate amount represented 27 per cent of private credits and 28 per cent of the credit debt of the wealthy group. With the exception of the top wealth quintile (where 20 per cent of the debtors are positioned) the number of households resorting to a private credit significantly exceeded the number of those extending a credit and the loan amounts are also higher, typically reaching 20 to 35 per cent of the credit debt of the concerned households. In the lowest wealth quintile, 11 per cent of households declared some credit debt from another households (92,000 households), representing one fourth of their total liabilities with an average value of HUF 900,000. Nearly half of the households with negative net worth (194,000 households holding 26 per cent of the sector's liabilities, HUF 14 million per household) also borrowed a private credit, but despite their substantial amount, these private credits gave only a fraction of the group's credit debts.

The factors influencing lending/borrowing among private individuals include, among others, the place of residence, age and education. Based on the extrapolated data, some 83 per cent of those involved in lending among individuals have college or high school diplomas, and in terms of age, the median is 44. In terms of residence, nearly half of the inter-household loans can be linked to Budapest and Pest County.

Households having a business or corporate capital investment

Individuals, households can perform economic activities, or possess capital investment as sole proprietors or as owners of joint partnerships, corporations. In the Hungarian macro-statistics, sole proprietors, self-employed persons form part of households (they are not separated from the households), while joint partnerships and corporations are positioned within the corporations sectors, and households may hold equity in these entities (shares or other equity, that is, some financial assets). The number of operating sole proprietorships is constantly above 200,000, and their increasing aggregate net worth may have been over HUF 1,800 billion at the end of 2014. The number of Hungarian and non-resident partnerships and corporations operating with household equity is close to 470,000, and the equity holding of households in these entities amounted to HUF 11,166 billion and HUF 12,615 billion at the end of 2014 and 2015, respectively, based on financial accounts data.

The survey mentions the sole proprietorships of 222,000 households worth HUF 1,221 billion in value (of aggregate net worth), and 336,000 households were found to have some equity holdings in one or more partnerships or corporations, while the number of corporations concerned was in excess of 350,000 in 2014.[22] According to the HFCS, of the 336,000 households having some corporate capital investment (shares or other equity), 55,000 mentioned that they (also) keep quoted shares (43,000 of them had only quoted shares) and 29,000 were also self-employed. Hence, the overlap of the households having some interest in sole proprietorships (self-employment) and those having some interest in joint partnerships (corporations)

[22] Mainly the small amount capital investments of below HUF 1 million are missing from the survey. These may have been left out of the survey, as marginal investments, in view of their small value (e.g. having zero or negative own equity).

is small. As opposed to the households having some ownership in partnerships, households operating sole proprietorships are not part of the wealthiest and highest income group; their average annual income was HUF 5.4 million and their average net worth was HUF 29.4 million at the end of 2014 (Table 3-3-2). The corresponding indicators of households having some equity in partnerships and corporations reached HUF 8.1 and 78 million at the same point in time according to the survey data aligned to the national accounts. In addition to income from employment, property incomes also greatly contributed to the outstanding revenue levels; the average amount of such property income was HUF 1.7 million per household, corresponding to a 5 per cent yield.

Table 3-3-2
Income and wealth conditions of certain household groups in 2014, million HUF

Main conditions per household, million HUF	All households	Households of pensioners	Households of sole proprietors	Households owing partnerships
Gross annual income	3.5	2.7	5.4	8.1
Employee income	2.1	0.8	2.5	3.9
Entrepreneurial income	0.2	0.1	1.8	1.4
Pension	0.8	1.6	0.6	0.6
Net worth	18.3	14.7	29.4	78.0
Number of households, thousand	4,128	1,946	222	336

Source: HFCS data aligned to the national accounts.

According to the survey data aligned to the national accounts (financial accounts) at the end of 2014, the corporate equity investments of Hungarian households worth HUF 11,166 billion are composed of quoted shares in the amount of HUF 465 billion (of this, HUF 166 billion worth of foreign shares), of other shares in the amount of HUF 1,281 billion and other equity worth HUF 9,419 billion (of this, HUF 587 billion worth of foreign equity) (these latter items are all referred to as unlisted equity). Quoted shares being part of portfolio investments shall be dealt with more in detail in the Section on securities. This Section covers unlisted equity considered to be direct capital investment. At the end of 2014, the ownership of households in **unlisted companies** was HUF 10,700 billion at national economy level, representing 12.5 per cent and 27.7 per cent of this sector's total wealth and financial wealth, respectively. Only a narrow margin of households, i.e. 7.1 per cent of all households owned noticeable unlisted stocks. However, this instrument had a decisive share within their wealth. It usually exceeded the value of these families' non-financial assets. Contrary to the above, in case of those households that do not own equity, the share of deposits, beside the dominating non-financial assets, exceeded the proportion of other instruments (Table 3-3-3). In general, every tenth company receives credit from its owner. This explains why the loans granted represent a higher share within the gross wealth of households owning equity than in the case of the other households where only private credits granted for other households appear.

Table 3-3-3
Composition of wealth of households having and not having unlisted equity, percentage

Does the household have unlisted shares and other equity?	Households concerned	Non-financial assets	Currency	Deposits	Debt securities	Loans	Unlisted shares and other equity	Listed shares	Insurance and pension schemes	Financial derivatives	Other accounts receivable
No	92.9	65.4	4.6	10.4	3.6	0.5	0.0	5.1	4.3	0.1	6.1
Yes	7.1	31.3	1.3	5.2	3.5	5.9	40.9	5.7	3.4	0.0	2.8

Source: HFCS data aligned to the national accounts.

A substantial, around 90 per cent share of households having unlisted equity can be found in the sector's higher income and higher wealth segment, and as part of this group, half of the households belongs into the top wealth decile. They held 93.2 per cent of unlisted equities based on the information available at the end of 2014 (Table 3-3-4).

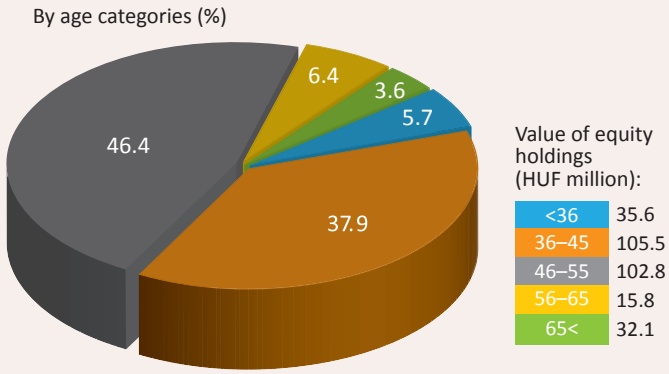
Table 3-3-4
Distribution of households having unlisted equity by income, gross and net worth, at the end of 2014

Deciles	By gross worth per households				By net worth per households				By income per households			
	Unlisted equity (HUF billion)	Unlisted equity (%)	Households having unlisted equity (pcs)	Households having unlisted equity (%)	Unlisted equity (HUF billion)	Unlisted equity (%)	Households having unlisted equity (pcs)	Households having unlisted equity (%)	Unlisted equity (HUF billion)	Unlisted equity (%)	Households having unlisted equity (pcs)	Households having unlisted equity (%)
I.	2.0	0.0	2,893.0	1.0	41.3	0.4	9,023.0	3.1	5.9	0.1	6,167.0	2.1
II.	5.3	0.0	3,118.0	1.1	3.5	0.0	2,749.0	0.9	7.6	0.1	6,212.0	2.1
III.	7.6	0.1	5,222.0	1.8	14.5	0.1	6,831.0	2.3	6.3	0.1	5,645.0	1.9
IV.	17.4	0.2	7,310.0	2.5	18.8	0.2	8,943.0	3.0	29.8	0.3	9,873.0	3.4
V.	15.1	0.1	5,375.0	1.8	41.6	0.4	12,176.0	4.1	85.9	0.8	18,789.0	6.4
VI.	31.1	0.3	6,345.0	2.2	34.9	0.3	5,946.0	2.0	96.1	0.9	15,579.0	5.3
VII.	85.7	0.8	20,727.0	7.0	91.8	0.9	19,246.0	6.5	146.8	1.4	24,613.0	8.4
VIII.	166.6	1.6	33,601.0	11.4	149.1	1.4	25,042.0	8.5	373.1	3.5	46,839.0	15.9
IX.	392.3	3.7	61,040.0	20.7	389.1	3.6	60,671.0	20.6	487.2	4.6	53,707.0	18.3
X.	9,976.6	93.2	148,651.0	50.5	9,915.1	92.7	143,655.0	48.8	9,461.0	88.4	106,858.0	36.3
Σ	10,699.7	100.0	294,282.0	100.0	10,699.7	100.0	294,282.0	100.0	10,699.7	100.0	294,282.0	100.0

Source: HFCS data aligned to the national accounts.

When analysing the territorial distribution of unlisted corporate shares and other equity, households living in Budapest held half of the equity (HUF 5,046 billion), and the value of household investments in Vas, Veszprém and Fejér counties is also outstanding (HUF 1,299 billion, HUF 833 billion and 804 billion, respectively). In the case of households owning unlisted equity, the value of equity per one household was the highest in Vas, Veszprém and Komárom-Esztergom counties (HUF 370 million, HUF 301 million and HUF 257 million). In terms of the age of the reference person, both the total value and the average value of equity holdings was the highest in households where the reference person was aged between 36 and 55 years based on the data at the end of 2014.

Chart 3-3-2
Distribution of households having unlisted equity by income, gross and net worth, at the end of 2014 and average value of equity holdings, percentage and million HUF



Source: HFCS data aligned to the national accounts.

Prevalence of various securities, households having securities

Within the analysis of financial assets, the survey covered three groups of negotiable instruments: investments placed in various mutual funds (mutual fund shares), debt securities (such as government bonds, Treasury bills, other bonds, hereinafter: bonds) and within equity holdings, quoted shares.

According to the supplemented data aligned to the national accounts, 11.6 per cent of households had some type of securities investment at the end of 2014. The most popular type of security is the mutual fund share; 7.4 per cent of households held some kind of mutual fund share, closely followed by bonds with 7.3 per cent and the least number of households had quoted shares (1.3 per cent). The survey reveals that nearly half of the mutual fund share owners also had bonds. This proportion within the circle of bond owners was somewhat higher, that is, a higher proportion of bondholders also owned mutual fund shares. Quoted shares were more popular among households having mutual fund shares, they held almost twice as many quoted shares than bondholders.

All three types of securities are the most widespread in the Central Hungary region; 66 per cent of those holding quoted shares, 53 per cent of those having mutual fund shares and 42 per cent of bondholders reside in Budapest and Pest County. These regions are followed by North Hungary and the West Trans-Danubian region in terms of penetration. The average age of the reference person was the highest for bondholders, i.e., 53.6 years of age, the average age of quoted shareholders was 51.1 years and the value was 49.9 years in the case of mutual fund shareholders.

According to the data aligned to the national accounts, the sum of securities investments was HUF 7,590 billion, representing 8.8 per cent of total wealth and 19.6 per cent of financial assets. Within financial assets, households are most willingly investing their savings into securities after equity holdings.

Table 3-3-5
Distribution of household wealth and security investment by wealth deciles, billion HUF and percentage

Wealth deciles	Total assets		Financial assets		Securities investments	
	Billion HUF	%	Billion HUF	%	Billion HUF	%
X.	42,158	49	25,484	66	6,665	88
IX.	12,652	15	3,680	10	511	7
VIII.	8,729	10	2,468	6	205	3
VII.	6,547	8	1,735	4	98	1
VI.	5,020	6	1,367	4	60	1
V.	3,912	5	1,078	3	17	0
IV.	3,013	4	940	2	18	0
III.	2,159	3	804	2	9	0
II.	1,283	1	726	2	7	0
I.	461	1	388	1	0	0
Total	**85,934**	**100**	**38,670**	**100**	**7,590**	**100**
Of which: TOP 1%	**18,296**	**21**	**14,197**	**37**	**2,716**	**36**

Note: Debt securities, mutual fund shares and quoted shares are considered to be securities investments.

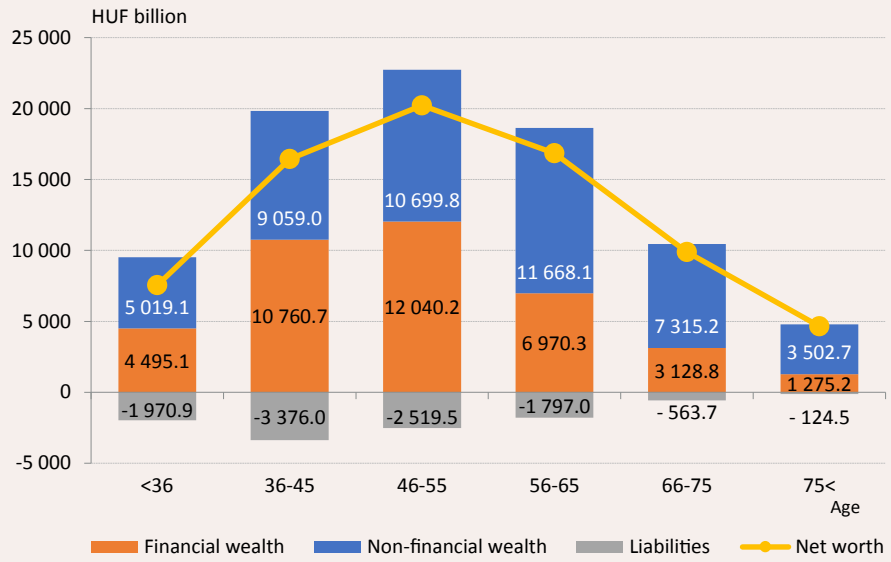
According to the data ranked based on the total wealth per household, households within the wealthiest decile own 88 per cent of securities, but the top 1 per cent already possesses 36 per cent of securities, while from among the various types of securities, shares are mainly concentrated in the wealthiest group. The group of households with the lowest wealth practically does not own any securities that could be expressed as a percentage, and it is also noticeable that the wealthier 50 per cent of households cover more than 99 per cent of the sector's securities wealth. When analysing the same data, in terms of the number of households holding securities, those owning securities are more evenly distributed among the wealth layers. The number of households within the wealthiest decile represents 57 per cent of total households, which means that within households with more wealth, fewer households keep a larger quantity of securities, while within the less wealthy household decile, a much higher number of households own securities, but the value per household is lower. Overall it can be concluded that securities investments are concentrated with the households having significant wealth.

Intergenerational differences in accumulated wealth

The analysis of the data basing on the results of the household finance survey aligned to the national accounts enables us to examine the intergenerational differences, but the obtained results should be evaluated with precaution. On the one hand, this is the first financial survey of households, a snapshot, which provides only limited information about the process of wealth accumulation. We are unable to analyse how the income and the wealth of households and their composition evolved over time. We can only observe whether the households currently in a similar or different life stage show any similarity or difference in terms of the size of wealth and income. On the other hand, several generations may live in one household, which distorts the distribution of wealth among generations, because we classify households in one or another age group based on the age of the main earner, i.e., the reference person. And finally we should not forget either that households may own wealth that has been accumulated over several generations which may be transferred to other households during any period of lifecycle through inheritance or in the form of gift.

