

Gender Features of Financial Literacy (Self-Efficacy) of Students at a Technical University

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ABSTRACT

The development of financial technologies, tools and services actualizes the importance of financial education and improving the financial literacy of the population, which determines the adoption of effective decisions on issues related to their current and future well-being. The study of financial literacy of students of Novosibirsk state technical University revealed the gender specificity of financial behavior, which allowed us to make recommendations to reduce the gender gap in the level of financial literacy of young people. The opinion was expressed that the prospects for the development of this area should be related not only to financial literacy, but also to the implementation of measures to increase women's self-confidence in their ability to manage personal finances.

Keywords: *financial education, financial behavior, financial literacy, gender characteristics, risks, financial future*

1. INTRODUCTION

The current rapid development of financial technologies, tools and services increases the chaotic nature of consumer behavior, primarily due to ignorance, dependence on stereotypes and poor-quality advertising information. That is why the tasks of improving financial literacy of the population remain relevant for the economies of different countries for a long time.

Currently, the positive effect of financial literacy on various financial decisions and behaviors has been identified and has been repeatedly empirically confirmed. Increasing financial literacy has been shown to have a positive impact on retirement planning and life in retirement (Clark et al., 2012), participation in the stock market (van Rooij et al., 2011), personal savings (Jappelli and Padula, 2013), proper use of debt (Stango and Zinman, 2009), and credit cards (Xiao et al., 2012; Norvilitis et al., 2006) [1]. A correlation between financial knowledge and wealth was established (van Rooij et al., 2012) [1]. In other words, with proper financial knowledge and skills, people can receive significant benefits, both in the short and long term [2].

Surveys regularly conducted by the National Agency for financial research (NAFI) show that moderate self – assessments of the level of financial literacy prevail among Russians-about half assess their knowledge and skills as satisfactory (44% in 2010, 51% in 2016, 47% in 2018), while the majority do not take into account income and spending (69% in 2010, 72% in 2016, 60% in 2018) and only a third compare the terms of providing financial services (30% in 2010, 32% in 2016, 36% in 2018) [3]. International data confirm the scale of the problem.

In world practice, the organization for Economic Cooperation and Development (Organization for Economic Cooperation and Development), an international economic organization of developed countries that recognize the principles of representative democracy and free market economy, has been engaged in financial education for adults since 2003 and for young people since 2008 [4].

In 2006, the Group of 8 (G8) Finance Ministers recognized the importance of improving people's financial education and financial literacy in order to increase their ability to use financial services and make effective decisions about their current and future well -being. And in 2013, at the G20 summit, national strategies for financial literacy were presented [5].

1.1. Related Work

Foreign researchers are actively studying the issues and problems of improving financial literacy. For example, according to Farrell L., Fry T. R. L., Risse L. [6], personal Finance management requires not only financial knowledge and literacy; a person needs a sense of self-confidence in their financial decisions, which is characterized by financial self-efficacy. Financial self-efficacy becomes an essential determinant that determines the type and quantity of financial products that an individual owns. That is, if a person is more confident in their financial capabilities to manage personal finances, then they have a good result from investing and saving their own funds, while not using products that cause the appearance of debt obligations. Philippas N. D. notes that financial knowledge has become necessary amid the instability of global markets, asymmetric information in

these markets, the complexity of financial products, and the rapid growth of financial technologies (FinTech) [7]. Panos, G. A., Wilson J. O. S. [8] believe that financial literacy plays an important role in ensuring a person's financial well-being. FinTech is revolutionizing the financial services industry by influencing personal financial planning, well-being, and social well-being. In an era of increasing digital financial availability and threats posed by online financial fraud, financial literacy is of particular importance.

The main factors that affect the level of financial literacy, Farrell L., Fry T. R. L., Risse L. include [6]: education, age, household income, gender. Many foreign studies focus on gender differences in financial literacy. Thus, Bucher-Koenen T., Lusardi A., Alessie R., van Rooij M. note [9] that women demonstrate a lower level of financial literacy, while gender differences are present for both basic and more advanced indicators of financial literacy. A number of foreign researchers [2, 10, 11] have studied the potential impact of financial education on a person's financial capabilities.

