

The Level of Financial Literacy among the High School Students in the chosen regions of the Czech Republic

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Abstract In the current economic conditions it is impossible to consider anything as permanent and predictable. A certain level of financial education across all age groups is necessary. It is no longer possible the case that what one learns in one time can use a long time without changes. Especially in the economic area, it is necessary to enable individuals still have further education, acquisition by obtaining of new knowledge and experience and deepen the already acquired. Likewise, how it is changed everything around, the financial environment is changing too. In the markets, there are many new possibilities of investment, saving or borrowing capital. Therefore, it is essential that each individual had a certain level of financial literacy. The aim of this article is to present the results of the research focused on the level of financial literacy among the high school students in the Czech Republic. A questionnaire survey was attended by participants from the high school students from Olomouc, Zlín and Moravian-Silesian Region in the total number of 297 respondents. The main area was examined the relationship between educational attainment and obtained level of financial literacy. During the research, there were the statistical methods to verify the results used, specifically the χ^2 test for significance evaluation and the Pearson contingency coefficient for establishing the intensity of relations. Based on the obtained results we can say that there is agreement between the self-assessment of respondents' financial literacy and the educational attainment. The results also show the reluctance of students to use the services of the financial advisors, mainly due to the fact the respondent do not know any representatives of this profession.

Keywords Economic Conditions, Financial literacy, High School Student, Self-Evaluation, Knowledge.

I. INTRODUCTION

CURRENT worldwide economic development has forced several authors and experts in the economic field to start

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focusing on the issue of financial literacy and financial knowledge not only among adult individuals, but also to the necessity of devoting attention to this particular problem during childhood or while maturing.

The financial situation dramatically worsened worldwide during 2008 and 2009 and its influence was accompanied by phenomena such as decreasing values of shares or portfolios, record unemployment, overcapitalisation, household bankruptcies or failures of major corporations [15, 21, 25, 26]. The economic crisis has not spared the countries of the Central Europe. In the conditions of the Czech Republic, as stated Hornungová, Klimková [14], there was the initial sign of decline of the Czech crown followed by the reduction of the inflow of orders which meant for many Czech companies the intractable situation often followed by failure of the entrepreneurship. Some companies have even tried to save the situation, the solution was as shortening working week or interference either night shifts or continuous operations. But others joined the sharp step in the form of layoffs a large number of quality employees which had a negative impact not only on the Czech economy, but too as the increasing rate of unemployment, but also to the economic and social life of the Czech population. The financial situation of many people, especially of these who were made redundant across the all age categories, has made worse. The solution was different. People solve and resolve the new financial difficulties as loans from the bank institutions, as well as from the non-banking institutions. They often do not know the conditions under which they described the loans.

At the level of the household's indebtedness was made a research for example by Šedová, Benada [36] or Smrčka [31]. Šedová, Benada [36] focused their research on the comparison of the household indebtedness in the Germany and transitive economies of the Central and Eastern Europe. By the assessment of the level of household debts it is important to take into account the macroeconomic (eg. the level of the economic growth of the analyzed country and its impact of growth on employment and work productivity) and microeconomic factors (eg. the tendency of the household to save or the quality of the institutional market environment for the household loans market). Smrčka [31] added the fact that the family or household indebtedness is connected almost exclusively with the developed countries.

This recent slump in the economy provided a whole range of examples showing how insufficient financial ability and knowledge can influence not only individuals, but entire families and generations. In this context, there is a growing need for individual members of society to understand economic relations, to have sufficient knowledge and ability in order to make important financial decisions [17].

It is generally possible to require every individual to be financially literate. Such financial literacy is an imperative aspect of solving basic financial problems emerging in contemporary modern society [5, 13, 34]. As early as 2006, that is, before the outbreak of the worldwide crisis, the government of the United States of America became aware of the insufficient financial literacy of its inhabitants and commenced the first national projects realizing a strategy towards improving this situation [28].

In the Czech Republic, too, voices calling for an improvement of financial literacy have been coming to the fore for some time as Czech households do not practice adequate responsibility in this area. As say Constantin et al. [8] “family financial situation proves to be an important item when it is about school results. Student’s satisfaction regarding the financial status of his/her family may prove to disadvantage some of the students, but also to boost up the others. For example, a poorer social status would disadvantage the non-competitive students but would stimulate, on the other side, the competitive ones”.

