

## The Impact of Financial Literacy Workshops in Rural Areas of Armenia

Artur POKRIKYAN\*

### Abstract

Weather workshops are efficient in increasing the level of financial literacy and impacting financial decisions of the consumers is not obvious. Many people may claim that financial knowledge and skills drive their financial decisions and behavior. The last statement is also driving national strategies for financial education in many countries, which implement financial literacy workshops for different target groups. Similar projects are also planned to be held according to the National Strategy for Financial Education in Armenia especially for rural areas. However, considering the country specific details and historical context it is important to evaluate the effectiveness of such workshops before mass implementation.

In this article, we outline the methodology of our study related to the effectiveness of financial literacy workshops in rural areas of Armenia by using pre-post evaluation method in 4 villages. We also discuss the experience and limitations faced in the process of conducting workshops. Even though the long-term effectiveness of such workshops in terms of driving healthy financial behavior still needs to be tested, the short-term results are substantial in terms of knowledge accumulation and changes in preferences of participants. Particularly, based on pre-post evaluation results, there is on average 63% increase in knowledge and skills of participants and significant change of preferences from informal to formal ways of saving, taking debt and shopping around.

Keywords: Financial Capability, Financial Education, Financial Inclusion, Financial Literacy  
JEL: G02

### Introduction

Countries were not always taking care of financial literacy and developing policies towards increasing it among the population. The concept of financial literacy as a separate category emerged in early 90s and since then its role increased gradually with the development of technologies and new financial tools. More we can argue that it became even more popular after the recent financial crisis in 2008, as the impact of the crisis on ordinary people would have been less significant, if they had the necessary knowledge, skills, attitude and behavior to make sound financial decisions (OECD, 2013).

Starting from 2007, the Central Bank of Armenia (CBA) highlighted the importance of financial literacy as prerequisite for financial stability, financial inclusion and economic prosperity in the country. In 2012, a committee for the development and implementation of National Strategy of Financial Education (NSFE) was established with the involvement of CBA, ministries, around 20 private and social sector representatives, later in 2014 NSFE and its 2015-2019 action plan were approved by the Government.

The role of financial literacy in rural areas of Armenia is extremely important. Around 36% of population in Armenia live in rural areas and are mainly engaged in agriculture, which provides around 20% of GDP. Only 15.5% of adults living in rural areas have bank account (Demirguc-Kunt, Klapper, Singer, & Van Oudheusden, 2015), which demonstrates low level of financial inclusion. Relatively low income from one side and its poor management from the other cause serious issues for rural population. Based on data of Financial Capability Barometer survey (Central Bank of Armenia, 2014), around 25% of population has seasonal income and only 10% is managing its income in a way to be able to satisfy the family needs during the whole year. Rural population is also extensively using credits to finance their farming activities. The latter is usually associated with different risks, which may directly affect welfare in rural communities. Considering that people in rural areas have relatively low financial literacy and often face problems while making financial decisions regarding budget planning, seasonal income, credit and risks associated with agriculture,

---

\* MA, Financial Education Expert, Central Bank of Armenia, Yerevan, Armenia.  
Email: arthur.pokrikyan@gmail.com

rural areas were separated as a special target group (NSFE Steering Committee, 2012).

There are various tools, which can be used to increase the level of financial literacy in rural population. However, the effectiveness of each tool may vary a lot depending on the context. One of the tools, which is usually used in different countries by policymakers and private sector participants (banks, microfinance institutions etc.) is financial literacy workshops. The relevant information, which can be applied in near future, delivered in the form of catchy workshops may have a significant impact on financial decisions of people, such as opening a saving account or taking an affordable credit. However, it is not always as simple as it sounds and the effectiveness of such programs is still under debate.

Most financial education programs are voluntary which can create additional difficulties in assessing the real impact of the program. The point is that people who are really interested in the financial issues would attend trainings and not the ones who experience difficulties in managing personal budget. Mandell (2008, p. 15) summarizes that, "those who need financial education the most—workers with little formal education, who have accumulated few assets and are in the greatest danger of retiring without sufficient income—are least likely to attend". This point once again illustrates the difficulty to reach out the right target audience for the workshops.

Another possible challenge for the effective implementation of financial literacy workshops may be the difficulty of changing the behavior of people. The behavioral change depends not only on the gained knowledge but also on self-discipline, self-control and future orientation. Sometimes it is possible that skillful and knowledgeable people who really know what the "good" behavior is, have problems in implementing it. One of the best examples for this can be smoking. Even though many people understand the negative aspects of it they don't quit.

