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## Long-term savings of the population: an opportunity for both the country's economy and individual households

**Abstract.** There are various economic, social and psychological conditions, as well as goals and motives, which affect household saving rates. Savings made by household members belong to personal finance studies which are relevant to an area of economics related to the management of financial resources. The purpose of this article is to show the importance of saving not only at the micro level but also at the level of the whole economy. Savings represent an internal source of the national financial capital. The greater propensity to save, the more financial resources can be invested into the economy. In this article, by using Poland as an example, the author emphasises the special importance of long-term savings for the national economy and the country's economic security, which stabilises the financial system and may reduce the share of foreign investors in public debt. The focus is also on the key determinants that affect the scale and structure of households' savings in Poland at the medium level of development. This article aims to identify the factors determining the level of household savings, as well as their structure, and to highlight the importance of long-term savings for the economy by using Poland as an example. These factors include an increase in the level of individual income, a strive to diversify the structure of cash resources of individual households, and improvement of the level of economic security of families, especially with regard to the issues of protecting their income at retirement age.

**Keywords:** Savings; Households; Saving Motives; Long-Term Savings; Investment Fund; Retirement Account; Poland

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#### Довгострокові заощадження населення: перспективи для економіки країни та приватних домогосподарств

**Анотація.** Існують різні економічні, соціальні та психологічні умови, цілі й мотиви, які впливають на рівень заощаджень окремих домогосподарств. Проблема заощадження коштів членами приватних домогосподарств належить до сфери вивчення фінансів домогосподарств, тобто тієї галузі економічної науки, в якій досліджуються питання, пов'язані з управлінням фінансовими ресурсами. Метою цієї статті є визначення важливості заощаджень на рівні економіки всієї країни. Заощадження є внутрішнім джерелом поповнення фінансового капіталу країни. Чим більшу схильність має населення до заощадження коштів, тим більше фінансових ресурсів може бути інвестовано в економіку країни. У цій статті на прикладі Польщі автор звертає увагу на особливу важливість довгострокових заощаджень для національної економіки та економічної безпеки країни, які сприяють фінансовій стабілізації в державі та можуть зменшити частку іноземних інвесторів у структурі державного боргу. Також увагу приділено визначенню ключових детермінант, що впливають на масштаб та структуру заощаджень домогосподарств, які мають середній рівень доходів у Польщі. Також ця стаття покликана виявити фактори, що допомагають визначити рівень заощадження коштів та його структуру, а також наголосити на важливості ролі довгострокових заощаджень в економіці країни на прикладі польського досвіду. Відповідними факторами є збільшення рівня особистих доходів, прагнення диверсифікувати структуру грошових ресурсів окремих домогосподарств, підвищення рівня економічної безпеки сімей, особливо щодо питань захисту доходів членів сімей при досягненні ними пенсійного віку.

**Ключові слова:** заощадження; домогосподарства; мотиви заощаджувати; довгострокові заощадження; інвестиційний фонд; пенсійний рахунок; Польща.

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#### Долгосрочные сбережения населения: перспективы для экономики страны и частных домохозяйств

**Аннотация.** Существуют различные экономические, социальные и психологические условия, цели и мотивы, влияющие на уровень сбережений отдельных домохозяйств. Проблема сбережения средств членами частных домохозяйств относится к сфере изучения финансов домохозяйств, то есть к той области экономической науки, в которой исследуются вопросы, связанные с управлением финансовыми ресурсами. Целью данной статьи является определение значимости сбережений на уровне экономики всей страны. Сбережения являются внутренним источником пополнения финансового капитала страны. Чем большую склонность имеет население к экономии денежных средств, тем больше финансовых ресурсов может быть инвестировано в экономику страны. В данной статье автор на примере Польши обращает внимание на особую важность долгосрочных сбережений для национальной экономики и экономической безопасности страны, способствующих финансовой стабилизации в государстве и способных уменьшить долю иностранных инвесторов в структуре государственного долга. Также внимание уделено определению ключевых детерминант, влияющих на масштаб и структуру сбережений домохозяйств, имеющих средний уровень доходов в Польше. Данная статья также призвана выявить факторы, помогающие определить уровень сбережения денежных средств и его структуру, а также подчеркнуть важность роли долгосрочных сбережений в экономике страны на примере польского опыта. Соответствующими факторами являются увеличение уровня личных расходов, стремление диверсифицировать структуру денежных ресурсов отдельных домохозяйств, повышение уровня экономической безопасности семей, особенно в вопросах защиты доходов членов семей при достижении ими пенсионного возраста.