“There are several exceptionally substantial signs that the credit boom is unmanageable, at least in a significant part of the Czech population. This is attested to by the dynamic growth of property seizures to over 300 thousand annually – naturally, some of these were attributed to the development of legislation and the solution of comparatively insignificant liabilities arising from various fines; nevertheless, the amount of resources in seizure rulings is gradually increasing. Similarly, the amount of registered loan agreements is dynamically increasing in general and we should take into consideration the fact that more than 150 thousand families currently have serious difficulty fulfilling their obligations [32].”

II. LITERATURE REVIEW

A range of different definitions of financial literacy appear in current economic theory. For instance, Taylor and Wagland [37] assert that a definition of financial literacy includes comprehension of the function of money and the ability to make effective and successful financial decisions. Mason and Wilson [23] define financial literacy as “an individual’s ability to obtain, understand and evaluate the relevant information necessary to make decisions with an awareness of the likely financial consequences.” The authors of the article tend to define the financial literacy as given by Anthes [1] according to Lois Vitt et al. (2000 in [1]) and which covers all areas related to this term: “Personal financial literacy is the ability to read, analyze, manage, and communicate about the personal financial conditions that affect material well-being. It includes the ability to discern financial choices, discuss money and

financial issues without (or despite) discomfort, plan for the future, and respond competently to life events that affect everyday financial decisions, including events in the general economy.”.

Csongor [9] defines financial literacy as a set of skills and abilities serving to comprehend financial information and towards making responsible decisions, resulting in an improvement of the individual’s financial situation. This, however, does not only include elementary knowledge, such as being aware of interest rates, inflation or which financial or bank products could be used in a given situation; emphasis is also placed on so-called self-care, which entails the individual’s preparedness for predictable and, more importantly, unpredictable situations in one’s financial life.

As asserted by Taylor and Wagland [37], financial literacy has four basic elements – mathematical literacy, financial understanding, financial competence and financial responsibility. Their departure point was data provided by the Australian Securities and Investments Commission. Financial literacy in itself can be viewed from several points of view.

Several authors research it in relation to participants’ ages – i.e. financial literacy related to adults [24] or financial literacy related to adolescents or children [10, 16, 18, 19, 22, 27, 35, 41]. Gerrans et al. [11] and Coben et al. [7] have suggested that literature and research related to financial literacy should be divided into three categories – research oriented towards development of financial literacy, then evaluation of financial literacy of adolescents and evaluation of adult financial literacy. Furthermore, there are authors concerned with other factors – for instance, the problem of gender is often mentioned [2, 38, 40], whose studies show that women are less willing to accept risks than are men; they are less certain in making financial decisions and less informed in the area of financial literacy [6, 12]. Other factors mentioned are, for instance personal and family income or age [40].

Some studies focus on financial literacy as a whole, others specialise only on factors relating to specific activities – e.g. investing. As the example is possible to mention for example Bolton et al. [4]. These authors were focused on the financial literacy connected with the issue of loans, especially their downside and divided the financial literacy of this area into two groups – the loan-focused literacy and the lender – focused literacy. The loan-focused literacy is focused on improve the financial literacy of the view of increasing the consumer knowledge about loans. It means to know about the advantages and disadvantages of this financial instrument. The second literacy – the lender-focused literacy is focused on the issue of consumer knowledge about the lenders. It means how and why particular lenders act as they do.

Within the scope of solving the problem of societal financial literacy, there is a growing need to devote attention also to financial education. The growing assortment of financial services and products provides a constant influx of possibilities for financing through loans or through continuous new possibilities of investment. At the same time, their risk factors and complexity grow proportionally, thus increasing the need for financial education [39].

