Improving Financial Education Strategy for Sustainable Development

Introduction. Modern society has long agreed that financial education is one of the pillars of its sustainable development. In many countries, action plans were prepared, strategies developed, training courses were aimed at increasing the level of financial education, but after a few years it is again clear that the problem has not been solved, there are very few examples of success and it is not known whether these successes are the result of the above measures. The need of change the strategies in place today in financial education is slowly emerging. There is an urgent task of improving the strategy of financial education at the present stage of development of society.

Aim and tasks. The purpose of this paper is to analyze the current financial education strategy on the example of one particular country – Georgia, its logical consequences and find the levers that will make this strategy more effective or outline the contours of the new strategy.

Results. The results of the work done in Georgia in the field of financial education over the past six years were analyzed. Comparison of the stated goals and actual results of the current strategies of financial education is carried out. The study is based on the analysis of the determinants of financial behavior of human, the main postulates of behavioral economics. The methods of logical generalization, synthesis, analysis and deduction are widely used in the research to reveal the cause-and-effect relationship between mental models of thinking, financial education and financial stability of the individual. Also examined the development policy measures adopted by the World Bank. An assessment of their relevance for improving financial education is carried out. The importance of considering mental models of thinking in achieving goals set in various spheres of society was noticed. Also, as a result of the analysis, new approaches were identified that improve the strategy of financial education.

Conclusions. Strategies need to be developed based on the mental models of the population of a particular country taking into account the psychological aspects that are significant for the members of a given community. It is necessary to process the information provided by the population, not only semantically, but also etymologically, within the framework of the measures outlined in the strategy and use categories in the context to which the society is more sensitive. More successful examples of financial education development policies need to be considered.

Keywords: savings, over-loan, consumerism, mental models of thinking.
Вступ. В сучасному суспільстві фінансова освіта є однією з основ його сталого розвитку. У багатьох країнах були підготовлені плани дій, розроблені стратегії, навчальні курси були спрямовані на підвищення рівня фінансової освіти, але через кілька років знову стає ясно, що проблема не вирішена, прикладів успіху дуже мало і ще невідомо, чи є ці успіхи результатом вищевказаних заходів. Потреба в зміні існуючих сьогодні стратегій фінансової освіти з'являється поступово. Постає актуальним завдання вдосконалення стратегії фінансової освіти на сучасному етапі розвитку суспільства.

Мета і завдання. Мета даної статті - проаналізувати поточну стратегію фінансової освіти на прикладі Грузії, її логічні наслідки і знайти важелі, які зроблять цю стратегію більш ефективною або окреслити контури нової стратегії.

Результати. Проаналізовані результати роботи, виконаної в Грузії в галузі фінансової освіти за останні шість років. Проведено порівняння заявлених цілей і фактичних результатів поточних стратегій фінансової освіти. Дослідження грунтується на аналізі детермінант фінансової поведінки людини, основних постулатів поведінкової економіки. У дослідженні широко використовуються методи логічного узагальнення, синтезу, аналізу та дедукції для виявлення причинно-наслідкового зв'язку між ментальними моделями мислення, фінансовою освітою і фінансовою стійкістю особистості. Також були розглянуті заходи політики розвитку, прийняті Світовим банком. Проведено оцінку їх актуальності для підвищення фінансової освіти. Відзначено важливість врахування ментальних моделей мислення при досягненні цілей, поставленних в різних сферах життя суспільства. Також в результаті аналізу було виявлено нові підходи, що поліпшують стратегію фінансової освіти.

Висновки. Стратегії необхідно розробляти на основі ментальних моделей населення конкретної країни з урахуванням психологічних аспектів, значущих для членів цієї спільноти. Необхідно обробляти інформацію, надану населенням, не тільки семантично, а й етимологічно, в рамках заходів, викладених в стратегії, і використовувати категорії в контексті, до якого суспільство більш чутливо. Необхідно розглянути більш успішні приклади політики розвитку фінансової освіти.

