NBP Narodowy Bank Polski

Household Wealth and Debt in Poland

Pilot survey report 2014

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Financial Stability Department
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Preface

The Household Wealth and Debt Survey (BZGD), whose findings are presented in this paper, is a survey primarily concerned with the analysis of the widely understood financial situation of respondents, with a particular emphasis on assets accumulated by households and liabilities (debt) incurred by them. The survey was conducted in 2014 by Narodowy Bank Polski, in cooperation with the Central Statistical Office (Główny Urząd Statystyczny – GUS). The survey is a pilot study, however due to the relatively large sample of the surveyed households and advanced research methodology, we decided to publish its results.

The Household Wealth and Debt Survey also relied on the experience gathered by Narodowy Bank Polski thanks to its participation in the works of the research network of the European Central Bank entitled: Household Finance and Consumption Network (HFCN). Under this network, central banks and statistical offices of the euro area countries have conducted since 2006 surveys of household financial condition, and, in particular household assets and debt. In 2012 Narodowy Bank Polski was granted observer's status in the HFCN network.

The survey questionnaire covers the range of issues which are addressed in euro area surveys. While being a version of the HFCN questionnaire, the survey has been adapted to the Polish conditions, modified as regards the formulation of questions and the layout of research modules by teams of Narodowy Bank Polski and the Central Statistical Office (GUS). The surveyed sample was chosen by the GUS, taking into account NBP's comments and requests. The survey was conducted in February 2014 by GUS employees (supervision, organization, compilation of the survey findings) and interviewers employed at voivodship statistical offices. Imputation of the results was carried out at the Voivodship Statistical Office in Łódź.

The authors would like to extend their acknowledgements to the employees of the Central Statistical Office and voivodship statistical offices, involved in the survey, in particular to Mr. Piotr Łysoń – Director of the Social Surveys and Living Conditions Department, Ms. Małgorzata Żyra – Deputy Director of the Department, Ms. Krystyna Siwiak – Head of the Household Surveys Division, Ms. Maria Barlik – employee of the Household Surveys Division. Any errors and omissions are the sole responsibility of the authors.

The study was prepared at the Financial Stability Department, in cooperation with the Economic Institute for the needs of NBP authorities. Opinions expressed in the study are author's opinions and not those of the authorities of Narodowy Bank Polski.

Summary

The average net wealth of households in Poland in 2014, measured by the median, amounted to PLN 256.8 thousand. The net wealth value was largely determined by real assets, collected by the households, including predominantly the value of the main residence (an average of PLN 282.6 thousand) and self-employed business wealth (an average of PLN 219.7 thousand). Financial assets were much less important in the process of wealth accumulation (an average of PLN 8.6 thousand).

Real asset holdings varied across individual groups of respondents. The vast majority of households were owners of their main residence[1] (76.4%) and vehicles (63.0%). Much fewer households declared other real estate property (19.1%) or self-employment business assets (18.8%) as components of their wealth. Among financial assets the most common form of fund accumulation were deposits (81.9% of households), whereas the actual value of assets accumulated in this form was relatively small (an average of PLN 5.0 thousand).

Liabilities of households, consisting of various forms of debt, are declared by 37% households and, in the case of an average household, constitute a relatively small burden on its assets (PLN 10.0 thousand). The level of debt by type of debt varies greatly. Housing loans secured by a lien on property (mortgage loans) are the main component of household debt in Poland. They are reported by only 12.1% of households and are considered a relatively high burden (an average of PLN 104.0 thousand). Other loans, primarily consumer loans, are more common (29.4% of households), but their value is much smaller (an average of PLN 5 thousand).

Net wealth is a highly fluctuating variable along with many important characteristics of households. In particular, net wealth grows considerably with along growing household income and educational attainment of the household reference person. The net wealth also increases markedly with age of the of the household reference person, during their economic activity, reaching the maximum value when the household reference person reaches the age of 45 - 64 years (PLN 304.5 thousand). The labour force status of the household reference person and class of their place of residence are a highly differentiating feature of net wealth level. Households in which the household reference person runs business activity (self-employed status) are clearly more affluent (PLN 783.6 thousand) than the average in the total population, and also residents of rural areas hold wealth of a considerably higher value (PLN 366.1 thousand) than households in urban areas (PLN 207.2 thousand).

The findings of the survey of Polish households' wealth, especially in case of the net wealth metrics, follow the regularities observed in the euro area. Households in Poland are moderately wealthy against the background of the euro area countries, holding an average of net wealth (EUR 61.7 thousand) which constitutes approx. 56% of the net wealth of median household in the euro area (EUR 109.2 thousand). The highest household net wealth in the euro area is recorded in Luxembourg (EUR

[1] Owner of the main residence means a person holding the title to more than 50% of value of the real estate. 1% of households own less than 50% title to the real estate.

397.8 thousand) and Cyprus (EUR 266.9 thousand) while the lowest value of wealth is recorded in Slovakia (EUR 61.2 thousand) and Germany (EUR 51.4 thousand). The main asset, contributing the most to the total household wealth, both in Poland and in the euro area, is real property being the household main residence. Poland has clearly greater prevalence of owner occupied real estate (76.4%) as compared to the euro area average (60.1%). This fact largely explains why an average Polish household has greater or similar wealth as compared with much wealthier countries as measured by GDP, where the possession of the main residence is less common (e.g. Austria - 47.7%, Germany - 44.2%). For the Polish households financial assets are less important as a component of their total assets (median of EUR 2.1 thousand) than for the euro area households (median of EUR 11.4 thousand), accounting for approx. 5% of total assets, as compared to approx. 15% for the euro area. The element which is distinctive for households in Poland is a relatively high percentage of respondents declaring possession of business assets (18.8% vs. 11.1% in the euro area) and the value of these assets (EUR 52.8 thousand as compared to EUR 30.0 thousand in the euro area).

Households in Poland are significantly less indebted than those in the euro area. In Poland, the average household debt amounts to EUR 2.4 thousand (a little over 6% in relation to gross assets), while the euro area average debt is EUR 21.5 thousand, representing approx. 22% of total assets.

Poland is a country with significantly smaller wealth inequalities as compared with the euro area countries, as evidenced by a lower Gini coefficient for net wealth (58% vs. an average of 68% for the euro area). Similar wealth inequalities as in Poland are observed in such countries such as Greece (56%), Slovenia (53%) or Slovakia (45%) and the most pronounced inequalities are observed in Germany and Austria (76%) and Cyprus (70%).

Introduction

The Household Wealth and Debt Survey (BZGD), whose findings are discussed in this study, is aimed to put together a wide range of information on the economic situation of households with a focus on assets accumulated and liabilities incurred by households. The data on assets and liabilities of households are collected with a high degree of detail. Household assets include real and financial assets. Real components of assets are represented by real estate property being the main residence, other real estate property, vehicles, self-employment business wealth and valuables. Financial assets include such items as saving deposits, shares in mutual funds and bonds purchased individually, shares of (stock exchange) listed companies purchased individually, funds gathered on accounts managed by professionals, other financial receivables (e.g. arising from loans, bills of exchange, etc.).

Liabilities include debt incurred by households arising from: housing (mortgage) loans, consumer loans (including car loans) and other consumer loans (credit or payment card debt or overdraft), other liabilities (e.g. resulting from instalment payment agreements, private loans from family, friends, employers, etc.) and business loans or loans for other purposes (including the repayment of other debts). As a result, data collected during the Household Wealth and Debt Survey (BZGD) draw a complete picture of households' financial situation, which may be recorded as the balance sheet of the household sector (in terms of assets and liabilities). The result (balancing item) of the balance sheet of the household sector, and, at the same time, the key outcome variable of the survey is net wealth, defined as the difference between total assets and total liabilities. The financial balance sheet of the household sector can be outlined as follows:

Figure 1. Financial balance sheet of the household sector in Household Wealth and Debt Survey (BZGD)

HOUSEHOLD BALANCE SHEET	
ASSETS	**LIABILITIES**
Real assets	***Housing loans***
Household main residence	*Housing loans secured on the main residence*
Other real estate property	*Housing loans secured on another real estate*
Vehicles	
Valuables	***Non-housing credit and loans***
Self-employment business wealth	
Financial assets	
Deposits	
Mutual funds	
Shares	
Obligations	**NET WEALTH: ASSETS – LIABILITIES**
Receivables	
Voluntary pension schemes / Life insurance	
Other financial assets	

Source: Own elaboration

In addition to a complete set of data on assets and liabilities of the household sector, collected in the Household Wealth and Debt Survey, there are large amounts of supplementary information allowing for an exhaustive characterization of households in terms of their socio – economic and demographic characteristics. In particular, other[2] modules of the questionnaire include the following issues:

- demographic data (including the composition of the household, age, sex, marital status, education, etc.).
- household expenses (including, total average monthly spending on food and non-alcoholic beverages, cash donated to persons outside the household, e.g. support to the relatives, gifts, savings: propensity to save and saving objectives, etc.).
- status in the labour market and income of the household (including professional activity, occupation and position, working hours, income from employment, etc.)
- economic activity (including the value and legal form of the company, its business profile, employment size, etc.).
- bequests and donations (including the type of bequest or gift received, the year of receipt, value, etc.)
- pensions schemes (including pension entitlements under public pension schemes, participation in voluntary pension schemes and the total amount of funds gathered, insurance coverage under life insurance policy and the total amount of funds collected, etc.).
- complementary information concerning the household financial condition (including self-assessment of financial situation, savings "for a rainy day," etc.).

In addition, the Household Wealth and Debt Survey collects a series of supplementary information concerning, in particular: the place of residence (including, the type of building, location, quality, etc.), the way in which the interview proceeded (attitude of the respondent, credibility of answers, degree of understanding of questions by the respondent, etc.) and performance of the survey (including the effectiveness of the interview, the duration of the interview, the reasons for refusal or interruption of the interview etc.). The complexity of information collected in the Household Wealth and Debt Survey, not only makes it possible to compile balance sheets of the household sector (and its subgroups), but it also enables the analysis of processes of wealth accumulation by households, depending on their characteristics.

The Household Wealth and Debt Survey fills a major information gap on the household finance in Poland, namely the lack of complete and sufficiently detailed data on assets and debts (e.g. for different income groups or socio-economic groups of households). Household surveys which are currently conducted in Poland both by the GUS (Household Budget Survey, European Union Survey on Income and Living Conditions (EU-SILC)), and by other institutions (e.g. Social Diagnosis) meet information needs in this respect to a limited extent only. They focus on flows of income and expenses, and provide at most only approximate, very rough information on certain aspects of assets and debts. On the other hand, the aggregate data on household assets and debts, derived from the national accounts or aggregate banking statistics are neither complete[3] nor allow the conduct of analyses for particular groups of households. In case of BZGD, it is possible to conduct various studies of major theoretical and practical importance, because of detailed individual data on assets and debts of households in Poland, along with their socio-economic and demographic characteristics.

[2] The survey questionnaire constitutes Chapter 3 of the Methodological Annex to this study (NBP, 2015b).
[3] For example, the financial accounts do not show tangible fixed assets.

From the point of view of Narodowy Bank Polski, the ability to use the data from the Household Wealth and Debt Survey to analyse the stability of the financial system, as influenced by the situation and decisions of households, is of key importance. This may be achieved, in particular, through the identification of heavily indebted households whose current income is largely used for debt servicing and who additionally fail to hold sufficient collateral in the form of liquid assets. Moreover, in the case of mortgage loans - the loan-to-value ratio threatens borrower's solvency. In case this concerns a considerable part of households, this can adversely affect the situation of some banks heavily involved in lending to households, and thus undermine the instability of the banking sector. Until now, this type of analysis has not been possible due to the absence of consistent individual data on debt, income and assets of households[4].

Data from the Household Wealth and Debt Survey also provide a better understanding of the monetary transmission mechanism. In particular, they allow a more thorough analysis of how households respond to changes in NBP interest rates, bearing in mind that this reaction can considerably differ among the household groups, depending on the distribution of the debt burden on the current income and accumulated savings across the population. These analyses will also be crucial for conducting macro-prudential policy, both in the assessment of the scale of systemic risk and calibration of macro-prudential instruments such as debt servicing costs - DSTI (debt-service-to-income). Comparable studies have been launched in other parts of the world to this end, among others, by the Federal Reserve in the United States and by the European Central Bank for the euro area[5].

Individual data on assets and debt, complemented by a wide range of household characteristics will also be useful for different types of studies of a fundamental nature, that can provide a better understanding of the mechanisms of financial decision-making of households, help to identify the risks to which they are exposed and build micro- and macroeconomic models reflecting these processes. In particular, statistical surveys of assets and debt, with the range of data collected similar to those used in the Household Wealth and Debt Survey[6], are used, among others, to analyse the conditions of household saving processes, household propensity to undertake risk and to explain the structure of accumulated assets, the impact of changes in the value of wealth on consumption, inequalities of income and wealth, credit availability and determinants of demand for credit, debt and household vulnerability to shocks.

The basis and the inspiration for the Household Wealth and Debt Survey is the Household Finance and Consumption Network (HFCN) project[7], launched in 2006 and coordinated by the European Central Bank in the euro area countries. The first round of the survey, launched by HFCN in 2010, covered 15 euro area countries and collected information on 62,000 households. The results of the survey were

[4] Analytical possibilities offered by the Household Wealth and Debt Survey in this respect are presented in Box 4 of the Financial Stability Report – July 2015 (NBP, 2015a, p.45).The paper by Zajączkowski and Żochowski (2007) gives an example of analyses based on the data coming from GUS surveys of household budgets for similar purposes, used at NBP.

[5] For example, FED (2014), ECB (2013a).

[6] The overview of the literature on the subject may be found, among others, in: Davies and Shorrocks (2000), ECB (2009).

[7] Full information on the HFCN project, together with links to the materials published under the project, may be found on the website of the European Central Bank (https://www.ecb.europa.eu/pub/economic-research/research-networks/html/researcher_hfcn.en.html).

published in 2013. The second round of the survey, whose results will be released in 2016, involved 17 countries, and another round of the survey will be carried out every 2 or 3 years. In the recent years, several countries outside the euro area, including Poland[8], were granted an observer status in the HFCN and started their own surveys on financial situation of households, with special emphasis on their assets and debts, following the HFCN methodology[9].

The Household Wealth and Debt Survey is a survey in which households, participating on a voluntary basis (in the case of certain questions - household members) respond, in the presence of an interviewer, to a series of questions regarding their broadly defined financial situation and selected socio-demographic characteristics. The survey has been carried out by Narodowy Bank Polski in cooperation with the Central Statistical Office (GUS). The range of questions asked in the questionnaire corresponds with the HFCN project, whereas the layout of the modules and questions was developed by the teams of NBP and the GUS. Data to be analysed in this study was based on the January and February 2014 results, and cover a representative sample of 7 thousand households living in Poland, of which approx. 3.5 thousand completed the questionnaire[10] in a satisfactory way. The survey is a pilot study, however due to the relatively large number of the surveyed households and fairly advanced research methodology, being the result of close cooperation with the Central Statistical Office and consultations within the HFCN, we decided to publish its findings. We plan to conduct the Household Wealth and Debt Survey in the future on a regular basis, every 2 - 3 years, while maintaining cooperation with the GUS and the HFCN, on a larger sample of households and using modified methodology (e.g. sample selection scheme, questionnaire, method of interviewing, etc.). For these reasons, these results should be considered only as the first approach to the issue of the distribution of wealth and debts among households in Poland.

To ensure an appropriate understanding of the results of the Household Wealth and Debt Survey two factors should be borne in mind. First, BZGD is a survey and as such faces problems typical for this kind of study[11]. In particular, household assets (gross wealth), as one of the basic categories analysed in the survey, are a variable strongly unevenly distributed across households. Consequently, it requires appropriately adjusted sampling scheme (the so-called oversampling of the wealthiest households). We applied this procedure also in our survey, however, like in the case of similar surveys conducted worldwide, it is difficult to precisely evaluate the effectiveness of the method used (See Box 1.1). A potentially serious problem, undermining the quality of the survey, is also the lack of response, which may be manifested either in unit non-response or in item non-response. Respondents' tendency to avoid answering certain questions or even to refuse to participate in the survey is the higher, the

[8] These include (as at 31 July 2015) the Czech Republic and Hungary, with Denmark having an observer status in the HFCN.

[9] Methodological solutions adopted by the HFCN are largely based on the experiences of the Survey of Consumer Finances (SCF), a study of this type conducted on a regular basis for the longest period of time. The survey has been carried out by the US Federal Reserve since 1983 (the first trial study in 1962). Also the Bank of Italy / Banca d'Italia boasts of a long tradition of household surveys, addressing wealth and debt issues (since 1965). Since the beginning of the 2000s regular surveys of households' wealth and debt have been conducted by the central banks of Spain, Greece, the Netherlands and Portugal (see: ECB, 2009).

[10] For more information on the study see the Methodological Annex (NBP, 2015b).

[11] The problems encountered in the surveys of households' financial situation are discussed in the papers by Davies and Shorrocks (2000) and ECB (2013b).

more sensitive, in their opinion, the questions asked. Surveys of household financial situation, including their assets and debt, are studies whose basic questions are generally considered highly sensitive for the respondent. Surveys of this kind also run the risk of misreporting, usually manifested in systematic undervaluation of the value of assets declared by the respondent. One of the major causes of this problem is the above mentioned sensitivity of the surveyed issues for the respondent; this can also be driven by the deficiencies in financial education. For those reasons, it is difficult to expect the results of the survey of households' financial situation, generalized for the whole population, to provide aggregates consistent with the data derived from comprehensive, aggregate statistics, such as bank reporting or the national accounts. The strong point of the survey is that it allows to collect individual data on the analysed phenomenon, which gives the possibility of constructing distributions of variables which are of interest for the researcher and developing microeconomic models of the analysed phenomena. The second part of this study, namely the Methodological Annex (NBP 2015b), analyses, in more detail, such issues as the sampling scheme, random and non-random errors and the extent of coverage of certain financial aggregates, in relation to the national accounts data and results of the Household Budget Survey.

The second issue which is important for the appropriate interpretation of the results of the Household Wealth and Debt Survey is an understanding of the concept of the key outcome variable of the survey, namely the household net wealth. This variable, as in the HFCN survey and other surveys of this type, is defined as the total value of financial and non-financial assets owned by the household less the value of its total debt, as measured by respondent at the time of the survey. Thus, wealth includes only those assets and liabilities, which are the household’s private property and which are subject to market valuation[12]. For instance, financial claims of households’ on the State Treasury resulting from public pension schemes, or more broadly - social security system, are not included in this definition. Household wealth understood in this way should not be considered equivalent to the wealth of households, understood as the sum of the current value of the household net wealth and the discounted current value of the expected stream of future income. The second category is broader as it contains the expected income resulting from the participation in the public social security system. The aim of such surveys as the HFCN, the BZGD and similar ones is to determine private net wealth rather than net wealth of households[13]. This is very important in ensuring international comparability of results of household wealth and debt surveys. It turns out that in countries with complex social security systems households tend to show less propensity to save and collect private wealth, as it is somewhat offset by a stream of the expected social benefits[14]. Thus, taxes financing those social security schemes replace private savings and the social benefits system substitutes the utility stream flowing from private assets. As a result, higher level of household private wealth in country A as compared to country B does not necessarily have to mean more wealth in country A, because country B can provide their citizens with at least comparable or higher stream of services through a developed social security system, financed with taxes, not with private savings. The results of the first round of the HFCN survey, as well

[12] See Davies and Shorrocks – op.cit., OECD (2013).

[13] Based on Zachłod-Jelec (2008) containing an overview of theoretical concepts concerning household wealth and discussing practical connected with wealth assessment.

[13] The thesis on the substitutionary character of private problems connected with wealth assessment.

[14] The thesis on the substitutionary character of private assets and public social insurance systems are positively verified by Fessler and Schürz (2015) basing on the data from the HFCN survey.

as the results of our survey discussed below, provide a clear exemplification of this thesis. This survey is a pioneer study when it comes to providing detailed information on the distribution of wealth and its components across households in Poland. In the literature there are few estimates of the aggregate household wealth, based on its various definitions[15] (e.g. Zachłod-Jelec - op. Cit., Credit Suisse (2014) and earlier publications, Allianz (2014) and earlier publications). The above cited paper by Zachłod-Jelec - op. cit., and another study by the author (Zachłod-Jelec, 2011) present also the theoretical concept of household wealth and attempt to account for this wealth (assets financial) in the model of consumption for Poland.

The subsequent chapters of our study discuss the following issues. Chapter 2 presents and analyses the main results of the survey, in the form of aggregate characteristics and distribution of net wealth, including its comparison with the results of the HFCN survey. This chapter outlines the main results of the survey. Chapter 3 focuses on the analysis of financial and non-financial assets of households. In Chapter 4 we analyse household debt with a particular emphasis on the assessment of risks undertaken by household. The Statistical Annex presents tables with the detailed results and the glossary of most important categories analysed in this study. The Methodological Annex, which is complementary to this publication (NBP, 2015b), addresses the following issues: organization and methodology of the survey (including its questionnaire), imputation and editing of results and discussion of the certain measures of the survey quality.

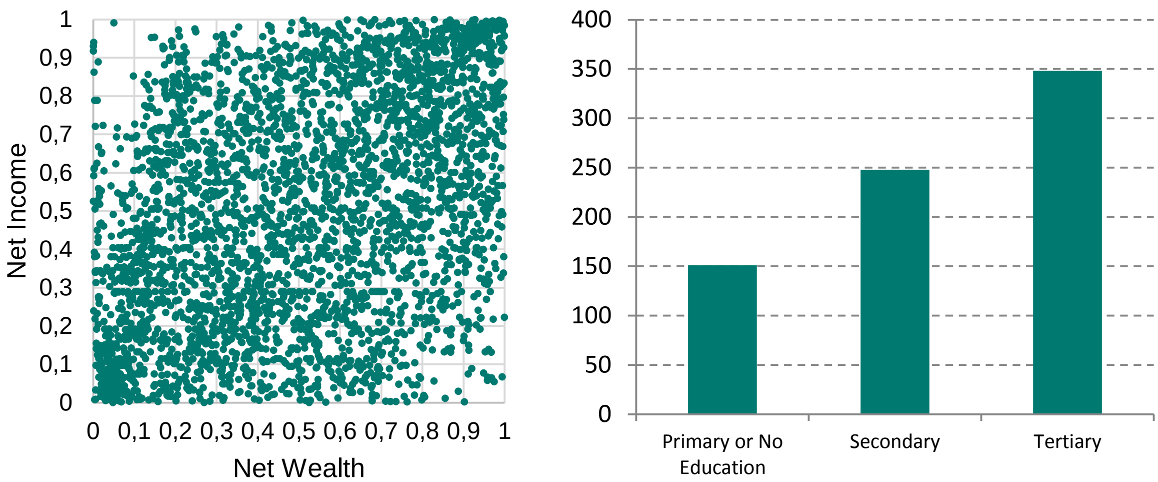
[15] Studies by Credit Suisse also contain certain measures of wealth inequalities.

1. Net wealth

1.1. Main results

The average net wealth of a household in Poland, as measured by the median[16], amounted to PLN 256.8 thousand. Net wealth variable is subject to a significant variability resulting from many important features of households. In particular, net wealth tends to increase considerably along with growing income per household (see Figure 1.1 left-hand panel). For example, 10% of households with the highest annual net income had at their disposal assets (PLN 539.0 thousand) on average, which were, more than four times the median size of wealth held by 20% of the lowest income households[17] (PLN 120.0 thousand).

Figure 1.1. Net wealth and net income (left-hand panel - empirical copula), net wealth depending on the education of the reference person (right-hand panel – in PLN thousand).



Notes: Marginal distributions in the empirical copula have been converted into monotonous distributions in the interval (0,1) using the empirical distribution. The Spearman's rank correlation coefficient is 0.42, with 95% confidence interval (0,388-0,443). If the variables had been negatively interrelated, the distribution of the empirical copula would have focused around the diagonal with a negative slope. If the variables had been positively correlated, the distribution of the empirical copula would have focused around the diagonal with a positive slope. On the other hand, if the variables had been independent, the distribution would have been uniform throughout the field.

Source: BZGD, NBP.

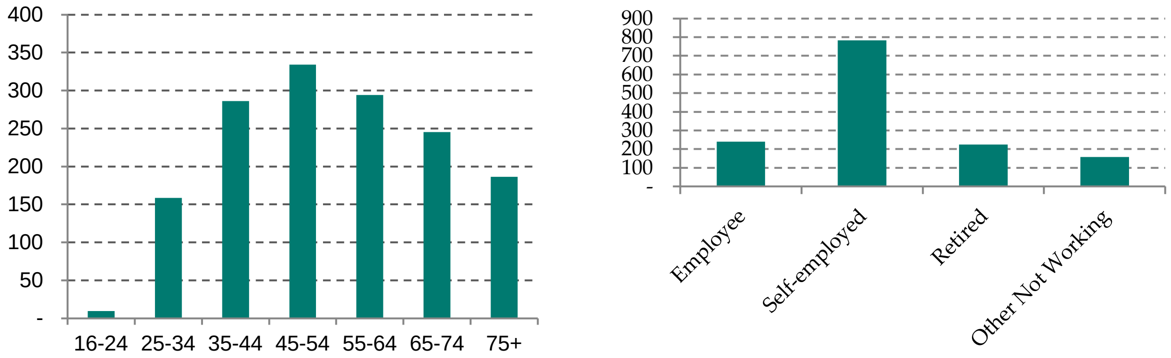
[16] In this study the median will be used as the basic measure of the central trend due to the strong skewnness of wealth distribution. Such an approach is commonly used in household wealth surveys (e.g. ECB, 2013a).

[17] Due to strong right-handed asymmetry (skewenness) of wealth distribution, we distinguish decile groups for the wealthiest households in terms of income and wealth (above the 80th percentile), maintaining a breakdown into quintiles for other households.

Education of the household reference person[18] is favourable to wealth accumulation (see Figure 1.1, right-hand panel). In the case of households where the reference person has higher education, net wealth (PLN 343.6 thousand) is more than twice as high as in households where the reference person has at most primary education (PLN 151.0 thousand).

Another feature that strongly differentiates the value of net wealth is the labour force status of the reference person (see Figure 1.2 right-hand panel). Households in which the reference person conducts their own business activity (self-employed status) are clearly more affluent (PLN 783.6 thousand) than households having employee status (PLN 238.6 thousand) or pensioner status (PLN 201.6 thousand). Net wealth varies significantly with the age of the household reference person, reaching the highest value when the household reference person attains the age of 45 - 64 (PLN 304.5 thousand) increasing from PLN 141.5 thousand in the case of young households (16 - 34 years), and then falling to PLN 216.7 thousand in the case of the oldest households whose reference person is above 65 years of age (see Figure 1.2 left-hand panel).

Figure 1.2. Net wealth depending on the age (left-hand panel) and the labour force status of the reference person (right-hand panel) – PLN thousands.



Source: BZGD, NBP.

Net wealth per household is strongly differentiated by the class of the geographical location of residence. Households in rural areas have on average much more wealth (PLN 366.1 thousand) than households in urban areas (PLN 207, 2 thousands). Residents of large cities[19] (over 200 thousand of inhabitants) are clearly more affluent (PLN 258.3 thousand) than is in the case of smaller towns (PLN 184.7 thousand).

As consistently shown by the household wealth surveys worldwide[20], the value of net wealth is primarily determined by real assets accumulated by households, predominantly in the form of their main

[18] The household head is the main person providing information to the interviewer during the survey. We use interchangeably the terms the household reference person and the household head.

[19] See Table A2, Statistical Annex.

[20] For example, the ECB (2013a), Ynesta (2008).

residence and business assets. Financial assets are of clearly lesser importance in the process of wealth accumulation. Debt resulting from the purchase of the main residence is a major factor lowering the household net wealth.

The median value of the household main residence in the entire population was PLN 282.6 thousand while business assets averaged PLN 219.7 thousand. An important component of household assets is also the value of other property than their main place of residence (PLN 150.0 thousand). The holding of particular real assets varies across various groups of households. While the vast majority of households own their main residence (76.4%) and motor vehicles (63.0%), much fewer households declared other real estate (19.1%) or business assets (18.8%) as components of their wealth. Business assets amount to an average of PLN 219.7 thousand and represent a significant part of wealth of the most affluent households in Poland (see Table 1.2). At the same time, as compared to other countries in the euro area both the frequency (18.8% versus 11.1% in the euro area) and the value of that wealth component (EUR 52.8 thousand versus EUR 30.0 thousand in the euro area) are relatively high in Poland.

Financial assets represent a relatively small part of total net wealth and amount to an average (median of the total financial assets) of PLN 8.6 thousand. Individual components of financial assets are very unevenly distributed across households, and their average value varies significantly. For example, bank deposits are the most popular form of fund collection (81.9% of households hold bank deposits), whereas the value of assets accumulated in the form of deposits is relatively small (PLN 5.0 thousand). On the other hand, households are far less likely to invest their savings in investment funds (4.2% of households), while in the case of such assets the figures are, on the average, significantly higher (PLN 11.9 thousand).

Liabilities of households, comprising various forms of debt (for example, mortgage loans, consumer loans, etc.) are for the average household a relatively small burden on its assets (PLN 10.0 thousand). On the other hand, as in the case of financial assets, households differ considerably both in terms of the debt profile and debt level of particular types of commitments. For example, liabilities resulting from secured housing loans (mortgages), which are the main component of household debt in Poland, concern only 12.1% of households, yet represent a relatively high burden for them (an average of PLN 104.0 thousand). In contrast, other loans, primarily consumer loans[21] are much more common (23.5% of households claim to have taken a consumer loan), but their value in household liabilities is much lower (on average PLN 5 thousand).

[21] These are consumer loans (for example, for the purchase of a car or another motor vehicle, to finance business or professional activity, for other loan repayment, for educational purposes, to finance living costs, for other purposes) and loans for consumption purposes taken out at banks and non-bank financial institutions.