1.2. Our Contribution

To identify gender-specific financial behavior of young people, a survey of 110 students of Novosibirsk state technical University was conducted; an equal number of representatives of both genders participated in the survey. When analyzing the responses of students from Novosibirsk state technical University, it was found that young women are less knowledgeable about personal Finance management, young men have a better theoretical base and are more confident in practical situations. The results of self-assessment correspond to an objective picture of the possession of financial competencies, both among men and women.

1.3. Paper Structure

The second section of the study reflects the views of Russian and foreign researchers on the problem of improving financial literacy, presents the grouping of countries in relation to the government's attitude to financial literacy, and shows the role of financial self-efficacy. The third section presents the results of the identified gender specificity of financial behavior of students of Novosibirsk state technical University. In conclusion, recommendations are made to reduce the gender gap in the level of financial literacy of young people.

2. BACKGROUND

It should be noted that abroad came to the realization of the need to improve financial literacy of the population much earlier than in the Russian Federation; the United

States was the first to engage in financial education of citizens. The level of financial literacy and coverage of the population with financial instruments differ significantly from country to country. We can talk about methods, means and forms of communication in the system of financial education, determined by the national specifics of the country where programs are implemented to improve financial literacy of citizens. Such programs are available in Australia, Austria, Belgium, Canada, the Czech Republic, Finland, Germany, Hungary, India, Indonesia, Italy, Japan, Norway, Poland, Romania, Spain, South Africa, the United Kingdom, and other countries.

In relation to the government's attitude to financial literacy, the following groups of countries can be distinguished:

- 1) with a high degree of understanding of the importance of financial literacy of the population and the scale of financial education and enlightenment (USA, UK, France, Germany, Canada, Singapore, New Zealand);
- 2) with state awareness of the importance of financial education, but lack of sufficient study and proper support from the public (in particular, the Netherlands, Poland, Italy, Czech Republic, Austria, India, China, Russia);
- 3) with the coming understanding of the degree of influence of financial literacy of citizens on the economic and social development of the country and the beginning of the process of initialization of projects and programs to ensure financial education of the population (African countries).

Currently, in Russia, as in the world, much attention is paid to programs to improve financial literacy, including through the implementation of financial education programs. In the Russian Federation since 2011, implementing a joint project of the Ministry of Finance and the world Bank, "enhancing financial literacy and developing financial education in the Russian Federation". By order of the Government of the Russian Federation dated September 25, 2017 No. 2039-p Approved the strategy for improving financial literacy in the Russian Federation for 2017-2023. the goal of this Strategy is to create the basis for the formation of financially literate behavior of the population as a necessary condition for improving the level and quality of life of citizens, including through the use of financial products and services of appropriate quality.

Many Russian and foreign academic researchers, as well as practitioners, address the issue of financial literacy and activation of activities in the field of financial education. Thus, A.V. Zelentsova, E. A. Bliskavka, D. N. Demidov believe that " the development of financial literacy is an important direction for strengthening the middle class, saving behavior of the population as the basis for macroeconomic stability and the development of the modern financial sector of the country." They emphasize that "in international practice, the concept of financial literacy is accepted as the ability of individuals to manage their finances and make effective short-and long-term financial decisions" [12].

Financial education, according to M. A. Ovchinnikov, is "a combination of two elements: – individuals' possession of

information about existing financial products and their producers (sellers), as well as existing channels for obtaining information and consulting services; – the ability of the consumer of financial services to use the available information in the decision-making process: when performing special calculations, assessing risks, comparing the comparative advantages and disadvantages of a particular financial service" [13].

Thus, financial education aimed at the formation of universal competencies, including financial literacy, can be considered as a process by which any individual not only improves their knowledge of financial products and concepts, but also develops skills to work with modern financial instruments, understands risks and has the ability to make informed choices, is able to make effective decisions to improve their financial well-being and protect their interests.

Issues of financial literacy are currently receiving a lot of attention, both at the international and national levels. A large number of domestic and foreign studies have been devoted to solving problems related to the formation of rational financial behavior, risk assessment and management, as well as ensuring personal financial security. However, issues related to identifying and taking into account the gender characteristics of students at a technical University in the formation of knowledge and skills of financially literate behavior remain, in our opinion, without due attention.

