Influence of social and demographic aspects on increase of financial literacy of the population in Russia and China

T Klepikova
Irkutsk National Research Technical University, Irkutsk, Russia

E-mail: klepiktv@gmail.com

Abstract. The development of financial literacy in a population helps to manage personal finances, as well as helps to shape the development of financial markets by attracting the public to participate in investment projects. Russia and China belong to a group of states characterized by the initialization of financial education programs for their respective populations. A comparative analysis of the financial literacy level, taking into account financial models of market development, shows China to have an advantage over Russia. The latest prediction models in the field of financial education indicated that China would rise high in the rating on the level of financial literacy of adult population among the G-20 countries. According to results of studies on financial literacy levels of 15-year-olds, conducted in the framework of the Program for International Student Assessment (PISA), Chinese teenagers were shown to be the most knowledgeable due to innovations in Chinese education. The experience of countries leading in the field of financial education of young people is being used to introduce programs in Russia. Target indicators of effectiveness of the financial knowledge of a population should include parameters that take into account both level of financial literacy and changes in people's behavior.

1. Introduction
The development of the financial literacy of a population is a vital necessity for every modern state. Individuals need the ability to plan future incomes and expenses, use credit, choose types of insurance, and manage personal finances. International practice shows that governments of industrialized countries are responsible for the development of financial services market. The qualitative growth of financial literacy of the population leads to both an increase in living standards of people and the responsibility of a country’s citizens in matters of financial independence. Furthermore financial literacy of a population influences the quality of financial services provided to those citizens, leading to the transparency of financial markets and the otherall growth of the state’s economy. As a result, the Organization for Economic Co-operation and Development (OECD) has begun to create a network of financial education programs to deepen and expand awareness of the importance of financial education in the world since 2008 [1].

2. Models and Methods
According to the OECD, depending on the participation level of states, states are conditionally divided into three types [2]:
- States with fully developed financial education programs and full government support for these programs;
• States with developed financial education programs and insufficient government support for these programs;
• States with the introduction into the development of financial education programs and certain activities and programs to increase financial literacy by the government.

Russia and China belong to the third group, which have begun to implement programs to ensure the financial education of the population. When considering the advantages and disadvantages of developing financial literacy within the populations of Russia and China, we will use the method of comparative analysis. Russia and China have their own peculiarities connected with economic, social, and regional processes within their respective countries. While both countries have ended complete state socialism, the paths taken towards the creation a market economy have been the same. Russia has been developing on a model marked with the predominance of imputed financial products and the passivity of the financial behavior [3]. This model is characterized by the use of salary cards. Salary cards are used for the calculation of income for more than 47% of Russians. In China, a "technocratic" model of financial market development has been applied. This has resulted in an adoption rate of 35-40% of the population using electronic payments, and 30-36% of the population using mobile financial services [4].

In 2008, the OECD started building an international network of financial education programs in order to deepen and expand awareness of the importance of financial education in the world [5]. In 2011, the OECD / INFE (International Network on Financial Education) published Measuring financial literacy Questionnaire and guidance notes for conducting an internationally comparable survey of financial literacy [6]. For G20 meeting in the summer of 2017, a report based on the comparative international study on financial literacy of the OECD G20 countries was prepared and released. In the final ranking, each participating country could receive a maximum of 21 points, which included a maximum of 7 points for financial knowledge, 5 for attitudes, 9 for behavior. The average financial literacy score for G20 countries is 12.7 points out of the maximum 21. Table 1 represents data of financial knowledge, attitudes and behavior for China and Russia.

| Table 1. Financial knowledge, attitudes and behavior. |
|------------------------------------------------------|
| Overall score | Knowledge | Behavior | Attitudes |
| China         | 14.1      | 4.7      | 6.2       | 3.1       |
| Russian Federation | 12.2     | 4.1      | 5.1       | 2.91      |

China took fourth place in the ranking, while Russia ranked ninth among the G20 countries. Based on correct responses of Chinese and Russian respondents, in the analysis of financial knowledge components, the biggest difference in knowledge has been revealed in the estimation of interest plus principal and diversification (Table 2) [2].