Table 1.1. Net wealth and assets of households – main characteristics

	Household structure	Net wealth		Assets					
				Real assets			Financial assets		
	%	median (PLN thousand)	mean PLN thousand)	%	median (PLN thousand)	mean PLN thousand)	%	median (PLN thousand)	mean PLN thousand)
All households	100.0	256.8	411.1	88.8	307.4	470.5	88.7	8.6	21.9
Ownership status									
Owner outright	65.2	355.0	523.3	100.0	343.5	508.8	91.0	9.4	22.5
Owner with housing loan	11.2	275.6	477.7	100.0	422.0	596.0	96.9	13.4	33.5
Tenant or other	23.6	4.6	68.7	52.3	13.0	119.2	78.3	4.7	13.4
Household type									
One-person household[1]	30.3	160.2	239.1	77.4	202.0	299.6	78.3	4.0	18.0
Couple without children	19.3	247.2	411.2	94.0	270.0	439.1	92.2	10.1	26.2
Couple with children	32.3	314.2	488.8	93.7	362.0	538.5	93.9	10.6	24.0
Extended-family household	18.1	403.5	559.9	93.2	413.7	581.2	92.8	9.1	19.3
Age of the reference person									
16-34	15.7	141.5	272.3	85.4	254.0	347.1	91.4	9.1	19.3
35-44	18.4	286.0	470.8	91.7	372.3	537.6	91.9	10.0	25.3
45-64	43.3	304.5	485.5	91.0	345.0	523.4	90.3	9.5	23.9
65+	22.6	216.7	321.5	84.8	260.0	367.8	81.1	5.0	16.9
Labour force status of the reference person									
Employed	45.5	238.6	359.3	91.0	297.0	406.2	93.7	9.9	24.5
Self-employed	11.1	783.6	1 068.1	99.8	789.4	1 073.5	94.8	18.0	32.7
Retired and other not working	43.4	201.6	297.1	83.6	252.0	346.4	81.8	5.5	15.6
Education of the reference person									
Primary or no education	15.7	151.0	270.2	73.1	257.0	366.8	69.3	3.7	9.2
Secondary education	60.9	247.8	423.2	89.8	285.0	470.7	90.3	8.0	16.6
Higher education	23.4	343.6	473.1	96.6	393.6	500.8	97.5	18.1	40.9
Class of geographical location									
Urban areas	67.1	207.2	335.3	86.4	265.1	390.0	90.5	9.1	24.0
Rural areas	32.9	366.1	565.5	93.4	405.5	606.9	84.9	7.7	17.4
Net income (quantiles)									
0-20%	20.0	120.0	196.0	69.2	200.0	278.3	67.8	2.4	7.7
20-40%	20.1	178.6	280.2	85.1	200.0	322.8	87.7	4.8	12.6
40-60%	20.0	253.8	364.5	93.7	272.0	390.4	92.4	7.6	15.8
60-80%	20.0	357.5	552.5	96.5	392.7	583.4	97.0	11.2	22.3
80-90%	10.0	405.8	507.0	99.4	401.3	513.0	98.4	18.8	26.2
90-100%	10.0	539.0	817.2	99.2	587.0	832.9	98.4	34.1	64.5
Net wealth (quantiles)									
0-20%	20.0	6.9	12.6	44.3	7.0	29.0	6.9	3.4	6.8
20-40%	19.9	129.9	125.2	99.4	132.0	139.2	89.9	6.3	12.5
40-60%	20.1	256.8	257.8	100.0	254.7	260.7	96.0	10.0	20.3
60-80%	19.9	455.4	458.8	100.0	448.8	457.2	95.8	11.5	22.4
80-90%	10.0	698.6	715.5	100.0	695.8	713.5	97.6	12.3	24.2
90-100%	10.0	1 263.8	1 692.7	100.0	1 245.3	1 672.4	99.1	26.5	62.5

Source: BZGD, NBP.

1.2. Distribution of net wealth

Net wealth is unevenly distributed across households, and their strong concentration is observed in the group of the most affluent households. This is a common phenomenon observed in both developed and developing countries[22]. According to the data collected in this survey, 10% of the most affluent households hold 37% of the total net assets, while for 20% of the least wealthy households; (net) accumulated assets represent only a small part (1.0%) of the total households' assets.

A fraction of households (5.9%) failed to gather wealth of a net positive value, out of which 2.6% hold total debt exceeding the stock of all the accumulated assets meaning wealth of a net negative value. In the case of 1% of the least affluent households, net value of their wealth does not exceed PLN -4.5 thousand, with the lowest recorded value of PLN -130 thousand. The average (median) household collects (net) assets worth up to approx. PLN 257 thousand, while 1% of the most affluent households hold (net) assets amounting to at least PLN 2.8 million (see Figure 1.3).

The difference in income and wealth inequalities is reflected in the Lorenz curve (see Figure 1.4 left-hand panel), which is the cumulative distribution of a particular category (income in the economy, wealth in the population). The diagonal line reflects equal distribution of a particular variable in the population. The size of the field between the line of equal distribution and the Lorenz curve corresponds to the Gini coefficient - the higher the Gini coefficient, the greater the inequality. The Gini coefficient for the net wealth is 57.9%, while for net income amounts to 38.4%. Income inequality in Poland is less pronounced than wealth inequality, which is also in line with the global trends[23]. The Household Wealth and Debt Survey data show that 10% of the highest-net-income households generate 23% of the total income of all households, while income of 20% of the lowest-income households accounts for a mere 7% of the total income.

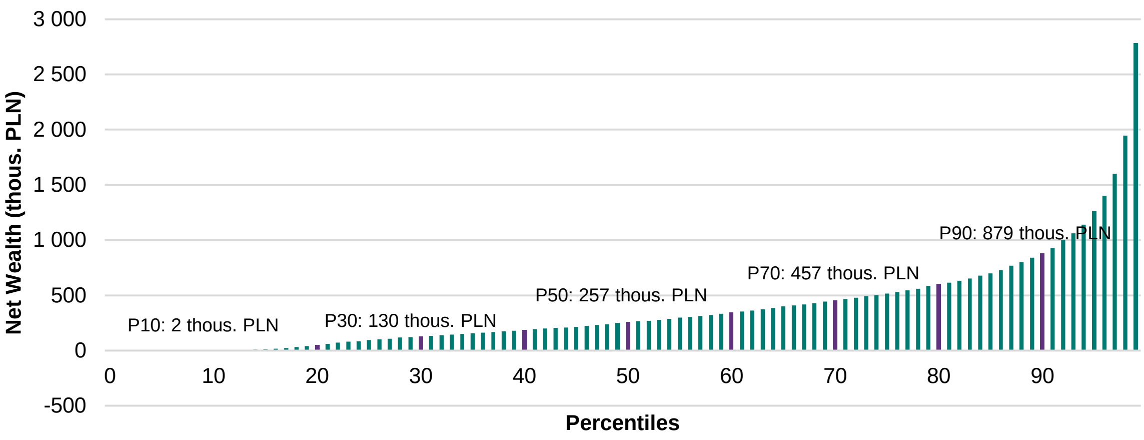
The Gini coefficient for net income in the Household Wealth and Debt Survey is therefore higher than that obtained in such surveys as the EU-SILC survey (30.7%, 2013), the household budget survey (33.8%, 2013) or Social Diagnosis [Diagnoza Społeczna] (28.5%, 2015), which shows a considerable span of results[24]. The data derived from the Household Wealth Survey point to a larger scale of income inequality in Poland, as they better capture the highest income households in the sample than other surveys. This was achieved thanks to the above mentioned procedure[25] of oversampling the most affluent households which may also be expected to generate a higher income. This was suggested by the experience of the euro area countries from the findings of the survey of financial situation of households, including their assets and debt, gathered under the HFCN project, where also the values of the Gini coefficient are higher than those calculated on the basis of data from other surveys[26] such

[22] See OECD (2015), UNO (2013).
[23] OECD – op. cit., UNO - op. cit.
[24] The analysis of the reasons for the divergence of Gini coefficient estimates for Poland between the EU-SILC study and the Household Budget Surveys may be found in the paper by Wójcik-Żołądek (2013).
[25] See also NBP (2015b), being a methodological annex to this study.
[26] For example Arrondel et al. (2014), relying on the data from the HFCN study, present the Gini coefficient estimate at the level of 42.1% (for gross income, 2010), whereas the EU-SILC data, available at the website of the Eurostat, show the Gini coefficient of 30.2% (disposable income, allowing for the equivalence scale, 2010).

as the EU – SILC survey (Arrondel et al., 2014). What should be borne in mind is the limited comparability of inequality measures, including the Gini coefficient for various surveys. This results, apart from diversified representativeness of the surveyed households, also from different income measures used (gross, net) and possible allowance made for demographic composition of a household (use of the scale of equivalence) etc. For example, the Gini coefficient according to this survey, calculated for net income using the scale of equivalence (as defined by the OECD) is 34.6%, thus being quite close to the one calculated on data from the household budget survey.

Despite the attempts to factor in lower propensity of wealthy households to participate in the survey in the sampling algorithm (see Methodological appendix - NBP, 2015b), it appears that the share of the richest households in the survey is lower than the actual one (see Box 1.1). Consequently, the scale of wealth inequalities in Poland is probably greater than suggested by the survey results.

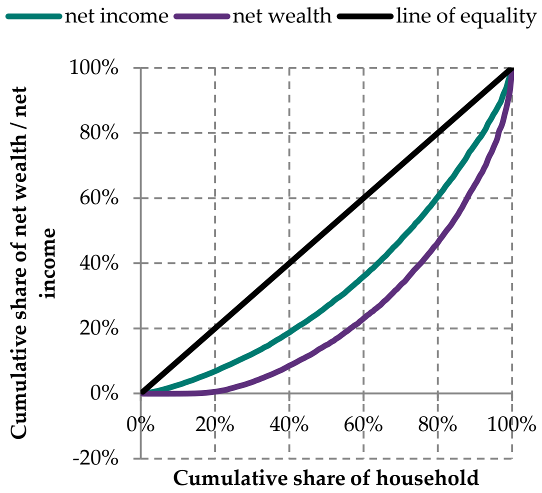
Figure 1.3. Distribution of household net wealth

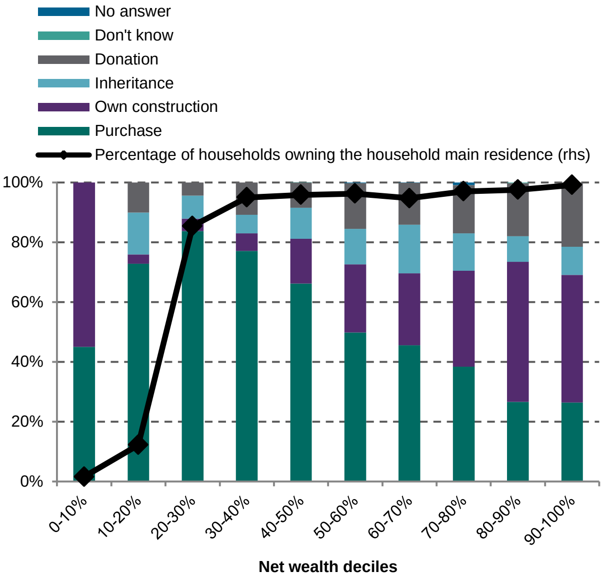


Source: BZGD, NBP.

Note: The Figure presents upper marginal values of percentiles of the net asset value.

Figure 1.4. The Lorenz curves for net wealth and net income (left-hand panel). The way of acquiring of the household main residence across net wealth deciles (right-hand panel).





Source: BZGD, NBP.

The fact of possessing the principal place of residence is associated with the level of net wealth - the percentage of households owning their place of residence is rising rapidly from almost 2% for the least affluent household to more than 95 % for middle wealth households and more affluent households (see Figure 1.4 right-hand panel). The role of home construction is rising and the role of purchase of the main residence is declining with higher wealth (the poorest households from the bottom decile of wealth are an exception). More than 75% of less wealthy households acquire their main residence through purchase. In turn, more than 40% of households from the last quintile have built their main residence on their own, and only 25% of them acquired it by the purchase. Also the number of households declaring to have acquired their place of residence through donation is rising with higher household wealth, posting a 5-10% rise in the case of less wealthy households and a 20% rise in the case of the richest households. Acquisition through donation does not seem to be related to the level of assets and the percentage of households that were donated the property is in the range of 5-15%. Different levels of wealth and its components in particular wealth groups are illustrated in Table 1.2. This table presents balance sheets for three deciles of households – the poorest households, middle wealth households and the richest households.

The sum of net wealth of the 10% least wealthy households is negative (approx. – PLN 3.6 billion). This results from a small share of households in this group being owners of their main residence (approx. 1.6%) and a relatively high level of loan-related debt resulting from non-housing credit and loans (comparable with housing debt and even higher than among middle wealth households). Motor vehicles in this group account for a major part of real assets (approx. 10%) as compared to other groups of households. At the same time, as a result of a relatively low level of real assets, financial assets play a very important role in the assets of the least wealthy households (approx. 26% of all assets versus approx. 3-6% of all assets in two comparable wealth groups). The value of fixed assets held in this group is almost one hundred times smaller than the value of fixed assets held by middle wealth households and the value of total financial assets approximately twenty times smaller.

Net wealth of middle wealth households amounts to approx. PLN 345 billion, the overwhelming part being fixed assets, including primarily household's principle residence (owned by approx. 95% of households and accounting for approx. 79% of total assets). Other real estate and business assets, which are not held by the poorest group of households, account in this group, for approx. 7% and 2.7% of total assets, respectively. Housing loans are the main component of household debt, representing approx. 90% of the total debt.

The wealthiest 10% of households have accumulated PLN 2.3 billion worth of assets. The vast majority of them own their main residence (approx. 99%). Similarly to other wealth groups, this asset component constitutes the main asset, but its share in comparison to other asset components in this group is the lowest (approx. 52.5%). The role of other real estate property (approx. 14.7% of assets) and, above all business assets is considerably rising (approx. 26.7% of assets). Financial assets account for a relatively small part of household wealth. Housing loans are the main component of household liabilities (approx. 69%), but as compared to middle-income households other the type of debt (approx. 31%) is clearly gaining in importance.

Table 1.2. Households by their net wealth

10% of the poorest households					
ASSETS			LIABILITIES		
	Value (PLN million)	Share (%)		Value (PLN million)	Share (%)
Total assets	5 482.5	100.0	**Total liabilities**	9 089.1	100.0
Real assets	4 076.2	74.3	*Housing loans*	4 669.7	51.4
Household main residence	3 357.7	61.2	*Residential loans backed on the main residence*	4 669.7	51.4
Other real estate property	-	0.0	*Residential loans backed on another real estate*	-	0,0
Vehicles	568.9	10.4	*Non-housing credit and loans*	4 419.4	48.6
Valuables	149.6	2.7			
Self-employment business wealth	-	0.0			
Financial assets	1 406.3	25.7			
Deposits	622.5	11.4	NET WEALTH		
Mutual funds	18.1	0.3		Value (PLN million)	
Shares	16.1	0.3	**Net wealth**	- 3 606.7	
Bonds	-	0.0			
Receivables	69.6	1.3			
Voluntary pension schemes/ life insurance policies	680.0	12.4			
Other financial assets	-	0.0			

10% of the middle wealth households (45%-55%)					
ASSETS			LIABILITIES		
	Value (PLN million)	Share (%)		Value (PLN million)	Share (%)
Total assets	369 852.9	100.0	**Total liabilities**	35 642.8	100.0
Real assets	348 097.9	94.1	*Housing loans*	31 715.3	89.0
Household main residence	297 937.6	80.6	*Residential loans backed on the main residence*	30 406.2	85.3
Other real estate property	23 659.9	6.4	*Residential loans backed on another real estate*	1 309.2	3.7
Vehicles	13 748.0	3.7	*Non-housing credit and loans*	3 927.5	11.0
Valuables	2 352.6	0.6			
Self-employment business wealth	10 399.9	2.8			
Financial assets	21 754.9	5.9			
Deposits	14 968.6	4.0	NET ASSETS		
Mutual funds	579.2	0.2		Value (PLN million)	
Shares	571.7	0.2	**Net assets**	344 424.0	
Bonds	396.0	0.1			
Receivables	398.2	0.1			
Voluntary pension schemes/ life insurance policies	4 290.8	1.2			
Other financial assets	550.3	0.1			

10% of the wealthiest households					
ASSETS			LIABILITIES		
	Value (PLN million)	Share (%)		Value (PLN million)	Share (%)
Total assets	2 346 664.3	100.0	**Total liabilities**	54 504.5	100.0
Real assets	2 264 672.0	96.5	*Housing loans*	37 598.6	69.0
Household main residence	1 238 033.3	52.8	*Residential loans backed on the main residence*	31 279.5	57.4
Other real estate property	345 641.4	14.7	*Residential loans backed on another real estate*	6 319.2	11.6
Vehicles	46 349.4	2.0	*Non-housing credit and loans*	16 905.9	31.0
Valuables	4 662.7	0.2			
Self-employment business wealth	629 985.3	26.8			
Financial assets	81 992.3	3.5			
Deposits	53 635.0	2.3	NET ASSETS		
Mutual funds	11 493.6	0.5		Value (PLN million)	
Shares	2 137.1	0.1	**Net assets**	2 292 159.8	
Bonds	2 141.5	0.1			
Receivables	1 964.8	0.1			
Voluntary pension schemes/ life insurance policies	6 702.5	0.3			
Other financial assets	3 917.8	0.2			

Source: BZGD, NBP.

Box 1.1. The richest households and distribution of wealth

Empirical studies show that concentration of wealth in the group of the richest is very high (Wolff 2006; Kennickell 2007; Davies et al. 2010). For this reason, we need a good representation of this group in the sample in order to determine the degree of inequality of wealth distribution. At the same time, given lower propensity of wealthy households to participate in the surveys, the share of this group of households should be higher in the sample than in the population so that the number of those households as shown in the survey results reflect their size in the population.

For this purpose, the drawing algorithm takes into account parameters that are potentially related to the wealth level. The most effective way is to use administrative data that are strongly associated with the wealth level (e.g. real property tax or income tax). In the present survey we did not use this type of individual data. Statistical districts (encompassing several dozen of dwellings), where the richest households were expected to be domiciled, were identified in 10% of those municipalities where in 2013 the highest average personal income taxes were paid. Within these municipalities statistical districts were selected with the largest average housing area (based on the census figures).

In order to ascertain whether the distribution of wealth in the sample reflects the distribution across the population we can rely on publicly available information on wealth of the richest Poles (Forbes, 2014). Households in the sample, even the richest ones, will be closer to the central part of wealth distribution, and the richest ones in the very tail of the distribution. If the form of the distribution estimated on the basis of the sample used in the survey is the same as when taking into account the data on the wealthiest households, this means, that the sample is representative also in the upper tail of the distribution. Empirical studies show that the distribution of wealth is in line with power-law distribution (Clauset et al. 2009).

So we can estimate the exponent of this distribution based on the sample and compare it with the exponent obtained on the basis of the data containing both the survey data and data from the list of the richest households. This survey was carried out in the euro area countries and the United States on the basis of the data published on the Forbes list of the richest people (Vermeulen, 2014). It shows that wealth distribution in the population is particularly well reflected in countries where tax data were used to identify households for sampling (USA, Spain, France) whereas in other countries (Germany, Austria, Italy, Belgium, the Netherlands) the sample underestimates the degree of wealth concentration.

The variable is a power-law distribution variable if its probability distribution is as follows:

$$p(x) \propto \alpha x^{-\alpha}$$

where α is called the exponent of decomposition or the scaling parameter.

The empirically found power-law distributions concern primarily the tails of the distribution (observations of extreme values, and not the entire distribution), and are characterized by an exponent in the range of $2 < \alpha < 3$.

If logarithmized, both sides of the first equation give the following:

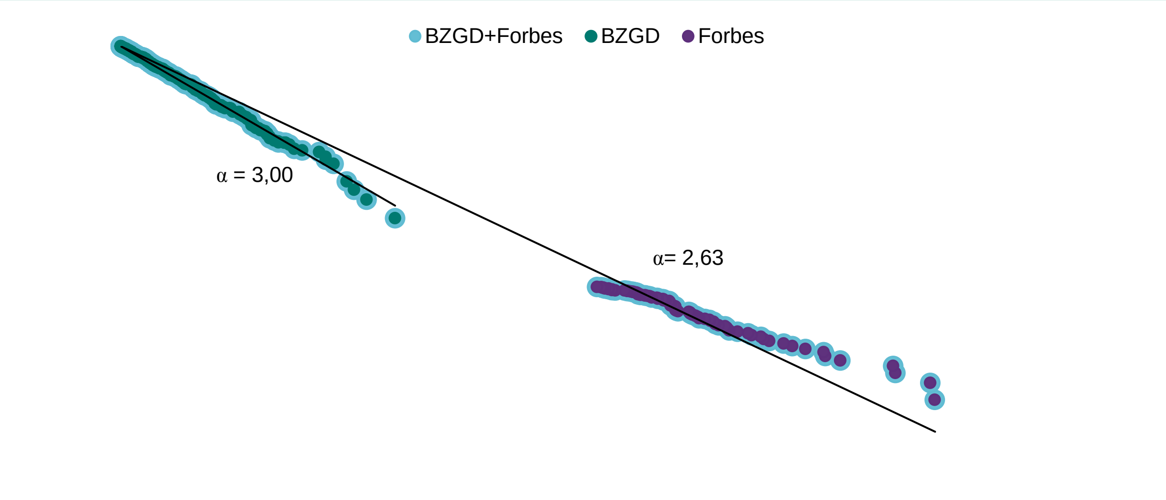
$$\ln\big(p(x)\big) = -\alpha \ln(x) + C$$

where C is a constant.

The above equation is often used to check if a variable is a power-law distribution variable – it is checked whether the variable x and its histogram, both shown on a logarithmic scale, follow a straight line with a slope $-\alpha$. This procedure usually turns out to be unreliable, but if, instead of the probability density function, the distribution function is used and the histogram is constructed using ranks, the error in estimating the exponent is very small (Clauset et al. 2009). This approach was used in this analysis. Break point value wealth from whose level the distribution takes a form of a power-law distribution (PLN 757 thousand) was determined in accordance with the procedure proposed by (Clauset et al. 2009) based on the data from the sample without the use of weights.

Figure 1.5 shows the estimation of the upper part of wealth distribution based on the data from the Household Wealth and Debt Survey (BZGD) and based on data from the Household Wealth and Debt Survey (BZGD) correlated with the Forbes data. It turns out that the scaling parameter is lower if the list of the richest people in Poland is factored in. The higher scaling parameter obtained on the basis of the Household Wealth and Debt Survey (BZGD) data suggests a lower degree of concentration of wealth than the actual one. In other words, the scale of inequality in the distribution of wealth is higher than suggested by the Household Wealth and Debt Survey (BZGD) data because it failed to sufficiently account for the wealth of the richest people. These results are consistent with those for other countries, where administrative data were used when sampling the households (see. Vermeulen, 2014).

Figure 1.5. The power-law distribution taking into account the survey data only and the one additionally taking into account the data on the richest people.



Notes: The logarithm of the complementary power-law distribution function estimated on the basis of the histogram using ranks was shown on the vertical axis. The logarithm of net wealth in PLN was shown on the horizontal axis. The first observation in the upper left-hand part of the graph corresponds to assets in the amount of PLN 757 thousand, and the last observation in the lower right-hand corner corresponds to the assets of approx. PLN 11 billion.

Source: BZGD, NBP.

1.3. Net wealth in Poland as compared to the euro area countries

Net wealth of an average household[27] in Poland (EUR 61.7 thousand) accounted for approx. 56 % of the median net wealth of an average household in the euro area[28] (EUR 109.2 thousand). This means that Polish households are moderately wealthy as compared to the euro area countries, with average net wealth similar to that observed in such countries such as Austria (EUR 76.4 thousand), Portugal (EUR 75.2 thousand), Slovakia (EUR 61.2 thousand) and Germany (EUR 51.4 thousand). Luxembourg (EUR 397.8 thousand), Cyprus (EUR 266.9 thousand) and Malta (EUR 215.9 thousand) feature the highest net wealth per household in the euro area.

The above mentioned countries with the level of net wealth per average household relatively similar to that observed in Poland, form a heterogeneous group in terms of the level of development, as measured by GDP per capita. On the one hand, these include the least developed euro area countries such as Portugal (78% of GDP per capita of the EU-28, 2014, PPS – Purchasing Power Standard) and Slovakia (76% of GDP per capita of the EU-28, 2014, PPS) and, on the other hand, countries belonging to the forefront in the European Union in terms of the level of development, such as Germany (124% of GDP per capita of the EU-28, 2014, PPS) and Austria[29] (128% of GDP per capita of the EU-28, 2014, PPS). Bearing in mind that the main place of residence is the household main asset, determining the total household wealth (if the household owns a real estate), based on the behaviour of this variable we can explain the position of these countries at the bottom part of the distribution of net wealth. In countries with lower GDP per capita, belonging to the analysed group, ownership of the occupied property is much more common (Slovakia -89.9% of households, Portugal - 71.5%, Poland - 76.4%) than in wealthier countries in terms of GDP (Austria - 47.7%, Germany - 44.2%), where, in turn, rental of dwellings is much more common. With considerably lower prevalence of property ownership in the latter group of countries, their average (median) value is much higher (Austria – EUR 200.0 thousand, Germany – EUR 168.0 thousand) than in countries with lower GDP per capita (Slovakia – EUR 55.9 thousand, Portugal – EUR 90.0 thousand, Poland - EUR 67.9 thousand).

Financial assets of Polish households are of lesser importance as a component of their total net wealth than is the case in the euro area. The average household in Poland has gathered financial assets worth EUR 2.1 thousand (conditional median) as compared to EUR 72.6 thousand, which is the average value of real assets. In contrast, in the euro area a household has an average of EUR 11.4 worth of financial assets (conditional median) and the average stock of real assets amounting to EUR 144.8 thousand.

Households in Poland are significantly less indebted than the euro area countries, in relation to the accumulated gross assets. In Poland, the average total debt is EUR 2.4 thousand (slightly more than 6% of gross assets), while in the euro area the average household debt is EUR 21.5 thousand (approx. 22% of gross assets).

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[27] Translated into the EUR at the exchange rate published by NBP on 30 June 2014 of 4.1609 PLN/EUR.
[28] Here and in the later part, values for the euro area based on the ECB (2013a).
[29] All data on GDP per capita taking into account the purchasing power standard, based on Eurostat (http://ec.europa.eu/eurostat).

Net wealth of households in Poland is generally more evenly distributed than in the euro area. In particular, wealth inequalities in Poland, as measured by the Gini coefficient, amount to 58% as compared to the average of 68% in the area euro[30]. Poland is therefore a country with considerably smaller wealth inequalities, similarly to Greece (56%), Slovenia (53%) or Slovakia (45%). The largest wealth inequalities, as measured by the Gini coefficient, are observed in Germany and Austria (76%) and Cyprus (70%).

Larger wealth inequalities may be observed especially in the United States. In Poland 10% of the richest households own 37% of net assets, the average euro area[31] figure being 50% and the US figure 84%. Differences as regards inequalities in the distribution of wealth in Europe as compared to the United States[32] are, however, probably less pronounced. Data for Poland (see Box 1.1) and most euro area countries fail to sufficiently factor in the wealthiest people, while in the United States they seem also to appropriately reflect the situation of the wealthiest ones[33] (Vermeulen, 2014).

To sum up this part of the study, the results of the surveys of the affluence of Polish households, in terms of the main measure of wealth - net wealth, correspond to the regularities observed in the euro area. Net wealth value of the average Polish household against the euro area countries is relatively low, reflecting the level of income of Polish households. Assets of Polish households consist, for the most part and to a considerably larger extent than in the euro area, of real assets (95.5% of total assets), mainly real estate (66.5%), with a small share of financial assets (4.5%). Such a composition of assets is typical of relatively less developed countries (e.g. Slovakia, Portugal) with a quite modest level of income and a moderate degree of development of the financial system, with a relatively low household debt as one of the consequences. At the same time, households in these countries show a strong propensity to own occupied dwellings[34] as a result of which the average net wealth of households in these countries, including Poland, is above the average observed in some other countries (Germany), where households have relatively higher income. The second feature distinctive for Polish households is a high percentage of people declaring ownership of business assets as well as their level. For most categories of the balance sheet, assets and liabilities in Poland are relatively low as compared to most euro area countries, but in the case of business values they appear to be relatively high. A wider debate concerning international comparisons of net wealth of households in the euro area, including differences between income and wealth of households across countries, is presented in papers based on the data from the HFCN survey[35].

[30] ECB (2013a) – op. cit.
[31] Fessler i Schürz (2013).
[32] Federal Reserve (2014).
[33] Higher possibility to include the richest in the sample usually results from access to administrative data.
[34] This is most likely the effect of both the poorly developed housing market and institutional and cultural differences.
[35] The updated list of publication, using the HFCN survey data, may be found at the website:
https://www.ecb.europa.eu/pub/economic-research/research-networks/html/researcher_hfcn.en.html.

