Financial Literacy of Latvian Citizens: findings and conclusions

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ABSTRACT

The results obtained in the process of assessment of the level of individual's financial literacy provide information on the factors, which reduce financial efficiency and cause unnecessary costs. Despite a vast body of international experience in the field of financial literacy assessment, one of the main problems is to develop a measuring instrument, which can ensure valid results and can be adapted to the socio-economic and demographic conditions of a definite country. Therefore, in 2015, academic personnel of the Department of Finance, Faculty of Engineering Economics and Management of Riga Technical University conducted research within the project «Enhancing Latvian Citizens' Securitability through Development of the Financial Literacy» and developed an instrument for assessment of the level of financial literacy, which can be used to evaluate financial knowledge of the Latvian citizens taking into consideration all components of financial literacy. The results are briefly described in the current paper.

Keywords: Financial literacy, Measurement, Survey, Latvia.

1. INTRODUCTION

The issues concerning the ability of the individuals to successfully manage their finances remain topical for more than a decade. In the research conducted in 2011 [30] it was recognized that since 2002 the development of the concept of financial literacy occurred on the premise that the concept covers not only individual's financial attitudes, behavior, experience, but also knowledge and computation skills.

In 1996, researchers [24] expressed doubts about consumer ability to make informed decisions concerning financial products, as the available financial information is used inefficiently. In turn, global economic crisis and difficulties associated with financial stability of the countries of Eurozone stirred heated discussion not only on the management of financial flows in the state and private business sector, special attention was turned to the quality of personal finance-related decisions made by the individuals. In order to increase security of the European consumers with respect to financial issues, European Parliament [10] passed a resolution of 18 November 2008 on protecting the consumer: improving consumer education and awareness on credit and finance (2007/2288(INI)). The necessity to raise the level of consumer literacy is connected with the dynamic development of the financial market and the offer of new, more complicated financial products. Different social processes are underway: social stratification, changes in the labor market and living conditions, at the same time, life style and habits of individuals are also changing. Many external factors have changed; they can be conditionally divided into two large groups: changes of the social environment and changes in the financial service market [3][26] (Table 1).

Table 1.

Factors of financial literacy

Social environment and risk profile change	Changes in financial service market
Demographic changes	Increase of information flow
Changes in the labor market	New distribution channels
Greater scope of personal responsibility	Deregulation of financial market
Growth of debt liabilities	Wider range of financial products

Demographic situation in Latvia can be characterized by the fact that in 2015, compared to 2000, the total number of permanent residents decreased by average 16.6% [12]. At present, the number of economically active citizens has decreased, and they have to support a larger number of the retired. Taking into consideration life expectancy, people need larger savings to sustain themselves during retirement.

Radical changes have occurred in the labor market. The number of people with permanent, long-term employment has decreased. Part-time work, seasonal employment, partial self-employment requires employees to possess a different set of financial management skills.

These factors have determined the growing level of personal responsibility individuals should bear. Financial management strategy implemented at present can influence the quality of individual's life in the future. Twenty years ago, the issues concerning good pension based on state guaranteed social security system were not as topical as they are now. The forecasted life expectancy is growing, thus pension payout period will be longer. Economic instability of the state, inflation, constantly changing tax legislation and other factors increase individuals' uncertainty about the stability of future incomes. Pension system imposes individual responsibility both for incomes, which ensure the formation of the pension capital, and investments to not only sustain this capital, but also to increase it. A person should take responsibility for financing their own and their family healthcare. The cost of education has also risen. Moreover, even if the services of financial consultants and brokers are used, an individual is still personally responsible for own decisions when purchasing financial services.

The majority of people use credit facilities to finance their purchases. Furthermore, at present even young people have access to financial products, including microcredits. Thus, people face the necessity to make financial decisions at an early age. Competition among financial service providers leads to reduction of credit interest rates, which motivates consumers to undertake even larger obligations. However, inconsiderate financial decisions lead to financial mistakes, which may have significant adverse consequences in the future [18][27].