Despite the challenges discussed above, financial education programs in form of workshops are taking place in many countries aiming to improve financial knowledge and help people in managing their finances. International practice suggests that a great amount of programs result in significant positive changes in the amount of debts, levels of savings and likelihood of comparison of financial products (Lusardi & Mitchell, 2014). However it is interesting to study the results of such programs in countries like Armenia.

In this paper, we outline the methodology and results of our study related to the effectiveness of financial literacy workshops in rural areas of Armenia. We also discuss the experience and limitations faced in the process of conducting workshops.

## Methods

In order to understand to what extent financial literacy workshops in rural areas of Armenia impact the development of financial capability and drive healthy financial behavior among population, an experimental study was initiated. The study design is based on the existing literature and practices accepted worldwide for estimating the impact of experiments. Before introducing the methodology of our study, it is important to mention some key definitions. The latter will help to understand study design in a much clear way. In this study, the null hypothesis states that there is no difference between the population means of the treatment and control groups in terms of financial capability. The alternative hypothesis states that there is a difference between these groups. The statistical power is the probability of rejecting the null hypothesis when a specific

alternative hypothesis is true. When comparing two groups, the statistical power is the chance of rejecting the null hypothesis (i.e. the two group share a common population mean) and therefore claiming that there is a difference between the population means of the two groups, when in fact there is a difference of a given magnitude. Thus this gives a chance of making the correct decision, that the two groups are different from each other. For example, if the statistical power is 0.80, we will correctly identify a difference between the groups with probability 0.80. Statistical power greater than or equal to 0.80 is often recognized by the research community to be sufficient, though some researchers seek higher level of statistical power. The significance level is the probability of rejecting the null hypothesis when it is true.

The sampling frame and sample of this study include 8 villages (4 treatment group, 4 control group) in 2 regions of Armenia (Shirak and Gegharkunik). Considering the importance to ensure having significance level of 0.05 and the statistical power level of 0.85, the sample size strongly depends on the possible effect of the experiment. For this study we have chosen a scenario when possible effect is equal to 0.2. Thus in each village the minimum number of participants for the workshop should be 11. The optimal duration for financial literacy workshops is 5-6 hours in total, however considering the difficulties to organize this workshop in one day, it was decided to split the content between two consecutive days.

To assess the long-run impact of financial literacy workshops on participants' financial capability including behavior, Two-group experimental design method will be used, on the other hand pre-post evaluation method is used in treatment villages to assess the short-run effectiveness of workshops in terms of financial knowledge and skills accumulation. In this paper we only discuss the pre-post evaluation part of research, as at least 6 months need to pass after intervention in order to look at the changes in participants' behavior as well as be able to triangulate the data with respective macroeconomic statistics (e.g. changes in formal saving rates in the villages chosen for the study and villages nearby).

The workshop is designed in a way that is relevant for people living in rural areas. It covers several important topics such as budgeting, saving and long term planning, managing debt, protecting personal rights, avoiding financial frauds and scams. Particularly it is important that it focuses on basic financial services (bank account, payment cards, deposit, pension funds, credit, insurance) as well, discussing their benefits and risks by comparing with alternative informal methods. Considering that people in rural areas mostly use credit services, the workshop is structured in a way that questions related to managing debt and credit are discussed on the second day to create an additional motivation for participants to attend the second day as well.

As already mentioned, in treatment villages pre survey were conducted before the workshop and post survey after it, simultaneously baseline survey were conducted in control villages. The questionnaires were identical for all cases and were based on workshop content. Particularly, the questionnaire includes 14 questions both true/false and multiple choice, which are mostly related to the basic financial concepts and services such as inflation, simple and compound interest rates, diversification, preferences related to saving, taking debt, shopping around, protecting rights, trust towards financial institutions etc. In addition, it also includes questions related to the demographic characteristics of participants such as age, sex, education, marital status, employment, income.

The way of gathering participants for the workshops in rural areas is important in terms of methodology. Considering the difficulties of communication two main gathering practices were used, which will allow us to assess the effectiveness of gathering approaches as well. In 2 villages of treatment group

we tried to gather participants by ourselves, in the other 2 villages we asked administrative authorities to organize. Taking into account the difficulty of gathering random participants from village representing all the layers of rural community, no preferences were initially set in terms of workshop group characteristics.

## Results

As already mentioned in the methodology, for this study 4 treatment villages were visited for conducting financial literacy workshops. The results of pre-post evaluation from these villages are discussed in this section. In treatment villages 70 people filled the pre questionnaire, out of which only 49 filled the post questionnaire as well, which shows that only 70% of total participants attended both days of workshops.