**Ключевые слова:** сбережения; домохозяйства; мотивы экономить; долгосрочные сбережения; инвестиционный фонд; пенсионный счет; Польша.

### 1. Economic theory of saving

Household savings are deemed to be part of the income of the population. Household disposable income is the amount of money that households have available for spending and saving after income taxes have been accounted for. Being in possession of savings creates a sense of security for the members of the households. Saving also creates the basis for investment funds and their multiplication, which generates demand for financial products.

According to J. M. Keynes, a propensity to save is an ability of individuals to postpone consumption in time and is closely related to the level of income. As the income grows, propensity to save is growing as well. According to Keynes, basic motives that induce saving are: a transactional motive - to maintain cash resources in order to ensure the continuity of spending, prudence - the desire to hedge against unpredictable decrease in income or against an unpredictable increase in expenditure and a speculative motive - savings for investment (speculation) on the securities market in order to increase prosperity (The quoted saving motives do not fully cover those indicated by J. M. Keynes. Keynes published his theory of liquidity preference in the book *The General Theory of Employment, Interest and Money* in 1936).

A. Moro and F. Modigliani linked saving with the life cycle theory by assuming that typical rational people plan their consumption over a lifetime. At the beginning and at the end of their life activity people have low incomes, so they tend to maintain their income at the same level, regardless of current income. Therefore, in order to protect themselves in old age and to maintain a proper standard of living during periods of lower income, individuals save part of the income and accumulate wealth during their lifetime.

M. Friedman introduced the concept of permanent income, an average household income in the long term. Savings defined by Friedman are the difference between current and permanent income. In contrast to Keynes, according to who the consumption depends on income during a given period, Friedman argued that temporary changes in income do not result in an increase in consumption. People planning their consumption are driven by permanent income and therefore consumption growth in a given period can only be a result of changes in the revenue that will be perceived by consumers as a constant.

### 2. Forms and types of savings

Saving is usually understood as a reserve for making future purchases, for unforeseen expenses or it comes from the need to have certain funds for unforeseen events in the future, whereas income is the main economic factor determining the level of spending and the level of saving. The propensity to save is influenced by macroeconomic factors indirectly affecting households, as well as psychological social and cultural factors related to the behaviour of individuals and the decisions made within the households. Social factors include the level of education, the occupational status of the head of the family and its members, the number of people in the household and their age, and ties between household members, or even whether financial issues and the planned expenditure are discussed at home. The culture factors include customs, habits and routines.

Propensity to save changes within the life cycle. The savings rate is slightly negative for the age group of 19-24; then it begins to rise for the age group of approximately 35. In the age group of 35-55, the saving rate remains high and relatively stable. For people over the age of 55, propensity to save decreases rapidly, and, according to the research, individuals over 60 years old spend more than their disposable income because they consume previously accumulated savings (Report 2015) [1].

The following factors influencing household savings can be distinguished:

- 1) external macroeconomic factors such as GDP growth, GDP per capita, the inflation rate, the level of tax burden resulting from the implemented fiscal policy, the level of development of the financial system, markets and financial products, the level of real interest rates resulting from the implemented monetary policy and the demographic situation;
- 2) internal factors, including the amount of disposable income (after tax and after draining compulsory contributions enlarged by possible contributions) reached the current level of

consumption habits, family traditions, the household structure and the number of children.

- Methods of saving can be divided into (Banbula P. 2006) [2]:
- voluntary, resulting from the will of saving its autonomous decisions (usually savings are created for the purpose of attaining the pursued objective);
  - compulsory, not resulting from the saver's decision, for they are imposed by the legal system, for instance obligatory pension contributions into the social security system.

