The Macrotheme Review
A multidisciplinary journal of global macro trends

The level of basic knowledge on financial products according to the opinion of students entering higher education[1]

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Abstract

Nowadays financial knowledge and the financial literacy is a cardinal issue in an everyday speech, because the sub-prime crises, and its consequences highlighted the shortcomings of the financial knowledge. When we are talking about the reasons of the crisis, we always mention households', companies' and banks' responsibility, next to supervisions' and governments' responsibility as well. According to the opinions, articles, we should think, that the main problem is the lending and borrowing activity of the banks till the millennium. But it isn't true! The main reason is the lack of financial knowledge and the financial consciousness. The importance of financial culture is being discussed in many articles and studies today. Each of these papers point to the importance of financial literacy and financial knowledge. Financial literacy can only be developed by the education. The crisis drew attention to the importance of this topic, so after nearly ten years, teaching finances already appeared in our education system as well. This is very important thing, because students leaving secondary education are already able to take credits and make serious financial decisions. Beside borrowing, students leaving secondary education become active players in the labor market, so they can make decisions about their investments as well. The aim of the study is to measure the basic knowledge of the financial products of students step to the tertiary education, based on the results of a questionnaire research, drawing attention to the most problematic areas where students' knowledge is defective or incomplete. During the research the main financial concepts were evaluated, such as interest, credit, creditworthiness, securities and basic saving forms. The paper presents the most developed areas to be solved by the education system, to make financially conscious people in the future.

Keywords: financial culture, financial literacy, crisis, bank products, primary research

1. Overview of literature

The definition and importance of financial culture is one of today's popular subjects. The financial crisis pointed out how much damage the lack of financial literacy can cause, and how much destruction can be caused by the events occurring due to irresponsible financial decisions.

[1] SUPPORTED THROUGH THE NEW NATIONAL EXCELLENCE PROGRAM OF THE MINISTRY OF HUMAN CAPACITIES

Nevertheless, we should not have waited for nearly ten years with the development of financial culture, it should have been started straight after the crisis worldwide. The low level of knowledge was not an unknown fact in Europe and in the United States of America, since several articles and studies had already drawn the attention to it long before the crisis (Van Els et.al, 2007). The absence or inadequacy of financial literacy causes damages to the economy and leads to irresponsible decisions, which in many cases must be solved by the governments, just like in Hungary in relation to bailing out the foreign currency loans.

Numerous researchers have tried drafting the definition of financial culture, yet this study builds on the definition used by the Hungarian National Bank. In the strict sense of the term financial culture does indeed mean financial reading and writing skills, for which special professional knowledge is needed. According to the generally accepted definition "it is such a level of financial knowledge and skills, with the help of which the individuals are able to identify the basic financial information necessary for their conscious and careful decisions, interpret them after their acquisition, and on that basis they are able to make the actual decisions, assessing their possible future financial and other consequences" (MNB – PSZÁF, 2008). Based on the definition of Atkinson and Messy (2012), financial culture is a combination of such knowledge, skills, abilities, attitudes and behavioural patterns that are essential for making the right financial decisions both at a personal and social level. In the possession of financial literacy welfare can be increased and improved, which can be felt not only at micro, but at macro level as well. In the opinion of Luksander et. al. (2014), financial culture is basically the ability of processing the financial information and making the right financial decisions. Suganya, Sakthivelrani and Durai (2013) defined the substance of financial culture as the set of such knowledge base, through which the individuals are able to maximize their life-long financial welfare. Ultimately, it can be acknowledged that financial culture is always a combination of some kind of ability and skill, with which the growth of personal and social welfare can be achieved. This is inconceivable without a concrete professional knowledge, and therefore it can be asserted that the role of financial education is inevitable and unavoidable in this matter.

The knowledge that knows and understands the modern financial processes and is capable of adapting to the changes is crucial in today's globalized world. This is why Grifoni and Messy (2012) highlighted that the substance of the definition is being an essential skill these days.

