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PUBLIC VS. PRIVATE MENTAL ACCOUNTS: EXPERIMENTAL EVIDENCE FROM SAVINGS GROUPS IN COLOMBIA*

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I. INTRODUCTION

Savings is important to poor households. Capital and asset accumulation can help provide poor and extremely poor households with an improved ability to generate future income and more effectively fight poverty in the future, smooth consumption and investment plans in the face of adverse shocks.[1] Poor households save small amounts of cash flows via informal providers such as ROSCAs and deposit collectors; or save by holding risky assets (livestock, stored grain, durable goods).[2] In all forms of microfinance, high costs of monitoring and transaction relative to the size of the financial amounts involved have often worked to reduce both the supply and the demand for formal financial services or made access costly for clients.[3] For this reason, innovations to bring down costs and improve the terms and usefulness of services offered to the poor are key to expanding service. I design and evaluate two modifications of a well-established methodology of self-help groups in Colombia called Village Savings and Loan Associations (VSLA), in order to understand if private or public

1. Karlan and Morduch (2009), and Burgees et al (2005).

2.   Duflo and Banerjee (2007), Dupas and Robinson (2010), Collins et al (2009), Karlan and Murdoch (2009).

3.   Karlan and Morduch, 2009; and Dupas and Robinson (2010).

commitment through the creation and salience of 'mental savings accounts', affects savings behavior. The results show that public commitment is very effective in increasing savings and private commitment has heterogeneous behavioral responses of treatment effects.

Recent evidence suggests that self-control problems and time inconsistent preferences of individuals might prevent them from making optimal decisions in everyday scenarios such as waking up early, starting a diet, doing homework, or even saving.[4] As a result, individuals often demand and rely upon commitment mechanisms to mitigate these problems. According to Bryan at el (2010), commitment mechanisms provide individuals with tools to help them stick to a plan that might otherwise be repeatedly postponed because of a disparity between our long and short run intentions. Frequently, individuals' preferences for future choices are valued disproportionately lower over current ones[5] leading to situations such as clicking the snooze button of the alarm clock or delaying our workout one more day. As a result, individuals end up running anxious to catch the last train and a lecture from the boss, or having to bear that back pain that have not managed to escape from. These situations are common when making financial choices. Consequently, savings rates and assets accumulation are often low, and this is not just the result of lack of access to formal financial services. A *commitment* mechanism is something that helps us *promise* our current selves to behave according to our future best interests. In the context of under-savings, a *commitment* device is an arrangement used by individuals to incentivize higher savings or penalize failure to making deposits. These rewards or penalties could be economic

(*hard commitment*) or psychological (*soft commitment*). In this study I use a *soft commitment* device to evaluate how individuals respond to self-control problems associated to savings decisions.

This study describes the design and implementation of a Randomized Controlled Trial to evaluate if relatively simple modifications to how an existing savings product was framed and labeled creates a commitment mechanism and how it affects savings accumulations and other outcomes of low-income individuals in newly formed Village Savings and Loan Associations (VSLAs) in Colombia.[6] Under the existing VSLA methodology, individuals are encouraged to save but make no explicit statement of a commitment to reach particular savings goals. Motivated by hypotheses derived from behavioral economics, the designed experiment explores how *private-* and *public-labeling* alternatives in the ways in which individuals are asked to declare their savings as earmarked for a particular purpose might affect program outcomes hypothesizing that this might work via differences in how mental accounts are created and labeled. Individuals in the *private-labeling* treatment create and label a 'mental savings account' and state a savings goal privately. In the *public-labeling* treatment, label and state savings goals individually but were then asked to publicly reveal and announce their chosen goals to other members of the savings group.[7] In this way individuals in both treatment groups are able to label their 'mental savings account' and create private or public commitments to reaching individual savings goals.

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4. Laibson (1997), Angeletos et al (2001), Shefrin and Thaler (1981).

5. Angeletos et al (2001), Bryan et al (2010).

6. In Colombia, more than 4,500 VSLAs have been formed with over 70,000 beneficiaries up to date. The program targets more than 5 million poor and extremely poor households registered at Red Unidos, the largest anti-poverty intervention in the country. The global outreach of the VSLA clients is of over 8.7 million in the five continents (Source: VSL Associates).