Relatively low propensity to save in Poland is partly historical heritage. In times of war, people were losing their savings including cash deposited in banks. The socialist period did not imprint the habit of saving in the society either. That was because of strong propaganda that the state would guarantee retirement, health care, children's education, thus saving for such purposes did not make sense. In the period of systemic transformation from a planned economy to a market economy, the society wanted to catch up with the level of consumption in developed countries. Hence, people were going willingly into debt to meet the consumer needs rather than save.

The propensity of households to save is strongly affected by economic and political stabilisation of the country, as well as by the implemented government policy that ensures safety of savings and a stable financial system. The banking sector is stable and reliable. Since 1994, the Bank Guarantee Fund (BFG) has been operating in Poland, which includes insuring of warranty by commercial banks, cooperative banks and credit unions. Starting from 30 December 2010, the guarantee limit to funds accumulated by a single depositor has been EUR 100,000 (converted at the current exchange rate from PLN). The financial means up to that amount are subject to a 100% guarantee from the Fund.

To make rational decisions about saving and investing in financial instruments, including long-term savings (e.g. for pension purposes), it is necessary to trust state institutions and financial intermediaries, including banks (Wierzbicka, 2015) [3]. During the period of 25 years of systemic transformation in Poland, the confidence in banks and other financial intermediaries increased, as shown by public opinion polls, such as *Social Diagnosis* which has been carried out in Poland every two years since the year 2000. The latest one took place in 2015. (*Social Diagnosis 2015*) [4]. According to the survey of 2015, Narodowy Bank Polski (the National Bank of Poland) has the greatest trust among financial institutions. 63% of respondents declared large or moderate confidence, 12% of respondents declared a lack of confidence and 26% had no opinion. In the 2015 Social Diagnosis survey, the trust to commercial banks was declared by 44% of all respondents, whereas 26% of respondents did not trust banks and 30% of respondents had no opinion. (This is a higher level of confidence, if compared to other financial institutions). The banking system of Poland is stable in terms of commercial and cooperative banks. This encourages the public to place money in banks.

An important internal factor affecting the increase in the propensity to save is the structure of households. Households without children or with one child are more likely to make provision for the old age security (Rytelewska, & Kłopocka, 2010) [5]. However, the most important factors contributing to saving are a correspondingly high level of income and the possession of a financial surplus over the current needs. In Poland, however, despite the increase in GDP per capita two thirds of Poles still declare that they have no savings or have only a symbolic amount that does not exceed a few thousand of zlotys (PLN).

Not all the savings become investments, however they gradually increase economic awareness and knowledge about financial products increases the interest of the population in multiplying savings in the financial market.

### 3. The results of empirical research regarding saving

In August 2016, Poles gathered total savings of over PLN 1,200 billion. They were kept in cash, in banks, investment funds and pension funds, as stocks and bonds and other financial instruments. Yet, this is not enough compared to the needs of the economy. The net investment indicator (MPIN) that is the difference between any foreign assets and foreign liabilities of the country shows an insufficient amount of domestic savings of households in Poland. This indicator describes whether a country is a creditor or a net debtor in relation to foreign countries, and, in

the case of Poland, it has been systematically deteriorating (Congress, 2014) [6] According to the data from the Polish National Bank, «the level of savings in the Polish economy is about 18% of GDP, while the value of the investment is carried out by three percentage points higher, but is financed by foreign capital» (Majka, 2015) [7]. Table 1 shows the changes in the structure of household savings in the Polish economy.

During the last ten years, the nominal value of bank deposits of households in Poland has increased from PLN 239.4 billion in 2006 to PLN 694.2 billion in June 2016. The total value of all savings in the last 10 years has been growing by an average of 8% per annum (Orlik, 2016) [8].

As it occurs from the data presented in Table 1, since the beginning of the financial crisis, there has been an increase in the share of savings in the form of bank deposits in national and foreign currencies from PLN 239.4 billion in 2006 to PLN 694.2 billion in June 2016, an increase of 190%. The second place in the structure of savings is taken by cash, which at the end of June amounted to PLN 163 million, an increase by 137% in 10 years. In recent years, the funds from the Family program 500 plus, which was launched in April 2016, had a positive impact on the increase of cash outside Polish banks. As a result, families get PLN 500 per month for their second child and all subsequent children. A significant number of the households covered by state support allocated funds to cover their current expenditure (Analisis, 2016) [9].