Growing information flow. Certain changes occurred in the way financial transactions are carried out, e.g. receiving income (salary, benefits, and pension) and paying expenses (utility and other bills). For example, in Latvia different services can be accessed at the site www.latvija.lv, and this causes changes in consumer behavior. It has increased the demand for electronic payments and online transactions. Individuals who do not use these options overpay for the services, because financial institutions have to employ specially trained personnel. Social interaction at various social platforms has also increased.

New distribution channels. At present, a person should not go to the bank to receive a financial service, however, s/he has to be able to process information provided by online access to financial institutions.

Liberalization of financial markets. Expanding product range, growing complexity of financial products, introduction of new technologies are the factors that caused the increase of the volume of aggressive marketing and growth of fraud. There is a higher risk that consumers are persuaded to buy financial products and conduct financial transactions that are not to their benefit.

Wider range of financial products**.** Technological development and market liberalization have provided a wider access to financial services, at the same time, the products have become more complicated, and so the customers not only need but also are obliged to compare the offers. They should be aware of such matters as commission, interest rates, terms and conditions of the agreements and potential risks. Financial service sector is becoming more complicated and keeps changing. Experts recognize that the level of financial literacy of consumers is insufficient. It is manifested as problems in using credits cards [24], problems in meeting obligations and inadequate pension planning [23], lack of participation in the stock market [20], inability to accumulate wealth or manage it efficiently [28]. The financial crisis clearly demonstrated that individuals should invest in products, the mechanism of which they understand. In turn, the recognized problems open the structure of financial literacy.

2. CONCEPT OF FINANCIAL LITERACY

Depending on the aims of a concrete research, financial literacy can be interpreted in two different ways: broad and narrow interpretation (Table 2).

Table 2.

Financial literacy interpretation [5] [36]

Narrow interpretation	Broad interpretation
Financial management	Understanding of economic processes
Budget planning	Understanding household decision making
Savings	
Investment	
Insurance	

The definition suggested by Fear (2008) concerning the factors characterizing a financially literate person implies gradual development: 1) first, concrete fields in which a person is competent are defined, for example, «being knowledgeable, educated, and informed about managing money and assets, banking, investments, credit, insurance and taxes»; 2) then the knowledge is organized into levels, observing «simple-to-complex» principle, for example, «understanding the basic concepts underlying the management of money and assets, the time value of money in investments and the pooling of risks in insurance»; 3) finally, conceptual understanding of the entire field of finance, «knowledge and understanding to plan and implement financial decisions» [30].

Financially literate people are more competent in retirement planning [26], more eagerly become participants in the financial market and reach better results compiling credit portfolio [32], are able to save larger sums of money [20], can avoid high interest rates and additional costs [11][21][25]. Advancement of financial literacy allows households to reach high level of welfare, helps adapt to changing living conditions and diminish risks, thus reducing distress and increasing the sense of security. It can be stated that financial literacy as a set of definite knowledge and skills guides customer behavior and helps developing a special attitude to money. It is attested by research conducted by several authors and the published results.

Generally, to determine the level of financial literacy of an individual, a gradual approach is used. First, the ability to make simple mathematical calculations is determined (numeracy), then understanding of basic economic processes and concepts is assessed, thus relating financial literacy to economic literacy. After that, respondent's cognitive abilities with regard to finance are estimated. Testing of mathematical skills is used as an assessment tool in many studies, as numerical ability is seen as an element of financial literacy [9][14][17][34]. If a person has poor numeracy skills, s/he either does not deal with financial issues at all (financial backwardness) or does not select the correct product, as it is difficult to compare different offers [10].

However, in the recent years the necessity to translate knowledge into actions has been highlighted, as the transition from knowledge to practical application is connected with emotional, psychological dimension of an individual, as well as rational and cognitive behavior [5].

