

# *Household saving rate including life insurance premiums and consumer confidence index in selected Eastern European countries*

Lyubov KLAPKIV<sup>1</sup>

*Insurance Department, Maria Curie Skłodowska University*  
*Department of Finance, Kyiv National University of Trade and Economics*

*Abstract.* The main idea of the article is a comparative analysis of the connection between the household saving rate and consumer confidence in selected Eastern European countries during the period 2008 – 2014. The life insurance premiums were also included as an indicator of a long term characterization of household savings. Gross domestic product growth per capita was used as a dimension of general economic conditions in selected countries.

The author elaborates on the result of the research that showed different impact of consumer confidence on household saving rate in 2008 in the selected countries. In some countries (such as Poland and Bulgaria) different trends prevailed that that were based on the features of the influence of crisis and remittance.

*Keywords:* household saving rate, consumer confidence, life insurance premiums, uncertainty, Eastern European countries.

*JEL Codes:* D14, E21, G22.

## **1. Introduction**

The necessity of scientific research on the nature of factors of long-term household saving from the behavioural economics perspective is related to the question of the reasons for saving and directions of their use (investing). The relevance of this research is fact that some countries of Eastern Europe are characterized by the higher level of economic, political, and social risks, which complicate the inflow of foreign investments. For instance, in 2016, the OECD country risk classification gave Ukraine a rate of 7 and Russia – a rate of 4 out of 7 [*Country risk...* 2016]. “The Economist” has its own methodology of countries’ risk briefing. The grading scale starts from “A” – the absence of risk, to “E” – maximum risk. In 2016 Russia received “E”, Ukraine – “D”, Hungary – “C”, Bulgaria – “C”, and Poland received “C” in the categories of “Political stabil-

---

<sup>1</sup> Contact with author: Lyubov Klapkiv, Insurance Department, Maria Curie Skłodowska University, Pl. M. Curie-Skłodowskiej 5, Lublin, Poland, e-mail: liuba.klapkiv@gmail.com.

ity risk” and “Government effectiveness risk” [Risk briefing 2016]. In the conditions of high risk and uncertainty there is a problem with the government’s strategic planning of financial flows and prediction of the internal financial resources of the population, which can be accumulated and used for the country’s modernization and innovative development.

The aim of this paper is to analyse the connection between household saving rate (including insurance premiums) and consumer confidence index in selected Eastern European countries.

## 2. Determinants of long-term saving behaviour

Household saving behaviour is a multifaceted process that reflects the influence of many factors of different nature. Long term saving behaviour is a function of perception of the future and the act of providing for the future. According to K. E. Warneryd saving constitutes the difference between net worth at the end of the period and the net worth at the beginning of the period, which should equal the excess of income over consumption expenditure in the same period [Warneryd 1999, p. 45].

The developed economic theory of household saving behaviour on the territory of Eastern European countries did not exist prior to the reforms of the 1990s. This is related to the fact that the Soviet economic thought did not examine the behavioural factors of long-term saving. The subject of research were savings as the absolute value without any subjective reasons or motivation, nor the decision making process. The Communist system created conditions of specific and limited ways to form savings, which a priori did not stimulate the development of behavioural theories. The main motivation to have savings was the lack of consumer goods. That is why the saving behaviour was factitious. An important factor in developing the theory of behaviour of long term saving was the emergence of private ownership after 1990.

The processes of saving attracted the attention of researchers throughout history of world economics. In particular, J. Mill contributed considerably to development of behavioural aspects of savings. He divided savings according to their influence on the value of national capital: some savings arise out of aspiration to “make, at favourable conditions, certain stocks in case of difficulties in the future”, other savings are the savings that come true “simply for the sake of enrichment or based on that others appeared richer than themselves” (their origin is connected with the desire to improve living conditions or to provide a future for their children or other people) [Mill 1885, pp. 593, 576]. It is also necessary to note that in his research J. Mill described certain factors that make a population carry out accumulations and productively use the accumulated assets. To such factors he attributed, firstly, “the force of real desire to accumulate”, and, secondly, “the degree of capital safety”. Tendency to accumulate depends on the degree of uncertainty of the future and on the psychological features of different nations.

A. Marshall connected the concept of savings with the concept of expectations: an accumulation usually is the result of expectation of pleasure and, depends on the foresight

(prospectiveness) of individuals, their ability to imagine the future [Маршалл 2008, pp. 307 – 308]. He notes that it is impossible to quantitatively estimate a future benefit because of uncertainty in the long-term.

J. Keynes also allocated a number of subjective factors connected with the psychological desire of humans to save, a kind of “incentives and goals” to encourage a refrain from spending. Specifically, developing a reserve for contingencies, saving due to the need to be taken care of at old age, giving family members the opportunity to get an education or support dependants, ensuring revenue in the form of interest, providing opportunities to gradually increase one’s future earnings, having independence and the ability to make autonomous decisions, possessing the possibility of speculative or commercial operations, caring for heirs, feeling a satisfied sense of greed [Keynes 2016, pp. 73 – 74].

Personal savings, according to R. Harrod, are divided into two parts [1960, p. 286]:

1. Satisfaction of own needs (determined by the expected income changes, needs, failure to obtain the proper income at old age).

2. Transfer of inheritance (this development is advisable in the “early period of life”, “for contingencies”, but “the amount of these savings should probably seek a reduction with each generation” in a stationary society).

According to the life-cycle hypothesis of F. Modigliani, the main motive for long-term savings appears to be the desire to maintain a decent standard of living throughout lifetime. Taking into account the significant fluctuations in income during the life – people at a young age will lend, middle-aged people will save, and the elderly will spend what was previously accumulated [Japelli, Modigliani 2005, pp. 141 – 142]. So it is clearly assumed that overspending should be avoided now in order to have the same wealth level at old age.

G. Katona divided savings based on the purpose for which they are made. He called long-term savings for the purpose of insurance a “contract” because a person is forced to do it regularly for a long time regardless of future changes in circumstances [Earl, Kemp 1999, p. 350]. Considering the psychological factor of savings, Katona noted that the optimistic expectations for revenues lead to a reduction in savings; and the expected reduction of income causes an increase in the volume of savings, regardless of previous income changes.

At the same time, it is believed that people are naturally not inclined to save. They acquired this quality through the experiences of many generations, which constantly showed the utility of foresight [Кашин 2001, p. 14]. Numerous empirical studies of saving behaviour were conducted by specialists in the field of economic psychology. In his studies K. Warneryd [1999] investigated psychological factors that influence saving behaviour, such as time preference, risk aversion, attitudes, orientation towards the future, and self-control. The research by R. Easterlin [2000, pp. 31 – 62] shows the importance of comparison with the reference group for predicting savings behaviour. P. Lunt and S. Livingstone tried to identify the economic, demographic and psychological characteristics of people who are inclined or not inclined to make savings [Lunt, Livingstone 1992]. The authors found that economic variables have a high pre-

dictive power in relation to the total amount of savings, while psychological variables predict well which part of their income, and how regularly, people will save.

