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FINANCIAL LITERACY IN THE CZECH REPUBLIC

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Abstract:

This paper analyses the need to deal with the issue of financial literacy and financial knowledge not only by adults, but also by youth and young adults. This paper is focused on research into the knowledge and understanding of the financial literacy of young people, mostly between the ages of 16 to 33 years, via a questionnaire. The survey, undertaken in the Czech Republic, is based on a sample of 329 students from high schools and 329 students from the University of South Bohemia in České Budějovice [658].

Key words: Financial Literacy, Education, Youth, Questionnaire, Educational system.

JEL Class: A13, D18.

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INTRODUCTION

There are lot of changes after the introduction of lot of new financial products [Zandi 2008]. The securitisation of debts came to be the financial instruments for anybody, there are lot of difficult and exotic financial instruments in the market [Lucas et al., 2007]. But individuals are increasingly in charge of securing their own financial well-being mostly after retirement. With the shift from defined benefit to defined contribution pensions, today's workers have to decide both how much to save and how to allocate their retirement wealth. Financial markets have become more complex and individuals are faced with a proliferation of new investment products, many of which are new and often fairly complex. Investment opportunities have expanded beyond national

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borders, permitting individuals to invest in a broad range of assets and currencies. However, as the financial crisis has made it clear, it is very hard to navigate this new financial system and the consequences of mistakes can be devastating. But how well equipped are individuals to make financial decisions, and how much do individuals know about economics and finance [Renaud 2009] emphasizes that for the first time in the world history more people live in urban areas than in rural areas. As a result, financial system connected with housing becomes more and more important part of the whole economy. Housing loans will increase, because urban expansion intensifies. This cannot be covered by government expenditures solely. Bergstresser [2008] has analysed the period between 1980 and 1994 in the U.S. It has been found that the increase in bank concentration reduced the flow of bank capital to construction and land development loans. Iacoviello [2002] has found significant impact of tight monetary policy on decrease of real house prices in France, Germany, Italy, Spain, Sweden and UK for the periods covering late 1970s till 1998.

The debate on links of housing and macroeconomics dates back to Fischer [1933] and his debt deflation theory. Residential capital stock plays an important role in the economy, housing expenses constitute an important part of household expenditures, etc. [Chetty and Szeidl 2004; Greenwood and Hercowitz 1991; Skinner 1994]. Relationship of macroeconomics and housing market has been extensively studied for developed countries [for example: Davis and Heathcote 2005; Hwang and Quigley 2006; Seko 2003; Wen 2001].

1. THE SITUATION IN THE CZECH REPUBLIC

The Czech banking sector is under great evolution since 1989. Not only globalisation processes intensified, but also a transition in economy had started. Some of banks was privatised, after Czech banking crises plays here and now the most important role foreign capital.

The specific nature of Czech society in the area of financial literacy is strictly correlated with the socio-economic changes that have occurred since 1989. It was the development of the free-market economy that forced the government and financial institutions to increase their interest in financial literacy. The other historical event having a significant impact on financial literacy was Czech entry to the European Union and, connected with that, the necessity of ratifying certain acts. There are too much new products in the financial markets and – unfortunately – the moral of new based companies in this field is not the best.

Insurance agent will describe to his client a product in pink colour, but he „forgets” to say some basic information or is signed the agreement with most

important part for client (such how to terminate your agreement) in so small font, he is not able to note it.

In the stock and bonds market is common do not say to clients right results of the company or fund or the staff „forgets” to remind, that the result and expected profit is necessary to decreased for duties, inflation, cost of funds... [Kantnerová 2014].

The Czech past system of education was not enough, but it is changing nowadays, slowly, but it starts to work. There is a new Strategy of Ministry of Education, Youth and Sport, support from the central bank and Ministry of Finance and finally starts work of special department on the Ministry of the Interior.

The situation in the education looks as follows.