| Table 2. Components of financial knowledge. Percentage correct responses all respondents. |
|-----------------------------------------------------------------------------------------|
| Interest plus principal | Diversification |
| China                    | 74%             | 57%             |
| Russian Federation       | 48%             | 41%             |

Following the experience of the leading countries, the Russian financial market offers sophisticated and convenient financial products for consumers. Already about 80% of the population use financial services. However, experts argue that 71% of Russians have difficulty in choosing financial services. The greatest difficulties arise for Russians in the field of investment products and loans. Recent polls show that, 55 percent of Russians noted that they need to increase the level of knowledge and skills in the financial sphere [7]. While in China, about 81% of China's surveyed residents said that education in financial services is "very valuable," according to the Xinhua News Agency [8].

Thus, over the last decades of economic reform, financial literacy has become advanced in China. The Chinese believe that the ability to use financial knowledge and skills in the effective management of their finances will allow them avoid depreciating their assets and remain financially aware...
throughout their lives. The average financial literacy rate for Chinese residents was 63.71% according to the People's Bank of China (PBOC) [8].

However, sharp regional differences in the levels of financial literacy are confirmed both by experts from Russia and China. One of the key factors is the geographical extent of both countries. In Russia, the most vulnerable category of citizens lives in the North Caucasus Federal District, in China they live in Inner Mongolia. The most vulnerable categories of citizens in the field of financial literacy in the world community are consumers with a low level of education, youth, migrant workers, and rural residents. Nevertheless, innovations in the field of financial education make it possible to expand the opportunities for territorial development. At present, the main target groups are children and youth; every second program uses a wide range of tools and channels, among which the Internet becomes the most important. The OECD published results of the 6th international study on the level of financial literacy of 15-year-old schoolchildren from 18 leading countries of the world, conducted as part of the Program for International Student Assessment (PISA) in May of 2017 [9]. The PISA conducts a financial literacy study through a computer test every three years. The results of the survey show the level of financial knowledge and skills of 15-year-old schoolchildren in using such knowledge in making effective decisions to improve financial well-being and participation in the economy of their country. According to the OECD, in terms of awareness of the 15-year-olds in financial matters, the most knowledgeable were teenagers from China (603 points), Russian participants took the 4th place among 18 countries (512 points) [9]. Russia significantly improved its position, rising from 10th place in a similar test conducted in initial 2012 study [10].

3. Results and Discussion

The People's Republic of China has made incredible progress in developing the knowledge in financial literacy over the past decade. "As China is building itself into a financial power, the financial literacy level of consumers, is critical to the healthy development of the capital market," said Zhou Baoluo, a chairman of Junior Achievement China, a NGO in the field of financial literacy education [8]. In developing the financial education strategy, China's financial institutions, led by the People's Bank of China, conducted a macro-survey to determine the level of financial knowledge of the population. Based on the conducted studies, a strategic plan was developed to increase the level of financial literacy of the population, which includes the following activities:

- Conducting surveys every two years to adjust the road map and guidelines for the development of best practices at the national level, taking into account real needs;
- Introducing financial literacy into schools from the first class. In math lessons, when learning how to calculate interest, children are taught how to count income from a deposit or assess the terms of a loan;
- Financial institutions participating in trainings and training seminars, as well as other activities on financial literacy of the population;
- Using interactive methods of mastering basic financial knowledge, including comics, films, theater performances, and video games, each targeted at different age groups of the population [11].

The experience of China shows that a family plays a big role in involving young people in finding solutions to financial problems. According to the OECD, 46% of 15-year-old students from Beijing, Shanghai, Jiangsu, and Guangdong have bank accounts. Thirty-six percent of students earn money on holidays or are employed part-time, while 16% of students report having other informal earnings. Furthermore, 78% of students discuss money issues with their parents at least once a month [9]. All this makes it possible to increase the motivation of young people. The Chinese government does not stop at the achieved results, as the level of financial literacy of the adult population of China is still far from the industrialized countries. This inadequacy became quite apparent when in December 2017, the pyramid scheme Qbao.com tricked more than 200 million Chinese. For comparison, the number of people affected in China by Qbao.com is significantly larger than the entire population of Russia [12].

