

## FINANCIAL LITERACY: THE CASE OF KIMEP UNIVERSITY STUDENTS

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**Abstract:** This article analyzes the financial literacy of students by using the questionnaire method at KIMEP University. The purpose of the study is to assess the level of financial literacy of students and their attitude to teaching the basics of financial literacy in institutions of higher education. The following tasks were accomplished to achieve this purpose: 1. The level of financial literacy of students was assessed. 2. The students' demand for knowledge about the financial market, financial institutions and the services provided by them were revealed. 3. The existing ways of getting information by students about financial institutions and services were studied; the opportunities for self-education in this area were studied.

The study analyzed the subjective assessment of the level of financial literacy, the understanding and use of contemporary financial services by students, as well as the students' level of trust in financial institutions. The ways of increasing the financial literacy of higher education students are suggested proceeding from the analysis.

**Keywords:** Financial literacy, Development, Economic information, KIMEP University, Questionnaire research, Personal finance, Students, Financial institutions.

### 1 Introduction

Recently, more attention has been paid to the problem of increasing the financial literacy of the population. Financial literacy is necessary for people of any age. Pensioners need it to manage skillfully the accumulated funds, not to lose money in pyramid schemes, to learn to use those financial instruments that save time and effort. Financial literacy allows middle-aged people to work out the right strategies of saving for old age, enables to manage available financial resources effectively. Financial literacy allows young people to gain an understanding of finance, to build skills in planning budgets and savings, to solve the problems of financing education and housing. (1, 2)

Financial literacy is usually defined as knowledge about financial institutions and the products they offer, as well as the ability to use them when necessary and the understanding of the consequences of one's own actions. Financial literacy as a concept is divided into three interrelated parts such as attitudes, knowledge, and skills on the basis of which the index of financial literacy is calculated. (3)

The first part, i.e. attitudes, is the basis of financial literacy. It is concerned with the formation of financial behavior that begins with family budget planning for a long term, and the development of a strategy for satisfying the needs of the life cycle. The life cycle of any person includes certain events, which must be approached with good financial skills. This is the creation of a family, the birth of children, the purchase of an apartment or a house, the education of children, a pension. The solution of all these tasks is impossible without the use of financial market instruments such as savings, credits, and investments. At the same time, the distrust of the population to financial institutions is an important attitude, which often hampers the development of people's financial activity.

Although it is necessary to emphasize that the inclusion of attitudes in the concept of financial literacy is a very controversial issue. The attitudes related to long-term financial strategies is not always a sign of financial literacy and their lack is not a sign of financial illiteracy. It is possible that, on the contrary, the lack of long-term strategies and of confidence in financial market institutions when these institutions are weak and subject to crises and when regulatory legislative framework is not keeping up with the development of the market is a financially competent attitude, which results in the refusal to use financial instruments. Why does someone need to start saving for retirement from a young age when the probability is high that in the conditions of high inflation or instability of the financial market these savings will depreciate or even disappear? Why does someone need to be insured if, in the case of an insured event, it will be difficult to receive payments? Why does

someone need to get a credit for education if it is not really education but the right connections allow to qualify for prestigious jobs with high salaries? It turns out that the inclusion of such attitudes in the definition of financial literacy makes this definition, rather normative. In other words, it is accepted as evidence only in the system of liberal economic views. However, even if we leave aside the discussion about the soundness of the liberal approach, it should be recognized that individualism, personal responsibility for financial decisions and long-term financial strategies could be justified for the population only if there are clear and strict rules for the financial market participants dealing with the population's money, which they will have to respect.

When developing financial literacy programs, it should be borne in mind that it is impossible to form "correct" attitudes without corresponding changes in the institutions of the financial market. For example, it makes no sense to form a credit culture and the confidence towards banks without providing the full cost of credit and the opportunity for borrowers to compare the conditions of different banks with each other. It is impossible to teach people to read credit contracts if banks hide essential information behind incomprehensible wording and multi-page texts. It is impossible to expect that people will make long-term savings or invest in the stock market if their savings are depreciated or even completely lost as a result of inflation or financial turmoil. In addition to attitudes, financial literacy presupposes a certain level of knowledge and practical skills in the field of finance. When developing test questions for measuring the index of financial literacy, we tried to make sure that the questions were focused on fundamentally important financial competencies, the absence of which currently leads people to financial losses or lost profits.