Five parameters of human behavior in the context of financial literacy have been distinguished: 1) financial monitoring - checking bank statements and recording expenses; 2) financial planning - dealing with retirement and insurance issues, using consulting services; 3) informed selection of financial products comparing products and services; 4) practical application of information on financial issues; 5) overall financial control and ability to save money [30]. Analyzing the development of the concept in the course of time, it can be noticed that recently the notion of financial literacy covers also social aspect. At present, the focus is made not only on reaching individual financial aims using financial literacy as a tool, but also on raising public welfare.

3. GENERAL PRACTICE OF FINANCIAL LITERACY ASSESSMENT

Different authors assess different components of financial literacy based on their subjective interpretation of the concept. For example, an in-depth analysis of the level of financial literacy of Australian citizens was carried out in the research by the Australian government «Financial Literacy: Australians' Understanding Money» [4]. Seven components of financial literacy were analyzed: budget, saving, investing, credit and debt, planning and retirement, protecting money, information and advice. Within «The 2012 Consumer Financial Literacy Survey» conducted in the USA [15], the level of financial literacy was analyzed considering nine components of the concept: budget, bills, debt, getting money; savings; spending; credit; credit cards and mortgage. Based on the definition provided by the OECD, financial literacy should be evaluated taking into consideration four dimensions: 1) knowledge and understanding; 2) skills; 3) beliefs and attitudes; 4) behavior [27]. However, some researchers distinguish only two: understanding and use, which is practical application of the knowledge [16].

Financial literacy comprises several elements: money literacy, price literacy, budget literacy [31]. Money literacy implies competence in managing cash and non-cash money. Price literacy includes competences necessary to understand pricing mechanism and the impact of inflation. Budget literacy is the ability to manage personal and family budget, it also includes the ability to manage financial assets (deposits, investments, insurance) and financial liabilities (loans and leasing). In both cases, it is connected with awareness of the range of financial products and services, the ability to compare the them and select the most appropriate.

Researchers often unite questions into blocks based on financial literacy components, there are also unstructured questionnaires simply grouping questions by degree of complexity: basic and advanced financial literacy questions [33]. Some researchers analyze all dimensions of financial literacy, yet other focus on separate elements. It depends on the scope of research, as well as on the researcher's opinion on what financial literacy is – knowledge, skills and cognition, or all three at once.

In many studies, respondents are invited to do self-assessment of their financial knowledge [1][8][18][22][33]. However, it has been recognized that the perceived level of financial literacy of the respondents should always be compared with the actual level.

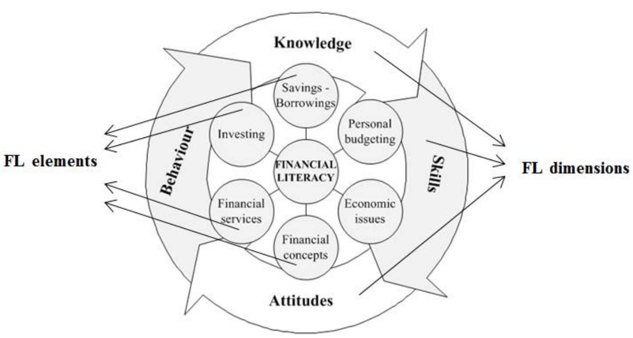

Figure 1. Conceptual model of financial literacy [13]

Based on the conceptual model of financial literacy (see Figure 1) and the results of the pilot research conducted in 2013 [13][29], an instrument for evaluating the level of financial literacy was developed – the questionnaire comprising two parts (Part A and Part B). This instrument covers only knowledge dimension. Firstly, knowledge is the main factor influencing consumer behavior [7], thus this dimension can be considered the basis for three other dimensions. Secondly, the aim of the research is to assess the level of financial literacy of the population of Latvia, therefore the survey should include questions, which can be answered either correctly or incorrectly.

Part A comprises 8 questions, which characterize respondent profile: gender, age, respondent location, education level, education field, social/employment status; household type; income level. Part B comprises 24 questions covering the following areas: 1) savings and borrowing 2) personal budgeting, 3) economic issues 5) financial concepts, 5) financial services, 6) investing. The questionnaire includes multiple choice questions formulated as tasks.

