PROYECTOCAPITAL

inshort

Number 48 / May 2014

CHANGES IN FINANCIAL BEHAVIOR THROUGH A FINANCIAL EDUCATION PILOT PROGRAM IN PERU.

EVIDENCE FROM THE EVALUATION OF THE PILOT PROGRAM "PROMOTION OF SAVINGS IN JUNTOS FAMILIES"*

CHRIS BOYD[1]

THE PILOT PROGRAM "PROMOTION OF SAVINGS"

The Pilot Program "Promotion of Savings in JUNTOS Families" was a joint initiative between the public sector (JUNTOS, Banco de la Nación (BN), Agrorural, Technical Secretariat of the Inter-Ministerial Commission on Social Affairs) and civil society (Instituto de Estudios Peruanos / Proyecto Capital, CARE) launched in October 2009 in the districts of San Jerónimo (Apurímac) and Coporaque (Cusco).[2] The goal of the pilot program was to build basic capabilities so that poor households in Peru could launch and consolidate productive activities by mobilizing savings (initially in the BN) and using other financial products to promote the household's self-sustainability and its gradual graduation from the JUNTOS conditional cash transfer (CCT) program,[3] as well as to develop, validate and systematize tools for the appropriate adoption of a culture of family savings.

The Pilot Program "Promotion of Savings" combined three components: (a) financial training and financial awareness (what the financial system is, how it works, the products it offers, its advantages; guidelines for better income management, emphasizing the value of saving as a means for building family capital); (b) financial accompaniment (reinforcement of the

* The complete document is available at the Proyecto Capital website: <www.proyectocapital.org>.

1. With the collaboration of Úrsula Aldana (researchers at the Instituto de Estudios Peruanos).

2. The evaluation of the results of the first year of activities of the Pilot Program "Promotion of Savings" in San Jerónimo and Coporaque was described in Trivelli et al. (2011).

3. The National Program of Direct Support to the Poorest Peruviuans (Programa Nacional de Apoyo Directo a los Más Pobres – JUNTOS) is a Peruvian government program designed to benefit the country's poorest households with a monthly subsidy of S/. 100 (US$ 30) distributed through branches of the Banco de la Nación. The program prioritizes households that include pregnant women, widowed parents, senior citizens and children under age 14, designating the woman as the representative to withdraw the transfer, which can be used freely as long as the household complies with shared responsibilities in the areas of nutrition, health, education and identity.

first component by local leader mothers and bi-monthly visits from trainers and accompaniment of local JUNTOS coordinators); (c) non-monetary incentives for saving (raffling food baskets worth S/.180 to JUNTOS beneficiaries with positive savings account balances).

Specifically, financial training and financial awareness was done with groups of 20 to 30 beneficiaries and was organized in three major modules: the financial system, financial products and a program of agricultural and rural productive development. Module 1 aimed to teach the beneficiaries who's who in the financial system, how money circulates, the role of financial institutions and the state (what the Superintendent of Banking and Insurance and the Deposit Insurance Fund are), who the customers of the financial system are, what their rights are, etc. The goal of Module 2 was for the beneficiaries of the pilot program to understand financial services (especially savings), their characteristics (what a savings account is, what an interest rate is, what a voucher is, etc.) and advantages (as money-management tools) and decide what financial institution was most appropriate for them. Module 3 sought to foster entrepreneurial initiatives among the pilot program's beneficiaries and encourage the use of more complex financial services, such as credit and micro-insurance.

The districts eligible for the intervention had to have belonged to JUNTOS since 2007, have users who withdrew their JUNTOS transfers at BN branches or private financial institutions, have a low HDI and be places where the BN and Agrorual (Sierra Norte or Sierra Sur) had sufficient operating capacity. Of the 216 districts that met those criteria, 24 were chosen for the intervention, but for political reasons the intervention was implemented in only 17 of them (only in the highlands, in the departments of Apurímac, Ayacucho, Cusco, La Libertad and Puno), which account for nearly 14,000 JUNTOS recipient households. This meant that the selection of districts was not perfectly random.[4]

The intervention was not perfectly uniform either. The three modules of the financial training and accompaniment component were implemented between November 2009 and March 2012 in the 17 districts assigned to the treatment group, at different times in each region, with the Puno districts having the longest and most incomplete intervention. Users in the Ayacucho districts received additional productive training from CARE PERÚ, and users in La Libertad received radio messages to encourage saving as part of the Innovations for Scaling Up Financial Education Project.