Table 1.3. Net wealth of Polish households and their components against the background of the euro area countries, taking into account the ownership of the main residence (median – EUR thousand)

	All household				Owners of the main residence					Non-owners of the main residence				
	As-sets	% of indebted house-holds	Liabili-ties	Net wealth	% of house holds	As-sets	% indebted house-holds	Liabili-ties	Net wealth	% of house holds	As-sets	% indebted house-holds	Liabil-ities	Net wealth
PL	70.7	37.0	2.4	61.7	77.4	88.0	38.7	3.4	83.7	22.6	2.2	31.1	0.8	1.0
BE	249.9	44.8	39.3	206.2	69.7	335.5	51.5	55.9	304.1	30.4	9.9	29.5	4.5	7.6
DE	67.9	47.4	12.6	51.4	44.2	263.1	54.7	61.7	215.5	55.8	13.3	41.6	3.3	10.3
GR	110.2	36.6	14.6	101.9	72.4	152.1	38.6	20.0	136.5	27.6	7.0	31.5	5.0	5.4
ES	210.2	50.0	36.0	182.7	82.7	245.6	51.9	43.4	214.3	17.3	9.1	40.7	8.0	5.1
FR	150.4	46.9	28.4	115.8	55.3	273.8	56.5	44.2	238.4	44.7	9.5	34.9	4.4	7.8
IT	188.0	25.2	15.0	173.5	68.7	259.5	27.3	31.0	250.8	31.3	12.0	20.6	5.0	10.8
CY	331.9	65.4	60.2	266.9	76.7	425.4	69.5	77.5	349.0	23.3	21.0	51.8	17.9	16.3
LU	494.4	58.3	73.4	397.8	67.1	636.1	64.0	104.7	556.2	32.9	28.1	46.8	10.0	22.1
MT	227.4	34.1	15.7	215.9	77.7	276.1	37.3	18.8	267.0	22.3	22.6	22.8	3.4	21.7
NL	217.3	65.7	89.1	103.6	57.1	330.5	83.5	132.8	214.8	42.9	25.7	42.0	11.2	19.3
AT	92.8	35.6	13.8	76.4	47.7	264.1	42.4	30.8	241.2	52.3	13.7	29.4	3.6	11.6
PT	93.2	37.7	31.7	75.2	71.5	127.0	43.5	40.6	106.1	28.5	5.5	23.3	3.0	4.5
SI	105.2	44.5	4.3	100.7	81.8	136.1	48.1	4.7	134.0	18.2	4.0	28.1	2.4	3.5
SK	64.4	26.8	3.2	61.2	89.9	69.6	26.9	4.1	65.6	10.1	2.6	25.6	1.0	2.2
FI	132.7	59.8	29.4	85.8	69.2	196.4	64.7	56.7	153.1	30.8	5.2	49.0	4.9	2.8
EA	142.0	43.7	21.5	109.2	60.1	253.0	48.9	50.0	217.6	39.9	11.5	35.9	4.3	9.1

Legend: PL - Poland, BE - Belgium, DE - Germany, GR - Greece, ES - Spain, FR - France, IT - Italy, CY - Cyprus LU - Luxemburg, MT - Malta, NL - Netherlands, AT - Austria, PT - Portugal, SI - Slovenia, SK – Slovakia, FI - Finland, EA – euro area.
Source: BZGD, NBP; HFCN (2013).

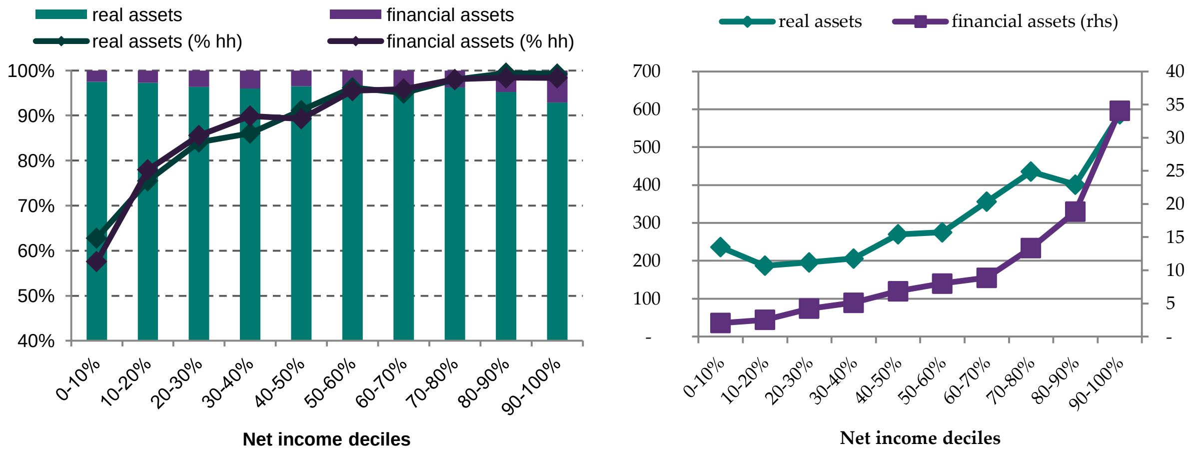
2. Assets

Household assets may be broken down into two main types of assets: real assets and financial assets. Both real assets and financial assets are in portfolios of the vast majority of households (88.8% and 88.7% respectively), and their total value is predominantly determined by the value of real assets. They account for 95.2% of total assets of this sector. As a result, the average value (median) of real assets is significantly higher (PLN 302.1 thousand) than that of financial assets (PLN 8.6 thousand).

Widespread ownership of real assets and financial assets which represent the overwhelming majority of total household wealth is typical of developed countries as evidenced by the HFCN results. In the euro area, 91.1% of households hold real assets, while 96.8% of all households own financial assets. The average value (median) of real assets (PLN 144,8 thousand) exceeds, by far, the value of financial assets (EUR 11.4 thousand). In Poland the situation is similar.

Household net income (Figure 2.1) is a significant factor explaining the differences in the level and the structure of assets between households. The percentage of households holding both real assets and financial assets increases with higher income (the largest differences in these percentages are observed between the first and the second decile group). In addition, the more income generated by a household, the higher the value of assets acquired by the household and the higher the share of financial assets in household's portfolio.

Figure 2.1. The structure of gross assets of households determined by household net income (left-hand panel: the share of components in the total value -%, and the percentage of households holding particular components -%; right-hand panel: median in PLN thousand.

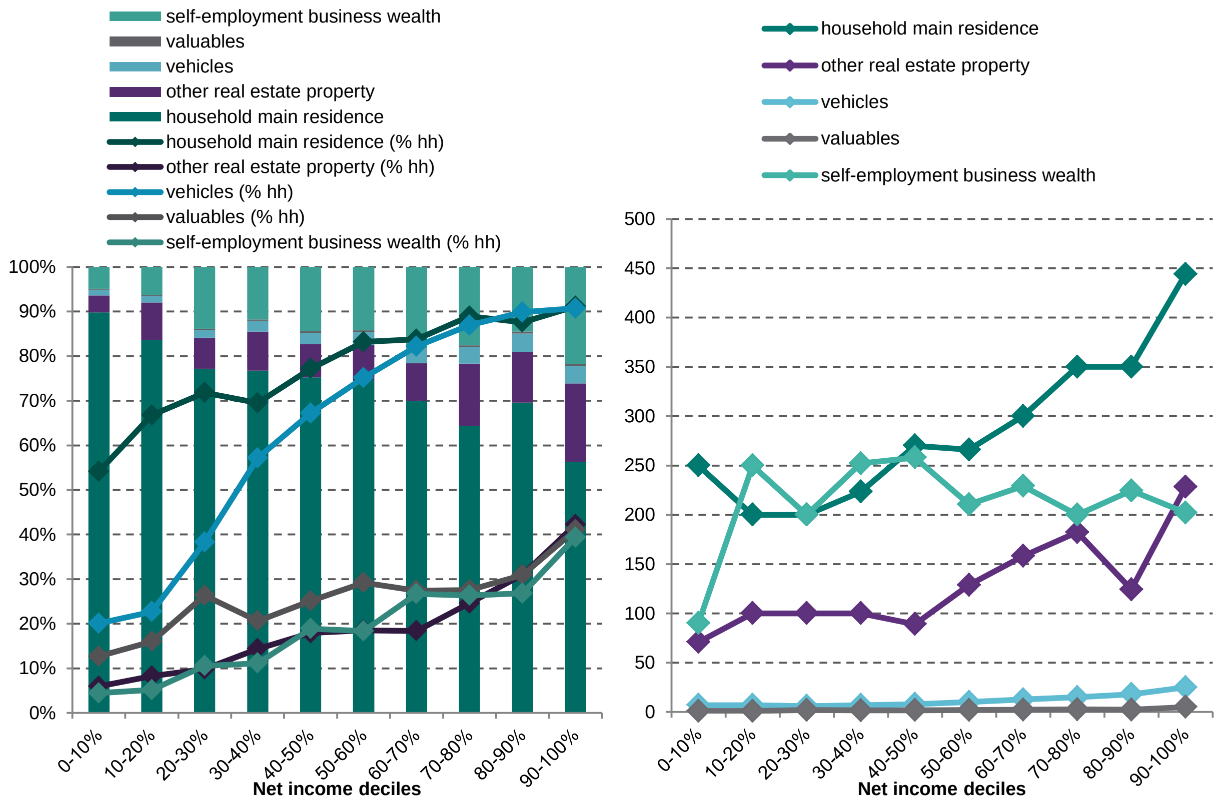


Source: BZGD, NBP.

2.1. Real assets

Similarly to the euro area countries, real property constituting the household main residence (76.4%) and motor vehicles (63.0%) are the most common real assets held by Polish households. A smaller proportion of households hold other assets i.e. valuables (25.7%), other real estate property (19.1%), self-employment business assets (18.8%). As regards the value structure of real assets, real estate is its largest component: the household main residence accounts for 69.7%, and other property for 11.1% of real assets. Also self-employment business wealth representing 15.8% account for a relatively large share of assets. Other real assets, namely vehicles and valuables represent the total of 3.4%. In the following part of the analysis the latter two categories have been combined due to their low share in the structure of real assets.

Figure 2.2. The structure of real assets (left-hand panel: percentage of households -%, share of the aggregate -%, right-hand panel: median in PLN thousand) by net income (decile groups)



Source: BZGD, NBP.

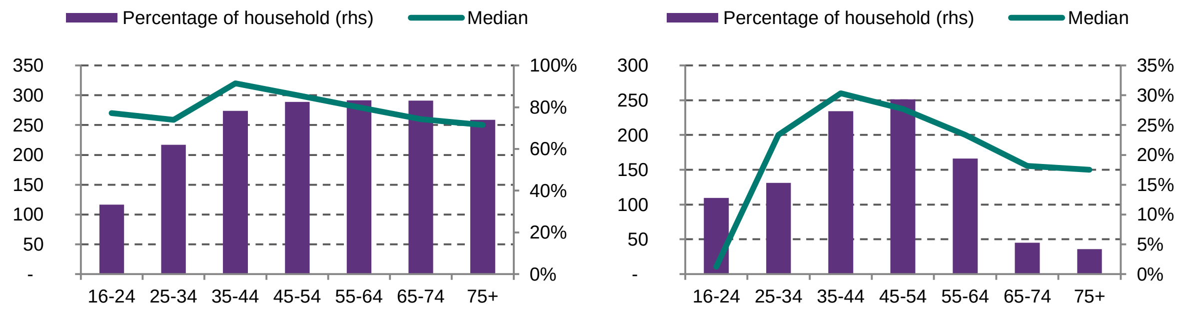
Table 2.1. Real assets of households - main characteristics

	Real assets						
	Total			Household main residence	Other real estate property	Self-employment business wealth	Other
	%	median (PLN thousand)	mean (PLN thousand)	%			
All households	88.8	307.4	470.5	77.4	19.1	18.8	69.8
Ownership status							
Owner-outright	100.0	343.5	508.8	100.0	20.9	22.5	74.5
Owner with housing loan	100.0	422.0	596.0	100.0	25.4	22.7	88.4
Renter or other	52.3	13.0	119.2	4.3	11.2	6.6	48.1
Household type							
One-person household[1]	77.4	202.0	299.6	66.5	12.2	6.4	41.8
Couple without children	79.5	270.0	439.1	79.5	70.0	14.7	76.3
Couple with children	81.0	362.0	538.5	81.0	82.7	25.7	85.5
Extended family	87.2	413.7	581.2	87.2	77.3	31.6	81.5
Age of the reference person							
16-34	85.4	254.0	347.1	59.1	20.8	15.0	77.8
35-44	91.7	372.3	537.6	78.3	24.0	27.3	81.0
45-64	91.0	345.0	523.4	82.9	20.5	23.9	73.5
65+	84.8	260.0	367.8	79.2	11.6	4.8	48.8
Labour force status of the reference person							
Employed	91.0	297.0	406.2	75.6	22.3	11.9	22.3
Self-employed	99.8	789.4	1 073.5	92.1	28.9	94.8	28.9
Retired and other not working	83.6	252.0	346.4	75.6	13.3	6.5	13.3
Education of the reference person							
Primary or no education	73.1	257.0	366.8	65.8	6.1	12.0	40.0
Secondary education	89.8	285.0	470.7	78.5	17.8	20.7	72.2
Tertiary education	96.6	393.6	500.8	82.3	31.2	18.4	83.6
Class of locality							
Urban areas	86.4	265.1	390.0	72.7	20.3	12.2	20.3
Rural areas	93.4	405.5	606.9	86.9	16.7	32.2	16.7
Net income (quantiles)							
0-20%	69.2	200.0	278.3	60.5	7.1	4.8	30.5
20-40%	85.1	200.0	322.8	70.7	12.1	10.9	59.5
40-60%	93.7	272.0	390.4	80.2	18.2	18.6	77.2
60-80%	96.5	392.7	583.4	86.4	21.5	26.5	88.5
80-90%	99.4	401.3	513.0	87.6	31.0	26.8	93.3
90-100%	99.2	587.0	832.9	91.1	42.2	39.4	92.9
Net wealth (quantiles)							
0-20%	44.3	7.0	29.0	6.9	2.5	1.1	40.6
20-40%	99.4	132.0	139.2	89.9	11.4	4.0	62.7
40-60%	100.0	254.7	260.7	96.0	18.8	8.6	71.6
60-80%	100.0	448.8	457.2	95.8	22.8	23.4	82.2
80-90%	100.0	695.8	713.5	97.6	33.8	42.4	91.5
90-100%	100.0	1 245.3	1 672.4	99.1	46.3	71.2	92.2

Source: BZGD, NBP. Note: 1) The category includes single parents.

Net income category clearly differentiates the structure of real assets of particular groups of households (Figure 2.2). With growing income, the percentage of households holding particular types of real assets gradually increases. In addition, the wealthier the household, the greater the value of its assets. The exception are self-employment business assets, whose average value (median) is slightly fluctuating above the second decile of income, ranging between PLN 200-250 thousand. Household main residence prevails in the structure of real assets held by less affluent households (90% of the total real assets for the first decile group). With rising income, other assets, in particular, business assets (22% of real assets for the last decile group) and other real estate property (18% in the case of this group of households) account for a larger share in the structure of real assets . The share of household assets associated with business activity is stable and seems to be independent of income, with the exception of the lower tail distribution.

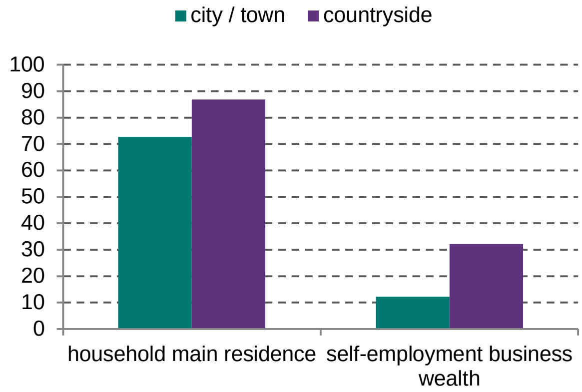
Figure 2.3. The household main residence (left-hand panel) and self-employment business wealth by age groups (right-hand panel) - the median value in PLN thousands; the percentage of households in %.

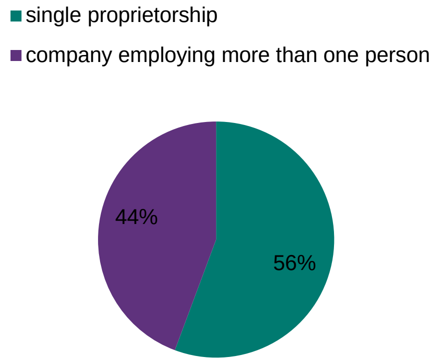


Źródło: BZGD, NBP.

The age of the reference person is the feature which is responsible for significant differences between households in terms of propensity to own major real assets. In particular, there is a clear correlation between the stage of the household reference person in the life cycle and the household's possession of real estate properties (in particular, the household main residence - left-hand panel of Figure 2.3) and self-employment business wealth (right-hand panel). Young households (whose reference person is under the age of 35 years) rarely hold property, because they are at the beginning of their professional activity and have limited access to capital. They are also less likely to conduct business activity. Then, as the reference person grows older over their professional life cycle, households tend to own their household main residence more often (peak in the age group 55 - 64), and the share of owners of business assets also increases (until the age of 45 - 54). In the case of households whose reference person is at the retirement age, the number of households in the possession of their main residence declines (perhaps due to the transfer of wealth to the next generation). Older households also limit their business activity for similar reasons or due to the sale of their enterprise.

Figure 2.4. The percentage of households holding particular real assets by the class of locality (left-hand panel) and the type of conducting business (right-hand scale) -%





Source: BZGD, NBP.

Rural areas have higher concentration of households being owners of their main residence (left-hand panel of Figure 2.4). Moreover, a greater percentage of households in rural areas (32.2%) claim to be owners of self-employment business wealth than households in urban areas (12.2%). This stems largely from the fact that households in rural areas are engaged in farming business. More than half (56%) of business assets come from sole proprietorship (right-hand panel of Figure 2.4), whose value is assessed at an average of approx. PLN 100 thousand. Companies employing more than one person are valued at an average approx. PLN 275.5 thousand.

Poland belongs to the group of countries that feature a high proportion of ownership of the household main residence (76.4%) as compared to the euro area countries. The average share of home ownership in the euro area is 60.1% and varies strongly across countries, ranging from 47% in Austria and 4.43% in Germany where ownership of the household main residence is relatively uncommon to approx. 90% in Slovakia. What is distinctive for Polish households is that young families in Poland tend to buy their principal residence much more often than their counterparts in the euro area. Approximately 59% of households in Poland whose reference person is aged 16-34 own the property used as the household main residence, while in the euro area countries this share is 31.9%[36]. In contrast, possession of other real estate property than the household main residence is less common in Poland than in the euro area (19.1% and 23.1% respectively). Households in Poland hold a distinctly higher percentage of self-employment business wealth (18.8%) than their counterparts in the euro area (11.1%). A similar percentage of households holding business assets was observed in such countries as Cyprus (19.5%) and Italy (18.0%).

[36] HFCN (2013b).

Table 2.2. Real assets in Poland as compared to euro area countries (% of households, median in EUR thousand)

Country	Total		Household main residence		Other real estate property		Self-employment business wealth	
	% of households	median (EUR thousand)	% of households	median (EUR thousand)	% of households	median (EUR thousand)	% of households	median (EUR thousand)
PL	88.8	72.6	77.4	67.9	19.1	36.0	18.8	52.8
BE	89.8	220.0	69.6	250.0	16.4	174.0	6.6	50.0
DE	80.2	89.2	44.2	168.0	17.8	115.0	9.1	19.4
GR	92.2	114.3	72.4	100.0	37.9	61.9	9.8	36.2
ES	95.3	201.7	82.7	180.3	36.2	120.2	14.2	50.8
FR	100.0	124.1	55.3	193.8	24.7	115.9	8.9	53.1
IT	97.7	176.0	68.7	200.0	24.9	100.0	18.0	15.0
CY	95.8	313.8	76.7	240.3	51.6	202.2	19.5	98.8
LU	93.6	470.5	67.1	500.0	28.2	300.0	5.2	97.6
MT	94.8	201.1	77.7	186.6	31.4	120.1	11.5	136.5
NL	89.8	198.8	57.1	240.0	6.1	165.5	4.8	51.7
AT	84.8	107.0	47.7	200.0	13.4	94.0	9.4	180.6
PT	90.1	91.9	71.5	90.0	27.1	53.5	7.7	47.1
SI	96.2	105.9	81.8	110.9	23.2	52.4	11.6	25.5
SK	96.0	61.8	89.9	55.9	15.3	16.4	10.7	4.6
FI	84.3	144.2	67.8	129.7	29.8	107.6	13.8	0.9
EA	91.1	144.8	60.1	180.3	23.1	103.4	11.1	30.0

Source: BZGD, NBP; EBC (2013).

Note: The column „Household main residence" shows the percentage of households holding the title to a part (not lower than 50%) or to the whole property.

2.2. Financial assets

The most common financial assets are bank deposits, held by 81.9% of households. More than half of households (51.3%) accumulate savings in order to protect their family and dependents in the case unfavourable random events (whole life insurance policies), or to finance their life needs after the end of professional life cycle (voluntary[37] pension schemes other than the Occupational Pension Schemes). Households tend to invest much less in such products as investment funds (4.2%), shares (3.5%) and bonds (1.0%) or hold other financial assets[38] (7.2%). Bank deposits account for the bulk (68.2%) of the total value of financial assets. Financial investments in securities represent 11.7% of the total financial assets, of which approximately 61% are shares in investment funds. Savings under voluntary pension schemes and the value of insurance policies make up 15.0% of total financial assets. Other financial assets represent 5.1% of total financial assets.

[37] Household receivables resulting from membership in public and occupational pension schemes are not treated as financial assets of households.

[38] The category of other financial assets includes financial assets held on accounts managed by professionals (e.g. brokers, financial advisers), derivatives, shares held in company (companies) not quoted on the stock exchange (on the public market) exclusively as an investor or non-active shareholder and other household receivables.

The wealthier the household, the higher the tendency to hold various financial assets (see Table 2.3 and Figure 2.5). The share of investments in mutual funds, stocks and bonds increases with higher net income (19% of financial assets in the upper decile group, as compared to 4% in the lowest decile group). Higher income households usually hold higher value financial assets (right-hand panel of Figure 2.5). It should be noted that the share of funds collected under voluntary pension schemes and insurance policies is relatively constant and independent of income (11-18%).

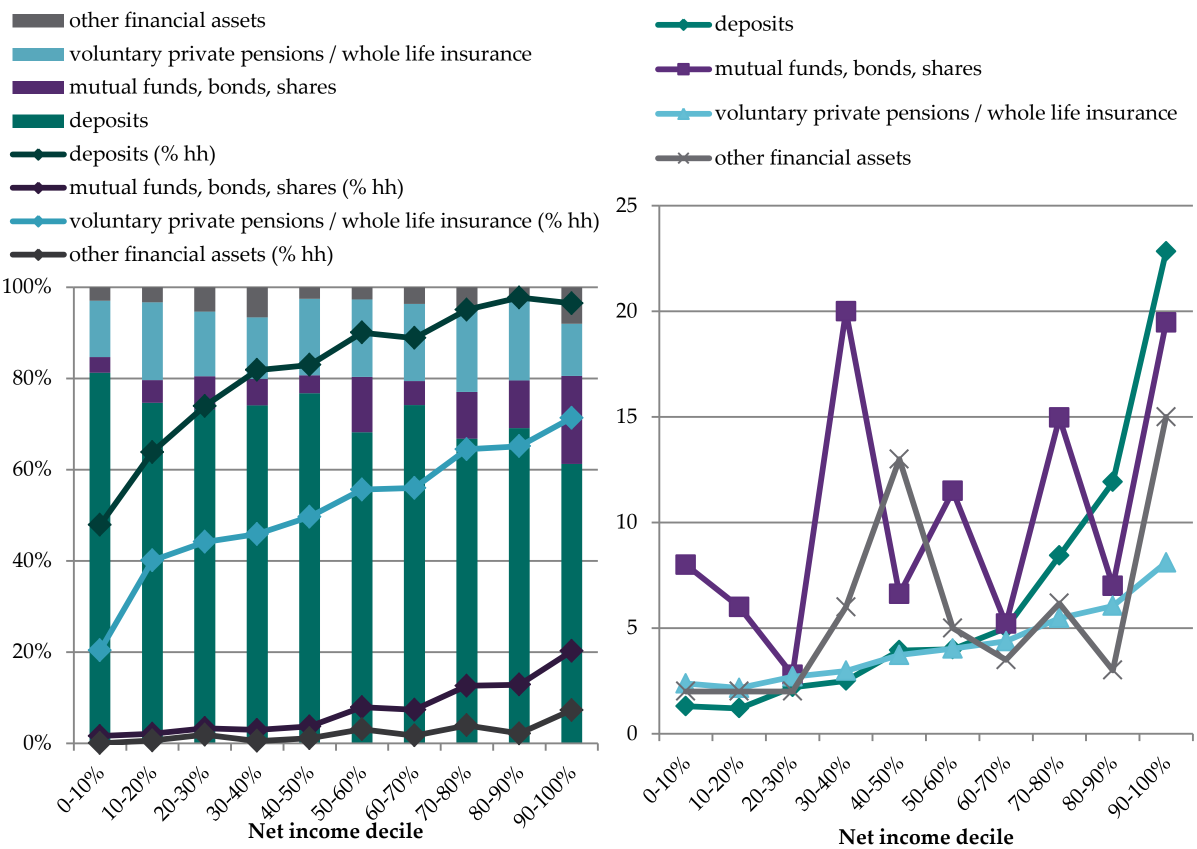
In addition to income, also the education of the reference person has a clear impact on the forms of savings, which is particularly visible in the case of such assets as investment funds, bonds and stocks (Table 2.3). In particular, 21% of households with higher education hold this type of financial assets as compared to only 6.9% of households with secondary education and 1.8% with primary education.

Table 2.3. Financial assets of households - main features

	Financial assets						
	Total			Deposits	Mutual funds, bonds, shares	Voluntary private pensions / Life insurance	Other
	%	median (PLN thousand)	mean (PLN thousand)	%			
All households	88.7	8.6	21.9	81.9	7.5	51.3	6.9
Ownership status							
Owner outright	91.0	9.4	22.5	84.2	7.4	53.0	6.1
Owner with housing loan	96.9	13.4	33.5	94.1	14.8	63.6	11.0
Tenant or other	78.3	4.7	13.4	69.6	4.4	41.0	7.4
Household type							
One-person household[1]	78.3	4.0	18.0	67.7	4.6	38.2	6.1
Couple without children	92.2	10.1	26.2	85.4	10.0	58.0	6.8
Couple with children	93.9	10.6	24.0	90.0	9.6	57.8	8.8
Extended-family household	92.8	9.1	19.3	87.2	5.7	54.3	5.2
Age of the reference person							
16-34	91.4	9.1	19.3	88.5	8.3	50.4	9.0
35-44	91.9	10.0	25.3	87.1	9.5	53.7	9.2
45-64	90.3	9.5	23.9	84.7	7.5	54.2	6.7
65+	81.1	5.0	16.9	68.2	5.3	44.1	4.1
Labour force status of the reference person							
Employed	93.7	9.9	24.5	89.3	10.1	58.8	7.9
Self-employed	94.8	18.0	32.7	92.5	6.5	47.7	13.0
Retired and other not working	81.8	5.5	15.6	71.3	4.9	44.3	4.4
Education of the reference person							
Primary or no education	69.3	3.7	9.2	56.0	1.2	34.8	3.3
Secondary education	90.3	8.0	16.6	83.2	5.6	52.0	6.8
Tertiary education	97.5	18.1	40.9	95.7	16.4	60.3	9.6
Class of geographical location							
Urban areas	90.5	9.1	24.0	83.9	8.9	54.2	7.8
Rural areas	84.9	7.7	17.4	77.7	4.6	45.4	5.2
Net income (quantiles)							
0-20%	67.8	2.4	7.7	55.9	1.8	30.2	4.4
20-40%	87.7	4.8	12.6	77.9	3.1	45.0	5.7
40-60%	92.4	7.6	15.8	86.5	5.8	52.6	5.0
60-80%	97.0	11.2	22.3	92.0	10.0	60.2	8.0
80-90%	98.4	18.8	26.2	97.7	12.9	65.1	7.6
90-100%	98.4	34.1	64.5	96.5	20.2	71.3	15.6
Net wealth (quantiles)							
0-20%	74.7	3.4	6.8	64.7	1.3	37.9	5.6
20-40%	90.2	6.3	12.5	81.9	5.6	57.2	5.3
40-60%	90.0	10.0	20.3	82.7	7.1	54.7	5.6
60-80%	92.1	11.5	22.4	86.6	11.4	51.7	6.4
80-90%	95.3	12.3	24.2	91.9	9.8	56.7	9.8
90-100%	96.9	26.5	62.5	94.9	14.1	52.9	13.5

Source: BZGD, NBP. Note: 1) The category includes single-parent families

Figure 2.5. The structure of financial assets (left-hand panel: percentage of households -%, share of the aggregate -%; right-hand panel; median in PLN thousand) according to net income (decile groups)



Source: BZGD, NBP.

The prevalence of financial assets as the form of wealth accumulation by households is lower in Poland than in most euro area countries (Table 2.4), which reflects the fact that banking services are generally less widespread in Poland. Similarly to the euro area countries, deposits are the most popular financial asset, although the percentage of households holding them in Poland is significantly lower than the euro area average (81.9% of households as compared to 96.4% in the euro area). Polish households are also less inclined to invest in mutual funds, shares or bonds than their euro area counterparts. Smaller figures are recorded in Slovakia and Greece. On the other hand, the percentage of Polish households saving under voluntary pension plans and life insurance schemes (51.3%) is significantly higher than the average in the euro area (33%) and exceeds the index for all the euro area countries[39].

[39] It should be noted that certain studies concerning the euro area countries point to problems with precise determination of the scale of this phenomenon. As a result, those assets are often undervalued, thus becoming hardly comparable between countries. When comparing the Household Wealth and Debt Survey (BZDG) data concerning life insurance and voluntary pension funds with the Polish Financial Supervision Authority (KNF) data it seems that the Households Wealth Study reflects fairly accurately the percentage of households holding this type of assets (KNF, 2013), Deutsche Bank (2013)).