Ключові слова: заошадження, надмірна позика, конс’юмеризм, ментальні моделі мислення.
**Introduction.** In the writings and public speeches of many scholars or individuals interested in the welfare of society, we can see that the advantage of a person with a financial education is mainly a good knowledge of financial products and concepts, the ability to use the right tool at the right time. And if we also consider that the main goal of the financial education strategy is to achieve financial stability of households, we will find that the key to financial stability lies in the proper use of financial products [1, 2, 3]. If we follow this logic, countries with many high-profile financial institutions and longer-term practice in using financial instruments should have higher levels of financial education, and households should be less vulnerable to financial challenges. However, numerous studies prove opposite; even in developed economies the situation is dire in terms of financial education [2]. In this paper, we will present the current strategies of financial education on the example of Georgia, which in turn used the well tested approaches of developed economies to create financial education strategy.

**Analysis recent research and publications.** In our study, we have actively used the results of a study on financial education conducted in Georgia and around the world [2,6]. As the research is based on the example of Georgia, we paid more attention to the materials related to the ongoing measures to improve financial education in Georgia until 2016 [4,6,7]. The views of F. Carpena and B.Zia on the relationship between the level of financial education and human behavior were studied [8,9]. The studies by JA Sandlin, SE Nugraha, and A. Kozubik on differences in the level of financial education among both elementary school students and university students were considered. [10,11,12]. Emphasis is placed on the D. Kaneman-He, Th. Gilovich , D. Griffin 's research about human behavior [13], and in our study were actively used the experiments of P. Dupas, L.Xu, G.Berg, T. Bernard [14-18].

Modern financial education strategies and related scientific work are mainly focused on understanding the extent to which the society possesses information on various financial instruments and how we can help them make full use of these tools.

But there are a few researches on the correlation between financial stability and the use of financial instruments. Over the years, the formula for success by which stability is achieved through increased savings does not change, but less attention is paid to the fact that increasing the same savings brings more credit resources and stimulates consumption by the community or spending.

**Aim and tasks.** The aim of this study is to analyze the current financial education strategy on the example of one particular country, Georgia, its logical results and find the levers that will make this strategy more effective or outline the contours of the new strategy.

**Methods and materials.** The study is based on the analysis of the determinants of financial behavior of human, the main postulates of behavioral economics. The methods of logical generalization, synthesis, analysis and deduction are widely used in the research to reveal the cause-and-effect relationship between mental models of thinking, financial education and financial stability of the individual.

**Results.** Over the past few years in Georgia has been conducted a survey of the population to evaluate situation of general education and financial education level either (e.g. 2009 in organization PISA (Programme for International Student Financial Education National Strategy 15 Assessment) by adolescents in the study; Standard & Poor's 2014 years of global research financial education level study (2014 S&P Global FinLit Survey, and others). The studies showed that there was an unsatisfactory situation for general education, as well as for the financial education levels [4, 5].

Based on the analysis of final result, it does not allow to make sufficient and comprehensive presentation of financial education level of population, which is an important basis to build an effective financial education national strategy. Therefore, in April 2016, with the initiative of the National Bank of Georgia, an in-depth study of financial education was conducted throughout the country. The study is largely based on economic co-operation and Development Organization (Organisation for Economic Co-operation and Development – OECD) Financial Education
International Network (International Network on Financial Education – INFE) financial education and financial involvement in research methodology. The results of the research revealed the level of financial education of the population of Georgia, the peculiarities of behaviors and attitudes, the degree of awareness and use of financial products, and other meaningful issues [6].

In fairness, it should be noted that the various private or state initiatives have been taking measures to raise the level of financial education in Georgia for several years:

- Consumer rights protection training program:
  In 2015, with the funding of the German Savings Banks Foundation for International Cooperation (SBFIC) and with the support of the National Bank of Georgia and the Association of Banks, the development guide and practical booklet on the protection of consumer rights in commercial banks were completed. This program includes, both, the theoretical and practical exercises; and the commercial banks were using it regularly in the trainings of employees [7];

- Brochures:
  In 2015, with the support of the European Fund for South East Europe Development Program (EFSE DF), the National Bank of Georgia completed the training materials for individuals and small and medium-sized businesses. The brochure for individuals helps consumers to make informed decisions when using a mortgage loan, while the brochure for small and medium-sized businesses provides users with important advice on financing their business in foreign currency [7]. Printing of this material started in 2016;