Based on the survey data aligned to the national accounts it can be concluded that in 2014 the total wealth and the average wealth per household was the highest among households where the reference person was aged between 46 and 55. The wealth increase observed as age progresses – which is essentially caused by the increase in the volume of financial assets – stops in that stage of life, then the value of wealth gradually declines for older individuals (Chart 3-3-3). The increase in liabilities characterises the early life stage of households, while we see a lower volume of liabilities for the age group with the highest gross wealth (in line with what has been presented under Section 3.2). At the same time, the distribution of net worth by age is similar to that of gross wealth. The age median of households is the upper bound of the top category, that is 55 years.

Chart 3-3-3
Main wealth components of households by age categories, billion HUF



Source: HFCS data aligned to the national accounts.

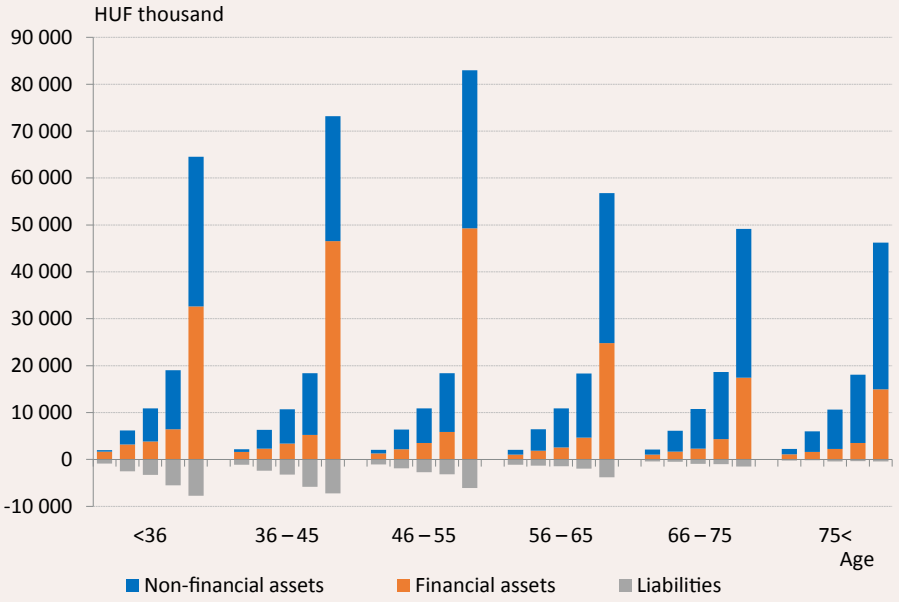
Although the aggregate real estate portfolio of households represents an increasing value until the end of their active age, **the aggregate value of financial assets reaches its maximum level for the considerably younger age group,** while older households realized less financial wealth despite the longer accumulation period. The distribution of the average asset value per one household signals the differences even clearer. Individuals between the ages of 46 and 55 owned real assets in the value of HUF 14 million and financial assets in the value of HUF 16 million on average[23]. The same for the age group between 56 and 65 was HUF 13 million and HUF 8 million based on the survey. Similar differences can be observed regarding average incomes. The gross annual income of HUF 4.5 million per household of those in the 46 to 55 age group drops to HUF 3.2 million in the 56 to 65 age group.

In order to obtain more details, we further breakdown the population of households classified into age groups according to the quintiles generated based on the size of wealth per one household (Chart 3-3-4). In the first four wealth quintiles, the wealth per one household remains practically unchanged in the different age categories. So irrespective of how old the main earner of the household is, the household wealth is more or less identical to the wealth of other households belonging into the same wealth category. However, the wealth composition slightly changes in favour of non-financial assets as the age of the reference person progresses. By contrast, liabilities are higher in the initial stage of life in every quintile and completely diminish by the end of the lifecycle. In the top wealth quintile, however, wealth per household considerably changes in function

[23] Excluding the data of the two wealthy households added to the HFCS (see Section 3.2) the total financial wealth of those between the ages of 46 to 55 was HUF 7,366 billion, while the average financial wealth per one household was HUF 9.8 million. Hence, without the added data, the dominance of young households is even more obvious in the area of equity investments.

of age, and this is what actually determines the distribution of total wealth by age group. Within that, the average size of non-financial assets in the top quintile is practically also independent of age, but financial wealth, and within that, the level of equity holdings change substantially. Because the number of households having corporate capital investment and the value of the equity they hold are both high at a younger age, this is what essentially influences the high value of total wealth in these age groups (see Section 3.1. and the previous part of Section 3.3.).

Chart 3-3-4
Value of main asset and liability components per household by wealth quintiles and age categories, thousand HUF

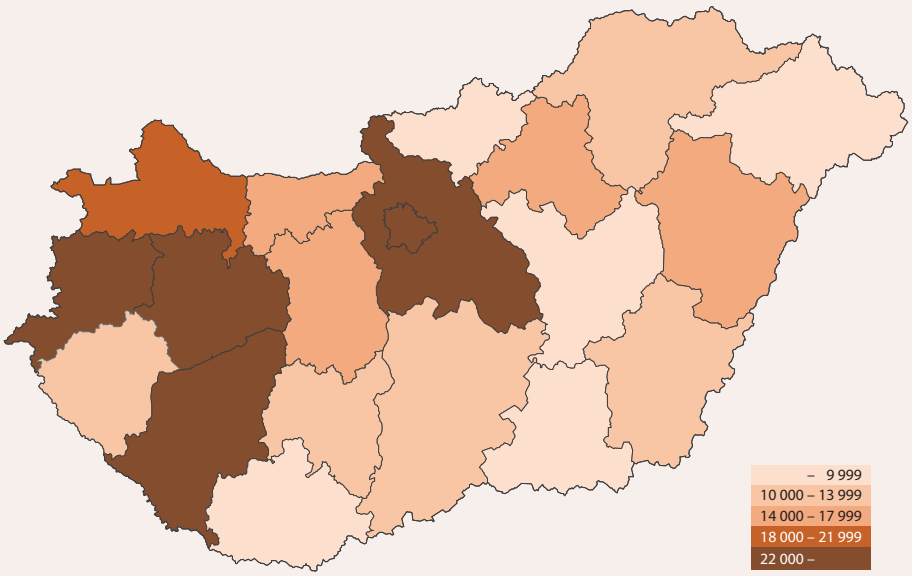


Source: HFCS data aligned to the national accounts.

Territorial differences within wealth distribution according to the data aligned to the national accounts

In the following, we examine the factors that influence wealth differences among the various regions of the country and the changes brought about by the alignment of the survey data to the national accounts (compared to the territorial distribution presented under Section 3.1). According to the modified data of the Hungarian HFCS, the gross worth of households was HUF 68,272 billion while their net worth was HUF 62,132 billion. The alignment to the national accounts increased these indicators to HUF 85,934 billion and HUF 75,583 billion. The total value of financial assets changed from HUF 17,853 billion to HUF 38,670 billion while that of liabilities changed from HUF 6,140 billion to HUF 10,351 billion. Therefore the increase in gross and net worth is attributable to the increased proportion of financial assets, which appeared in households with higher wealth, causing the wealth of the wealthier central and west Hungary counties to increase, while the magnitude of wealth remained practically unchanged in the eastern part of the country compared to the previously presented territorial distribution.

Chart 3-3-5
Mean value of net worth per household by county, thousand HUF



According to the survey data aligned to the national accounts, gross worth and net worth of households residing in Budapest was HUF 28,640 billion and HUF 25,852 billion, representing one third of the sector's total wealth at the end of 2014. The value of assets per household in the capital city amounted to nearly HUF 36 million and its value of assets net of liabilities was HUF 32 million. After the alignment, recognised household wealth in Budapest has increased by nearly 1.5-fold. The average gross income of households was HUF 4.6 million in the capital city. The net value of assets per household dropped to between HUF 20 and 30 million in Vas, Somogy, Veszprém and Pest Counties. In the former counties, the average value of financial assets in excess of real assets, while in Pest County the value of land and buildings approaching the level of the capital city (HUF 17 million) primarily contributed to the evolution of high wealth values.[24] By contrast, the counties with the lowest net worth per household were Jász-Nagykun-Szolnok County (HUF 6 million), Nógrád County (HUF 8 million), Baranya County (HUF 8 million) and Csongrád County (HUF 9 million). In these counties the average value of non-financial assets per household may have been HUF 5 to 7 million, while that of financial assets may have been HUF 3 to 4 million based on the survey. The difference between the counties with the highest and the lowest wealth per household is more than fivefold.

Further correlations in the composition and distribution of income and wealth

In the foregoing it has been established that there is some correlation between the size of income and size of wealth, but the current size of the income does not cleanly determine the size of wealth, that is, the wealthiest households are not necessarily among the ones with the highest income while lower income households may not be necessarily poorer. Namely, not only current incomes but also previous incomes as well as transfers within households (gifts, inheritance) influence the accumulation of wealth, and these correlate with the age of household members. In addition to the above, external circumstances also influence the size of wealth, primarily fluctuations in market prices and exchange rates. It can be assumed that households accumulate wealth from their increasing incomes until the end of their active age, then they spend it or handed over to the next generation. But the results of the Hungarian household finance survey did not show such a straightforward correlation between the age and the size of wealth. In general, the wealth of households in the middle of their active age is the highest, thereafter the observed wealth is gradually shrinking. Incomes per household are

[24] In counties with high average financial assets, the presence of a few households with wealth worth several billions influences the results; therefore the data broken down by county are inaccurate and are for general information only.

also lower, which could be attributed to the fact that employee incomes become less relevant from the 56-65 age group, and are replaced by lower amount pension type incomes (Table 3-3-6).

Table 3-3-6
Mean value per household of main instruments by age categories, million HUF

Age of reference person	Total assets	Real assets	Financial assets	Liabilities	Received gift, heritage	Total income	Employee income	Investment income	Number of households, thousand
76-109	11.6	8.6	3.0	0.3	0.3	1.8	0.1	0.0	424
66-75	16.3	11.6	4.7	0.8	0.4	2.3	0.4	0.1	671
56-65	20.9	13.1	7.8	2.0	0.8	3.2	1.6	0.1	890
46-55	30.4	14.3	16.1	3.4	0.8	4.5	3.3	0.4	749
36-45	21.2	11.4	9.8	4.2	0.9	4.4	3.2	0.4	795
26-35	18.0	9.4	8.6	3.8	0.8	4.2	3.3	0.1	487
17-25	6.3	3.8	2.5	1.2	0.4	2.3	1.8	0.0	112

Source: HFCS data aligned to the national accounts.

It can be concluded that **those households have substantial wealth who also own equity holdings**. The amount of wealth is also significantly shaped by the existence and the value of land and buildings. Macro data show that over two thirds of the auount of financial assets owned by households originated from accumulation (from transactions or net investment) while one third derived from revaluation. Revaluation is of no relevance for numerous widely used financial assets, but by contrast, 70 per cent of the value of equity holdings on average were generated through revaluation and 30 per cent is attributable to capital investments. Also more than half of the positive volume change of real assets derived from revaluation, account taken of the past 20 years (see Section 2.3). In addition to incomes and savings, the creation of the different wealth values was fundamentally influenced by the selection of the instruments, as the value of investment was supplemented with a higher or lower price increase depending on the selected instrument. Households who invested primarily in corporate shares or other equity may have achieved outstanding wealth accumulation, while the same does not hold true for households who opted for traditional investment forms. Because equity investments appeared at a younger age and increased in quantity and value alike, therefore the wealthier households are also positioned in this group.

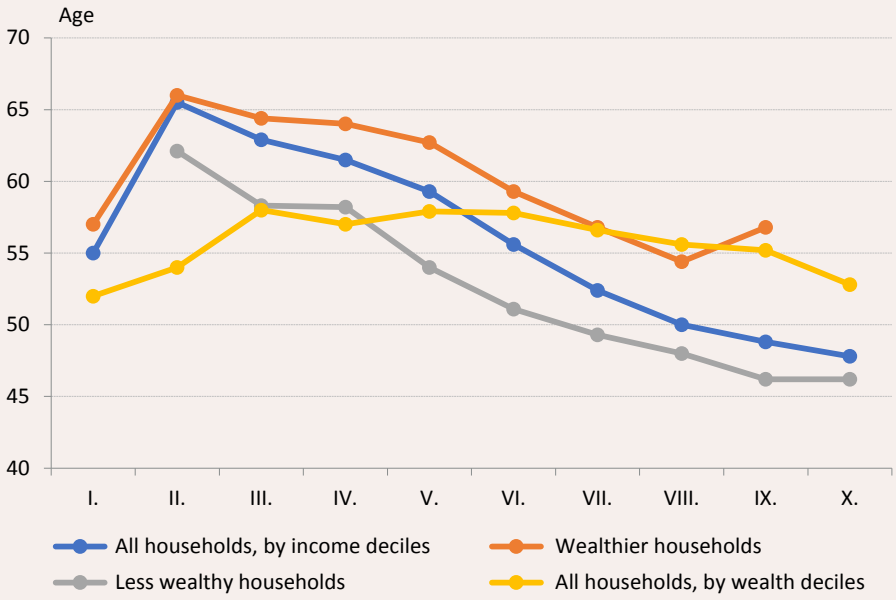
Table 3-3-7
Mean value per household of main instruments by age categories, million HUF

Average data (per household), million HUF	Households by income deciles									
	I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	X.
All households belonging to the given decile (413 thousand households per decile):										
Average age, year	55.0	65.5	62.9	61.5	59.3	55.6	52.4	50.0	48.8	47.8
Average financial assets	1.3	1.5	2.0	3.3	3.5	4.0	5.2	7.0	9.7	56.2
Average real assets	5.5	6.1	7.0	8.1	9.9	10.4	10.8	12.0	15.7	29.0
Average liabilities	1.3	0.8	1.0	1.3	2.0	2.1	2.9	3.0	4.3	6.5
Average income	0.6	1.1	1.4	1.8	2.2	2.7	3.3	4.2	5.5	11.9
of which: pension	0.3	0.8	0.8	0.9	1.0	0.9	0.8	0.8	0.8	0.6
Minimum of wealth	0.0	0.4	0.4	0.6	0.7	0.8	1.1	1.3	1.6	3.6
Maximum of wealth	59.2	85.9	60.0	92.5	121.7	112.3	131.6	138.5	212.0	30,915.0
Minimum of wealth by wealth deciles	0.0	2.1	4.1	6.2	8.3	10.7	13.7	18.1	25.0	38.6
Maximum of wealth by wealth deciles	2.1	4.1	6.2	8.3	10.7	13.7	18.1	25.0	38.6	30,915.0

Source: HFCS data aligned to the national accounts.