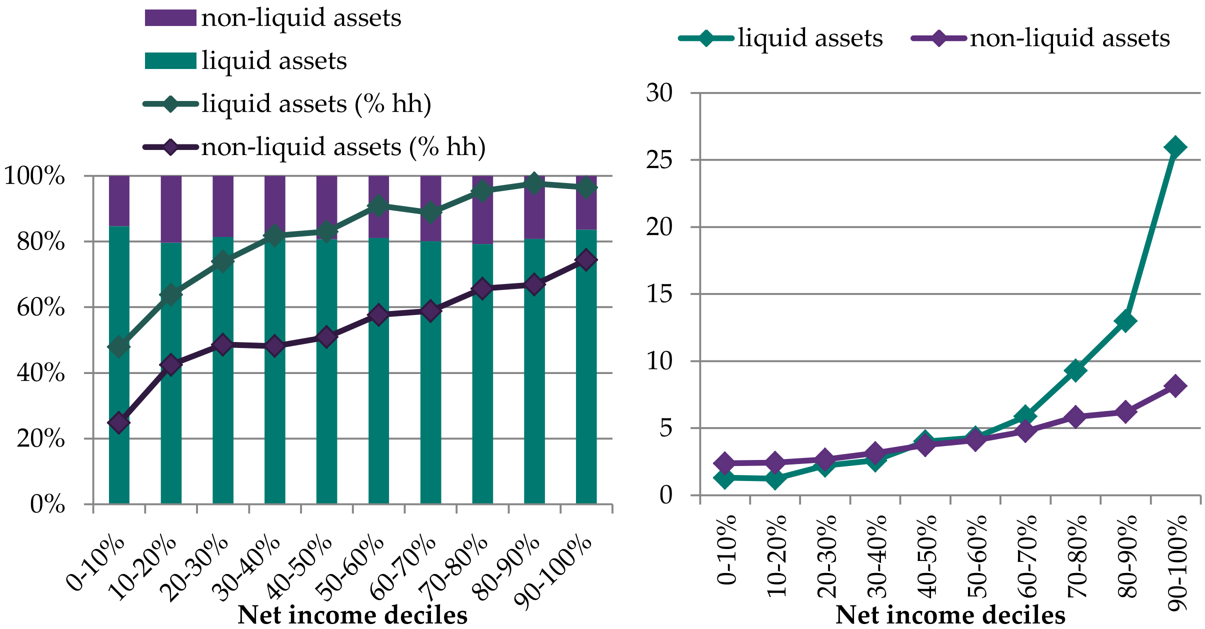
Table 2.4. Financial assets in Poland as compared to the euro area countries (percentage of households -%, median in EUR thousand

Cou ntry	Total		Deposits		Mutual funds		Bonds		Shares		Voluntary pension schemes / life insurance policies	
	% of house-holds	median (EUR thou-sand)	% of house-holds	median (EUR thou-sand)	% of house-holds	median (EUR thou-sand)	% of house-holds	median (EUR thou-sand)	% of house-holds	median (EUR thou-sand)	% of house-holds	median (EUR thou-sand)
PL	88.7	2.1	81.9	1.2	4.2	2.9	1.0	1.5	3.5	1.9	51.3	1.0
BE	98.0	26.5	97.7	10.0	17.6	20.4	7.5	30.8	14.7	5.1	43.3	19.9
DE	99.3	17.1	99.0	7.9	16.9	10.0	5.2	16.0	10.6	8.6	46.5	11.4
GR	74.5	4.4	73.4	3.6	1.2	8.8	0.5	N	2.7	5.7	3.8	10.5
ES	98.3	6.0	98.1	3.5	5.6	13.9	1.4	19.2	10.4	6.1	23.6	7.4
FR	99.6	10.7	99.6	6.5	10.7	6.9	1.7	12.0	14.7	6.9	37.5	10.6
IT	92.0	10.0	91.8	5.9	6.3	20.0	14.6	20.0	4.6	10.9	18.0	10.1
CY	87.9	22.1	81.2	5.8	1.0	N	3.2	22.5	34.6	1.9	45.7	15.5
LU	98.4	27.9	98.0	14.3	19.0	26.9	4.4	45.8	10.0	10.8	34.3	27.8
MT	97.2	26.2	96.9	13.2	8.0	16.9	21.6	20.4	13.4	10.3	24.2	20.3
NL	97.8	34.7	94.2	10.1	17.7	7.1	6.0	15.5	10.4	5.6	49.8	53.2
AT	99.5	13.5	99.4	10.6	10.0	11.2	3.5	13.8	5.3	7.1	17.7	8.1
PT	94.5	4.3	94.3	3.4	2.8	15.0	0.4	N	4.4	5.0	14.1	5.9
SI	93.9	1.7	93.6	0.8	12.0	4.8	0.7	N	10.0	1.2	18.3	3.4
SK	91.7	2.5	91.2	2.0	2.7	2.5	1.0	N	0.8	N	15.0	3.2
FI	100.0	7.4	100.0	4.5	27.4	2.6	0.8	10.0	22.2	3.8	23.7	4.3
EA	96.8	11.4	96.4	6.1	11.4	10.0	5.3	18.3	10.1	7.0	33.0	11.9

Legend: PL - Poland, BE - Belgium, DE - Germany, GR - Greece, ES - Spain, FR - France, IT - Italy, CY - Cyprus LU - Luxemburg, MT - Malta, NL - Netherlands, AT - Austria, PT - Portugal, SI - Slovenia, SK – Slovakia, FI - Finland, EA – euro area.
Source: BZGD, NBP; EBC (2013).

From the point of view of financial risk analysis of households it is important to identify those financial assets that may act as protective buffers against unexpected, unfavourable random events, such as job loss, a strong increase in the current financial burdens, etc. That is the role of the so-called liquid financial assets which should be understood as deposits, units in mutual funds, bonds and shares. Figure 2.6 shows that the higher the income the larger the percentage of households holding both liquid and illiquid financial assets, while the share of liquid assets in the total of financial assets is relatively independent of income (left-hand panel). Liquid assets represent on average 82.8% of financial assets. Households belonging to the highest income groups hold liquid financial assets with much higher values (right-hand panel), so they can be more resistant to possible shocks.

Figure 2.6. Liquid vs. illiquid financial assets (left-hand panel: percentage of households -%, share of the aggregate -% right-hand panel: median in PLN thousand) by net income (decile groups)



Source: BZGD, NBP.

3. Debt

This chapter presents liabilities of households in Poland, and consists of two parts. At the beginning, we have presented the most important characteristics of indebted households, according to socio-economic features, such as: age, education, labour market status of the reference person, household size and place of residence and level of income or net wealth. The analysed debt was divided into housing loans[40] and non-housing credit and loans [41] as these types of debt differ both in terms of value, maturities and risks, and characteristics of indebted households. Basic statistics were compared with the results for the euro area countries. More detailed breakdowns are shown in the tables in the Statistical Annex to this Report.

In the second part of the chapter we analysed the debt burden of households and the financial risk they are exposed to as a consequence. We took into consideration both their current burden as well as asset holdings which could offset temporary increases in debt service costs or declines in income. Again, the basic statistics were compared to the results for the euro area countries.

[40] The class *housing loans* includes loans granted for housing purposes, which include the purchase of the household main residence, purchase of another real estate property (land, buildings) and renovation or modernization of a housing unit/house.

[41] The class *non-housing credit and loans* comprises consumer loans (granted for the purchase of a car or another motor vehicle, educational purposes, financing of maintenance costs), other consumer loans (credit account debt, credit in the form of credit line/overdraft), loans to finance business or professional activity, loans for other purposes (including, for the reimbursement of other loans) and loans for consumption purposes. In the further part of the Report we have used the abbreviated name of this class "non-housing credit and loans".

Table 3.1. Liabilities of households – main characteristics

	Household structure	Liabilities								
		Total			Housing credits / loans			Non-housing credit and loans		
	%	%	median (PLN thousand)	mean (PLN thousand)	%	median (PLN thousand)	mean (PLN thousand)	%	median (PLN thousand)	mean (PLN thousand)
All households	100.0	37.0	10.0	57.3	12.1	104.0	142.7	29.4	5.0	13.4
Ownership status										
Owner outright	65.2	29.0	5.7	20.9	1.5	101.8	108.1	28.0	5.0	15.8
Owner with housing loans	11.2	100.0	111.0	150.7	100.0	104.0	145.9	37.0	7.5	13.0
Tenant or other	23.6	30.5	3.2	13.7	1.4	158.0	143.0	29.8	3.0	7.1
Household type										
One-person household[1]	30.3	23.3	3.8	29.1	4.9	50.0	102.2	19.9	2.4	9.1
Couple	19.3	36.2	12.0	71.3	12.8	126.0	172.2	27.2	5.0	13.5
Couple with children	32.3	49.5	17.2	77.9	22.4	115.0	150.2	36.3	5.3	13.6
Extended-family household	18.1	38.3	6.5	24.5	5.1	43.6	69.2	35.2	6.0	16.7
Age of the reference person										
16-34	15.7	47.2	32.2	88.8	24.8	137.0	157.0	29.9	6.0	9.7
35-44	18.4	51.9	25.0	87.5	24.5	115.0	164.4	37.7	5.4	13.9
45-64	43.3	36.2	7.1	34.3	7.7	59.0	103.5	31.7	5.0	14.0
65+	22.6	19.8	3.2	20.0	1.7	26.8	76.1	18.5	2.8	14.4
Labour force status of the reference person										
Employed	45.5	46.8	14.0	71.3	19.6	119.0	153.3	34.3	5.0	9.8
Self-employed	11.1	45.6	20.7	74.5	17.5	110.5	135.9	35.4	8.0	28.9
Retired and other not working	43.4	24.5	4.0	20.9	2.8	48.0	77.2	22.7	3.3	12.8
Education of the reference person										
Primary or no education	15.7	22.4	3.4	19.3	2.0	38.0	61.4	20.9	3.0	14.7
Secondary education	60.9	37.9	7.4	37.8	9.5	70.0	108.1	32.3	5.0	12.5
Tertiary education	23.4	44.4	52.0	113.6	25.6	150.0	180.8	27.5	6.0	15.2
Class of geographical location										
Urban areas	67.1	37.3	11.3	63.1	13.1	115.0	152.3	29.0	5.0	12.7
Rural areas	32.9	36.3	7.0	45.0	10.1	90.0	117.7	30.3	5.0	14.7
Net income (quantiles)										
0-20%	20.0	20.1	2.5	30.8	2.0	50.0	54.5	18.5	2.0	4.0
20-40%	20.1	28.2	4.4	57.5	4.9	60.0	71.7	24.6	3.3	7.9
40-60%	20.0	40.4	7.5	61.0	11.6	66.2	106.8	32.9	3.8	10.5
60-80%	20.0	47.3	14.4	52.5	17.5	105.6	138.2	37.9	6.0	20.5
80-90%	10.0	48.6	13.5	56.9	19.2	130.0	127.9	38.1	6.5	11.3
90-100%	10.0	49.1	78.8	106.2	29.6	182.0	221.6	28.0	9.5	25.5
Net wealth (quantiles)										
0-20%	20.0	34.3	3.5	30.8	4.5	160.0	180.8	31.6	3.0	7.5
20-40%	20.1	43.1	12.0	56.9	16.5	101.2	128.7	32.8	4.3	9.9
40-60%	20.1	35.9	10.5	58.9	12.0	104.0	154.2	27.6	5.5	9.4
60-80%	19.9	32.8	10.0	58.0	11.2	98.0	137.6	26.3	5.8	13.8
80-90%	9.9	39.8	12.9	52.9	15.8	54.2	114.3	31.3	7.0	9.5
90-100%	10.0	37.9	26.9	106.2	16.6	130.0	166.8	25.9	8.0	48.2

Source: BZGD, NBP. Note: 1) The category includes single-parent families

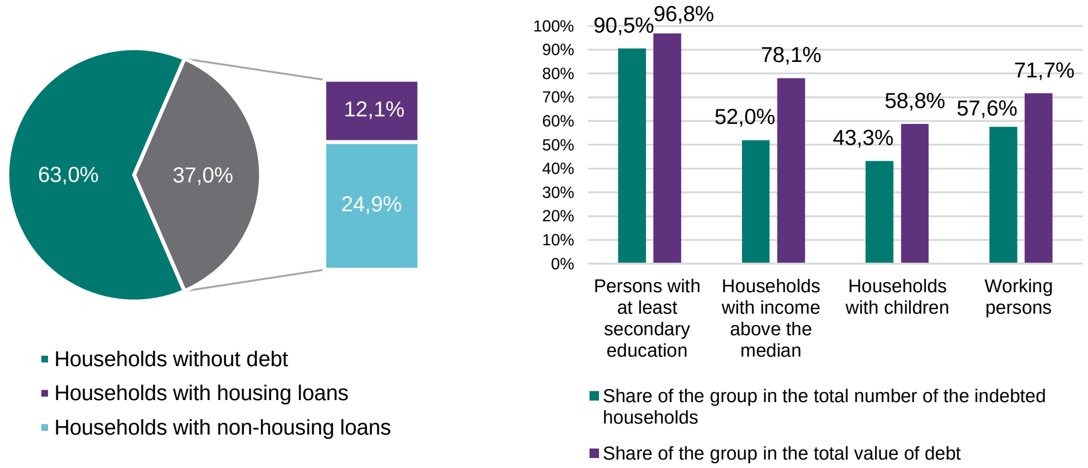
3.1. Total debt

In Poland, approximately 37% of households are indebted, of which 12.1% are burdened with housing loans and 29.4% with non-housing credit and loans (see Table 3.1 and Figure 3.1, left-hand panel). Debt resulting from these types of loans accounts for 81.5% and 18.5% of the total household debt respectively. The dominant role of housing loans in the total household debt results from significantly higher value of housing loans. The average value of debt resulting from housing loans, as measured by the median, amounts to PLN 104 thousand, while the average value of debt resulting from other types of loans is PLN 5 thousand. For approx. 5.5% of households burdened with housing loans the current debt is relatively low and does not exceed PLN 10 thousand. For approx. 4% of households burdened with other loans the debt is relatively high and exceeds PLN 50 thousand (see Figure 3.2).

The percentage of indebted households is unevenly distributed in various sections of household characteristics. Smaller households, low-income households or households whose reference person is older or has at most primary education (see Table 3.1) are the least likely to be burdened with debt.

Income is a differentiating factor both in terms of the percentage of indebted households in the group and the amount of debt. Among households with income above the median or at least secondary education, every second one claims to be indebted. Households in these groups represent respectively approx. 50% and 90% of all the indebted households, and their debt represents respectively 78% and 97% of the total debt (see Figure 3.1 right-hand panel). Households with children and young households get indebted as often as households with higher education and significant disposable income. The likelihood of getting indebted is not affected by the place of residence of the household (urban / rural) - in both sections, the percentage of indebted households ranges from 30% to 40% in the analysed group of households.

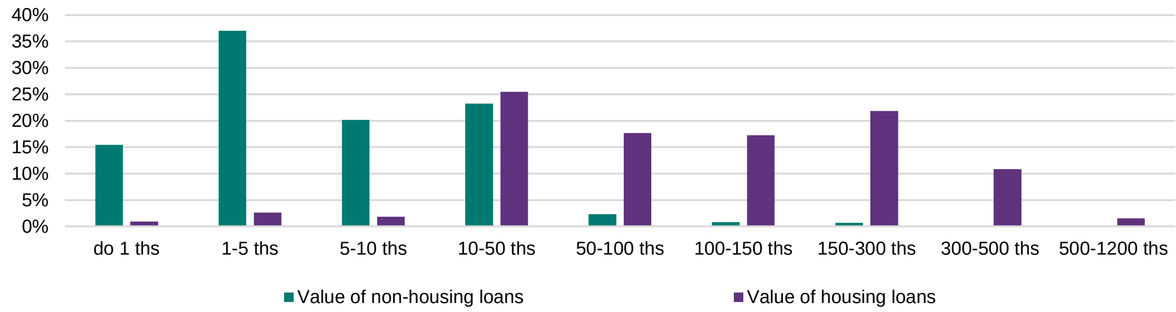
Figure 3.1. The proportion of indebted households by type of loan in the household population (left-hand panel) (%) and the share of selected groups of households in the total number of indebted households and the total value of debt (right-hand panel) (%)



Source: BZGD, NBP.

Note: Category „Indebted with non-housing credit or loans" encompasses households without a housing loan. The percentage of households with non-housing credit or loans is 29.4% as 37.2% of households with housing loan are, at the same time, burdened with other loan and they account for approx. 4.5% of the population.

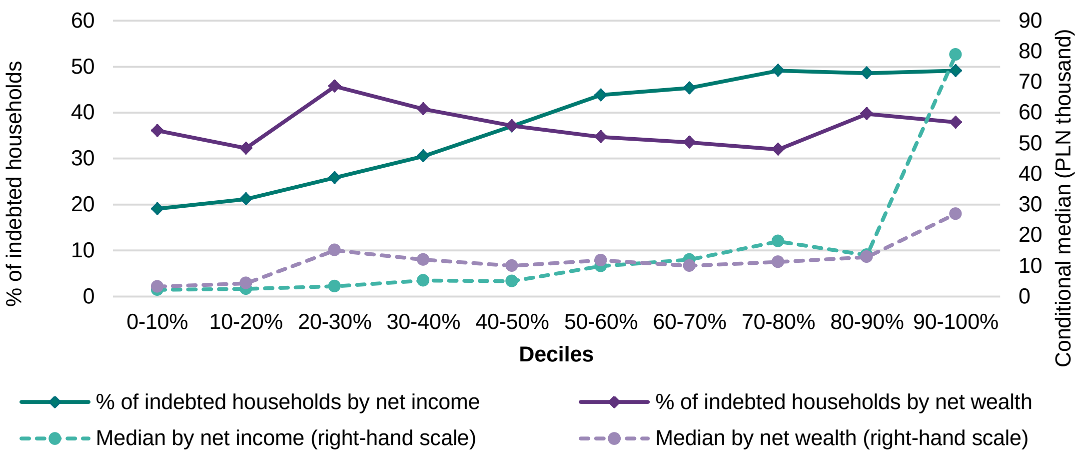
Figure 3.2. Distribution of housing loans and non-housing credit and loans (%)



Source: BZGD, NBP.

The propensity of households to borrow does not seem to be linked to their net wealth – the percentage of indebted households is relatively constant in all wealth groups (see Figure 3.3). In turn, the correlation of net wealth with debt level is reflected in extreme wealth and extreme poverty groups only – it is significantly lower in the case of the least affluent households and higher for the wealthiest ones, while it is constant for middle wealth groups.

Figure 3.3. The percentage of indebted households and the median debt according to net income and net wealth



Source: BZGD, NBP.

Both the percentage of indebted households (37%) and the average debt value (according to the median of EUR 2.4 thousand) in Poland are significantly below the values in euro area, where more than 43.7% of households are indebted, holding an average debt of approx. PLN 21.5 thousand. Households in Poland declare some of the lowest debt values, comparable to the ones declared by households in Slovakia and Slovenia, while the frequency of borrowing is similar to that in the Maltese and the Greek societies (see Table 3.2).

Table 3.2. Household debt in Poland as compared to the euro area countries

	PL	BE	DE	GR	ES	FR	IT	CY	LU	MT	NL	AT	PT	SI	SK	FI	EA
Percentage of the in-debted households (%)	37.0	44.8	47.4	36.6	50.0	46.9	25.2	65.4	58.3	34.1	65.7	35.6	37.7	44.5	26.8	59.8	43.7
Debt median (EUR thousand)	2.4	39.3	12.6	14.6	36.0	18.4	15.0	60.2	73.4	15.7	89.1	13.8	31.7	4.3	3.2	29.4	21.5

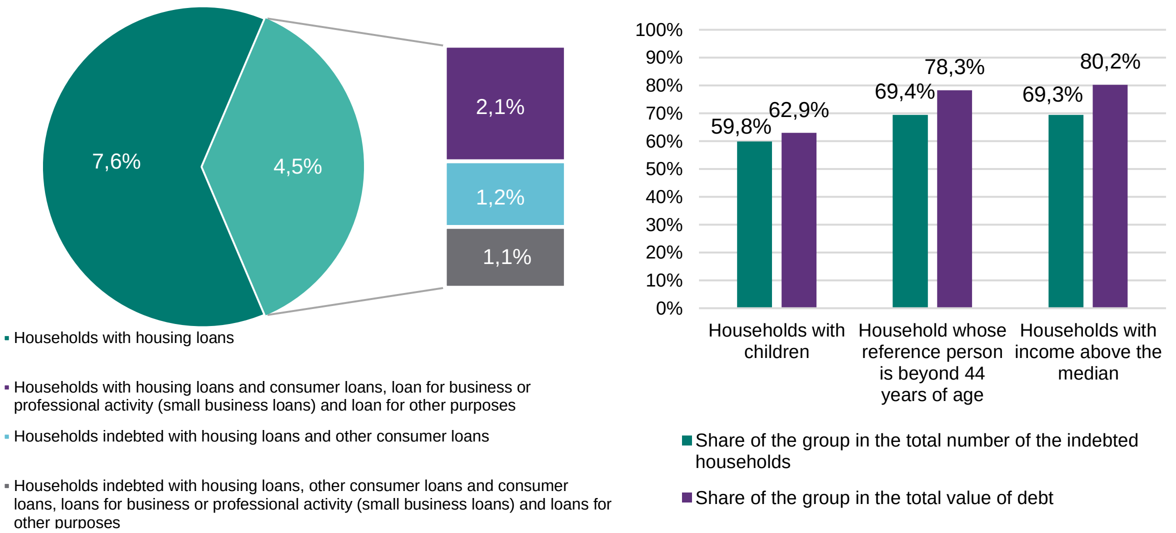
Legend: PL - Poland, BE - Belgium, DE - Germany, GR - Greece, ES - Spain, FR - France, IT - Italy, CY - Cyprus LU - Luxemburg, MT - Malta, NL - Netherlands, AT - Austria, PT - Portugal, SI - Slovenia, SK – Slovakia, FI - Finland, EA – euro area.
Source: BZGD, NBP; ECB (2013).

3.2. Housing loans

Out of 12.1% of households with a housing loan, 10.8% finance the real estate being their main residence and 1.6% - another property (see Table A12 of the Statistical Annex). In approx. 96% of cases, the loan is secured by a mortgage on the financed property. Most of households holding a housing loan do not declare any other forms of debt, while 37.2% of indebted households (4.5% of all households) are repaying, at the same time, non- housing credit or loans (see Figure 3.4 left-hand panel).

83% of households who have taken out a housing loan, are repaying their debt in domestic currency (10.1% of all households) and 17% (2.2% of all households) in foreign currency, out of whom the vast majority of foreign currency borrowers repay their debt in Swiss francs. Foreign currency debt accounts for 24.3% of the total housing debt (statistics on the scale of burden of domestic and foreign currency borrowers is presented in the box in Section 3.4).

Figure 3.4. The percentage of households with housing loans and other forms of debt in the population (left-hand panel) (%) and the share of selected groups of households in the total number of indebted households and in the total value of housing debt (right-hand panel) (%)

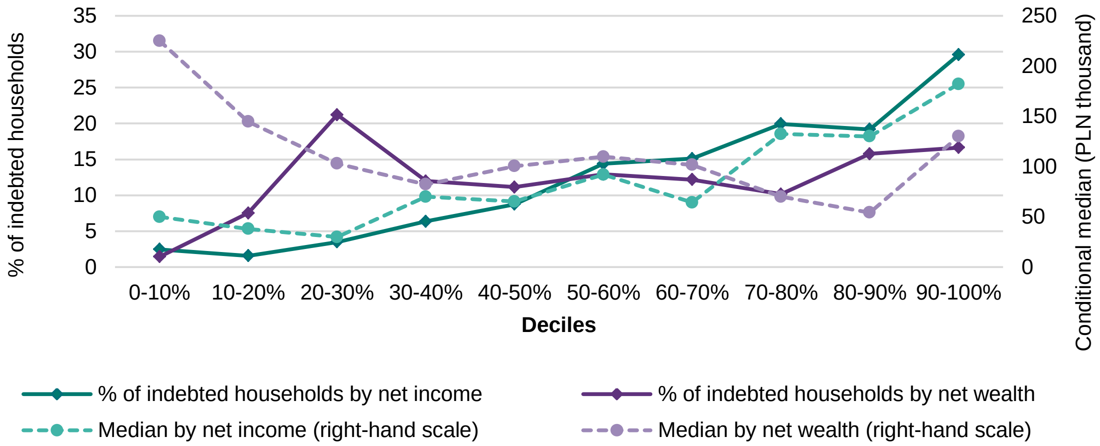


Note: *Other consumer loans* include credit card debt, credit in the form of credit line or overdraft.
Source: BZGD, NBP.

Having a housing loan is associated with certain social and economic characteristics and concentration of this type of debt in certain groups of households is much higher than in the case of other forms of debt. The bulk of housing loans were taken out by middle income households, whose reference person is aged below 44 years or households with children - each of these groups accounts for approx. 60-70% of all the indebted households and has approx. 60-80% of the total debt resulting from housing loans (see Figure 3.4 right-hand panel). Low probability of having a housing loan is observed in the group of smaller households or low-income households as well as elderly or less educated households.

The probability of having a housing loan and its average value, grow with higher income and education level. Like in the case of total debt, the propensity to borrow and the debt amount are clearly less correlated with net wealth (see Figure 3.5). The percentage of households having a housing loan is markedly lower in the case of the least wealthy households, but remains relatively stable for the remaining 70-80% of the population. On the other hand, the correlation between net wealth and the value of housing debt is non-monotonic. The average value of loan is the highest among the lowest wealth households and stands at approx. PLN 160 thousand (see Table 3.1). These are mainly young households whose reference person is maximum 34 years of age, with middle income level and secondary education (among other households with housing debt there are relatively more people with higher income and higher education). The value of housing loan declines for other income groups except for the wealthiest households where it grows again. This correlation between the mortgage debt value and net assets was also observed in the euro area.

Figure 3.5. The percentage of the indebted households and the median of housing debt by net income and net wealth



Source: BZGD, NBP.

Households in Poland take out mortgage loans about twice less frequently than households in the euro area (23.1%) and repay more than twice lower capital for this type of borrowing which, according to the median amount in Poland to EUR 25 thousand as compared to EUR 67.5 thousand in the euro area[42]. Poland belongs to the group of countries with relatively lowest percentage of indebted households and the lowest value of the debt, whose level is comparable only to Slovakia and Slovenia (taking into account both statistics).

Table 3.3. Household mortgage debt in Poland as compared to other euro area countries

	PL	BE	DE	GR	ES	FR	IT	CY	LU	MT	NL	AT	PT	SI	SK	FI	EA
Percentage of the indebted households (%)	12.1	30.5	21.5	17.5	32.5	24.4	10.8	44.8	38.8	15.6	44.7	18.4	26.7	14.1	9.6	N/D	23.1
Debt median value (EUR thousand)	25.0	69.3	80.0	41.0	60.0	55.9	60.0	86.6	127.3	35.0	131.0	37.5	48.8	6.6	25.0	N/D	67.5

Legend: PL - Poland, BE - Belgium, DE - Germany, GR - Greece, ES - Spain, FR - France, IT - Italy, CY - Cyprus LU - Luxemburg, MT - Malta, NL - Netherlands, AT - Austria, PT - Portugal, SI - Slovenia, SK – Slovakia, FI - Finland, EA – euro area, N/D – no data.
Source: BZGD, NBP; ECB (2013).

3.3. Non-housing credits and loans

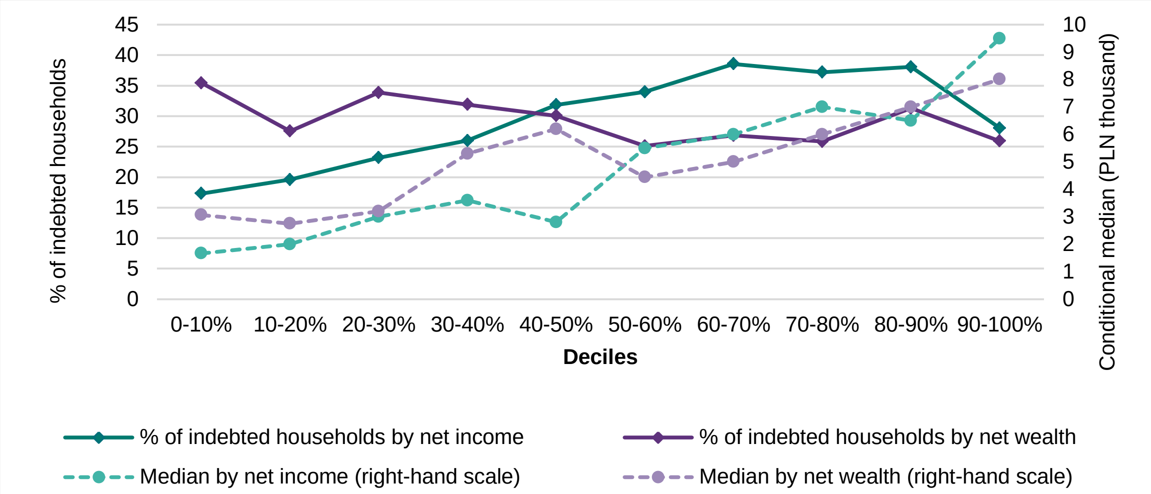
Specific features of non-housing credit and loan, including, in general, its relatively low value and short maturity, make it available to a wider group of households – approx. 29.4% of households claim to have other than housing loan. The largest part of such loans are loans, which finance consumer spending (car loans, educational loans, loans for living expenses, consumer loans). Loans for business or professional activity (small business loans) and loans for other purposes (including the repayment of other debts), held by 24.7% of households and accounting for more than 90% of the debt resulting from non- housing credit and loans. Definitely fewer households incur credit card debt (5.3%) or credit in the form of line of credit (open-end credit) (6.1%). The median value of non- housing credit and loans is PLN 5 thousand, including for credit card debt - approx. PLN 1.4 thousand, for credit line (open-end credit) or overdraft approx. PLN 2 thousand and for other forms of credit (including consumer loans) - approx. PLN 5.0 thousand (see Table A13 of the Statistical Annex).

The frequency of taking out non- housing credit and loans is similar in most groups of households, although these loans seem to be more common for households with secondary education and large families (households with children and extended families). These groups represent more than 60% of indebted households and of the total debt value in this type of loan. In contrast to housing loans, the percentage of debtors does not change monotonically with rising income. The proportion of indebted households increases along with income in the case of low-income households, to stabilize at approx. 40% in the case of above average income earners and declines for top earners (see Figure 3.6). This trend may be observed in both credit cards debt and overdraft as well as other forms of loans or non-housing credit and loans. The level of debt resulting from the latter loan category, however, is more diverse in terms of income and more clearly correlated with it than in the case of credit cards debt and overdraft.

[42] Category *housing loans* is comparable to the category *mortgage loans* used in the ECB Report (ECB (2013a) as the overwhelming majority (approx. 96%) of loans for housing purposes registered in the Household Wealth and Debt Survey (BZGD) are secured with mortgage on property.