*Table 1. Research studies of household saving rate in Eastern European countries*

Countries	Author	Title	Conclusion
East Europe and Former Soviet countries	M. Chawla, G. Betcherman, A. Banerji [2007]	From Red to Gray: The „third Transition” of Aging Populations in Eastern Europe and the Former Soviet Union	Household savings respond to factors such as aging, income, growth and foreign saving in broadly the same way that they do in other countries.
Bulgaria, Hungary and Poland	C. Denizer, H. Wolf, Y. Ying [2000]	Household Savings in the Transition	Disproved precautionary savings motive in saving.
Hungary	A. Horváthné Kökény, Z. Széles [2014]	What Influences the Savings Decisions of the Hungarian Population	Revealed the high positive correlation between household saving rate and confidence to the State.
Poland, Hungary, Czech Republic, Slovak	A. Andrejovska, J. Buleca [2016]	Regression Analysis of Factors Influencing Volume of Households' Savings in the V4 Countries	Revealed the high positive correlation between GDP, unemployment rate, disposable income and saving rate.
European Union countries (with distinguished Baltic region, Romania and Bulgaria)	S. Rocher, M. H. Stierle [2015]	Household saving rates in the EU: Why do they differ so much? European Economy	Presented the factors of differences in saving rate in EU countries: income and wealth, demography, economic uncertainty, fiscal policy, financial market sophistication and the degree of international financial integration.
Poland	A. M. Kłopocka [2016]	Does Consumer Confidence Forecast Household Saving and Borrowing Behaviour? Evidence for Poland	Unemployment level expectations is proved to be the best predictor of changes in household saving and borrowing rates.
Poland	A. Kolasa, B. Liberda [2015]	Determinants of Saving in Poland: Are They Different from Those in Other OECD Countries?	Household saving is more sensitive to changes in government and corporate saving than in OECD countries.
Poland	A. Kłopocka, T. Kopczynski, G. Lenicka-Bajer [2014]	Financial situation and attitudes towards saving in Polish society: evidence from micro data	The decreasing expectations lead to the slope of the overall saving motivation. Moreover pessimists seem to reveal the lowest inclination to deliberate saving. The level of optimism is positively associated with both the share of savers and the level of accumulated savings.

Only research studies which were published in European (English language) journals were included.

P. Webley identified the list of psychological factors of savings and described a number of variables: the perceived degree of control costs, the propensity to save, the time horizon of planning, the use of methods to control costs, social comparison, assessment of the current economic situation and future perspectives, attitudes to saving [Webley, Burlando, Viner 2000, pp. 497 – 501]. As a result of his research P. Webley marks the best predictors of saving and psychological variables: time horizon, planning, control (management), as well as the overall credibility of the government, income, age and perceived financial status compared with the reference group.

The feature of household saving behaviour in the Eastern European countries that is often highlighted is tied to a complicated mechanism of socio-economic transformation. If Western Europe had hundreds of years of saving tradition and tested theories, then in Eastern European countries the question of household saving behaviour and its relation with consumer confidence would look differently. Therefore, in Table 1, the latest European studies were collected that investigate household saving behaviour (and in some cases the level of consumer confidence).

Many empirical studies have estimated the impact of theoretical saving determinants on household saving in the European Union, only a very limited number of studies analysed household saving behaviour in the Eastern European countries. Moreover, previous studies have shown that empirical results are largely dependent on the country sample indicating that household saving behaviour may be different across countries. Only Aneta Maria Kłopocka showed a connection between household saving rate and consumer confidence index in Poland with the help of multiple linear regression analysis. The author believes that there is little research that compares the changes in household saving rate during the crisis of 2008-2009, and its connection with consumer confidence specifically in Eastern European countries.

### **3. Determinants of household saving in Eastern European countries**

Most studies investigate long term saving at the macroeconomic level and focus on total private saving. Only a few studies distinguish between economic and behavioural factors of household saving, even though the theoretical models of saving behaviour are very different for households as they have their own awareness. Moreover, previous studies have shown that empirical results are largely dependent on the country sample indicating that household saving behaviour may be different across countries [e.g. Schmidt-Hebbel, Servén 1997].

Economic development of Western European countries gives reason to believe that, besides income, a number of other factors have influence on the level of saving. Thus, their combined influence can appear more substantial than the influence of the change in value of income and result in an “anomalous” (from the classic approaches point of view) situation, when high profits are combined with a lower saving quota (“wealth effect”), and vice versa. Some research showed that generous pension system, almost complete coverage of the public health- and long-term care insurance system in developed countries make precautionary saving less necessary [Van Ooijen, Alessie, Kalwij 2015,

p. 353]. Some forms of this anomalous effect have been observed in Bulgaria and Romania and were explained by the remittances [Rocher, Stierle 2015, p. 13]. For the countries of Eastern Europe, the reasons related to creating forced saving include: disparity of suggestions of benefits in an economy demanded from them, lagging of human necessity from the possibility of demand, difficulty in legalization of shadow income.

It should be emphasized that society's perceptions of long-term savings differ across countries, as not only the necessity of providing for the future has an influence, but also an institutional environment. The latter one represents a set of institutions and mechanisms that ensure compliance, which either promotes or inhibits the processes of saving. For instance, the quality of pension security, the availability and value of social services (education and healthcare), direct or indirect taxation, remittances, income from undeclared work [Rocher, Stierle 2015, p. 9].

In order to analyze the household saving behaviour and household expectation of positive or negative future financial situation, four indicators were used. The first one, Gross domestic product (GDP) per capita, will characterize the general economic conditions in the country (background for savings motivation). The second one, consumer confidence index allows to analyse how people interpret economic situation. The third are household saving rates (HSR), which characterize saving opportunities of households in economy. And the last one, life insurance premium shows if the savings are steered in the direction of e.g. long term investments (as there could be different types of financial investments).

Gross domestic product per capita – characterizes the general level of welfare of the country (Table 2). It is important to include the annual GDP growth per capita because it reflects economic conditions in the country, where the individuals make decisions on long term investments. On the other hand, unfavorable general economic environment could be the reason for the change in the dynamics of saving behaviour.

*Table 2. Gross domestic product growth per capita, (annual %)*

Year	GDP per capita						
	Poland	Bulgaria	Slovak Republic	Slovenia	Hungary	Ukraina	Russian Federation
2008	3,9	6,3	5,5	3,1	1,1	2,8	5,2
2009	2,5	- 3,6	-5,6	-8,6	-6,4	-14,4	-7,8
2010	3,9	0,7	4,9	0,7	0,9	4,6	4,4
2011	4,9	2,2	2,7	0,4	2,0	5,5	4,1
2012	1,5	0,8	1,3	-2,9	-1,1	0,4	3,3
2013	1,3	1,8	1,3	-1,1	2,1	0,2	1,0
2014	3,3	2,1	2,4	2,9	3,9	-1,1	-1,0
2015	3,6	3,6	3,4	2,7	3,1	-9,5	-3,9

Source: based on World Bank Gross domestic product per capita growth, <http://data.worldbank.org>, (access: 12<sup>th</sup> December 2016).