Summarizing the factors influencing wealth size, we can state the following. Households with twice as much income own on average twice as much wealth, but there are households with significantly higher or lower wealth in every income group. Households with more wealth are older than the average in every income group, and those with less wealth are younger (Chart 3-3-6). Therefore **there is a positive correlation between the age and the size of the accumulated wealth**, but this is concealed by other factors. In the lower income groups, for the wealthier households, we can primarily observe that the value of real assets is substantially higher than the average, while in the higher income groups, the outstanding value of financial assets also contributes to the substantial amount of wealth (top part of Table 3-3-8). Accordingly, for households having a wealth lower than the average, primarily the lack of real assets is striking, while a volume of financial assets lower than the average is mainly present in the higher income categories (lower part of Table 3-3-8).

Chart 3-3-6
Distribution of average age of reference person by income and wealth decile



Source: Age data contained in tables 3-3-7 and 3-3-8 Wealthier households mean households classified in the higher wealth decile, while less wealthy households mean households classified in the lower wealth decile.

It can be concluded based on the results of the household survey that under similar income conditions, the wealth of the households who received a higher value gift or inheritance from other households is higher. 18 per cent of households indicated that they received some gift or inheritance during their existence with an average value of HUF 4 million. The average amount of such transfer in the lower income groups evolved at around HUF 3 million while in the highest income decile the same was at around HUF 7 million. Households having received such wealth transfer owned one third more gross wealth on average than those who did not receive such support from relatives; in the top income decile, this difference exceeded 40 per cent (see Table 3-3-9). As incomes and wealth increase, so does the number of households who received some support from relatives.

Table 3-3-8
Mean value per household of selected variables of households having more and less wealth than the average broken down by income deciles, million HUF

Average data (per household), million HUF	Households by income deciles									
	I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	X.
Households belonging to the given income decile, but to higher wealth decile:										
Number of households, thousand	287	263	221	207	199	159	123	97	62	
Average age, year	57.0	66.0	64.4	64.0	62.7	59.3	56.8	54.4	56.8	
Average financial assets	1.5	1.8	2.7	4.8	5.1	6.4	9.5	16.4	27.0	
Average real assets	7.7	8.9	11.4	13.6	16.8	19.8	22.1	27.1	40.8	
Average liabilities	1.4	1.0	1.3	1.4	2.7	2.8	3.6	3.4	5.7	
Average income	0.6	1.1	1.4	1.8	2.2	2.7	3.4	4.2	5.6	
of which: pension	0.3	0.8	0.9	1.1	1.2	1.2	1.0	1.0	1.3	
Households belonging to the given income decile, but to lower wealth decile:										
Number of households, thousand		86	133	143	164	205	236	258	273	177
Average age, year		62.1	58.3	58.2	54.0	51.1	49.3	48.0	46.2	46.2
Average financial assets		0.8	1.1	1.6	2.0	2.3	3.0	3.6	5.3	9.6
Average real assets		0.2	1.1	1.5	2.5	3.5	5.0	5.7	8.9	12.5
Average liabilities		0.4	0.6	0.7	1.3	1.5	2.3	2.6	4.1	4.9
Average income		1.1	1.4	1.8	2.2	2.7	3.3	4.2	5.4	8.2
of which: pension		0.7	0.6	0.8	0.7	0.6	0.7	0.7	0.7	0.6

Source: HFCS data aligned to the national accounts.

Table 3-3-9
Per household value of selected variables of households received private transfers broken down by income deciles, million HUF

Average data (per household), million HUF	Households by income deciles									
	I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	X.
Households received private transfers belonging to the given income decile:										
Average private transfers	3.0	2.9	2.3	3.1	2.8	3.7	3.6	4.2	4.1	7.0
Number of households, thousand	35	60	43	55	59	84	76	74	94	127
Average age, year	55.0	64.0	63.0	65.0	61.0	56.5	54.0	51.5	49.2	47.9
Average financial assets	1.7	1.9	2.7	4.7	3.7	5.3	7.1	9.6	10.6	89.0
Average real assets	7.6	8.7	8.4	12.4	11.4	13.6	14.3	15.4	21.9	32.6

Source: HFCS data aligned to the national accounts.

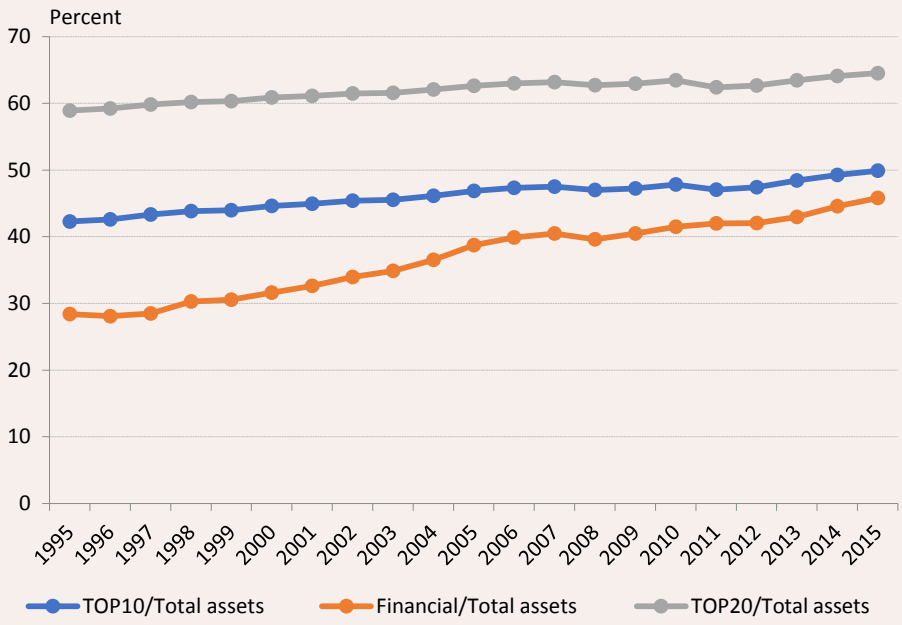
About the temporal change of wealth distribution

In this Section we provide an estimate of the temporal evolution of wealth distribution among households by connecting the one-off microdata and the continuously available macrostatistics. This estimate is based on the assumption that the distribution of the various instruments within the society does not significantly change in time. The HFCS results repeated every three years may provide direct experiences later on regarding that issue. At present we can base this assumption on the relative stability of the distribution of income and equity holdings observed.

The constantly high amount of financial investments in excess of other investments has contributed to the fact that the stock of financial assets held by households has gradually approach the amount of real assets. In the made 1990's financial assets represented less than 30 per cent within household wealth, in 2015 this ratio was already 46 per cent. And within financial assets, the proportion of various securities and, in particular, corporate shares and equity holdings is increasing, supplemented by the revaluation stemming from price changes. According to the household survey data for the end of 2014 aligned to the national accounts, financial assets are more concentrated within the sector than non-financial assets, and from among financial assets, shares, equity holdings and shareholder's credit and securities represent a substantial amount particularly among the investments of wealthy households. Although at present we have some survey results regarding the distribution of household wealth for one single date, we can give an estimate based on the temporal evolution of the proportion of the various instruments regarding the temporal change of the distribution of the total wealth within the sector.

In terms of the latest period, it can be stated that the wealthiest 10 per cent of households disposes over 50 per cent of the sector's (gross) wealth. This proportion may have been significantly lower at around 42 per cent 20 years earlier. The spreading of financial assets and the increase in the value of investments until 2007 gradually increased the share of the top wealth decile from the sector's gross wealth. Thereafter, the pause of asset prices and in 2011 the withdrawal of private pension fund assets led to a temporary decrease in differences. As from 2013, however, we can once again observe an increase in the proportion of the wealthiest households. If we disregard the characteristics of the top wealth group, we can say that wealth differences have not change during the period under review. The second wealthiest household decile – owning 17 per cent and 15 per cent of the sector's gross wealth in 1995 and 2005, respectively – had 8 and 7 times as much wealth in 1995 and 2015, respectively than the lowest quintile of households according to the survey. There may have been some 30-fold difference between the gross wealth of the top and bottom quintile both at the start and at the end of the period. The difference displays an increasing trend, but the financial crisis and the restructuring of the private pension fund system diminished wealth differences according to the present estimate, so from that point on, the slow increase of wealth differences continued from a lower level.

Chart 3-3-7
Share of financial assets and share of total assets of wealthy 10 and 20 percentage in household sector total assets, percentage



Source: Own estimate based on the financial accounts and HFCS data aligned to the national accounts.

4 Distribution of household income and the wealth within the sector in an international comparison

In this Chapter we present the results of the household finance survey together with the data of the additional 19 countries that joint the second wave of the HFCS, based on ECB's summary reports published at the end of 2016.[25] For comparability, we are using the data and the categories of the publications also for the Hungarian households, and in addition to this, we also present in some cases the data aligned to the national accounts, corresponding to the categories of the national accounts.

Hungary's population is less than 2 per cent of the EU's population, its GDP is 0.8 per cent of the EU's GDP, its gross household disposable income is 0.7 per cent of EU households' income, its household net worth is 0.4 per cent of the EU households' net assets according to the data of the national accounts for 2014. Compared to our small share, we contributed with a significant household sample to the results of the second wave of the HFCS. In terms of the gross sample size, that is, the number of visited households, Hungary occupies the second position (with 17,985 households) after France (with 20,272 households). The net sample size – the number of actual data captured – was higher than in Hungary only in Italy, Finland and France, while in Portugal, they reached the same number of households (6207). The sample of the Hungarian household survey covered 0.15 per cent of households which is three times the European average. More than 7 per cent of households included in the HFCS database came from the Hungarian survey. Hence, the Hungarian survey is able to provide robust results by international standards thanks to its size.

The most important summary wealth indicator for households is **net worth**, because this indicator unifies the information related to the various assets and liabilities. The net worth of households in the European Union was EUR 51,400 billion in 2014; of this, the amount per one household was EUR 241,000 on average, that is, HUF 75 million according to macro-statistics.[26] As part of this, households within the Euro area had EUR 264,000 or HUF 83 million net worth. However, in the second wave of the HFCS, the average net worth of households in the euro area was EUR 223,000, that is, HUF 70 million, which means that the survey managed to observe 84 per cent of the wealth contained in the national accounts. Based on the macro-statistical data, net worth per household in Hungary may have been somewhat above HUF 18 million in 2014, of this, the HFCS covered HUF 15 million net worth per household, which also corresponds to an 84 per cent share.

The net worth of households within the European Union was composed of nearly EUR 30,000 billion worth of real assets, EUR 31,000 billion worth of financial assets and nearly EUR 10,000 billion worth of liabilities, that is, the volume of financial assets somewhat exceeded that of non-financial assets. To this, the substantial surplus of financial assets measured in the United Kingdom has also contributed; without this, we can measure a 46 per cent proportion of financial assets in the Euro area at the end of 2014. By contrast, in the official presentation of HFCS results – in the publications of the ECB – 82 per cent of gross wealth is composed of real assets while 18 per cent is financial assets. Therefore, the underestimation of wealth – be it gross or net

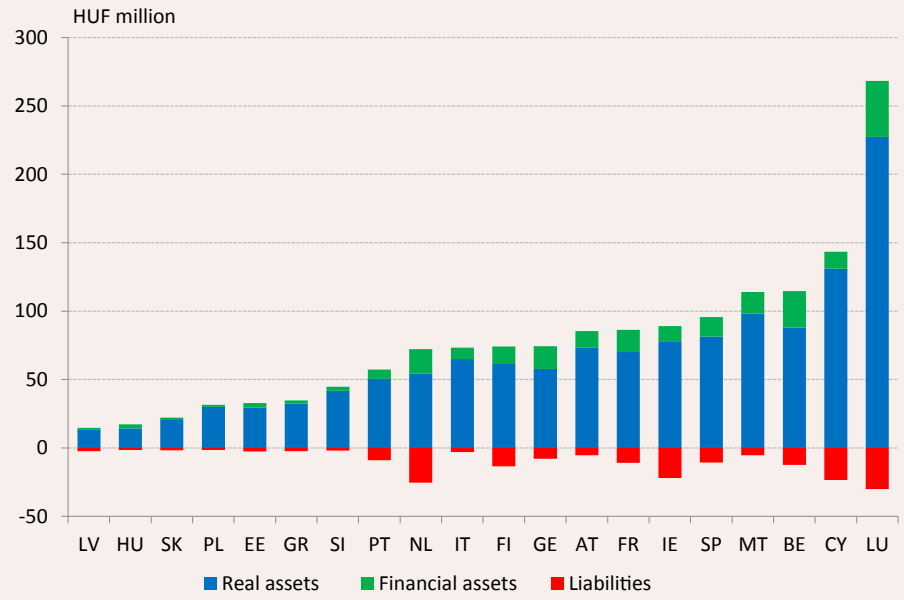
[25] For the list of publicitations, see the Chapter of methodological notes.

[26] No official EU data is available for wealth and its components because the corresponding data of the various member states are missing. The data presented herein are estimates prepared for this publication.

worth – is attributable to the underestimation of the value of financial assets in the household survey.[27] The corresponding results of the Hungarian HFCS reflect 83 per cent real assets and 17 per cent financial assets on average. Therefore, the distribution of gross wealth of households to financial and non-financial assets approximates the European average according to the survey. As a reminder, the Hungarian survey data aligned to the national accounts suggest 55 per cent real assets and 45 per cent financial asset.

According to the macro data, net worth per household at the end of 2014 was higher in Hungary than in Poland and Slovakia, but was lower than in Lithuania (see Chapter 2). By contrast, HFCS results precisely show a reverse order. From among the participants, the average net worth of Lithuanian households was the lowest, i.e., EUR 40,000, that of Hungarian households was EUR 51,000, that of Slovakian households was EUR 66,000 while Polish households had an average net worth of EUR 94,000. Differences are influenced by the completeness and the quality of the coverage and the valuation of the financial assets in the national accounts and in the household survey.

Chart 4-1
Composition of net worth per household in countries participating in HFCS, million HUF



Source: Own calculation based on ECB data (HFCS).

In terms of the distribution of net worth among households, the average European values come back from the results of the Hungarian household finance survey. The wealthiest household decile owned 51 per cent of the sector's net worth according to the aggregate HFCS data, and the poorest 5 per cent of households had negative net worth. In Hungary, the top 10 per cent of households owned 48.5 per cent of the sector's net worth and barely more than 4 per cent of households reported negative net assets according to the original survey data. Hungarian survey data aligned to the national accounts show a greater wealth difference. The top ten per cent of households owned 56 per cent of net worth and the share of households with negative net worth may have been 5 per cent at the end of 2014. According to the published results of the HFCS, the proportion of households reporting liabilities (negative net worth) in excess of the volume of assets was the highest among Dutch (14.3 per cent), Irish (12.4 per cent), Finnish (8.9 per cent) and German households

[27] In the results presented by the ECB, the net worth of businesses and corporations operating with the active participation of households is added to the real assets of households and not to financial assets which causes part of the difference. For this reason, it is not recommended to analyse the composition of wealth based on the ECB's instrument classification. With the proper instrument classification, the share of financial assets increases from 17 to 25 per cent, while the share of real assets obviously decreases from 83 to 75 per cent (see under Section 3.1 on modified data).

