



THE LONG-TERM EFFECTIVENESS OF FINANCIAL EDUCATION CLASSROOM WORKSHOPS IN RURAL AREAS THE CASE OF ARMENIA



CONTENTS

1	EXECUTIVE SUMMARY	3
2	INTRODUCTION	4
3	LITERATURE REVIEW	5
4	METHODOLOGY AND DATA DESCRIPTION	6
5	RESULTS	7
	5.1 Knowledge, Skills and Resilience	7
	5.2 Trust, Saving and Borrowing Preferences	9
	5.3 Financial Inclusion and Behavior Change	10
6	CONCLUSIONS AND LESSONS LEARNED	11
	REFERENCES	12
	APPENDIX 1. DIFFERENCE IN DIFFERENCE (DID) REGRESSION RESULTS	13
	APPENDIX 2. PRE-SURVEY QUESTIONNAIRE	14
	APPENDIX 3. POST-SURVEY QUESTIONNAIRE	16

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KEYWORDS

Financial education, financial literacy, measuring impact, long-term impact, differences in differences.

1. EXECUTIVE SUMMARY

The Financial Education in Rural Areas (FERA) project, launched by the Central Bank of Armenia (CBA) in December 2016 under the National Strategy for Financial Education (NSFE),¹ aims to improve financial literacy in rural Armenia by promoting healthy financial behavior and responsible decision making.

To understand the effectiveness of classroom-based financial education workshops, the CBA conducted a controlled experiment with 100 randomly selected villages (50 each in the experiment and control groups) in six regions of Armenia (Ararat, Gegharkunik, Shirak, Lori, Kotayk and Tavush). Participants were selected through village authorities and local schools. The workshop was conducted in each village in December 2016 to provide financial education relevant to the winter and spring sowing season, which is when most financial decisions are made about budgeting, credit and spending.

The experiment group participated in two-day classroom-based financial education workshops (three hours a day) covering topics related to the general economy and financial system, personal and family budgeting, saving and planning, debt management, shopping around for financial products and tools, rights protection and financial security, and frauds and scams. The workshops were conducted in the Armenian language.

Three surveys were conducted at different stages: a pre-survey (before the workshop), a short-term post-survey (immediately after the workshop) and a long-term post-survey (six months after the workshop). The short-term results were presented in the paper, *“Short-Term Effectiveness and Development Potential of Financial Education Classroom Workshops in Rural Areas: The Case of Armenia”*. Overall, the assessment showed that the short-term impact of financial education workshops on financial literacy and trust in the financial system was significant and positive (Kacarevic et al. 2017).

After six months (in the summer), the long-term post-survey was conducted to analyze the long-term effectiveness of the classroom workshops. In addition to knowledge, skills and attitude-based questions, the

survey also included behavioral questions. This enabled the CBA to assess the effectiveness of financial literacy workshops on positive behavioral change in rural areas.

The results showed that, over the long term, the workshops had a minimal positive effect on the financial knowledge, skills and resilience of participants. In terms of attitude changes, there was a positive impact on saving and borrowing preferences, but there was less influence on trust levels than in the control group. For the behavioral components, the workshops had a minor but positive impact on financial inclusion. The number of people who had savings at the time of the survey declined in the long term, indicating that attitude changes about savings did not translate into behavior change.

The short-term significant and positive results of classroom workshops gradually diminished, leading to negligible results in the long term. Additional studies will be important to identify the factors influencing the financial behavior of people living in rural areas, and to design financial education workshops with lasting impact.

¹ Adopted by the Government of the Republic of Armenia in November 2014.

2. INTRODUCTION

This case study features Armenia's experience with classroom-based financial education workshops and the Central Bank of Armenia's (CBA) efforts to measure the effectiveness of these workshops on financial inclusion and financial behavior. Using difference-in-difference (DID) regression analysis, the CBA measured the impact of two-day financial education workshops in 100 villages randomly selected from across six regions.

The results indicate a positive and significant impact on financial knowledge, skills and attitude in the short term (immediately after the workshops). Another survey was conducted six months after the workshops to examine the possible long-term impact on financial knowledge and skills, behavior and financial inclusion.

The results of the long-term evaluation results suggest that the positive and significant short-term results of classroom workshops gradually faded. The effect on participants' financial knowledge, skills and resilience, saving and borrowing preferences, and financial inclusion were positive, but there was only a negligible effect on participants' trust in the financial system and financial behavior (saving and borrowing). Additional efforts and refinements are needed to ensure the workshop is effective over the long term.



Workshop in Akner, Syunik, by Shushanik Ghazaryan.



Workshop in Norashen, Ararat, by Aram Khachatryan.



Workshop in Karnut, Shirak, by Haykuhi Hovhannisyan.

3. LITERATURE REVIEW

Financial literacy is becoming more important, prompting public authorities, international organizations and the private sector to implement a variety of financial education programs. Methods vary, but the one addressed in this case study is the classroom-based workshop.

Although the impact of financial education classroom workshops on behavior change is debatable, studies have typically shown positive results. Jamison et al. (2014) and Sayinzoga et al. (2016) have noted the effectiveness of classroom workshops in raising financial literacy levels, and present significant evidence of the effect of workshops on financial behaviors, such as saving. Rand (2004) has suggested that workshops have a long-term positive impact on behavior change, with 85 percent of participants in a Brookings study doing a better job tracking their expenditures and 84 percent changing their approach to managing their household budget. On the other hand, a paper by Kaiser and Menkhoff (2017) suggests that while in-person training appears to be more effective than non-classroom delivery methods, participants had no significant change in financial behavior.