The various disciplines are trying to capture the development of financial culture in different ways. Economics assumes that financial culture can be taught empirically, thus it recognises the role of education and the positive individual examples and practices (Lusardi – Mitchell, 2014). The science of psychology rather builds on the psychological history and behavioural aspects of the individuals, so it also takes the aspects of self-esteem, confidence and self-assessment into consideration, although there have not been comprehensive researches concerning the latter (Antonides et.al, 2011).

The individuals first of all need to be in the possession of a basic knowledge in order to be successful in making financial decisions. They have to know certain key definitions that fundamentally characterize the financial products (maturity, rate of return, interest, securities, investments). Bandura (1982) noted that without an objective financial knowledge the individuals will not be able to make responsible financial decisions. Obviously it is an individual feature how much one utilizes from this basic knowledge during the decision-making process, yet we still have to provide the bases that are critical for making responsible decisions.

Several researches showed already that the quantifiable basic financial knowledge conveyed by the educational establishments has a positive impact on making responsible financial decisions (Chen – Volpe, 1998; Lusardi – Mitchell, 2007), but it has also been proved that a good basic financial knowledge will not result in correct financial decisions on its own, as the awareness and attitude of the individuals are necessary for that too (Borden et.al, 2008; Johnson – Serraden, 2007).

However, on the margins of financial culture and literacy those ethical and moral questions – or more like the complete disavowal of ethical and moral principles – must be noted, due to which the exploitation of the actors with poor financial culture became possible (Csiszárik-Kocsir, 2016a., 2016b., 2016c.). The crisis and the subsequent events drew attention to the shortcomings connected to financial literacy (Klapper – Lusardi – Panos, 2012). Because of the general welfare and unlimited liquidity prior the crisis certain age groups were socialized in a way that they did not learn how to handle or save money, since the message that came from everywhere told them that the missing liquidity can be compensated from (even multiple) loans. Prior the crisis Johnson and Sherraden (2007) had already emphasized that it would be advisable to involve the younger generation as well in the preparation of financial processes by extending the subjects taught in a financial direction, or even by involving them in making the financial family decisions. Osana, Tucker and Bennett (2003) had come to a similar opinion earlier, as this could lead to a higher financial responsibility. The irresponsible borrowing and the inconsiderate advance consumption can be linked – either directly or indirectly – to the lack of financial literacy and financial culture. To this day the analysis of financial culture has become an increasingly trendy concept and research area. It is the subject of many articles, researches, theses and dissertations, although specific and tangible steps have not really been taken towards development. Every major bank considers the development of financial culture to be a part of its CSR activities, but hardly any real detectible results have been produced yet.

Financial culture can be split up, since it has levels that may be developed while some are less prone to development. Those elements of financial culture belong to the improvable levels that can be adjusted by education and training easily and in a relatively short period of time. Such elements are the financial knowledge, financial skills and financial abilities. The parts of financial culture that are hard to develop are manifested in traditions, habits, various seen and taught norms, perspectives and values (Balázsné, 2013). The latter front – learnt from parents, family and friends – is the hardest to shape, because due to socialization they evolve to be an integral part of us, infiltrate our character, and hence they follow us for the rest of our lives (Koh – Lee, 2010). This process is called economic socialization, where the next young generation learns from its educators the principles of using money and acquires the attitudes that will later largely determine whether their actions in the financial world are going to be successful or not. Family has an emphasized role in this process, as that is where the money management principles are taught, which are decisive for them (Zsótér, 2012). This is all connected with the previously introduced opinions, according to which we have to start teaching financial consciousness in school so that the possible negative habits could somewhat be corrected.