2. FINANCIAL EDUCATION IN THE CZECH REPUBLIC

By Kantnerová [2013; 2015]

The Ministry of Finance has started to discuss financial education within the care of consumer protection in the financial market. Based on the recommendations of the publication *Improving Financial Literacy* a document *Strategie finančního vzdělávání/The strategy of financial education* (MF ČR, 2007) was published as well as its updated version *Národní strategie finančního vzdělávání/The National Strategy of financial education* published in 2010. The aim of the strategy, which is presented in this document, is an integrated system of financial education, which would help increasing the level of financial literacy in the Czech Republic. The proposed action is based on two pillars - initial education (preschool, primary, secondary and higher education) and further education (educational activities focused on the adult population that are not within the initial training). This chapter should focus on initial education. The document *Strategie finančního vzdělávání* was followed by a document *Systém budování finanční gramotnosti na základních a středních školách/The System of Creating Financial Literacy in Primary and Secondary Schools* (MŠMT 2007) created together by the Czech Ministry of Finance (MF), the Ministry of Education, Youth and Sport (MŠMT) and the Ministry of Industry and Trade (MPO) on behalf of the Government of the Czech Republic. This document defined the standards for financial literacy for three different target groups:

- Standard financial literacy for the first stage of primary schools (age 6–10).
 - Standard financial literacy for the second stage of primary schools (age 11–15).
 - Standard financial literacy for secondary schools (age 16–19)
- corresponding to the standard of an adult person.

Standards for those target groups include the following areas: *Money*, *Management of household* and *Financial products*. The standard of financial literacy for secondary education also includes the topic of *Consumer rights*. Their contents would be discussed below.

The standards of financial literacy were implemented into the FEP (basic methodic documents) for primary education in January 2013. From September 2013, the schools are obliged to implement them into school curricula. One of the targets of the educational area of „People and society” is education aimed at forming and developing key competencies by guiding students to understand problems of money and prices, and responsible administration of personal (family) budget with a view to changing life situations. (VUP, RVP ZŠ// The System of Creating Financial Literacy in Primary and Secondary Schools, 2013) [Kantnerov 2013, 2015].

It is obvious that financial literacy is related to mathematical literacy. If an individual does not have some degree of knowledge of basic numeracy (mathematical literacy) and they cannot compete in the financial world. Huston states that if an individual struggles with arithmetic skills, it will certainly have a negative impact on its financial literacy [Huston 2010].

3. PROBLEM FORMULATION

There has been a lot of debate about the definition of financial literacy and many definitions are accepted.

The OECD (INFE) has defined financial literacy as follows: a combination of awareness, knowledge, skill, attitude and behaviour necessary to make sound financial decisions and ultimately achieve individual financial wellbeing.

Because of the situation that financial literacy is increasingly considered to be an essential life skill, the focus of OECD is from 2005, when the *OECD Recommendation* advised that „financial education should start at school. People should be educated about financial matters as early as possible in their lives”.

There are lot of activities targeted to the search and evaluation of the level of financial literacy by youth.

By PISA (Programme for International Student Assessment, 2012) is financial literacy composed from 2 components:

1. *Literacy* is viewed as an expanding set of knowledge, skills and strategies that individuals build on throughout life, rather than as a fixed quantity, a line to be crossed, with illiteracy on one side and literacy on the other. Literacy involves more than the reproduction of accumulated knowledge, although measuring prior financial knowledge will be an important element in the assessment. It involves also a mobilisation of cognitive and practical skills, and other resources such as attitudes, motivation and values.

2. *Knowledge and understanding of financial concepts* can be assumed that they (youth) have some awareness of the financial environment that they and their families inhabit. All of them are likely to have been shopping to buy household goods or personal items; some will have taken part in family discussions about money and whether what is wanted is actually needed; and a sizeable proportion of them will have already begun earning and saving. Some students already have experience of financial products through a bank account or a mobile phone contract. A grasp of concepts such as interest, inflation, and value for money are soon going to be, if they are not already, important for their financial well-being.