The participants were mainly active community members (teachers, employees of administration). As no preferences were initially set in terms of workshop group characteristics, it was interesting to see the contrast between 4 treatment villages. In some villages the participants were mainly women in others vice versa, which indicates that there are many cultural and social differences between the regions of Armenia. Based on demographic characteristics, as well as financial inclusion:

- 53% of participants were employed,
- 78% were married,
- 46% of participants were women (an interesting phenomenon were noticed that depending on village the participation based on sex were critically different including mainly women or mainly men),

- 92% of participants had secondary or higher education (overall literacy level in Armenia is more than 95%),
- More than half of participants have monthly family income between \$100-\$400 on average and personal income of 23% provides more than 75% of family income,
- Only 16% self-reported to have a bank account, 43% had payment cards and more than 20% are constantly using money transfer services,
- Almost 13% of participants had savings at the moment of workshops, 46% had debts, 26% had neither savings nor debts, and the rest is missing,
- In contrast with savings only 1.5% had deposit, almost 45% had credit from a bank or microfinance institution, and in addition more than 28% were consigner for a credit.

Before introducing the actual results, it is also important to mention several challenges we faced during conducting workshops in villages. One of the main challenges is related to participation. Gathering participants in villages is difficult considering the communication and attitude related issues. People don't value financial literacy workshops as they tend to overestimate their knowledge and skills in this area. In the villages, where we gathered the participants by ourselves, the effectiveness was almost 2 times lower than that in the villages where local administrative authorities organized the workshops. In addition, it was challenging to ensure the presence of the same participants for the second day as well. As mentioned, during this study on average 70% of participants were present for the second day of workshop as well. Participants get interested in the topic during the first day, which motivates them to attend the second day as well. However, the reasons why some of them didn't appear on the second day remain controversial and the participation would be much higher if some incentives (e.g. lottery) are integrated into the workshop.

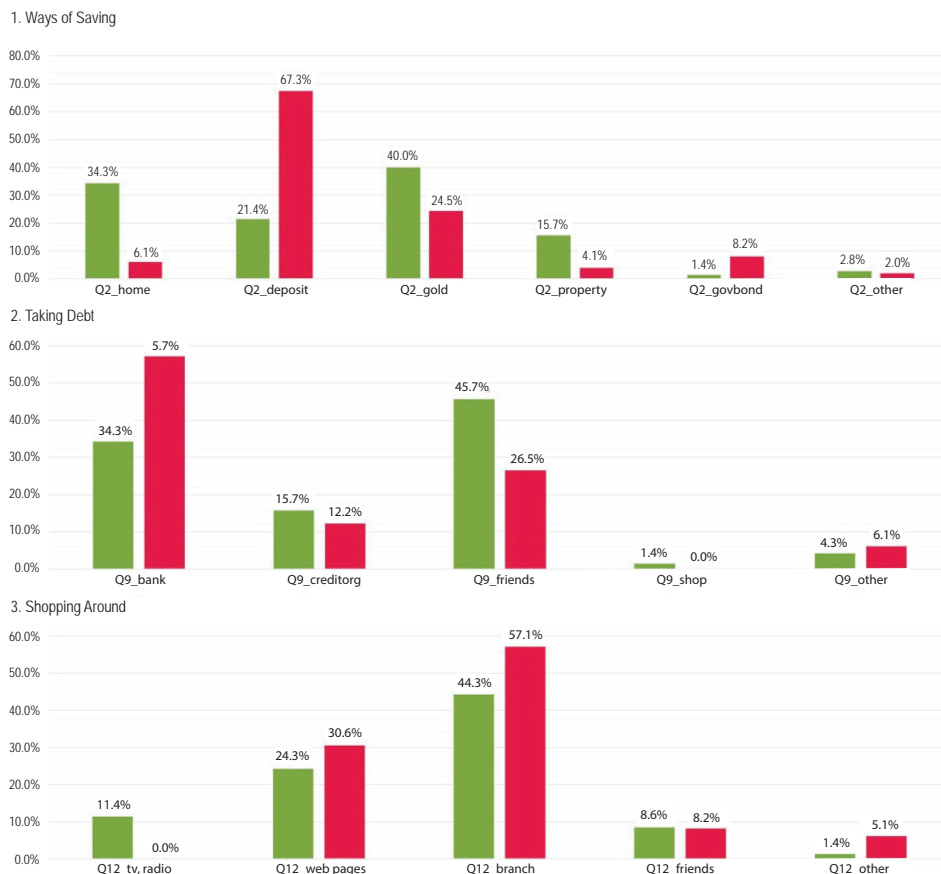


Figure 1. The Results of Pre-post Evaluation (pre – green, post - pink) in Terms of Changes in Preferences Related to Ways of Saving (1), Taking Debt (2) and Shopping Around (3)