7. I will use the words VSLA or savings groups interchangeably.

Behavioral economics has been increasingly accepted to be able to make predictions of field phenomena.[8] An important result in behavioral economics is that mental accounting is a commitment mechanism that individuals use in inter-temporal decision-making in order to constrain their own behavior.[9] Mental accounting was originally defined by Richard Thaler (1985) to be the process of mentally coding and categorizing transactions that individuals create to mentally separate the money available make plans and keep track of their spending. Individuals assign their available income to different expenditure accounts and put labels such as rent, pension, entertainment, etc. This violates the classical principle of fungibility of money in which money should not have labels attached,[10] thus, one should be able to transfer money from one account to other accounts without any (implicit or explicit) costs.

Individuals often rely upon mental accounts as a commitment device to mitigate self-control problems associated with inter-temporal choices.[11] For this reason, by implicitly or explicitly categorizing mental accounts, individuals impose constraints to their behavior, are often better able to achieve initially chosen savings goals and use financial services more effectively to raise incomes and welfare.[12] As a result, individuals may save more when they save for a declared purpose. Relatively little evidence however has been collected from actual field experiments to indicate how much practical and policy importance such strategies might have on individual behavior.

Thaler (1999) argues that how mental accounts are framed, labeled and evaluated are key components in the decision-making process. If fungibility is violated, the way in which savings choices are framed can have significant impacts on actual savings outcomes. This finding provides a framework for thinking about how individuals evaluate (open and close), frame and label mental accounts in a way to maximize their utility when making financial choices. For this reason, studying further these elements help us understand better how the process in which mental accounts, as a commitment device, are created actually matter for savings decisions. In particular, this study investigates if opening mental accounts publicly, instead of privately, increases savings through additional constraints imposed to the behavior of individuals as a result of the 'public' nature of commitment.

II. MICROFINANCE IN COLOMBIA

Informal contracting is common in Colombia, mainly in poor neighborhoods. A study of low and middle-income households in Colombia shows that 90% of the surveyed families have borrowed money at least once.[13] Of these, 83% used informal lenders (family, neighbors, friends or informal lenders) and less than 30% have used formal financial institutions (banks, cooperatives).[14] Most families reported holding liquid savings (e.g. saved cash at home, purchase of durables or through

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8. Camerer et al (2004).

9. Thaler (1985).

10. Thaler (1985 & 1999), Hastigs and Shapiro (2013).

11. Bryan et al (2010), Shefrin and Thaler (2004) and Kast and Pomeranz (2009).

12. Thaler (1985).

13. The sample represents approximately 75% of lower income Colombian households. USAID-Econometria S.A (2007).

14. Duflo and Banerjee, 2007 also find that almost all extremely poor households in their sample of one region of India borrowed money from expensive informal lenders. Only 6.4% of extremely poor households borrowed from a formal lending institution. In contrast, one third of the Indonesian poor population borrows from a bank. In their book, Portfolios of the Poor, Collins et al (2009) use financial diaries data to document the extensive use of informal lenders (mostly relatives and friends, some at no interest) by households to finance expenditures in South Asia and South Africa.

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deposit collector). Yet fewer than 2% saved in a bank.[15]

In the last decades attention has been focused in increase the access to microcredit; however, the government and other institutions are shifting the focus to the provision of alternatives for savings and insurance targeted to poor and extremely poor households. Still, the design of innovative products to raise savings is a relatively new topic in the microfinance agenda.

One component of *Red Unidos*, the largest Colombian governmental anti-poverty initiative, offers households access to specialized financial mechanisms linked to transfer payments including savings, microcredit and micro-insurance. Information collected in the baseline of *Red Unidos* (nearly 600,000 households) suggests that 80% of households don't know how to use the formal financial services available. Although 90% reported having a bank account, it is mainly used to receive transfers and wages. *Red Unidos* aims to help 16 million people who live under the national poverty line, 5.3 million under the extreme poverty line and the displaced population from violence, to get priority access to the government supply of social programs. These numbers represented 32.7% and 10.6% of the Colombian population in 2012.[16]

As part of the *Red Unidos* strategy, Banca de las Oportunidades pilot the program Village Savings and Loan Associations (VSLA) in 34 municipalities

in 2008. The VSLA methodology has been implemented in over 30 developing countries around the globe and has proven to be effective in providing savings and loan services to local communities that have not access to formal services. To date, VSLA has almost reached 9 million clients worldwide.[17] In June 2011, the government started the expansion to organize at least 600 new VSLA in cities and rural areas with high poverty levels and limited access to formal financial services. I used this expansion to carry out the RCT designed in this study. From 2013, the government and other multilateral organizations are funding the promotion of the program in more regions of the country to reach over 70,000 clients.