The Czech Republic brings financial literacy into being of our life in 2008 in the Standards [Ministry, 2007] of Ministry of Education, Youths and Sports. There is stated, that financial literacy is a set of knowledge, skills and behaviour of citizen needed to financial ensuring its family and to its active role in the financial market. One should be oriented in the problems connected with money, prices and be able to manage home households including managing of financial assets and credit and loans with regards to changeable conditions. Financial literacy is composed from three components – currency, prices and budget of home.

4. METHODOLOGY

Research was based on a survey of 329 secondary school students, in five different high schools, and 329 university students, from 4 different faculties of the University of South Bohemia in Ceske Budejovice by means of a questionnaire. Statistical methods were used for its evaluation. The questionnaire contained some shortened versions of questions used by the Ministry of Finance of the Czech Republic. Furthermore, respondents were questioned about their sources of information regarding managing money. Their „knowledge” was assessed according to their answers to the questions.

Results were evaluated by the method used by Braak, C. J. F. & Šmilauer, P. [2002]: CANOCO Reference Manual and Cano Draw for Windows User's Guide: Software for Canonical Community Ordination (version 4.5). Microcomputer Power, Ithaca, New York.

The calculation was made by the CANOCO program for Windows (TER BRAAK & ŠMILAUER 2002), STATISTICA (STATSOFT, INC. 2010) and StatSoft, Inc. (2010). STATISTICA (data analysis software system), version 9.1.

Data were collected in the period 2013–2014 in five high schools and four different universities (University of South Bohemia in Ceske Budejovice) – each with a different area of study – in the Czech Republic town of Ceske Budejovice. The participants were selected by way of random choice by agreements with the management of schools and teachers of financial subjects.

Hypothesis 1 – Older students will be more literate than younger.

Hypothesis 2 – More educated – students from the University – will be more literate than students from high schools.

5. RESULTS

Table 1. The Comparison of Responses of Students from High Schools and University
 (in percentages)

Question	High School Students	University Students
Criteria for selecting bank – the coverage of ATM network	13%	13%
Breadth of Electronic Banking Services	8%	17%
Bank's credibility	30%	29%
Account administration fees	29%	30%
Rate of deposit p.a.	20%	11%
Criteria for selecting credit lines – Annual Percentage Rate of Charge – APRC	21%	56%
Monthly installment	28%	17%
Someone's Recommendation	9%	4%
Rate of credit p.a.	25%	13%
I do not know	15%	8%
Other	2%	2%
Household Budget – I know	75%	82%
I do not know	25%	18%
Before signing agreement – read completely	28%	16%
Complete reading and explanation by professional	63%	73%
Explanation by professional	7%	11%
I do not read it/do not want explanation	2%	0%
Penalties if loan is not paid – I know it from the agreement	85%	96%
There is information on the internet	10%	3%
I will wait for the information from the bank	3%	1%
I will wait until seizure	2%	0%
Insolvency – I inform the creditors and try to close an agreement	76%	91%
Take a further loan to help pay for it	4%	1%
Other	3%	1%
I do not know	19%	7%

Source: author's own calculations.

1. Criteria for choosing a bank – There are very comparable answers between the two types of schools with the exception of electronic banking. Students from University chose this more often, probably because of the easier availability of personal computers (PC's) for them. For University students, it is a more practical option. They often have their own bank account and manage their own money themselves. Both groups are focused on the cost of an account, such as fees, and credibility of the bank. The focus on fees is a positive trend as is, also, credibility. This is probably due to how they were raised by their families, as they may recall the bankruptcies of many Czech banks in the 1990's.

2. Criteria for choosing a credit line – There is a clear focus on cost once again. If we summarize the three answers focused on cost, there is a ratio between High School students and University students of 75:86. The higher level of education is probably the reason for the disproportion in answer to the question about knowledge of APRC, which is 21:56. In the comparison of the results of the Ministry of Finance [9] there is a disproportion of 75:86 (students):58. This can be perceived as evidence of the impact of higher student education.