Even though low-income populations are one of the main target groups for financial education, there is little evidence of the effectiveness of these programs (Kaiser and Menkhoff 2017). Financial education interventions have been more efficient with employees, youth and financial counselling, triggering positive financial behavior in terms of saving, retirement planning, budgeting and debt management (Bernheim and Garrett 2003; Boyce and Danes 2004; Staten, Elliehausen and Lundquist 2002). Some studies have revealed the importance of other factors in financial behavior change, particularly Lyons, Chang and Scherpf (2006) who assert that prior financial experience might matter more than the number of lessons completed.

High program dropout rates, data collection challenges, low survey response rates, tracking of respondents and seasonality are the main reasons there is limited research on the effectiveness of financial education interventions for disadvantaged groups (e.g. low income and those living in remote areas). Also, considering the high costs associated with impact evaluation, many organizations that conduct financial education programs

do not have the resources or expertise to collect impact data and/or conduct rigorous evaluations (Lyons, Chang and Scherpf 2006).

Based on the results of the CBA's 2014 Financial Capability Barometer, financial literacy levels in Armenia are intermediate, with only 44 percent of adults financially literate (Pokrikyan et al. 2017).

As part of the NSFE, the CBA, in cooperation with other institutions, has developed initiatives and activities for different target groups, such as the Financial Education in Schools and Financial Education in Rural Areas programs. These programs aim to enhance financial capability and raise public awareness (Nurbekyan and Hovanessian 2018). Evaluating the impact of these projects is critically important to the CBA.

4. METHODOLOGY AND DATA DESCRIPTION

For the pre-survey, there were 925 people in the treatment group and 918 in the control group. However, only 608 participants attended the second day of the workshop (65.7 percent). Since only 229 respondents from the treatment group participated in the long-term survey, 229 respondents were randomly selected from the control group.² Contacting workshop participants after six months had just a 37.7 percent success rate, due to various reasons such as refusal to participate in the survey, being out of the country, not providing a phone number or providing an incorrect number.

Given that attrition bias can be a huge problem, the CBA analyzed whether the characteristics of the survey respondents were different in the pre-survey than after attrition. Table 1 shows the main characteristics of all participants, the characteristics of participants who were lost in the follow-up survey and the characteristics of the remaining participants. It was observed that the characteristics of the control and treatment groups were a bit different.

As for attrition, the CBA observed that participants who left the sample did not differ substantially from the remaining sample, which means that the loss of participants does not necessarily lead to attrition bias (McCoy et al. 2009). There may have been more women participants than men in the workshops for cultural reasons or the channels used to recruit participants may have reached more women than men.

The CBA developed a knowledge index by adding the number of questions answered correctly (from 0-9), then comparing the performance of respondents in the treatment and control groups. Based on the average performance of each group before and after the workshop, participants were divided into three groups based on the number of correctly answered questions. Respondents who answered 0-3 questions correctly were classified as Low, those with 4-6 correct answers as Medium and those with 7 or more correct responses as High. The prefixes “pre-” and “post-” are added to indicate when the survey was administered.

To determine the effectiveness of the financial literacy workshops, participants’ performance was studied based on the number of questions they answered correctly. Using the difference-in-difference (DID) method, the CBA analyzed the effect of the treatment (workshops) on participants’ financial knowledge, skills and resilience; trust and saving and borrowing preferences; financial behavior and financial inclusion.

² The sample size for the short-term results is different as more people filled in the short-term post-survey.

TABLE 1: CHARACTERISTICS OF PARTICIPANTS

	All participants		Participants lost to follow-up survey		Remaining participants	
	Treatment	Control	Treatment	Control	Treatment	Control
Age	44	46	43	48	44	48
Female	73%	62%	68%	63%	76%	60%
Monthly income (AMD)	59,000	69,900	60,000	66,600	56,200	72,000
Married	78%	82%	78%	81%	76%	83%

5. RESULTS

5.1 KNOWLEDGE, SKILLS AND RESILIENCE

Table 2 shows the nine categories of knowledge and skill-based survey questions that were asked before the workshops and six months later.³ In general, it was observed that the treatment group did not perform as well as the control group, both in the pre-survey and after the training. While both groups showed improvement, the treatment group performed better than the control group. It can therefore be concluded that the workshop had a small, but positive, long-term effect on participants.

Table 3 and Table 4 group workshop participants by absolute numbers. For instance, the intersection of the first row and first column show that 20 participants scored Low both before and immediately after the workshop. Indeed, the number of those scoring Low before the workshop decreased from 97 to 25 in the short term, and in the long term decreased to 59. Meanwhile, the number of those scoring High increased from 17 to 111 in the short term and from 17 to 29 in the long term. Over the long term, 37 percent of participants improved their financial knowledge and

³ The pre-survey questionnaire is in Appendix 2 and the post-survey questionnaire is in Appendix 3.

⁴ The question has changed slightly.

TABLE 2: KNOWLEDGE AND SKILL-BASED QUESTIONS

	Treatment		Control	
	Pre-Survey	Post-Survey	Pre-Survey	Post-Survey
Inflation	14.85%	31.88%	19.65%	31.00%
Inflation calculation ⁴	58.08%	27.07%	65.07%	43.67%
Simple interest calculation	32.75%	51.53%	44.98%	52.40%
Compound interest calculation	54.15%	59.39%	56.77%	65.50%
Knowledge of deposit insurance	27.51%	37.12%	24.45%	25.76%
Knowledge of effective interest rate	44.54%	54.59%	46.72%	38.86%
Exchange rate risk	57.21%	52.40%	56.77%	60.70%
Fraud	59.39%	84.28%	62.88%	79.04%
Complaint	36.24%	49.78%	54.59%	48.03%
Average	42.75%	49.78%	47.99%	49.44%

TABLE 3: PERFORMANCE LEVELS OF THE TREATMENT GROUP (SHORT TERM)

	Post-Low	Post-Medium	Post-High	Total
Pre-Low	20	40	37	97
Pre-Medium	4	52	59	115
Pre-High	1	1	15	17
Total	25	93	111	229

TABLE 4: PERFORMANCE LEVELS OF THE TREATMENT GROUP (LONG TERM)

	Post-Low	Post-Medium	Post-High	Total
Pre-Low	30	64	3	97
Pre-Medium	28	70	17	115
Pre-High	1	7	9	17
Total	59	141	29	229

moved to a higher performing group, while 48 percent stayed in the same group as they were before and 16 percent underperformed. It can therefore be concluded that the long-term positive effect of the workshop is not as significant and measurable as in the short term.