Village Savings and Loan Associations

VSLA are community based savings commitment products, built on the ROSCA model and other self-help savings groups as an alternative to formal microfinance that offers access to insurance, savings and small loans to the poor.[18] Individuals self-select and participate in a voluntary basis to form a self-managed and self-capitalized fund to save and borrow periodically. Members make small and regular contributions to the savings fund by purchasing **up to 5 shares** in each meeting. Savings are invested in a fund that is soon used to provide small, short-term loans to participants. Funds are securely stored in the safe box and kept by one member of the group until the next meeting.

The VSLA has a structured methodology and a set of rules that members establish in the first "training" meeting, before starting making contributions. The share price, interest rate on loans, value of the contribution to the social fund and

15. The Colombian Longitudinal Survey of Wealth, Income, Labor and Land (ELCA) of the Research Center on Economic Development at Universidad de Los Andes also finds similar results near a decade later. However, a larger percentage of households (11% to 13%) keep their savings in a bank account. I used the first wave for 5,446 urban and 4,718 rural households, representative of the Colombian population.

16. Source: Departamento Administrativo Nacional de Estadistica - DANE.

17. VSLA Global Outreach report. Hugh Allen (October 2013).

18. For more information visit VSL Associates. http://vsla.net/

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other rules are defined prior to the first purchase of shares and are maintained throughout the first savings cycle. This methodology helps households to manage their cash flows and be able to accumulate larger amounts of money for investment in businesses, education, improving housing conditions, or unexpected expenses. At the end of the savings cycle (usually 8 to 9 months), the fund is closed and the accumulated savings are distributed according to the shareholdings. The VSLA methodology encourages savings and use of loans but does not make any activity to explicitly state savings goals or use of savings.

III. INTERVENTION AND EXPERIMENTAL DESIGN

I randomly assigned newly formed VSLA to two treatments and one control group in 9 municipalities of Colombia. The assignment of the VSLA was carried out using a simple lottery and the method is called spot-randomization in which the assignment to treatment was random at the time when the VSLA was formed. For example, if 5 new VSLA were formed in a week in Cartagena, I draw the type of intervention that the VSLA would be assigned to (private, public or control). This status is maintained throughout all the experimental period. The unit of randomization is the VSLA and the unit of analysis is the individual member of the VSLA.

Individuals in the control group were exposed to the standard VSLA model. In the private-labeling treatment members received an additional module with a short organized guided conversation aimed at discussing and highlighting the difficulties of committing to a savings path and the potential role and use of mental accounts in strengthening those commitments. I asked participants to voluntarily state in writing a savings purpose and weekly savings goals. This was intended to help guide individuals to form and label their 'mental savings account' to privately commit to achieving that savings purpose. Goals were not stated publicly.

The *public-labeling* treatment was similar except that the group discussion encouraged members to make commitments to themselves as well as to others in their group in order to explore the possibility that this might lead to different outcomes. As in the *private-labeling* treatment members were asked to voluntarily state a savings purpose and weekly savings goals in writing, but in this intervention, those commitments were shared with all members of the group. By doing this, individuals explicitly label their 'mental savings account' and publicly commit to their own decision. Prior to the announcement of savings goals, individuals were **not** informed about the *(public)* nature of the treatment.[19] This module included a trust building game and a guided conversation aimed at highlighting the achievements of group commitments.[20]

The RCT compares the situation of individuals who are statistically equivalent at baseline but are exposed to different interventions. For this reason, any difference observed across experimental groups is attributable to the intervention. The random assignment allows controlling for selection bias present in the estimates and allows

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19. Although individuals seemed shy when the experimenter invited to share their commitments, 100% of those in the treatment intervention decided to share it with other members of the group.

