

FINANCIAL LITERACY OF STUDENTS IN SLOVAK REPUBLIC

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Abstract

Financial literacy is the ability to understand money matters, to manage credit and debt and to make sound financial decisions. Financial literacy is becoming more and more important worldwide. The global financial crisis with strong confusion in financial markets all over the world has highlighted the need for consumer protection and strengthening the financial literacy for long-term stability of the financial sector. As a result, government authorities worldwide and also in Slovak Republic are looking for practical and effective ways of improving consumer protection in financial services and supporting financial literacy. However, according to conclusions of international researches, as well as national public and private surveys, citizens of many countries including Slovakia have insufficient level of the financial literacy. The aim of a paper is to analyse the level of knowledge of selected population group – students, who study at universities in Slovakia. The paper defines financial literacy in the way it is defined by different institutions and states. It defines the role of universities in Slovakia and thereafter it presents the survey results about financial literacy (financial knowledge) of students studying at universities in Slovakia.

Key words: financial literacy, financial knowledge, financial behaviour

JEL Code: A21, D14, I22

Introduction

In the era of global financial crisis competent governmental and nongovernmental organisations in Slovakia as well as in Europe and in the world devote increased attention to consumer protection not only on the market of goods and services but also on the financial market. An inevitable part of consumer protection is a sufficient informing of consumers about their rights and duties, as well as about the products themselves. In the financial market an important role is played by knowledge from the field of finance and personal finances management.

Present economic conditions require people to orientate themselves sufficiently in the field of finance, personal finances management and to have an overview about products in the financial market. The reason for inevitability of orientation in above mentioned fields is that an individual makes financial decisions every day which will influence his financial situation in short as well as long run.

Many published research results in Slovakia as well as in the world point out the low level of financial literacy of the population, for example: among the young and women in the United States (Lusardi & Mitchell, 2011; MESR & MFSR, 2008), of college students in the United States (Chen & Volpe, 1998), of university students in Czech republic (Tomaskova, Mohelska, & Nemcova, 2011), of university students in Turkey (Altintas, 2011).

The aim of a paper is to analyse the level of knowledge of selected population group – students, who study at universities in Slovakia.

The paper defines financial literacy in the way it is defined by different institutions and states. It defines the role of universities in Slovakia and thereafter it presents the survey results about financial literacy (financial knowledge) of students studying at universities in Slovakia. At the end it compares the survey results about financial literacy of students of universities in Slovakia and in some other countries of the world.

1 Importance and Definition of Financial Literacy

Recently the importance of financial literacy has increased both in world economies and in European economies and in Slovakia. Reasons for this situation are found in solving problems of financial crisis, but also as a consequence of demographic, economic and political changes (Megyesiova & Lieskovska, 2011). Survey of financial literacy schemes in the EU 27 (Habschick, Seidl, & Evers, 2007) presents 2 categories of reasons for financial literacy: complexity of individual's needs and complexity of financial products in a structure as it is presented in Tab. 1.

Tab. 1: Main drivers for financial literacy

Complexity of individuals' needs	Complexity of financial products
<ul style="list-style-type: none"> – Growing instability of individuals' working life – Decrease of social security – Increasing personal responsibility – Increasing prosperity – Increasing indebtedness – Increase in the life expectancy – Increasing number of owner-managed enterprises 	<ul style="list-style-type: none"> – New distribution channels – Deregulation of financial markets – Wider range of financial products and increasing dynamic in the development of new products – Increasing amount of information
Individuals need financial literacy in order to cope with the increased complexity of their needs and financial products.	

Source: (Habschick, Seidl, & Evers, 2007), p. 5

With the notion financial literacy the notion financial education is closely connected.

The Organization for Economic Cooperation and Development (OECD) initiated creating a commission which worked out the principles and program of financial education which should be implemented in the educational systems of member states. OECD defines financial education as “the process by which individuals improve their understanding of financial products and concepts; and through information, instruction and/or objective advice develop the skills and confidence to become more aware of financial risks and opportunities, to make informed choices, to know where to go for help, and to take other effective actions to improve their financial well-being and protection“ (OECD, 2005).

What is expressed by the term financial literacy? This term is explained by many institutions and state differently. Scientists and specialists agree that financial literacy is one of the parts of economic and general literacy. They have no clear definition of financial literacy so far.