A DID regression was performed to calculate the effect of the treatment (workshop) on participants' financial knowledge and skill levels. The results can be found in Appendix 1. It was observed that, on average, an individual who participated in the financial literacy workshop scored higher on knowledge and skill-based questions. To be exact, they answered 0.65 more questions than non-participants. It is important to note that in the short term (immediately after the training) this indicator was 2.3 for the same 230 people, which means that an individual answered approximately two more questions correctly in the short term than they did after six months (Figure 1).

The CBA also attempted to measure the financial resilience of participants, that is, their ability and knowledge to withstand stressful events that might influence one's income and wealth. In the analysis, this indicator represents knowledge about exchange rate risk, rights protection and security from financial fraud. Figure 2 shows the effect of the workshop on knowledge of financial resilience in both the control and treatment groups. The change among workshop participants was 0.12 while in the control group it was only 0.06.

After six months, the overall financial knowledge, skills and resilience of participants were almost the same in both the treatment and control groups, but the long-term change was greater in the treatment group, a signal that classroom workshops had a positive effect.

FIGURE 1: PERFORMANCE WITH KNOWLEDGE AND SKILL-BASED QUESTIONS IN TREATMENT AND CONTROL GROUPS

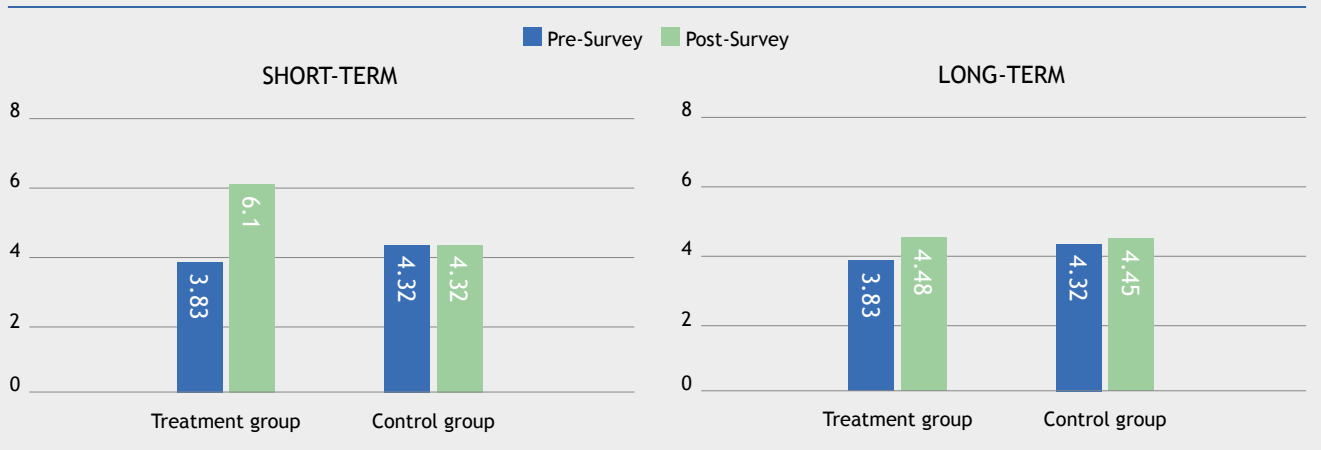
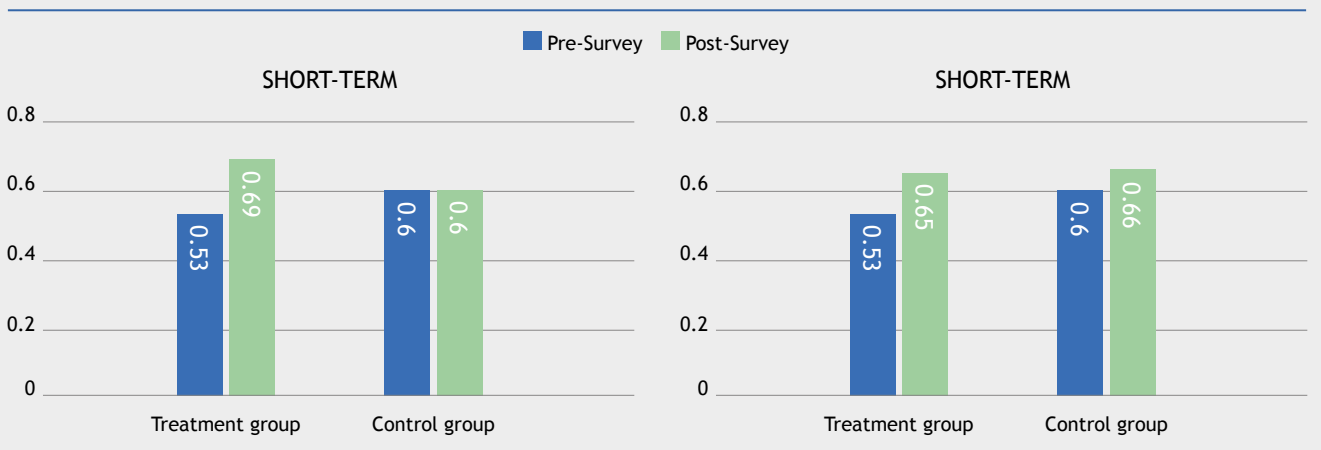