Meanwhile, the raffle of food baskets was only held in 2011 in the 24 districts initially selected for the intervention, some of which ended up being part of the evaluation control group. The results presented here therefore correspond mainly to the intervention with the financial training and accompaniment components, but it is impossible to determine the additional effect of including small initiatives in this type of program.[5]

To evaluate the pilot program results, a baseline survey was carried out in July 2010 (after the intervention had begun in some districts) and a follow-up survey was done in July 2012 (only three months after the intervention had ended in

4. The districts assigned to the treatment group also had special characteristics: the districts of San Jerónimo (Apurímac), Huanta (Ayacucho), Acomayo (Cusco), Usquil and Julcán (La Libertad) had a BN branch in the district. Julcán also had a BN agent, and Huanta had an ATM and four agents.

5. Cole et al. (2009) find important impacts of small incentives on the opening of savings accounts, although not if they are tied to the financial education program that they analyze. In the case of the Pilot Program "Promotion of Savings," the coordinators, financial facilitators and bank staff did not always emphasize promotion of savings by providing information about the food basket raffle. Also, because the baskets that were going to be raffled had to be displayed in the BN office, the existence of that incentive was probably better known by those living closest to BN branch.

some districts) with a sample of 1,442 households[6] in nine treatment districts (654) and 19 control districts (788). The estimated impact of belonging to a treatment district (hereafter, intention to treat) presented below corresponds to the minimum impact attributable to the pilot intervention, using the differences-in-differences methodology,[7] controlling for characteristics such as poverty and access to services, as well as for imbalances in the baseline variables.

It is important to note that although the results correspond to intention to treat, the survey shows that 53 percent of the survey respondents in the treatment districts and 15 percent in the control districts participated in the training sessions. This contamination of the control group occurred because the treatment and control districts were very close to each other and often shared JUNTOS program local coordinators.

Besides the lack of uniformity of the intervention and the heterogeneity of the treatment districts, it is also important to note that the results of the evaluation correspond to reported information, except in the case of BN data. Overall, the evaluation presented here constitutes the first study analyzing the impact of a long-term, face-to-face financial education program targeting the poorest people (JUNTOS beneficiaries are in the two poorest quintiles in Peru); it is also the first evaluation of a financial education program tied to a CCT program.

Knowledge, skills and financial behaviors[8]

To measure financial capabilities, this paper follows the concept used by the Financial Education Fund. Financial capabilities are built through the consecutive acquisition of four components: financial knowledge, financial skills, financial attitudes and the change in financial behavior.

Financial knowledge is the understanding of basic financial concepts, personal finance management, knowledge of the different types of financial services available in the market, and especially how to access them, and understanding of how they work, their costs, etc. To be able to use financial services, however, a person must also have financial skills: the ability to apply financial knowledge, to know when, where and whom to ask about services or specific questions, and to know what financial services or products are most suitable. Financial knowledge and skills, however, are not enough to make appropriate use of financial services; financial attitudes are also needed: trust and willingness to use the services. In short, a person can change his or her financial behavior—that is, can manage his or her finances appropriately—making use of financial services that are available in the market and adapted to his or her needs.

Did the financial education and financial accompaniment influence the financial knowledge, skills, attitudes and behavior of the target population?