Consumer confidence index shows us an individual perception of uncertainty, which measures the level of optimism and pessimism that individuals have about the performance of the economic conditions and events, whether real or perceived. When consumers are confident, the economy surges, and when consumers are timid, they pull the economy down with them [Furher 1993, p. 34]. Firstly, social perception of economic situation in selected countries is described, which could be shown by the Gfk CCI (Table 3). The approach to calculating the index is different for every country (added as reference).

*Table 3. Consumer Confidence Index for selected countries*

Year	CCI						
	Poland	Bulgaria	Slovak Republic	Slovenia	Hungary	Ukraine	Russian Federation
2008	-5	-35,8	-4	-19	-50	99,8	-3
2009	-25	-53,3	-40	-38	-80	48,2	-37
2010	-17	-55,8	-30	-25	-50	70,2	-17
2011	-28	- 37,2	-22	-27	-35	80,3	-12
2012	-25	- 43,2	-37	-24	-52	78,8	-6
2013	-32	-41,7	-35	-35	-48	85,8	-8
2014	-23	-38,5	-16	-33	-25	80,5	-11
2015	-14	-33	-7	-15	45	50,1	-22

Source: own elaboration based on the Trading Economics "Consumer Confidence Index," <http://www.tradingeconomics.com>, (access: 10th December 2016).

Household saving rate - the main indicator that characterises saving opportunities of households in economy. It is one of the key parameters of the country's economic development. Together with customer confidence HSR is used to forecast changes of household saving behaviour in perspective.

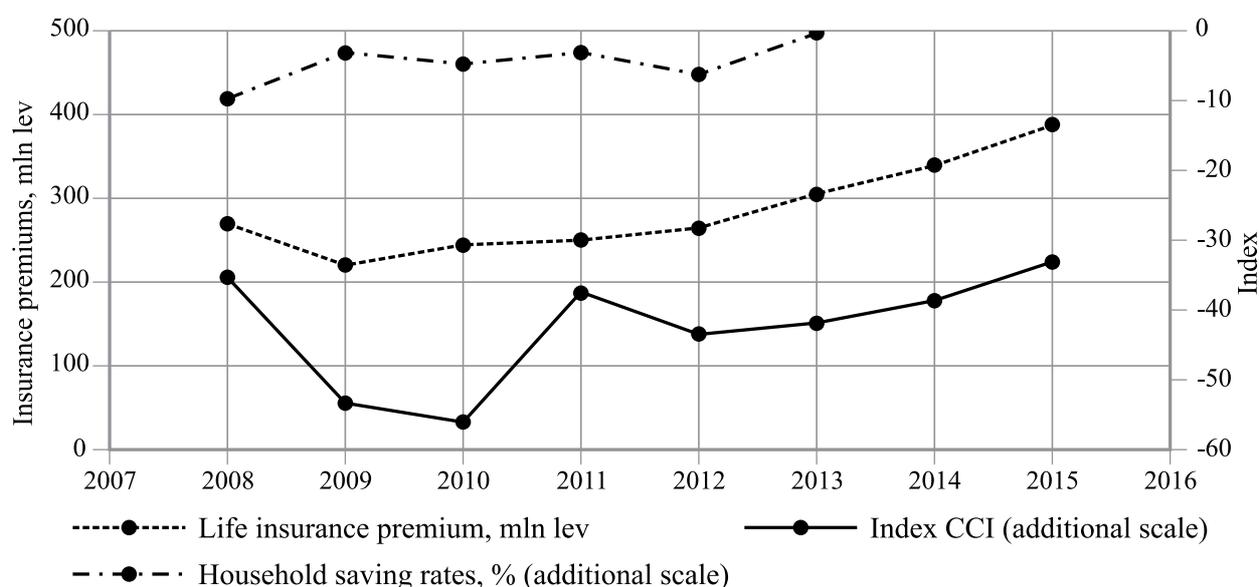
Indicator of life insurance premiums with saving nature is associated with individual's decision about long-term investment of savings. Life insurance policies is one of the ways of saving, and it shows us the preference of society in the long term and visualize the relations between their opportunities in saving (HSR) and investment for future. For some time already, the currency substitution has been advanced in economies of the former soviet countries, with the US dollars being the currency of choice for saving [Conway 2001, p. 181]. The highest popularity today among the possible forms of savings is in the investment in real estate [Andrejovska, Bulecka 2016, p. 217].

CCI, HSR, GDP growth per capita and life insurance premium indicators were investigated by author in selected countries: Bulgaria, Ukraine, Hungary, Poland, Slovakia, Slovenia and Russia. These countries were chosen because they had similar conditions of market development, but nowadays these countries have different economies and the level of welfare, that influence households.

#### 4. Analysis of household saving rate (including life insurance premiums) and consumer confidence index in selected Eastern European countries

Bulgaria (Figure 1): growth of the household saving rates in 2009 occurred during worsening of CCI and decline in the GDP growth (Table 2). The consumer confidence index was strongly in the negative position, especially at the time of crisis in 2008-2010 (CCI - 55,8), as household saving rates in this period also changed from -3,0 to -4,7. Nevertheless, the volume of the life insurance premiums started to rise in 2009 as well as growth of the GDP per capita (Table 2). We can suggest that the demand on life insurance in Bulgaria is related with perception of economic uncertainty and financial situation of the individuals: an increase of financial welfare among the population of Bulgaria and a decrease in uncertainty are among those factors influencing the increase of the life insurance premium described [Животозастрахователните 2016].

Figure 1. Dynamics of household saving behaviour determinants in Bulgaria<sup>2</sup>



Source: based on periodical reports from Комисия за финансов надзор. Статистика за животозастрахователния за 2008-2014 г., <http://www.fsc.bg/bg/pazari/zastrahovatelen-pazar/statistika/zhivotozastrahovane/2008/>; Trading Economics "Consumer Confidence Index", <http://www.tradingeconomics.com/>; OECD Data "Household saving rates", <https://data.oecd.org/hha/household-savings.htm>, (access: 10<sup>th</sup> December 2016).

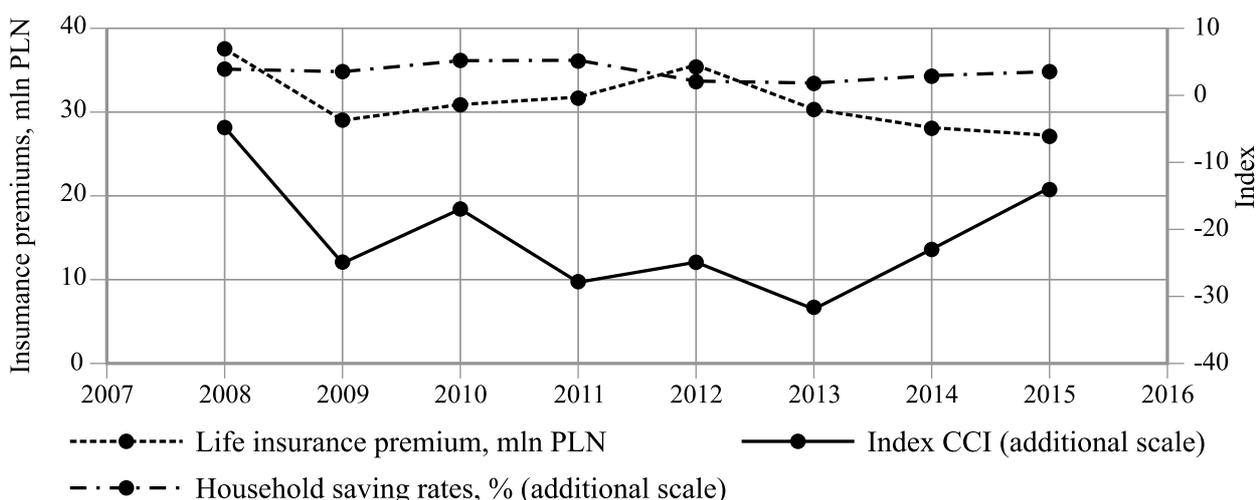
Poland (Figure 2): there was no evidence recession in Poland at the crisis 2008-2009, but the GDP growth per capita had changed from 3.9 % to 2.5 %. This also had an in-