Question statements in Part B reflect the content of the question and its connection to a definite component of financial literacy (see Figure 1 and Table 3). The numerical order of the question in the questionnaire is presented in parentheses to be able to identify the question by its name.

Respondents were asked to choose one from five answer options; there was one correct answer, three incorrect answers and the «don't know» option. In addition, respondents were invited to evaluate each question according to 5-grade Likert scale (1 – very simple question, 5 – very complex question). This gave the opportunity to compare actual level of respondent financial knowledge with the perceived level.

Table 3.

Design of Part B of the questionnaire

Question code	FL element	Question topic
SAVINGS_1(1) SAVINGS_1(2) SAVINGS_3(3)	Savings	Deposit
SAVINGS_4(4)		Investment safety
DEBT_1(5) DEBT_2(6) DEBT_3(7) DEBT_4(8)	Borrowings	Loans
BUDGET_1(9) BUDGET_2(10)	Personal budgeting	Tax return
BUDGET_3(11) BUDGET_4(12)		Balance sheet
THEORY_1(13)	Economic issues	Purchasing power
THEORY_2(14)		State economic development
THEORY_3(15)		Risk and return
THEORY_4(16)		Time value of money
SERVICES_1(17)	Financial services	ATMs
SERVICES_2(18)		Online banking services
SERVICES_3(19)		Payment cards
SERVICES_4(20)		Money transfers
INVEST_1(21) INVEST_2(22) INVEST_3(23) INVEST_4(24)	Investing	Stocks and bonds

The data were processed using *MS Excel* and *SPSS* environment. The data were analyzed using the following statistical analysis methods: analysis of relative values and means, frequency analysis, and T-test to compare the means of two independent samples. The points score characterizing the level of financial literacy of each respondent was determined. In addition, correct answers were assessed in accordance with the ascribed complexity rank. Based on the results of individual respondents, the level of financial literacy of the Latvian citizens was evaluated.

To calculate the score obtained by each respondent filling in the questionnaire, the input data were transformed into a binary system, using code 0/1: '1' – if the respondent chose the correct answer; '0' – if the respondent chose an incorrect answer or did not know the answer.

In order to evaluate the level of financial literacy of respondent the mean points score in the sample were calculated. Estimating the score in case a respondent gave a correct answer, rank w_i ascribed to the respective question was taken into account. The score that a respondent could get for a correct answer n_i was calculated by Formula (1):

$$n_i = 1 \text{ point} * w_i \tag{1}$$

The respective rank was ascribed to the questions based on expert survey. Experts, similar to respondents, were invited to evaluate each question according to 5-grade Likert scale (1 - very simple question, 5 - very complex question). Seven experts took part in ranking the questions (Riga Technical University, CE Services, Ltd., Norvik Banka). Rank w_i was estimated as arithmetic mean of evaluations provided by experts.

The maximal score a respondent could receive answering correctly to all questions in the questionnaire was 54.2 points.

Minimal score was equal to 0. To interpret the result obtained by each respondent, the score was transcribed according to 10-grade scale used to assess educational performance.

4. METHODOLOGY AND SAMPLE DATA

Within a survey, 506 questionnaires were submitted, 390 questionnaires included questions ranked by degree of complexity. 29% of respondents were men and 71% – women. In general, women dominate in terms of number in many studies dedicated to financial literacy issues, which were conducted in different countries [2]. It may be argued that women are more socially active and demonstrate more willingness to participate in the research of this kind.

Distribution of respondent according to their age was as follows: 46% are in 18–25 age group and this corresponds to the criterion employment status, as 39% of respondents are students. The next largest respondent group (23%) is 31–45 years old, 17% of respondents are 46–62 years old, 8% are in 26–30 age group. 6% of respondents are in the group ‘above 62’, which, in its turn, corresponds to employment status criterion – retired, it is 3%. It means that some respondents in the group ‘above 62’ are still employed. 1% of respondents are unemployed.