When the concept was operationalized, we did not include the preference assessment in the index. For example, if a person is attracted to risk, this does not increase or decrease the assessment of his level of financial literacy, because risk appetite per se does not say anything about financial literacy or illiteracy.

The issue of financial literacy and its importance for the economic well-being is discussed widely worldwide. Numerous researchers raised this issue during different periods of time and the studies took place in different countries. (4, 5) Numerous authors mentioned this topic in their papers at conferences. However, a very small amount of authors discussed the applicability of this particular topic in such CIS country as Kazakhstan. This paper attempts to discuss the issue of financial literacy and its applicability among Kazakhstani youngsters, who are current students.

As it was defined by Lusardi and Mitchel (6), financial literacy is an ability to process economic information and make informed decisions about financial planning, wealth accumulation, debt, and pensions. Such type of knowledge helps physical entities to invest intelligently, take loans at cheaper costs and to accumulate wealth in shorter periods of time. Physical entities are similar to companies and they also strive for wealth accumulation. They also do borrow and do invest and achieve their goals throughout their lives. The paper is devoted to the issue of financial literacy in Kazakhstan and it evaluates the knowledge of financial literacy among certain categories of Kazakhstani population.

At the same time, the paper strives to identify whether Kazakhstani youngsters need any training in the area of financial literacy and personal finance. For this purpose, the survey was conducted among young people, who are KIMEP University students in 2017. Questionnaires were distributed among KIMEP University students during daytime in 2017.

Two main research questions are as follows:

1. Are KIMEP University students financially literate?

2. Do people of our country need any training in the area of personal finance (financial literacy)?

The literature allows us to review papers related to the issue of personal finance. By summarizing any previous research done on this particular topic, we may focus on what remains to be explored. The paper further contributes to the issue of financial literacy in Kazakhstan and provides both theoretical and practical implications of the study.

## 2 Literature Review

The traditional economic theory postulates that forward-looking individuals maximize expected lifetime utility using economic information to build retirement assets over their working lives (Behrman et al., 2012). The popular microeconomic approach to saving and consumption decisions in the area of personal finance postulates that a fully rational and well-informed individual will consume less than his income in times of high earnings, thus saving to support consumption when his income falls. During the years of high earnings, an individual accumulates wealth in order to spend it during the years of low income. Individuals do consume and do invest and their decisions affect the whole economy. Throughout their lifetime, individuals make different decisions about saving, investing and consumption both in the short run and in the long run. Such authors as Modigliani and Brumberg (8) and Friedman (9) discussed the issue of financial literacy as the consumer is posited to arrange his optimal saving and decumulation patterns to smooth marginal utility over his lifetime. Such microeconomic models generally assume that an individual can formulate and execute saving and spend down plans, which requires them to have the capacity to undertake complex economic calculations and to have an expertise in dealing with financial markets. Keown (10) described key issues of financial literacy and pointed out the importance of personal finance in his textbook "Personal Finance: Turning Money into Wealth". The author scientifically described such issues as the personal financial planning process, mortgage loans, consumer loans, investment in stocks, bonds etc. Financially educated individuals in the sphere of personal finance usually make wise decisions about housing, mortgage, short-term and long-term investment. They push demand on particular financial products such as deposits, loans, and also on financial instruments such as stock and bond. During the economic recession, they may influence the economy counter-cycle way by investing in stock or bonds. Using this strategy they may facilitate economic growth, increase Gross Domestic Product of their country. As it is universally accepted, consumption and investment are significant parts of Gross Domestic Product and they are managed by physical entities. By investing their excess funds into stocks, bonds or placing them in bank deposits, they may facilitate economic growth during the period of the recession of an individual.