<sup>2</sup> In Bulgaria, the consumer survey is carried out 4 times a year on a rotational principle and covers around 1200 people from urban and rural areas. The questionnaire includes 15 questions relating to the financial situation of household, general economic situation in the country, consumer prices, unemployment, major purchases, household savings, financial situation of household, buying a car, buying or building a home and purchases for home improvements. The consumer confidence indicator uses a scale of -100 to +100, <http://www.tradingeconomics.com/bulgaria/consumer-confidence>, (access: 8<sup>th</sup> December 2016).

fluence on increasing the household saving rate. It is supported by Kos'ny's research stating that among Polish households, savings increase in periods of slower economic growth and decrease in fast growth periods because of precautionary motives [Kos'ny, Piotrowska 2013]. Analyzing the connection between CCI and saving behaviour in Poland, it has to be admitted that the household saving has a positive correlation with expected unemployment indicator [Klopocka 2016].

This led to a decline in the amount of insurance premiums. It is worth paying attention to the fact that from 2011 until 2012 the economic conditions deteriorated (decrease of the GDP per capita growth from 4.9 % to 1.5 %) but that was not reflected in the household saving rate and did not affect the general consumer expectations. As seen in Figure 2, premiums for life insurance decreased from 2012 contrary to all other indicators. In author's opinion, this indicates that demand for life insurance has a weak link with the general economic situation in Poland. During a stable growth there are other impact factors which require further study.

Figure 2. Dynamics of household saving behaviour determinants in Poland

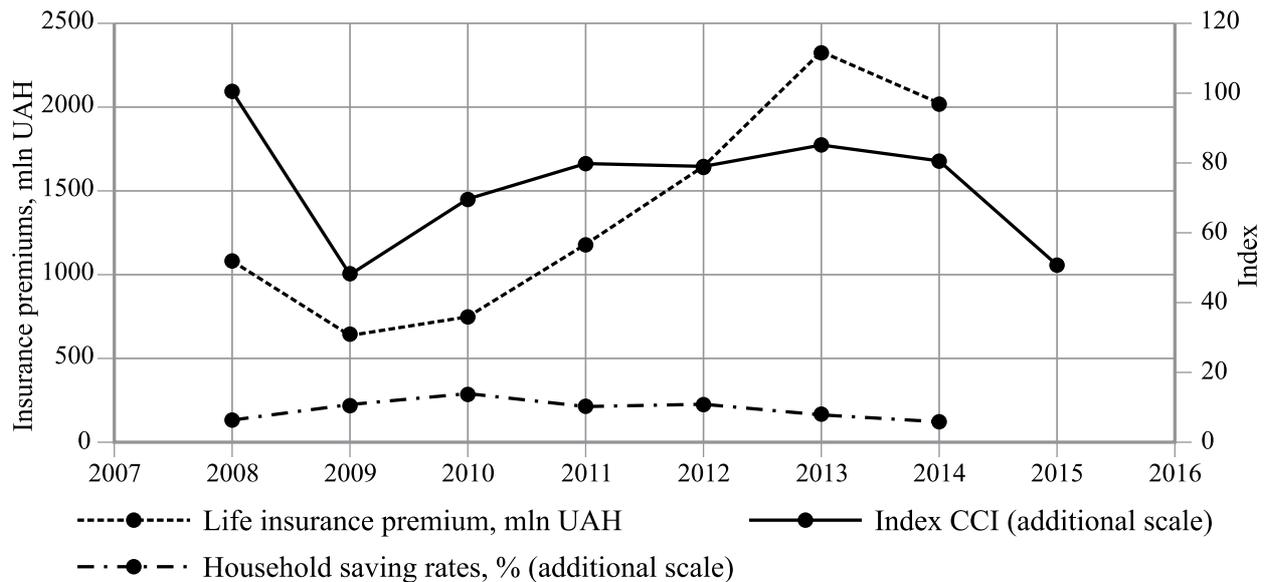


Source: based on the periodical report from <http://www.knf.gov.pl>; Trading Economics, op. cit.; OECD Data, op. cit., (access: 10<sup>th</sup> December 2016).

Ukraine (Figure 3): the crisis of 2009 shows the connection between pessimistic social perception of economic uncertainty (CCI), decrease in household saving rates and life insurance premium. In the indicator of life insurance premium, we save the original currency of premium because in countries such as Ukraine or Russia, the sharp change in exchange rates cause a significant difference in value, which could even involve opposite behavioural trends. The Ukrainian hryvnia devaluated from 8 UAH for 1 USD in 2013 to 27 UAH for 1 USD in 2016. First of all, we are interested in the direction of trend demand on life saving insurance which would be better shown through national currency (in national currency there would be an opposite trend in comparison with the US dollar). However, in the following years the situation is reversed: instead of decreasing household saving rates from 2010 to 2014, the demand for life insurance

significantly rose in this period from 754.8 million UAH in 2010 to 2337.4 million UAH in 2014. Consumer Confidence Index also increased. It can be suggested that expectation of higher and stable income encourages to save and invest in long term financial instruments. It also could mean that household saving rates do represent real financial situation of individuals in Ukraine as GDP growth per capita decreased significantly starting from 2012.

Figure 3. Dynamics of household saving behaviour determinants in Ukraine<sup>3</sup>