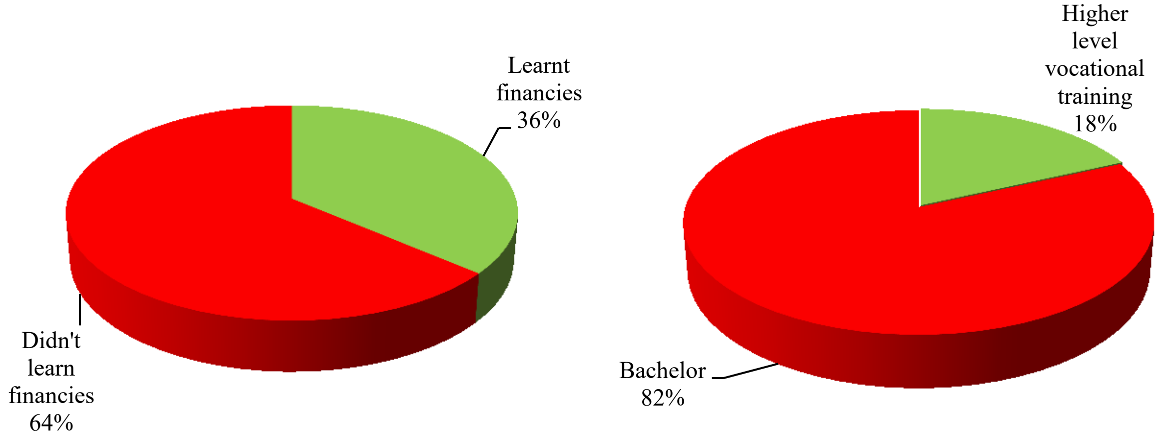
2. Material and method

The basis of the study was a questionnaire survey conducted in the autumn of 2017[2]. The research was done with the help of a pretested standardized questionnaire form. The questionnaire did not contain open questions for statistical assessment purposes. The finalization of the questionnaire was preceded by four earlier rounds: a primary quantitative research conducted in 2015, qualitative surveys from 2015 and 2016, and a questionnaire survey carried out in the spring of 2016, as a result of which I was able to come to conclusions from a sample of 3736 people in the form of numerous studies. The current format of the questionnaire was based on the results of the former researches, and it examined a number of issues, from the value of money through the correct usage of financial and investment information to ethical questions, tailored especially to students entering into higher education for the reason of evaluating their financial knowledge. The questionnaire was filled by students of several higher education institutions, who began their studies in the autumn of 2017 within undergraduate education or higher-education vocational training. The questionnaire was filled by 942 respondents in total, but unfortunately only 768 could be assessed.

The questionnaire consisted of 16 questions, 9 of which serving the segmentation of the respondents. The questions covered many fields, from the value of money through financial consciousness to the assessment of basic knowledge. The questionnaire was accessible online, ensuring the anonymity of the respondents. For the segmentation of the respondents we asked about their age, gender, residence-related information, income and the education level of the parents, among other things, including if the respondents had studied finance before or not. Among the questions there were multiple choice questions and rating scales too. The questionnaire was filled by students of the Eszterhazy Karoly University, Pannon University, Szent Istvan University and Óbuda University, regardless of the faculties. The only condition of the participation was for the students to start their academic studies at the time of filling the questionnaire, so the ones attending master's degree programmes were not included in the sample. The sample was not considered to be representative, but it provided for the possibility of establishing a representative research later. The results of the questionnaire presented in this study were obtained with the help of the SPSS 19.0 and MS Excel 2010 programs. The results obtained are introduced based on whether the students had previously studied finance or not and what form of education they started their academic studies in. We intend to analyse the subject in the course of other studies as well on the basis of the education level of the parents, income, employment and previous financial preparatory studies.

[2] I hereby would like to thank for the help of the students who contributed to filling the questionnaire form.

Figure 1.: The composition of the sample according to the previous financial studies and the form of current studies



Source: own research, 2017, N = 768

3. Results

From the 768 students entering into higher education or starting their studies – who constituted the sample – we wanted to learn through 26 statements how much they were aware of the certain basic financial terms. In the study, by grouping the statements, we wish to introduce the fields that need to be developed the most according to the knowledge and answers of the students.

First of all, we classified the statements into groups. The group concerning the investments contained 8 statements, on top of that we asked 4 statements from the students about interests, we assessed their knowledge with regard to bank and credit cards via 9 statements, and last but not least we examined their basic knowledge of loans through 5 statements.