Sandra J. Huston states: „The standard definition of literacy developed by the Literacy Definition Committee and used by the National Adult Literacy Survey is “using printed and written information to function in society, to achieve one’s goals, and to develop one’s knowledge and potential (Kirsch et al. 2001, p. 3).“ (Huston, 2010)

Angela A. Hung, Andrew M. Parker, Joanee K. Yoong (2009) analysed the definitions of financial literacy published by different authors after the year 2000. On the basis of analysis results they processed the overview of conceptual definitions of financial literacy (Tab. 2).

Remund (2010) deals with defining of the issue of financial literacy in more detail when he distinguishes between conceptual definitions and operational definitions.

The European Commission defines financial literacy as “the capability of consumers and small business owners to understand retail financial products with a view to making informed financial decisions”(Habschick et al., 2007).

In conditions of the Slovak Republic we can also find several definitions.

The dictionary of knowledge economy defines financial literacy as the ability to use knowledge, skills and experience for efficient management of own financial resources with the aim to ensure life long financial security of oneself and one’s household (Sivák, 2011)

The National Standard of Financial Literacy which is an open document in which financial literacy and specific knowledge, skills and experience are defined, which teachers and students must dispose of in order to be able, according to their needs, extend their knowledge about personal finance, defines financial literacy as the ability to use knowledge,

skills and experience for efficient management of own financial resources with the aim to ensure life long financial security of oneself and one's household. It emphasises the fact that financial literacy is not an absolute state; it is a continuum of abilities which are conditioned by variables such as age, family, culture or place of residence. It states that financial literacy is indication for the state of continuous development which enables each individual to react effectively on new personal events and constantly changing economic environment (MESR & MFSR, 2008).

Tab. 2: The overview of conceptual definitions of financial literacy:

Source	Conceptual Definitions
Hilgert, Hogarth, & Beverley (2003)	Financial <i>knowledge</i>
FINRA (2003)	"The <i>understanding</i> ordinary investors have of market principles, instruments, organizations and regulations" (p. 2).
Moore (2003)	"Individuals are considered financially literate if they are competent and can demonstrate they <i>have used knowledge</i> they have learned. Financial literacy cannot be measured directly so proxies must be used. Literacy is obtained through practical <i>experience</i> and active <i>integration of knowledge</i> . As people become more literate they become increasingly more financially sophisticated and it is conjectured that this may also mean that an individual may be more competent" (p. 29).
National Council on Economic Education (NCEE) (2005) b	" <i>Familiarity</i> with basic economic principles, knowledge about the U.S. economy, and <i>understanding</i> of some key economic terms" (p. 3).
Mandell (2007)	<i>understanding</i> of some key economic terms" (p. 3). Mandell (2007) "The <i>ability</i> to evaluate the new and complex financial instruments and <i>make informed judgments</i> in both choice of instruments and extent of use that would be in their own best long-run interests" (pp. 163-164).
Lusardi and Mitchell (2007c)	[<i>Familiarity</i>] with "the most basic economic concepts needed to make sensible saving and investment decisions" (p. 36).
Lusardi and Tufano (2008)	Focus on debt literacy, a component of financial literacy, defining it as "the <i>ability to make simple decisions</i> regarding debt contracts, in particular how one <i>applies basic knowledge</i> about interest compounding, measured in the context of everyday financial choices" (p. 1).
ANZ Bank (2008), drawn from Schagen (2007)	"The <i>ability to make informed judgements</i> and to take effective decisions regarding the use and management of money" (p. 1).
Lusardi (2008a, 2008b)	" <i>Knowledge</i> of basic financial concepts, such as the working of interest compounding, the difference between nominal and real values, and the basics of risk diversification" (p. 2).

Source: Hung, Parker, & Yoong, 2009

For the needs of our paper we will define financial literacy as the level of financial knowledge a university student in Slovakia has.

2 Financial Literacy of University Students in Slovakia

The mission of universities which are part of European University education and common European research according to § 1 paragraph 2 of Act No. 131/2002 of the Laws of the Higher Education to develop harmonic personality, knowledge, wisdom, goodness and creativity in man and to contribute to development of education, science, culture and health

for the welfare of the whole society and this way to contribute to the development of the knowledge society.