Lusardi and Mitchell (6) mentioned that despite the rapid spread of such financially complex products as student loans, mortgages, credit cards, pension accounts, and annuities, many of these have proven to be difficult for financially unsophisticated investors to deal with. Such developments have their advantages, they also impose on households a much greater responsibility to borrow, save, invest and decumulate their assets sensibly by permitting tailored financial contracts and more people to access credit. (11) Such authors as Lusardi and Mitchell (12) have found low levels of financial literacy in the US population, an inability to understand basic financial concepts, such as the importance of retirement savings and poor judgment in borrowing decisions. At the same time, Cole, Sampson, and Zia (13) found out that there are very low levels of financial literacy for households in India and Indonesia. Lusardi finds widespread lack of financial literacy among people with low levels of education, women, and minorities. This lack of financial literacy is associated with poor financial making, in particular, regarding retirement planning. (14)

Yet despite the strong association between financial literacy and a range sure of financial well-being, little is known about the

efficacy of financial training programs in improving these outcomes. Bernheim, Garrett, and Maki (15) studied variation across states and time in mandatory financial education for high school students and find that mandates increased exposure to financial curricula asset accumulation. Cole, Sampson, and Zia (13) randomized evaluation of a financial education program in Indonesia.

In terms of training in the sphere of financial literacy, many researchers analyzed whether there is a causal link between literacy and individual outcomes. In their studies, Garrett (16) and Lusardi (17) provide survey evidence that attendance of financial counseling programs does positively affect those attendees with low income and that education effects of the programs are large; however with self-selection into an upward bias. In contrast, Duflo and Saez (18) conduct exposing employees to a benefit fair that raises awareness, but they find only a small effect on savings plan enrollment.

## 3 Materials and Methods

In order to understand fully the level of financial literacy of the population, it seems necessary to gather additional sociological information on the current state, development trends, problems, and needs of the people under research. First of all, information on the financial literacy of young people is necessary, as they are the most promising segment of users of financial services in the country.

There are two research questions of the study. The first is about the knowledge of financial literacy and the second one is about the need for training in the sphere of personal finance. First of all, it should be studied whether students know the basics of financial literacy. (19) In addition, the second issue is whether they need any training in the sphere of financial literacy. The survey took place at KIMEP University, which is located in Almaty, Kazakhstan. Respondents were asked about their perception of their knowledge of personal finance. Also, they were asked anonymously about their current financial position, in terms of wealth they own. The wealth of respondents includes deposits, stocks bonds, real estate, gold, and other assets. Respondents also were asked whether they need any training in the area of personal finance (financial literacy). The sample includes 300 students from different specializations. Majority of students, which is 89% of respondents agree that financial literacy training are needed for every citizen of Kazakhstan. Only a few of them (21% of respondents) believe that they are knowledgeable enough in the area of personal finance. In terms of the wealth they own, respondents mostly named a few assets such as deposits, cars, and certain personal belongings. A very small percentage of respondents (1%) do own real estate. The age of respondents varies from 17 to 24 years old. Majority of them are a nonworking population of youngsters. Majority of respondents were female (51%) and the rest (49%) were male respondents. Respondents were asked to fill in a questionnaire on the campus of KIMEP University during the daytime, after their classes. Majority of respondents were willing and able to fill in the questionnaire.

As a way to improve the knowledge of basic issues related to financial literacy, respondents were asked to agree or not agree to introduce basic financial literacy courses. Majority of respondents (82%) agree that such a new course will help to obtain basic knowledge of financial literacy. Respondents were asked about the ways to improve their knowledge of basic finance. Majority of respondents (78%) agree that internet and self-study are helpful in this case. Almost all respondents (97%) agree that financially literate people make sound financial decisions during their lifetime and it helps them to accumulate wealth on time. Such people achieve their goals, accumulate enough for retirement and can easily get rich. Respondents realize the importance of financial literacy knowledge in their practical life.

Below this is the questionnaire used in the research.

Good day! Through this brief survey, your answers will be helpful. Your response will be used only for survey purposes. Thank you very much for your time and suggestions.