3. Household budget – A better level of knowledge is displayed by University students, since 82% answered positively. University students are older and can also have their own bank account (according to Czech law) and very often they have a part-time job or help their family to pay for their education and better themselves, so they would be more familiar with managing money and budgeting. In the comparison with the results of the Ministry of Finance [9] there is disproportion of 82:75 (students):37. This would seem to indicate strong evidence for the impact of higher student education.

4. Before signing of the agreement – In both groups of respondents there are some unexpected answers since the ratio is 9:11. There were no University students who answered „I do not know”. In the current situation in the Czech Republic, it is strongly recommended to read very carefully the full agreement because of the decreased level of professional and moral behaviour of financial institution employees. Again, there is a better level of knowledge by the University students.

5. Penalties if loan is not paid – The ratio 85:96 tells us again that the level of education has an impact on the thinking and knowledge of students and that educational level is an area of focus.

6. Insolvency (default) – The highest awareness is, again, students with higher education levels. However, there are warning signs from the answers of high school students. For example, 19% do not know what they should do in the event of insolvency. In this situation, they are vulnerable to credit traps. This group is the most susceptible to credit and financial problems because they are of the generation who may not have a good example from their parents and did not get proper financial education from their school. In the comparison with

the results of the Ministry of Finance [9] there is a disproportion in the answer “– I inform the creditors and try to close an agreement” 76:91(students):51. This can, again, suggest further evidence of the impact of higher student education.

The following Fig. 1 shows the results of the statistical analysis on data collected during research.