With respect to education level, 46% of respondents have secondary education, 53% respondents have higher education (irrespective whether graduate or post-graduate), and 1% have primary education. Income level per household or per one family member of the majority of respondents (60%) is in the range 286–700 EUR. 20% indicated that their income level is above 700 EUR and 19% that it is 285 EUR and less.

Respondent segmentation according to different criteria allowed testing several hypotheses.

H1: There is a correlation between individual’s level of financial literacy and his/her age.

It was forecasted that respondents in the 31 to 45 age group would demonstrate the highest level of financial knowledge. After 30 people already have work and life experience, they have already obtained education. At this age, many people have children that should be taken care of. In the course of their lives, they have already faced a range of financial issues and problems, thus they have acquired additional knowledge and skills in the field of finance (for example, they know how to apply for a mortgage or lease a car).

H2: The level of financial literacy has a positive impact on the welfare of an individual (household).

The criterion ‘Average household income per family member’ was used to test H2. Fig.2. presents the ratio of correct answers given to every question, distributing respondents according to gender. The largest fraction of male respondents answered correctly to 15 questions out of 24, which, in comparison to women, demonstrates a certain tendency.

The difference was particularly noticeable in the answers to the questions concerning investment (INVEST block). It can be connected with the fact that men more actively deal with investments, and that was confirmed by other studies [6].

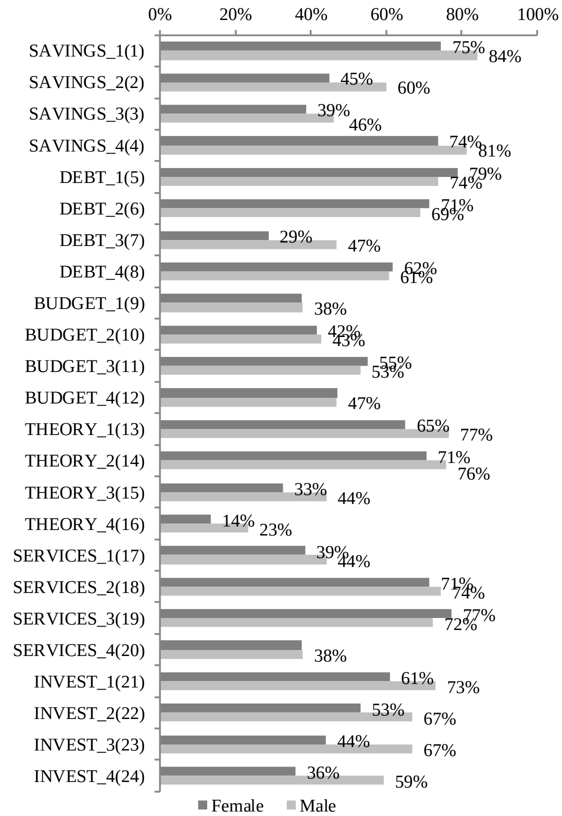

Figure 2. Ratio of correct answers to the total number of answers, percent (distributed by gender). Source: results of the project

For example, in the research conducted by Lusardi (2008) men showed better results answering the questions on compound interest, inflation and share market risks [19]. Women demonstrated a lower level of financial knowledge, especially regarding the issues of risk diversification. It can be explained by different scopes of responsibility and different roles performed in a household – which member of the family more actively deals with money management, makes larger contributions to the family budget, plans most important purchases and similar questions.

Segmenting the answers by education level, it can be concluded that financial literacy level can be directly dependent on education level. A person acquires certain competences in the process of education developing a knowledge base and it is attested by the ratio of correct answers. For example, in order to answer correctly to the question SAVING_1 (1) «How much will you receive if you invest 100 EUR for a month, given that the annual interest rate on deposit is 12%», it is necessary to know how to calculate interest. 77% of respondents answered correctly to this question, thus attesting their numerical literacy. The respondents in ‘above 62’ age group – ‘seniors’, demonstrated the lowest level of knowledge anwering to the majority of questions (Fig.3).