1. What is your age?
2. Specify your gender
3. Specify your status
4. Name all assets which you personally own
5. How wealthy are you?
  - A. Very wealthy
  - B. Wealthy
  - C. Average
  - D. Below average
  - E. Poor
  - F. Other
6. Are you financially literate?
  - A. Yes
  - B. No
7. In your opinion, are you knowledgeable enough in the area of personal finance?
  - A. Yes
  - B. No
  - C. I do not know
8. Do you need any training in the sphere of personal finance?
  - A. Yes
  - B. No
  - C. I do not know
9. In your opinion, is it helpful for Kazakhstani citizens to pass training in the area of financial literacy (personal finance)?
  - A. Yes
  - B. No
  - C. I do not know
10. Do you believe that financially literate people make sound financial decisions during their lifetime and it helps them to accumulate wealth on time?
  - A. Yes
  - B. No
  - C. I do not know

### 3 Results and Discussion

The study took place on the campus of KIMEP University in Almaty, Kazakhstan. The sample employed includes 300 students, who are KIMEP University students. Respondents were kindly asked to fill in their questionnaires and based on their answers, the results were interpreted. Two basic research questions of the study are about respondents' financial literacy and the need for any training in this area. Only 21% of respondents consider themselves as financially literate enough. In terms of training, almost 90% of respondents agree that financial literacy training is needed for our population. Almost all respondents (97%) agree that financially literate people make sound financial decisions during their lifetime and it helps them to accumulate wealth on time. Such people achieve their goals, accumulate enough for retirement and can easily get rich. Limitations of the study are that it only employed 300 students of young age (17-24), which is not representative.

Theoretical implication of the research is that the sample size may be increased and may employ not only students but all employees of the University. The survey may be expanded and implemented in other countries as well. The practical implication of the study is that there is a need for training in the sphere of financial literacy in Kazakhstan. At least, youngsters, who represent KIMEP University, agree upon this issue. Such training will help people to learn basic financial literacy and may help them to accumulate wealth, make wise decisions in the area of personal finance. People will be knowledgeable enough to invest intelligently, to borrow cheaper and will be able to accumulate enough wealth for their retirement. The need for such training does exist in Kazakhstan and other ways of learning basic financial literacy include internet and self-study as per respondents' answers.

To increase the financial literacy among the youth, the authors of the article believe that the main focus in the development of new curricula or the modernization of existing ones should be given to the information resource in the global network, since, for example, the educational and practical literature on this subject has already reached a significant quantitative and qualitative development. However, websites on this subject already exist and, according to the above research data, they are in demand. Despite this, the general level of financial literacy of students who are not specialized in economics needs to be increased. (20)

However, there are some reasons for the insufficient efficiency of websites at the current stage. Ironically, most sites devoted to financial literacy do not contain relevant financial information necessary for making decisions in the area of personal finance, such as currency rates, interest rates, financial forecasts, although such information is often found on other sites. Another popular element of such sites is training videos. On most sites, this element is present to some extent. On the other hand, here comes the question of its relevance and ability to interest the target audience. As a rule, such videos are aimed at already working citizens and are not quite suitable for students.

The existence of such a problem is logical. Since students consider lectures and training to be a sought-after means of communication that contribute to increasing the financial literacy of this target group, we also interviewed experts and representatives of companies engaged in organizing educational activities to improve financial literacy. Such companies do not currently consider students as the main target audience for lectures and seminars, as well as training courses in general. There are two reasons for this. First, from the point of view of the companies organizing seminars and training, students showed insufficient solvency, and this is a key factor for a commercial organization. In addition, very often training videos concerning personal finance management are derived from offline training. Accordingly, the lack of orientation towards students in offline mode entails a lack of specialized courses on the Internet. The second reason for the lack of attention of commercial training organizers to students is that students are still recognized as more financially literate than other categories of the population. It should be noted that these companies conduct, for example, training and seminars at the invitation of institutions of higher education (in part for advertising purposes), which subjects are both business coaching and general financial literacy.

It is important to point out that although there are a lot of such programs on the market and some of them are free, not every user who does not have experience in maintenance of housekeeping accounts is able to choose a program most suitable for him or her.

An insufficient desire of commercial companies to develop programs to increase financial literacy among students has an economic justification. However, these methods of increasing financial literacy retain their effect independently of their initiator. In current conditions, when particular programs and the selection of projects to increase financial literacy exist, an institutional program would be possible, implying, among other things, the creation of such an online platform. Taking into account this opportunity, we attempt to formulate new approaches to increasing the financial literacy of students who are not specialized in economics.