Lindsey-Taliefero and Kelly [20] add that at present it is necessary for individuals and households to have adequate information, education and instruments to help them make better financial decisions in an increasingly complex financial system. Without corresponding help, a large proportion of adolescents learn how to manage personal finance by trial and error, frequently entering the work process not knowing how to operate with chequebooks or how to manage using their credit cards [3]. Yilmaz [42] asserts that financial education is an important part of people's daily lives. How states Csongor [9], in the life is possible to recognize the predictable but too non-predictable situations. For both there are many products on the market (for example the bank instruments or different types of insurance) and it is only on the given person to understand the conditions of these products.

Financial literacy is an important theme in the world's economic and financial interest. Improving financial literacy is achieved through financial education. It is the question where have to state the children or young adults financially literate. Jorgensen and Savla [17] according to Moschis (1985 in [17]) say that "teaching children to be financially literate has been mostly left to parents" but add "that many parents do not have these skills themselves". The importance of financial education states for example Cudmore et al. [10]. According to these authors "the financial education is essential for today's youth" but add that from the survey in 2000 was found that "50 percent of the population said that it is not discussed at home, few of them learn about personal finance in school and only about 12 percent of students have any formal education about money before they graduate from high school". Duguay (2001 in [10]) emphasizes the understanding of the personal finance (of the personal money) can help young people to avoid making the costly mistakes.

The level of financial literacy and the financial knowledge of young people is important to know, because, how adds Huston [15], these "indicators are used as the inputs to model the need for financial education and explain variation in financial outcomes such as savings, investing and debt behavior".

The very principle of financial education and literacy, moreover, stumbles on the fact that various (and even commonly used) financial instruments have become unusually complicated, some of them not precisely understood even by people generally considered experts in the field.

Johnson and Sherraden [16] mention the possibilities to integrate the financial education into the schools on the example of the USA. In the article there are given the examples of such programs, for example Save for America or Bank-at-School Programs.

A further aspect is also the fact that even highly regarded specialists are divided on several financial-economic issues, which citizens, however, consider to be clear - which can be seen in the example of evaluating the success of public projects [29].

The public thus quite justifiably becomes of the impression that becoming "fully financially literate" entails delving very deeply into the problem of finance, which is not a particularly

motivating element. One should also not lose sight of another fact.

We have already mentioned the theory asserting that inhabitants have to a certain degree lost their natural wariness proportionally to the poor example given by states in the past few decades [30]. We should also not forget that several studies in recent years [5, 29, 33] have noted significant shortcomings in risk evaluation in businesses: „It concludes that the financial crisis can to a significant extent attributed to failures and weaknesses in corporate governance arrangements which did not serve their purpose to safeguard against excessive risk-taking in a number of financial service companies. Accounting standards and regulatory requirements have also proved insufficient in some areas. Last but not least, remuneration systems have in a number of cases not been closely related to the strategy and risk appetite of the company and its longer term interests [5].”

III. PROBLEM FORMULATION

Research conducted by the authors of the article was based on a questionnaire survey. Statistical methods were used for its evaluation.

The questionnaire contained questions generally characterizing the respondent, questions aimed specifically at the area of financial literacy. Among these were questions tracking the respondent's self evaluation, questions verifying the true level of knowledge, questions surveying the respondent's interest in education. Furthermore, respondents were questioned on their information sources on managing money, and finally, on their attitude to financial advisory services.

The aggregated characteristics "Self evaluation", "Knowledge" and "Interest level" were defined to evaluate the questionnaire. "Knowledge" was assessed according to answers to questions concerning the annual percentage of expense rates, knowledge of conditions for providing and repayment of loans and knowledge of the term financial reserve. The departure points for "Self evaluation" were answers to a question on the knowledge of basic financial terms and answers to a question of whether the respondent was aware of the current state of the problem of finance.

The numerical value of each of the first two characteristics was set as the amount of correct or positive answers to the questions of a given group. The characteristics of "Self evaluation" and "Knowledge" gained a value of 0 to 3. Similarly, the characteristic of "Interest level" gained a value of -1 to 5. A value of -1 corresponds to an explicit expression of disinterest in education, 0 corresponds to a neutral attitude; and then, positive values correspond to the gradually increasing value of an educational course which the respondent would hypothetically be interested in completing.