Also in the case of non- housing credit and loans there is no clear correlation between propensity to borrow and wealth. More affluent households have typically higher debt resulting from these loans (see Figure 3.6). A distinctive group are households with housing loans who declare twice as often (approx. 13% of them) to have credit cards debt and overdraft. Also the level of such debt in the range of PLN 2.0-2.6 thousand is about 30-60% higher than in the other groups.

Figure 3.6. The proportion of indebted households and the median of debt resulting from non-housing credit and loans by income and net wealth



Source: BZGD, NBP.

The percentage of households burdened with debt other than mortgage debt in Poland standing at the level of 29.4% is comparable to the euro area level, while the median debt value stands at a much lower level of approx. EUR 1.2 thousand as compared to EUR 5 thousand in the euro area. Poland belongs to the group of countries with the lowest level of outstanding debt arising from non-mortgage loans and again, in terms of both characteristics of the debt, is comparable to Slovakia (debt of EUR 1 thousand and approx. 20% of the indebted) (see Table 3.4).

Table 3.4. Household debt resulting from non-mortgage loans in Poland as compared to other euro area countries

	PL	BE	DE	GR	ES	FR	IT	CY	LU	MT	NL	AT	PT	SI	SK	FI	EA
Percentage of the indebted households (%)	29.4	24.2	34.6	26.1	30.7	32.8	17.8	47.9	36.9	25.2	37.3	21.4	18.3	38.9	19.9	N/D	29.3
Debt median value (EUR thousand	1.2	5.2	3.2	4.3	7.2	5.2	5.7	10.1	10.0	4.0	13.7	3.0	3.3	3.1	1.0	N/D	5.0

Legend: PL - Poland, BE - Belgium, DE - Germany, GR - Greece, ES - Spain, FR - France, IT - Italy, CY - Cyprus LU - Luxemburg, MT - Malta, NL - Netherlands, AT - Austria, PT - Portugal, SI - Slovenia, SK – Slovakia, FI - Finland, EA – euro area, N/D – no data.

Source: BZGD, NBP; ECB (2013).

3.4. Household debt burden

Household debt load is of fundamental importance not only for the indebted, but also for the rest of population who as a result of this debt, in the case of massive loan repayment problems may be hit by the financial crisis. At this point, we performed the analysis of basic indicators showing the scale of this risk. The Household Wealth and Debt Survey allows, for the first time in Poland, to take into account not only the information about the scale of debt burden for the current income, but also about households' financial buffers that can be used to offset a temporary increase in debt servicing costs or income decline. The available data also allow us to determine the size of the group of households in a particularly difficult situation i.e. at the same time heavily burdened with debt and having small financial buffers (low asset-to-debt ratio).

The starting point is to assess the scale of the debt burden for disposable income (Debt-Service-to-Income, DSTI[43]), which is the measure used both by banks to assess client creditworthiness as well as in micro - and macro-prudential policy. Complementary indicator is the total debt to disposable income ratio (Debt-to-Income, DTI). While the DSTI measures the scale of the current debt service burden (debt servicing costs are, among others, the function of the value of the debt, its maturity and the interest rate level), the DTI allows you to assess the scale of potential growth of this burden. For example, a high value loan granted for a long period of time amidst low interest rates may have an acceptable low DSTI, but should interest rates rise, the debt burden for the borrower may prove to be excessive. The DTI limit would reduce this risk by limiting the amount of borrowing, regardless of the interest rate level. The DTI, however, is insensitive to debt maturity and therefore does not inform about the scale of the current debt load (loans of moderate values and very short maturities would result in low DTI but high DSTI). There are no generally adopted standards as regard safe levels of the DSTI and the DTI, but it is often recognized that we face financial tensions if debt servicing costs exceed 30% -40% of disposable income (see May and Tudela, 2005; Beer and Schurz, 2007) and the value of that debt exceeds three-year income (see Banco de Espana, 2014)[44].

The second class of indicators is based on the information on household assets. Firstly, households may hold liquid financial assets (deposits, shares of companies listed on the stock market, bonds and shares in investment funds), enabling them to smooth consumption in response to a sudden increase in debt servicing costs or decline in income. Let's analyse, for example, a household with a mortgage loan worth twice the annual income, servicing costs at 30% of the monthly income and liquid asset holdings equal to two months' income. The value of these assets is relatively low in relation to total debt. However, they would allow for at least two months of debt servicing in the event of total loss of income. Additionally, considering notice periods generally applicable in the labour market this gives the household some time to improve its financial situation. First and foremost, liquid assets may facilitate the absorption of temporary debt service costs. Should, in the above cited example, the DSTI ab-

[43] The DSTI ratio is defined as the ratio of the monthly loan instalment (under housing loan or non-housing credit and loans (with the exception of credit card debt, credit line /overdraft) to the average net monthly income of a household.

[44] In order to determine safe debt levels it is necessary to factor in a number of risk sources, including the risk of change in debt servicing costs and debt level (including the eventuality of job loss). Simple indicator ignore these issues. Therefore, exceeding the so-called safe levels does not necessarily have to mean excessive risk for the household. Similarly, meeting those levels does not have to mean low risk level.

ruptly increase by 20 pp (e.g. due to interest rate hikes, depreciation of the Polish zloty against the loan currency or reduction in wages), which is a significant value, the household would have to spend as much as 50% of its income on debt servicing. Instead of reducing other expenses it could finance these additional costs using its liquid financial assets - in this example, liquid assets would be sufficient for almost the entire year. The above example shows that even if the value of liquid assets in relation to total debt is relatively low, these assets can be a very important buffer against sharp increases in debt servicing costs.

Secondly, in the event of serious financial problems the indebted households may try to pay off the debt with the proceeds from the sale of other assets, including real property. Households whose debt exceeds the value of asset holdings (namely, if the Debt-to-Assets - DTA ratio exceeds 1, which means that their net wealth is negative) do not have such a possibility. The LTV (Loan-to-Value) ratio[45] is a twin indicator for micro- and macro-prudential purposes, applying mainly to mortgage-burdened households. As with the DSTI and the DTI limits, there are no clear standards as regards the reference values of individual indicators, yet it is often assumed that the safe LTV level does not exceed 80% (the most common limit in the regulations worldwide) and the DTA level does not exceed 75% (see Banco de Espana, 2014).

[45] The Loan-To-Value ratio (current LTV) is defined as the ratio of the value of outstanding loan to the current value of the real estate property used as the loan collateral. The value of the property is the respondent's estimate at the time of the survey.

Table 3.5. Household debt burden indicators

	Indebted households			Housing loans and credits			Non-housing credit and loans			DTI			DTA		
	%	DSTI	% GD with DSTI exceed-ing 40%	%	DSTI	% GD with DSTI exceed-ing 40%	%	DSTI	% GD with DSTI ex-ceed-ing 40%	%	Median	% GD with DTI exceed-ing 300%	%	Medi-an	% GD with DTA exceed-ing 75%
All households	33.4	14.2	3.4	12.1	21.0	2.0	24.6	12.7	2.4	37.0	21.6	3.7	37.0	6.5	3.4
Ownership status															
Owner without housing loan	25.7	11.1	2.0	1.5	23.5	0.4	24.8	10.9	1.9	29.0	11.5	0.6	29.0	1.6	0.0
Owner with housing loan	100.0	20.3	16.0	100.0	20.3	16.0	25.6	27.9	7.6	100.0	185.4	29.8	100.0	26.7	10.5
Tenant or other	24.6	13.3	1.4	1.4	21.4	0.1	23.8	13.3	1.4	30.5	10.8	0.7	30.5	45.5	9.8
Household type															
One-person household[1]	20.3	16.1	3.1	4.9	26.9	1.3	16.4	13.8	2.2	23.3	20.6	1.8	23.3	6.2	3.0
Couple	33.9	16.2	3.3	12.8	20.2	2.0	23.6	14.6	2.2	36.2	28.7	5.1	36.2	5.9	3.3
Couple with children	45.1	14.8	4.0	22.4	19.1	3.0	29.6	13.2	2.7	49.5	34.3	6.0	49.5	10.2	4.9
Extended-family household	34.1	9.5	2.7	5.1	24.6	1.4	30.6	9.5	2.2	38.3	10.9	1.4	38.3	2.3	1.9
Age of the reference person															
16-34	43.7	17.8	4.0	24.8	22.5	3.3	24.7	13.0	2.3	47.2	42.7	4.5	47.2	27.7	6.8
35-44	47.0	13.4	5.1	24.5	17.6	3.8	29.2	12.4	3.1	51.9	43.5	6.6	51.9	12.1	4.7
45-64	32.4	12.9	3.3	7.7	18.1	1.7	27.1	12.7	2.8	36.2	18.7	1.7	36.2	3.4	2.6
65+	17.9	13.3	1.4	1.7	27.9	0.3	16.5	12.7	1.1	19.8	8.5	0.5	19.8	1.6	1.5
Labour force status of the refer-ence person															
Employed	42.1	14.0	3.4	19.6	20.2	2.8	27.5	11.9	2.0	46.8	29.5	5.8	46.8	9.7	4.6
Self-employed	43.5	13.8	7.8	17.5	20.7	4.6	32.3	12.5	6.3	45.6	26.0	5.3	45.6	2.8	0.6
Retired and other not working	21.8	15.0	2.2	2.8	26.9	0.5	19.6	13.4	1.8	24.5	12.9	1.2	24.5	3.2	3.0
Education of the reference person															
Primary or no education	21.2	13.0	3.0	2.0	31.8	0.9	19.7	12.8	2.6	22.4	11.1	1.0	22.4	4.5	2.7
Secondary education	34.2	13.2	3.5	9.5	21.0	1.9	27.3	12.2	2.6	37.9	17.7	2.9	37.9	4.5	3.8
Higher education	39.7	17.6	3.3	25.6	19.4	3.1	21.1	14.6	1.7	44.4	77.8	7.9	44.4	15.7	3.0
Class of geographical location															
Urban areas	33.3	14.7	3.1	13.1	20.3	2.2	23.5	12.9	2.3	37.3	25.9	4.2	37.3	8.4	4.4
Rural areas	33.8	13.3	3.2	10.1	21.2	1.5	26.9	12.2	2.5	36.3	17.4	2.8	36.3	2.6	1.5
Net income (quantiles)															
0-20%	17.2	19.2	4.6	2.0	58.1	1.4	15.2	17.1	3.2	20.1	17.1	1.6	20.1	4.0	3.4
20-40%	25.4	15.4	3.0	4.9	28.6	1.4	21.5	13.7	2.3	28.2	17.0	1.8	28.2	6.6	3.3
40-60%	36.1	15.8	3.2	11.6	24.0	2.3	27.3	14.0	2.1	40.4	19.7	4.0	40.4	5.7	5.4
60-80%	42.7	14.2	4.0	17.5	22.5	3.1	31.4	12.1	3.1	47.3	22.8	6.7	47.3	6.6	3.5
80-90%	45.4	10.9	2.4	19.2	17.1	2.4	32.5	8.3	1.3	48.6	17.4	2.7	48.6	3.5	1.6
90-100%	46.4	11.5	1.6	29.6	15.6	1.3	23.1	10.2	0.8	49.1	55.8	6.5	49.1	14.3	1.4
Net wealth (quantiles)															
0-20%	28.8	14.7	2.5	4.5	23.8	0.7	25.5	14.1	2.2	34.3	13.2	2.9	34.3	69.7	14.8
20-40%	41.1	14.6	4.5	16.5	21.5	2.5	28.6	12.7	3.5	43.1	32.6	5.3	43.1	8.0	2.3
40-60%	32.1	12.8	1.6	12.0	18.3	1.3	22.8	11.2	0.8	35.9	21.7	3.6	35.9	4.1	0.3
60-80%	29.7	14.1	2.8	11.2	22.5	1.8	22.6	12.1	2.0	32.8	20.7	2.4	32.8	2.3	-
80-90%	37.0	14.9	3.6	15.8	22.4	2.8	25.9	12.0	2.0	39.8	22.2	3.6	39.8	1.8	-
90-100%	34.2	16.1	7.2	16.6	20.7	4.5	21.6	15.5	4.6	37.9	35.1	5.2	37.9	1.8	-

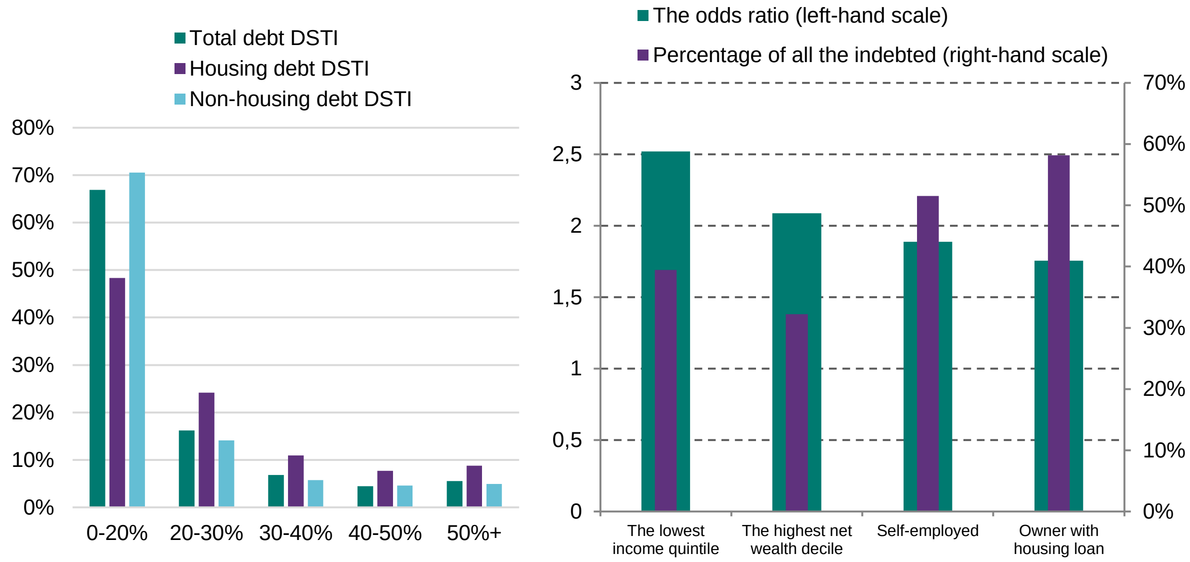
Note: When calculating the DSTI, we disregarded the costs of credit card debt, credit line and overdraft which, if factored in, would distort the debt service costs for the majority of households. Consequently, the total number of the indebted, presented in the table, exclusive of these categories, is 33.4%.
Source: BZGD, NBP.

Borrowers spend on average approx. 14.2% of their monthly net income on debt servicing (calculated using the median). There are large differences in the debt service burden between borrowers having a mortgage and those burdened with other types of debt. The DSTI median for households burdened with housing loan amounts to approx. 21.0%, while for the remaining indebted households it amounts to approx. 12.7% (see Table 3.5). This is also reflected in the percentage of households who are the most burdened with debt in each of these groups. Approx. 90% of all borrowers allocate up to 40% of their monthly disposable income for debt service (see Figure 3.7 left-hand panel). 16.5% of households with housing debt have the DSTI in excess of 40% as compared to just approx. 9.5% of households burdened with other type of debt. Households repaying housing debt and debt resulting from non-housing credit and loans[46] are the most debt burdened group of borrowers accounting for approx. 10% of the indebted population (and approx. 3.3% of all households). The DSTI median in this group is approx. 27.9% which means that almost half of them spend almost 30% of their income on debt service.

As a result, nearly 60% of all households with the DSTI exceeding 40% are households with housing debt (see Figure 3.7 right-hand panel). Due to the generally considerable value of this debt, the probability of having a high DSTI in this group is by approx. 75% higher than across the remaining indebted households. High probability of a significant debt burden concerns, to a similar extent, one-person households and the self-employed. In these groups it is almost two times higher than among the total indebted population. The highest probability of a high DSTI concerns two completely different groups of households - those earning the lowest income and the wealthiest ones. In the latter group, it is however of a relatively less severe and much less risky due to a large surplus of assets over liabilities.

[46] In the group of households repaying more than one loan, accounting for 4.5% of households, approx. 48% were repaying a residential loan and a consumer loan for business activity or for another purpose only, 27% were repaying a housing loan and another consumer credit or loan (credit card debt/ credit line/overdraft), and 25% were repaying a housing loan, a consumer loan for business activity or for another purpose and another consumer credit or loan.

Figure 3.7. DSTI ratio distribution in the population of indebted households in Poland (left-hand panel) and the characteristics of households with DSTI> 40% (right-hand panel)

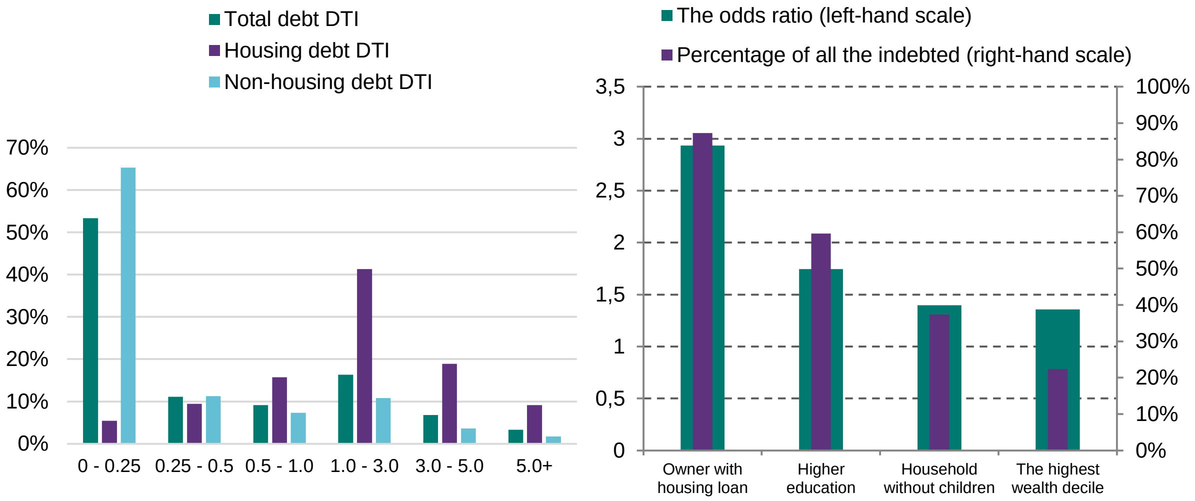


Note: The category *Total debt DSTI* does not take into account credit in the form of credit line, credit card debt or overdraft. The DSTI has been calculated on the basis of net income.
The odds ratio – indicates as relatively high incidence of households with DSTI > 40% in a particular group of indebted households in relation to all the indebted; value 1 indicates the same frequency, value 2 two times higher frequency.

Source: BZGD, NBP.

The DTI is complementary to the DSTI indicator. For approx. 75% of the indebted, the debt does not exceed the annual household income, and for almost 90% of them it does not exceed three times the value of the annual income (see Figure 3.8). In the case of housing loans, the DTI ratio is clearly higher – the overwhelming majority of households whose debt exceeds the annual income are households with a housing debt and half of them have debt in excess of two times the value of their annual income. The risk associated with fluctuations in the debt service costs is higher for mortgage-burdened households for three reasons: (i) housing loans are clearly higher value loans, (ii) mortgage service costs are sensitive to interest rate changes (practically, there are no housing loans with a fixed interest rate, which is often the case in other types of debt), (iii) as a result of long maturities the sensitivity of current debt servicing costs to interest rate changes is high. This translates into a higher percentage of households heavily burdened with debt service costs in this group; on the other hand, these are higher-income households who are less at risk of losing their jobs because of better education; therefore they are in a better position to assume such a risk.

Figure 3.8. DTI ratio distribution in the population of indebted households in Poland (left-hand panel) and characteristics of households with DTI > 3 (right-hand panel)



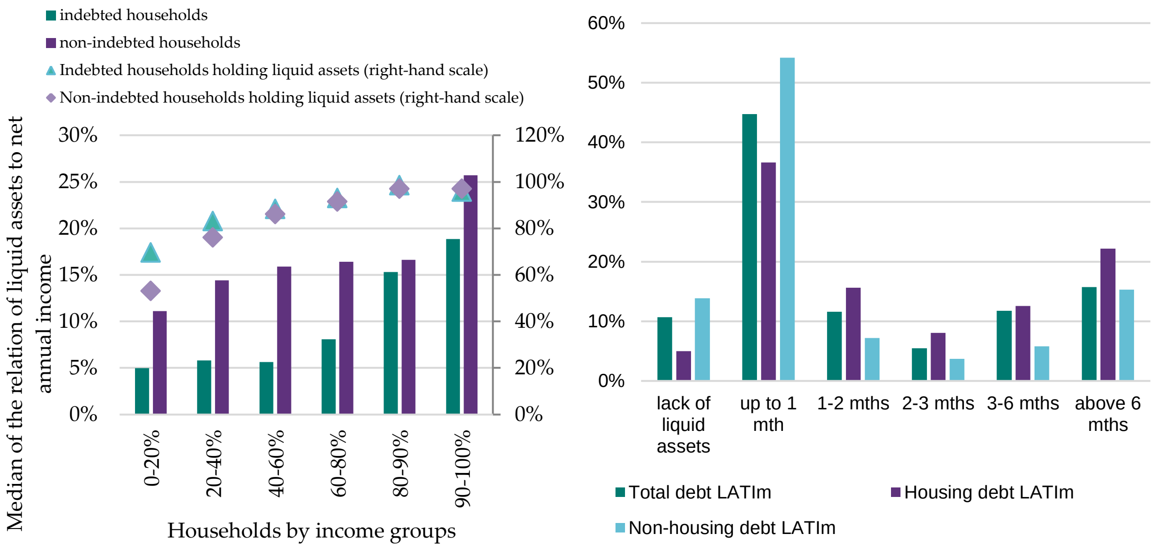
Note: The category *Total debt DTI* takes into account all the declared types of debt, including credit in the form of credit line, credit card debt and overdraft. The DTI has been calculated based on the net annual income.
The odds ratio – indicates a relatively high incidence of households with DTI> 3 in a particular group of the indebted households in relation to all the indebted; value 1 indicates the same frequency, value 2 two times higher frequency
Source: BZGD, NBP.

The second group of indicators, indicating the scale of risk associated with debt, is based on the relation of the value of assets to the debt level. It also informs about the possibility of debt repayment with the use of assets, as well as the capacity to absorb the increase in debt servicing costs.

The most convenient for this purpose are liquid financial assets that may be exchanged into cash relatively quickly and whose sale, in contrast to the sale of a real estate or a car, generally does not affect their current standard of living. The percentage of households holding liquid assets increases with the level of income and is very similar among the indebted and non-indebted households (see Figure 3.9 left-hand panel). The exception is the lowest income group, where only approx. half of the indebted claim to hold any liquid assets whereas among the non-indebted with similar income this percentage is almost 70%. However, the value of liquid financial assets is significantly lower for the indebted in almost all income groups. For non-indebted households the median value of liquid assets usually does not exceed their two-month income, whereas among indebted households it is almost half lower and corresponds to approx. one month's net income (see Figure 3.9 right-hand panel).

Despite lower value of liquid financial assets held by the indebted they constitute quite a significant buffer. Firstly, approx. 40% of all indebted households have liquid assets enabling full repayment of the debt. Among households burdened with a non-housing loan (including those that have a housing and other type of loan) this percentage increases to nearly 60%. This partly protects them not only against the risk of rising debt servicing costs, but also against the risk of a temporary decrease or loss of income. Due to the significant value of housing debt only 13% of households burdened with such a debt could pay off their entire debt by selling liquid financial assets. At the same time, approx. 11% of indebted households claim not to have any liquid assets; as a result, any increase in debt servicing costs is bound to take their toll on current consumption. Education is the main distinguishing feature of indebted households in terms of holding liquid financial assets. The lack of any liquid financial assets is reported by almost 30% of indebted households where the household reference person has a primary education, and only among the 3% of households where the household head has a university degree.

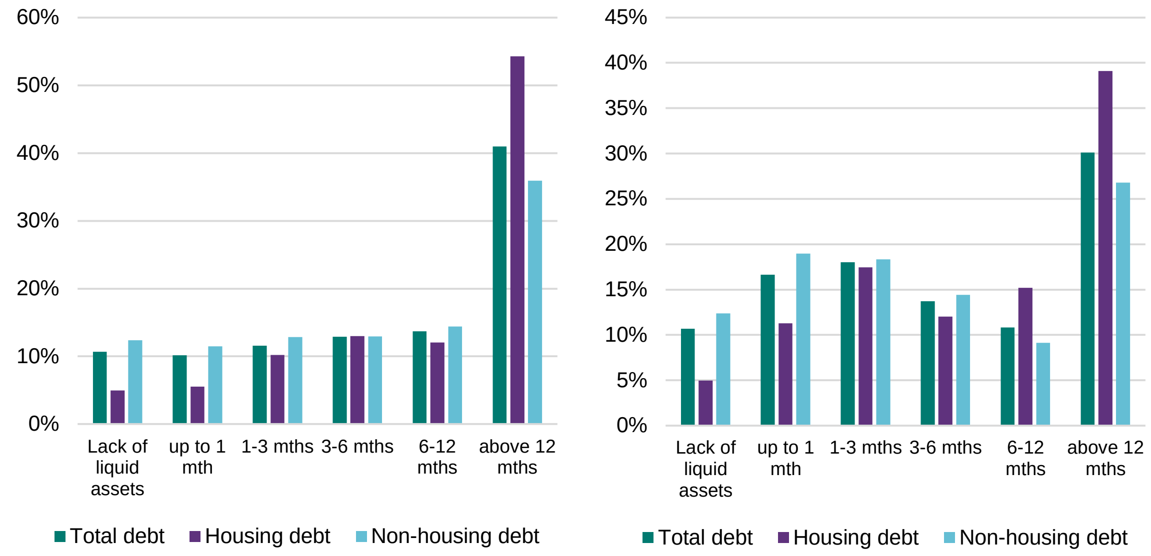
Figure 3.9. Liquid financial assets in relation to net annual income held by particular income groups in the population of indebted and non-indebted households in Poland (left-hand panel) and liquid assets values distribution by income in the group of indebted households (right-hand panel)



Source: BZGD, NBP.

Even if liquid assets do not allow households to fully repay their debt, they can absorb part of the increase in debt servicing costs and moderate declines in revenues. Approximately 20-25% of indebted households do not have any liquid assets or their liquid assets are so small that they would not allow them to service even a slight increase in debt even for 1 month (see Figure 3.10). More than half of households could, however, finance a 20 percentage point increase in the DSTI (e.g. from 30% to 50%) for more than 3 months, and 30% of them even for over a year. Households with housing loans, mainly concerned about the risk of rising DSTI costs, have more liquid assets and are in a better situation. Only 10-15% would not be able to absorb an increase in the DSTI even for one month, more than half could do this for a period exceeding 6 months and 40% for over a year.

Figure 3.10. The maximum period during which an indebted household could service a 10 p.p. increase in DSTI with their liquid financial assets (left-hand panel) and the maximum period during which indebted households could finance a 20 p.p. increase in the DSTI with liquid financial assets (right-hand panel)



Source: BZGD, NBP.

Box 3.1. Analysis of households' burden resulting from domestic and foreign currency loans

Table 3.6. Statistics on housing loans, divided into Polish zloty and foreign currency loans

	Net DSTI		Net DTI		Liquid assets to annual net income	
	Foreign currency loans	PLN loans	Foreign currency loans	PLN loans	Foreign currency loans	PLN loans
Conditional median	19.3%	21.2%	1.8	1.8	31.5%	13.3%
Average	24.2%	28.1%	2.4	2.4	65.0%	30.3%
DSTI > 40%	21.1%	16.2%	-	-	-	-
DTI > 3			27.9%	28.6%	-	-
Liquid assets to annual net income < 10%	-	-	-	-	29.9%	51.5%
% of all households	2.2%	10.1%	2.2%	10.1%	2.0%	9.6%

Source: BZGD, NBP.

The number of households who claimed to be holding a foreign currency loan is relatively small, both due to the percentage of those households in the population and the size of the sample. This suggests that we should be extremely cautious in generalizing the results. Yet, due to the fact that some features of households burdened with foreign currency loans identified in the Household Wealth and Debt Survey are reflected in other data sources, information specific for BZGD, including information on asset holdings, seems probable.

Among 12.1% of households indebted with housing loans, 10.1% claim to be holding a domestic currency loan and 2.2% a foreign currency loan. This latter group of borrowers is not only exposed to the risk of interest rate changes, but also to exchange rate fluctuations. The final risk is not a simple sum of individual risk components, but depends on the correlation between changes in interest rates abroad and the exchange rate of the zloty. Over the past few years, this correlation has benefited borrowers – weaker exchange rate of the zloty was usually accompanied with interest rate cuts abroad and vice versa – levelling off the amount of loan instalments. Interest rate cuts for the major currencies in which mortgage loans were taken out (i.e. CHF and EUR) partially reduced the scale of the burden of debt servicing costs due to the depreciation of the zloty observed since mid-2008, but *per saldo* these costs have been increasing.

Foreign currency loans were usually granted in higher amounts, but they were taken by households earning much higher income - the median of the annual net income of a household burdened with a foreign currency loan is PLN 33.5 thousand per person (as per equivalent income, according to the OECD equivalence scale), and among households with a mortgage loan raised in PLN is less than PLN 27 thousand per person. As a result, in terms of income, the average value of loans taken out in foreign currencies is very similar to those raised in PLN (see the DTI indicator in Table 3.6). Also, the percentage of households with high DTI was similar. Similarly, the average value of the DSTI at the beginning of 2014 was similar. However, the percentage of households spending over 40% of income on debt servicing was significantly higher among households with mortgage loans taken out in foreign currency than among households with mortgage loans raised in Polish zlotys (approx. 21% vs. 16%). This share is likely to have increased after the depreciation of the Polish zloty against the Swiss franc as of the beginning of 2015.

In addition to higher income levels, the feature distinguishing households indebted with foreign currency loans is a significantly higher value of their liquid financial assets holdings. The average value of liquid financial assets held by households burdened with housing loans in Polish zloty did not exceed their two-month income. In the case of households with foreign currency denominated loans these buffers are equivalent to almost 5-month income and for only less than 30% of households they are below their monthly income.