(8.7 per cent). Net worth concentrated in the top decile was considerably higher than the European average in Lithuania (64 per cent), in Germany (60 per cent), in Cyprus (57 per cent), in Estonia (56 per cent), and in Austria (56 per cent) according to the aggregate HFCS data.

The age of household members plays a determinant role in the distribution of net worth among households (primarily that of the reference person). In terms of the overall Euro area, wealth per household reaches its maximum level at around the age of 65, but by contrast, the wealth of Hungarian households reaches its maximum at a considerably younger age (see Section 3.3). The same can be observed for the household wealth data published by the younger member states of the European Union (Estonia, Lithuania, Malta, Poland, Slovenia, Slovakia, Cyprus). It is probably that in these countries wealth accumulation and wealth appreciation have become significant over the last few years, and in particular younger households had the possibility to have some share of it.[28]

With the help of the data series summarizing the HFCS results published by the ECB, we can make a number of statements regarding the occurrence and the value of the various financial and non-financial assets and liabilities. The property of largest value of households is generally, the residential property where they live, which represented half of the value of household wealth according to the aggregate HFCS data. Account taken of the original data of the Hungarian survey, this proportion was 56 per cent while based on the data aligned to the national accounts, this proportion was 42 per cent in 2014. 84.2 per cent of Hungarian households lived in their own property as opposed to the 61.2 per cent share measured in the Euro area. Accordingly, the value of residential properties was among the lowest in Hungary in the list of countries featured in the survey (HUF 11 million, see Section 3.1), the measured value was lower only in Lithuania. The value of residential properties basically determines the countries' ranking in terms of wealth size; this explains why Slovakia (with HUF 19 million of average real estate value), Poland (with HUF 27 million of average real estate value) and Estonia (with HUF 21 million of average real estate value) are better ranked than Hungary. In the Euro area, the value of an average flat may have been around HUF 62 million. Substantially higher values were measured in Germany, Belgium, the Netherlands, Austria or Cyprus while the highest average value was observed in Luxembourg (HUF 200 million). The share of households living in their own residential properties is the lowest in Germany and Austria; it does not reach 50 per cent according to the survey data.

From among financial assets, bank deposits are the most popular. Nearly 97 per cent of households in the Euro area had a bank account, bank deposit at the time of the survey. The share of deposits within household wealth was 8 per cent. In Hungary 81 per cent of households reported that they have a bank account. Only in Cyprus, Greece and Lithuania was this ratio lower. There are two types of financial assets that are more widespread in Hungary among households than in Europe, i.e., debt securities (due to increasing demand for government securities) and credit granted to other individuals. According to the original HFCS data, 37 per cent of Hungarian households had some credit debt, one fifth of households mentioned their outstanding mortgage loan and one fourth mentioned other credit debt. By comparison, averages in the Euro area are somewhat higher (42, 23 and 28 per cent). Outstanding loan per debtor household in Hungary was below HUF 4 million based on the survey. This is the lowest value from among the 20 countries (Poland and Slovakia had similarly low average values, while the Euro area average corresponds to HUF 21 million).

[28] Future surveys may confirm the correctness of the assumption if the maximum wealth is shifted to a later age in these countries. In addition to these factors the deeper analysis of the intergenerational transfers may bring other causes to the surface.

Table 4-1
Coverage of HFCS compared to national accounts regarding net worth and certain financial assets, percentage

Participating countries in HFCS	Net wealth	Deposits	Debt securities	Shares and equities	Investment fund shares	Insurance technical reserves
Austria	89.5	45.3	13.0	163.0	35.7	11.3
Belgium	86.2	53.7	20.6	59.9	74.1	21.5
Cyprus	135.4	23.7	19.8	168.7	695.5	63.8
Estonia	149.5	77.2	0.0	93.4	94.0	17.3
Finland	96.4	64.6	27.5	61.3	73.0	14.4
France	74.3	46.2	23.5	124.0	23.0	35.5
Greece	86.2	20.2	5.2	62.7	26.5	4.1
Netherlands	43.8	45.0	435.6	18.6	49.6	11.4
Poland	225.7	29.9	88.0	273.2	19.8	14.9
Latvia	55.2	18.5	52.5	117.8	54.2	9.0
Hungary	**84.0**	**72.1**	**62.9**	**65.5**	**51.7**	**48.2**
Germany	84.3	53.9	44.3	260.5	46.7	26.9
Italy	78.9	30.1	26.2	50.6	23.3	6.3
Portugal	98.9	38.5	6.2	146.6	25.2	15.7
Spain	141.7	43.5	54.9	128.8	20.5	42.8
Slovakia	108.7	27.7	2.0	98.3	8.5	14.3
Slovenia	166.5	30.3	6.7	309.7	24.3	11.2

Source: Own calculation based on ECB and Eurostat data. The stock data of the national accounts have been supplemented (see Chapter 1). The HFCS data reflect the presentation of the ECB, except that businesses operated with the active participation of households are shown among shares and equity holdings and not among real assets. Sole proprietorships are not filtered out because there is no separate information for their value in the data publication of the ECB.

When comparing the wealth data of the household survey with the stock data contained in the national accounts of the various countries, we obtain a rather mixed picture in terms of the quality of both data sets. The measured amount of non-financial assets held by households matches the indicators published in the national accounts up to 60 to 100 per cent, by contrast, the average coverage of financial assets is only 40 to 60 per cent (Table 4-1). The reported values of the various financial assets generally substantially underestimate the macro statistical data accepted as correct, but at the same time, we can also see survey data for debt securities, mutual fund shares, and other equity dramatically exceeding those included in the national accounts, which also raises questions regarding the quality and the completeness of the macro data. The difference of the household wealth data included in the Hungarian survey from the national accounts is relatively even by instrument, therefore the two data sets could be aligned and jointly used without any major difficulties. The information of the two statistics may strengthen one another in every participating country and may contribute to the development of stock reports and balance sheet data of the national accounts and the production of more detailed data regarding households.

5 Notes on methodology

5.1 DEFINITION OF THE MAIN STATISTICAL CONCEPTS USED IN THIS PUBLICATION

Households:

The households sector consists of individuals or groups of individuals who take part in economic processes mainly as consumers or by providing labour (private persons), and may also carry out production activities within the household (as sole proprietors or performing independent activities).

In Hungarian macro-statistics, the household sector (S.14) includes the households of resident individuals and the enterpreneurs that cannot be organisationally distinguished from them. The sectoral classification of businesses is based on their legal form: partnerships, companies are grouped in the corporations sectors while self-employment (sole proprietorships, other self-employed activity) are grouped in the household sector.

The Household Finance and Consumption Survey (HFCS) covers private households, but does not include individuals living in institutional households (institutions, jails, homes, other communities). The business activity and business wealth of private households is also measured, so there is no significant difference in the household categories of data collection and macro-statistics. (See also: ESA 2.118.)

Output (production):

The value of goods and services produced by a specific economic entity (producer) for own final consumption or for other economic agents during a specific period. Use may occur during the production process (intermediate consumption) or in the context of collective or individual consumption. In the national accounts, (agricultural) production by households for own consumption is classified as production activity by households (over and above the production of market goods and services). (See also: ESA 3.07; 3.14.)

Intermediate consumption:

The value of the goods and services during a specific period that are used by producing economic units within the production process. This category does not include fixed assets, the wear and tear of which must be recognised as consumption of fixed capital (depreciation). Goods and services are either transformed or entirely utilised during the production process. (See also: ESA 3.88.)

Value added (gross):

The value obtained as the difference between output (produced goods and services) and intermediate consumption (goods and services used) at the level of an economic agent or sector. This is gross value added; by deducting the value of consumption fixed capital, we obtain net value added. Gross value added is the contribution of an economic agent or sector to the national economy's gross domestic product (GDP). (See also: ESA 8.11- 8.13.)

Operating surplus (gross): We obtain this balancing indicator by deducting the income paid to employees and other production taxes from gross value added and adding other subsidies on production. This corresponds to return on assets, operating profit of enterprises, which can be distributed among investors (creditors, equity holders). Gross operating surplus in the household sector corresponds to the operating surplus of services of owner-occupied dwellings. (See also: ESA 8.15.)

Compensation of employees: Total compensation in cash and in kind provided by the employer, paid by the enterprise to the employee as consideration for the work performed according to the national accounts methodology. Its two main components are wages and salaries and the social security contribution paid by the employer (which the employee also receives and pays to the state budget). Employee income may appear as both an expense (wages paid to the employees of the self-employed) or as revenue (wages paid by the self-employed or wages paid by an employer classified in a different sector). (See also: ESA 4.13.)

Property income: Income accrued when the owners of financial assets and natural resources (land) put them at the disposal of other institutional units. The income payable for the use of financial assets is called investment income, while that payable for the use of a natural resource is called rent. Property income from financial assets and investments is primarily interest, dividends (income withdrawn from a corporation) and insurance income. For households, property income received may take on any of these forms while paid property income can only be interest (on debt liabilities). (See also: ESA 4.41.)

Mixed income: The income of small businesses within the household sector (self-employed, entities involved in business activities with no tax number) and the income of households generated by production for own use. For this type of business activity, employee income and the operating surplus expressing property income cannot be distinguished. (In a statistical sense, entrepreneurs in the household sector are neither the owners nor the employees of their business and thus the income derived from the business is considered mixed income.)

Disposable income: The amount of incomes (primary) due to economic agents for their contribution to the production of value-added and the transfers supplementing them (secondary incomes). This is the amount of income that the various sectors can allocate to consumption and capital formation. Generally speaking, the category of gross disposable income is used, from which amortisation (capital asset utilisation) is not deducted, while taxes are deducted. (See also: ESA 8.15.; 8.31.)

Consumption, final consumption expenditure: Final consumption expenditure consists of expenditure incurred by households, non-profit institutions serving households and the government on goods or services that are used for the direct satisfaction of individual needs or the collective needs of the community. By contrast, actual final consumption refers to the acquisition of goods and services. The difference between the two concepts is the value of the goods and services offered to households as in-kind transfers but funded by the government or non-profit institutions serving households. (See also: ESA 3.94.; 3.95.; 3.101.)

Saving: The unused portion of disposable income constitutes saving. (See also: ESA 8.15.)

Capital expenditure: The accumulation of saved incomes in real and financial assets (investment). Within this category, gross capital formation consists of gross fixed capital formation and changes in inventories. Further accumulation items are the net acquisition of non-produced non-financial assets (land) and investment in financial net worth. Net capital formation is obtained by deducting consumption of fixed capital (amortisation).

Capital transfers: Non-regular transfers of larger amounts (unrequited transfers). Capital transfers include capital taxes, investment grants and other capital transfers. For households, this category primarily includes European Union grants, large winnings and compensation (e.g. deposit insurance or investment insurance).

Net lending/borrowing, net financing: The balancing indicator of the capital and financial account of national accounts, with identical content, pertains to a specific economic sector or the entire national economy. Net lending, also known as net financing or net financial savings is the amount obtained as the difference between saving and capital formation accumulated by a specific sector or the entire national economy in the form of financial assets and used to finance (excess) consumption and capital formation by other sectors or the non-resident sector. If this figure is negative, it means that the (excess) consumption and capital formation of the sector or the entire national economy is financed by another sector or the non-resident sector. The household sector typically exhibits (positive) net lending, also referred to as financial savings. (See also: ESA 5.17., 5.18.)

Wealth, net worth: Macro-statistics present the amount of the various assets and liabilities owned by the various sectors and economic agents (in sum: assets, instruments) at market value in the context of the balance sheet. The balancing item on the balance sheet is net worth, which is the difference between assets (total assets) and liabilities (total liabilities, including issued equity). (See also: ESA 5.16.; 7.01.; 7.02.)

While the accounting balance sheet is a statement of balanced assets and liabilities that sums up the wealth of economic agents from two perspectives, assets and liabilities in the statistical balance sheet often differ in volume, and the balancing net worth (own wealth) is a technical item. Due to the unique structure of the balance sheet, the term (gross) worth is generally not used in macro-statistics. In this publication, the total assets on the asset side of the balance sheet is regarded as (gross) worth. Households' wealth is thus the total of the financial and non-financial assets held by them. Gross worth includes the net value of fixed assets (gross value minus amortisation), as this is the closest to market value.

Net financial worth: The difference between financial assets and liabilities, the balancing item of the stocks in financial account (financial balance sheet). Net financial worth reveals the "external financial position" of a sector, i.e. its position as a net lender or a net borrower. (See also: ESA 7.10.)

Produced non-financial assets: Produced non-financial assets are outputs from production processes. It consists of fixed assets which are used repeatedly or continuously in production for more than one year; inventories which are used up in production as intermediate consumption, sold or otherwise disposed of; and valuables. Valuables are not used primarily for production or consumption, but are instead acquired and held primarily as stores of value. For households, this includes property, valuables and vehicles, machinery, equipment used for producer (entrepreneurial) activity, other assets and inventories. (See also: ESA 7.22-23.)

Non-produced non-financial assets: Non-produced non-financial assets are economic assets that come into existence other than through processes of production. They consist of natural assets, contracts, leases and licences, and goodwill and marketing assets according to the system of national accounts. For households, this primarily includes holdings of land. (See also: ESA 7.24.)

Financial assets: Financial instruments (with the exception of monetary gold bullion) are claims that are simultaneously liabilities for other institutional units, thus the impact of the economic events associated with an instrument is recognised on the balance sheet of both agents, on the asset side of one agent and the liability side of the other agent. For households, relevant financial instruments on the asset side include currency (cash), bank deposits (current accounts and fixed deposits), debt securities (bonds, notes, treasury bills), loans granted, shares and other equity, mutual fund shares, insurance premium reserves (claims on life insurance, other insurance or pension fund savings), financial derivatives and other receivables. The liability side of households' balance sheet includes various debt liabilities (housing loans, consumer and other loans) financial derivatives and other liabilities. (See also: ESA 5.03.)

5.2 METHODOLOGICAL NOTES ON THE INTERNATIONAL DATA

Presentation of international data (Chapter 1) relating to the household sector (S.14) primarily covers the European Union and its Member States, but in some cases, statistics on other developed economies are also shown. The source of data concerning EU Member States and other European countries is based on the Eurostat database (national accounts, financial accounts). Data on non-European countries are derived from OECD databases. This publication is based on the information available at the end of 2016. Data issued with the longest time lag cover the stocks of non-financial assets (Member States must report to Eurostat on the respective data no later than two years after the reference period) and therefore, household wealth could be surveyed in the period ending 2014. (In respect of financial assets, year-end data of 2015 were already available.)