The relative frequency of responses and contingent tables for expressing variable dependence are stated in the evaluation. During these evaluations, it was always only the subset of questionnaires containing relevant answers that were taken into consideration, i.e. questionnaires leaving some relevant questions unanswered were excluded.

The symmetric measure of association, based on Pearson's statistics – the χ^2 test – was used for expressing variable dependence in contingent tables. The null hypothesis reads: variables A and B are independent. The test criterion has the shape:

$$\chi^2 = \sum_{i=1}^r \sum_{j=1}^s \frac{(n_{ij} - n_{ij}^*)^2}{n_{ij}^*} \quad (1)$$

where $n_{ij}^* = \frac{n_i \cdot n_j}{n}$ are theoretical frequencies.

The critical region is delimited by the

$$\text{inequality } \chi^2 \geq \chi^2_{1-\alpha}((r-1)(s-1))$$

IV. PROBLEM SOLUTION

297 students of secondary and vocational schools in the Czech Republic participated in the questionnaire survey. The first dependency noted was the relation between Self evaluation and Knowledge.

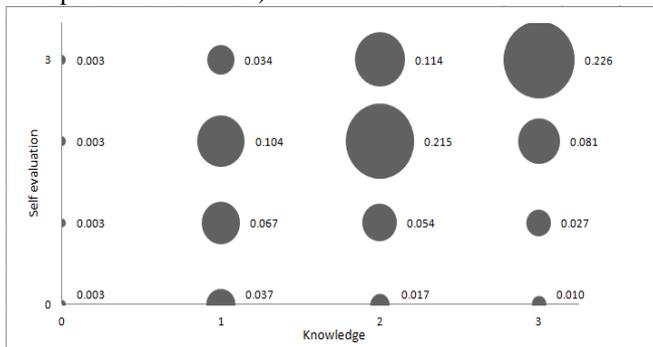
The relative frequency of responses is given in Table 1. and graphically represented in Figure 1.

Tab. 1 - Relative frequency of responses in the individual categories "Knowledge and Self evaluation"

		Knowledge			
		0	1	2	3
Self evaluation	0	0.3 %	3.7 %	1.7 %	1.0 %
	1	0.3 %	6.7 %	5.4 %	2.7 %
	2	0.3 %	10.4 %	21.5 %	8.1 %
	3	0.3 %	3.4 %	11.4 %	22.6 %

Source: own analysis

Fig. 1 - Relative frequencies (area is proportional to the size of response combination)



Source: own analysis

Results show that a relatively good correlation exists between self evaluation and real knowledge.

It is interesting to note the connection between knowledge and the extent of interest in financial education. The relative

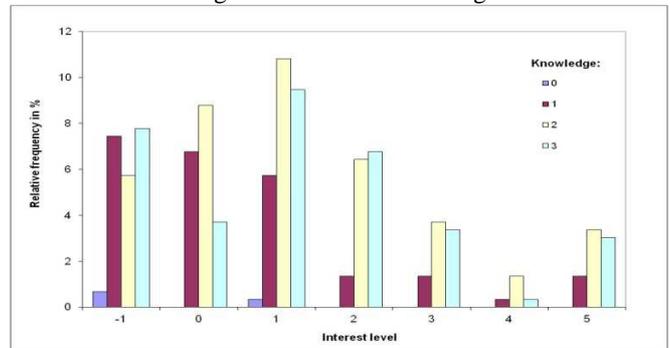
frequency of responses is shown in Table 2 and graphically represented in Figure 2.

Tab. 2 - Relative frequency of responses in the individual categories "Knowledge and Interest level"

		Knowledge			
		0	1	2	3
Interest level	-1	0.7 %	7.4 %	5.7 %	7.8 %
	0	0.0 %	6.8 %	8.8 %	3.7 %
	1	0.3 %	5.7 %	10.8 %	9.5 %
	2	0.0 %	1.4 %	6.4 %	6.8 %
	3	0.0 %	1.4 %	3.7 %	3.4 %
	4	0.0 %	0.3 %	1.4 %	0.3 %
5	0.0 %	1.4 %	3.4 %	3.0 %	

Source: own analysis

Fig. 2 - Bar graph of relative frequency of responses in the individual Knowledge and Interest level categories