In the last 10 years, as seen in Table 1, the growth rate of savings collected in the forms related to the capital market has been lower. Only investments in Treasury bonds have recorded a noticeable increase. The share of savings invested in Investment Fund Societies amounts to approximately 10% of total savings; in the case of life insurance linked to the capital fund, it accounts for approximately 5% of the total savings. In subsequent years, the use of savings accumulation with the help of financial intermediaries should promote changes in the law to provide greater protection for customer of financial institutions, introduced by the Act on Consideration of Complaints by Financial Market Entities and the Financial Ombudsman as of 5 August 2015. The Financial Ombudsman Service is a new institution, which has been in operation since 11 October 2015 and represents clients of banks, insurance companies, investment funds, brokerage houses and other financial intermediaries. The main task of the Ombudsman is to consider requests and complaints, and provide advice on matters arising between the client and the financial institution.

Any investment in financial instruments is associated with risks. Recent recommendations of good practice, being the recommendations of the Financial Supervision Authority, emphasise the need to familiarise the client with the characteristics and risks of specific investment products (card products and procedures for the special survey which identifies the understanding of the product risk by the customer). It is also required to determine the time horizon until which you can withdraw from the contract, which aims to protect consumers against ill-conceived decisions. Banks, insurance companies and other financial institutions must provide the customer with detailed information on the product, written in accessible, intelligible language. Financial institutions, in line with the recommendations of the Financial Supervision Authority, including banks, should strive to adapt the product to the investment needs and financial possibilities of the client and its appetite for risk (Recommendation, 2015) [10], (The Act, 2015) [11].

#### 4. Saving in practice

According to the research conducted in the period between 18 and 24 August 2016 at the request of the Polish Bank Association, known as *Some aspects of saving in Polish society*, carried

out by TNS on a sample of 1,058 Poles aged 15 and over, 65% of the Polish population has a financial capacity to save at least a small amount. However, 35% accumulates surplus funds of up to PLN 250 per month, which is a small sum. The study clearly indicated that people with higher education and high income have a greater ability to save. As for the motives of saving, the constant tendency of saving without specific, explicit goal dominates. According to the respondents, 36% of them points to saving «for a rainy day» (just in case), 29% - in view of durable goods, and only 18% - for the purpose of securing the future.

While analysing the goals of saving, we found out that 41% of respondents saves in view of extra pleasures, including consumer goods (17%) and holidays (24%), while a very small percentage (only 4% of responses) related to saving in order to buy a house or apartment. The mentioned percentage increased only slightly in the age group up to 29 years old (5%) and up to 39 years old (7%). Most people who decide to buy a flat or a house use a home loan or a mortgage and even the so-called own contributions. The research shows that as many as 57% of people do not think about the time perspective in terms of spending the accumulated savings; 24% intend to do so in a period of one year and only 2% - in 10 or more years. As for the amounts that are designed to provide financial security the majority (40% of respondents) felt that PLN 10,000 savings give you a sense of security. Another study carried out in 2016 by the Kronenberg Foundation at Citi Handlowy on *Poles' attitude to finance*, states that people save most by gender (Table 2). The survey was conducted in the form of interviews in October 2016 on a representative sample of Poles aged 15-75 on a sample of N = 1028.

Investing in real estate is considered to be the safest form of saving if the value is the factor taken into account (Table 3).

Since the beginning of the financial crisis, the share of households with savings increased in Poland from 28% in 2007 to over 40% in 2013, which is the result of greater instability and the threat of job losses. Yet, the level of savings is still very low while comparing it with the level of savings in highly developed countries (Social Diagnosis, 2013) [12].