One of the concepts most internalized by JUNTOS users in the pilot program treatment districts was that of the "voucher." Although there was some knowledge of the concept before the intervention (more than 30 percent knew of it), afterward, 63 percent of the users in the treatment districts and only 43 percent in the control districts knew what a voucher was. The

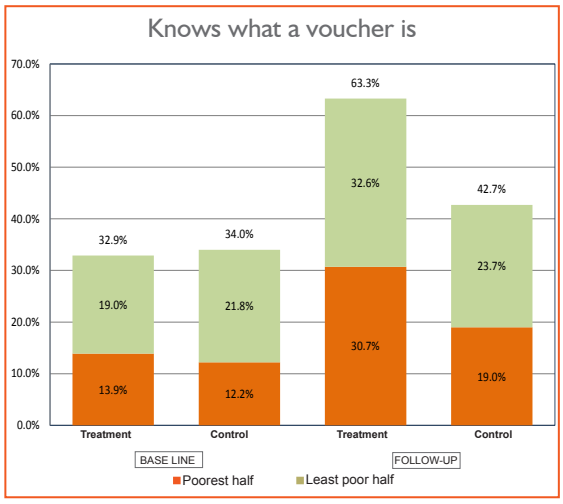
6. Ninety-five percent of the informants were women: designated recipients of the JUNTOS transfer.

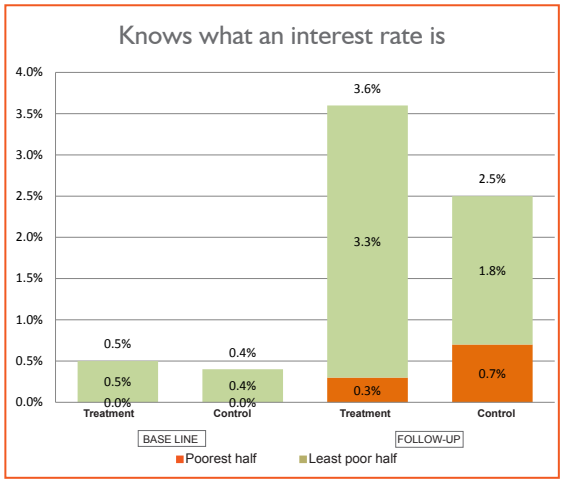
7. Differences between the districts assigned to the treatment and the control districts, before and after the intervention.

8. In the baseline, the households in the study had an average of five members, the average age of the interviewee and partner (if any) was 41 years, the parents (or the father or mother) had completed fifth grade on average, and the highest educational level reached in the household was the first year of secondary school, 81 percent of those interviewed were married or living with a partner, and 82 percent had their own house. In addition, 77 percent of those interviewed worked in farming (independently or for others), and 91 percent worked in farming or livestock breeding, with average poverty levels of 24.6 (on a scale of 0 to 100 (Schreiner, 2009), with 100 being the wealthiest).

increase in knowledge of the concept attributable to assignment to the treatment was 21.7 percent (24.4 percent among the least-poor half and 18.7 percent among the poorest half of the sample).

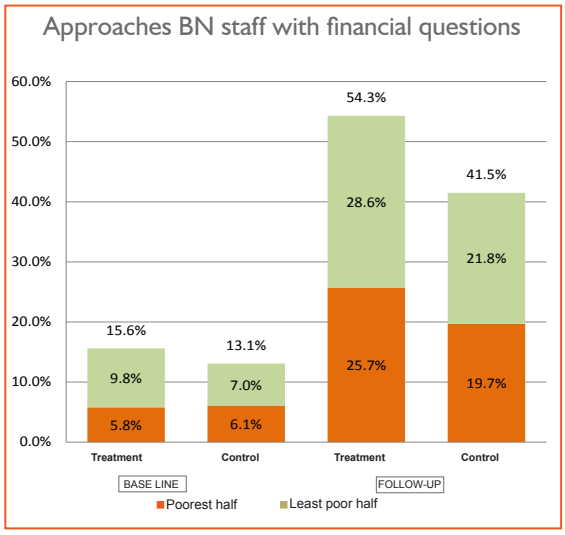
Not all the financial concepts were equally understood or easily learned, however. Less than 1 percent of the JUNTOS users knew what an interest rate was before the intervention, and only 3.6 percent of those in the treatment districts and 2.5 percent in the control districts knew afterward (which indicates significant spillover in the control group). The pilot program-related increase in knowledge of what an interest rate is, therefore, was not significant, perhaps because the concept is so complex.