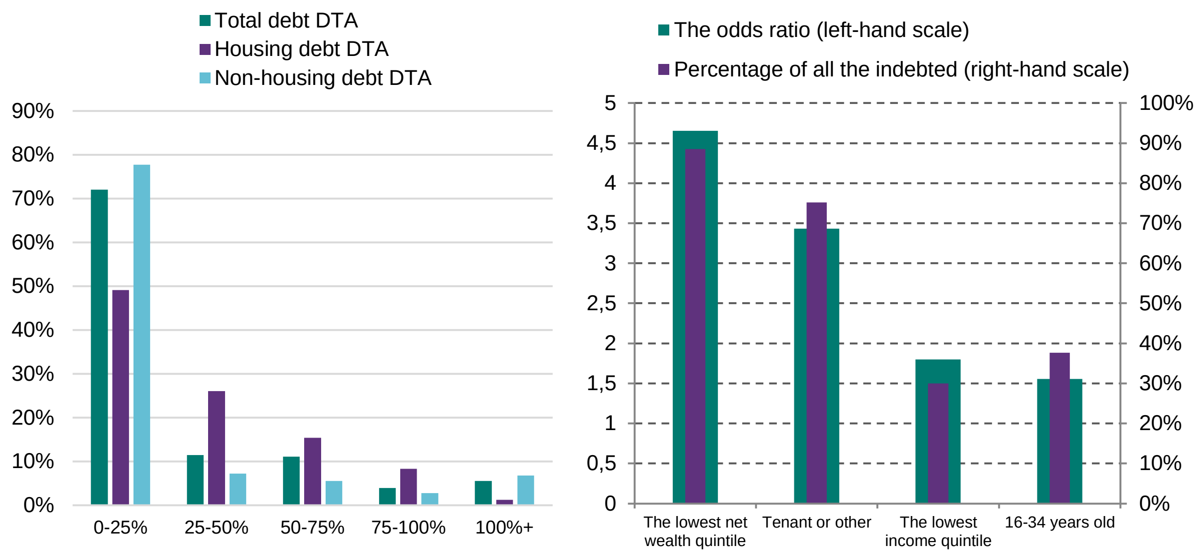
The study suggests that in the group of households with foreign currency denominated loans there are relatively more households heavily burdened with debt service costs, but, at the same time, many of them have liquidity buffers in excess of liquidity buffers held by other households. Liquid assets of households with foreign currency denominated loans allow long-term absorption of even significant increases in the DSTI (absorption of a 20 p.p. increase in the DSTI for an average period of almost 2 years and absorption of a 30 p.p. increase in the DSTI for over a year).

A household may also try to pay off the debt with the proceeds from the sale of its assets, including real estate property and vehicles and not just liquid assets alone. Over 90% of all indebted households have wealth exceeding by more than 25% their debt level (see Figure 3.11, left-hand panel). This percentage is very similar both in the group of households with housing debt and those burdened with another type of debt. The value of the debt exceeds the value of the whole household wealth more often in the group of households with a loan other than housing loan (i.e. for nearly 7% of them as compared to 1.2% of households with a housing loan).

Among households with assets exceeding the value of debt by more than 25%, the vast majority of households are owners of their main residence (all households with a non-housing credit and/or loans and approx. 94% of households with a housing loan). Among tenants, this percentage is much lower and stands at slightly more than 42% (see Figure 3.11 right-hand panel).

Another factor affecting the ability to repay the debt out of the asset held is the age of the household reference person - almost 95% of households where the reference person is aged above 45 years have assets far exceeding the value of the debt, in the group where the reference person is aged 35-44 years this percentage is only 75% and among younger households only approx. 55%. This seems to reflect lower debt values in the group of older households and their higher capacity to accumulate wealth over their life span. All households with net above-average wealth would be able to repay their debt out of their asset holding and would still own at least 25% of wealth.

Figure 3.11. DTA distribution in the population of indebted households in Poland (left-hand panel) and the characteristics of households with DTA > 75% (right-hand panel)



Note: The category *Total debt DTA* takes into account all the declared types of debt, including credit in the form of credit line, credit card debt and overdraft.
The odds ratio – indicates a relatively high incidence of households with DTA > 75% in a particular group of indebted households in relation to all the indebted; value 1 indicates the same frequency, value 2 two times higher frequency.
Source: BZGD, NBP.

The highest debt levels are reported by households with housing debt for whom the owned real estate property is at the same time the most important wealth component. For more than half of them the Loan-to-Value ratio (LTV) does not exceed 36%. This means that in this group of borrowers, the value of the collateral exceeds 3 times the current value of the loan and the collateral, if sold, would be sufficient to fully finance the outstanding portion of the debt and allow the household to purchase a cheaper the property or to rent it. Households for which the LTV ratio exceeds 80% account for approx. 15% of households with housing debt, while only for less than 5% of indebted households the current LTV ratio exceeds 100% (see Figure 3.12 right-hand panel). These are mainly households in the upper income quintile (see Figure 3.12 left-hand panel). It should be noted that the percentage of households with the LTV ratio above 100% almost doubles (up to approx. 10% of households with housing loan) if you refer the value of outstanding capital to the appraised value of the property at the time of taking out a loan (Loan-to-Value at origination).

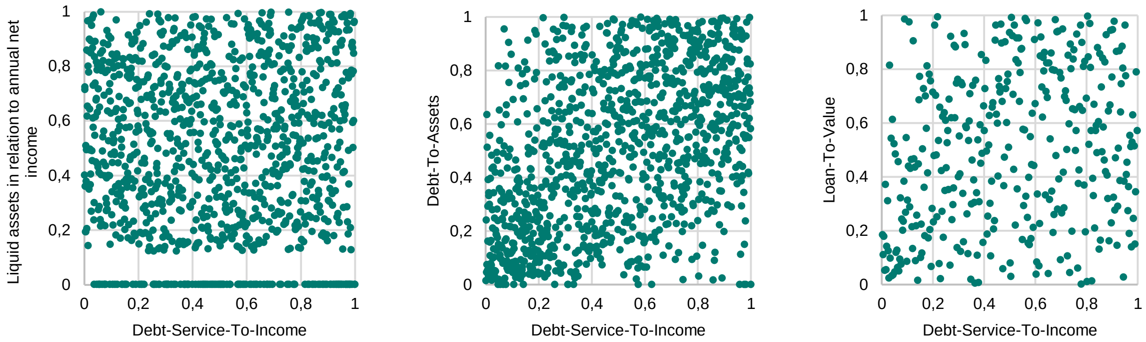
Figure 3.12. Current LTV by household income groups (left-hand panel) and distribution of LTV (% of indebted households) (right-hand panel)

Source: BZGD, NBP.

The above analysis of the debt burden of households and the possibility of its repayment is focused on individual indicators. From the point of view of financial stability, also the correlation between the likelihood of being heavily indebted and the assets and liquidity buffers held by households is very important. This is so because different risk is taken by a household whose DSTI exceeds 30% but who holds liquid assets in excess of its few months' income and other assets far exceeding the debt level, and quite a different risk is faced by a household who, having the same DSTI, does not have any liquid assets and all of its asset holdings would barely be sufficient for debt repayment.

The correlation between particular variables is presented with the use of *empirical copula*. Multidimensional distribution (e.g. joint distribution of the DSTI and liquid asset, or DSTI and DTA) reflects both the marginal distributions of individual variables and the relationship between the variables forming it. The copula is a function describing the pure structure of relationships between variables, irrespective of the distribution of individual variables. It is obtained by normalizing the marginal distributions (usually on a scale of 0:1, where values close to 0 indicate the lowest levels of the variable and values close to 1, the highest). The correlations between selected variables are presented in Figure 3.13. If variables were inversely correlated, the empirical copula distribution would concentrate around the negatively sloping diagonal. If variables were positively correlated, the empirical copula distribution would concentrate around the positively sloping diagonal. On the other hand, if the variables were independent, the distribution would be uniform throughout the field.

Figure 3.13. Empirical copula: DSTI vs. liquid financial assets to annual net income for total loans (left-hand panel). DSTI vs. DTA (central panel) and DSTI vs. LTV (Current Loan-To-Value) for housing loans (right-hand panel)



Note: The category *Total debt* does not include credit in the form of credit line, credit card debt or overdraft. Spearman rank correlation coefficient in the left-hand figure is 0.01 (number of observations 1105), P(-0.05 < rho < 0.07) = 95% - statistically insignificant correlation, in the central figure 0.44 (number of observations 1105), P(0.39< rho < 0.44) = 95%, and in the right-hand figure 0.24 (number of observations = 356), P(0.14 < rho < 0.33) = 95%.
Source: BZGD, NBP.

Firstly, it is important how often households who are burdened with the current debt service do not have sufficient liquidity buffers to absorb any temporary increases in the debt service costs. It turns out that the value of the DSTI appears to be unrelated to the level of liquid assets, regardless of the DSTI level (see Figure 3.13 left-hand panel). This means that the probability of having both high level of DSTI and low level of liquid financial assets is relatively small, since it is the product of the probability of each of these events. 3.3% of indebted households with DSTI exceeding 40% and liquid assets below the monthly income are in the most difficult situation (see Table 3.7). The percentage of households that could have a problem with the absorption of DSTI increases exceeding 30% of liquid asset holdings is on the rise and amounts to nearly 7%. These are the lowest-income borrowers burdened with a consumer loan - in this a group approx. 32% of households claim not to have any liquid assets.

Secondly, the point is how often an over-indebted household can decide to pay back its debt by selling its assets. The extent of being burdened with the current debt service is positively correlated with the value of the DTA ratio (see Figure 3.13, central panel). This means that households with a high DSTI level are more likely than other to hold a low level of assets, insufficient to repay the debt effortlessly. Thus, 0.6% of indebted households are in the most difficult situation, facing at the same time high debt burden (DSTI> 40%) and being unable to repay the debt with the held assets (DTA> 1), whereas approx. 1.2 of indebted households would have difficulties with smooth repayment of such debt. Should households find the threshold in excess of 30% DSTI unacceptable, 2.3% of the indebted would not be able to easily repay the debt with the assets held. The positive correlation between the DSTI and the DTA is observed primarily in the case of households with non-housing credit and loans. For households with housing debt, this correlation is clearly weaker, which is reflected in the absence of a strong relationship between the current LTV and the DSTI (see Figure 3.13, right-hand panel), with a concordance coefficient between these variables at the level of 0.24, and the confidence band P (0.136 <rho <0.333) = 95%.

Table 3.7. The percentage of indebted households in a particularly difficult financial situation

	Liquid assets ≤ 1 monthly income	Liquid assets ≤ 3 monthly income	DTA > 0.75	DTA > 1
DSTI > 30%	6.7%	9.1%	2.3%	1.3%
DSTI > 40%	3.2%	5.0%	1.2%	0.6%

Note: Particular fields in the table present the percentage of indebted households meeting at the same time the condition referred to in a particular line and in a particular column.
Source: BZGD, NBP.

Statistics showing the scale of debt burden of households in Poland look very optimistic as compared to the euro area countries, indicating the lowest (i.e. safer) levels. The average (gross) value of DSTI in Poland is 9.8%, 14.7% for the DTI, 6.5% for the DTA and 35.7% for the LTV. In the euro area countries, these figures are 11.1% for the DSTI, 62% for the DTI, 21.8% for the DTA and 37.3% for the LTV respectively. The higher value of the DTI ratio in the euro area results, among others, from a higher share of mortgage debt. Also the DTA level is much higher in this group of countries, whereas in Poland it is also lower due to a high percentage of households being owners of their main residence. In Poland, there are about two times fewer over-indebted households than in the euro area countries (with gross DSTI ratio in excess of 40%) - the share of over-indebted borrowers in Poland accounts for 4.8% of all the indebted as compared to approx. 9% in the euro area.

Table 3.8. Indicators of household debt burden (%)

	PL	BE	DE	GR	ES	FR	IT	CY	LU	MT	NL	AT	PT	SI	SK	FI	EA
DSTI Total loans	9.8	13.8	6.7	9.4	19.2	13.1	10.6	22.5	15.7	8.4	12.6	2.9	16.0	11.0	9.0	N/D	11.1
DSTI mortgage loans	13.9	14.8	12.8	16.4	20.5	17.4	15.5	25.3	16.3	12.8	14.2	4.6	16.7	11.7	20.4	N/D	15.9
DSTI consumer loans	8.8	15.1	10.9	14.7	19.9	14.7	13.2	25.0	16.6	11.5	14.5	5.6	17.3	15.8	12.5	N/D	13.9
DTI	14.7	79.8	37.3	47.2	113.5	50.4	50.3	157.0	86.9	52.0	194.1	35.6	134.0	26.6	22.7	64.3	62.0
DTA	6.5	18.2	28.4	14.8	17.9	18.9	11.7	17.0	18.2	6.2	41.3	16.7	25.7	3.9	6.6	34.6	21.8
LTV indicator Loans secured by a lien on the household main residence	35.7	28.8	41.9	31.6	31.0	32.4	30.0	31.9	27.5	19.9	52.5	18.7	41.4	5.4	37.3	48.6	37.3
Net liquid assets to annual to annual gross income indicator	12.8	33.5	22.3	4.9	12.3	18.5	21.9	5.1	20.7	75.7	16.4	32.9	15.9	2.2	12.1	9.4	18.6

Legend: PL – Poland, BE – Belgium, DE – Denmark, GR – Greece, ES – Spain, FR – France, IT – Italy, CY – Cyprus, LU - Luxembourg, MT – Malta, NL – the Netherlands, AT – Austria, PT – Portugal, SI – Slovenia, SK – Slovakia, FI – Finland, EA – euro area, N/D – no data.
Source: BZGD, NBP; ECB (2013).

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Statistical annex

Table A1. Percentage of households, conditional mean and conditional distribution of gross wealth (assets), net wealth, real assets, financial assets, debt and the annual gross and net income.

	Gross wealth (Total assets)	Net wealth	Debt	Real assets	Financial assets	Gross income (annual)	Net income (annual)
Percentage of households (%)	96.1	100.0	37.0	88.8	88.7	99.9	99.9
Conditional mean (PLN thousand)	449.8	411.1	57.3	465.2	21.9	70.5	48.1
Conditional distribution (PLN thousand)							
5-percentile	2.5	0.0	0.6	6.6	0.3	13.6	10.3
10- percentile	10.1	2.4	1.0	50.0	1.0	19.2	13.9
20- percentile	97.4	49.2	2.0	130.0	2.2	27.5	19.7
30- percentile	161.6	130.0	3.5	180.0	3.9	36.5	25.8
40- percentile	218.5	187.8	6.0	240.0	6.0	46.2	32.4
50- percentile	294.1	256.8	10.0	302.1	8.6	56.9	39.6
60- percentile	380.0	345.2	17.0	400.8	12.7	68.7	47.7
70- percentile	492.4	456.5	39.6	498.0	20.0	83.3	56.7
80- percentile	641.3	602.3	90.0	643.0	30.6	102.2	69.0
90- percentile	930.0	879.0	191.1	940.0	47.4	134.6	90.0
95- percentile	1317.9	1263.8	280.0	1300.0	72.2	166.9	110.0

Table A2 Percentage of gross wealth (total assets), net wealth and debt of households broken down into particular groups

	Structure	Gross wealth (total assets)		Net wealth		Debt		
	% of households	median (PLN thousand)	mean (PLN thousand)	median (PLN thousand)	mean (PLN thousand)	% of households	median (PLN thousand)	mean (PLN thousand)
All households	100.0	294.1	449.8	256.8	411.1	37.0	10.0	57.3
Ownership status								
Owner without housing credit	65.6	359.5	529.3	355.0	523.3	29.0	5.7	20.9
Owner with housing credit	10.8	438.5	628.4	275.6	477.7	100.0	111.0	150.7
Tenant or other	23.6	10.8	87.3	4.6	68.7	30.5	3.2	13.7
Household type								
One-person household	24.0	181.3	263.5	150.0	230.6	20.5	3.6	29.1
Single-parent family with children	6.3	240.4	298.2	193.4	271.7	34.1	5.4	29.1
Couple	19.3	271.8	444.7	247.2	411.2	36.2	12.0	71.3
Couple with children	32.3	359.0	534.2	314.2	488.8	49.5	17.2	77.9
Extended-family household	18.1	413.7	580.1	403.5	559.9	38.3	6.5	24.5
Age of the reference person								
16-24	1.6	16.4	207.3	9.5	183.2	16.5	2.8	7.2
25-34	14.1	248.0	340.9	158.5	282.2	50.6	38.0	91.7
35-44	18.4	343.5	527.1	286.0	470.8	51.9	25.0	87.5
45-54	20.0	359.0	558.1	334.1	525.7	40.5	8.0	39.9
55-64	23.3	303.0	476.0	294.3	451.0	32.5	6.0	28.2
65-74	13.0	257.0	357.5	242.1	339.7	25.2	3.0	13.5
75+	9.7	219.4	334.7	186.5	297.2	12.5	3.6	37.6
Labour force status of the reference person								
Employed	45.5	286.8	400.5	238.6	359.3	46.8	14.0	71.3
Self-employed	11.1	795.6	1 102.1	783.6	1 068.1	45.6	20.7	74.5
Retired	28.5	248.0	342.7	225.1	321.2	23.0	4.5	23.6
Other not working	14.9	195.0	287.7	157.4	251.0	27.3	3.6	16.4
Education of the reference person								
Primary or no education	15.7	196.1	317.8	151.0	270.2	22.4	3.4	19.3
Secondary education	60.9	270.0	449.5	247.8	423.2	37.9	7.4	37.8
Tertiary education	23.4	409.3	526.7	343.6	473.1	44.4	52.0	113.6
Class of geographical location								
Urban areas	67.1	242.3	374.0	207.2	335.3	37.3	11.3	63.1
Above 200 thousand inhabitants	25.3	315.7	453.5	258.3	396.4	37.4	15.0	95.1
Below 200 thousand inhabitants	41.8	212.5	326.3	184.7	298.2	37.3	10.0	43.7
Rural areas	32.9	399.2	603.6	366.1	565.5	36.3	7.0	45.0
Net income (quantiles)								
0-20%	20.0	160.0	231.5	120.0	196.0	20.1	2.5	9.2
20-40%	19.9	189.2	293.4	178.6	280.2	28.2	4.4	19.4
40-60%	20.1	269.2	385.9	253.8	364.5	40.4	7.5	39.1
60-80%	19.9	390.0	587.2	357.5	552.5	47.3	14.4	67.7
80-90%	10.0	429.1	535.8	405.8	507.0	48.6	13.5	59.3
90-100%	10.0	627.6	896.8	539.0	817.2	49.1	78.8	147.9
Net wealth (quantiles)								
0-20%	20.0	6.2	22.2	2.4	7.3	34.3	3.5	30.8
20-40%	20.1	143.1	149.8	129.9	125.2	43.1	12.0	56.9
40-60%	20.1	265.5	279.0	256.8	257.8	35.9	10.5	58.9
60-80%	19.9	466.2	477.8	455.4	458.8	32.8	10.0	58.0
80-90%	9.9	714.8	736.5	698.6	715.5	39.8	12.9	52.9
90-100%	10.0	1 296.8	1 732.9	1 263.8	1 692.7	37.9	26.9	106.2

Table A3. Gross wealth broken down into real assets and financial assets (percentage of households, share of gross wealth (assets) by groups of households

	Gross wealth (total assets)	Real assets		Financial assets	
	% of households	% of households	% of gross wealth (assets)	% of households	% of gross wealth (assets)
All households	96.1	88.8	95.5	88.7	4.5
Ownership status					
Owner without housing credit	100.0	100.0	95.9	91.0	4.1
Owner with housing credit	100.0	100.0	94.3	96.9	5.7
Tenant or other	83.5	52.3	85.1	78.3	14.9
Household type					
One-person household	89.8	76.4	93.7	76.7	6.3
Single-parent family with children	94.4	81.1	95.0	84.4	5.0
Couple	98.3	94.0	94.2	92.2	5.8
Couple with children	98.7	93.7	97.1	93.9	2.9
Extended-family household	98.1	93.2	98.7	92.8	1.3
Age of the reference person					
16-24	89.0	62.9	92.6	76.9	7.4
25-34	96.4	87.9	94.3	93.0	5.7
35-44	97.9	91.7	95.1	91.9	4.9
45-54	97.1	91.4	95.6	91.9	4.4
55-64	96.7	90.6	95.1	88.9	4.9
65-74	96.0	88.7	95.7	86.5	4.3
75+	90.2	79.5	95.4	73.9	4.6
Labour force status of the reference person					
Employed	98.0	91.0	93.7	93.7	6.3
Self-employed	100.0	99.8	97.0	94.8	3.0
Retired	95.3	88.2	95.3	85.1	4.7
Other not working	88.8	74.7	96.5	75.4	3.5
Education of the reference person					
Primary or no education	86.4	73.1	97.6	69.3	2.4
Secondary education	97.3	89.8	96.4	90.3	3.6
Tertiary education	99.4	96.6	91.6	97.5	8.4
Class of geographical location					
Urban areas	96.0	86.4	93.5	90.5	6.5
Above 200 thousand inhabitants	95.2	85.2	92.6	90.7	7.4
Below 200 thousand inhabitants	96.4	87.2	94.3	90.3	5.7
Rural areas	96.4	93.4	97.3	84.9	2.7
Net income (quantiles)					
0-20%	85.5	69.2	71.6	67.8	28.4
20-40%	97.4	85.1	92.4	87.7	7.6
40-60%	98.6	93.7	93.4	92.4	6.6
60-80%	99.5	96.5	95.4	97.0	4.6
80-90%	100.0	99.4	96.7	98.4	3.3
90-100%	99.2	99.2	96.0	98.4	4.0
Net wealth (quantiles)					
0-20%	80.5	44.3	97.3	74.7	2.7
20-40%	100.0	99.4	96.0	90.2	4.0
40-60%	100.0	100.0	96.0	90.0	4.0
60-80%	100.0	100.0	96.1	92.3	3.9
80-90%	100.0	100.0	94.9	95.1	5.1
90-100%	100.0	100.0	92.1	96.9	7.9

Table A4. Percentage of households holding real assets by types of assets and groups of householders (%)

	Real assets	Household main residence	Other real estate property	Vehicles	Valuables	Self-employment business wealth
All households	88.8	77.4	19.1	63.0	25.7	18.8
Ownership status						
Owner without housing credit	100.0	100.0	20.9	67.3	27.8	22.5
Owner with housing credit	100.0	100.0	25.4	84.2	27.0	22.7
Tenant or other	52.3	4.3	11.2	41.6	19.4	6.6
Household type						
One-person household	76.4	65.1	11.8	25.2	19.1	5.0
Single-parent family with children	81.1	71.6	13.8	43.8	21.0	11.6
Couple	94.0	79.5	23.2	70.0	27.3	14.7
Couple with children	93.7	81.0	24.7	82.7	27.9	25.7
Extended-family household	93.2	87.2	16.3	77.3	30.3	31.6
Age of the reference person						
16-24	62.9	33.3	13.0	43.6	21.0	12.8
25-34	87.9	62.0	21.7	75.5	25.5	15.3
35-44	91.7	78.3	24.0	76.0	27.7	27.3
45-54	91.4	82.5	21.5	76.2	26.6	29.3
55-64	90.6	83.3	19.7	60.8	26.4	19.4
65-74	88.7	83.2	12.8	43.3	26.2	5.3
75+	79.5	74.0	10.1	29.4	20.0	4.2
Labour force status of the reference person						
Employed	91.0	75.6	22.3	75.4	27.8	11.9
Self-employed	99.8	92.1	28.9	84.3	32.2	94.8
Retired	88.2	80.8	13.9	45.2	24.8	5.5
Other not working	74.7	65.5	12.0	43.4	16.3	8.6
Education of the reference person						
Primary or no education	73.1	65.8	6.1	32.8	15.3	12.0
Secondary education	89.8	78.5	17.8	65.8	26.0	20.7
Tertiary education	96.6	82.3	31.2	76.1	32.0	18.4
Class of geographical location						
Urban areas	86.4	72.7	20.3	57.9	27.1	12.2
Above 200 thousand inhabitants	85.2	69.0	22.3	55.0	30.0	13.5
Below 200 thousand inhabitants	87.2	75.0	19.1	59.7	25.3	11.5
Rural areas	93.4	86.9	16.7	73.4	22.9	32.2
Net income (quantiles)						
0-20%	69.2	60.5	7.1	21.4	14.4	4.8
20-40%	85.1	70.7	12.1	47.7	23.5	10.9
40-60%	93.7	80.2	18.2	71.2	27.2	18.6
60-80%	96.5	86.4	21.5	84.6	27.5	26.5
80-90%	99.4	87.6	31.0	89.9	31.0	26.8
90-100%	99.2	91.1	42.2	90.7	41.1	39.4
Net wealth (quantiles)						
0-20%	44.3	6.9	2.5	33.6	15.9	1.1
20-40%	99.4	89.8	11.4	54.6	21.5	4.0
40-60%	100.0	96.1	18.6	63.5	25.0	8.8
60-80%	100.0	95.8	23.3	74.8	28.9	23.0
80-90%	100.0	97.6	33.1	88.1	36.3	42.6
90-100%	100.0	99.1	46.3	89.2	38.1	71.2

Table A5a. Conditional medians and means for real assets by types of assets and groups of households (PLN thousand)

	Real assets		Household main residence		Other real estate property		Vehicles		Valuables		Self-employment business wealth	
	median	mean	median	mean	median	mean	median	mean	median	mean	median	mean
All households	302.1	465.2	282.6	371.6	150.0	238.9	12.0	20.5	2.0	5.5	219.7	347.0
Ownership status												
Owner without housing credit	343.5	508.8	270.0	363.8	144.2	248.2	12.0	20.8	2.0	5.9	201.5	343.2
Owner with housing credit	422.0	596.0	350.0	420.0	170.0	249.6	15.0	22.4	3.0	5.4	272.5	407.2
Tenant or other	13.0	119.2	328.0	358.8	137.5	179.3	9.0	17.2	1.5	4.0	276.9	288.7
Household type												
One-person household	200.0	291.0	200.0	270.5	150.7	209.9	10.0	18.9	2.0	5.9	258.0	314.9
Single-parent family with children	266.7	330.4	250.0	304.0	122.5	144.5	8.0	21.3	1.5	7.8	100.0	167.9
Couple	270.0	439.1	260.0	347.9	137.5	254.0	10.0	17.3	2.7	7.4	271.6	428.9
Couple with children	362.0	538.5	320.0	421.0	165.9	237.0	14.0	22.6	2.0	4.1	220.0	332.9
Extended-family household	423.1	591.5	350.0	432.0	120.0	277.0	12.0	20.0	2.5	4.9	210.7	356.1
Age of the reference person												
16-24	131.5	272.3	270.3	383.3	23.4	143.2	10.0	17.4	1.0	5.2	10.4	127.9
25-34	256.1	353.0	258.7	338.2	146.2	183.7	12.6	21.4	2.5	6.3	200.0	282.9
35-44	372.3	537.6	320.0	416.9	160.0	243.9	12.0	20.4	2.0	4.6	260.0	333.4
45-54	368.0	568.2	300.1	405.6	160.0	244.8	13.0	23.3	2.0	4.4	237.7	386.5
55-64	314.2	484.7	280.0	357.1	144.2	304.1	12.0	20.6	2.5	7.1	200.0	348.6
65-74	267.3	371.2	260.0	340.2	100.0	170.0	10.0	15.6	2.0	5.1	155.3	311.9
75+	250.4	362.7	250.0	332.2	120.0	196.2	7.5	13.4	2.0	4.9	150.0	425.0
Labour force status of the reference person												
Employed	297.0	406.2	284.7	354.9	156.0	230.1	13.0	20.2	2.0	5.9	200.0	279.3
Self-employed	789.4	1 073.5	446.0	579.1	270.0	427.3	20.0	31.0	3.0	6.0	250.0	407.5
Retired	258.3	353.5	250.0	331.1	100.0	147.5	10.0	16.4	2.0	5.2	155.3	273.0
Other not working	240.0	330.2	240.0	308.2	80.0	153.6	8.0	15.0	1.5	3.7	278.7	224.7

Table A5b. Conditional medians and means for real assets by types of assets and groups of households (PLN thousand)

	Real assets		Household main residence		Other real estate property		Vehicles		Valuables		Self-employment business wealth	
	median	mean	median	mean	median	mean	median	mean	median	mean	median	mean
Education of the reference person												
Primary or no education	257.0	366.8	252.8	336.0	120.0	181.3	8.0	12.8	1.0	1.9	163.6	260.5
Secondary education	285.0	470.7	264.7	368.7	120.0	239.4	12.0	19.4	2.0	4.0	224.4	371.2
Tertiary education	393.6	500.8	330.0	397.6	180.0	245.6	17.0	25.2	3.9	9.7	260.0	312.1
Class of geographical location												
Urban areas	265.1	390.0	250.0	337.5	150.0	225.2	12.0	20.0	2.5	6.2	200.0	266.1
Above 200 thousand inhabitants	340.0	473.0	320.0	404.6	200.0	291.9	15.0	22.9	2.8	8.5	258.7	320.6
Below 200 thousand inhabitants	222.0	340.8	200.0	300.1	130.0	178.1	10.0	18.4	2.0	4.6	147.3	227.1
Rural areas	405.5	606.9	350.0	429.7	146.2	273.0	12.0	21.2	2.0	3.7	250.0	409.6
Net income (quantiles)												
0-20%	200.0	278.3	220.0	275.6	90.0	168.7	7.0	12.3	1.0	2.8	200.0	226.8
20-40%	200.0	322.8	200.0	299.1	100.0	179.7	7.0	12.0	1.8	3.5	228.7	322.4
40-60%	272.0	390.4	267.7	341.8	100.0	153.2	10.0	14.1	2.0	4.6	245.3	281.4
60-80%	392.7	583.4	340.0	435.5	160.0	301.7	14.0	23.0	2.5	6.3	215.2	379.2
80-90%	401.3	513.0	350.0	404.9	124.3	187.7	18.0	23.3	2.3	7.0	224.4	276.1
90-100%	587.0	832.9	444.1	510.6	228.2	344.4	25.0	35.8	5.0	8.5	202.1	456.6
Net wealth (quantiles)												
0-20%	7.0	29.0	80.0	124.5	20.0	32.7	6.0	8.5	1.0	2.1	12.4	17.2
20-40%	132.0	139.2	130.0	135.5	50.0	71.7	10.0	12.5	1.5	2.9	15.0	26.4
40-60%	254.7	260.7	230.0	234.8	72.0	98.7	10.0	15.1	2.0	5.9	39.8	64.5
60-80%	448.8	457.2	400.0	380.9	150.0	158.9	15.0	24.6	3.0	7.1	120.0	150.7
80-90%	695.8	713.5	589.4	531.4	182.2	217.3	18.0	22.0	3.0	4.6	244.8	239.5
90-100%	1 245.3	1 672.4	781.6	922.4	400.0	550.8	25.0	38.4	3.0	9.0	400.0	653.1