FIGURE 2: KNOWLEDGE OF FINANCIAL RESILIENCE IN TREATMENT AND CONTROL GROUPS



5.2 TRUST, SAVING AND BORROWING PREFERENCES

The level of trust in the financial system and saving and borrowing preferences are important indicators of financial attitudes. The 2014 World Bank Global Findex survey found that 30 percent of respondents identify trust as the main reason for not having a bank account.⁵

Following the classroom workshops, trust levels in the treatment group increased by 15.1 percent in the short term, but only by 7.7 percent in the long term (Figure 3). For the control group, trust increased by 24 percent without any intervention. These results indicate that classroom workshops had a negative impact on trust in the financial system.

Figure 4 illustrates participants' long-term preferences for saving and borrowing before and after the financial education workshops. There was a noticeable and positive shift in preferences for formal methods of saving and borrowing.

In particular, the number of people who preferred depositing savings at a bank increased by 77 percent. Similarly, more respondents became eager to borrow from banks rather than from friends, relatives and neighbors. However, access to savings might still be an issue for respondents as the number of people who preferred to save at home did not change.

It was concluded that the workshop had an ambiguous effect on the attitudes of participants. While there was a positive effect on saving and borrowing preferences, the workshops had a negative effect on trust in the financial system compared to the control group.

5 Demirguc-Kunt et al., 2015.

FIGURE 3: TRUST LEVELS IN THE TREATMENT AND CONTROL GROUPS

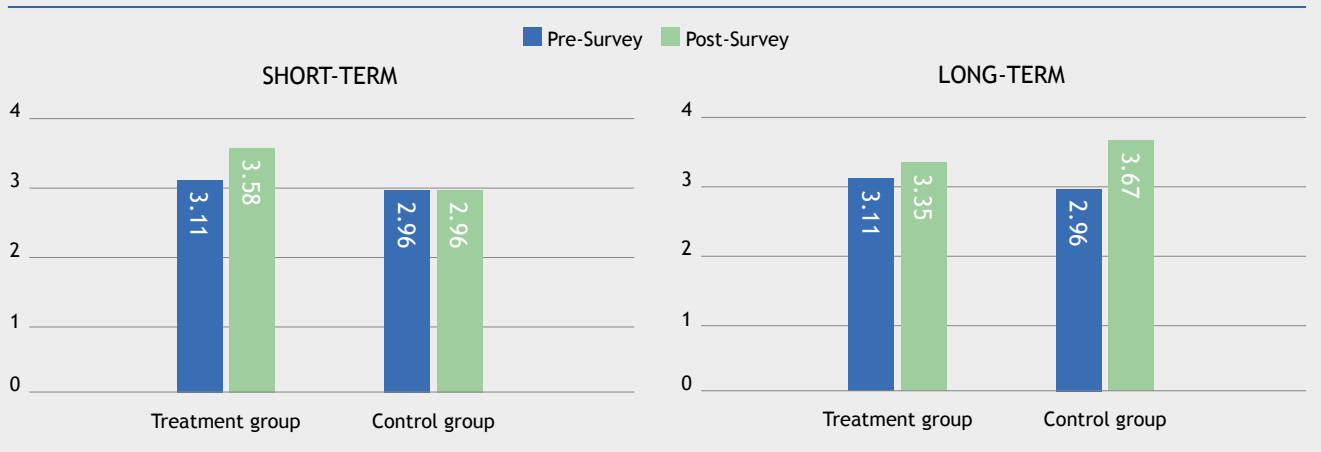
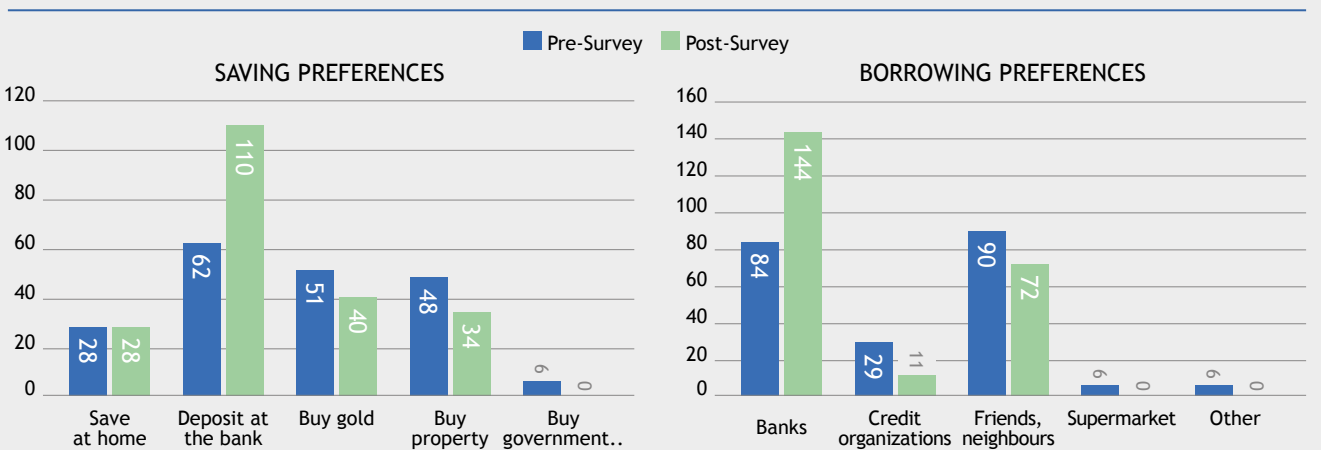