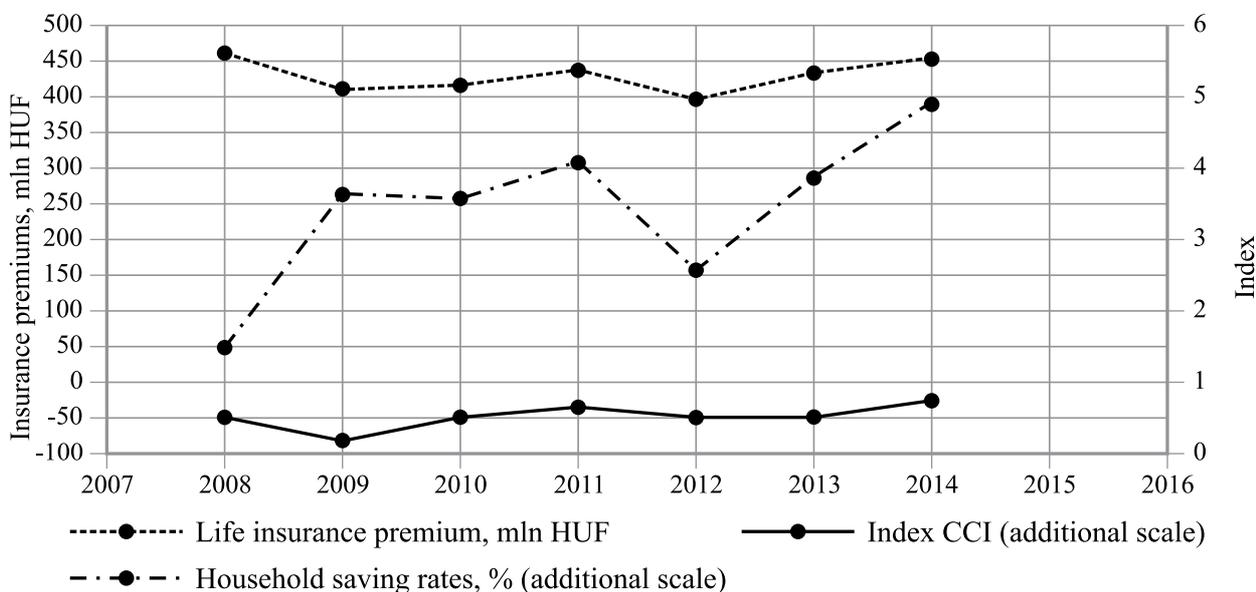
Source: based on periodical reports from Національна комісія, що здійснює державне регулювання у сфері ринків фінансових послуг “Інформація про стан страхового ринку 2008-2014”, [www.nfp.gov.ua/content/informaciya-pro-stan-i-rozvitok.html](http://www.nfp.gov.ua/content/informaciya-pro-stan-i-rozvitok.html); Trading Economics, op.cit.; Макроекономічні показники України, [www.bank.gov.ua/files/1-Macroeconomic\\_indicators.xls](http://www.bank.gov.ua/files/1-Macroeconomic_indicators.xls), (access: 10<sup>th</sup> December 2016).

Hungary (Figure 4): individual perception to uncertainty in 2009 showed us a higher level of pessimistic expectation as GDP decreased by 6.4 %. Demand for life insurance also diminished, and household saving rates confirm that the saving motivation among Hungarians strongly increased. It means that individuals decided to increase savings because of negative expectations. Mody and al. argue that two-fifths of the sharp increase in household saving rates between 2007 and 2009 was caused by labour and GDP uncertainty (by the precautionary savings motive) [Mody, Ohnnsorge, Sandri 2012]. Household saving rate's trend changed from 2009 to 2011 twice, but it was not connected with consumer confidence or general economic situation. Life premiums growth turned negative in 2011 basically due to the declining trend of non-unit-linked

<sup>3</sup> Current consumer confidence indicator (BWUK) is based on the results of the household survey carried out with the use of the consumer tendency test. The indicator is the arithmetic mean of the evaluations of the previous and predicted (over the following 12 months) changes concerning the household's financial condition as well as the general economic situation of the country and major purchases currently made. The BWUK may range from -100 to +100, <http://www.tradingeconomics.com/poland/consumer-confidence>, (access: 11<sup>th</sup> December 2016).

premiums [OECD 2013, 19]. The research made by A. Andejevska, shows a positive correlation between GDP per capita (decrease -1.1%), HSR and social perception under the crisis period in Hungary [Andrejevska, Bulecka 2016, p. 221].

Figure 4. Dynamics of household saving behaviour determinants in Hungary<sup>4</sup>

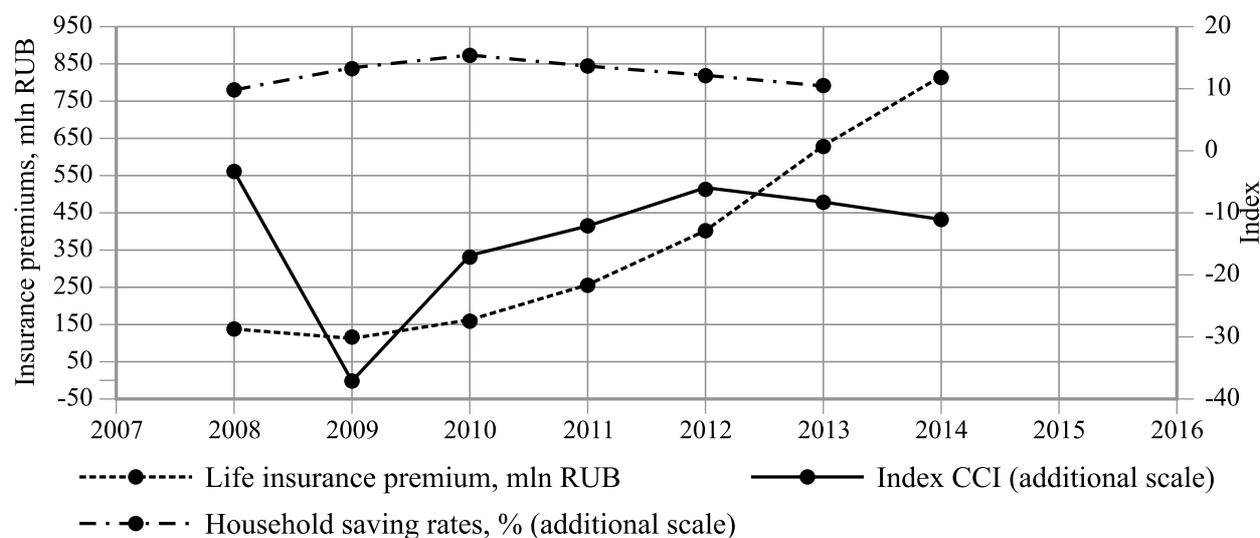


Source: based on periodical reports from Market report. Hungarian Insurance Company Year book, <http://www.mabisz.hu/en/market-reports.html>; Trading Economics op.cit.; OECD Data, op.cit., (access: 10<sup>th</sup> December 2016).

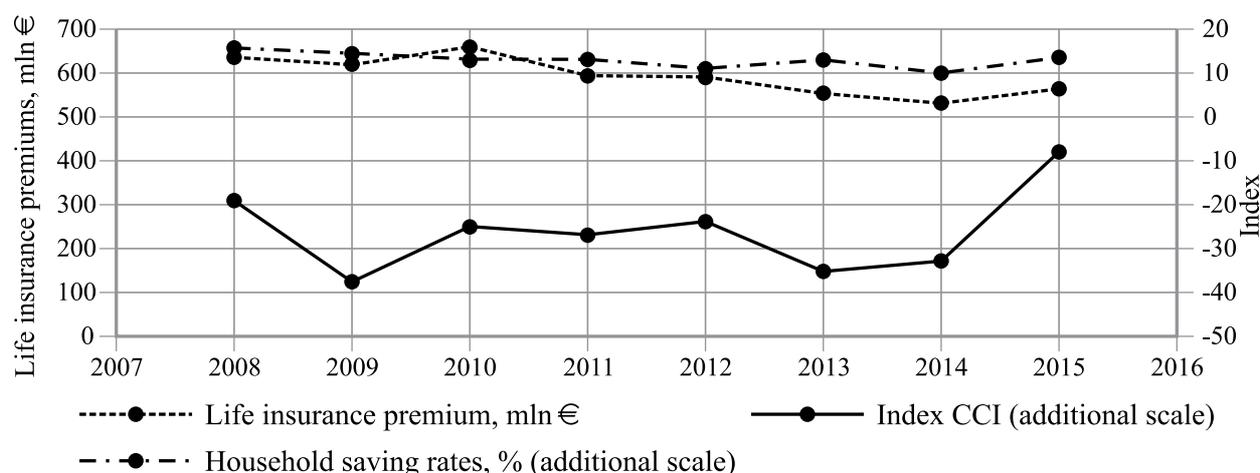
Russia (Figure 5): In 2009, CCI decreased, household saving rates increased, which confirmed that individuals in Russia have increased their savings to build up a reserve against unforeseen contingencies and decreased demand for life insurance (which means that they expected to use their savings in a short time). But under the expectation of higher income and optimistic perception of the financial situation from 2010 to 2012, saving behaviour was characterized by a rising demand for life insurance and decrease in household saving rates.