20. We played a game called "Game with balloons". One balloon was distributed to each member of the VSLA; they were challenged to keep it in the air. Once they were able to hold them up in the air, I added more balloons, so that each participant had to keep an eye not only on their own balloon but also on the balloon of others. The purpose of the game was to build a cooperative environment within members of the VSLA.

determining causal effects of the interventions on the outcomes of interest.

Sample Size and data

I used a (Multi-Site) Cluster Randomized Trial model to select a sample size required to achieve a statistical power of 80%.[21] I introduced an additional level of randomization, by stratifying the sample of new VSLAs in different sites (9 municipalities) and assigning each VSLA to an experimental group in order to reduce heterogeneity in the estimates in each site. The randomization uses a cluster design because of the nature of the savings program and the nature of the interventions. The sample needed in each site was calculated to be approximately 15 clusters.[22] In total, I selected 137 VSLAs. One third is assigned to each experimental group. From each selected VSLA, all individuals were part of the experimental sample, but I randomly chose 5 members to be surveyed at their house to collect demographic characteristics at baseline and after the intervention.

I used mixed methods for data analysis at different stages of the research project. During July to November of 2011 I administered a baseline survey to 670 individuals from the experimental sample to measure a set of characteristics and choices prior to their exposure to the treatments. The second-stage surveying was administered in the fall of 2012, when I followed-up the same group of individuals interviewed at baseline. I also use administrative records of 1,663 members (from VSLAs in the treatments an control groups) of the VSLA gathered from two organization which I worked with: IED/Vital and Plan International. Finally, I collected qualitative data from focus group discussions to gather information about the experience and perspectives of participants in the study.

IV. RESULTS:

Baseline and randomization balance:

Data gathered at baseline suggest that the outcomes of interest and other covariates related to savings are balanced across experimental groups. This implies that the randomization was effective. I found no statistical differences across control, *public-* and *private-labeling* in most pre-treatments characteristics. As a result, any difference in outcomes post-treatment can be attributed to the intervention.[23]

Treatment effects on savings

If money were fungible or perfectly substitutable, and if the marginal propensity to consume ought to be the same out of all sources of income and assigning labels to specific expenditures or accounts would not have any impact on how the money is spent. Individuals would just transfer money from, say, the 'rent' account to the 'leisure' account without imposing any psychological or monetary costs.[24] If this were the case, labeling savings accounts (privately or even publicly) would not affect individual's savings decisions in the experimental sample. On the other hand, the classical approach to decision-making under uncertainty assumes a self-interested behavior of individuals. Therefore, choices should be unaffected by other people's decisions (neglecting any motivation of reciprocity and fairness that induce cooperation and enhances group oriented behavior). If this were the case, social networks

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21. I used the software Optimal Design from Spybrook et al (2011).

22. More information about power analysis is available upon request.

23. For more information on pretreatment variables, check the full versión of this study.

24. Thaler (1999), Hastigs and Shapiro (2013).

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wouldn't be relevant for decision-making and individuals in the *public-labeling* treatment will not make any additional effort to achieve their savings goals and therefore, savings rates would be the same as in the other experimental groups.

However, the results demonstrate very significant and strong results for treated individuals in the *public-labeling* intervention. Savings increased by an average of 35% (effect size of up to .38 standard deviations). The results for the *private-labeling* treatment intervention are heterogeneous. The quantitative and qualitative data indicates that such heterogeneity comes from intrinsic ability to save of individuals and on institutional features of the VSLA methodology that impose restrictions on individual savings behavior. In sum, treatment effects are very significant for individuals who are less economically constrained in their ability to save and insignificant for individuals that are less able to save, even prior to the intervention. This uncovers the fact that individuals experience different abilities to respond to the treatment interventions and must be considered in the analysis. The results are robust to different specifications, as described in more detail below.