Source: own analysis

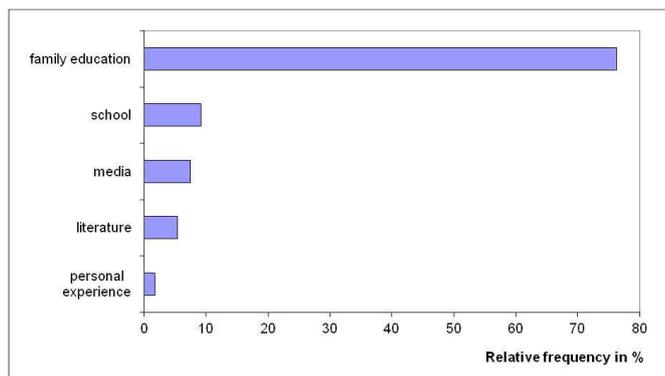
The image shows that explicit disinterest is the most frequent attitude in knowledge category 1 and that the relative frequency of responses decreases as the level of interest increases. In knowledge categories 1 and 2, weak interest (value 1) is the most frequent, and the frequency of responses decreases with an increased level of interest from value 1.

The image indicates the existence of a group of respondents whose interest in education seems not to be influenced by the cost of an educational course.

Pearson's statistics were not used to evaluate either stated dependencies. This is due to the fact that the frequencies of responses in certain categories were low and the implemented metric is somewhat problematic for rigorous evaluation.

It is useful to know the sources from which students inform themselves in the matter of money management for prospective organization of courses in the area of financial literacy. The relative frequency of information sources for money management is shown in Figure 3.

Fig. 3 - Graph of relative frequency of information sources on money management

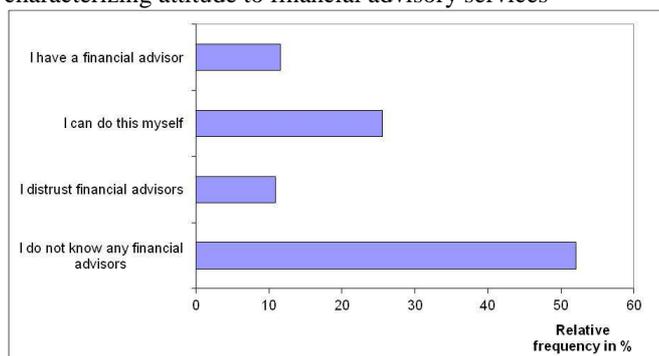


Source: own analysis

It can be observed that the vast majority of respondents gained information on money management within the family. It can thus be assumed that education aimed at children of pre-school age and children in the lowest years of primary school would be the most effective.

Generally, in ordinary life, one specific possibility of compensating for the lack of one's own knowledge in the area of financial problematic is to use the services of a financial advisor. An overview of responses is shown in Figure 4.

Fig. 4 - Graph of relative frequency of responses characterizing attitude to financial advisory services



Source: own analysis

The prevalence of the answer "I do not know any financial advisors" clearly stems from the fact that the students' social status does not correspond to the need to use the services of a financial advisor.

The relatively strong representation for the answer "I distrust financial advisors" is debatable. It could be an image of respondents' excessive self-esteem, which would generally correspond to their age category. Another reason could be transferred experience with the practices of certain financial advisors whom the majority of citizens encounter in regular administration of their bank accounts and insurance.

The strongest predictable factor influencing knowledge of the financial problematic and self-evaluation in this area is the level of education.

The proportion of persons considering themselves to be adequately financially literate grows as education increases. This dependence is statistically conclusive on a significance level of < 0.05 ($\chi^2 = 10.13$, $p\text{-val} = 0.006$), according to Pearson's statistics, the intensity of relation is 0.18 – thus a

weak dependence. A statistically conclusive difference in the structure of responses was found, allowing us to reject the hypothesis of the independence of education and level of understanding conditions for providing and repaying financial resources ($\chi^2 = 16.11$, $p\text{-val} < 0.001$). This intensity is weak, Pearson's statistic $\cong 0.2$.