According to the latest research of 2016 carried out by Kronenberg Foundation, 70% of Poles believe that it is worth to save, however only 13% declares that they save regularly and 41% states that they do so from time to time. The answers relating to active attitudes (as part of a representative sample of N = 1,028) provide interesting results after the individual analysis of the options available: among those who save regularly, 78% regularly talks at home about finances, 28% invests their savings, 24% postpones retirement, 40% puts money away every month and 28% chooses to invest in products.

#### 5. Long-term savings

An increase in long-term domestic savings is the most crucial to the economy. It is especially beneficial because it has the following effects:

- it increases the availability of capital that may be used to finance investments through the stock exchange, and consequently develops the economy;
- it reduces the dependency of the domestic economy on foreign capital;
- it enables the development of long-term institutional investors, such as pension funds, which has been demonstrated by the experience of other countries.

When Poland's banking sector introduced the requirements of Basel III, there was a need to strengthen the capital base of banks. Nowadays, there is a need to supplement the capital of banks due to an exposure to risk, as well as to change the minimum long-term liquidity ratio of banks within at least one-year time horizon. New regulatory requirements and the introduction of additional capital buffers have significantly reduced the possibility of granting long-term loans by banks on the basis of short-term deposits. Therefore, banks are particularly interested in the growth of long-term domestic savings. However, low interest rates are

Tab. 1: Structure of household savings in the period of 2006-2015 (PLN billion)

Years	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Direct investments, bonds, shares	57.3	53.7	40.2	50.2	54.7	48.4	47.8	54.4	51.2	50.9
Investment funds for individuals	83.0	111.7	44.4	65.2	79.4	66.0	74.7	88.7	103.5	106.6
Insurance capital funds	27.5	35.5	25.8	31.0	36.4	37.5	45.2	49.8	54.0	55.5
PLN and foreign currency bank deposits	239.4	262.8	332.0	387.6	426.0	482.1	519.5	553.7	605.3	662.5
Currency in circulation	68.9	77.2	90.7	89.8	92.7	101.8	102.5	114.4	130.0	149.7
<b>Total</b>	<b>476.1</b>	<b>540.9</b>	<b>533.1</b>	<b>624.0</b>	<b>689.2</b>	<b>735.8</b>	<b>789.7</b>	<b>861.0</b>	<b>944.0</b>	<b>1025.2</b>

Source: [8]



Tab. 2: Structure of saving by gender

Form	Male	Female
Savings - Credit Account	28%	25%
Term deposit	18%	17%
Keeping cash at home	18%	14%
Savings account	16%	24%

Source: [13]

Tab. 3: Safe ways of saving / investing

Form of saving	Male	Female
Real estate	24%	18%
Term deposit	12%	19%
Savings account	10%	18%

Source: [13]

not conducive to saving. Increasing the amount of long-term deposits raises the banks' possibility in the area long-term loans, including those for investment purposes.

### 6. Long-term infrastructure and energy projects financing

Long-term savings do not imply an explicit goal, however investing the savings in different types of financial instruments is most commonly used to multiply wealth. In contrast, most savings are long-term, intended for retirement, children's education, health treatment, purchase of real estate, etc.

According to the research carried out by the Kronenberg Foundation in 2016, tax breaks may act as incentives from the state. The main indications pointed by the respondents in a representative sample are: 49% - tax relief and 20% - dedicated savings programs (for example pension schemes, individual retirement accounts). At the same time, 11% answered that nothing would lead them to long-term savings (Survey, 2016) [13].

In Poland, the reforms of the mandatory pension system, as well as demographic changes such as extended life duration and decreasing fertility, indicate a negative outlook on the so called replacement rate.

A replacement rate is the percentage of a worker's pre-retirement income that is paid out by a pension program upon retirement. The functioning of the «Pay as you go» (PAYG) system in Poland is unbalanced and requires support from the state budget. Despite this low awareness of pension and inadequate promotion, additional voluntary pension savings in the so-called third pillar resulted in the insufficient involvement of Poles in the third pillar products available, which are:

- 1) employee pension plans (existing in Poland since 1999), (4 forms are allowed) at which the contribution is funded by the employer and the employee may make a voluntary contribution;
- 2) individual retirement accounts (IRA) that give preference to tax (available since 2004);
- 3) individual retirement account protection (since 2012).

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