FIGURE 4: SAVING AND BORROWING PREFERENCES IN THE TREATMENT GROUP



5.3 FINANCIAL INCLUSION AND BEHAVIOR CHANGE

Financial inclusion is having access to useful and affordable financial products and services—transactions, payments, savings, credit and insurance—that meet the needs of society and are delivered in a responsible and sustainable way.⁶ In this research, only the usage component of financial inclusion was considered. Based on the questionnaire, an inclusion index was developed by calculating the number of financial tools and services that participants mentioned using, both before the workshops and after six months. This pattern is shown in Figure 5. The long-term change was negative for both the treatment and control groups, and although the decline was smaller in the treatment group (12.7 percent), the overall difference was not significant at 5.5 percent. The overall decrease in financial inclusion means that people used different financial services less after six months than they did before the workshops.

As shown in Figure 6, the number of people with savings and debts decreased after six months. The number of those in the treatment group who had savings before the workshops was significantly different from the control group. Moreover, in the treatment group, savings levels decreased tremendously (95 percent) while in

the control group, savings decreased by much less (38.1 percent). Unlike savings, the decrease in debt levels for the treatment and control groups was identical.

In the post-survey, respondents were asked additional behavioral questions about loans. The results are shown in Table 5.

Differences in the preferred source of the loan and loan comparison shopping between the treatment and control groups were compared. The results suggest there was no significant difference between the two groups and both groups have similar patterns. The significant decrease in both the measure of debts and loans might be assumed to relate to seasonal migrants who returned from abroad with a lump sum and covered all the family’s debts for the year. It is also interesting to note that people are loyal to the financial institutions they have used before.

In conclusion, the financial education workshops had a positive impact on financial inclusion, but the effect on financial behavior was negligible.

6 World Bank, 2017.

FIGURE 5: INCLUSION INDEX IN TREATMENT AND CONTROL GROUPS

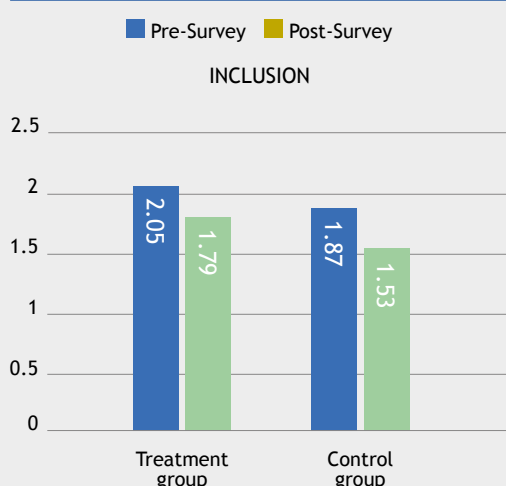


FIGURE 6: SAVINGS AND DEBT LEVELS

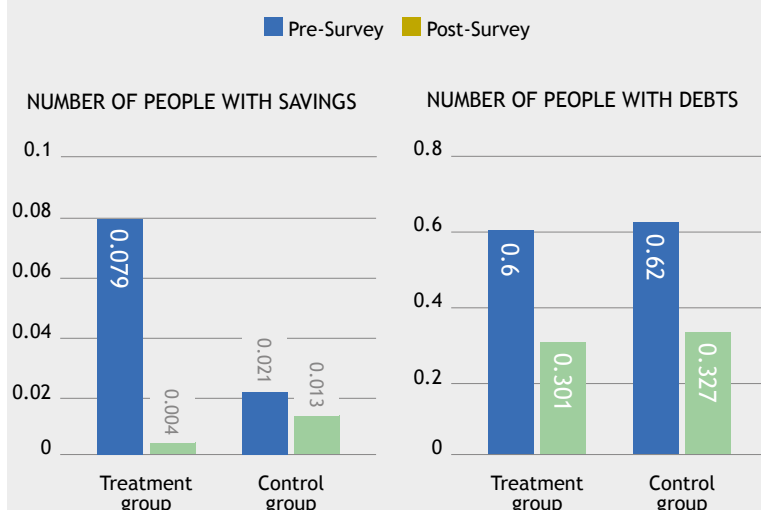


TABLE 5: BEHAVIORAL QUESTIONS ON LOANS (POST-SURVEY)

	Treatment group		Control group	
	Before 2017	This year	Before 2017	This year
1. Had a loan before	74%	30%	83%	33%
2. Financial institution as loan source	99%	99%	100%	100%
3. Did comparison shopping	15%	15%	38%	40%
4. Had a delay in paying the loan	6%		4%	

6. CONCLUSIONS AND LESSONS LEARNED

Both the short-term and long-term impact evaluations of the Financial Education in Rural Areas project generated valuable lessons.

Despite the positive and significant short-term effects of the classroom workshops, in the long term, the positive effect on participants' financial knowledge, skills and resilience was minimal. After the workshop, participants tended to answer half a question more (out of 9) correctly, on average. In the short term, the number of people who scored low on knowledge questions decreased by 75 percent, and in the long term by 40 percent.

As for financial attitudes, the workshop had an adverse effect on participants' trust in the financial system compared to the control group. In the long term, trust in the financial system increased by five percent after the classroom workshop, while in the control group there was a 14 percent increase. On the other hand, the workshop had a positive long-term effect on the saving and borrowing preferences of participants.