First, we would like to characterize the statements about investments, which are also illustrated in the table below. Regarding the investments it can be noted that the students' knowledge was only 53.9%, which is unfortunately the lowest when compared to the other three groups. As a consequence the percentage of the incorrect answers was the highest too, 29.8%. The least understood statement concerned with the treasury bonds, as the proportion of the correct answers was only 29.7%. In connection with investments the students were not aware either that they were commitments for over a year, to which the percentage of the correct answers was 40.9%. The statement about investment funds was similarly problematic, as the students didn't know whether it involved a state guarantee or not. It is proved by the 43.2% rate of the correct answers. In the case of these statements the proportion of the "I don't know" responses speaks volumes as well!

The students were fully aware that they are able to make their savings profitable in numerous fields, through the financial and capital market too, which is shown by the 74.5% response rate. In relation to the investment funds they knew that their capital can lose its value, confirmed by a percentage of 68.2%, and they were also relatively well aware that the equity fund is the least safe among the investment funds.

In light of the above it can be stated that the students' knowledge has shortages in the very field that is the most ordinary. Upon finishing their education they would create savings from their income, which shall generate interest somewhere. However, the details of the opportunities are not clear for them yet, and therefore the initial financial education will have to focus on this in the future, in the course of several subjects even!

Table 1.: The proportion of the right or wrong responses about the investments on the whole sample (%)

	don't know	correct	wrong
My savings can generate a return only in a bank.	4,4	74,5	21,1
The capital I invested in investment funds cannot lose its value.	11,5	68,2	20,3
Among the investment funds the equity funds are the safest.	18,0	58,9	23,2
Government security funds provide a high return.	13,5	58,9	27,6
EBKM is the abbreviation of an EU institution.	27,6	56,8	15,6
State guarantee is granted for my capital invested in investment funds.	18,0	43,2	38,8
Investments always mean a commitment for over a year, or for at least one year.	9,6	40,9	49,5
If I buy treasury bonds, it will reduce my liquidity.	28,4	29,7	41,9

Source: own research, 2017, N = 768

The students performed a lot better in respect of statements about interests. In addition to the 63.2% correct answer ratio, the percentage of the incorrect answers was only 26.2%. With regard to the 4 statements belonging to this group the respondents were the surest about the interest not always being a fixed amount, as it is indicated by the number of correct answers (80.2%). The following statement received a similar rating, namely that the students perfectly knew that interest and interest rate are two different concepts (79.2%). The statement concerning the term of nominal interest rate, which required deeper financial knowledge, was more problematic. This is where the proportion of "I don't know" answers was the highest and the proportion of correct answers was the lowest. The students also knew well that interest is the price of the money lent, with 57% correct answers, as the table below shows.

Table 2.: The proportion of the right or wrong responses about the interest on the whole sample (%)

	don't know	correct	wrong
Interest is always a fixed amount.	5,5	80,2	14,3
Interest and interest rate are identical, synonym terms.	9,4	79,2	11,5
Interest is the price of the money lent.	6,3	57,0	36,7
Nominal interest rate is the interest rate that the banks announce.	21,4	36,5	42,2

Source: own research, 2017, N = 768

Money substitutes, the bank and credit cards, are today's increasingly widespread means of payment. Decreasing the use of cash has been a target for years or even decades, since in Hungary the rate of this is extremely high. The traditional cash payments are in retreat, giving way to such modern instruments like bank cards and credit cards that are equipped with various security functions and other services. There are card reading terminals in more and more places these days, the larger supermarkets are unimaginable without them. By using the credit cards consciously the owner can even save money, but for that financial consciousness and discipline is needed.

We assessed the knowledge on bank and credit cards through nine statements. In total the students produced a knowledge of 57.3%, and the percentage of the incorrect answers were high again, 29.8%, just like in the case of statements regarding investments. The answers were very diverse. The students knew it well that bank cards cannot be owned without a bank account, which is indicated by the 83.3% rate of the correct answers. The students gave decisively correct responses to the statement according to which certain additional services are attached to certain bank cards (76.3%). However, the situation with the credit cards is a bit more troublesome. Only 58.1% of the students knew that cash can be taken out from credit cards as well, and they also knew in the same proportion that paying with bank cards is free of charge at most of the banks.