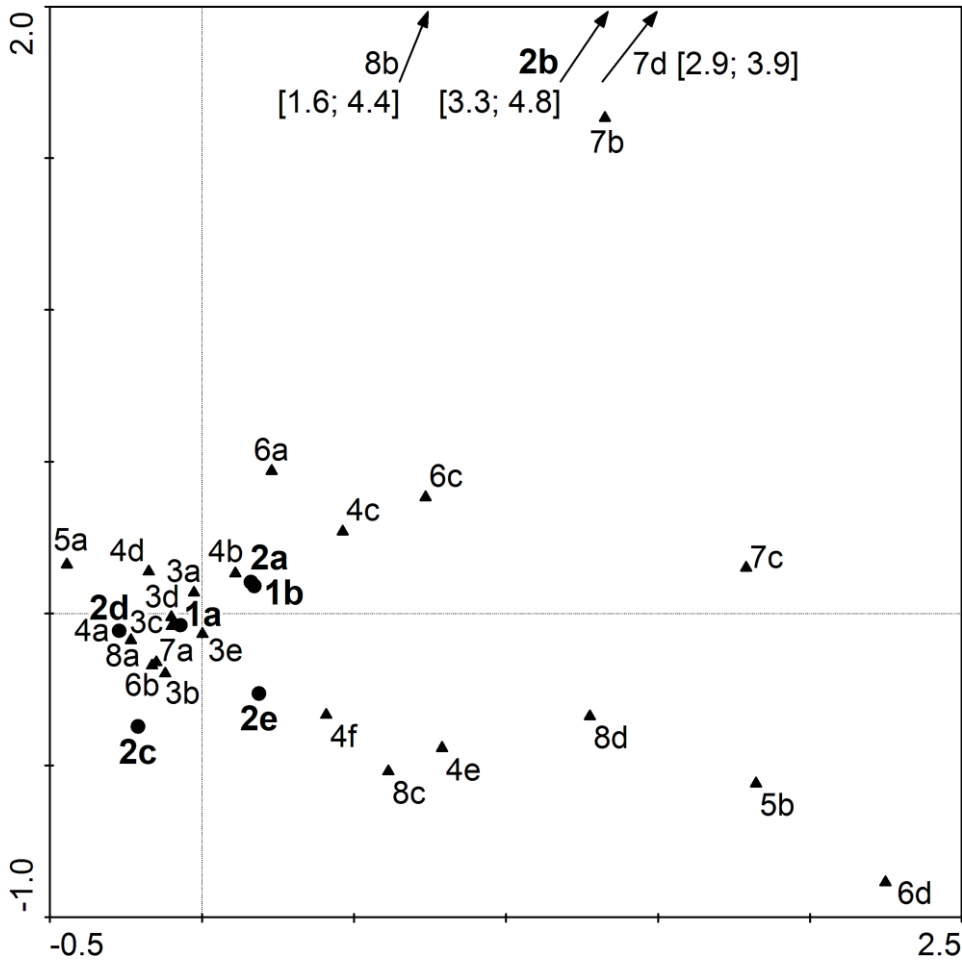


Fig. 1. Analyse of the situation

Source: author’s own calculations.

The first two coordinating axes explain 23.5% of the variability (the first one 15.4%). Triangular points express the active variable (economic behaviour of respondents) and the passive variables (sex and education of respondents).

The image was somewhat scaled down and the position of three points lying outside of the viewable area is not shown but only described. It is possible to explain most of the variability by the level of financial literacy – by the knowledge or ignorance of some financial terms and the results of financial behaviour. In the left side there are the answers which tend towards the meaning more „literate” (e.g. 5a, 6a, 6b, 7a, 8a), and on the right side more „illiterate” (5b, 6d, 7c, 8b). Literate respondents had mostly the same answers; whereas, those on the illiterate side had answers that were different and variable. Answers with a low or very low level of financial literacy (7c, 7d, 8b) are in an upper part of the described area; while answers of hesitant respondents or those uncertain in the matters of finance (5b, 7b, 8d) are at the bottom. Sex and education were not taken into account in the diagram.

CONCLUSION

In the current world of economic development, the issue of financial literacy is being discussed and scrutinised more frequently. It is undeniable that an increasing number of countries choose to deal with financial literacy need on their populations through the design and implementation of tailored, articulated and coordinated National Strategies for Financial Education. This happens both in advanced and emerging economies across different financial systems and in response to specific national needs and contexts.

This paper was focused on the level of financial literacy among the young and working Czech population between 18 and 33 years of age. This group of people was specifically chosen because of the importance of knowing the level of financial literacy of this generation, as it is starting life, along with all of its difficulties, and out of which will arise the next generation. The results can be used at the Ministry of Education, Youth and Sports as the base for the evaluation of the level of financial education of this generation and for the possible adaptation of the Strategy. This survey was conducted at the Universities in České Budějovice, with the aid of a questionnaire and was statistically evaluated. From the result of it follows big area for the educational process in the raising of young people.

What is surprising is only the difference in time doing of the household budget and answers of very and not so much young students (age difference). What is more matter of the education and care home, in the family, than at the school. Education, gender and even taking a financial course did not have a significant effect on respondents behaviour in this survey.

The first hypothesis is proved, but the second one is disprove. It looks that the sample of students is not educated enough – there is a space for

the improvement of system of education. The difference caused by age looks to be the result of more experienced older students.

It can be assumed that family experience and parental guidance are the most frequent sources of information on how to manage and handle the finance. The correct model of financial behaviour, which includes discussion of the household budget and the preparation of financial strategies for a family by all its members, is very useful. In this situation can be big help on side of media, not only at schools.

There is big space for some changes in legislation and transformation of banks on the way to the transparent financial markets and changes in the moral obligations of start in any bank or fund or other financial enterprise – or official, or in the shadow. It will not be easy work for any gouvernement, any central bank and Basel Committee [Archaya and Richardson 2009; White 2000]. It looks, that economic and financial crisis meets the crisis of morality. The situation causes the need to teach and raise new generation by more sophistic methods and more practically. It is necessary to give a lectures on practical topics, in the connection with practice and not only on the theory about function of something.

It is necessary to say to students how to avoid problems, what is necessary to know before the signing of any agreement. Where are people able to help them in some situation. What to do in the case of debts if I am unemployed person. To know rights in such situation.

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