In theoretical decision making about preferred methods of saving and borrowing, it seemed that workshop participants gained the necessary knowledge, but did not change their behavior or actions significantly in the long term. The actual savings levels of participants decreased significantly over the long term, indicating that attitude change did not lead to behavior change. However, the workshop had a minor positive impact on the financial inclusion of participants. Long-term financial inclusion decreased for both groups, but in the treatment group it was by 13 percent while in the control group it was 18 percent.

To summarize, the effect of classroom workshops on participants' financial knowledge, skills and resilience, saving and borrowing preferences, and financial inclusion was positive, unlike trust in the financial system and financial behavior, which showed a negligible difference.

Additional research would be helpful in identifying constraints to the long-term effectiveness of financial education workshops. The gradually diminishing impact in all areas indicate the importance of applying differing degrees of treatment to the same target group

over the long term. Applying behavioral insights would also help policymakers design more targeted financial education interventions.

In terms of impact evaluation, better randomization and more effective survey methods should be implemented to eliminate attrition and selection biases, and to help identify what influences and drives the financial behavior of people living in rural areas.

Other components of the workshops should also be tested, including the curriculum, method of instruction, schedule, duration and time period.

REFERENCES

- Bernheim, B.D. and Garrett, D.M. 2003.** “The effects of financial education in the workplace: Evidence from a survey of households.” *Journal of Public Economics* 87(7/8), 1487-1519.
- Boyce, L. and Danes, S.M. 2004.** Evaluation of the NEFE High School Financial Planning Program, 2003-2004.
- Clancy, M., Grinstein-Weiss, M. and Schreiner, M. 2001.** “Financial education and savings outcomes in individual development accounts.” Working Paper No. 01-2. St. Louis, MO: Washington University, Center for Social Development
- Healy, D. and R. Denniss. 2016.** Financial Literacy Program Evaluation. First Person Consulting Pty Ltd.
- Jamison, J.C., Karlan, D. and Zinman, J. 2014.** “Financial Education and Access to Savings Accounts: Complements or Substitutes? Evidence from Ugandan Youth Clubs.” NBER Working Paper No. 20135.
- Kacarevic, A. et al. 2018.** The Effectiveness of Short-Term Financial Education Workshops in Rural Areas: The Case of Armenia. AFI CEMC Working Group. Available at: <https://www.afi-global.org/publications/2716/The-Effectiveness-of-Short-Term-Financial-Education-Workshops-in-Rural-Areas-The-Case-of-Armenia>.
- Kaiser, T. and Menkhoff, L. 2017.** Does financial education impact financial literacy and financial behavior, and if so, when? (English). Policy Research Working Paper, no. WPS 8161. World Bank Group. Available at: <http://documents.worldbank.org/curated/en/144551502300810101/Does-financial-education-impact-financial-literacy-and-financial-behavior-and-if-so-when>.
- Lyons, A.C., Chang, Y. and Scherpf, E. 2006.** “Translating Financial Education into Behavior Change for Low-Income Populations.” *Journal of Financial Counseling and Planning* 17(2). Available at: <https://ssrn.com/abstract=2232122>.
- McCoy, T. et al. 2009.** “Attrition Bias in a U.S. Internet Survey of Alcohol Use Among College Freshmen.” *Journal of Studies on Alcohol and Drugs* 70(4): 606-614.
- Miller, R. and Hollist, C. (2007).** “Attrition bias.” Faculty Publications, Department of Child, Youth, and Family Studies, 45.
- Nurbekyan, A. and Hovanesian, N. 2018.** “Financial Inclusion, Regulation, Financial Literacy, and Financial Education in Armenia.” ADBI Working Paper 843. Asian Development Bank Institute. Available at: <https://www.adb.org/publications/financial-inclusionregulation-financial-literacy-and-financial-education-armenia>.
- Pokrikyan, A, Lalayan, S. and Mkrtchyan, A. 2017.** Financial Capability Barometer: A New Methodology for Measuring the Financial Capability of a Country’s Population. AFI Special Report. Available at: <https://www.afi-global.org/publications/2483/Financial-Capability-Barometer>.
- Rand, D. 2004.** Financial Education and Asset-Building Programs for Welfare Recipients and Low-Income Workers: The Illinois Experience. Brookings. Available at: <https://www.brookings.edu/research/financial-education-and-asset-building-programs-for-welfare-recipients-and-low-income-workers-the-illinois-experience/>
- Russia Financial Literacy and Education Trust Fund. 2013.** Financial Literacy and Inclusion: Results of OECD/INFE Survey across Countries and by Gender.
- Sayinzoga, A., Bulte, E. and Lensink, R. 2016.** “Financial Literacy and Financial Behavior: Experimental Evidence from Rural Rwanda.” *The Economic Journal* 126, 1571-1599.
- Schreiner, M., Clancy, M. and Sherraden, M. 2002.** Saving Performance in the American Dream Demonstration: A National Demonstration of Individual Development Accounts. St. Louis, MO: Washington University, Center for Social Development.
- Staten, M.E., Elliehausen, G. and Linqvist, E.C. 2002.** The Impact of Credit Counseling on Subsequent Borrower Credit Usage and Payment Behavior. (Monograph #36). Washington, DC: Georgetown University, Credit Research Center.