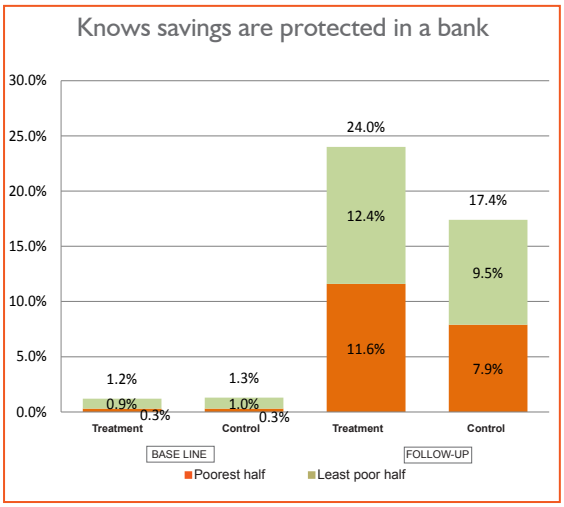


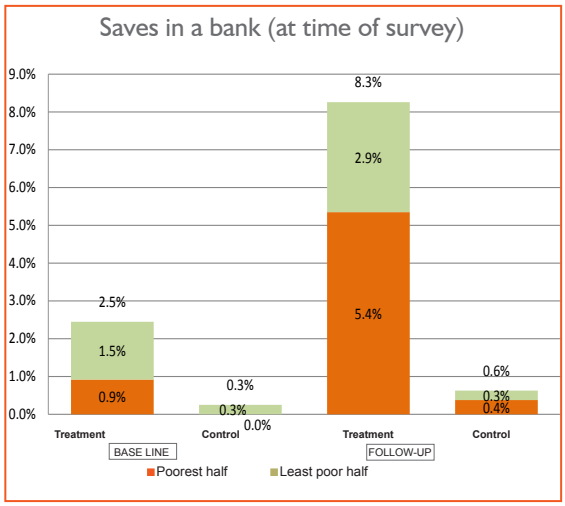


Regarding financial skills, it was found that because of the intervention, the percentage of users who sought out bank staff to answer financial questions rose from about 15 percent to 54 percent in treatment districts and to 42 percent in control districts; a 10.3 percent increase was attributable to the pilot program. That increase was also greater among the poorest half of JUNTOS users (11 percent) than among the least-poor half (9.6 percent).

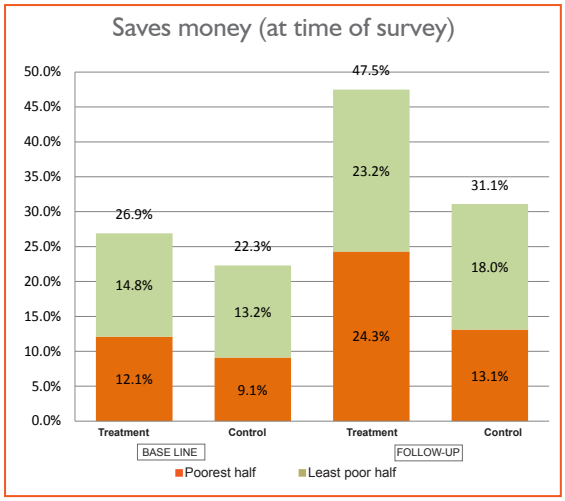
The main financial attitude that the pilot program aimed to create among JUNTOS users was trust in the financial system. Although no change was recorded in the percentage of those who said they trusted financial institutions, there were significant changes in the percentage of JUNTOS users who knew that their savings in a bank were protected, which reflects a financial attitude of involvement in the financial system. The proportion of users who knew their savings were protected rose from about 1 percent to 24 percent in treatment districts and to 17.4 percent in control districts, with the minimum change attributable to the intervention at 6.7 percent (6.4 percent for the poorest half and 7.1 percent for the least-poor half).