In terms of the retrospective it could be seen that motivation for savings in Russian society had different reasons. For example, J. Pickersgill in the year 1980, made conclusions about the influence of human expectations on saving behaviour [Pickersgill 1980, p. 632]. According to his studies, Soviet households spent nearly all of their increasing real income on consumer goods and services prior to 1965, but saved approximately 10% of their increasing incomes after that year, which coincides with the demise of Khrushchev and the announcement of the economic reforms.

<sup>4</sup> In Ukraine, the Gfk CCI survey is made by phone and covers over 1,000 individuals. The questions focus on current economic and financial situation, savings intention as well as on expected development regarding: consumer price indexes, general and personal financial situation and major purchases of domestic appliances. The share of negative answers is deducted from the share of positive answers and 100 is added to the difference. The Index values range from 0 to 200, <http://www.tradingeconomics.com/ukraine/consumer-confidence>, (access: 11<sup>th</sup> December 2016).

Figure 5. Dynamics of household saving behaviour determinants in Russia<sup>5</sup>

Source: Ассоциация страховщиков жизни. Годовой отчет. 2008-2014, <http://aszh.ru/about/annual-report/>; Trading Economics, op.cit.; OECD Data, op.cit., (access: 10<sup>th</sup> December 2016).

Figure 6. Dynamics of household saving behaviour determinants in Slovenia<sup>6</sup>

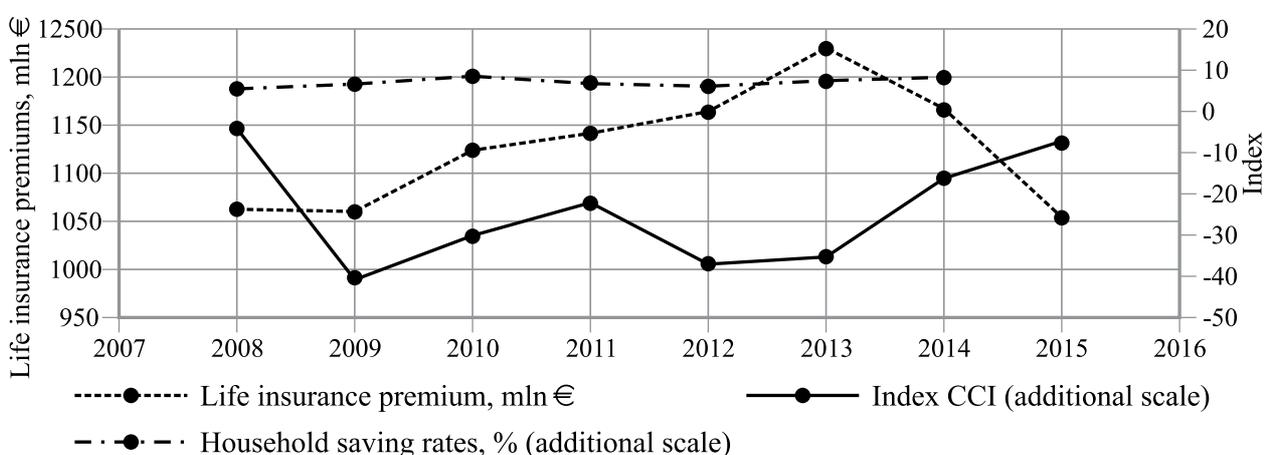
Source: based on the periodical report from <http://ec.europa.eu/eurostat>, <http://www.zav-zdruzenje.si>, Trading Economics, op.cit., (access: 10<sup>th</sup> December 2016).

<sup>5</sup> The consumer confidence index is calculated from responses given to questions concerning the actual and the expected financial position of households, the actual and the expected economic situation of the country, and the purchase of higher value consumer durables. The consumer confidence indicator uses a scale of -100 to +100, <http://www.tradingeconomics.com/hungary/consumer-confidence>, (access: 11<sup>th</sup> December 2016).

<sup>6</sup> In Russia, the Overall Consumer Confidence Index is based on a survey of 5,000 people aged 16+ living in all regions of the country. The index is an arithmetical average of 5 indices: the change in the respondent's personal financial situation over the last 12 months and next 12 months, the change in the country's economic situation over the last year and in the next 12 months, and the current climate for durable goods purchase. The index shows the difference between the percentage share of persons that are optimistic and the percentage of persons that are pessimistic. It takes a value between -100 (situation described as poor and expected to become worse) and 100 (expects the situation to improve); 0 indicates neutrality, <http://www.tradingeconomics.com/russia/consumer-confidence>, (access: 11<sup>th</sup> December 2016).

Slovenia (Figure 6): negative expectations of the population and the decline by 8.6 % of GDP in 2009 almost did not change the demand for the long-term insurance and household saving rate. Until 2012, the nature of consumer confidence did not affect the level of savings. It is believed that the main deterrent of life insurance saving was the objective factor of deteriorating economic situation in Slovenia because there was a significant decline in GDP per capita (decrease of 2.9 % in 2012). It can be concluded that life insurance saving is not dependent on saving possibilities or consumer confidence of the population as a whole. It also shows that in 2013 91.2 % of population in Slovenia had long-term deposits, however only 15 % had voluntary life insurance [The Eurosystem... 2013].

Figure 7. Dynamics of household saving behaviour determinants in Slovak Republic <sup>7</sup>



Source: based on the periodical report from: <https://www.sav.sk>, <http://www.mcser.org>; Trading Economics “Consumer Confidence Index”, <http://www.tradingeconomics.com>; OECD Data “Household saving rates”, <https://data.oecd.org/hha/household-savings.htm>, (access: 10<sup>th</sup> December 2016).

Slovak Republic (Figure 7): economic crisis of 2008-2009 showed a decrease in GDP per capita of 5.6 %, a deterioration of consumer expectations of the population, and a saving rate increase, which affected the decrease of life insurance premiums. In Slovak Republic there was high level of unemployment observed after 2008, which was the main factor of decrease in the CCI.