APPENDIX 1

DIFFERENCE IN DIFFERENCE (DID) REGRESSION RESULTS

TABLE 6: DID ON KNOWLEDGE AND SKILL LEVELS (LONG TERM)

	Pre-	Post-	Pre-post difference
Treatment group	3.83	4.48	0.65
Control group	4.32	4.45	0.13
Difference (T-C)	-0.47	0.03	0.52**

Inference: *** p<0.01; ** p<0.05; * p<0.1

TABLE 7: DID ON TRUST LEVELS

	Pre-	Post-	Pre-post difference
Treatment group	3.113	3.346	0.233
Control group	2.957	3.668	0.711
Difference (T-C)	0.156	-0.322	-0.478**

Inference: *** p<0.01; ** p<0.05; * p<0.1

TABLE 8: DID ON SAVINGS

	Pre-	Post-	Pre-post difference
Treatment group	0.079	0.004	-0.075
Control group	0.021	0.013	-0.008
Difference (T-C)	0.058	-0.009	-0.067***

Inference: *** p<0.01; ** p<0.05; * p<0.1

TABLE 9: DID ON DEBTS

	Pre-	Post-	Pre-post difference
Treatment group	0.600	0.301	-0.299
Control group	0.620	0.327	-0.293
Difference (T-C)	-0.02	-0.026	-0.006

Inference: *** p<0.01; ** p<0.05; * p<0.1

APPENDIX 2 PRE-SURVEY QUESTIONNAIRE

1 - Of the financial services listed below, which one do you use?

- 1) Bank account
- 2) Bank account and credit card
- 3) Loan
- 4) Deposit
- 5) Money transfer
- 6) I am a guarantor
- 7) Other
- 8) None

2 - Please indicate which one is true for you:

- 1) I have savings
- 2) I have loans
- 3) I have both savings and loans
- 4) None
- 5) Hard to answer

3 - Which one is the most preferable way to save?

- 1) Save at home
- 2) Deposit at banks
- 3) Buy gold
- 4) Buy a house
- 5) Buy government bonds
- 6) Other

4 - How do we calculate inflation in your opinion?

- 1) From the change in exchange rate
- 2) From the price changes of flour, sugar, oil and other important goods
- 3) From the price changes of goods and services which are popularly used
- 4) Hard to answer

5 - You have 1,000,000 AMD in income and the inflation rate is 5%. How much should you earn next year so your standard of living would not change?

- 1) More than 1,000,000
- 2) Exactly 1,000,000
- 3) Less than 1,000,000
- 4) Hard to answer

6 - Imagine you have 100,000 AMD in savings in the bank for 1 year with a 5% interest rate. If there is no income tax, how much will you get after 1 year?

- 1) More than 105,000 AMD
- 2) Exactly 105,000 AMD

- 3) Less than 105,000 AMD
- 4) Hard to answer

7 - Imagine you have 100,000 in deposits in the bank for 5 years with a 5% interest rate. If you add the interest to the initial saving every month, how much will you get after 5 years (compound)?

- 1) Exactly 125,000
- 2) Less than 125,000
- 3) More than 125,000
- 4) Hard to answer

8 - Imagine you have 8,000,000 in deposits in a bank, how much of this money is guaranteed by the guarantor organization of Armenia?

- 1) 6,000,000
- 2) 4,000,000
- 3) 8,000,000
- 4) Hard to answer

9 - Which one is the best option for taking out loans?

- 1) Banks
- 2) Credit institutions
- 3) Friends, relatives...
- 4) Markets (like shops, i.e. 'pay later?')
- 5) Other

10 - What is the name of the rate that includes all the costs of taking out a loan?

- 1) Nominal interest rate
- 2) Effective interest rate
- 3) Refinancing rate
- 4) Hard to answer

11 - Imagine you have a dollar loan and the exchange rate changes from 500 to 450. What would happen to your monthly payment?

- 1) Increase
- 2) Decrease
- 3) Stay the same
- 4) Hard to answer

12 - Imagine you saw an advertisement that offers a deposit which doubles your money in 3 months. What would you do?

- 1) Use the opportunity and recommend it to friends
- 2) Ignore it, because it can be financial fraud
- 3) Test it by depositing a small amount
- 4) Hard to answer

13 - Imagine you win a lottery of 50,000. In the second round you have a chance of winning 100,000 or losing the initial 50,000. Which option would you choose?

- 1) Stop playing and take the 50,000
- 2) Continue playing, getting 100,000 or 0
- 3) Would not play in the first place
- 4) Hard to answer

14 - Which option is most preferable to get information about financial services?

- 1) TV, radio, magazines
- 2) Websites of financial institutions
- 3) Branches of financial institutions
- 4) Friends, relatives, neighbours
- 5) Village authority
- 6) Other

15 - After having a problem with financial services, which organization would you contact first?

- 1) Financial institution
- 2) CBA
- 3) Financial mediator
- 4) Court
- 5) Other

16 - From 1-5, how much do you trust the financial system of Armenia?

17 - Gender

Male / Female

18 - Your age

19 - Education

- 1) No education
- 2) Primary
- 3) 8 years
- 4) 10 years
- 5) Profession
- 6) Higher

20 - Do you have financial education?

- 1) Yes
- 2) No

21 - Marital status

- 1) Married
- 2) Single
- 3) Widowed
- 4) Divorced

22 - Number of family members

23 - Are there people in the family who are working abroad?

- 1) Yes 2) No

24 - Your occupation

- 1) Employed
- 2) Farmer
- 3) Seasonal worker
- 4) Unemployed
- 5) Student
- 6) Retired
- 7) Housewife
- 8) Unable to work

25 - How much is your family income (monthly)?

- 1) Less than 50,000
- 2) 55,000-180,000
- 3) 181,000-250,000
- 4) 251,000-400,000
- 5) More than 400,000
- 6) Hard to answer

26 - Your income is what percentage of your entire family income?

- 1) 1%-25%
- 2) 26%-50%
- 3) 51%-75%
- 4) 76%-99%
- 5) 100%
- 6) I don't have personal income
- 7) Hard to answer

27 - Would you like to participate in financial education classes?

- 1) Yes 2) No

APPENDIX 3 POST-SURVEY QUESTIONNAIRE

1 - Which of the following options are true?