The Russian society faces even more difficult tasks in the field of financial education [13]. Large-scale measures to develop financial literacy by the population of Russia began in 2011:
The Ministry of Finance of Russia, together with the World Bank, with the support of the Government of the Russian Federation, developed programs for financial education and consumer protection of financial services.

The Pension Fund of Russia (FIU) provides training for the working population and youth on pension education, conducts presentations of the continually updated training materials of the FIU on financial literacy, which are freely available on the FIU website [14].

In Moscow, on February 10-11, 2015, the International Conference on Financial Literacy and Financial Accessibility was held.

On 9-17 March 2015, a week of financial literacy for children and young people in the Global Money Week Framework was held in partnership with Child and Youth Finance International. The Ministry of Finance of Russia received the main international award within the framework of the "Global Money Week" for holding the "Week of financial literacy for children and youth" for the best results in 2016 [15].

On February 13, 2018, the Fourth International Conference on Financial Literacy and Financial Accessibility (Finfin) was held in Moscow, the latest FinTech tools and successful customer service strategies were discussed, to improve the welfare of consumers of the financial market and effective practices of financial education of consumers [12].

Practical manuals are being published, including textbooks on financial matters for students;

Seminars are held on the organization of regional methodological centers for financial literacy in schools and secondary vocational education institutions [16].

One of the main criteria of the level of financial literacy is the formation of personal savings. The decline in the savings activity of the Russian population can be traced to the first half of 2017. The share of money incomes that went into savings is estimated at 7.4% of the total revenue, which is lower than in 2016 [17]. The decrease in the share of the population's savings in total income indicates the weakening of the level of work with the population in the formation of additional savings. According to NAFI research, only a quarter of Russians form a "safety pillow."

Credits and investment products as financial services cause the greatest difficulties for Russians. In nominal terms, the total amount of loans to the population at the beginning of May 2017 is equal to 10978.3 billion rubles, the total amount of debt is estimated at 10948.6 billion rubles. The share of savings of the population decreased from 16.1 percent in 2015 to 9.2 percent in 2017 [17], which indicates that the borrowers have not correctly assessed their capabilities and are not fully informed by credit institutions. The illiterate use of loans led to the fact that every fifth respondent with a loan (22%) indicated that payments account for more than 30% of income [16]. Thus, the primary task is to explain the importance of savings and educate the population of basic knowledge on calculating loans using effective technology and international practice.

As a result, the Government of the Russian Federation approved a strategy for increasing financial literacy in the Russian Federation for 2017-2023 in order to expand coverage and improve the quality of education in the field of finance. The strategy will provide citizens with access to reliable information that will help them protect their consumer rights [18].

The development of a joint strategy for the introduction of financial education is being discussed by scientists, experts, governments of the world's leading countries. To this end, international conferences and symposiums are being held. Currently in 2018, Russia is taking an active part in the development of a new concept in the field of financial education of the population.

The symposium Advancing financial literacy globally: implementation and innovation is to be held on the 4-5th of October, 2018 in Moscow. There will be a discussion of innovative implementation of new approaches, such as new digital trends, financial education for vulnerable groups, and consumer protection to improve credit decisions and outcomes. More than 200 international experts are expected to be in attendance.

Following the results and discussion described above, we can conclude that all activities carried out by Russian state structures, financial institutions, and public organizations confirmed the interest of the population in raising financial literacy and readiness to use financial instruments to improve their well-being.
4. Conclusion

Involving all segments of the population in the process of financial education requires enormous costs and efforts of interested parties on both sides. The main goal is to increase the financial literacy of young people, who will soon fully enter the difficult financial world. Modern development of innovative programs will accelerate the process of increasing the financial literacy of young people throughout the whole population.

The Russian society faces even more difficult tasks in the field of financial education and steps are taken to move forward. It is necessary to develop new approaches, solutions, and criteria for the success of programs to improve financial literacy and consumer protection. Practice shows that increasing knowledge does not increase the literacy of a person and thus is not enough to change behavior. The main task at the present stage in developing financial literacy, along with increasing financial education, is to change people's behavior and protect their consumer rights. This should be the main criterion for the success of financial literacy programs.

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