However, from 2009 until 2013 the volume of life insurance premium was increasing, to the same extent as the saving rate was decreasing. The highest level of life insurance premium was in 2013, due to the financial stability in the country (Table 2) and high sales of the unit linked insurance. In author’s opinion, individuals’ behaviour regarding investing in long-term life insurance in Slovak Republic does not have a strong connection with specified indicators.

<sup>7</sup> In Slovenia, the consumer confidence indicator is the average of balances from answers to questions about the expected household financial situation, the expected general economic situation in the country, about expected unemployment, and the question about savings over the next 12 months. The consumer confidence indicator uses a scale of -100 to +100, <http://www.tradingeconomics.com/slovenia/consumer-confidence>, (access: 11<sup>th</sup> December 2016).

However, it seems logical that the shock of 2008-2009 caused by changes at the country level, primarily affected precautionary savings motives, as people had to adjust their saving behaviour due to uncertainty about future unemployment, income fluctuations and the duration of that shock.

Among other factors which should be considered is saving mentality. Saving mentality has an important influence on the saving behaviour Garon Shaldon [2012], O. Rathkolb and O. Binder [2014, p. 80]. In the economically developed countries the population's savings are characterized by a high degree of self-conditioning. This means that provided all other conditions are equal, individuals will continue saving, as this process becomes a habit. Savings habits contribute to saving, can be acquired over time in targeted interventions, and ease feelings of financial strain [Loibl, Kraybill, DeMay 2011, p. 590]. It is necessary to note that relative stability of the economy of the USSR (disregarding all its defects, inherent in the socialist government methods) motivated humans to the active consumption of insurance services.

In 1990, the structure of insurance payments to a state insurance company of the USSR accounted for 37.1% from a national economy, and 62,9 % from the population; as part of the receivables from population, 90 % included payments on the long-term life-insurance contracts [Гуревич 2007, p. 14]. In the Ukrainian SSR, 71 % of active population had such agreements that gave an opportunity to the Republic to accumulate and use large amounts for investing and other necessities. Generations of people who, in 1998, bore considerable losses as a result of financial crisis in the countries of Eastern Europe, have a limited trust in the long-term saving.

One more hypothesis that confirms specifics of saving behaviour: a household headed by individuals with above average education, by individuals who are self-employed, or by individuals employed in the private sector are likely to be net winners compared to households headed by individuals who are older, less educated, or working in the contracting public sector [Denizer, Holger 2000]. Literature marks the relationship between financial behaviour in long-term savings and financial education: certain financial education programmes are associated with a positive behaviour change in savings. For instance, J. van Rooij, A. Lusardi, and R. Alessie find that, in the Netherlands, an increase in financial literacy from the 25<sup>th</sup> to the 75<sup>th</sup> percentile is associated with a 17-30 percentage point higher probability of stock market participation and retirement planning [Rooij, Lusardi, Alessie 2011, p. 20].

## **5. Role of labour migrants remittances as a source of saving**

It is important to see that, labour migration, which is the source of substantial savings, is widespread in the Eastern European countries. These financial resources are not represented to fully in the official statistics of countries. Therefore, the information about real financial possibilities of the population is distorted. National accounts may not adequately grasp the amount of remittances received by households, and the size of unrecorded informal flows is overestimated. Following C. Freund and N. Spatafora, the informal remittances amount to about 35-75 percent of official remittances to devel-

oping countries [Freund, Spatafora 2005, p. 1]. Consequently, actual disposable income may be higher than national accounts indicate. Assuming that national account figures on consumption expenditure are more accurate, this may result in lower readings of official saving rates in countries where net received remittances are large. To the extent that consumption expenditure is underestimated as well, the effect on the saving rate may be reduced out as both the numerator and denominator are impacted [Rocher, Stierle 2015]. According to estimates, the average annual saving of households in Ukraine is about 447 USD (common value of annual household savings – 6 billion USD) and in families with labour migrants the average annual savings consists of 960 USD. Interestingly, 50 % of labour migrants who left Ukraine indicate the long-term savings to be the primary purpose of earnings and emigration [OECD 2016, p. 56].

## 6. Summary

Household savings behaviour is not static and changes along with the complexity of economic relations, and increase of uncertainty. The research has confirmed that there is no universal model to explain saving behaviour because within each country the reaction and perception of financial crisis is influenced in different ways. Observations show that all selected countries had similar trend of consumer confidence during a period of crisis: reacting to the crisis, CCI decreased in 2008 and rose in 2009. In Bulgaria, there was a significant decline of CCI in 2008 and in 2009. In 2008 HSR increased in Bulgaria (three times), in Hungary (two times), and in Ukraine and Slovak Republic. This supports the idea that during recession times, the household behaviour changes to higher savings [Niculescu-Aron, Mihaescu 2014, p. 112]. In Poland and Slovenia the HSR decreased in 2008, meaning that the populations' savings decreased even though the general expectations of the population were pessimistic. In the selected countries life insurance premiums also decreased. It can be deduced that the main model of behaviour at the beginning of the crisis in Poland and Slovakia was consumption. But we have to admit that Poland was the only country with positive GDP growth per capita in 2008.

In 2009, CCI increased in all selected countries (except for Bulgaria). But there was a considerable change in saving rates: in Slovenia, Hungary and Bulgaria HSR decreased, but in Poland, Ukraine, Russia and Slovak Republic HSR began to increase. Here it's important to note that in 2009 GDP has a positive growth in all selected countries, except Poland. The difference in saving behaviour in Poland in 2008 – 2009 could be explained by the latest influence of the crisis.

Households in selected Eastern European countries are more inclined to save during a period of high uncertainty. But during a period of economic growth there is no common trend between household savings and consumer confidence. Each country is characterized by a different connection between HSR and CCI: the improvement of the economic situation (increase in GDP) and the consumer confidence index was not accompanied by the HSR (for example in Bulgaria and Hungary in 2010).

An important issue in assessing the saving behaviour in Eastern European countries are the financial resources of migrant workers that are not fully represented in the official statistics of the countries. In some countries (such as Bulgaria and Ukraine) this caused the HSR to inaccurately represent the real situation in the relation between human consumption and income.