The greatest differences in the structure of responses were among students in secondary vocation education finishing with a certificate of apprenticeship (95% confidence interval for the proportion of individuals for whom contracts are comprehensible is $0.53 - 0.87$) and students with high school leaving certificate (CI = $0.25 - 0.42$).

V. DISCUSSION

Based on the research, it was confirmed that the financial literacy of students in the Czech Republic is not sufficient. Especially in the light of the expected credit boom, it is necessary to increase financial literacy not only for students but also for the older population. There are still many people who do not understand interest rates and do not realize the implications they may have for defaults on loans and advances. Moreover, the growing supply of new financial products requires even by well financially literate people constant monitoring of the development. The need for building a system of financial education in primary and secondary schools was confirmed, as it was established by the Czech Government Resolution No 1954 of 7th December 2005.

Financial literacy is an essential element in preventing over-indebtedness and social exclusion and is an essential tool for active employment policies for obtaining and retaining employment.

Strengthening of financial literacy can annually save hundreds of millions of crowns expenditure of the Czech Republic. Financial literacy is the basis for understanding all forms such as pension, health care and schools. The survey showed a good correlation between self-esteem and knowledge of respondents and shows that the respondents are well aware of their knowledge. This is basically positive, as one who realizes his or her ignorance; more often seeks an expert's help, than a person who mistakenly believes that his or her knowledge is sufficient, although it is not.

In general, the lack of knowledge in the area of financial literacy among high school students can be mainly caused by the lack of sufficient funds with which they would have to manage. They gain most of their money from their parents or as earnings from temporary jobs. Therefore, they do not realize the importance of financial education and it is school or family who is responsible for providing necessary information.

Some of the results of the lack of financial literacy are indebtedness of Czech citizens, households and the increasing number of foreclosures. Indebtedness and inability to meet their financial obligations leads to heavy over-indebtedness, which is now faced by more than 300,000 households in the Czech Republic. Over-indebtedness affects predominantly socially disadvantaged individuals. Many families owe not only for a rent, but also for goods acquired in installments and they often borrow on repayments from loan sharks or companies providing quick loans for high interest. The offer

of quick and easy money is very appealing, however, people not always realize the risks and hazards of such a loan of money. Therefore, prevention of over-indebtedness could be teaching financial literacy at primary and secondary schools, where pupils and students will gain skills necessary for the management of cash and non-cash money, for transactions with them and knowledge and tools to manage them (e.g. current account, payment instruments). Therefore, the aim of teaching financial literacy is to implement the basic knowledge and skills about the financial over - indebtedness, awareness of students, and the public. Financial literacy should be a necessary and important part of the education of pupils and students.

The research confirmed the findings of Jorgensen and Savla [17] according to Moschis (1985 in [17]), it was found that "teaching children to be financially literate has been mostly left to parents". The vast majority of respondents received information from the area of financial literacy from their family, but the problem may be that their own parents often do not have sufficient knowledge of the area and often also have large loans that they are not able to repay, and so they can be a wrong example for their children.

VI. LINK TO EDUCATIONAL ASPECTS

Learning theory (cognitivist) first imagined and developed by Jean William Fritz Piaget (1896 - 1980) assumed that humans generate knowledge and understanding through sequential development of individual cognitive abilities as reconnaissance processes, memory, analysis, reflection, application, creation / creativity, understanding and evaluation. Cognitivist learning involves the adoption of techniques, procedures, organization and structure for the development of internal cognitive structures that would strengthen synapses in the brain. Education intervenes in the development of conceptual knowledge, techniques, procedures and solving algorithmic problems in order to assist those who need the background to the acquisition and integration of new knowledge. The development of thinking schemes and adopting knowledge implies a platform based on both human interaction and the environment. The ability to learn is explained by Piaget as directly related to children's intellectual development stages (described by him), stages by which are built features that lead to a particular type (particularly specific) of thinking.