Changes in financial behavior are seen first in greater savings rates (formal and informal). The minimum increase in the savings rate attributable to the pilot program is 12 percent, and is highest among the poorest half (15.8 percent). The increase in the formal savings rate attributable to the pilot program was just 5.3 percent, and it was also higher among the poorest half (8.1 percent).

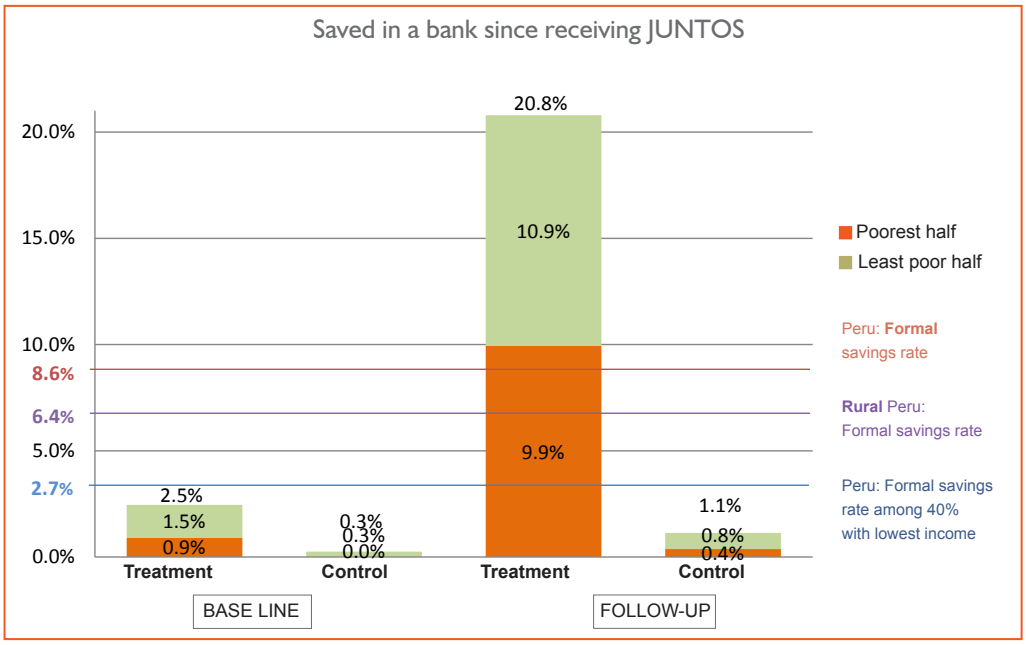


Nevertheless, both savings and income in rural households runs in cycles, generally related to the agricultural production cycle. This was reflected in the low rates of formal savings when the survey was carried out. It is more appropriate to measure the use of formal savings products by considering the specific time period. The formal savings rate registered since the year in which they began to receive the JUNTOS transfer (2007) was less than 3 percent in the base line for households in treatment and control districts; after the intervention it increased to 20.8 percent for those in treatment districts, with no significant changes for the control group. This savings rate was also higher than the national savings rate (8.6 percent) calculated by Findex (World Bank), even for the poorest half of the target population.[9]

Because of the pilot intervention, at least 17.5 percent more users in treatment districts than in control districts left savings in a bank since they began to receive JUNTOS transfers. The increase attributable to the pilot program was also slightly higher for the least poor half (18.1 percent) than for the poorest half (16.9 percent), and the poverty variable was not decisive, showing that even the poorest users in the intervention could save in the formal financial system.[10]

9. It should be noted that the FINDEX savings index corresponds to the percentage of adults over age 15 who saved in a financial institution during the year preceding the survey (FINDEX 2011). The comparison of savings rates in periods greater than one year is more valid, however, because there is significant seasonality in savings in rural areas.