- Savings Calendar:
  The savings calendar is another interesting project to raise financial education. The National Bank of Georgia, together with the German Savings Banks Foundation for International Cooperation (SBFIC), has developed a savings calendar that teaches consumers 12 different and practical ways to save money [4];

- Educational Videos:
  In 2015, the National Bank of Georgia together with Khan Academy started creating Georgian language versions of educational videos of financial and economic content. In December 2015, the National Bank of Georgia released five videos on Khan Academy. In 2016, up to 40 videos were recorded with the support of the European Foundation for Southeast Europe (EFSE DF) [7]. They are posted on the Youtube channel created for this purpose and also on the user page of the National Bank of Georgia: www.nbg.gov/cp;

- Global Money Week:
  Global Money Week 2015, organized by the National Bank, National Youth Palace and with the involvement of an international organization the Child and Youth Finance International (CYFI) in coordination with the Global Money Week was celebrated. Global Money Week is held annually in many countries around the world in March and its main purpose is to encourage the younger generation to engage in the discussions about saving money, changing the economic system and the financial future. The motto of the 2015 week was "Save today, be safe tomorrow". The following activities were held during the money week: photo exhibition, drawing contest, public lectures, etc. The best students were given a lecture on the history of the National Bank at the National Bank of Georgia, its functions and the culture of saving. Students also got acquainted with the work of the cash center [7];

- World Savings Day:
  In 2015, World Savings Day was celebrated in Georgia as well. Celebrating this day is a good way to overcome the barrier between the population and commercial banks. In 2015, within the framework of World Savings Day, various activities were organized by the National Bank of Georgia, the German Savings Banks Foundation for International Cooperation (SBFIC) and 5 Georgian Commercial Banks (Bank of Georgia, TBC Bank, Liberty Bank, VTB Bank and Finca Bank). The nationwide social media competition is also notable, in which children performed pictures on the theme of the "dream piggy bank" and named the goals of saving. The winners were hosted by the National Bank on an excursion to the Cash Center, with commercial banks opening children's deposits as gifts, and SBFIC rewarding children with various incentive gifts [4].
The logical continuation of these measures was the creation of a national financial strategy by the National Bank of Georgia, with the mission of announcing the development of strategic principles and strategic directions for raising financial education in Georgia, ensuring the financial stability of the country's population and promoting prosperity. The main directions of the strategy were defined [6]:

a) Raising the awareness about Financial education benefits;
b) Enhance coordination and cooperation between stakeholders;
c) Expanding educational opportunities.

The realization of a financial strategy should lead the integration of true financial behavior into the mental model of society. Proper financial behavior is one of the main prerequisites for financial well-being. National Bank surveys have revealed trends in population-specific behaviors related to cost planning, savings, and access to the financial products. As the results showed, approximately 40% of the population used that form to save money - saving; when respondents with relatively low income and low level of financial education were characterized with saving money at their houses. Financial education and income levels have increased adequately, with respect to the culture of saving being improved significantly and with the indicator of using respondent's household loans. However, the implementation of specific actions for the purpose of financial goals, including savings, was typical for only 57% of the population, which became one of the most important challenges in the development and implementation of the financial education strategy [5].

Clearly, the low level of savings is neither a Georgian problem nor a specificity of developing countries. According to Dan Ariel, this situation is not unfamiliar to Americans either, if they were saving tens of percent 30 years ago, a little later - 5%, today the savings are already zero. He thinks that it is impossible to save today and names two main reasons for this: one is that people are not accustomed to looking at reality through the prism of a long-term perspective, and the second reason lies in the abstraction of money [20].

The main architect of reality is consumerism – "it is more important to have than to be" [21]. A principle-based society tends to increase spending in order to, at least, approach the ideal in their imagination by owning similar subjects. Buying a two-door refrigerator, taking out a modern Smartphone in installments, taking a loan to buy an old Mercedes; when you cannot fill the refrigerator halfway all year round, often do not have money to activate talk time on your Smartphone or do not use the car on Sundays due to lack of fuel.