It is particularly true with respect to questions on savings and liabilities, where the ratio of correct answers given by the ‘senior’ at times does not exceed 30%.

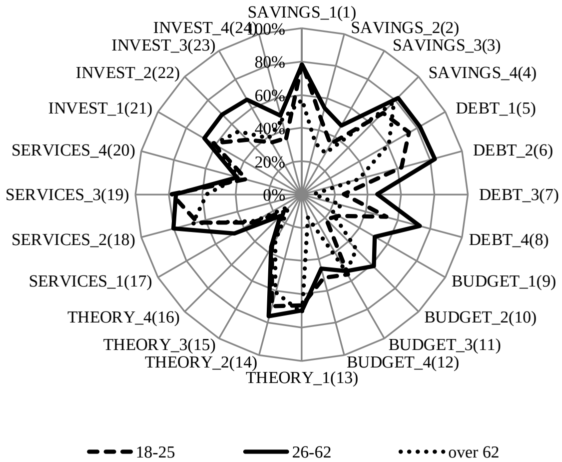

Figure 3. Ratio of correct answers to the total number of answers, percent (distributed by age) Source: results of the project

Distributing respondents by income level, there is a considerable positive correlation between income level and the level of financial literacy (Fig.4).

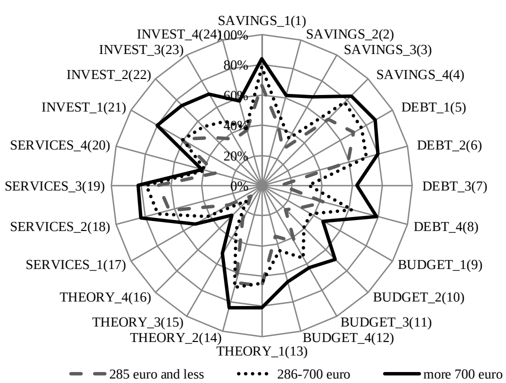

Figure 4. Ratio of correct answers to the total number of answers, percent (distributed by income level). Source: results of the project

It can be seen in Fig. 4 that the respondents with income level 'more than 700 EUR' demonstrated better results answering to all questions. Based on the results of the pilot survey [13][29] evaluating the components of financial literacy according to complexity criteria, in order to analyze the differences in the ranking of the questions by experts and respondents, two hypotheses were put forward.

H3: *Respondents consider the questions on economic theory, financial concepts and investments to be the most complex.*

H4: *The actual level of financial literacy of respondents is lower than the perceived knowledge level.*

According to the results of international research by *The National Bureau of Economic Research* (NBER), young people lack financial knowledge, and they recognize that. In turn, adults have a tendency to overstate their knowledge [4]. However, some studies show that exactly the students have a tendency to overstate their contribution, expecting excellent grades for the work that is not up to the highest standard [35].

Table 4.

Actual and perceived knowledge of the respondents

Respondent profile criteria	Respondent	Actual knowledge	Perceived knowledge
Gender	Male	56%	2.94
	Female	49%	3.15
Age	18–25	49%	3.12
	31–62	56%	3.11
Education level	Secondary education	48%	3.10
	Undergraduate education	54%	3.02
	Postgraduate education	58%	3.14
Thematic field of education	"The economist"	58%	2.94
	Other groups	46%	3.21
Employment status	Student	48%	3.16
	Employed	56%	2.99

Source: results of the project

The results show that respondents evaluate their knowledge adequately. The respondents, who value their knowledge high, rank more questions as being simple, they also give more correct answers (see Table 4).

5. CONCLUSIONS

The process of evaluation of the level of financial literacy, when a respondent is an active subject, in a certain way activates the thoughts of an individual, thus setting a person' mind on responsibilities, opportunities, and risks in the field of finance.