55.5% of them marked the correct answer for paying with bank cards reduces the volume of cash in circulation. This percentage is surprising, because it is obvious that paying with bank cards means paying with electronic money, therefore there is no cash movement. It follows that the responding students don't have their own bank cards yet, which will change in the near future. Thus, their knowledge about bank and credit cards needs to be improved fast via lectures and practices. With 39.3%, the students gave the least amount of correct answers to the interest charged on credit card debt. This means that in the student's belief credit cards are bad in all the cases, and there is always an interest after paying with credit cards. The results are detailed in the table below.

Table 3.: The proportion of the right or wrong responses about the bank and credit cards on the whole sample (%)

	don't know	correct	wrong
I can own a bank card without a bank account.	7,8	83,3	8,9
Certain services (reward points, insurance, etc.) can be attached to certain bank cards.	8,1	76,3	15,6
Cash cannot be taken out from credit cards.	18,5	58,1	23,4
Paying with bank cards is free of charge at most of the banks.	7,6	58,1	34,4
If I pay with a bank card, it reduces the volume of cash in circulation.	10,4	55,5	34,1
When paying with credit card we spend the bank's money.	10,2	51,8	38,0
In terms of payments, there is no difference between bank cards and credit cards.	10,7	51,6	37,8
I get bonus points after credit card payments.	24,2	41,7	34,1
If I pay back my credit card debt in time, I won't have to pay interest on the used amount.	18,8	39,3	41,9

Source: own research, 2017, N = 768

Finally, the statements about loans constituted the last group. There is a generally negative, bad public opinion regarding loans due to the defaulting loans subsequent to the crisis. The students who are starting their higher education now presumably were listening a lot to what problems their family and acquaintances had to face in relation to the reimbursement of loans taken out, especially foreign currency loans. This is why it's crucial that in the case of students in their first year at higher education the basic terms concerning loans and the factors of taking out loans consciously in the right way must be emphasized and taught.

The most correct answers within the group were given to the first statement, which proved that the students knew that not everyone can get a loan. Here the percentage of the correct answers was 89.3%. They were also well aware that creditworthiness is not about the bank being able to grant a loan, but about the borrower being able to pay it back. The percentage of the correct answers was 71.9% in this case. Moreover, the students knew that with the help of loans the consumption of the economic operators could be moved forward, since it is advanced, pre-financed by loans (60.7%). On the other hand the proportion of incorrect answers was higher again with regard to APR and denomination. To the statement about APR we only received 35.9% good answers, while denomination is a term the definition of which very few of the students were familiar with.

Overall, it can be established that the rate of the correct answers was very low in relation to statements about loans too. It was 56.1%, and the rate of the incorrect answers was extremely high as well, only 0.1% away from the other two problematic statement groups. The below table illustrates the results in details.

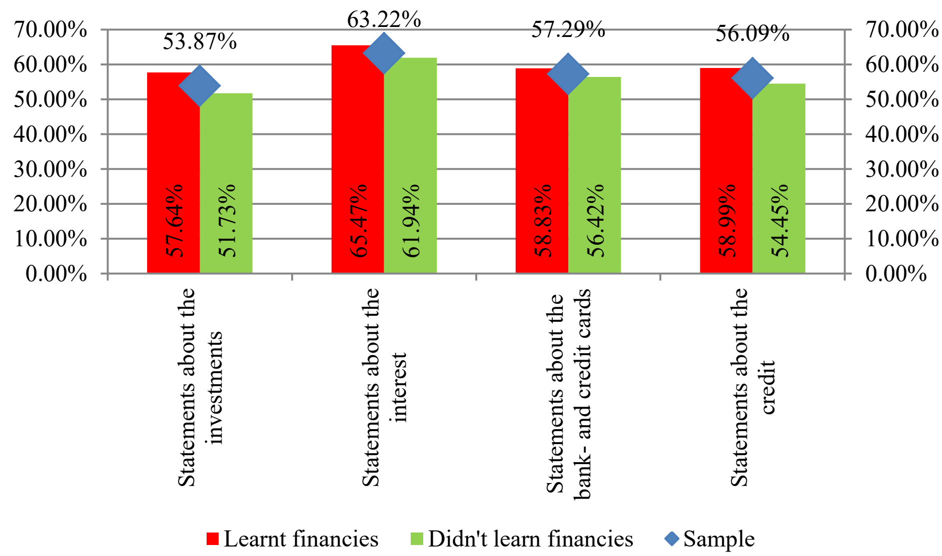
Table 4.: The proportion of the right or wrong responses about the credits on the whole sample (%)