Non-financial assets in the household sector comprise fixed assets, inventories (all together: produced assets) and the value of land (non-produced assets). In case of several countries, not all of these data are available for the period ending 2014 or any period, and therefore the missing figures had to be estimated. The range of countries listed in the diagrams is based on the extent to which they had to supply or should have supplied the missing stock data. However, in order to determine the total of the financial and non-financial worth of the entire European Union, some kind of simple estimation was needed for all Member States. Most countries provide information on the value of fixed assets (the main item for households is property), and expert estimates were only necessary in the case of Spain. Estimations were also necessary in order to determine the value of inventories held by households in the case of Austria, Denmark, Germany, Italy, Luxembourg, Slovakia, Spain, Cyprus and Romania. With regard to the value of land (plot of land, arable land) owned by households, estimates had to be prepared for many more countries. When estimating, it had to be taken into consideration that the data provided by countries on non-financial assets held by the household sector (S.14) include the assets of non-profit institutions serving households (S.15) (resulting in an overestimate by 10 per cent at maximum), or that the value of lands belonging to properties (land plot, non-produced assets) might be included in (cannot be separated form) the value of properties (produced non-financial assets). Leaving out data on non-produced non-financial assets results in a much more serious data gap in observing household wealth compared to inventories, and therefore, provision of these missing data is essential for the comparability and completeness of data. In Central and Eastern European countries the value of land may account for 20%-30% of the value of household non-financial assets, while it may reach 40% in Western European countries.

In respect of data on financial assets and liabilities, most countries report data separating the value of stocks held by households (S.14) from the value of stocks held by non-profit institutions serving households (S.15), and therefore reducing the stocks of financial assets was necessary only in case of a few countries. There may

be deficiencies in the national account statistics regarding the full observation and market valuation of financial assets, however they are less likely to be discovered in the aggregate data. The value of financial assets held by Slovakian households was the only data that was supplemented for the purposes of this publication by an estimated stock of unquoted shares and other equity as their absence was particularly visible.

Presentation of time series data comprises 20 years of flow data of the national accounts (1995-2014). Related stock data could be presented for the period from the end of 1995 to the end of 2014. GDP at current prices for 1995 was available for each country, however, the stocks of household worth at the end of 1995 had to be estimated for several countries. Of the presented countries, estimations had to be made for the 1995 year-end value of household worth (in addition to the value of land) of the Netherlands, Poland, Spain and Romania, using subsequent data or flow data. Application of the renewed methodological rules for national accounts (ESA 2010) in European Union Member States became mandatory in 2014. The expectation was that Member States should revise the annual data of the national accounts in accordance with the new methodology, retrospectively back until 1995. In spite of this, time series revised back until 1995 according to ESA 2010 are not available at present for some countries and therefore, in these cases we used data compiled according to the ESA 95 methodology. (We assumed that with regard to the household sector, the methodological changeover did not affect stock data significantly.)

Names of European and non-European countries or their abbreviations used in charts:

AT – Austria
BE – Belgium
CY – Cyprus
CZ – Czech Republic
DK – Denmark
EE – Estonia
FI – Finland
FR – France
GE – Germany
GR – Greece
HU – Hungary
IE – Ireland
IT – Italy
LU – Luxembourg
LV – Latvia
NL – Netherlands
PL – Poland
PT – Portugal
SK – Slovakia
SP – Spain
SW – Sweden
UK – United Kingdom
AU – Australia
CH – Switzerland
JP – Japan
KO – Republic of Korea
US – United States of America

5.3 METHODOLOGICAL NOTES ON HUNGARIAN MACROSTATISTICAL DATA

The source of data for the domestic household sector is the national account statistics of HCSO and the financial account statistics of the Magyar Nemzeti Bank. This publication could take into account the statistical data that were available at the end of 2016. Flow data of the annual national accounts until 2015 were published by HCSO on 30 September 2016, while stock data of fixed assets and inventories until 2014 were published on 23 December. On 31 December 2016, the MNB published the data of financial accounts of the national economy covering the period before 2016 Q3 and including data which were revised retrospectively until 1989-ig.

As both the flow data of non-financial national accounts and the flow and stock data of financial accounts were available for 2015, this data release covers data for 2015 (flow data of 2015, stock data of year-end 2015). However, with a view to providing a comprehensive presentation of household worth, stock data of non-financial assets held by households at year-end 2015 had to be estimated. Stock data of year-end 2014 and flow data of 2015 (gross fixed capital formation, consumption of fixed capital) provided guidance on this. In addition, an estimate for the entire period had to be prepared in order to determine the value of non-produced non-financial assets (mainly land) held by households as the stock statistics of HCSO do not yet include the value of non-produced assets.

With regard to the value of non-produced non-financial assets held by domestic households, estimates for this publication were made in two parts. On the one hand, an estimate was made to determine the value of lands (plots of land) belonging to properties, in an amount of 20% of the value of properties. On the other hand, an estimate was prepared to determine the value of utilised agricultural area (arable land, pasture, forest, etc.) based on the size of the areas and the price data supplied by HCSO and FHB. Both estimates were calculated at the aggregated level, covering the entire sector.

Net lending of a sector, referred to as net financing or net financial savings in financial accounts terminology, is the prominent balancing item in the system of national accounts. Here, the balance of capital account calculated from the top, from the direction of revenues and expenditures is linked to the balance of the financial account calculated from the bottom on the financing side (i.e. changes in net financial worth originating from transactions). The balances calculated from two directions and from independent sources are not equal, which indicates errors in statistical processing. The statistical discrepancy may reflect coverage and timing differences in compiling the accounts of the balance. Additionally, ad hoc errors may distort the balances. Differences in timing stem from recording financial events at different times and are temporary, while differences in coverage may persist in the long run. In our case, the balance of the household sector is continuously more favourable when measured from the direction of financial accounts then when calculated from non-financial accounts, which suggests differences in coverage and observation. A working group of HCSO and the MNB regularly reviews the possibility of harmonising the national accounts, data sources and the impacts of transactions on data of financial and non-financial accounts. From time to time, it also performs enhancements with a view to improving data quality and coherence. Prior to the compilation of this publication, financial accounts statistics performed a comprehensive data revision in the stock and flow data of the household sector, which reduced the sector's net lending by HUF 100 billion and consequently the size of statistical discrepancy. At this point we cannot see further opportunity for reducing discrepancy on the side of financial accounts. (In the context of financial assets, shortcomings in coverage present a risk of underestimating financial savings.) In order to ensure the disclosure of the integrated national accounts, we removed the remaining statistical errors by increasing the amount of property income of households in this publication. Further coordination between the two institutions, the internal consistency and data revision practices of national accounts will determine when and to what extent the new results of harmonization can appear in the data of national accounts.

5.4 METHODOLOGICAL NOTES ON DATA OBTAINED FROM THE HOUSEHOLD SURVEY

The first summary description of the Hungarian HFCS was published in the July 2016 issue of Statisztikai Szemle (Hungarian Statistical Review) (Simon–Valentiny). This study was based on the preliminary data from the 2014 Hungarian survey. However, further corrections were made to the data until the cut-off date in September 2016, therefore the data presented in this publication may slightly diverge from those published earlier. This publication uses the data sent to the ECB in the autumn of 2016 and converted to euros; the figures were reconverted to forints at the average HUF/EUR exchange rate of 306.07. (This is the average exchange rate during the period covered by the survey, i.e. October 2013 and September 2014.)

The publication uses the household survey's weighted data, i.e. the data grossed up, extrapolated to the whole population. All the households and all the persons in the households (members of households) have a weight that shows the number of households (or persons) represented by them within the household sector (within the society). The unweighted data are only shown in a few places, in Section 3.1 presenting the results of the survey (under the headings "Number of households concerned" and "Sum in the sample"), for general information purposes. The average weight in the Hungarian survey is 665, therefore one surveyed household

(or person) represents or stands for 665 households (or persons) on average. In addition to grossing up, the weighting contributed to the adjustment of the distortions in the pattern features during implementation.

This publication distinguishes four successive stages of the Hungarian HFCS's (weighted) data: the original, the modified, the supplemented data and those fitted, aligned to the national accounts. The original data mean the HFCS database available to users. These are not the surveyed, raw responses received, but the data after data correction, subsequent data provision and imputation that have been processed, weighted and that have received technical identifiers, and were sent to the ECB. Modified data mean the version of the original dataset that has been subject to the adjustments presented in this publication. The adjustments are detailed in the next paragraph. The supplemented dataset means the modified dataset supplemented with two further households. The supplementation aims to take into account the households with the greatest wealth and income that were excluded from the survey. The supplementation was performed based on administrative data, therefore it contains only declared income and assets. The dataset aligned to the national accounts means the adjustment of the modified and supplemented data to the stock data of national accounts for the end of 2014. Fitting was performed instrument by instrument, using prorating in the case of comparable instruments (all the households were assigned the same multiplier), and by dividing the amount in the national accounts in the proportion of another instrument in the case of instruments not covered by the survey.

Summary of the household-level modifications on the original Hungarian HFCS data compiled in 2014

Households' leasing liabilities were not surveyed among debt liabilities. This may have been due to the fact that respondents did not necessarily know the outstanding amount of the full debt, since they treat the lease as a rental scheme. Therefore only the amount of the lease payment was surveyed. For the purposes of statistics, vehicle and home leases in the case of households are usually considered borrowing and debt repayment schemes, therefore it was necessary to establish and take into account among debt liabilities the leasing liabilities of the households concerned. In view of the lease payments, i.e. repayment instalments, estimates were prepared for these stocks, therefore households' grossed-up debt liabilities increased by HUF 297 billion. During the estimation, a 6-per cent interest rate and a 10-year maturity were assumed in all cases, and that the households concerned were at the middle of the maturity on average at the time of the survey.

In line with the goals of the survey, households dedicated assets and liabilities (loans, deposits, properties, vehicles etc.) should, in theory, contain instruments for business purposes (used in self-employment or agricultural production) as well. However, the text of the survey did not specifically point this out. In the case of some households, it seemed to be necessary to slightly increase the stock of bank deposits or non-financial assets, since the reported value of the sole proprietorship did not fit into the value of the assets. (The reported value of the sole proprietorship is considered additional information, and it is the aggregate net amount of the assets and liabilities that the household listed among the assets concerned.)

For most households in the survey, establishing and reporting the value of equity investments proved to be a tall order. The business value reported or imputed during data processing had to be modified in several cases, since it was not in line with the size of other assets and incomes. As a result of the additions and reductions during the adjustment, the grossed-up (weighted) stock of households' financial assets expanded by HUF 345 billion in total. The data correction relied on the value of the business, the business' reported characteristics (corporate form, activities, headcount etc.) and the other assets of the household. The adjustment mainly affected the value of equity investments in partnerships and corporations that are part of households' financial wealth, while the reported value of sole proprietorships remained the same.

During the data modification for the purposes of the publication, more than 100 households were assigned a current account, and in some cases a time deposit (with a grossed-up value of over HUF 50 billion overall), since their other characteristics (their sole proprietor status or their bank credit debt) suggested that they had a bank account, however, respondents did not report this.

In the case of a few households, adjustments had to be performed by orders of magnitude with respect to the excessively high value of the inspected properties, vehicles and private loans granted that were not substantiated by other household characteristics. As a result, the grossed-up (weighted) stock of non-financial assets diminished by HUF 1,085 billion, while that of credit claims declined by HUF 156 billion.

Only a few households realised and indicated during the survey that they earned property income on their financial assets and investments in the year preceding the survey. Since property income from interest-bearing instruments (loans, deposits, securities) can be calculated relatively accurately, a calculation was performed for the missing interest income during data processing and imputation, and the original HFCS dataset already contained this. However, with respect to the income extracted from businesses and companies (dividends, equity), there was no subsequent data provision or supplementation. Since the absence of property income distorts total income as well, estimates were prepared for the missing amount based on the stock of capital investments, which boosted households' grossed-up annual income by HUF 417 billion. During the estimation, the experiences gained from the examination of the corporate database used for compiling the financial accounts were employed with respect to the dividend payment practices of the firms of various sizes and types.

Methodological notes on the classification into wealth and income groups within the household sector

This publication usually presents the data from the household survey (micro data) by the household groups (deciles) created based on households' gross or net wealth. Furthermore, in some cases, the data differentiated by household groups (deciles) based on total gross income are also shown. The use of wealth size categories is warranted by the fact that primarily wealth data are presented. Wealth size categories mean the groups created based on households' gross wealth (total assets), unless otherwise indicated. The groups based on net worth were created taking into account households' stock of assets less their liabilities. Households' classification into the groups was based on the assets and income aggregated to the household level.

5.5 REFERENCES AND RECOMMENDED LITERATURE

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5.6 ABBREVIATIONS

Institutions

ECB – European Central Bank
Eurostat – The statistical office of the European Union
IM – Hungarian Ministry of Justice (Business Information Service)
HCSO – Hungarian Central Statistical Office
NAV – National Tax and Customs Administration of Hungary
OECD – Organisation for Economic Cooperation and Development

Other concepts

ESA 95, ESA 2010 – European system of national accounts, the 1995 and the 2010 version, respectively. The methodological standard regulating the compilation of the national accounts in the European Union.
GFS – Government finance statistics.
HFCS – Household Finance and Consumption Survey.
HFCN – Household Finance and Consumption Network, the ECB working group in charge of the creation, development and implementation of the Household Finance and Consumption Survey.