In relation to the above mentioned basic mission of the universities in Slovakia, the long term plan in educational, research, developmental, artistic and other creative activity for the field of the universities until 2014 considers universities as important and exclusive places of education of experts at all stages of university education who are prepared for solving principal contemporary problems of the Slovak society, in the field of increasing the social and cultural level of the society, economic growth, improving the environment and in other fields at regional, national as well as international level.

Each individual, also a specialist with academic education in any scientific field makes important decisions in the field of his own finances.

In 2011 university education in Slovakia was provided by 20 public universities, 3 state universities and 12 private universities. Besides these four foreign universities with seat in Czech Republic had authorisation to provide university education on the territory of the Slovak republic. Two of them used this authorisation actively.

From November 2011 to March 2012 a questionnaire survey was carried out aimed at financial literacy of university students of Slovakia. The questionnaires were distributed personally but students could fill them in via the internet. Teachers at selected universities were addressed to distribute the questionnaires. On the whole 722 questionnaires were collected out of which 104 were questionnaires filled in via the internet. Even if the survey was aimed at financial literacy of university students in Slovakia, 25 students studying at universities in Czech Republic and 2 students from England, joined the survey. Students were from different institutions of tertiary education and universities of different stages of study studying different specialisations.

The aim of our questionnaire survey was only the analysis of financial knowledge of university students. The questionnaire contained 24 questions, of which 17 were specialist questions, and 7 questions were identifying. The identifying questions referred to sex, age, forms of study and respondents' stage of study. With these questions alternative answers were given. Questions referring to town of study, name of the university and study specialization of respondents were formulated as open questions. Specialist questions were formulated in a way which enabled us to analyze students' knowledge about personal finances. Alternative answers were given, or there were combinations of alternative answers with the possibility of a free answer. The questions were formulated so that we could analyse the knowledge of the students about the personal finances. We tried to find out if they can correctly determine the

future value of money, calculate the balance on their account, what is money covered by. We also wanted to know about the knowledge of students about consumer loans, credit card, and housing savings. We devoted attention to comparison of risks when making capital and investment insurance, and of risks when investing into shares and bonds. We also wanted to find out if students understand the terms as the down payment, leasing, inflation, nominal pension and real pension.

The survey was joined by 695 students from 13 public universities and 2 private universities and 1 foreign university with seat in Czech Republic. The structure of respondents according to universities is presented in Table 3. Most of them – 553 respondents – students studying at universities in Slovakia were studying at a public university, 90 at a foreign university with seat in Czech Republic and 52 at a private university. The structure of respondents according to further educational and demographic characteristics is presented in Tab. 3.

Tab. 3 Characteristics of the sample

		Number of participants	Percentage
Education			
University	Public university	553	79,57
	Private university	52	7,48
	Foreign university	90	12,95
Stage of study	1st stage	416	59,86
	2nd stage	268	38,56
	3rd stage	11	1,58
Specialisation	Economic	253	36,40
	Non economic	431	62,01
	Not stated	11	1,58
Demographic Characteristic			
Sex	Male	219	31,51
	Female	476	68,49

Basic results of the questionnaire survey regarding the number of correct answers from the aspect of above stated educational and demographic characteristics are presented in Tab.4.

In Tab. 4 following results are presented: minimum number of correct student's answers (min), maximum number of correct student's answers (max), average number of correct answers (average), middle values – modus and median of multiplicity of correct answers and calculated index of financial literacy (FL index) of single respondents' groups. When we multiply the FL index by one hundred we get the percentage of success rate of respondents.

Tab. 4 Survey results. Correct answers

		Min	Max	Average	Modus	Median	FL index	Number
Total	Total	3	16	9,1741	9	9	0,5397	695
	Male	3	15	9,8174	10	10	0,5775	219
	Female	4	16	8,8782	9	9	0,5222	476
Female	Economic	4	16	9,8797	11	10	0,5812	158
	Non economic	4	14	8,3694	9	8	0,4923	314
	Not stated	7	12	9,25	9	9	0,5441	4
Male	Economic	4	15	10,2105	10	10	0,6006	95
	Non economic	3	15	9,547	9	9	0,5616	117
	Not stated	6	13	9	9	9	0,5294	7
Total	Economic	4	16	10,004	10	10	0,5885	253
	Non economic	3	15	8,6891	9	9	0,5111	431
	Not stated	6	13	9,0909	9	9	0,5348	11
Stage of study	1st	4	15	8,8365	9	9	0,5198	416
	2nd	3	16	9,6903	9	10	0,57	268
	3rd	5	14	9,3636	9	9	0,5508	11

The Tab. 4 above indicates that the smallest number of correct answers in the survey were three correct answers, namely with men who are studying at the second stage of study (master degree), non – economic specialization. The biggest number of correct answers of the survey was 16, namely with a women studying at the second stage of study, economic specialization.