3. RESEARCH RESULT

The research is aimed at studying gender differences in the level of financial literacy of students. Students studying at Novosibirsk state technical University (NSTU) were chosen as the media for the research, since young people are actively involved in economic relations and become active consumers of financial services, including digital ones. At the same time, without sufficient life experience of making financial decisions and proper financial culture, students and graduates of higher education institutions risk being in a difficult situation. One of the research tasks is aimed at identifying effective educational tools that contribute to the development of financial behavior skills. The introduction of such tools in the educational process of students in various areas of technical University training will improve the quality of decisions made both in personal Finance management and in professional activities.

To identify gender-specific financial behavior of young people, a survey of 110 NSTU students was conducted; an equal number of representatives of both genders participated in the survey.

The first question was about students' self-assessment of financial competence (do You Consider yourself competent in financial matters?); the results of responses to it are shown in Fig. 1.

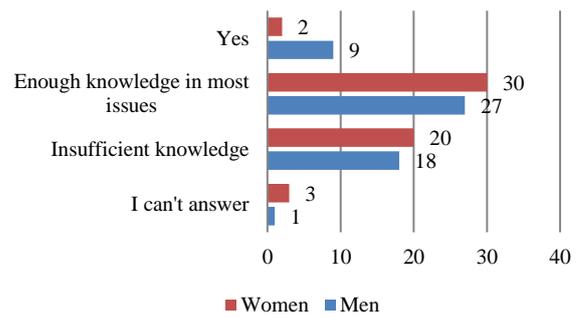


Figure 1 Students' Assessment of their own financial competencies

The majority of respondents (95 people or 86%) indicated that their level of knowledge is insufficient in the field of financial literacy; moreover, low self-esteem is more characteristic of women – the share of negative self-esteem in the female sample is 11% higher than in the male one. Men who are confident in their financial competence are 4.5 times more likely than women; there are almost no men who have difficulty in determining their own level of financial knowledge and skills.

The second question allowed us to find out the propensity of young people and their families to form savings, as well as to determine the preferred forms of saving financial resources (Fig. 2).

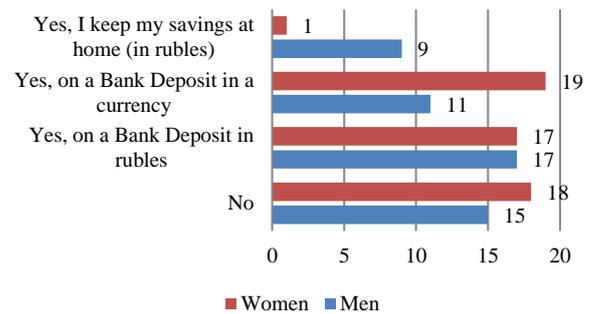


Figure 2 Distribution of respondents' answers to the question: "do you (your families) have any types of savings?"

30 % of respondents gave a negative answer to the question about having savings; women were the least likely to save – 33% of them said they did not have savings, while about 27% of men did. Thus, a significant proportion of respondents do not have a practice of forming financial savings, and, consequently, face financial difficulties more often than the rest.

The results shown in Fig. 3, show those women's savings preferences are more uniform than men's.

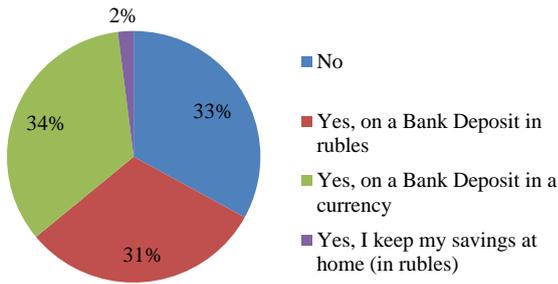


Figure 3 Distribution of women's responses to the question: "do you (your families) have any types of savings?«»

Women prefer to keep money in Bank deposits (65%), with more confidence in deposits in foreign currency (34%). However, only 2% of respondents keep their savings at home. These facts illustrate women's understanding of the need to create a "safety cushion", as well as women's propensity to use the least risky forms of savings.

As shown in figure 4, the savings options that men choose are more diverse.