6 Tables

Table 6-1
Gross and net worth of households, billion HUF

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Non-financial assets of households	**9,413**	**12,092**	**14,976**	**16,902**	**19,884**	**22,344**	**24,835**	**26,757**	**28,896**	**30,782**	**32,495**
Fixed assets (net)	7,449	9,592	11,874	13,361	15,755	17,754	19,850	21,253	22,865	24,457	25,826
of which: dwellings	6,418	8,337	10,339	11,649	13,747	15,479	17,331	18,594	20,048	21,495	22,790
Inventories	80	83	84	111	130	142	149	149	155	155	160
Land	1,884	2,417	3,018	3,430	3,999	4,448	4,836	5,355	5,876	6,170	6,509
Financial assets of households	**3,732**	**4,725**	**5,971**	**7,339**	**8,742**	**10,335**	**12,021**	**13,757**	**15,478**	**17,706**	**20,528**
Currency	423	466	527	622	788	821	905	1,045	1,184	1,156	1,387
Deposits	1,498	1,874	2,201	2,632	2,956	3,317	3,819	4,133	4,749	5,293	5,867
Debt securities	220	349	487	609	773	855	943	1,009	1,107	1,302	1,203
Loans	161	196	238	284	331	380	429	504	566	598	626
Equity and investment fund shares	971	1,274	1,822	2,245	2,670	3,368	3,931	4,602	5,034	5,744	7,109
Insurance technical reserves	141	202	292	453	672	944	1,242	1,600	1,940	2,537	3,182
Financial derivatives	0	0	0	0	0	0	0	0	0	0	0
Other accounts receivable	317	365	404	494	552	650	752	865	899	1,077	1,155
Gross worth of households	**13,144**	**16,818**	**20,947**	**24,241**	**28,626**	**32,679**	**36,857**	**40,514**	**44,374**	**48,488**	**53,023**
Liabilities	636	686	802	886	1,087	1,423	1,952	2,843	4,083	5,132	6,269
Net worth of households	**12,508**	**16,132**	**20,145**	**23,355**	**27,539**	**31,256**	**34,904**	**37,672**	**40,292**	**43,356**	**46,754**

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Non-financial assets of households	**35,162**	**37,719**	**40,502**	**42,059**	**42,749**	**43,646**	**45,249**	**46,159**	**47,264**	**48,794**	
Fixed assets (net)	28,011	30,148	32,312	33,494	34,104	34,733	35,381	35,875	36,393	37,028	
of which: dwellings	24,813	26,806	28,802	29,928	30,513	31,108	31,718	32,094	32,553	33,100	
Inventories	158	153	148	142	141	143	143	141	146	146	
Land	6,993	7,418	8,042	8,423	8,504	8,770	9,725	10,143	10,725	11,620	
Financial assets of households	**23,308**	**25,656**	**26,539**	**28,615**	**30,332**	**31,614**	**32,818**	**34,787**	**37,991**	**41,219**	
Currency	1,652	1,884	2,098	2,149	2,235	2,394	2,356	2,615	3,087	3,695	
Deposits	6,202	6,653	7,585	7,991	7,782	8,336	8,361	7,586	7,566	7,734	
Debt securities	1,313	1,174	1,442	1,380	1,591	1,726	2,134	2,752	3,052	3,756	
Loans	682	719	761	812	860	920	949	981	1,153	1,208	
Equity and investment fund shares	8,280	9,338	9,106	9,700	10,615	11,095	11,694	13,338	15,237	16,729	
Insurance technical reserves	3,919	4,624	4,348	5,381	6,002	3,035	3,088	3,194	3,455	3,569	
Financial derivatives	1	1	2	0	0	1	1	1	69	1	
Other accounts receivable	1,259	1,264	1,198	1,204	1,248	4,107	4,235	4,320	4,371	4,527	
Gross worth of households	**58,470**	**63,375**	**67,041**	**70,674**	**73,080**	**75,260**	**78,066**	**80,946**	**85,254**	**90,013**	
Liabilities	7,435	8,832	11,080	11,143	11,934	11,792	10,364	9,770	9,672	8,703	
Net worth of households	**51,036**	**54,543**	**55,961**	**59,531**	**61,146**	**63,468**	**67,702**	**71,176**	**75,582**	**81,310**	

Source: MNB (financial accounts), HCSO (national accounts). The value of lands for the whole period and the value of real assets at the end of 2015 are the MNB's own estimates.

Table 6-2
Detailed financial accounts of households, stocks, billion HUF

	1989	1990	1991	1992	1993	1994	1995	1996	1997
Financial assets	**894.3**	**1,100.0**	**1,499.0**	**1,963.0**	**2,407.4**	**2,955.9**	**3,731.8**	**4,725.2**	**5,971.0**
Currency and deposits	**494.7**	**585.1**	**774.9**	**1,040.8**	**1,249.7**	**1,521.8**	**1,921.5**	**2,340.3**	**2,727.9**
Forint currency	147.6	163.1	186.8	242.9	293.3	330.5	377.4	416.2	470.2
Foreign currency	12.4	18.3	22.6	24.3	28.1	34.0	45.8	50.1	57.2
Forint deposits with credit institutions	298.9	320.2	418.7	605.9	706.3	841.6	1,031.0	1,355.1	1,636.6
Foreign currency deposits with credit institutions	25.2	71.5	132.2	152.5	204.4	293.6	438.0	485.0	523.1
Deposits with central government	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deposits at rest of the world	10.7	11.9	14.6	14.6	16.4	20.1	26.8	31.2	37.4
Debt securities	**27.8**	**34.7**	**71.9**	**95.5**	**115.6**	**162.0**	**220.3**	**348.8**	**486.8**
Short-term securities of central government	1.7	2.4	2.2	9.0	28.9	80.0	117.5	171.2	334.8
Long-term securities of central government	0.0	0.0	0.2	17.8	45.4	54.8	73.8	117.7	79.3
Securities of non-financial corporations	9.0	5.0	1.8	2.9	0.4	2.6	10.6	20.7	20.1
Securities of credit institutions	17.1	27.4	67.7	65.8	40.9	24.6	16.7	25.8	33.2
Securities of rest of the world	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securities of rest of the world	0.0	0.0	0.0	0.0	0.0	0.0	1.8	13.4	19.5
Loans	**28.6**	**41.1**	**61.8**	**82.6**	**105.6**	**129.3**	**160.6**	**195.9**	**237.7**
Equity and investment fund shares	**202.8**	**270.4**	**384.4**	**510.9**	**657.1**	**786.7**	**971.0**	**1,273.7**	**1,822.4**
Equity in non-financial corporations	185.0	245.1	346.6	465.1	607.0	702.3	860.6	1,091.1	1,480.1
Equity in financial corporations	1.5	9.3	16.4	18.7	9.8	20.5	24.4	41.4	87.1
Equity in non-resident corporations	16.3	16.0	19.7	21.9	26.3	28.9	36.4	43.0	53.1
Mutual fund shares of residents	0.0	0.0	1.7	5.2	14.0	35.0	49.6	98.2	202.2
Mutual fund shares of non-residents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Insurance, pension and standardized guarantee schemes	**31.1**	**40.2**	**49.9**	**56.8**	**74.3**	**99.6**	**141.4**	**201.7**	**291.9**
Non-life insurance reserves	3.2	9.7	12.6	15.5	19.6	33.5	49.7	62.7	75.7
Life insurance reserves	27.9	30.5	37.3	41.3	54.7	65.8	85.1	115.6	158.9
Pension fund reserves	0.0	0.0	0.0	0.0	0.0	0.4	6.7	23.4	57.4
Private pension fund reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other fund reserves	0.0	0.0	0.0	0.0	0.0	0.4	6.7	23.4	57.4
Financial derivatives	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Other accounts receivable	**109.2**	**128.4**	**156.2**	**176.4**	**205.1**	**256.5**	**316.9**	**364.8**	**404.2**
of which: tax and contribution receivables	57.8	61.2	72.0	85.5	99.3	120.4	139.4	166.1	204.0
of which: claims on unpaid wages	36.9	44.3	49.8	44.1	46.3	61.0	80.4	80.5	72.0
of which: claims due to pension fund withdrawals	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liabilities	**434.5**	**489.6**	**400.8**	**449.3**	**525.8**	**610.9**	**636.0**	**685.6**	**802.1**
Loans	**354.0**	**392.0**	**273.0**	**290.7**	**334.4**	**377.3**	**350.6**	**332.7**	**385.1**
Loans from non-financial corporations, HUF	34.1	38.9	39.0	39.0	38.9	39.3	40.0	40.6	41.9
Housing loans from credit institutions, HUF	272.9	290.9	167.6	174.4	193.7	187.6	170.7	150.5	137.4
Housing loans from credit institutions, foreign currency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5
Consumer and other loans from credit institutions, HUF	46.9	61.0	63.4	69.2	88.6	131.3	117.8	115.0	138.8
Consumer and other loans from credit institutions, foreign currency	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2
Housing loans from other financial corporations, HUF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Housing loans from other financial corporations, foreign currency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Consumer and other loans from other financial corporations, HUF	0.1	0.1	1.1	3.1	6.0	7.2	8.0	9.3	8.7
Consumer and other loans from other financial corporations, foreign currency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
Loans from general government, HUF	0.0	1.0	1.9	4.9	7.1	11.9	14.1	17.2	56.8
Loans from rest of the world, foreign currency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial derivatives	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Other accounts payable	**80.5**	**97.7**	**127.7**	**158.7**	**191.4**	**233.6**	**285.4**	**352.9**	**417.0**
of which: trade credits and advances	13.2	20.2	31.9	44.0	56.0	66.7	84.1	109.2	130.3
of which: tax and contribution payables	57.8	61.2	72.0	85.5	99.3	120.4	139.4	166.1	204.0
Net financial worth	**459.8**	**610.4**	**1,098.3**	**1,513.7**	**1,881.7**	**2,344.9**	**3,095.7**	**4,039.6**	**5,168.9**

Table 6-2 (continuation)
Detailed financial accounts of households, stocks, billion HUF

	1998	1999	2000	2001	2002	2003	2004	2005	2006
Financial assets	**7,339.1**	**8,741.8**	**10,334.6**	**12,021.2**	**13,757.0**	**15,478.3**	**17,706.0**	**20,528.5**	**23,308.4**
Currency and deposits	**3,254.2**	**3,744.3**	**4,138.0**	**4,724.5**	**5,177.4**	**5,932.4**	**6,448.8**	**7,253.5**	**7,853.6**
Forint currency	557.3	720.7	748.8	880.8	985.0	1,115.4	1,088.3	1,309.7	1,501.2
Foreign currency	64.8	67.5	72.0	24.6	59.5	68.1	67.7	77.0	150.6
Forint deposits with credit institutions	1,961.8	2,243.8	2,501.8	2,966.2	3,408.7	4,036.6	4,594.3	5,053.5	5,151.9
Foreign currency deposits with credit institutions	617.4	651.0	739.0	767.5	628.4	588.8	565.2	640.8	838.9
Deposits with central government	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2
Deposits at rest of the world	48.7	56.6	71.1	82.3	92.9	120.9	130.1	172.3	207.9
Debt securities	**609.4**	**773.2**	**854.6**	**943.0**	**1,008.9**	**1,106.6**	**1,301.9**	**1,202.7**	**1,313.0**
Short-term securities of central government	449.3	552.9	592.1	640.1	727.6	805.5	855.3	738.8	811.4
Long-term securities of central government	113.4	174.8	204.7	210.7	211.1	216.8	285.5	283.1	284.8
Securities of non-financial corporations	7.4	9.1	8.2	14.5	18.2	31.9	23.7	19.5	17.2
Securities of credit institutions	27.3	34.5	31.8	44.1	45.2	45.2	127.6	136.2	162.3
Securities of rest of the world	0.0	1.4	2.2	3.2	6.6	6.9	7.9	23.4	36.9
Securities of rest of the world	12.0	0.5	15.6	30.3	0.1	0.3	1.8	1.6	0.4
Loans	**283.6**	**330.6**	**380.0**	**428.5**	**503.8**	**565.9**	**598.0**	**625.7**	**682.3**
Equity and investment fund shares	**2,245.3**	**2,669.6**	**3,367.9**	**3,930.6**	**4,602.3**	**5,034.5**	**5,743.7**	**7,108.7**	**8,280.3**
Equity in non-financial corporations	1,827.2	2,156.3	2,714.1	3,183.7	3,645.9	4,087.3	4,604.4	5,210.2	5,835.4
Equity in financial corporations	90.3	73.1	92.3	64.7	87.8	99.6	152.7	208.6	212.3
Equity in non-resident corporations	59.6	75.1	98.5	108.9	123.2	157.6	201.9	278.6	379.0
Mutual fund shares of residents	268.1	365.0	463.0	573.3	745.4	689.7	778.2	1,392.2	1,765.6
Mutual fund shares of non-residents	0.0	0.0	0.0	0.0	0.0	0.3	6.5	19.2	88.0
Insurance, pension and standardized guarantee schemes	**453.1**	**671.7**	**944.5**	**1,242.2**	**1,599.8**	**1,939.9**	**2,536.6**	**3,182.4**	**3,919.4**
Non-life insurance reserves	100.3	101.5	110.2	133.2	154.5	178.3	218.5	246.2	272.8
Life insurance reserves	217.9	311.3	431.3	516.0	630.9	731.6	848.7	1,016.5	1,265.3
Pension fund reserves	134.9	258.9	402.9	593.0	814.3	1,030.0	1,469.4	1,919.8	2,381.4
Private pension fund reserves	32.8	95.1	182.6	292.3	433.2	578.9	892.1	1,246.4	1,621.9
Other fund reserves	102.2	163.7	220.3	300.6	381.1	451.1	577.3	673.4	759.4
Financial derivatives	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.7**
Other accounts receivable	**493.5**	**552.3**	**649.7**	**752.3**	**864.9**	**899.0**	**1,077.0**	**1,155.4**	**1,259.1**
of which: tax and contribution receivables	247.0	273.8	321.5	374.6	424.6	441.4	486.8	509.7	585.4
of which: claims on unpaid wages	96.3	116.8	146.6	167.5	206.3	199.5	275.9	306.2	322.3
of which: claims due to pension fund withdrawals	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liabilities	**886.3**	**1,086.7**	**1,423.1**	**1,952.3**	**2,843.0**	**4,082.7**	**5,132.2**	**6,269.0**	**7,434.8**
Loans	**398.5**	**523.2**	**779.0**	**1,204.4**	**1,997.7**	**3,188.2**	**4,153.4**	**5,236.5**	**6,294.2**
Loans from non-financial corporations, HUF	43.5	45.1	45.6	68.0	82.0	82.0	91.5	124.8	145.1
Housing loans from credit institutions, HUF	127.0	128.1	186.2	320.3	775.0	1,500.1	1,778.9	1,827.5	1,800.4
Housing loans from credit institutions, foreign currency	0.5	0.6	3.9	6.4	12.2	18.2	145.8	474.0	914.0
Consumer and other loans from credit institutions, HUF	184.5	286.6	404.7	530.2	646.7	760.7	858.5	880.9	944.1
Consumer and other loans from credit institutions, foreign currency	0.3	1.8	6.7	25.8	38.1	83.0	233.9	631.6	1,119.5
Housing loans from other financial corporations, HUF	0.0	0.0	0.0	0.0	4.2	11.0	20.6	10.6	14.7
Housing loans from other financial corporations, foreign currency	0.0	0.0	0.0	0.0	0.7	2.3	5.6	31.4	68.5
Consumer and other loans from other financial corporations, HUF	14.1	25.1	59.1	97.9	115.1	170.9	188.2	254.1	293.2
Consumer and other loans from other financial corporations, foreign currency	1.9	6.9	34.8	104.8	256.2	483.6	732.1	879.5	856.1
Loans from general government, HUF	26.7	26.4	29.6	36.2	46.8	46.8	44.7	43.0	42.4
Loans from rest of the world, foreign currency	0.0	2.5	8.5	14.8	20.8	29.6	53.7	79.1	96.3
Financial derivatives	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**1.0**
Other accounts payable	**487.9**	**563.6**	**644.2**	**747.9**	**845.3**	**894.5**	**978.8**	**1,032.5**	**1,139.6**
of which: trade credits and advances	149.8	174.1	192.8	222.1	250.9	273.9	300.7	326.6	342.2
of which: tax and contribution payables	243.3	267.4	316.0	367.2	415.4	427.2	469.5	484.1	554.2
Net financial worth	**6,452.8**	**7,655.1**	**8,911.5**	**10,068.9**	**10,914.1**	**11,395.6**	**12,573.8**	**14,259.4**	**15,873.6**