1. A website should be the main platform for teaching financial literacy. This may be an already existing resource, modified in accordance with the proposed specificity, or a new portal created with the involvement of public funding. At the same time, a resource on the Internet should have both a mobile version and a mobile application capable of running on major mobile platforms. Access to all information resources is offered only to registered users. A registration should be free but should require general information about a user to track statistics about the use of site resources and, as a consequence, about the practical implementation of the program. Taking into account the wishes of students, the current financial information should be posted on this site. This can be not only the exchange rate but also the most favorable offers of banks concerning deposits and credits. Such a solution will not only increase the information content of the site but also will attract various financial institutions to cooperation. The site must contain a section with a training video. The basis for this should be a video created specifically for the chosen target audience. Since the creation of videos can be quite costly, the best option at the initial stage is the creation of such videos with the

involvement of the students themselves. It can be students who are specialized in economics and who have theoretical knowledge and personal practical experience. The advantage of this approach is that the development and implementation of a project for the creation of such a video can be realized as a project in one of the academic disciplines or within the framework of the competition of student works. Subsequently, with sufficient funding, the involvement of professionals in this field is also justified. The site should provide an opportunity to consult on personal finance issues. To do this, it is possible to create a forum with assigned topics within financial literacy, in which users can ask questions of interest to them, receive answers from specialists and exchange opinions among themselves. In the future, it will be possible to create a database of frequently asked questions and to place corresponding answers into a separate section. An active participation in a project, high results in testing, the victory in a quiz or an online game could be rewarded with a coupon for a free individual consultation. This practice is quite standard in the West, where Amazon coupons play the role of reward for such actions.

2. Since the basis for personal financial planning is keeping personal records of income and expenses, it is necessary to take charge of the availability of a program and a mobile application for these purposes, both within a possible site and for isolated use. It is possible to provide an overview of available programs with user feedback and expert comments directly on the site. It should be recognized that most of the existing programs are either unjustifiably expensive, or not very convenient to use, or require access to personal information and watching an advertisement. Proceeding from the fact that most students do not have enough opportunities to pay for software products, attention should be paid to the development of a free or shareware program when financing such a development by the initiator of the program. Such a program should be understandable and convenient for students, it should be able to synchronize mobile devices with a personal computer. The main problem in keeping records of income and expenses is the complexity of entering information on expenses because they occur much more often than income is generated. To solve this problem, it is possible to propose, when creating an expenses accounting program, the possibility of importing information on expenses made through bank cards and through a direct data recording of cheques (through QR codes, for example). Similar applications targeted for payment are included, for example, in the Samsung Pay system but they have been developed most in China, where a significant (if not overwhelming) portion of small payments is made through the service WeChat. (21) The creation of a free program, as well as of a video, requires the involvement of specialists, and, therefore, some costs. However, such costs can be justified even from the point of view of a private investor, if such a program is not free but a shareware one. Expanded program functions such as expenses analysis, charting, technical analysis and forecasts and recommendations based on it should become available under certain conditions (for example, an increase in the level of financial literacy due to passing tests, participation and victory in online quizzes or games devoted to financial literacy, participation in surveys that improve the work of the site).
3. Any training, as well as the consolidation of the knowledge gained, is more effective if game methods are used for this. An online game could be one of the elements of the site. The development and popularization of such a game is a matter of specialists. Meanwhile, the students themselves could be involved in this work. Furthermore, already today a considerable number of various quizzes and Olympiads on financial literacy are held. It is possible to continue holding similar events as part of the work of the online portal as well as separately. It is possible to use external resources when working with the website.
4. Before the completion of the creation of the Internet portal, related software products, monitoring, and incentive