Table A6. Share of particular real assets in the total value of real assets by groups of households (%)

	Real assets	Household main residence	Other real estate property	Vehicles	Valuables	Self-employment business wealth
All households	100.0	69.7	11.1	3.1	0.3	15.8
Ownership status						
Owner without housing credit	100.0	71.5	10.2	2.8	0.3	15.2
Owner with housing credit	100.0	70.5	10.6	3.2	0.2	15.5
Tenant or other	100.0	24.5	32.1	11.5	1.3	30.7
Household type						
One-person household	100.0	79.2	11.1	2.1	0.5	7.1
Single-parent family with children	100.0	81.2	7.5	3.5	0.6	7.2
Couple	100.0	67.0	14.3	2.9	0.5	15.3
Couple with children	100.0	67.5	11.6	3.7	0.2	16.9
Extended-family household	100.0	68.3	8.2	2.8	0.3	20.4
Age of the reference person						
16-24	100.0	74.6	10.8	4.4	0.6	9.5
25-34	100.0	67.5	12.9	5.2	0.5	13.9
35-44	100.0	66.2	11.9	3.1	0.3	18.5
45-54	100.0	64.4	10.1	3.4	0.2	21.8
55-64	100.0	67.7	13.6	2.9	0.4	15.4
65-74	100.0	86.0	6.6	2.1	0.4	5.0
75+	100.0	85.2	6.9	1.4	0.3	6.2
Labour force status of the reference person						
Employed	100.0	72.6	13.9	4.1	0.4	9.0
Self-employed	100.0	49.8	11.5	2.4	0.2	36.1
Retired	100.0	85.8	6.6	2.4	0.4	4.8
Other not working	100.0	81.8	7.5	2.6	0.2	7.8
Education of the reference person						
Primary or no education	100.0	82.5	4.2	1.6	0.1	11.7
Secondary education	100.0	68.5	10.1	3.0	0.2	18.1
Tertiary education	100.0	67.7	15.9	4.0	0.6	11.9
Class of geographical location						
Urban areas	100.0	72.8	13.6	3.4	0.5	9.6
Above 200 thousand inhabitants	100.0	69.3	16.2	3.1	0.6	10.7
Below 200 thousand inhabitants	100.0	75.7	11.5	3.7	0.4	8.7
Rural areas	100.0	65.8	8.0	2.8	0.1	23.2
Net income (quantiles)						
0-20%	100.0	86.5	6.2	1.4	0.2	5.7
20-40%	100.0	76.9	7.9	2.1	0.3	12.8
40-60%	100.0	75.0	7.6	2.7	0.3	14.3
60-80%	100.0	66.8	11.5	3.5	0.3	17.9
80-90%	100.0	69.6	11.4	4.1	0.4	14.5
90-100%	100.0	56.3	17.6	3.9	0.4	21.8
Net wealth (quantiles)						
0-20%	100.0	67.3	6.3	22.4	2.6	1.5
20-40%	100.0	87.9	5.9	4.9	0.5	0.8
40-60%	100.0	86.5	7.0	3.7	0.6	2.2
60-80%	100.0	79.8	8.1	4.0	0.4	7.6
80-90%	100.0	72.7	10.1	2.7	0.2	14.3
90-100%	100.0	54.7	15.3	2.0	0.2	27.8

Table A7. Share of groups of households holding real assets by types of assets (%)

	Real assets	Household main residence	Other real estate property	Vehicles	Valuables	Self-employment business wealth
All households	100.0	100.0	100.0	100.0	100.0	100.0
Ownership status						
Owner without housing credit	80.9	83.0	74.7	71.2	75.9	77.8
Owner with housing credit	15.5	15.7	14.9	15.7	11.1	15.2
Tenant or other	3.6	1.3	10.3	13.1	13.1	6.9
Household type						
One-person household	12.9	14.7	13.0	8.8	19.3	5.8
Single-parent family with children	4.1	4.8	2.8	4.5	7.3	1.9
Couple	19.3	18.5	24.9	18.1	27.7	18.7
Couple with children	39.5	38.3	41.4	46.9	26.5	42.4
Extended-family household	24.2	23.7	17.9	21.7	19.2	31.2
Age of the reference person						
16-24	0.7	0.7	0.6	0.9	1.2	0.4
25-34	10.6	10.3	12.3	17.6	15.9	9.3
35-44	21.9	20.8	23.4	21.9	16.6	25.6
45-54	25.1	23.2	22.9	27.4	16.5	34.6
55-64	24.8	24.1	30.4	22.5	31.0	24.1
65-74	10.3	12.7	6.1	6.8	12.1	3.3
75+	6.7	8.2	4.2	2.9	6.6	2.6
Labour force status of the reference person						
Employed	40.7	42.4	51.1	53.6	52.5	23.2
Self-employed	28.8	20.6	30.0	22.5	15.2	65.9
Retired	21.5	26.5	12.8	16.3	26.0	6.5
Other not working	8.9	10.4	6.0	7.5	6.4	4.4
Education of the reference person						
Primary or no education	10.2	12.1	3.8	5.1	3.3	7.5
Secondary education	62.4	61.4	56.9	60.3	45.2	71.8
Tertiary education	27.4	26.6	39.3	34.6	51.5	20.6
Class of geographical location						
Urban areas	54.8	57.3	67.2	60.2	80.3	33.5
Above 200 thousand inhabitants	24.7	24.6	36.1	24.7	45.9	16.8
Below 200 thousand inhabitants	30.1	32.7	31.1	35.5	34.4	16.7
Rural areas	45.2	42.7	32.8	39.8	19.7	66.5
Net income (quantiles)						
0-20%	9.3	11.6	5.3	4.1	5.7	3.3
20-40%	13.3	14.6	9.5	8.8	11.8	10.7
40-60%	17.8	19.2	12.3	15.6	17.6	16.2
60-80%	27.2	26.1	28.3	30.0	24.6	30.8
80-90%	12.3	12.3	12.7	16.2	15.4	11.3
90-100%	20.1	16.2	31.9	25.3	24.9	27.7
Net wealth (quantiles)						
0-20%	0.6	0.6	0.4	4.4	4.7	0.1
20-40%	6.7	8.5	3.6	10.6	8.9	0.3
40-60%	12.6	15.7	8.0	14.9	21.0	1.7
60-80%	22.2	25.4	16.3	28.5	29.1	10.7
80-90%	17.2	18.0	15.7	15.0	11.8	15.6
90-100%	40.7	31.9	56.1	26.6	24.5	71.6

Table A8. Percentage of households holding financial assets by types of assets and groups of households (%)

	Financial assets	Deposits	Mutual funds	Bonds	Shares	Voluntary pension scheme / Life insurance policy	Other financial assets	Other receiva-bles
All households	88.7	81.9	4.2	1.0	3.5	51.3	2.2	5.0
Ownership status								
Owner without housing credit	91.0	84.2	4.0	1.1	3.4	53.0	2.2	4.1
Owner with housing credit	96.9	94.1	8.7	1.8	7.2	63.6	3.7	8.0
Tenant or other	78.3	69.6	2.6	0.4	2.2	41.0	1.7	6.2
Household type								
One-person household	76.7	66.0	2.5	1.1	2.1	37.3	1.7	5.0
Single-parent family with children	84.4	74.0	3.8	1.2	1.2	41.7	1.3	4.1
Couple	92.2	85.4	5.1	2.0	5.8	58.0	2.1	5.1
Couple with children	93.9	90.0	5.6	0.5	4.4	57.8	3.0	6.1
Extended-family household	92.8	87.2	3.1	0.8	2.3	54.3	2.1	3.3
Age of the reference person								
16-24	76.9	76.9	3.8	-	0.7	24.9	2.7	3.1
25-34	93.0	89.8	5.4	0.7	5.3	53.2	1.9	8.2
35-44	91.9	87.1	5.7	1.1	4.4	53.7	3.7	5.8
45-54	91.9	87.3	4.8	0.7	3.9	54.6	2.7	4.6
55-64	88.9	82.4	3.1	1.5	3.0	53.8	1.6	5.0
65-74	86.5	73.1	3.3	1.1	2.8	48.5	2.2	2.9
75+	73.9	61.6	2.5	1.1	1.6	38.1	0.5	2.7
Labour force status of the refer-ence person								
Employed	93.7	89.3	5.8	1.1	5.0	58.8	2.9	5.5
Self-employed	94.8	92.5	3.3	0.9	3.8	47.7	3.9	9.4
Retired	85.1	74.2	3.3	1.5	2.5	48.7	1.4	3.4
Other not working	75.4	65.7	1.6	-	0.9	35.9	0.6	3.5
Education of the reference person								
Primary or no education	69.3	56.0	0.2	0.1	0.9	34.8	0.3	3.1
Secondary education	90.3	83.2	2.4	0.8	3.1	52.0	1.6	5.3
Tertiary education	97.5	95.7	11.6	2.4	6.5	60.3	5.0	5.5
Class of geographical location								
Urban areas	90.5	83.9	5.0	1.2	4.2	54.2	2.4	5.7
Above 200 thousand inhabitants	90.7	85.4	7.2	1.7	4.8	45.5	2.8	6.6
Below 200 thousand inhabitants	90.3	82.9	3.7	0.9	3.8	59.4	2.2	5.1
Rural areas	84.9	77.7	2.5	0.8	2.2	45.4	1.8	3.7
Net income (quantiles)								
0-20%	67.8	55.9	1.1	0.1	0.9	30.2	0.3	4.1
20-40%	87.7	77.9	1.4	1.0	1.3	45.0	1.2	4.6
40-60%	92.4	86.5	3.4	1.0	2.6	52.6	2.1	2.9
60-80%	97.0	92.0	5.5	0.7	5.4	60.2	2.8	6.0
80-90%	98.4	97.7	6.8	1.5	5.1	65.1	2.2	5.5
90-100%	98.4	96.5	12.2	3.3	9.8	71.3	7.3	9.6
Net wealth (quantiles)								
0-20%	74.7	64.7	0.6	0.3	0.5	37.9	0.5	5.1
20-40%	90.2	82.1	3.4	0.2	2.4	57.1	0.9	4.4
40-60%	90.0	82.6	3.7	1.5	3.0	54.5	1.6	4.4
60-80%	92.3	86.6	6.5	1.1	6.3	52.2	3.4	3.7
80-90%	95.1	91.7	4.1	2.3	3.4	56.3	4.4	5.4
90-100%	96.9	94.9	9.2	1.8	7.5	52.9	5.3	9.4

Table A9a. Conditional medians and means for financial assets by types of assets and groups of households (PLN thousand)

	Financial assets		Deposits		Mutual funds		Bonds		Shares		Voluntary pension scheme / Life insurance policy		Other financial assets		Other receivables	
	median	mean	median	mean	median	mean	median	mean	median	mean	median	mean	median	mean	median	mean
All households	8.6	21.9	5.0	16.2	11.9	33.4	6.1	28.8	8.0	16.5	4.3	5.7	9.0	23.7	3.0	9.4
Ownership status																
Owner without housing credit	9.4	22.5	6.0	16.9	12.0	34.6	4.4	26.2	9.0	19.0	4.3	5.7	9.0	26.0	3.5	9.5
Owner with housing credit	13.4	33.5	6.6	22.0	12.3	39.1	45.0	51.0	10.0	16.3	5.4	7.1	20.0	26.6	3.0	9.8
Tenant or other	4.7	13.4	2.5	10.4	11.0	20.1	4.9	6.2	4.3	5.9	3.1	4.5	5.9	12.3	2.0	8.9
Household type																
One-person household	4.0	18.5	3.0	15.9	11.8	36.4	6.1	21.7	10.0	12.2	2.4	3.1	6.4	37.0	3.7	10.7
Single-parent family with children	4.2	16.1	2.5	12.8	8.6	17.9	4.3	36.9	15.0	12.8	2.7	3.9	3.5	27.4	3.2	20.1
Couple	10.1	26.2	7.0	19.6	12.8	29.1	8.0	26.7	9.0	19.6	4.5	5.6	5.0	27.1	2.4	9.3
Couple with children	10.6	24.0	6.0	16.4	11.5	37.2	4.9	55.7	6.0	11.4	5.4	6.7	10.0	21.4	3.5	8.0
Extended-family household	9.1	19.3	5.9	13.7	15.0	32.4	4.2	14.6	10.5	32.1	5.4	6.8	6.9	10.9	2.0	6.7
Age of the reference person																
16-24	3.4	16.9	2.0	11.9	6.3	18.6	-	-	5.4	5.4	3.3	4.8	50.0	61.3	0.2	8.0
25-34	9.6	19.6	5.0	15.2	11.0	11.1	5.7	5.6	9.0	6.7	4.3	5.9	3.7	8.0	2.0	3.4
35-44	10.0	25.3	5.0	17.3	12.0	37.7	50.0	58.3	7.0	13.9	5.1	6.5	12.0	21.5	5.0	9.1
45-54	10.1	24.4	6.0	17.8	10.0	36.0	2.0	6.8	6.0	14.6	5.3	6.9	5.9	13.1	2.5	10.5
55-64	8.6	23.4	5.0	16.8	20.0	54.6	4.3	16.9	12.0	26.3	4.3	5.5	20.0	42.8	3.0	11.2
65-74	5.3	16.1	4.0	12.4	21.7	28.4	15.0	16.3	20.0	29.3	2.7	3.9	7.5	33.8	5.0	12.4
75+	4.7	18.2	4.3	15.8	15.4	25.5	100.0	80.1	0.3	14.8	2.4	3.4	1.7	17.3	4.6	22.0
Labour force status of the reference person																
Employed	9.9	24.5	5.0	17.0	11.0	34.9	6.1	31.9	8.0	16.5	4.9	6.0	10.0	26.2	2.4	6.7
Self-employed	18.0	32.7	12.0	23.6	30.0	61.9	10.0	16.1	10.0	15.2	6.4	9.4	13.0	16.4	3.7	13.9
Retired	6.2	17.4	4.1	14.1	11.8	22.3	5.8	28.2	5.2	17.9	3.0	4.2	6.0	26.7	4.0	10.7
Other not working	3.6	11.6	2.0	9.8	8.6	17.4	-	-	3.8	13.8	3.0	4.2	6.0	8.4	3.5	10.7

Table A9b. Conditional medians and means for financial assets and groups of households (PLN thousand)

	Financial assets		Deposits		Mutual funds		Bonds		Shares		Voluntary pension scheme / Life insurance policy		Other financial assets		Other receivables	
	median	mean	median	mean	median	mean	median	mean	median	mean	median	mean	median	mean	median	mean
Education of the reference person																
Primary or no education	3.7	9.2	2.3	8.2	60.0	60.0	50.0	50.0	4.7	9.9	2.6	3.4	50.0	41.2	1.5	7.0
Secondary education	8.0	16.6	4.0	12.4	12.0	26.3	4.2	12.0	7.5	16.2	4.3	5.3	6.4	10.8	3.0	8.6
Tertiary education	18.1	40.9	12.0	27.9	11.0	37.0	15.0	41.8	9.0	17.6	5.3	7.3	15.0	33.9	3.7	12.3
Class of geographical location																
Urban areas	9.1	24.0	5.0	17.6	10.0	32.1	8.0	30.9	8.0	17.0	4.3	5.7	10.0	25.8	3.0	10.2
Above 200 thousand inhabitants	11.8	32.1	8.0	23.6	10.0	44.4	7.5	32.0	9.0	16.2	4.3	6.1	15.0	33.5	3.0	11.6
Below 200 thousand inhabitants	8.4	19.1	4.1	13.8	11.0	17.5	10.0	29.6	8.0	17.5	4.3	5.6	10.0	19.9	2.5	9.1
Rural areas	7.7	17.4	4.1	13.1	24.0	39.0	4.2	22.4	7.5	14.8	4.3	5.6	3.1	17.8	3.7	6.8
Net income (quantiles)																
0-20%	2.4	7.7	1.2	7.3	10.0	16.8	4.2	4.2	3.8	4.8	2.3	2.6	1.4	2.6	2.0	3.9
20-40%	4.8	12.6	2.4	10.5	20.0	24.7	10.0	30.2	2.8	6.4	2.7	3.4	3.5	11.7	2.5	11.6
40-60%	7.6	15.8	4.0	12.2	7.8	17.5	4.3	23.2	10.0	15.1	3.8	4.7	5.9	6.9	4.0	8.1
60-80%	11.2	22.3	6.3	16.5	12.3	18.7	4.4	4.4	5.0	12.8	5.3	6.3	9.0	14.0	3.2	9.0
80-90%	18.8	26.2	11.9	18.3	8.0	25.3	40.0	30.3	5.4	10.3	6.0	7.2	6.9	15.0	3.0	4.4
90-100%	34.1	64.5	22.8	40.3	25.0	65.0	15.0	42.9	12.0	29.4	8.1	10.2	20.0	48.9	2.5	15.9
Net wealth (quantiles)																
0-20%	3.4	6.8	1.3	5.1	4.3	4.7	8.0	6.7	3.4	2.8	3.0	3.8	5.0	4.1	2.0	4.8
20-40%	6.3	12.5	3.0	9.4	8.0	15.1	4.2	5.0	4.3	8.2	3.3	4.7	6.4	8.1	2.5	3.5
40-60%	10.0	20.3	6.0	15.8	10.0	16.8	5.7	16.1	9.0	12.7	4.3	5.6	10.0	18.7	5.0	14.2
60-80%	11.5	22.4	7.0	16.3	10.0	18.1	6.1	30.1	8.0	17.5	4.5	5.8	5.9	15.1	3.9	11.4
80-90%	12.3	24.2	8.8	18.0	20.0	18.8	2.3	8.5	11.3	25.6	5.3	6.7	9.0	13.2	2.5	6.6
90-100%	26.5	62.5	20.8	41.7	30.0	92.2	80.0	86.0	11.0	21.0	6.6	9.3	20.0	54.8	6.0	15.4

Table A10. Share of particular financial assets in the total value of financial assets by groups of households (%)

	Financial assets	Deposits	Investment funds	Bonds	Shares	Voluntary pension scheme / Life insurance policy	Other finan-cial assets	Other receiv-ables
All households	100.0	68.2	7.2	1.5	3.0	15.0	2.7	2.4
Ownership status								
Owner without housing credit	100.0	69.2	6.7	1.5	3.2	14.8	2.7	1.9
Owner with housing credit	100.0	63.8	10.4	2.8	3.6	13.8	3.1	2.4
Tenant or other	100.0	68.8	5.0	0.3	1.2	17.5	2.0	5.3
Household type								
One-person household	100.0	73.9	6.3	1.7	1.8	8.2	4.4	3.8
Single-parent family with children	100.0	69.6	5.0	3.4	1.1	12.1	2.7	6.0
Couple	100.0	69.3	6.1	2.2	4.7	13.3	2.3	2.0
Couple with children	100.0	65.3	9.2	1.2	2.2	17.1	2.8	2.2
Extended-family household	100.0	66.6	5.6	0.7	4.0	20.6	1.3	1.2
Age of the reference person								
16-24	100.0	70.2	5.5	-	0.3	9.3	12.9	1.9
25-34	100.0	74.8	3.3	0.2	2.0	17.3	0.8	1.5
35-44	100.0	64.8	9.2	2.8	2.6	15.0	3.4	2.3
45-54	100.0	69.1	7.6	0.2	2.5	16.7	1.6	2.2
55-64	100.0	66.6	8.0	1.3	3.8	14.3	3.3	2.7
65-74	100.0	64.8	6.8	1.3	5.9	13.5	5.2	2.6
75+	100.0	72.3	4.7	6.6	1.8	9.5	0.7	4.4
Labour force status of the reference person								
Employed	100.0	65.9	8.8	1.6	3.6	15.4	3.3	1.6
Self-employed	100.0	70.3	6.6	0.5	1.9	14.4	2.1	4.2
Retired	100.0	70.5	5.0	2.8	3.0	13.8	2.5	2.4
Other not working	100.0	73.3	3.1	-	1.5	17.3	0.6	4.2
Education of the reference person								
Primary or no education	100.0	71.8	1.5	1.1	1.4	18.5	2.2	3.4
Secondary education	100.0	69.1	4.1	0.6	3.3	18.6	1.2	3.0
Tertiary education	100.0	66.8	10.8	2.5	2.9	11.1	4.2	1.7
Class of geographical location								
Urban areas	100.0	67.9	7.4	1.7	3.3	14.3	2.9	2.7
Above 200 thousand inhabitants	100.0	69.3	10.9	1.8	2.7	9.5	3.2	2.6
Below 200 thousand inhabitants	100.0	66.5	3.7	1.5	3.9	19.2	2.5	2.7
Rural areas	100.0	69.0	6.6	1.2	2.2	17.2	2.2	1.7
Net income (quantiles)								
0-20%	100.0	77.6	3.4	0.1	0.8	14.9	0.2	3.0
20-40%	100.0	73.7	3.1	2.6	0.8	13.8	1.3	4.8
40-60%	100.0	72.1	4.1	1.6	2.7	16.9	1.0	1.6
60-80%	100.0	70.0	4.8	0.1	3.2	17.6	1.8	2.5
80-90%	100.0	69.1	6.7	1.8	2.0	18.2	1.3	0.9
90-100%	100.0	61.3	12.5	2.2	4.6	11.4	5.6	2.4
Net wealth (quantiles)								
0-20%	100.0	65.3	0.6	0.4	0.3	28.2	0.4	4.9
20-40%	100.0	68.1	4.6	0.1	1.8	23.5	0.6	1.4
40-60%	100.0	71.4	3.4	1.3	2.1	16.8	1.6	3.4
60-80%	100.0	68.2	5.7	1.6	5.3	14.7	2.5	2.1
80-90%	100.0	71.5	3.4	0.8	3.8	16.5	2.5	1.5
90-100%	100.0	65.4	14.0	2.6	2.6	8.2	4.8	2.4

Table A11. Share of groups of households holding financial assets by types of assets (%)

	Financial assets	Deposits	Mutual funds	Bonds	Shares	Voluntary pension scheme / Life insurance policy	Other financial assets	Other receiv-ables
All households	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Ownership status								
Owner without housing credit	69.3	70.3	65.0	65.3	73.3	68.5	70.3	54.4
Owner with housing credit	18.0	16.8	26.1	32.6	21.6	16.6	20.4	18.0
Tenant or other	12.7	12.8	8.9	2.1	5.2	14.9	9.3	27.7
Household type								
One-person household	17.5	19.0	15.4	19.3	10.7	9.5	28.4	27.2
Single-parent family with children	4.4	4.5	3.1	9.5	1.6	3.5	4.4	10.9
Couple	23.9	24.3	20.3	34.4	37.7	21.3	20.4	19.7
Couple with children	37.5	35.9	48.2	29.5	27.6	42.7	38.9	33.9
Extended-family household	16.7	16.3	13.0	7.3	22.5	23.0	8.0	8.4
Age of the reference person								
16-24	1.1	1.1	0.8	-	0.1	0.7	5.0	0.8
25-34	13.2	14.5	6.0	1.8	8.5	15.3	4.1	8.3
35-44	22.0	20.9	28.0	39.1	19.0	22.0	27.6	20.4
45-54	23.0	23.3	24.4	3.2	19.2	25.7	13.3	20.6
55-64	24.9	24.4	27.8	20.1	31.0	23.8	30.4	27.8
65-74	9.3	8.8	8.7	7.5	18.2	8.3	17.8	10.0
75+	6.7	7.1	4.3	28.3	4.0	4.2	1.7	12.1
Labour force status of the refer-ence person								
Employed	53.8	52.0	65.9	55.1	63.9	55.2	64.8	35.5
Self-employed	17.7	18.3	16.2	5.6	11.0	17.1	13.7	30.9
Retired	21.7	22.5	15.0	39.3	21.8	20.0	20.1	21.9
Other not working	6.7	7.2	2.9	-	3.3	7.8	1.4	11.6
Education of the reference person								
Primary or no education	5.2	5.4	1.1	3.7	2.4	6.4	4.3	7.2
Secondary education	46.9	47.5	27.0	18.4	51.9	58.1	20.7	58.8
Tertiary education	48.0	47.0	71.9	78.0	45.6	35.5	75.0	34.0
Class of geographical location								
Urban areas	75.0	74.7	77.0	80.9	81.7	71.4	79.6	82.5
Above 200 thousand inhabitants	38.0	38.6	57.7	45.3	33.7	24.0	44.8	41.1
Below 200 thousand inhabit-ants	37.1	36.1	19.3	35.6	48.0	47.4	34.8	41.4
Rural areas	25.0	25.3	23.0	19.1	18.3	28.6	20.4	17.5
Net income (quantiles)								
0-20%	5.4	6.1	2.6	0.3	1.4	5.4	0.3	6.8
20-40%	11.4	12.3	4.9	19.4	2.9	10.4	5.3	22.5
40-60%	15.1	15.9	8.6	15.3	13.5	17.0	5.5	10.1
60-80%	22.2	22.8	14.7	2.1	23.7	26.1	15.0	22.8
80-90%	13.3	13.4	12.3	15.5	9.0	16.1	6.2	5.2
90-100%	32.7	29.4	57.0	47.4	49.5	25.0	67.8	32.6
Net wealth (quantiles)								
0-20%	5.2	5.0	0.4	1.3	0.4	9.8	0.8	10.5
20-40%	11.6	11.6	7.4	0.7	6.8	18.3	2.7	6.6
40-60%	18.8	19.7	8.8	16.4	13.1	21.1	11.0	26.4
60-80%	21.3	21.3	16.8	22.3	37.5	20.9	19.4	18.1
80-90%	11.8	12.4	5.5	6.4	15.0	13.0	10.9	7.5
90-100%	31.3	30.0	61.0	52.9	27.1	17.1	55.2	31.0

Table A12. Percentage of indebted households by type of debt and groups of households (%)

	Total debt	Housing credits / loans					Total of other forms of debt			
			In domestic currency	In foreign currency	Backed on the HMR	Other		Credit line/ overdraft	Credit card debt	Other credit and loans
All households	37.0	12.1	10.1	2.2	10.8	1.6	29.4	6.1	5.3	24.7
Ownership status										
Owner without housing credit	29.0	1.5	1.1	0.4	-	1.5	28.0	4.8	4.1	24.8
Owner with housing credit	100.0	100.0	83.7	17.4	100.0	2.5	37.0	12.9	13.2	25.6
Tenant or other	30.5	1.4	1.4	-	0.1	1.4	29.8	6.7	5.2	24.0
Household type										
One-person household	20.5	4.2	3.7	0.5	3.8	0.4	17.1	3.4	2.7	14.3
Single-parent family with children	34.1	7.6	6.4	1.2	6.5	1.1	30.8	6.9	5.5	25.8
Couple	36.2	12.8	10.1	2.7	10.8	2.2	27.2	5.7	4.1	23.7
Couple with children	49.5	22.4	18.6	4.0	20.1	2.9	36.3	8.4	7.0	29.6
Extended-family household	38.3	5.1	4.4	0.9	4.8	0.3	35.2	5.9	7.0	30.6
Age of the reference person										
16-24	16.5	-	-	-	-	-	16.5	-	5.3	15.3
25-34	50.6	27.6	24.9	2.7	25.2	2.8	31.4	5.4	8.7	26.0
35-44	51.9	24.5	19.0	6.1	22.4	2.8	37.7	10.2	9.5	29.2
45-54	40.5	10.7	8.7	2.0	9.4	1.6	34.7	8.0	4.2	30.6
55-64	32.5	5.2	4.2	0.9	4.0	1.2	29.1	5.5	4.5	24.4
65-74	25.2	2.6	2.3	0.3	2.1	0.4	23.3	4.1	2.8	20.2
75+	12.5	0.6	0.6	-	0.6	-	11.9	1.2	0.4	11.5
Labour force status of the reference person										
Employed	46.8	19.6	16.2	3.6	17.5	2.7	34.3	8.1	7.7	27.6
Self-employed	45.6	17.5	13.9	3.8	14.9	2.7	35.4	3.6	6.6	32.3
Retired	23.0	2.3	2.1	0.2	2.1	0.2	21.4	4.0	2.6	19.0
Other not working	27.3	3.9	3.6	0.3	3.9	-	25.0	6.2	2.4	21.3
Education of the reference person										
Primary or no education	22.4	2.0	1.8	0.2	2.0	0.1	20.9	3.2	0.7	19.7
Secondary education	37.9	9.5	8.3	1.3	8.6	1.1	32.3	6.6	5.6	27.4
Tertiary education	44.4	25.6	20.3	5.8	22.4	3.9	27.5	7.0	7.6	21.2
Class of geographical location										
Urban areas	37.3	13.1	10.5	2.7	11.4	2.0	29.0	7.1	6.0	23.7
Above 200 thousand inhabitants	37.4	14.9	11.2	4.0	12.9	2.5	27.5	6.7	6.9	21.8
Below 200 thousand inhabitants	37.3	11.9	10.1	1.9	10.5	1.7	29.8	7.4	5.5	24.8
Rural areas	36.3	10.1	9.2	1.1	9.5	0.8	30.3	4.2	3.9	26.9
Net income (quantiles)										
0-20%	20.1	2.0	2.0	-	1.9	0.2	18.5	4.5	1.9	15.6
20-40%	28.2	4.9	4.4	0.5	4.7	0.3	24.6	5.0	3.3	21.5
40-60%	40.4	11.6	9.4	2.2	10.6	0.9	32.9	7.2	6.1	27.3
60-80%	47.3	17.5	15.8	1.9	16.3	1.7	37.9	8.1	8.3	31.4
80-90%	48.6	19.2	16.3	3.4	15.0	5.1	38.1	5.7	6.3	32.5
90-100%	49.1	29.6	20.9	9.0	25.8	4.6	28.0	6.3	7.9	23.2
Net wealth (quantiles)										
0-20%	34.3	4.5	4.0	0.6	4.3	0.2	31.6	8.0	4.8	25.7
20-40%	43.1	16.5	14.8	1.7	15.1	1.7	32.8	7.3	5.1	27.4
40-60%	35.9	12.0	9.3	2.9	11.3	0.7	27.6	5.8	7.1	22.1
60-80%	32.8	11.2	9.9	1.4	9.9	1.5	26.3	4.5	3.6	21.4
80-90%	39.8	15.8	13.6	2.2	14.2	2.6	31.3	7.8	5.6	23.9
90-100%	37.9	16.6	11.1	6.1	12.6	4.8	25.9	2.6	6.4	17.8