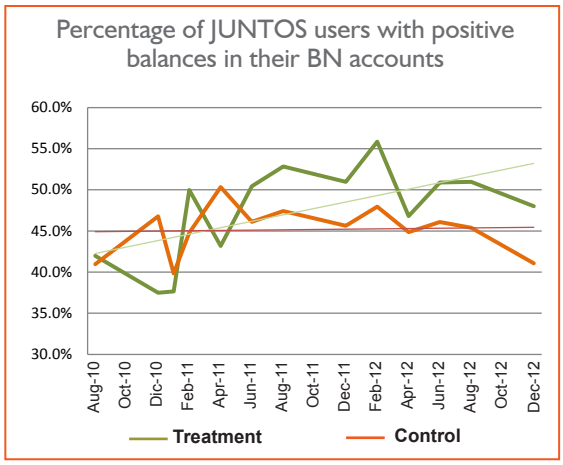
10. These results contrast with those of Cole et al. (2009), who found modest positive impacts on the opening of savings accounts (5 percent) from an in-person financial education program (of two hours) for rural households in Indonesia, and only for individuals with low initial levels of financial literacy.



The average amount of savings in a bank (declared) rose from 0.43 to 3.88 nuevos soles for households in control districts and from 4.93 to 13.65 nuevos soles for treatment districts. An average increase of 5.75 nuevos soles over the bank savings amount (at 6 percent significance) can be attributed to the pilot program, with the largest increase for the poorest half (9.45 nuevos soles), while the amount was not significant for the least poor half.

Meanwhile, savings rates (the percentage of JUNTOS users with positive balances greater than 1 nuevo sol at the end of the month) in the BN in months when a transfer was not paid averaged 47.5 percent in treatment districts and 45.2 percent in control districts. The percentage of users with balances greater than 1 sol and less than 200 soles[11] averaged 39.9 percent in treatment districts and 33.5 percent in control districts. These data show that the savings rates in the survey are underreported, perhaps because of the users' fear of being excluded from the JUNTOS program for having savings, found in qualitative studies.

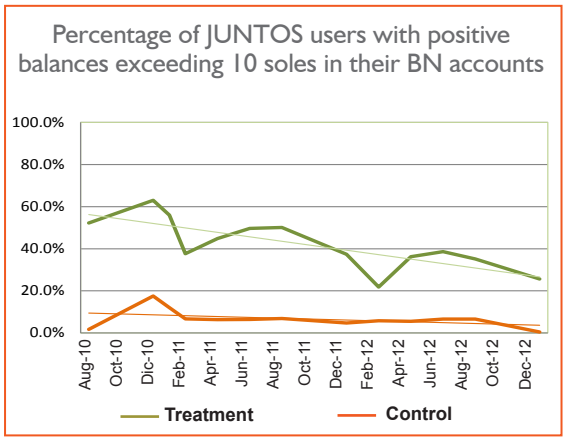
11. This range excludes amounts of 200 soles and over to avoid biasing the percentages of positive balances, because the amount of the JUNTOS transfer is 200 soles.



A simple differences-in-differences calculation (at one year and two years) for the months in which JUNTOS transfers were not delivered shows that the savings rates in the BN grew more in treatment districts than in control districts between the beginning and end of the pilot intervention. Considering only positive balances, however, there was no difference in the increase of the percentage of users with balances of between one and 10 soles in the BN in treatment and control districts, although there was a greater decrease in the percentage of users with balances of between 10 and 200 soles in

treatment districts than in control districts during the intervention period.

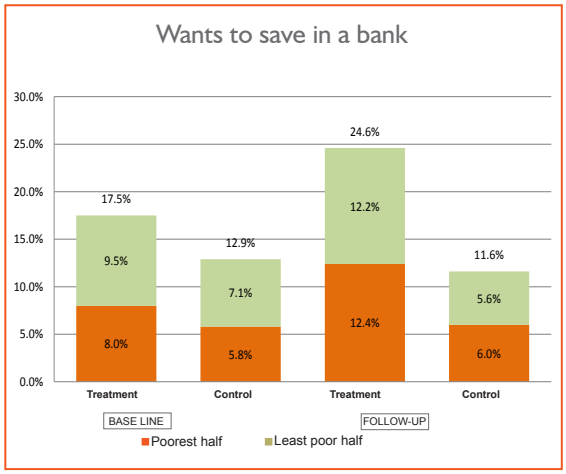
In summary, during the intervention, more users from the treatment districts had positive balances in their BN accounts, but they left smaller and smaller balances in them. It is possible that the financial training has spurred the mobilization of savings toward more convenient financial entities or forms of saving, resulting in this change, which did not occur with larger balances (of 10 to 200 soles) in control districts, where the percentages showed practically no variation (see graph).