The developed instrument for evaluating the level of financial literacy of the population and results of the survey allow making several conclusions. First, respondent answers, which characterize their level of financial literacy, differ significantly with respect to the following characteristics: gender, education level, thematic field of education and income level. Secondly, respondents' understanding of the notions, which are not in the focus of their everyday communication, cause problems in giving correct answers to the questions related to financial and economic theory. It points at the necessity to advance public knowledge and analytical skills in the basic principles of economics.

The author considers that in accordance with the National Strategy for Financial Literacy in Latvia 2014–2020, which sets out an integrated strategic approach to gradual increase of the level of financial literacy of the population, it is necessary: 1) Universities should introduce study courses promoting student understanding of the basic principles of successful personal finance management in the first years of studies; 2) state institutions, financial market participants and social partners should develop and offer high quality life-long learning opportunities (courses, seminars, master classes) to the citizens from other age and employment status groups.

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7. REFERENCES

[1] J. Almenberg, J. Save-Soderbergh, “Financial literacy and retirement planning in Sweden”, **Journal of Pension Economics and Finance**, Vol. 10, No. 4, 2011, pp. 585-598.

[2] A. Atkinson, F. Messy, **Measuring Financial Literacy: Results of the OECD**, OECD Working Papers on Finance, Insurance and Private Pensions No. 15, OECD Publishing, 2012.

[3] Australian Securities and Investments Commission. **National Financial Literacy Strategy**, Report 229, 2011. Available from: www.asic.gov.au

[4] Australia. Financial Literacy Foundation. **Financial literacy: Australians understanding money,** Canberra: Financial Literacy Foundation, 2007. Available from: http://www.understandingmoney.gov.au/report

[5] Australian Securities and Investments Commission. **Financial literacy and behavioral change, Report 230**. Australian Securities and Investments Commission, Sydney, 2011. Available from: http://www.financialliteracy.gov.au/

[6] V. L. Bajtelsmit, A. Bernasek, “Why Do Women Invest Differently Than Men?”, **Financial Counseling and Planning**, 1996. Available from: http://dx.doi.org/10.2139/ ssrn.2238

[7] A. Capuano, I. Ramsay, “Financial Literacy Project „What Causes Suboptimal Financial Behaviour? An Exploration of Financial Literacy, Social Influences and Behavioural Economics””. **Research report**, 2011. Available from: http://ssrn.com/abstract=1793502

[8] F. Carpena, S, Cole, J. Shapiro, B. Zia, **Unpacking the Causal Chain of Financial Literacy**. The World Bank Development Research Group, WPS 5798. 2011.

[9] H. Chen, R. P. Volpe, “An Analysis of Personal Financial Literacyamong College Students”, **Financial Services Review**, Vol. 7, No. 2, 1998, pp. 107-128.

[10] European Parliament. **Report on protecting the consumer: improving consumer education and awareness on credit and finance**. 2007. Available from: http://www.europarl.europa.eu/

[11] Financial Services Authority. **Measuring financial capability: an exploratory study.** 2005. Consumer research 37. Available from: http://www.fsa.gov.uk/

[12] Central Statistical Bureau of Latvia. **Population number and its change by statistical region,** 2016. Available from: http://data.csb.gov.lv/

[13] G. Ciemleja, N. Lace, J. Titko, “Financial Literacy as a Prerequisite for Citizens’ Economic Security: Development of a Measurement Instrument”, **Journal of Security and Sustainability,** Vol. 4, No. 1, 2014. pp. 29-40.

[14] K. Gerardi, L. Goette, S. Meier, Financial Literacy and Subprime Mortgage Delinquency: Evidence from a Survey Matched to Administrative Data. Federal Reserve Bank of Atlanta, **Working paper**, 2010-10.

[15] Harris Interactive. **The 2012 Consumer Financial Literacy Survey**. National Foundation for Credit Counseling, 2012.