	don't know	correct	wrong
Anybody can get a loan.	3,4	89,3	7,3
Creditworthiness means that the bank is able to grant a loan.	4,9	71,9	23,2
The consumption of the economic operators can be moved forward through loans.	14,1	60,7	25,3
APR is only important in the case of loans.	14,1	35,9	50,0
Denomination is the subscription of loans in foreign currency.	34,4	22,7	43,0

Source: own research, 2017, N = 768

In the following analysis we introduce the overall average of the correct answers given to the statement groups based on what type of education the students had and if they studied finance earlier. The fact whether the students studied finance or not clearly indicates that the ones having initial financial training could answer the statements in a more stable and confident way than the ones that had not participated in any kind of basic financial education. The students who had learnt about finance before produced more correct answers than the sample mean by 2-4 percentage points. They understood the statements about investments better, giving more correct answers by 3.77 percentage points. This value was higher in respect of statements about interest too, by 2.25 percentage points. Similarly to the rest of the students, the bank and credit cards were the least clear to them, where they could only show up an advantage of 1.54 percentage points. They also managed to perform better with regard to loans by 2.9 percentage points. The equivalent figure by the students who had not studied finance before meant a rate 2.11 percentage points lower in connection with statements about investments, but the answers were also problematic to the statements on loans, falling short to the sample mean by 1.64 percentage points. The situation was a bit better with the statements concerning interests, bank cards and credit cards, since in relation to interests they only fell short by 1.28 percentage points, while in the latter case the difference was only 0.88 percentage points, as it is shown by the graph.

Figure 2.: The level of the basic financial knowledge according to the previous financial studies