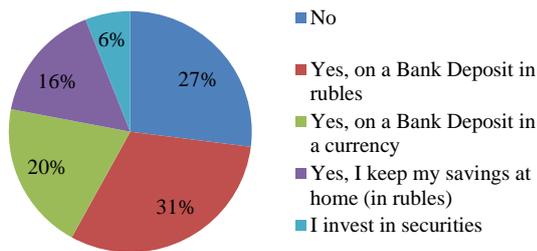


Figure 4 Distribution of men's responses to the question: "do you (your families) have any types of savings?«»

The following differences between the choice of men and women are revealed:

- men invest in stocks and other securities, which indicates their propensity for riskier forms of financial management and a desire to master more complex and profitable financial instruments;
- a significant number of men (16%) prefer to save without resorting to financial intermediaries, which indicates the ability to carry out unjustifiably risky actions in relation to personal finances;
- men prefer deposits in rubles rather than in foreign currency, in contrast to women.

For an objective assessment of the level of financial literacy of the surveyed students, they were asked to answer theoretical questions and solve practical situations on financial literacy. For rice. 5 the results of responses are distributed by the number of errors made.

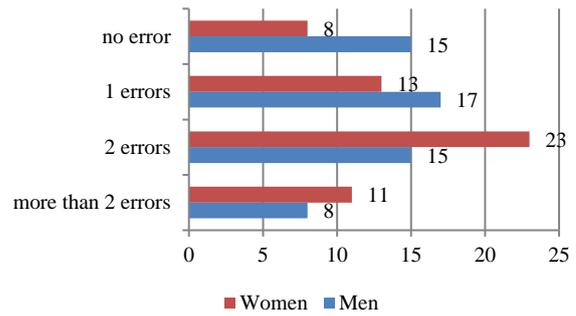


Figure 5 Distribution of respondents' errors when answering theoretical and practical questions on financial literacy

The presented results show that 27% of men answered all the questions correctly, while only 15% of women passed the test without errors. Men predominate among those survey participants who made only one mistake. Women make more mistakes, for example, two or more mistakes were made by 62 % of women, and among men - 42%.

The study found that women are less knowledgeable about personal Finance management, men have a better theoretical base and are more confident in practical situations. The results of self-assessment correspond to an objective picture of the possession of financial competencies, both among men and women. Emphasizing the gender factor, Farrell L., Fry T. R. L., and Risse L. note [6] that financial self-efficacy becomes one of the strongest factors determining the type and number of financial products that a woman owns. Women with greater confidence in their financial ability to manage their personal finances are more likely to have investment and savings products and less likely to have debt-related products.

4. CONCLUSION

In conclusion, there are also gender differences in the level of financial literacy among NSTU students: men are more literate and are prone to financial risk; women are less likely to take risky actions and have a lower level of literacy. For all that, both are fairly objective in assessing their own capabilities in making financial decisions. The results of the study fully correspond to the results of foreign researchers: Artavanis N., Karra S. [14], who conducted a study of financial literacy among students of the state University of Massachusetts, also note a lower level of financial literacy among women; Philippas N. D. [7] found that male students studying at universities in Greece are more financially literate.

Based on the results of the study, which established the existence of a gender gap in the level of financial literacy of young people, it is recommended not only to increase the overall level of financial competence, but also to direct efforts to eliminate this gap, which is determined by the following:

- the life expectancy of women in Russia is 10 years longer than that of men;
- women have the opportunity to maintain their working capacity longer: according to statistics, one in four men of 20 years of age loses their working capacity before retirement age;
- women more often than men are forced to stop working in order to take care of sick parents and other family members;
- women bear financial costs in the event of divorce, as they are often forced to provide for their own children;
- women spend more on medicine than men;
- women, according to statistics, earn 25-30% less than men; this is due to the fact that women work less, because they are more likely than men to leave their careers for the sake of raising children and caring for loved ones. When women return to their careers, they often accept lower-paid jobs, but with more flexible schedules;
- women are more afraid to talk about finances than men, considering these conversations too personal, because of this, they often find themselves not at (financial) Affairs in life and career.

Understanding that financial literacy changes the financial behavior of an individual, all of the above determines the importance of increasing women's financial literacy to the same level as men, which will simultaneously increase women's financial security; this process should start from the school bench. At the same time, the prospects for further development of this area should be related not only to the activation of programs to improve financial literacy and financial education, but also to the implementation of measures to increase women's self-confidence in their ability to manage personal finances.

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