While conducting the workshops another significant challenge was negative attitude of participants and low level of trust towards financial system. The discussions during workshops lead us to the idea that such attitude is mainly caused by the historical context. After the collapse of USSR many families lost their savings in banks. The latter affects the financial decisions and preferences of people till nowadays guiding them mostly towards informal financial services. The negative attitude due to historical context and current low standards of living was a serious challenge in terms of managing group dynamics during the workshop and keep it on track.

Despite the mentioned challenges, the results of workshops, in terms of short-term financial knowledge and skills accumulation are substantial. There is a distinctive change in the knowledge and skills of participants regarding the key concepts outlined in the workshop. Skills are mainly expressed by the ability of participants to use their knowledge (e.g. inflation -> outlining the effect of inflation). Particularly in Figure 1 you can see, based on pre-post evaluation results, there is on average 63% increase in knowledge and skills of participants. A substantial progress can be noticed in knowledge and skills related to the concepts of inflation, diversification, deposit guarantee, financial frauds and scams. Considering the general high level of literacy of participant, sizable effects have not been noticed in the areas of simple and compound interests (~16%).

There is a distinctive change in preferences of participants as well regarding ways of saving, taking debt and shopping around. In the graphs below are presented the pre-post evaluation results in terms of measured preferences while making financial decisions regarding saving, taking debt and shopping around. As you can see the saving preferences has been changed greatly from informal ways of saving to formal. Before the workshop only 21% of participants mentioned deposit as a preferred way to save, however after the workshop the share of participants increased to 67%, in contrast the preferences towards saving money at home decreased around 28 percentage points. This is the result of increased knowledge about inflation and other risks associated with saving money at home, as well as increased knowledge about deposit guarantee fund in Armenia, which is insuring the deposits of consumers at the commercial banks by the amount ~\$20k for the deposits in national currency and ~\$10k in foreign currencies. The preference has been changed in terms of taking debt as well. After the workshop in this area we also can notice a positive change in preferences towards formal sources of debts. Based on pre-post evaluation results the preference to take debt from friends and relatives decreased from 46% to 26%. The preferences regarding shopping around before and after the workshop were not changed a lot. In terms of getting information about financial services there is a slight change in preferences from TV, radio towards more professional sources such as branches and official web pages of financial institutions (respectively 13 and 6 percentage point increase). In terms of using informal sources of information (friends, relatives) while shopping around, there is no perceptible change.

To conclude, the overall impact of financial literacy workshops in 4 villages is positive in terms of both knowledge and skills accumulation and desired change in preferences. However, as mentioned before it is not always clear, if this will drive healthy financial behavior among participants after some time.

## Conclusion

Considering the given limitations and challenges the results of financial literacy workshops were positive. Considering that people living in rural areas are one of the important targets of NSFЕ, financial literacy workshops may be considered as one of the methods to develop financial capability in rural areas and may be implemented by CBA, however the long-term effectiveness of this method still needs to be evaluated.

Based on the experience we can highlight two important aspects, which should be considered before implementing financial literacy workshops on bigger scale in Armenia.

1. Context – it is very important to understand the context of the region and village, there are many cultural and social differences between the regions of Armenia, and even in the same region the differences between villages may be significant. In addition, there is a preliminary negative attitude, which needs to be considered. The workshop design may be improved by making it more relevant for the context.

2 Participation – incentives should be integrated into the workshop, in order to ensure the proper participation in both days of the workshop.

The results of workshops show that there is a sizable results in short term related to knowledge accumulation, however the long term results of financial literacy workshops on the decision making and behavior of people need further research.

## References

- Central Bank of Armenia. (2014). *Financial Capability Barometer*. Yerevan.
- Demircuc-Kunt, A., Klapper, L., Singer, D., & Van Oudheusden, P. (2015). *The global index database 2014: Measuring financial inclusion around the world*. World Bank .
- Lusardi, A., & Mitchell, O. S. (2014, March). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, 52(1), 5-44.
- Mandell, L. (2008). *Financial education in the workplace: Motivations, methods and barriers*. Asset Building Program, New America Foundation.
- NSFE Steering Committee. (2012). *National strategy for financial education in Armenia*. Yerevan.
- OECD. (2013). *Advancing national strategies for financial education*. A joint publication by Russia's G20 Presidency and the OECD.