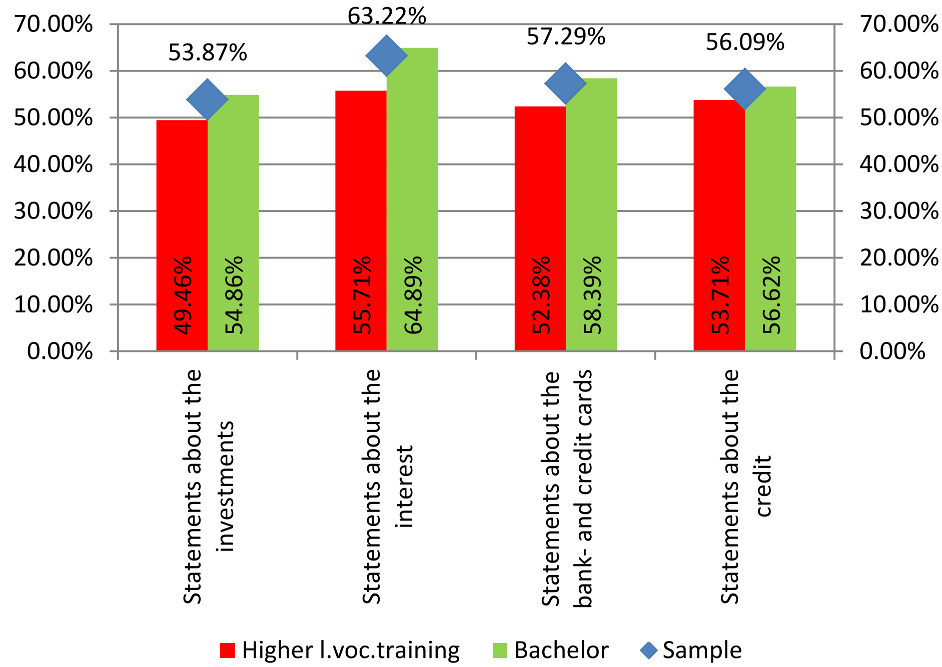


Source: own research, 2017, N = 768

The graph illustrates it clearly that in the case of all the statement groups those students had an advantage who began their studies in the course of higher level initial trainings. There were students among them who had previously been attending higher level vocational trainings of higher education institutions, which constituted a first-mover advantage to them. It is also a fact that the students who just entered into initial training had a higher proportion within the sample, which somewhat distorts the results.

In terms of the level of education, the students receiving initial training managed to produce a difference of 1-2 percentage points. These students gave more correct answers compared to the sample mean by 0.99 percentage points in the case of statements on investments, 1.67 percentage points in the case of statements on interests, 1.1 percentage points in the case of statements about bank cards and credit cards, and 0.53 percentage points in the case of statements on loans. With regard to students entering into vocational trainings of higher education institutions the gap is a lot more significant. Whereas in relation to investments they gave less correct answers by 4.41 percentage points, in connection with statements about interests (where the rate of the correct answers was the highest) they fell behind by 7.51 percentage points. The rate was similarly high regarding the statements about bank and credit cards, where it manifested in a shortfall of 4.91 percentage points. The shortfall was the lowest – 2.38% – in relation to statements abouts loans, as the below graph illustrates.

Figure 3.: The level of the basic financial knowledge according to the level of the current studies



Source: own research, 2017, N = 768

4. Summary

In view of this study it can be asserted that the students' minimal level of financial knowledge is acceptable, the common terms that they hear often are clear to them. The problems occur when they have to answer statements correctly that build on deeper financial knowledge. This reveals that the importance of an initial financial training is essential and indisputable. The future generation cannot be let out to the world of economy without a solid financial knowledge. The questions regarding investments are among the fields that need to be developed the most, which is critical because they will have to face this field as private individuals countless times. There are questions in relation to loans as well that require development and clarification. Teaching basic finance as part of school curriculums would be able to solve this issue, but even courses of personal finances or family finances would not be a waste of time either from the perspective of the future generation. The students participating in the sample already belong to generation Z, who manage their affairs and live their lives on a digital front. They will be the ones who will face financial innovations and FinTech the most. The students starting their higher education now cannot go out to the real world without possessing a solid financial knowledge. The bank sector that is about to be robotized will not be able to explain the information that will be necessary to make responsible financial decisions. All in all, higher education still plays a huge role, either by adding new subjects or by redesigning existing ones. Financial education must get a greater emphasis in order to train more successful economic operators and employees for the future.