## References

- Andrejovska A., Bulecka J., 2016, *Regression Analysis of Factors Influencing Volume of Households' Savings in the V4 Countries*, "Mediterranean Journal of Social Sciences", vol. 7, no. 1.
- Conway P., 2001, *Crisis, stabilization and Growth Economic Adjustment in Transition*, Springer.
- Denizer C., Holger C., 2000, *Household Savings in Transition Economics*, "Policy Research Working Paper", [www.worldbank.org/research/workingpapers](http://www.worldbank.org/research/workingpapers), (access: 11<sup>th</sup> December 2016).
- Earl P.E., Kemp S., 1999, *The Elgar Companion to Consumer Research and Economic Psychology*, Edward Elgar Publishing, Cheltenham.
- Easterlin R.A., 2000, *Life Cycle welfare: Evidence and Conjecture*, "Journal of Socio-Economics", vol. 30, iss. 1.
- Freund C., Spatafora N., 2005, *Remittances: transaction costs, determinants, and informal flows*, "World Bank Policy Research Working Paper", no. 3704.
- Furher C. J., 1993, *What Role Does Consumer Sentiment Play in the U.S. Macroeconomy?*, "New England Economic Review".
- Harrod R.F., 1960, *Second Essay in Dynamic Theory*, "The Economic Journal", vol. 70, no. 278.
- Japelli T., Modigliani F., 2005, *The age-saving profile and the life-cycle hypothesis*, [in:] "The collection papers of Franko Modigliani", The MIT Press, Cambridge, vol. 6.
- Keynes J. M., 2016, *The General Theory of Employment, Interest and Money*, Atlantic Publishers & Dist, New Dehli.
- Klopočka A.M., 2016, *Does Consumer Confidence Forecast Household Saving and Borrowing Behavior? Evidence for Poland*, "Social Indicators Research".
- Kos'ny M., Piotrowska M., 2013, Economic security of households and their savings and credits. National Bank of Poland. Working Paper, no. 146, [http://www.nbp.pl/publikacje/materialy\\_i\\_studia/146\\_en.pdf](http://www.nbp.pl/publikacje/materialy_i_studia/146_en.pdf), (access: 11<sup>th</sup> December 2016).
- Loibl C., Kraybill D., DeMay S., 2011, *Accounting for the role of habit in regular saving*, "Journal of Economic Psychology", vol. 32 (4).
- Lunt P., Livingstone S., 1992, *Mass consumption and personal identity*, Buckingham, Philadelphia: Open University Press.
- Mill J.S., 1885, *Principles of Political Economy*, A Text-Book For Colleges, New York.
- Mody A., Ohnsorge F., Sandri D., 2012, *Precautionary Savings in the Great Recession*, "IMF Economic Review", vol. 60, no. 1.
- Niculescu-Aron I., Mihaescu C., 2014, *Modelling the impact of economic, demographic and social determinants on household saving rate in the former socialist countries (Central and Eastern Europe)*, "Procedia Economics and Finance", vol. 10.

OECD, 2013, *Insurance statistics*, 2013, OECD Publishing, <https://stats.ukdataservice.ac.uk/metadata/OECD/Insurance/2113031e.pdf>, (access: 11<sup>th</sup> December 2016).

OECD, 2016, Міжнародна організація з міграції, *Міграція як чинник розвитку України*, Київ.

OECD, *Country Risk Classifications of the Participants to the Arrangement on Officially Supported Export Credits*, <http://www.oecd.org/trade/xcred/cre-crc-current-english.pdf>, (access: 8<sup>th</sup> December 2016).

Ooijen R. Van, Alessie R., Kalwij A., 2015, *Saving behaviour and portfolio choice after retirement*. “Economist-Netherlands”, vol. 163, iss. 3.

Pickersgill J., 1980, *Recent evidence on soviet households savings behavior*, “The review of Economics and Statistics”, vol. 62.

Rathkolb O., Binder O., 2014, *The paradoxical Republic. Austria, 1945 – 2005*, Berghahn Books.

*Risk briefing*, [http://viewswire.eiu.com/index.asp?layout=RKCountryVW3&country\\_id=1870000187](http://viewswire.eiu.com/index.asp?layout=RKCountryVW3&country_id=1870000187), (access: 8<sup>th</sup> December 2016).

Rocher S., Stierle M. H., 2015, *Household saving rates in the EU: Why do they differ so much?*, “European Economy. Discussion paper”, vol. 005.

Rocher S., Stierle M., 2015, *Household saving rates in the EU: Why do they differ so much*, [http://ec.europa.eu/economy\\_finance/publications/eedp/pdf/dp005\\_en.pdf](http://ec.europa.eu/economy_finance/publications/eedp/pdf/dp005_en.pdf), (access: 11<sup>th</sup> December 2016).

Rooij J. Van, Lusardi A., Alessie R., 2011, *Financial Literacy, Retirement Planning and Household Wealth*, “The Economic Journal”, vol. 122 (560).

Schmidt-Hebbel K., Serven L., 1997, *Saving Across the World: Puzzles and Policies*, World Bank – Discussion Papers, no. 354, World Bank.

Shaldon G., 2012, *Beyond Our Means. Why American Spends While the World Save*, Princeton University Press.

The Eurosystem Household Finance and Consumption Survey, 2013, <http://www.ecb.europa.eu>, (access: 11<sup>th</sup> December 2016).

Warneryd K.E., 1999, *The psychology of saving*, Northampton Edward Elgar, Cheltenham.

Webley P., Burlando R., Viner A., 2000, *Individual differences, savings motives and saving behaviour: a cross national study*, [in:] E. Hölzl (ed.), *Fairness and cooperation: IAREP/SABE conference proceedings*, WUV, Vienna.

Гуревич В., 2007, *Накопительное страхование жизни – надежное инвестирование*, “Страховой рейтинг Insurance TOP”, no 4 (20).

Животозастрахователните компании с рекорден ръст на приходите 2016, [http://insmarket.bg/Анализ/Животозастрахователните-компани-с-рекорден-ръст-на-приходите\\_1.at.2\\_i.451091.html](http://insmarket.bg/Анализ/Животозастрахователните-компани-с-рекорден-ръст-на-приходите_1.at.2_i.451091.html), (access: 8<sup>th</sup> December 2016).

Кашин Ю.И., 2001, *Развитие сберегательной системы в дореволюционной России*, “Банковские услуги”, vol. 2.

Маршалл А., 2008, *Принципы экономической науки*, Прогрес, Москва, vol.1.

<http://www.mabisz.hu>

<http://aszh.ru>

<http://www.tradingeconomics.com>

<https://data.oecd.org>

[www.nfp.gov.ua](http://www.nfp.gov.ua)

<http://www.fsc.bg>

<http://data.worldbank.org>

<http://www.knf.gov.pl>

[www.ecb.europa.eu](http://www.ecb.europa.eu)

<https://stats.ukdataservice.ac.uk/metadata/OECD/Insurance/2113031e.pdf>

*Stopa oszczędności gospodarstw domowych  
z uwzględnieniem składki na ubezpieczenie na życie  
i indeks zaufania klientów w wybranych krajach  
Europy Wschodniej*

**Streszczenie.** Głównym celem artykułu jest analiza porównawcza powiązania stopy oszczędności gospodarstw domowych z poziomem zaufania konsumentów w wybranych krajach Europy Wschodniej w latach 2008-2014. Wartość składki ubezpieczeniowej na życie została włączona do analizy jako wskaźnik długoterminowego charakteru oszczędności gospodarstw domowych. Dla określenia ogólnych gospodarczych warunków w wybranych krajach, wykorzystano wskaźnik wzrostu produktu krajowego brutto per capita. Wyniki badania wykazały zróżnicowany wpływ zaufania konsumentów na stopę oszczędności gospodarstw domowych w 2008 roku w wybranych krajach. W niektórych krajach (takich jak Polska i Bułgaria) odnotowano szczególne trendy, które były spowodowane działaniem kryzysu i wpływem przekazów pieniężnych.

**Słowa kluczowe:** stopa oszczędności gospodarstw domowych, zaufanie konsumentów, składki na ubezpieczenie na życie, niepewność, kraje Europy Wschodniej.

**Kody JEL:** D14, E21, G22.