The impact of consumerism is strengthening in a society with a low financial education. "Consumer control boom motivated mainly financed by banks and created another serious threat to consumer loans in the form of soap bubbles" [22]. The described "consumption" will be more difficult for us than elsewhere, because the items in demand are 100% imported, so it becomes the main catalyst for the deterioration of the balance of payments.

The problem of illegal spending on the Georgian society was also identified by the National Bank, and the fight against over-loan became one of the goals of its national strategy for financial education [6]. But, we wonder, what measures were taken to seek in the dealing with these problems?!

Since 2016, the National Bank of Georgia has elaborated serious work to implement the developed strategy of financial education: creating a guide for micro and small businesses [23], as well as a practical guide for those interested in agro-industry [24], a guide for potential investors on corporate bonds [25], was made a financial education program called "School-Bank" was developed for teenagers, a number of information brochures were created not only for pupils, but also for university students, they thought of funny comics [26]. Sure the work they have done is impressive, but should we expect better results than the countries with developed economies have achieved?! They have already gone this way, they have taken similar measures years ago, but what did they get as a result? In many of them, the majority of the population still does not have information on important financial categories, and most importantly, have not become more flexible in the face of various financial challenges [2].
We think the problem is the irrelevance of the events. In some places these measures are more justified, in others less, but at first glance they are countries with similar economies. National, cultural, mental-psychological aspects are less taken into account when developing the strategy. Perhaps, in a society, where Max Weber wrote "Protestant Ethics and the Spirit of Capitalism," or where children at the ages of 9-10 play Robert Kiyosaki’s "Rat Race" in school (this game is an electronic version of "Monopoly" where dice rolls depend on the player’s finances. Introduce children to the concept of accounting balance, show the idea that buying luxury items is a loss-making move and can be lost in the game), do not need special emphasis on how to save and what type of spending is undesirable, but the residents of post-socialist countries, especially Georgia do.

There is an impression that we are using the concept of savings as a kind of mediator, which should lead to talking about the importance of banks, and then switching them to other products. It seems that the strategy is focused on bringing new, more orderly customers to the financial sector.

For example, consider the School-Bank program [27]. It consists of 15 lessons and only the last lesson talks about the cost reduction. It is also worth noting, that this is the smallest lesson. Out of 11 brochures for students only one is about saving [28], it is also not reviewed in the context of deposits, at the expense of what is preferred to be saved. It is interesting that in children's comics, where the word "saving" is not mentioned in any form (in circulation), there is mentioned “keeping” 4 times, and it is only mentioned when talking about the bank, and “collecting” - 7 times, which is completely different from saving and causes different emotions [26].

In order to develop a relevant financial education strategy, it is necessary to decipher the mental-psychological tendencies of a particular society and find the sensitive points to which they respond more. For this purpose we have launched a multi-stage study, and today we can talk about the results of the first stage. We believe that, the current financial education strategy is more focused on positive mentors, or with other words, what is good to do and not on what is bad and what cannot be done. However, in a number of cases people are more sensitive to negative outcomes than to positive outcomes [32]. Therefore, we think that the measures taken under the activities of the Financial Education Strategy should be focused not so much on promoting the growth of savings as on avoiding over-loans, on intensive consumer loans. However, this hypothesis needs to be verified first. Therefore, in the first stage of the research, we decided to observe the attitude of the population towards the term "savings"; whether this word is associated with their own success, or they are more sensitive to "savings" or "loans" to a useful category for the bank. 99 respondents were interviewed, their ages ranging from 18 to 28 years. In one of the questions, respondents had to pair the word "savings" with one of the following words: stability, security, bank, success, job, and home. The answers were distributed as follows:

Fig. 1. Distribution of answers to the question: Which of the following words would you pair with "savings"?

Source: created by author
In the next question, the respondents had to choose which client was more useful for the bank: the client who pays the loans on time and often tries to use the bank loan, or the client who tries to save as much money as possible and deposit in the bank. The answers were distributed as follows:

![Pie chart showing distribution of answers to the question: Who is the most useful client for the bank?](image)

**Fig. 2. Distribution of answers to the question: Who is the most useful client for the bank?**  
*Source: created by author*

The answer to the first question shows that the attitude of the majority of respondents towards the term "savings" is fully in response with the purpose of the financial education strategy. The aim of the following was to achieve financial stability of households. However, it is interesting to note that "savings" are less associated with success.