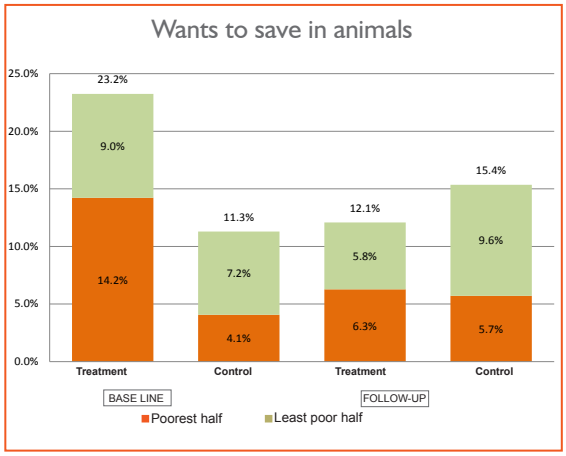


Note: Percentages with regard to the total accounts with positive balances.

Did the JUNTOS users continue to use non-formal financial products?

Rates of non-formal savings, such as savings at home, did not change significantly because of the pilot intervention, but the desire to save in animals did decrease by 15.1 percent (11.3 percent for the least-poor half and 18.7 percent for the poorest half), to 12.1 percent in treatment districts, while the desire to save in a bank increased by 8.6 percent (8.4 percent for the poorest half), to nearly 25 percent in treatment districts. An increase in the users who acquired large animals (5.3 percent), although not an increase in the value of those animals, can also be attributed to the pilot program.[12]

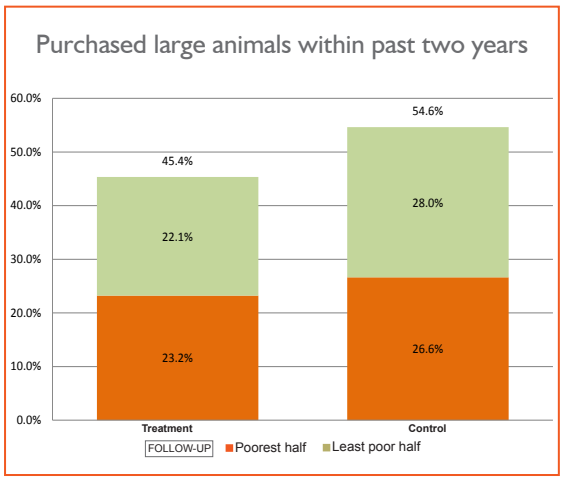




The increased purchase of large animals and the decreased desire to use them as savings appear to indicate that although users understand that there are better ways of saving than saving in animals, because of a lack of an adequate supply of financial savings products (e.g., nearby, with greater returns), they continue to save in a traditional way, such as by acquiring large animals. This hypothesis correlates with the greater desire to save in a bank compared with the low rate of bank savings at the time of the survey, also showing that even when JUNTOS users

12. The pilot's estimated impact on the purchase of large animals was 5.2 percent for the poorest half, but not significant, and 6.7 percent for the least-poor half, but only significant at 10 percent.

were aware of the advantages of the formal financial system, they did not use it. It is also possible, however, that the greater acquisition of large animals could be an investment resulting from higher levels of savings.



What variables besides the financial education intervention determine the use of formal financial services?