Table 6-2 (continuation)
Detailed financial accounts of households, stocks, billion HUF

	2007	2008	2009	2010	2011	2012	2013	2014	2015
Financial assets	**25,656.3**	**26,539.3**	**28,615.4**	**30,331.5**	**31,614.3**	**32,817.5**	**34,787.5**	**37,990.6**	**41,219.1**
Currency and deposits	**8,536.6**	**9,683.5**	**10,139.4**	**10,017.1**	**10,729.9**	**10,716.5**	**10,200.9**	**10,652.9**	**11,429.1**
Forint currency	1,729.7	1,787.3	1,760.5	1,913.9	2,201.5	2,101.7	2,483.4	2,938.6	3,391.2
Foreign currency	154.3	310.9	388.2	321.3	192.8	254.0	131.5	148.7	304.2
Forint deposits with credit institutions	5,469.9	6,205.2	6,432.7	6,279.2	6,787.0	6,739.8	6,103.9	6,010.5	6,067.1
Foreign currency deposits with credit institutions	940.6	1,097.1	1,247.0	1,161.2	1,090.9	1,062.4	903.5	916.8	1,006.4
Deposits with central government	6.6	9.9	16.5	20.1	23.0	33.1	33.0	34.4	40.7
Deposits at rest of the world	235.6	273.1	294.5	321.5	434.7	525.4	545.6	603.9	619.6
Debt securities	**1,174.2**	**1,441.8**	**1,379.8**	**1,590.8**	**1,726.5**	**2,134.4**	**2,752.0**	**3,052.5**	**3,755.5**
Short-term securities of central government	639.9	640.3	439.2	335.1	357.9	702.8	1,286.7	1,341.4	2,005.9
Long-term securities of central government	265.7	321.9	307.5	394.8	390.3	542.9	703.8	988.4	1,153.9
Securities of non-financial corporations	11.8	15.3	17.2	38.0	37.9	29.7	28.1	24.2	23.2
Securities of credit institutions	182.8	348.0	510.2	730.4	793.5	703.7	573.2	488.6	333.9
Securities of rest of the world	69.4	105.0	90.6	72.3	118.1	118.3	112.1	151.5	201.9
Securities of rest of the world	4.6	11.3	15.0	20.3	28.7	37.0	48.1	58.4	36.8
Loans	**719.2**	**761.2**	**811.5**	**859.6**	**920.4**	**948.7**	**981.1**	**1,153.2**	**1,207.6**
Equity and investment fund shares	**9,337.7**	**9,105.6**	**9,700.3**	**10,614.5**	**11,094.8**	**11,694.1**	**13,337.9**	**15,237.3**	**16,729.4**
Equity in non-financial corporations	6,178.7	6,481.4	6,867.4	7,229.3	7,791.4	8,314.3	9,043.4	10,112.6	11,440.3
Equity in financial corporations	252.0	258.9	293.7	345.6	323.8	333.2	318.5	300.0	299.6
Equity in non-resident corporations	509.2	564.8	638.6	680.7	729.8	651.2	622.7	753.0	875.0
Mutual fund shares of residents	2,225.6	1,696.1	1,713.6	2,115.5	2,078.2	2,237.8	3,205.9	3,878.8	3,881.3
Mutual fund shares of non-residents	172.2	104.5	187.0	243.4	171.7	157.7	147.4	192.8	233.2
Insurance, pension and standardized guarantee schemes	**4,624.2**	**4,347.9**	**5,380.6**	**6,001.6**	**3,035.2**	**3,088.5**	**3,194.3**	**3,454.7**	**3,569.3**
Non-life insurance reserves	299.0	319.6	322.1	315.9	307.5	307.9	310.8	313.5	308.6
Life insurance reserves	1,482.1	1,378.4	1,562.3	1,667.3	1,609.9	1,606.1	1,633.0	1,771.5	1,817.6
Pension fund reserves	2,843.0	2,649.8	3,496.2	4,018.4	1,117.7	1,174.4	1,250.5	1,369.7	1,443.0
Private pension fund reserves	2,012.1	1,901.2	2,636.4	3,100.4	226.3	192.0	193.1	208.7	218.9
Other fund reserves	831.0	748.7	859.9	918.0	891.4	982.4	1,057.4	1,160.9	1,224.1
Financial derivatives	**0.9**	**1.7**	**0.0**	**0.2**	**0.6**	**0.9**	**1.2**	**68.7**	**0.7**
Other accounts receivable	**1,263.6**	**1,197.6**	**1,203.8**	**1,247.7**	**4,106.9**	**4,234.5**	**4,320.1**	**4,371.3**	**4,527.4**
of which: tax and contribution receivables	597.3	592.7	560.0	489.8	491.6	533.4	559.4	589.0	628.2
of which: claims on unpaid wages	299.4	248.8	258.3	303.9	336.4	359.3	334.4	304.7	360.6
of which: claims due to pension fund withdrawals	0.0	0.0	26.3	91.1	2,791.0	2,845.8	2,854.5	2,851.0	2,844.7
Liabilities	**8,832.0**	**11,079.8**	**11,143.0**	**11,934.4**	**11,791.6**	**10,363.8**	**9,769.9**	**9,672.0**	**8,703.2**
Loans	**7,641.6**	**9,841.4**	**9,881.3**	**10,716.2**	**10,546.6**	**9,064.9**	**8,438.2**	**8,273.9**	**7,273.6**
Loans from non-financial corporations, HUF	147.9	179.0	168.0	164.0	165.0	164.5	148.9	131.5	149.8
Housing loans from credit institutions, HUF	1,695.2	1,556.9	1,514.3	1,555.3	1,600.9	1,641.4	1,591.8	1,608.3	3,013.9
Housing loans from credit institutions, foreign currency	1,466.7	2,380.8	2,488.3	2,850.9	2,664.6	1,914.9	1,767.1	1,749.0	6.7
Consumer and other loans from credit institutions, HUF	982.7	1,032.5	1,165.0	1,283.9	1,424.5	1,571.9	1,583.2	1,585.8	2,843.2
Consumer and other loans from credit institutions, foreign currency	1,798.1	2,786.4	2,725.6	2,933.0	2,854.4	2,148.2	1,936.1	1,814.0	46.6
Housing loans from other financial corporations, HUF	15.1	19.9	27.4	35.5	49.5	70.5	35.2	20.3	84.2
Housing loans from other financial corporations, foreign currency	102.6	157.3	180.0	225.6	283.8	237.7	103.1	79.0	1.3
Consumer and other loans from other financial corporations, HUF	305.8	374.3	420.4	558.7	612.9	650.6	662.2	715.5	953.6
Consumer and other loans from other financial corporations, foreign currency	988.4	1,222.3	1,060.0	973.5	753.0	535.1	481.8	439.2	44.6
Loans from general government, HUF	40.9	41.0	41.0	40.6	35.5	35.0	38.5	41.2	43.9
Loans from rest of the world, foreign currency	98.3	91.1	91.3	95.0	102.5	95.0	90.4	90.1	85.7
Financial derivatives	**0.3**	**1.2**	**2.0**	**3.4**	**4.8**	**2.4**	**1.3**	**3.7**	**0.8**
Other accounts payable	**1,190.1**	**1,237.2**	**1,259.7**	**1,214.8**	**1,240.2**	**1,296.5**	**1,330.3**	**1,394.5**	**1,428.8**
of which: trade credits and advances	366.0	403.6	443.5	480.6	502.3	516.7	515.4	504.5	510.5
of which: tax and contribution payables	564.6	561.2	530.5	489.8	491.6	533.4	559.4	589.0	628.2
Net financial worth	**16,824.4**	**15,459.5**	**17,472.4**	**18,397.1**	**19,822.7**	**22,453.7**	**25,017.6**	**28,318.6**	**32,515.8**

Table 6-3
Detailed financial accounts of households, transactions, billion HUF

	1990	1991	1992	1993	1994	1995	1996	1997
Financial assets	**188.7**	**349.8**	**433.2**	**398.8**	**500.9**	**571.8**	**731.9**	**871.1**
Currency and deposits	**88.2**	**163.5**	**256.6**	**178.6**	**218.8**	**275.9**	**360.1**	**317.3**
Forint currency	15.6	23.7	56.1	50.4	37.2	46.9	38.8	54.0
Foreign currency	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Forint deposits with credit institutions	21.3	98.5	187.3	100.3	135.4	189.4	324.1	281.5
Foreign currency deposits with credit institutions	46.3	41.4	12.6	27.2	45.4	38.9	-3.3	-21.7
Deposits with central government	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deposits at rest of the world	0.0	0.0	0.1	0.2	0.3	0.3	0.5	3.0
Debt securities	**6.9**	**37.2**	**23.6**	**22.6**	**59.4**	**69.3**	**111.6**	**136.4**
Short-term securities of central government	0.7	-0.2	6.8	19.9	51.1	37.5	53.8	164.1
Long-term securities of central government	0.0	0.2	17.6	30.1	22.3	30.0	27.1	-40.5
Securities of non-financial corporations	-4.0	-3.2	1.1	-2.5	2.2	8.0	10.1	-0.6
Securities of credit institutions	10.3	40.4	-1.9	-24.9	-16.3	-7.9	9.0	7.4
Securities of rest of the world	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securities of rest of the world	0.0	0.0	0.0	0.0	0.0	1.8	11.6	6.1
Loans	**12.5**	**20.6**	**20.8**	**23.0**	**23.7**	**31.3**	**35.3**	**41.8**
Equity and investment fund shares	**52.8**	**91.0**	**105.1**	**128.4**	**122.3**	**93.0**	**116.7**	**245.9**
Equity in non-financial corporations	48.0	84.5	99.2	119.3	95.3	71.2	65.2	137.9
Equity in financial corporations	4.8	4.8	2.4	0.3	6.1	7.2	2.9	7.2
Equity in non-resident corporations	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mutual fund shares of residents	0.0	1.7	3.5	8.8	21.0	14.6	48.6	100.8
Mutual fund shares of non-residents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Insurance, pension and standardized guarantee schemes	**9.1**	**9.7**	**6.9**	**17.6**	**25.3**	**41.8**	**60.2**	**90.3**
Non-life insurance reserves	6.5	2.9	2.9	4.1	13.9	16.2	13.0	13.0
Life insurance reserves	2.6	6.8	4.0	13.4	11.0	19.3	30.5	43.3
Pension fund reserves	0.0	0.0	0.0	0.0	0.4	6.3	16.7	34.0
Private pension fund reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other fund reserves	0.0	0.0	0.0	0.0	0.4	6.3	16.7	34.0
Financial derivatives	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Other accounts receivable	**19.1**	**27.8**	**20.2**	**28.7**	**51.4**	**60.4**	**47.9**	**39.4**
of which: tax and contribution receivables	3.5	10.8	13.5	13.8	21.1	19.0	26.7	37.9
of which: claims on unpaid wages	7.4	5.5	-5.7	2.2	14.7	19.4	0.1	-8.5
of which: claims due to pension fund withdrawals	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liabilities	**55.6**	**-88.1**	**49.8**	**78.0**	**87.2**	**27.6**	**52.6**	**120.0**
Loans	**37.9**	**-118.9**	**17.6**	**43.7**	**43.0**	**-26.7**	**-17.9**	**52.3**
Loans from non-financial corporations, HUF	4.8	0.1	0.0	-0.1	0.4	0.7	0.6	1.3
Housing loans from credit institutions, HUF	18.0	-123.3	6.8	19.3	-6.1	-16.9	-20.1	-13.1
Housing loans from credit institutions, foreign currency	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3
Consumer and other loans from credit institutions, HUF	14.1	2.4	5.8	19.4	42.7	-13.6	-2.8	23.8
Consumer and other loans from credit institutions, foreign currency	0.0	0.0	0.0	0.0	0.0	0.1	-0.1	0.2
Housing loans from other financial corporations, HUF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Housing loans from other financial corporations, foreign currency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Consumer and other loans from other financial corporations, HUF	0.0	1.0	2.0	2.9	1.2	0.8	1.3	-0.6
Consumer and other loans from other financial corporations, foreign currency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
Loans from general government, HUF	1.0	0.9	3.0	2.2	4.8	2.2	3.1	39.6
Loans from rest of the world, foreign currency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial derivatives	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Other accounts payable	**17.6**	**30.8**	**32.2**	**34.3**	**44.2**	**54.3**	**70.4**	**67.7**
of which: trade credits and advances	7.5	12.5	13.3	13.6	12.8	19.9	28.1	24.6
of which: tax and contribution payables	3.5	10.8	13.5	13.8	21.1	19.0	26.7	37.9
Net financial worth	**133.1**	**437.9**	**383.5**	**320.8**	**413.8**	**544.2**	**679.3**	**751.1**

Table 6-3 (continuation)
Detailed financial accounts of households, transactions, billion HUF