The answers to the second question show that the majority of respondents (more than 75% of respondents) consider "loan" as a more beneficial category for the bank than savings (deposit). People are even less focused on doing beneficial to others, and, moreover, if we add that people are more sensitive to negative contexts, then talking about consumer loans in a financial education strategy with a more or less negative tone will heal the spending structure of households (less share will go to consumer loans and the investment potential of households will increase).

One of the arguments when talking about the need for financial education is the increase in the social responsibility of individuals with respect to the current changes in the world and the importance to be educated. Clearly, individual decisions play a crucial role in achieving both individual households and overall public welfare. It is also not disputed that a financially educated individual is more competent for these purposes. But are the individual decision-making always based on the rational components; are not mental and psychological aspects more decisive?!

In 2015, the World Bank Group's enunciated in the report of "thinking, behavior and society" [29] that the thinking of all types of individuals, even the high level experts, are dominated by the social and cultural impact. These factors must therefore be crucial in developing a strategy for improving the financial behavior of ordinary citizens.

What measures can be taken to address the problems provoked by the lack of financial education or generated by harmful human tendencies? Initiation of competitions and Olympiads in schools, integration of financial subjects in school curricula in the next stages of teaching, teacher development activities appropriate to these goals; involvement of relevant topics in the curricula of students' training courses, their encouragement through various educational activities, competitions, planning of coordinated actions for this purpose together with the student self-government bodies; unemployed television and radio programs, a developer of PSAs, news web-pages and social media channels to open communities; encouraging financial training for employees in the workplace; education for rural people spreader moving platforms (special "training " buses) emissions, a field lecture courses planning [6].
Of course, these measures have undoubtedly a positive impact on the economic life of community, but they cannot go beyond the globally-accepted standard for financial education strategy framework. The World Bank Group’s 2015 report, Thinking, Society, and Behavior, even showed that traditional financial education measures are less effective [15,29].

In order to increase the efficiency of actions, it is necessary to introduce more specific and less unified methods, develop a system in which the emphasis will be made on the personal factor, its psychology, the mental model of thinking.

Prepared in 2015 by the World Bank Group on Thinking, Society and Behavior [29], the report focuses on new tools for achieving development goals, and on increasing the effectiveness of current measures. They expand the capabilities of the strategies and tools with which we can achieve poverty reduction and overall well-being. This report shows how it sheds light on a number of areas to take into account of the human factor: the fight against chronic poverty, the development of young children, the financial situation of households, health care, and climate change. This analytical basis mentioned above, and the many examples cited in the report, show the obstacles of the development of information, and the methods by which a community mentality is formed, can become a problem for development. And along with these problems also shows the means of their change.

Human observation of the decision-making process has revealed three principles that define new approaches to behavioral and developmental policy development and implementation. First of all, people often make decisions automatically and not deliberately - this is called "thinking automation". Secondly, what people think and do often depends on what people around them think and do - this is called "social thinking". Thirdly, in a particular society, people have common views about the world around them, about themselves - this is called "thinking based on mental models" [29].

The report documents that mind of people are limited in every segment of population, including the staff of World Bank. Developmental specialists are also characterized by thinking automatism, social thinking, and thinking based on mental models. This can lead to misconceptions about the underlying causes of behavior, and not show us possible ways to solve developmental problems.

Organizations working on development problems would be more effective if their practitioners understood the psychological and social determinants of their reasoning, and organizations would be able to implement procedures to mitigate their consequences.

The first principle: automation of thinking - If we come out of the simplified situation used in different economic models, then the subjects of economic activity review all the information at their disposal and look to the future to make a well-thought-out decision today that will help them achieve specific and long-term goals. In fact, people almost never behave like that [13]. Usually people have more information than they can process. There are many methods of organizing information that are difficult to follow.