Table 1 presents the treatment effects on savings measured by the number of shares purchased in every meeting. I measure the average treatment effects (ATE) of participating in the *public-labeling* or *private-labeling* intervention. All regressions are estimated with robust standard errors by clustering at the VSLA level. In the first three columns I estimated the treatment effects on savings accumulations measured with the number of shares purchased by each individual under various scenarios: first (column 1) during the entire savings cycle, second (column 2) during the first 6 meetings,[25] lastly (column 3) during the entire savings

cycle but for only those with the exact same share price.[26]

The regression results in panel A show that both *private-* and *public commitment* is successful in increasing savings accumulations (measured by the number of shares purchased by participants in each meeting). In the total savings cycle individuals in the *private-labeling* treatment saved on average 6 shares more, representing a 17% (0.3 standard deviations) increase in savings in comparison with the controls. Moreover, the increase in shares purchased by those in the *public-labeling* treatment was 12.4 shares or 35 percentage points (0.61 standard deviations) more than the controls.

The significance level of the coefficients for specifications 2 and 3 is robust. This implies that if we estimate the model for the first few meetings only, the treatment effects are very strong for both interventions, although the point estimates are smaller. On the other hand, estimating the ATE for the subsample with the same share price (P = COL 5,000) provides evidence of the effectiveness of the interventions for all individuals under the same conditions. In this case, I isolate the possible heterogeneity in opportunities to save across savings groups. The findings show that pri-

25. This specification is used in order to check for persistence of the treatment interventions on individual's savings behavior. The average number of meetings in the first savings cycle is 15.8. However, I only have this information for two thirds of the sample. For the remaining, I have detailed information of until the sixth meeting.

26. This specification is used to control for the potential biases that the differences in share price may generate when I estimate the model. As a result the ATE may be underestimated. Therefore I estimate the model for all individuals in VSLAs that have a price of shares equal to COP 5,000, the most frequent price. The exchange rate of Colombian Pesos (COP) to US dollars is approximately COP 1,850 per USD 1. The idea behind this specification is to be able to estimate the ATE for the sample of individuals under the exact same conditions, eliminating ex-ante heterogeneity in the savings groups.

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vate commitment increases savings by 25% while public commitment increases savings by 34%.

The last row shows the F-statistic corresponding to testing the joint significance of the *private vs. public* treatment effect. The effect on savings of publicly announcing savings goals is almost 50% larger than the effect of private commitments. The point estimates are statistically significant at the 1% level in specifications (1) to (3).

Columns 4, 5 and 6 show the treatment effects for the total amount of money saved over the savings cycle. This variable is constructed by multiplying the total number of shares purchased during the savings cycle by the price of the share in the VSLAs where the individual belongs. Interestingly the coefficients representing the ATE for the public and private labeling interventions are insignificant in specifications 4 and 5. But once I isolate the differences in share prices across savings groups (specification in column 6), the coefficients are significant for both interventions. As shown in column 6, the private-labeling treatment increases savings balances during the first savings cycle by USD 22.5 while the *public-labeling* treatment increases savings balances by USD 31.1. These point estimates represent an increase of 25% and 34% respectively. As a result, the share price is important in predicting savings because it affects the behavior of individuals by imposing constraints on their ability to save in the VSLA. Figure 1 depicts the number of shares bought on average by individuals in each experimental group using administrative records. The trend in savings shows that the treatment effect persists for a certain number of periods, but then it stabilizes.

For some individuals the behavioral response to treatments runs up against institutional features that restrict the optimal savings, such as the maxi-

mum of shares allowed to purchase in each meeting, individuals can only purchase discrete number of shares and the rigidity in share prices during the entire savings cycle. These restrictions are observed when an individual is willing to purchase 1.5 instead of 2 and ends up purchasing a single one, or in the cases in which a participant is capable of purchasing more than 5 shares but is only allowed a maximum of 5. As a result, individuals within a VSLA face different constraints that depend not only on their own capability to raise money to make contributions to the fund, but on the savings capability of other members and the rules set in their own VSLA (mainly price shares).

I found some evidence of the heterogeneity observed as a result of differences abilities to save. Individuals that, prior to the intervention, were more economically constrained (purchased zero or a small number of shares in the first meeting) exhibited more difficulties to purchase a larger amount of shares during the savings cycle, regardless of the treatment intervention received, whereas those with more ability to save (purchased 4 or more shares prior to the intervention) were more responsive to the treatment interventions. For this reason, I estimate a model to with heterogeneous treatment effects, where I use as *Initial Condition* dummies for the number of shares purchased in the first meeting (prior to the intervention) by each individual. The total effects estimated for both *private-* and *public-labeling* treatment interventions indicate that *public-labeling* treatment is very string and effective in increasing savings for all individuals, but are mixed for individuals in the *private-labeling* intervention. The *private-labeling* intervention significantly increases savings accumulations (via number of shares purchased or savings balances) of those

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who initially bought 3 or 5 shares. For all other types of individuals, the treatment effect is positive but insignificant. In contrast, the effect of the *public-labeling* treatment is significant for all types of individuals regardless of their measure of *Initial Condition*.