	1998	1999	2000	2001	2002	2003	2004	2005	2006
Financial assets	**1,058.3**	**986.4**	**1,080.8**	**1,293.5**	**1,354.3**	**1,321.3**	**1,650.8**	**1,952.5**	**2,078.1**
Currency and deposits	**451.4**	**449.4**	**337.8**	**623.1**	**543.9**	**720.4**	**579.7**	**752.7**	**632.4**
Forint currency	87.0	163.4	28.1	132.0	104.3	130.4	-27.1	221.4	191.5
Foreign currency	0.0	0.0	0.0	-44.1	40.8	5.5	5.2	5.1	70.4
Forint deposits with credit institutions	325.3	282.0	258.0	464.4	442.5	627.9	557.8	459.2	98.4
Foreign currency deposits with credit institutions	32.8	-4.4	39.2	56.2	-57.8	-60.3	26.1	32.7	231.0
Deposits with central government	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2
Deposits at rest of the world	5.8	8.0	12.1	16.8	14.5	17.0	17.3	37.5	38.0
Debt securities	**126.2**	**159.9**	**84.0**	**87.6**	**59.7**	**111.5**	**174.8**	**-102.0**	**114.3**
Short-term securities of central government	112.9	101.9	40.6	45.9	86.8	83.5	41.8	-118.7	72.4
Long-term securities of central government	39.4	59.2	31.2	7.2	-4.4	13.9	56.1	-2.2	4.5
Securities of non-financial corporations	-12.7	1.7	-0.9	6.3	3.7	13.6	-8.2	-4.2	-2.4
Securities of credit institutions	-5.9	7.3	-2.8	12.3	1.1	0.0	82.4	8.6	26.1
Securities of rest of the world	0.0	1.3	0.8	1.1	2.6	0.2	1.2	14.7	14.9
Securities of rest of the world	-7.5	-11.5	15.1	14.7	-30.2	0.2	1.4	-0.2	-1.2
Loans	**45.9**	**47.0**	**49.3**	**48.6**	**75.5**	**61.9**	**32.1**	**27.7**	**56.5**
Equity and investment fund shares	**204.2**	**72.7**	**246.7**	**153.1**	**228.5**	**9.1**	**209.8**	**660.0**	**498.1**
Equity in non-financial corporations	145.2	10.7	122.7	55.1	42.0	21.5	71.4	11.9	-14.1
Equity in financial corporations	-19.0	-34.0	9.3	-16.7	6.0	-7.1	1.8	30.9	-29.5
Equity in non-resident corporations	2.5	6.5	14.0	12.5	36.0	43.8	66.1	45.9	133.5
Mutual fund shares of residents	75.5	89.5	100.6	102.1	144.4	-49.1	65.5	563.4	347.3
Mutual fund shares of non-residents	0.0	0.0	0.0	0.0	0.0	0.0	4.9	7.9	60.9
Insurance, pension and standardized guarantee schemes	**141.2**	**198.6**	**265.7**	**278.5**	**334.2**	**384.3**	**476.3**	**535.7**	**673.1**
Non-life insurance reserves	24.6	1.2	8.7	23.0	21.3	23.8	40.1	27.7	26.6
Life insurance reserves	39.0	93.4	120.0	64.7	94.9	109.7	93.3	142.2	230.2
Pension fund reserves	77.6	103.9	137.0	190.8	218.0	250.8	342.9	365.8	416.3
Private pension fund reserves	32.8	42.4	84.7	109.9	139.2	165.1	258.0	297.6	341.1
Other fund reserves	44.8	61.6	52.4	80.9	78.8	85.7	84.9	68.1	75.2
Financial derivatives	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Other accounts receivable	**89.4**	**58.8**	**97.4**	**102.6**	**112.6**	**34.1**	**178.0**	**78.4**	**103.6**
of which: tax and contribution receivables	43.0	26.8	47.7	53.1	50.1	16.8	45.3	22.9	75.7
of which: claims on unpaid wages	24.3	20.6	29.8	20.9	38.7	-6.7	76.4	30.3	16.1
of which: claims due to pension fund withdrawals	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liabilities	**88.0**	**204.9**	**340.4**	**541.3**	**908.1**	**1,205.0**	**1,107.2**	**1,104.0**	**1,309.7**
Loans	**13.2**	**124.7**	**254.8**	**432.1**	**804.2**	**1,148.8**	**1,013.9**	**1,041.3**	**1,193.6**
Loans from non-financial corporations, HUF	1.7	1.6	0.5	22.4	14.0	0.0	9.5	33.3	20.3
Housing loans from credit institutions, HUF	-10.4	1.1	58.1	134.1	454.6	725.1	278.8	48.6	-27.1
Housing loans from credit institutions, foreign currency	0.1	0.1	3.2	2.9	6.2	4.8	130.6	321.1	486.1
Consumer and other loans from credit institutions, HUF	45.7	102.1	118.1	125.5	116.5	114.0	97.7	22.4	63.2
Consumer and other loans from credit institutions, foreign currency	0.1	1.6	4.8	19.8	13.3	40.3	158.7	388.1	518.9
Housing loans from other financial corporations, HUF	0.0	0.0	0.0	0.0	4.2	6.9	9.6	-10.0	4.1
Housing loans from other financial corporations, foreign currency	0.0	0.0	0.0	0.0	0.7	1.4	3.5	25.2	41.3
Consumer and other loans from other financial corporations, HUF	5.4	11.0	33.9	38.9	17.2	55.7	17.3	66.0	39.1
Consumer and other loans from other financial corporations, foreign currency	0.8	5.1	27.2	74.7	160.0	194.3	283.9	124.8	30.1
Loans from general government, HUF	-30.1	-0.3	3.3	6.6	10.7	0.0	-2.1	-1.7	-0.6
Loans from rest of the world, foreign currency	0.0	2.5	5.7	7.2	6.8	6.3	26.3	23.5	18.3
Financial derivatives	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Other accounts payable	**74.8**	**80.2**	**85.6**	**109.2**	**103.9**	**56.2**	**93.3**	**62.7**	**116.2**
of which: trade credits and advances	23.5	28.8	23.7	34.8	35.3	30.0	35.8	34.9	24.5
of which: tax and contribution payables	39.3	24.1	48.5	51.3	48.2	11.8	42.3	14.5	70.1
Net financial worth	**970.2**	**781.5**	**740.4**	**752.2**	**446.3**	**116.4**	**543.5**	**848.5**	**768.4**

Table 6-3 (continuation)
Detailed financial accounts of households, transactions, billion HUF

	2007	2008	2009	2010	2011	2012	2013	2014	2015
Financial assets	**1,915.0**	**1,677.9**	**881.4**	**860.9**	**525.0**	**565.7**	**1,027.2**	**1,488.9**	**1,495.0**
Currency and deposits	**701.7**	**1,061.8**	**426.9**	**-188.2**	**516.9**	**125.6**	**-541.3**	**442.9**	**840.8**
Forint currency	228.5	57.6	-26.8	153.4	287.6	-99.7	381.7	455.2	452.5
Foreign currency	1.7	143.1	81.9	-81.2	-159.8	70.9	-127.5	4.7	148.1
Forint deposits with credit institutions	318.0	735.3	227.5	-139.0	516.3	-14.9	-636.1	19.0	148.8
Foreign currency deposits with credit institutions	122.9	93.1	121.0	-143.6	-202.9	41.2	-170.0	-59.4	70.0
Deposits with central government	3.4	3.4	6.6	3.6	3.0	10.1	-0.1	1.4	6.2
Deposits at rest of the world	27.3	29.3	16.7	18.7	72.7	118.0	10.7	22.1	15.2
Debt securities	**-137.8**	**252.9**	**-82.9**	**221.4**	**136.3**	**374.5**	**585.0**	**247.6**	**698.8**
Short-term securities of central government	-171.3	-1.7	-200.9	-103.0	22.2	345.2	587.3	49.1	673.5
Long-term securities of central government	-19.2	60.7	-24.4	91.6	-2.6	139.5	155.1	264.4	163.0
Securities of non-financial corporations	-5.4	3.7	1.6	7.3	10.1	-6.9	-2.9	-4.6	-2.0
Securities of credit institutions	20.5	153.7	152.8	231.6	70.4	-108.4	-144.1	-97.5	-155.9
Securities of rest of the world	33.5	30.0	-15.6	-11.4	27.8	-3.1	-21.3	24.9	43.1
Securities of rest of the world	4.2	6.5	3.7	5.4	8.4	8.2	10.9	11.3	-22.8
Loans	**36.9**	**42.0**	**50.3**	**48.0**	**60.8**	**28.4**	**32.4**	**32.5**	**30.3**
Equity and investment fund shares	**609.7**	**-169.4**	**-62.5**	**368.4**	**-133.0**	**-13.2**	**804.2**	**627.2**	**81.2**
Equity in non-financial corporations	-73.2	-31.4	-17.8	-37.5	-48.2	-10.2	-16.5	41.8	87.7
Equity in financial corporations	33.2	132.7	-90.0	32.4	20.7	-28.8	-21.0	0.2	-48.2
Equity in non-resident corporations	165.1	108.4	46.9	-12.3	-29.9	-34.2	-24.0	36.0	60.1
Mutual fund shares of residents	419.7	-355.7	-10.1	364.3	-25.9	78.3	877.0	526.5	-54.2
Mutual fund shares of non-residents	64.9	-23.3	8.6	21.6	-49.6	-18.2	-11.3	22.7	35.9
Insurance, pension and standardized guarantee schemes	**701.2**	**556.7**	**543.4**	**370.2**	**-2,910.5**	**-72.6**	**67.2**	**104.4**	**86.1**
Non-life insurance reserves	26.2	20.6	2.5	-6.2	-8.5	0.5	2.8	2.7	0.5
Life insurance reserves	239.4	77.9	42.6	12.8	-47.7	-46.1	12.1	40.3	32.9
Pension fund reserves	435.6	458.3	498.4	363.6	-2,854.3	-27.0	52.3	61.4	52.6
Private pension fund reserves	361.0	362.5	425.0	303.8	-2,890.6	-49.0	-2.7	6.8	6.9
Other fund reserves	74.6	95.7	73.3	59.9	36.3	22.0	55.0	54.6	45.7
Financial derivatives	**-1.2**	**-0.2**	**0.0**	**-2.8**	**-3.4**	**-5.2**	**-5.7**	**-14.7**	**-397.4**
Other accounts receivable	**4.5**	**-66.0**	**6.1**	**43.7**	**2,857.8**	**128.2**	**85.5**	**48.9**	**155.1**
of which: tax and contribution receivables	11.9	-4.5	-32.7	-70.2	1.8	41.8	26.0	29.6	39.2
of which: claims on unpaid wages	-22.9	-50.6	9.5	45.6	32.5	22.9	-24.8	-29.7	55.8
of which: claims due to pension fund withdrawals	0.0	0.0	26.3	64.8	2,699.8	54.8	8.7	-3.5	-6.3
Liabilities	**1,508.4**	**1,397.1**	**-24.9**	**-322.4**	**-947.5**	**-881.9**	**-429.7**	**-275.0**	**-1,127.6**
Loans	**1,451.8**	**1,340.1**	**-65.3**	**-295.4**	**-990.3**	**-955.4**	**-482.4**	**-352.6**	**-1,154.8**
Loans from non-financial corporations, HUF	2.8	31.1	-11.0	-4.0	1.0	-0.5	-15.6	-17.4	18.3
Housing loans from credit institutions, HUF	-104.6	-137.6	-41.4	22.9	49.3	36.8	-42.4	28.4	1,430.4
Housing loans from credit institutions, foreign currency	578.6	589.0	54.8	-128.6	-586.2	-591.4	-128.2	-134.8	-1,873.7
Consumer and other loans from credit institutions, HUF	57.0	67.6	161.4	190.4	180.4	221.7	33.4	60.4	1,325.9
Consumer and other loans from credit institutions, foreign currency	712.8	610.6	-102.9	-277.2	-462.1	-502.3	-245.8	-237.1	-1,904.5
Housing loans from other financial corporations, HUF	0.4	4.8	7.5	8.1	14.0	21.1	7.2	-14.9	63.9
Housing loans from other financial corporations, foreign currency	36.0	35.8	18.9	11.2	22.6	-29.4	-24.4	-31.1	-84.9
Consumer and other loans from other financial corporations, HUF	12.6	68.5	46.1	138.4	62.3	48.0	17.9	59.1	279.7
Consumer and other loans from other financial corporations, foreign currency	155.8	76.4	-197.0	-257.7	-264.8	-157.0	-81.8	-63.1	-408.7
Loans from general government, HUF	-1.4	0.1	0.0	-0.4	-5.1	-0.5	3.5	2.8	2.7
Loans from rest of the world, foreign currency	1.7	-6.1	-1.7	1.5	-1.7	-1.8	-6.2	-4.9	-3.9
Financial derivatives	**-2.8**	**-1.1**	**-0.1**	**-1.1**	**-2.2**	**-2.9**	**-3.1**	**-10.5**	**-34.4**
Other accounts payable	**59.4**	**58.1**	**40.6**	**-25.9**	**45.1**	**76.4**	**55.8**	**88.1**	**61.7**
of which: trade credits and advances	32.8	48.6	57.9	56.1	41.7	34.3	20.7	13.1	31.0
of which: tax and contribution payables	10.4	-3.4	-30.6	-40.8	1.8	41.8	26.0	29.6	39.2
Net financial worth	**406.6**	**280.8**	**906.3**	**1,183.2**	**1,472.5**	**1,447.5**	**1,456.9**	**1,763.9**	**2,622.5**

Table 6-4
Summary data on assets and liabilities measured in HFCS, thousands of household and billion HUF

Description	Number of households	Amount	Number of households	Amount	Number of households	Amount
	Original		Modified		Macro-aligned	
Real assets	**3,719**	**51,503**	**3,719**	**50,491**	**3,720**	**47,264**
Properties	3,574	48,690	3,574	47,678		
Main residence	3,476	39,354	3,476	38,326		
First other properties	948	7,580	948	7,558		
Further other properties, total	174	1,756	174	1,794		
Other real assets	2,101	2,813	2,101	2,813		
Cars	2,043	2,176	2,043	2,176		
Other vehicles	254	307	254	307		
Other valuables	186	330	186	330		
Financial assets	**4,128**	**17,583**	**4,128**	**17,852**	**4,129**	**38,670**
Cash (currency)	4,128	245	4,128	245	4,129	3,087
Deposits	3,349	5,315	3,420	5,393	3,421	7,566
Transferable deposits (current accounts)	3,344	1,644	3,420	1,668		
Other deposits (fixed deposits, time deposits)	2,065	3,671	2,127	3,725		
Debt securities	302	1,924	302	1,924	303	3,052
Private loans (assets)	393	733	393	577	393	679
Shares and equities*	335	5,709	335	6,054	336	11,166
Publicly traded business (quoted shares)	55	86	55	215	56	466
Not publicly traded business (unquoted shares, equity)	294	5,623	294	5,839	295	10,700
Investment fund shares	310	2,041	304	2,041	304	4,072
Pension and life insurance claims	630	1,616	630	1,618	631	3,455
Loans and other liabilities	**1,522**	**5,896**	**1,583**	**6,113**	**1,584**	**8,953**
Mortgage loans	830	4,606	830	4,553		
Morgage of household main residence	774	3,889	774	3,879		
Morgage of household first other property	73	648	73	605		
Morgage of household further properties	10	69	10	69		

Description	Number of households	Amount	Number of households	Amount	Number of households	Amount
	Original		Modified		Macro-aligned	
Other loans and liabilities	1,052	1,290	1,133	1,560		
Lease liability	-	-	163	270		
Current account overdraft	474	114	474	114		
Credit- and commercial cards debt	161	42	161	42		
Private loans (debts)	408	485	408	485	408	679
Other financial liabilities	505	649	505	649		
Total income	**4,102**	**13,619**	**4,105**	**14,042**	**4,106**	**14,291**
Total household level income	2,794	925	2,809	1,348	2,810	1,495
Gross income from regular social tranfers	1,134	408	1,134	407		
Income from regular private tranfers	242	80	242	80		
Gross rental income from real estate property	127	88	127	89		
Gross income from financial investments	2,181	249	2,192	255		
Gross income from private business (exc. self-employment)	12	21	110	432		
Other income received	138	79	146	84		
Total personal level income	4,007	12,694	4,007	12,694	4,008	12,796
Employee income	2,544	8,588	2,544	8,588		
Entrepreneurial income	432	895	432	895		
Gross income from public pensions	1,946	3,142	1,946	3,142		
Gross income from occupational and private pension plans	27	15	26	15		
Gross Income from unemployment benefits	276	54	276	54		
Consumptions expenditure	**4,128**	**6,202**	**4,128**	**6,202**		
of which amount spent on food at home	4,128	2,640	4,128	2,640		
of which amount spent on food outside home	4,128	900	4,128	900		
of which amount spent on utilities	4,128	2,364	4,128	2,364		

FINANCIAL SAVINGS OF HOUSEHOLDS BASED ON

MICRO- AND MACRO-STATISTICAL DATA

2017

Print: Prospektus–SPL consortium

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