The second principle: social thinking - Humans are social beings and are influenced by social choice, social networks, social self-determination and social norms. What matters to most people is what people do around them and how they fit into that group of people, and they almost automatically repeat other people’s behavior. For many people, social choices such as honesty and reciprocity are noteworthy; they have an innate spirit of cooperation. From a collective point of view this can give us both positive and negative results; large-scale cooperation is also needed in a society with a high level of trust and a society with a high level of corruption.

The third principle: thinking based on mental models - During the process of thinking, a person is not usually guided by concepts that he has developed himself before. Instead, he uses the concepts, categories, stereotypes, prototypes, identifying characteristics, cause-and-effect relationships, and worldviews formed in the surrounding society. All of these are examples of a mental model. The mental model influences on what a person perceives and how he or she interprets that s/he has perceived earlier. There are mental models that define the manner and content of talking to children, the types of insurance risks, money-saving goals, climate perception, and the causes of illness.
Many mental models are useful, while others are useless and contribute to the transmission of poverty from generation to generation. The mental model is based on the perception of social interaction, which people often call "culture". Culture influences human decision-making as it emerges as a set of interrelated schemes that people use in the process of action and choice. Similar schemes act as tools that allow us to act on and define these actions.

To evaluate the impact on the development of all three types of thinking, the problems of small personal savings and high levels of household debt were discussed - these problems are common to all developed countries (perhaps the situation is not better in some countries where income levels are high). Economic policy is largely built on the view that an increase in the level of income is needed to increase the level of savings.

However, in addition to typical variables such as price, income, and regulatory base, savings are influenced by other factors, including thinking automation, a widespread tendency to follow societal norms, and mental models. Experiments in Kenya, South Africa, and Ethiopia show the importance of these three factors in solving major developmental problems in humans.

Many Kenyan families have spoken of the lack of funds as a reason for not allowing them to invest in prophylactic items, such as mosquito nets treated with insecticides. Therefore, locked metal boxes with cards were distributed to the population, on which family members had to write the name of the prophylactic medical product. Researchers have achieved savings growth and investments in such goods have increased by 66-75 per cent [14].

This program was based on the idea that despite the existence of different options for spending, and in terms of spending cash at any time, people usually use "accounting in their imagination" when spending money [29]. During which they determine the categories of expenditures and arrange their actions in accordance with them. The main thing in this example was that a metal box, a padlock and an inscription card allowed citizens to imagine spending money on preventive medicine products. This measure proved to be effective because "Accounting in Imagination" is a manifestation of "thinking automation" and the effect of categorization or labeling, when the object belongs to this or that category depends on how it is perceived.

Let us now consider the impact of social thinking. Traditional financial education enhancement programs have limited effects in low-income countries. In contrast, an attempt made in South Africa a few years ago (2013) to educate the population financially through a fun TV series was justified. The protagonist of this TV series was making financially unacceptable decisions. Those households that watched the series for two months showed little interest in gambling and very large installment payments. The households sympathized with the characters in the series, which made them more attentive to financial advice than when working with standard financial education enhancement programs.

The success of these events has been driven by "social thinking" - identifying ourselves with others and learning from their experiences [16; 30-31].

The Ethiopian population became a participant in the third example. The low-income population of Ethiopia often complained that they were psychologically less prepared for action [17].

In 2010, randomly selected households were offered one hour to watch films with optimistic content, including four documentaries about residents of the same region, which told how they had improved their socio-economic situation, set a specific goal and worked tirelessly. Six months later, the households watching this film had higher joint incomes and invested more in their children’s education. Surveys have shown that the films have widened the audience’s range of purposefulness and hope, primarily in terms of children’s education. Studies have shown how certain actions can change the mental model – a person's views on what can be achieved [18,19].

**Conclusion.** To sum up, the approaches of Ethiopia, South America, Kenya should be exemplary in planning financial education development activities.
These are the mental models of thinking and focusing on the psychology of the individual and taking into account its social specificities that should be considered when providing the developmental measures of the National Bank or another institution. It is necessary to process the information provided by the population, not only semantically, but also etymologically, within the framework of the measures outlined in the strategy, to use categories in the context to which the society is more sensitive. In further research, it is advisable to consider more successful examples in the development policy of financial education.

REFERENCES


21. Fromm, E. (2017). *To Have or To Be?* Moscow: AST Publisher. [in Russian]