References

1. Antonides, G. – Groot, I. M. – Van Raaij, W. F. (2011). Mental budgeting and the management of household finance, Journal of Economic Psychology, vol. 32, 546.-555.pp.
2. Atkinson, A. – Messy, F.A. (2012): Measuring Financial Literacy, OECD Working Papers on Finance, Insurance and Private Pensions no. 15, http://www.oecd-ilibrary.org/docserver/download/5k9csfs90fr4-en.pdf?expires=1498684984&id=id&accname=guest&checksum=C5B34DF2381775999E9EFC9A4A5B956D, letöltve: 2016.08.04.
3. Balázsné Lendvai, M. (2013): A bankmarketing szerepe a pénzügyi kultúra fejlesztésében, Doktori Ph.D. értekezés, Nyugat-Magyarországi Egyetem, Sopron, http://ilex.efe.hu/PhD/ktk/balazsnelendvai/disszertacio.pdf, letöltve: 2016.10.05.
4. Bandura, A. (1982). Self-efficacy mechanism in human agency. American Psychologist, vol. 37, no. 2, 122.-147.pp.
5. Borden, L. M. – Lee, S. – Serido, J. – Collins, D. (2008). Changing college students' financial knowledge, attitudes, and behavior through seminar participation, Journal of Family and Economic Issues, vol. 29, no. 1, 23.-40.pp.
6. Chen, H. – Volpe, R. P. (1998). An analysis of personal financial literacy among college students, Financial Services Review, vol. 7, no. 2, 107.-128. pp.
7. Csiszárik-Kocsir, Á (2016): A pénz boldogít, vagy sem? – A jólétet befolyásoló tényezők egy kvantitatív kutatás tükrében, „Korszerű szemlélet a tudományban és az oktatásban" – A Selye János Egyetem Nemzetközi konferenciája, Komarno,2016. szeptember 13.-14., 84.-93. pp.
8. Csiszárik-Kocsir, Á. – Varga, J. – Fodor, M. (2016): A pénz helye és értéke a mindennapi pénzügyi gondolkodásban egy kutatás eredményei alapján, „Korszerű szemlélet a tudományban és az oktatásban" – A Selye János Egyetem Nemzetközi konferenciája, Komarno,2016. szeptember 13.-14., 73.-83. pp.
9. Csiszárik-Kocsir, Á. (2016): Etikus pénzügyek, avagy a pénzügyek etikája - Vélemények egy kutatás eredményei alapján, Polgári Szemle, vol. 12, no. 4-6, 32.-44.pp.
10. Grifoni, A. – Messy, F.A. (2012): Current Status of national Strategies for Financial Education; a comparative analysis and relevant practices, OECD Working Papers on Finance, Insurance and Private Pensions, No. 16.
11. Johnson, E. – Sherraden, M. S. (2007). From financial literacy to financial capability among youth, Journal of Sociology and Social Welfare, vol. 34, no. 3, 119.-145.pp.
12. Klapper, L. – Lusardi, A. – Panos, G.A. (2012): Financial Literacy and the Financial Crisis. Policy Research Working Paper. Washington, The World Bank
13. Koh, N.K. – Lee, C.B. (2010): "Because My Parents Say So"- Children's monetary decision making, Procedia Social and Behavioral Sciences, vol 9., 48.-52.pp.
14. Luksander, A. – Béres, D. – Huzdik, K. – Németh, E. (2014): A felsőoktatásban tanuló fiatalok pénzügyi kultúráját befolyásoló tényezők vizsgálata, Pénzügyi Szemle, vol. 59, no. 2., 237. – 258.pp.
15. Lusardi, A. – Mitchell, O. S. (2007). Baby boomer retirement security: The role of planning, financial literacy, and housing wealth, Journal of Monetary Economics, vol. 54, 205.-224.pp.
16. Lusardi, A. – Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence, Journal of Economic Literature, vol. 52, no. 1. , 5.-44.pp.
17. Johnson, E. – Sherraden, M.S. (2007) From financial literacy to financial capability amog youth, Journal of Sociology and Social Welfare, vol. 34, no.3., 119.-145. pp.
18. Magyar Nemzeti Bank – Pénzügyi Szervezetek Állami Felügyelete (2008): Együttműködési megállapodás a pénzügyi kultúra fejlesztés területén, https://www.mnb.hu/letoltes/0415mnbpszafmegallpodas-penzugyi-kultura-fejleszte.pdf, letöltve: 2012.04.12.

19. Osana, H.P. – Tucker, B.J. – Bennett, T. (2003): Exploring adolescent decision making about equity: structured problem solving in social studies, Contemporary Educational Psychology, vol. 28, 357.-383.pp.
20. Suganya, S. – Sakthivelrani, S. – Durai, K. (2013): Development and validation of financial literacy scale, International Journal of Research in Commerce and Management, vol. 4. , no. 1., 99.-104. pp.
21. Van Els, P. – Van Rooij, M. – Schuit, M. (2007). Why mandatory retirement saving? In: O. Steenbeek & S. van der Lecq (Eds.), Costs and benefits of collective pensions systems, Springer, Berlin, 159.-186.pp.
22. Zsótér, B. – Nagy, P. (2012): Mindennapi érzelmeink és pénzügyeink Pénzügyi Szemle, vol. 57, no. 3., 310. – 321. pp.