Table A13a. Conditional medians and means for debt by type of debt and groups of households (PLN thousand)

	Total debt		Housing credits / loans										Total of other forms of debt							
					In domestic currency		In foreign currency		Backed on the HMR		Other				Credit line/ overdraft		Credit card debt		Other credit and loans	
	median	mean	median	mean	median	mean	median	mean	median	mean	median	mean	median	mean	median	mean	median	mean	median	mean
All households	10.0	57.3	104.0	142.7	100.0	130.0	114.5	194.7	103.0	142.8	101.8	117.8	5.0	13.4	2.0	3.5	1.4	2.7	5.0	14.4
Ownership status																				
Owner without housing credit	5.7	20.9	101.8	108.1	110.0	117.0	66.2	85.8	-	-	101.8	108.1	5.0	15.8	2.0	4.0	1.2	2.3	5.1	16.6
Owner with housing credit	111.0	150.7	104.0	145.9	99.0	130.5	130.0	211.3	103.0	143.1	110.0	113.7	7.5	13.0	2.6	4.2	2.0	3.2	8.0	15.0
Tenant or other	3.2	13.7	158.0	143.0	158.0	143.0	-	-	5.0	5.0	158.0	150.8	3.0	7.1	1.3	2.0	1.2	3.2	3.5	7.6
Household type																				
One-person household	3.6	29.1	50.0	105.1	50.0	97.7	156.0	163.2	50.0	106.3	54.2	92.0	2.4	9.4	1.0	2.6	0.8	4.3	2.5	9.8
Single-parent family with children	5.4	29.1	50.0	96.2	50.0	90.6	44.4	125.0	50.0	86.6	169.0	155.5	2.5	8.5	1.5	2.2	1.5	2.1	2.5	9.1
Couple	12.0	71.3	126.0	172.2	145.0	162.7	100.5	208.0	132.0	178.3	92.0	128.0	5.0	13.5	2.0	2.6	1.2	2.7	5.0	14.4
Couple with children	17.2	77.9	115.0	150.2	104.0	136.5	138.9	204.5	115.0	150.3	110.0	113.2	5.3	13.6	2.0	4.1	1.5	2.3	5.0	15.0
Extended-family household	6.5	24.5	43.6	69.2	34.6	55.5	90.0	126.6	43.6	66.8	150.0	109.6	6.0	16.7	3.0	4.3	1.4	2.8	6.0	17.7
Age of the reference person																				
16-24	2.8	7.2	-	-	-	-	-	-	-	-	-	-	2.8	7.2	-	-	0.7	1.1	4.1	7.4
25-34	38.0	91.7	137.0	157.0	144.6	152.8	75.0	195.2	137.0	159.6	92.0	114.7	6.0	9.9	2.0	4.5	1.7	2.7	6.2	10.1
35-44	25.0	87.5	115.0	164.4	110.0	143.4	118.7	212.6	118.7	164.7	110.0	117.6	5.4	13.9	2.0	3.0	1.3	2.3	6.0	16.1
45-54	8.0	39.9	60.0	117.1	54.8	101.3	100.5	185.3	59.0	118.2	80.0	87.5	5.0	10.7	2.0	4.7	1.5	2.6	5.0	10.5
55-64	6.0	28.2	50.0	79.3	43.6	65.5	138.9	142.5	43.6	63.7	120.0	123.6	4.4	17.4	1.2	2.7	1.2	3.6	5.0	19.5
65-74	3.0	13.5	38.0	86.1	38.0	89.5	90.0	60.8	18.1	49.2	150.0	268.5	2.2	5.2	1.5	2.5	2.0	3.6	2.4	5.0
75+	3.6	37.6	26.8	17.1	26.8	17.1	-	-	26.8	17.1	-	-	3.6	38.6	5.0	4.3	0.9	1.0	3.6	39.5
Labour force status of the reference person																				
Employed	14.0	71.3	119.0	153.3	111.0	136.7	150.0	220.8	122.0	155.1	100.0	109.6	5.0	9.8	2.0	3.2	1.2	2.2	5.6	10.6
Self-employed	20.7	74.5	110.5	135.9	62.9	135.8	114.5	127.1	75.0	137.2	120.0	122.8	8.0	28.9	3.0	8.3	2.0	5.4	7.8	29.7
Retired	4.5	23.6	27.0	82.1	27.0	82.4	90.0	79.5	26.8	64.4	150.0	255.4	3.6	16.5	2.0	4.0	1.0	2.7	3.8	17.4
Other not working	3.6	16.4	56.3	71.5	56.3	72.7	90.0	58.3	56.3	71.5	-	-	3.0	6.8	1.0	2.3	2.0	2.4	2.8	7.1

Table A13b. Conditional medians and means for debt by type of debt and groups of households (PLN thousand)

	Total debt		Housing credits / loans										Total of other forms of debt							
					In domestic currency		In foreign currency		Backed on the HMR		Other				Credit line/ overdraft		Credit card loans		Other loans	
	medi-an	mea n	medi-an	mea n	medi-an	mea n	medi-an	mea n	medi-an	mea n	medi-an	mea n	medi-an	mea n	medi-an	mea n	medi-an	mea n	medi-an	mea n
Education of the reference person																				
Primary or no education	3.4	19.3	38.0	61.4	38.0	61.5	90.0	60.8	38.0	58.9	120.0	120.0	3.0	14.7	1.0	1.9	0.7	1.4	3.0	15.2
Secondary education	7.4	37.8	70.0	108.1	59.0	100.9	100.5	154.6	60.0	104.7	110.0	118.0	5.0	12.5	2.0	3.7	1.2	2.1	5.0	13.5
Tertiary education	52.0	113.6	150.0	180.8	144.6	164.9	156.0	221.5	153.0	186.0	100.0	117.6	6.0	15.2	2.0	3.6	1.7	4.0	7.6	17.1
Class of geographical location																				
Urban areas	11.3	63.1	115.0	152.3	110.0	137.3	118.7	206.1	118.7	153.8	101.8	117.2	5.0	12.7	2.0	3.4	1.4	2.7	5.0	13.8
Above 200 thousand inhabit-ants	15.0	95.1	170.0	207.9	169.0	185.5	215.0	259.3	209.5	216.4	110.0	121.5	6.0	16.5	1.7	2.9	1.5	3.7	6.2	18.8
Below 200 thousand inhabit-ants	10.0	43.7	71.2	110.1	76.2	104.7	65.2	138.7	70.0	107.1	92.0	113.2	4.0	10.5	2.0	3.7	1.3	1.9	4.4	11.1
Rural areas	7.0	45.0	90.0	117.7	74.0	113.0	100.5	138.6	80.0	116.0	120.0	120.8	5.0	14.7	2.0	4.1	2.2	2.9	5.0	15.5
Net income (quantiles)																				
0-20%	2.5	9.2	50.0	54.5	50.0	54.5	-	-	50.0	45.1	158.0	158.0	2.0	4.0	1.0	1.9	0.8	1.8	2.0	3.9
20-40%	4.4	19.4	60.0	71.7	60.0	69.7	60.0	89.9	60.0	71.3	3.0	60.1	3.3	7.9	1.2	2.1	1.5	3.2	3.3	8.0
40-60%	7.5	39.1	66.2	106.8	92.0	102.9	65.2	123.5	61.3	105.0	92.0	127.7	3.8	10.5	2.0	2.6	1.0	1.4	4.0	11.7
60-80%	14.4	67.7	105.6	138.2	121.9	139.4	100.5	117.5	114.5	138.7	64.4	97.7	6.0	20.5	2.0	4.3	1.8	2.6	6.2	22.9
80-90%	13.5	59.3	130.0	127.9	104.4	116.6	150.0	160.3	119.0	121.2	100.0	125.6	6.5	11.3	3.0	4.6	1.0	2.6	6.5	11.9
90-100%	78.8	147.9	182.0	221.6	153.0	190.9	271.3	286.2	209.5	232.3	110.0	123.7	9.5	25.5	3.0	7.4	1.7	5.2	9.5	27.0
Net wealth (quantiles)																				
0-20%	3.5	30.8	160.0	180.8	150.0	153.5	351.4	377.8	160.0	183.2	40.0	138.8	3.0	7.5	1.3	2.1	1.2	1.7	3.3	7.3
20-40%	12.0	56.9	101.2	128.7	122.0	137.2	50.0	56.6	99.0	125.1	169.0	143.2	4.3	9.9	2.0	2.9	0.7	1.5	4.3	7.3
40-60%	10.5	58.9	104.0	154.2	86.2	112.5	215.0	282.1	100.5	155.6	158.0	132.4	5.5	9.4	2.2	4.4	1.8	3.0	5.0	8.2
60-80%	10.0	58.0	98.0	137.6	80.0	137.3	101.8	126.0	98.0	139.8	101.8	104.3	5.8	13.8	2.0	2.7	2.4	3.0	5.8	10.1
80-90%	12.9	52.9	54.2	114.3	50.5	91.1	237.3	256.2	50.5	103.5	80.0	126.3	7.0	9.5	4.0	4.5	0.9	2.7	6.0	8.8
90-100%	26.9	106.2	130.0	166.8	120.0	157.5	130.0	168.1	132.4	183.9	100.0	97.4	8.0	48.2	15.0	12.2	1.5	5.2	6.0	15.0

Table A14. Share of particular types of debt in the total amount of debt of households (%)

	Total debt	Housing credits / loans					Total of other types of debt			
			In domestic currency	Foreign currency loans	Backed on the HMR	Other		Line of credit / overdraft	Credit card debt	Other credit and loans
All households	100.0	81.5	61.7	19.8	72.7	8.8	18.5	1.0	0.7	16.8
Ownership status										
Owner without housing credit	100.0	26.9	20.8	6.1	-	26.9	73.1	3.2	1.5	68.3
Owner with housing credit	100.0	96.8	72.4	24.4	94.9	1.9	3.2	0.4	0.3	2.6
Tenant or other	100.0	49.3	49.3	-	0.1	49.2	50.7	3.3	4.0	43.4
Household type										
One-person household	100.0	73.1	60.3	12.9	67.7	5.4	26.9	1.5	1.9	23.5
Single-parent family with children	100.0	73.6	58.1	15.5	57.0	16.6	26.4	1.5	1.1	23.7
Couple	100.0	85.7	63.9	21.8	74.8	11.0	14.3	0.6	0.4	13.3
Couple with children	100.0	87.2	66.0	21.2	78.5	8.6	12.8	0.9	0.4	11.5
Extended-family household	100.0	37.4	25.8	11.5	34.0	3.3	62.6	2.7	2.1	57.8
Age of the reference person										
16-24	100.0	-	-	-	-	-	100.0	-	4.8	95.2
25-34	100.0	93.3	81.8	11.5	86.5	6.9	6.7	0.5	0.5	5.7
35-44	100.0	88.5	59.9	28.7	81.3	7.2	11.5	0.7	0.5	10.3
45-54	100.0	77.1	54.2	22.9	68.3	8.8	22.9	2.3	0.7	19.9
55-64	100.0	44.6	30.2	14.4	27.8	16.8	55.4	1.6	1.8	52.0
65-74	100.0	64.5	59.2	5.4	30.7	33.9	35.5	3.0	2.9	29.5
75+	100.0	2.1	2.1	-	2.1	-	97.9	1.1	0.1	96.6
Labour force status of the reference person										
Employed	100.0	90.0	66.4	23.6	81.2	8.8	10.0	0.8	0.5	8.7
Self-employed	100.0	69.9	55.7	14.2	60.0	9.9	30.1	0.9	1.1	28.2
Retired	100.0	34.9	31.5	3.4	24.8	10.1	65.1	3.0	1.3	60.9
Other not working	100.0	62.0	58.0	3.9	62.0	-	38.0	3.2	1.3	33.6
Education of the reference person										
Primary or no education	100.0	29.0	25.6	3.5	26.7	2.3	71.0	1.4	0.2	69.3
Secondary education	100.0	71.8	58.1	13.6	62.9	8.8	28.2	1.7	0.8	25.7
Tertiary education	100.0	91.7	66.4	25.3	82.6	9.1	8.3	0.5	0.6	7.2
Class of geographical location										
Urban areas	100.0	84.4	61.1	23.4	74.6	9.8	15.6	1.0	0.7	13.8
Above 200 thousand inhabitants	100.0	87.2	58.4	28.9	78.7	8.6	12.8	0.5	0.7	11.5
Below 200 thousand inhabitants	100.0	80.7	64.6	16.1	69.2	11.5	19.3	1.7	0.6	16.9
Rural areas	100.0	72.8	63.4	9.4	67.1	5.7	27.2	1.0	0.7	25.5
Net income (quantiles)										
0-20%	100.0	60.3	60.3	-	45.8	14.5	39.7	4.7	1.8	33.3
20-40%	100.0	64.6	56.4	8.2	61.8	2.9	35.4	1.9	1.9	31.5
40-60%	100.0	78.1	61.1	17.1	70.7	7.4	21.9	1.2	0.5	20.1
60-80%	100.0	75.7	68.8	6.9	70.5	5.2	24.3	1.1	0.7	22.5
80-90%	100.0	85.1	66.1	19.0	63.0	22.1	14.9	0.9	0.6	13.4
90-100%	100.0	90.1	54.8	35.4	82.3	7.8	9.9	0.6	0.6	8.6
Net wealth (quantiles)										
0-20%	100.0	77.5	57.7	19.8	74.3	3.2	22.5	1.6	0.8	20.2
20-40%	100.0	86.7	82.7	4.0	76.9	9.8	13.3	0.9	0.3	12.1
40-60%	100.0	87.8	49.5	38.3	83.2	4.5	12.2	1.2	1.0	10.0
60-80%	100.0	80.9	71.3	9.6	72.5	8.4	19.1	0.6	0.6	17.9
80-90%	100.0	85.8	58.8	27.0	70.0	15.8	14.2	1.7	0.7	11.8
90-100%	100.0	69.0	43.3	25.6	57.4	11.6	31.0	0.8	0.8	29.4

Figure A15. Percentage of households burdened with particular types of debt (%)

	Total debt	Housing credit / loans					Total of other types of debt			
			In domestic currency	In foreign currency	Backed on the HMR	Other		Line of credit / overdraft	Credit card debt	Other credit and loans
All households	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Ownership status										
Owner without housing credit	18.8	6.2	6.3	5.8	-	57.5	74.0	58.7	41.8	76.3
Owner with housing credit	76.6	91.0	90.0	94.2	100.0	16.3	13.2	26.5	31.0	11.6
Tenant or other	4.7	2.8	3.7	-	0.0	26.2	12.8	14.8	27.2	12.1
Household type										
One-person household	6.8	6.1	6.6	4.4	6.3	4.2	9.8	9.6	19.1	9.5
Single-parent family with children	2.9	2.7	2.8	2.3	2.3	5.6	4.2	4.4	4.9	4.2
Couple	23.4	24.7	24.3	25.8	24.1	29.3	18.1	13.1	14.5	18.5
Couple with children	58.8	62.9	63.0	62.8	63.5	57.9	40.8	51.8	36.8	40.3
Extended-family household	8.0	3.7	3.4	4.7	3.8	3.1	27.1	21.1	24.7	27.6
Age of the reference person										
16-24	0.1	-	-	-	-	-	0.5	-	0.6	0.5
25-34	30.9	35.5	41.1	17.9	36.8	24.4	11.1	15.5	22.5	10.4
35-44	39.4	42.8	38.4	56.7	44.1	32.5	24.4	25.8	27.2	24.2
45-54	15.3	14.5	13.5	17.6	14.3	15.4	18.8	34.4	14.8	18.0
55-64	10.1	5.5	5.0	7.3	3.9	19.5	30.0	15.9	25.7	31.1
65-74	2.1	1.7	2.0	0.6	0.9	8.1	4.0	6.0	8.9	3.7
75+	2.1	0.1	0.1	-	0.1	-	11.3	2.3	0.3	12.3
Labour force status of the reference person										
Employed	71.7	79.2	77.2	85.4	80.1	71.6	38.8	54.4	53.1	37.3
Self-employed	17.8	15.3	16.1	12.7	14.7	20.1	29.0	15.0	27.4	29.9
Retired	7.3	3.1	3.7	1.3	2.5	8.4	25.7	20.9	13.6	26.5
Other not working	3.2	2.4	3.0	0.6	2.7	-	6.5	9.7	5.9	6.3
Education of the reference person										
Primary or no education	3.2	1.1	1.3	0.6	1.2	0.8	12.3	4.4	1.1	13.2
Secondary education	41.2	36.3	38.9	28.4	35.7	41.6	62.9	68.7	49.2	63.1
Tertiary education	55.6	62.6	59.8	71.1	63.1	57.6	24.8	26.9	49.8	23.7
Class of geographical location										
Urban areas	74.6	77.3	73.9	88.0	76.5	83.5	62.7	74.5	74.5	61.5
Above 200 thousand inhabitants	42.5	45.5	40.2	61.9	46.0	41.4	29.3	22.3	44.5	29.1
Below 200 thousand inhabitants	32.1	31.8	33.7	26.1	30.6	42.1	33.4	52.2	30.0	32.4
Rural areas	25.4	22.7	26.1	12.0	23.5	16.5	37.3	25.5	25.5	38.5
Net income (quantiles)										
0-20%	1.7	1.3	1.7	-	1.1	2.9	3.7	7.9	4.5	3.5
20-40%	5.2	4.1	4.7	2.1	4.4	1.7	9.8	9.6	14.4	9.7
40-60%	15.0	14.4	14.9	12.9	14.6	12.7	17.7	17.2	12.0	18.0
60-80%	30.1	28.0	33.6	10.5	29.2	18.0	39.5	31.8	29.2	40.3
80-90%	13.6	14.2	14.6	13.0	11.8	34.2	10.9	12.0	11.5	10.8
90-100%	34.4	38.1	30.6	61.4	39.0	30.6	18.3	21.4	28.4	17.7
Net wealth (quantiles)										
0-20%	10.0	9.5	9.3	9.9	10.2	3.6	12.1	15.3	11.4	11.9
20-40%	23.2	24.7	31.1	4.7	24.5	25.9	16.6	19.4	10.7	16.7
40-60%	20.0	21.5	16.0	38.6	22.9	10.3	13.2	23.6	29.5	11.9
60-80%	18.0	17.8	20.8	8.7	17.9	17.2	18.6	11.0	14.9	19.2
80-90%	9.9	10.4	9.4	13.5	9.5	17.8	7.6	16.1	10.4	6.9
90-100%	19.1	16.1	13.4	24.7	15.1	25.2	31.9	14.6	23.1	33.4

Figure A16. Debt burden indicators by groups of households

	DSTI		DTI			DTA	
	Median	% of households with DSTI in excess of 40%	Median	% of households with DTI in excess of		Median	% of households with DTA in excess of 75%
				300%	450%		
All households	14.2	3.4	21.6	3.7	1.6	6.5	3.5
Ownership status							
Owner without housing credit	11.1	2.0	11.5	0.6	0.2	1.6	0.0
Owner with housing credit	20.3	16.0	185.4	29.8	12.5	26.7	10.5
Tenant or other	13.3	1.4	10.8	0.7	0.6	45.5	9.9
Household type							
One-person household	17.3	3.1	20.2	1.6	0.8	6.8	2.2
Single-parent family with children	11.0	3.1	21.3	2.8	1.9	6.0	6.6
Couple	16.2	3.3	28.7	5.1	2.4	5.9	3.3
Couple with children	14.8	4.0	34.3	6.0	2.4	10.2	4.9
Extended-family household	9.5	2.7	10.9	1.4	0.4	2.3	1.9
Age of the reference person							
16-24	8.4	-	8.7	1.0	1.0	47.6	6.7
25-34	18.1	4.5	89.7	12.1	5.6	27.7	6.9
35-44	13.4	5.1	43.5	6.6	2.8	12.1	4.7
45-54	12.4	3.3	18.7	1.7	0.8	3.6	2.9
55-64	13.3	3.6	14.6	1.2	0.6	3.3	2.5
65-74	12.4	1.3	10.3	0.3	0.2	1.6	2.0
75+	17.8	1.5	20.4	1.2	-	2.9	0.9
Labour force status of the reference person							
Employed	14.0	3.4	29.5	5.8	2.8	9.7	4.6
Self-employed	13.8	7.8	26.0	5.3	1.9	2.8	0.6
Retired	15.5	2.1	14.2	1.0	0.2	2.6	2.3
Other not working	15.0	2.2	11.1	1.6	0.7	5.0	4.3
Education of the reference person							
Primary or no education	13.0	3.0	11.1	1.0	0.5	4.5	2.7
Secondary education	13.2	3.5	17.7	2.9	1.4	4.5	3.8
Tertiary education	17.6	3.3	77.8	7.9	3.0	15.7	3.2
Class of geographical location							
Urban areas	14.7	3.5	25.9	4.2	1.9	8.4	4.5
Above 200 thousand inhabitants	17.8	4.1	36.5	6.0	2.6	12.0	4.8
Below 200 thousand inhabitants	13.0	3.2	21.6	3.1	1.5	7.4	4.3
Rural areas	13.3	3.1	17.4	2.8	1.0	2.6	1.5
Net income (quantiles)							
0-20%	19.2	4.6	17.1	1.6	1.5	4.0	3.4
20-40%	15.4	3.0	17.0	1.8	1.1	6.6	3.3
40-60%	15.8	3.2	19.7	4.0	1.9	5.7	5.4
60-80%	14.2	4.0	22.8	6.7	2.7	6.6	3.5
80-90%	10.9	2.4	17.4	2.7	1.0	3.5	2.0
90-100%	11.5	1.6	55.8	6.5	0.9	14.3	1.4
Net wealth (quantiles)							
0-20%	14.7	2.5	13.2	2.9	1.4	69.7	14.8
20-40%	14.6	4.5	32.6	5.3	2.4	8.0	2.3
40-60%	12.8	1.6	21.7	3.6	1.0	4.1	0.3
60-80%	14.1	2.8	20.7	2.4	1.4	2.3	-
80-90%	14.9	3.6	22.2	3.6	2.1	1.8	-
90-100%	16.1	7.2	35.1	5.2	1.7	1.8	-

Figure A17. Net income and total expenditure and consumption expenditure by groups of households (PLN thousand)

	Net income		Total expenditure		Consumption expenditure	
	median	mean	median	mean	median	mean
All households	39.6	48.1	27.8	29.7	13.2	14.8
Ownership status						
Owner without housing credit	41.1	48.9	29.8	30.4	13.4	15.3
Owner with housing credit	60.0	72.2	36.0	36.8	15.6	17.7
Tenant or other	26.4	35.1	22.8	24.4	10.3	11.8
Household type						
One-person household	18.0	23.5	15.6	17.9	7.2	7.9
Single-parent family with children	28.1	40.4	24.0	24.9	11.4	12.3
Couple	40.2	47.8	30.0	30.4	13.2	14.3
Couple with children	51.6	59.9	36.0	35.3	17.4	18.2
Extended-family household	57.6	62.8	36.0	36.0	18.6	19.0
Age of the reference person						
16-24	21.6	26.1	21.6	21.4	8.4	9.4
25-34	47.0	54.7	30.0	31.4	14.4	15.3
35-44	48.5	54.9	33.6	34.4	16.8	17.5
45-54	48.2	57.5	30.0	32.8	14.4	16.2
55-64	38.1	47.5	26.4	29.0	12.6	14.6
65-74	27.9	35.2	21.6	24.2	10.2	12.1
75+	22.8	30.0	19.2	22.3	8.8	10.7
Labour force status of the reference person						
Employed	50.6	57.9	30.0	33.3	14.9	16.5
Self-employed	53.9	67.5	36.0	36.2	16.8	18.0
Retired	28.8	35.6	22.8	25.2	10.8	12.5
Other not working	21.1	28.0	19.2	22.1	9.6	11.3
Education of the reference person						
Primary or no education	21.7	29.3	18.0	21.5	8.4	11.1
Secondary education	38.0	45.6	27.6	29.0	13.2	14.7
Tertiary education	58.4	67.3	36.0	36.8	15.6	17.4
Class of geographical location						
Urban areas	39.8	48.6	28.8	30.0	12.7	14.7
Above 200 thousand inhabitants	41.3	53.5	30.0	32.0	13.4	15.5
Below 200 thousand inhabitants	38.5	45.7	26.4	28.8	12.6	14.2
Rural areas	39.1	47.2	26.4	28.9	13.2	14.9
Net income (quantiles)						
0-20%	13.9	12.9	14.4	15.2	6.6	7.7
20-40%	25.7	25.9	21.6	23.1	10.2	11.1
40-60%	39.6	39.7	30.0	29.3	13.6	14.5
60-80%	56.7	57.3	36.0	36.4	18.0	18.7
80-90%	78.3	78.3	36.0	40.2	19.2	20.0
90-100%	110.0	131.5	48.0	48.2	22.8	23.5
Net wealth (quantiles)						
0-20%	24.5	28.5	19.2	22.0	9.6	10.8
20-40%	34.3	39.3	24.0	26.2	12.0	12.8
40-60%	40.0	47.2	27.9	29.3	13.2	14.7
60-80%	47.7	55.7	30.0	32.1	14.5	16.1
80-90%	55.7	64.4	36.0	35.8	18.0	18.6
90-100%	61.6	75.6	36.0	41.5	19.2	20.4

Glossary

Assets - resources accumulated by households, including real assets and financial assets.

Consumer loan - loan for financing current household's needs and household appliances. This category includes: loans for living expenses, loans to purchase a car or other motor vehicles and loans for educational purposes.

Debt-to-Assets (DTA) - the ratio of the current value of the debt to the value of assets held by households. It indicates the ability to repay the debt with the assets held, including the ability to absorb increasing debt servicing costs.

Debt-to-Income (DTI) - the ratio of the current value of the debt to the annual income of households (net or gross values).

Debt-Service-to-Income (DSTI) - the ratio of the monthly credit instalment to the monthly household income (net or gross values). It denotes how much income is spent every month on debt repayment. This indicator takes into account household burden resulting from all types of debt, excluding credit card debt, line of credit or overdraft.

Financial assets - assets accumulated by households in the form of saving deposits, insurance policies, voluntary pension schemes (with the exclusion of occupational pension schemes), shares in mutual funds, stocks and bonds and other financial assets and receivables resulting from loans granted to private individuals.

Household receivables resulting from participation in public and occupational pension schemes are not treated as financial assets of households.

Household income - is the sum of income from employment (paid employment, self-employment) and other sources of income (retirement and disability benefits, gains and other income) earned by members of the household aged 16 years and above. It is measured in net and gross values.

Specifically, household income consists of the following sources of income: paid employment, work (including assistance at work), self-employment, public pension and pension under occupational pension schemes, unemployment benefit and allowances, public assistance (family allowances, housing allowances, welfare allowances, scholarships), donations and alimony payments, income from real estate rental, income from financial assets holdings (deposits, stocks, bonds), dividends, profits from capital investment in business, other income (lottery prizes, compensation, end-of-employment payments, awards), receipt of financial support.

Housing loan – loan taken out in order to meet household's housing needs. This category includes: loans for the purchase of the household main residence, loans for the purchase of another property (land, buildings) and loans for renovation and modernization of housing (apartment or house).

Liabilities - liabilities incurred by the household, including commitments resulting from housing loans and other forms of debt (non-residential loans).

Liquid-Assets-to-Income (LATI) - the ratio of households' liquid financial assets to household's annual income. The ratio denotes the level of accumulated household savings (highest liquidity assets) that can be quickly converted into cash in order to absorb increases in debt servicing costs.

Liquid financial assets - financial assets accumulated by households, which can be quickly converted into cash. These include: saving deposits, shares in mutual funds, stocks, bonds and other financial assets, with the exception of the funds accumulated in voluntary pension schemes and life insurance policies.

Loan-to-Value (LTV) - the ratio of the outstanding loan to the value of real estate being the loan collateral. *Current LTV* is calculated based on the estimated value of the real estate indicated by the respondent at the time of the survey. *LTV at origination* is calculated based on the original purchase price of the real estate, indexed at the time of loan granting, as declared by the respondent.

Mortgage loan – housing (residential) loan secured by a mortgage on the property.

Net wealth - gross assets accumulated by the household less incurred liabilities.

Other forms of debt (also: loans other than residential loans) – credit or loan for non-housing purposes. This category includes: consumer loans, other consumer loans, loans to finance business or professional activity, loans for other purposes (including loans for repayment of other debt) and loans from private individuals or employers.

Other consumer loan – credit card debt, credit line or overdraft.

Real assets – real estate properties held by households (household main residence, other real estate property), vehicles, valuables and self-employment business wealth.

The middle wealth household - a household in the group of 10% of the population of households with an average net wealth around the median (between the 45^{th} and 55^{th} percentile of the distribution of the household's net asset value).

The poorest household – a household in the group of 10% of the population of households with the lowest net asset value (i.e. in the first decile of the distribution of the net asset value in the household population).

The reference person (also referred to as the household head) - the person best oriented in the household's situation who was interviewed during the survey.

The richest household – a household in the group of 10% of the population of households with the highest net asset value (in the tenth decile of the distribution of the net asset value in the household population).

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