Teaching and learning based on problem solving (PBL - problem based learning) occupy large spaces in academic preoccupations. From a historical point of view, these methods have been mostly placed in the context of the effects they produce. It has been shown in specialized literature that a problem-based learning curriculum has positive and consistent effects in terms of skills, abilities, competencies (skills, know-how, applied knowledge, procedural knowledge) of subjects (students) but is not of a great success on acquisition and obtaining of declarative knowledge (descriptive, propositional, which are by their nature expressed in sentences, affirmative statements, assessor, declarative or indicative proposals – which is part of a priori knowledge obtained without

observation, interaction or direct application). In other words, students learn better to do better what they are asked, to solve situations, develop their skills, types of know-how, but less well to personally orient their own cognitive processes (i.e., better know "how" , but less "why").

In addition to studying issues, cognitive measures, the effects of teaching methods on the type of knowledge acquired (general knowledge / skills or descriptive) in the relevant literature we took into account is questioned the issue of institutional influence on problem-based teaching method. Thus, learning outcomes have been described as directly related to curriculum or academic program in a general (comprehensive) view, describing the ways in which college (undergraduate program) affects students, paying particular attention to generic results of training, such as the progress of the study and its sequel (towards graduation). The reference framework of the experience of students in the undergraduate program was described by two concepts: institutional experience (involving education) and academic and social integration. This model assumes that institutional experience leaves its mark directly on the persistence of studies (continuing, non-interruption) and indirectly through social and academic integration (i.e. the decision to continue or graduation depends on high levels of social and academic integration - participation at/in student culture both inside and outside the immediate context of the learning experience). These studies have shown that students who "feel at home" participate in extracurricular activities and feel connected with colleagues and teachers and have a greater propensity towards continuation and successful completion of studies. Without social integration, ongoing studies are hampered and, finally, is questioned even completing their graduation. Natural integration involves both an academic issue and a social one as the willingness and ability of someone belonging to a group also depends in part on its ability to fit the educational level assumed. Although this fact requires of course cognitive skills is also needed time and effort allocation and schools by teachers and support staff should similarly provide the educational context to "invite" students to integrate academically. The concepts of social and academic integration incumbent an important distinction to be made between formal and informal integration, each important for the integrating whole. Formal academic integration involves contacts about the study and institution itself, while informal involves sustained contact between teachers and students outside the direct context of academic learning environment. Similarly, at level of social integration, formal integration involves firstly contacts between colleagues about school activities they have undertaken. Such contacts are often circumscribed by collaborative work (e.g., solving issues, home works and projects together). This formal level is distinguished from the informal which is characterized by factors such as frequent contacts and participation in student activities. Even though the model assumes a direct link between institutional experience and continuing education, there are not clearly identified the processes by which the institutional experiences influence learning, and are not reached issues that involve

social and academic integration. However, the academic debates at length the direct link between institutional experience (or learning environment) and the quality of learning. Generally, the basic model expresses that previous attributes to student experiences are transferred in assuming goals which, given the institutional experience (activities undertaken as students), lead to a certain quality of student efforts and ultimately, their persistence in the educational act.

VII. CONCLUSION

In current world economic development, the issue of financial literacy is being discussed and scrutinised. In our survey, we focused on the level of financial literacy of the Czech adolescent population. The survey was conducted at selected high schools in the Czech Republic with the aid of a questionnaire and it was statistically evaluated with the aid of a χ^2 test; Pearson's contingency coefficient was used for establishing relational intensity.

From the conducted survey it followed that a coincidence exists between the self evaluation of adolescents and their knowledge. This means that if the adolescent considers herself financially literate, she is truly possessed of adequate knowledge and is financially literate.

From the angle of attained knowledge and experience concerning ways of gaining information on managing money, the dominant view among respondents was that they learned mostly from their own families. It can thus be assumed that family experience and parental guidance are the most frequent sources of information on how to manage and handle their finances.

An interesting part of the survey was the examination of adolescent attitudes towards advisors, where the survey showed that a large percentage of those questioned did not know any financial advisors and, most importantly, that many adolescents did not trust these workers.

The survey also confirmed the assumption that the proportion of persons who considered themselves financially literate increases with increased education, a fact statistically confirmed at a 0.05 level of significance.

On the other hand, it was found that that the highest financial literacy in the area of comprehending conditions and repayment of financial resources could be observed at secondary vocational schools ending with an apprenticeship certificate as opposed to the assumptions of secondary vocational schools ending with matriculation.

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