Of those who had saved money in the bank, 37 percent mentioned that one disadvantage of saving in a bank is that it is very far away. Nevertheless, it is also clear that those who live far away (on average 2.2 hours from the place where they receive the transfer, 2.6 for the poorest half and 1.8 for the least-poor half) make a significant effort to approach the financial system to receive the JUNTOS transfer at the BN once every two months; this obligatory contact with the BN therefore allows the use of savings products (not necessarily only in the BN). Transaction costs are always negatively related to the probability of saving in a bank (with or without seasonality), but not with the probability of saving.

In addition, 24.1 percent of all interviewees in both the treatment and control groups said they keep money at home because the bank is far away. Of those who believe they qualify for credit and did not seek a loan, 5.9 percent said they did not do so because of the distance to the bank branch.

The average age of the transfer recipient correlated negatively with formal saving and with the probability of saving, showing that the older the head of household and that person's partner, the lower the likelihood of saving, perhaps because saving was seen as an effort toward a better future, which is a shorter time frame for older persons; it may also have been more difficult to transmit financial concepts to older people.

Poverty, as measured using an assets index, was not related to the probability of having saved money in the bank at some time, showing that the poor can save (Rutherford 2001, Collins et al. 2009) and can do so in the formal financial system. Access to basic electricity service, related to distance, was positively correlated with the propensity to save in a bank. Finally, JUNTOS users who knew before the intervention that they had a savings account in the BN, who we assume had greater knowledge of and prior contact with the financial system, were more likely to save in the formal financial system.

Transaction costs are not related to the perception of qualifying for credit, but do correlate with other variables. Age and poverty have a negative correlation with transaction costs, while educational level, access to electricity, the amount of transfers from friends, relatives or neighbors, trust in financial institutions and knowing before the pilot program that one had an account in the BN show a positive correlation.[13]

Conclusions

The results presented here merit five observations. First, in nearly all cases, transaction costs were

13. These factors are not related to the likelihood of gaining access to loans, as that depends on selection by the financial entities, which is not analyzed in depth by the survey.

an important constraint on achieving the pilot program's financial inclusion goals. Second, the designation of the treatment districts was not perfectly random for political reasons, but baseline control variables were used to make the treatment and control groups comparable. Third, participation in the financial education sessions, as well as the role of the JUNTOS coordinators, probably resulted in a significant spillover of the knowledge acquired in the financial education sessions. Fourth, the impacts presented here are mainly based on reported information, which could be biased in the treatment group. Finally, the results presented correspond to the intention to treat, and because about 50 percent of users attended the training, the magnitude of the results is practically doubled for the sub-group of those who actually attended the training.

Despite the heterogeneity of the intervention and its long time frame (only three months until the end of the intervention in some districts), important changes were seen in the financial and livelihood strategies attributable to the pilot intervention, even in the short term. The main effects of the program were seen in the acquisition of financial knowledge, skills and attitudes, as well as in the increase in non-formal savings and the use of formal savings (to rates higher than the national average) among beneficiaries as an additional money-management tool, although this also revealed a significant shortfall in the supply of financial services for the target population.

Bibliography

Cole, S., T. Sampson and B. Zia (2009). "Prices or Knowledge? What Drives Demand for Financial Services in Emerging Markets?" Working Paper 09-117. Harvard Business School.

Collins, D., J. Morduch, S. Rutherford, and O. Ruthven (2009). "Portfolios of the Poor. How the World's Poor Live on $2 a Day." Princeton University Press.

Rutherford, S. (2001). "The Poor and Their Money." Oxford India Paperbacks.

Schreiner, M. (2009). "A Simple Poverty Scorecard for Peru." Microfinance Risk Management.

Trivelli, C., J. Montenegro and M. Gutiérrez (2011). "Un Año Ahorrando. Primeros resultados del Programa Piloto "Promoción del Ahorro en Familias Juntos." Documento de Trabajo 159. Lima: Instituto de Estudios Peruanos.

Chris Boyd, Instituto de Estudios Peruanos

This publication is possible thanks to the support of the Ford Foundation and the IDRC - International Development Research Centre