- 1) I have savings
- 2) I have debt
- 3) I have both saving and debt
- 4) None of the above
- 5) Refuse/hard to answer

2 - Which one is the best option for taking out loans?

- 1) Banks
- 2) Credit institutions
- 3) Friends, relatives...
- 4) Markets (like shops, i.e. 'pay later?')
- 5) Other

3 - Did you have any loans until 2017?

- 1) Yes
- 2) No (Move to question 7)
- 3) Refuse/hard to answer

4 - Please indicate the purpose of the loan.

- 1) Point of sale loans
- 2) Consumer loans
- 3) Agricultural purposes
- 4) Mortgage loan
- 5) Other

5 - Please indicate the source of the loan.

- 1) Bank
- 2) Credit organization
- 3) Lombard
- 4) Friends, relatives...
- 5) Other
- 6) Refuse/hard to answer

6 - How many other options did you consider before taking the loan?

- 1) Did not consider any other option
- 2) 2 options
- 3) 3 and more options
- 4) Refuse/hard to answer

7 - From the financial services mentioned bellow, which one have you used this year??

- 1) Bank account
- 2) Bank account and banking cards
- 3) Loans/ point of sale loans
- 4) Deposit

- 5) Money transfer
- 6) Been a guarantor
- 7) Other
- 8) None of the above

8 - Please indicate the purpose of the loan.

- 1) Point of sale loans
- 2) Consumer loans
- 3) Agricultural purposes
- 4) Mortgage loan
- 5) Other

9 - Please indicate the source of the loan.

- 1) Bank
- 2) Credit organization
- 3) Lombard
- 4) Friends, relatives...
- 5) Other
- 6) Refuse/hard to answer

10 - How many other options did you consider before taking the loan?

- 1) Did not consider any other option
- 2) 2 options
- 3) 3 and more options
- 4) Refuse/hard to answer

11 - Have you ever missed the loan payment deadline?

- 1) Yes
- 2) No
- 3) Refuse/hard to answer

12 - If the answer is yes, what was the reason?

- 1) Not having the amount of money
- 2) Technical problems
- 3) Transportation problem
- 4) Deterioration of financial conditions
- 5) Force majeure
- 6) Did not remember the deadline
- 7) Other

13 - Please compare your new loan conditions with the previous one.

Interest rate of the loan	1)Increased	2)Decreased	3)Didn't change
Amount of the loan	1)Increased	2)Decreased	3)Didn't change
Deadlines	1)Increased	2)Decreased	3)Didn't change
Currency	The previous one was in ----- now it is in ----- currency		3)Didn't change

14 - Did you use your current loan to pay for another loan?

- 1) Yes
- 2) No
- 3) Refused/hard to answer

15 - Which one is the most preferable way to save?

- 1) Save at home
- 2) Deposit at banks
- 3) Buy gold
- 4) Buy a house
- 5) Buy government bonds
- 6) Other

16 - How do we calculate inflation in your opinion?

- 1) From the change in exchange rate
- 2) From the price changes of flour, sugar, oil and other important goods
- 3) From the price changes of goods and services which are popularly used
- 4) Hard to answer

17 - You have a deposit with a 5% yearly interest rate. If the inflation rate is 6%, after a year you can buy -----with your savings.

- 1) More
- 2) Same amount
- 3) Less
- 4) Refused/hard to answer

18 - Imagine you have 100,000 AMD in savings in the bank for 1 year with a 5% interest rate. If there is no income tax, how much will you get after 1 year?

- 1) More than 105,000 AMD
- 2) Exactly 105,000 AMD
- 3) Less than 105,000 AMD
- 4) Refused/hard to answer

19 - Imagine you have 100,000 in deposits in the bank for 5 years and a 5% interest rate. If you add the interest to the initial saving every month, how much will you get after 5 years (compound)?

- 1) Exactly 125,000
- 2) Less than 125,000
- 3) More than 125,000
- 4) Refused/hard to answer

20 - Imagine you have 8,000,000 in deposits in a bank, how much of this money is guaranteed by the guarantor organization of Armenia?

- 1) 6,000,000
- 2) 4,000,000
- 3) 8,000,000
- 4) Refused/hard to answer

21 - What is the name of the rate that includes all the costs of taking out a loan?

- 1) Nominal interest rate
- 2) Effective interest rate
- 3) Refinancing rate
- 4) Refused/hard to answer

22 - Imagine you have a dollar loan and the exchange rate changes from 500 to 450. What would happen to your monthly payment?

- 1) Increase
- 2) Decrease
- 3) Stay the same
- 4) Refused/hard to answer

23 - Imagine you saw an advertisement that offers a deposit which doubles your money in 3 months. What would you do?

- 1) Use the opportunity and recommend it to friends
- 2) Ignore it, because it can be financial fraud
- 3) Test it by depositing a small amount
- 4) Refused/hard to answer

24 - Imagine you win a lottery of 50,000. In the second round you have a chance of winning 100,000 or losing the initial 50,000. Which option would you choose?

- 1) Stop playing and take the 50,000
- 2) Continue playing, getting 100,000 or 0
- 3) Would not play in the first place
- 4) Hard to answer

25 - Which option is most preferable to get information about financial services?

- 1) TV, radio, magazines
- 2) Websites of financial institutions
- 3) Branches of financial institutions
- 4) Friends, relatives, neighbours
- 5) Village authority
- 6) Other

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- 4) 76%-99%
- 5) 100%
- 6) I don't have personal income
- 7) Hard to answer

38 - Did you participate in a financial education workshop during the previous six months?

- 1) Yes
- 2) No

39 - Would you like to participate in financial education classes?

- 1) Yes
- 2) No

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