systems, it is expedient, from our point of view, to attract commercial organizers of training activities on a reimbursable basis within the public procurement system. Such actions, although they involve additional financial costs, will increase the coverage of the program. In addition, as noted above, there are facts of the organization of seminars, lectures, and training in higher education institutions by such companies on a non-reimbursable basis, for advertising and reputational purposes. One of the drawbacks of the activities carried out was the fact that such training is more often held in economics higher education institutions and faculties, whereas, as was noted above, the students who are not specialized in economics have the greatest need for them. The lack of contacts between these companies and the leadership of institutions of higher education and their units, which are not specialized in economics, is also a kind of problem. It seems useful to instigate the interaction of non-economic and economic faculties of versatile institutions of higher education in order to connect the non-economic faculties with the organizers of training. Attention should also be paid to the fact that the representatives of the event organizers confirmed their readiness to work with higher education institutions, provided there is an external solvent customer, including a public and municipal procurement. The direct work of institutions of higher education including commercial projects of departments and faculties within the framework of extra-budgetary activities would be logical here.

5. Finally, for students who are not specialized in economics, it seems appropriate to make some modification of the economic courses, which they study in their first years as part of their general education curriculum. It seems that the purely academic content of economic disciplines is not of sufficient use, both practical and theoretical, because, as a rule, students who are not specialized in economics, do not use such knowledge to a sufficient extent and, as a result, forget it. In this regard, part of the time of the courses they attend could have a more applied nature, for example, in the form of an explanation of the principle of the functioning of credit and deposit products and their risks. The implementation of the proposed activities, especially at the initial stage, will require costs, which, depending on the scale of the project, can be significant. Before the start of a large-scale program to increase the financial literacy of students who are not specialized in economics, it may be expedient to create a pilot project and its approbation on a small group of students of one of the universities. This will avoid errors when expanding the target audience. In addition, it should be borne in mind that current measures to increase financial literacy also receive government funding (reaching tens of millions of dollars), but not always achieve the desired effect. (22, 23) In addition to this, teaching the economy in the current form to students who are not specialized in economics requires a substantial expenditure of teaching hours for teachers, and therefore corresponding funding, which can be applied more effectively in this area. For the purposes of financing the mentioned project, it is possible to involve non-state institutions. However, their participation is fraught with the danger of having an excess of information of an advertising nature. Unfortunately, very many Internet resources devoted to increasing financial literacy today openly advertise certain financial institutions or financial services, which is not always justified. Since the issue of increasing the financial literacy of the population as a whole has already been made at the state level, it is logical that the major share of the costs of implementing this project should be borne by the state budget.

#### 4 Conclusion

After graduating from a university or a college, when starting their working life, very few people are able to devote much time to self-education, especially if this is not related to their professional activities. In addition, already during the studies in a university, a citizen, as a rule, becomes fully capable. In this regard, when talking about the choice of the target audience in

terms of increasing the level of financial literacy of the population, special attention should be paid to students. This group being the most receptive to new knowledge is able not only to obtain the proposed knowledge about finance but also to start applying them from the first days of independent life. At the same time, when talking about students, it should be remembered that some of them, in accordance with the chosen higher education institution and specialty, directly study blocks of economic disciplines, gaining an economic or "near-economic" specialty, which is also likely to increase the level of knowledge in the field of personal finance.

Based on the above data, we can conclude that students really need to increase their level of financial literacy and are willing to give it their own time and energy. On the other hand, while students who are specialized in economics have the opportunity to raise their level of financial literacy by studying the disciplines of the main course of their curriculum, students who are not specialized in economics have fewer opportunities for this. (24)

To date, financial literacy is defined as knowledge about financial institutions and products, as well as the ability to use them when a need arises and understanding the consequences of their actions. (25) The effectiveness of the population's participation in the modern economy directly depends on an understanding of how you can profitably use new financial products. (26) Reliable use of knowledge is impossible without basic knowledge and skills. (27, 28) The task of increasing the level of financial literacy of the population is stated among the top priorities in the Concept of Long-Term Social and Economic Development of Kazakhstan for the period until 2020. In addition, the need to increase financial literacy is determined by a number of international agreements.

In conclusion, we would like to state that today the universities pay great attention to the theoretical aspect of studying economic disciplines, while the level of practical skills of students remains extremely low. It is necessary to establish interaction with financial structures, which will create the possibility of obtaining information and experience "at first hand."

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#### Primary Paper Section: A

#### Secondary Paper Section: AM, AO, AH