The average number of correct answers after rounding to the nearest whole number according to single categories of respondents was 8, 9 and 10.

The research results show that knowledge of 695 respondents is in 53. 97 % correct, out of which men's correct answers account for 57. 75 % and women's correct account for 52. 25 %. It means that men achieved better overall result than women.

On the basis of analysis results we came to a conclusion that the knowledge level in the field of finances with students who study economic specializations is higher by 7.74 % than with students who study non – economic study specializations or who didn't state the study specialization. The FL index of students who study at the third grade (doctoral study) is lower than that of second study grade students. Here it is necessary to say that all students in this category study non – economic study specializations which surely influenced this result.

At the Faculty of Business Economics of the Economics University in Bratislava with seat in Košice the degree of mastering the compulsory knowledge in courses which are ended by an examination is evaluated by a score from 0 to 100. The classification scale is shown in the Tab. 5.

Tab. 5: The classification scale at the Faculty of Business Economics of the Economics University in Bratislava with seat in Košice

Classification	Classification scala – grade				Score
Passed	A	Excellent	1	Excellent results	91-100
	B	Very good	1,5	Above average results	81-90
	C	Good	2	Average results	71-80
	D	Satisfactory	2,5	Acceptable results	61-70
	E	Sufficient	3	Results meeting minimum criteria	51-60
Not passed	FX	Not sufficient	4	Further work is required	0-50

If we apply this classification to evaluate college students' knowledge in Slovakia the results of their evaluation will be shown in the Tab. 6.

Tab. 6: The results of evaluation of college students' knowledge in Slovakia

Evaluation	Grade	Number of respondents	Percentage of respondents
1	A	1	0,14
1,5	B	18	2,59
2	C	93	13,38
2,5	D	75	10,79
3	E	251	36,12
4	FX	257	36,98
		695	100,00

Applying this classification scale 63.02 % of students would get a classification “passed” and 36.98 % of students would get the classification “not passed”. 57 % out of 438 successful students would be evaluated by the grade E – sufficient, that means that they reach results meeting only the minimum criteria. The average grade of all students is 3.14 (E) and the average grade of successful students is 2.6 (D).

Conclusion

Colleges and universities in Slovakia prepare university educated professionals at all levels of tertiary education for solving different problems of Slovak society at regional, state, as well as international level. On the basis of research results about financial literacy, about students' knowledge about personal finances, with 695 students who study at universities in Slovakia we can state that the financial literacy index is 0.5397, meaning that correct answers in the questionnaire account for 54 %. Further on we can state that the financial literacy index of male students is 0.5775 and is higher than the financial literacy index of female students which is 0.5222. The survey showed also the logical conclusion that the knowledge about

personal finances of the students studying economic study specializations is higher than with students studying non - economic study specializations. Knowledge about personal finances with students studying at first study grade is at a lower level than at the second study grade.

In 1998 research results about university students' knowledge in the field of personal finances were published. 924 students from different universities were engaged in this questionnaire survey. Their personal financial literacy; the relationship between the literacy and students' characteristics; and impact of the literacy on students' opinions and decisions were examined. Results show that participants answer about 53% of questions correctly (Chen & Volpe, 1998).

Research results both in Slovakia and abroad indicate a low knowledge level of university students about personal finances which is part of financial literacy. This situation requires improvement because it is probable that a man, who has insufficient knowledge about personal finances, will make mistakes in real world too, which means that his attitude and behaviour will be influenced by his knowledge.

This situation requires that the educational process pays more attention to education in the field of personal finances too. The National Standard of Financial Literacy (MESR & MFSR, 2008) pursues this goal by defining what a secondary school graduate should be able to manage in this field. For the future it will be important to implement the defined goals into practice.

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