[16] S. J. Huston, “Measuring financial literacy”, **Journal of Consumer Affairs**, Vol. 44, No. 2, 2010, pp. 296-316.

[17] L. Klapper, A. Lusardi, G. A. Panos, **Financial Literacy and the Financial Crisis.** Policy research working paper WPS No. 5980. Washington: The World Bank, 2012.

[18] T. Krizek, D. Hradil, “Financial Literacy of University Students: Methodology and Results of an Online Survey”, **International Journal of Business and Social Science**, Vol. 3, No. 22, 2012, pp. 92-102.

[19] A. Lusardi, **Financial Literacy: An Essential Tool for Informed Consumer Choice?** National Bureau of Economic Research, No. 14084, 2008. Available from:http://www.econstor.eu/

[20] A. Lusardi, O. S. Mitchell, “Financial literacy and retirement preparedness: Evidence and implications for financial education”, **Business Economics,** Vol. 42, No. 1, 2007, pp. 35-44.

[21] A. Lusardi, O. S. Mitchell, **Financial literacy and retirement planning: New evidence from the RAND American Life Panel,** Michigan Retirement Research Center Research Paper No. WP 157, 2007.

[22] A. Lusardi, O.S. Mitchell, “Financial literacy around the world: an overview”, **Journal of Pension Economics and Finance,** Vol. 10, No. 04, 2011, pp. 497-508.

[23] A. Lusardi, P. Tufano, “Debt Literacy, Financial Experience and Overindebtedness”, **Journal of Pension Economics and Finance**, Vol. 14, 2015, pp. 332-368

[24] D. Murray, “How much do your kids know about credit?” **Medical Economics**, Vol. 77, 2000, pp. 58-66.

[25] Ministerial Council for Education, Early Childhood Development and Youth Affairs. **National Consumer and Financial Literacy Framework**, 2009. Available from: http://www.mceecdya.edu

[26] M. Orszag, Financial Literacy: Viewpoint. Global Economic Symposim, **Background paper**, 2012. Available from: http://www.global-economic-symposium.org/

[27] Organisation for Economic Co-operation and Development (OECD). **Improving Financial Literacy: Analysis of Issues and Policies**, 2005. Available from: www.oecd.org

[28] V. Stango, J. Zinman, “Exponential growth bias and household finance”, **The Journal of Finance,** Vol. 64, No. 6, 2009, pp. 2807-2849.

[29] J. Titko, G. Ciemleja, N. Lace, “Financial Literacy of Latvian Citizens: Preliminary Survey Results”, **Procedia-Social and Behavioral Sciences,** Vol. 213, 2015, pp. 12-17.

[30] The Social Research Centre. **Adult Financial Literacy in Australia (December 2011**). Full Report of the results from the 2011 ANZ Survey. Available from:http://www.anz.com/resources/

[31] H. Tomaskova, H, Mohelska, Z. Nemcova, “Issues of Financial Literacy Education”, **Procedia-Social and Behavioral Sciences**, Vol. 28, 2011, pp. 365-369.

[32] United Nations Trust Fund for Human Security. **Human Security in Theory and Practice.** New York: United Nations. 2009. Available from: http://hdr.undp.org/

[33] M. van Rooij, A. Lusardi, R. Alessie, R. “Financial Literacy, Retirement Planning and Household Wealth”, **The Economic Journal**, Vol. 122, No. 560, 2012, pp. 449-478.

[34] D. Widdowson, K. Hailwood, “Financial literacy and its role in promoting a sound financial system”, **Reserve Bank of New Zealand Bulletin**, Vol. 70, No. 2, 2007, pp. 37-47.

[35] M. Wilson, L.E. Gerber, “How generational theory can improve teaching: Strategies for working with the “Millennials””, **Currents in Teaching and Learning**, Vol. 1, No. 1, 2008, pp. 29-44.

[36] Worthington, AC, Predicting financial literacy in Australia, **Financial Services Review**, Vol. 15 No. 1, Spring 2006, pp. 59-79.