To illustrate further these results I plotted the total heterogeneous effects for each type of individual. Figure 2 shows a monotonic and significant increase in the treatment effects of the *public-labeling* treatment and a fluctuating but increasing effect of the *private-labeling* treatment with the number of shares bought in the first saving cycle – *Initial Condition*. The results demonstrate clearly differences in the ability to respond to treatment interventions for different types of individuals. Setting a *soft commitment* to save is highly effective in increasing savings accumulations for individuals without economic restrictions or with some ability to save. The treatment intervention is not very significant for those more constrained financially. However when adding peer affects to *commitment* the financial or economic restriction does not prevent any type of individuals to increase savings accumulations. In fact, sharing their savings commitment with other members of the VSLA substantially increases savings accumulations for all individuals.

Treatment effects on goal achievement

Finally, I calculated the impact on goal achievement by comparing the savings goals established during baseline survey and during the interventions with data from the follow up survey about how individuals used their savings. The results show that *public* commitment highly affects achievement by increasing the probability of reaching their initially established savings goals 8.5 percentage points more often that individuals in the control group,

when they use exclusively the money saved in the VSLA. This number increases to over 21 percentage points when individuals use not just their savings but household investments or loans. These results imply that *public* commitment crowds in funds from many sources other than savings in order to achieve their goals. The impact is not statistical significant in the case of *private* commitment however.

Qualitative results

I performed 4 focus groups discussions with participants in the study to investigate their experience and perception about the savings goals' activity, main challenges in reaching goals, dynamics within VSLA, etc. Individuals report that before being part of a VSLA their level of savings was very small, irregular, mostly informal and used frequently in unnecessary spending. They acknowledged that sharing publicly their savings goals creates a competitive environment within the group that motivates each other to making greater effort to save a larger amount of money and reaching their goals. In all cases individuals felt and put pressure from one another to buy shares, actively participate in the group activities and achieve commitments. In a few situations the group penalized members that were not making regular contributions by expelling them from the group.

In terms of savings goals, men were more likely to set long run savings goals that require more funds and possibly other sources of funding than the savings from the group. Women set goals that were more feasible and easier to achieve, and were more prone to reach those goals. The most common motivations to reaching goals were personal challenge, pressure from other VLSA members (to purchase the maximum number of shares) and family-related goals (make it less likely to deviate).

During the discussion sessions I found evidence of social taxes in two contexts: First, penalization to those VSLA members that fail to contribute to the savings fund or failed to comply with the rules of conduct. Second, at the household level I found that in the beginning of the savings cycle men are usually skeptical and underestimate their wives' ability to save; but once they realize their wives' engagement in the program, they reduced the money transferred to their wives for household expenses because recognize their ability to raise money on their own. These statements provide some insights to study further the dynamic created at the household level as a result of changes in individual's savings behavior.

V. Conclusion

I designed and implemented a Randomized Controlled Trial (RCT) to study how two modifications of a *commitment* savings product, in which individuals open private or publicly a "mental savings account" affect savings decisions of low-income individuals that participate in newly formed VSLAs in Colombia.

The results show that *labeling* 'mental savings accounts' is effective in increasing savings for different types of individuals. The RCT demonstrates very strong and significant results for treated individuals in the *public-labeling* intervention. Savings increased by an average of 35 percentage points (effect size of up to .38 standard deviations) and individuals were 21% more likely to achieve the initially established savings goals. Individuals crowd in different sources of income flows besides savings, such as investments and loans, to achieve goals. Individuals change their behavior because they anticipate social punishment in case of failing to reach their commitments.

The results for the *private-labeling* treatment intervention are very interesting also. The effect on savings is heterogeneous and depends on intrinsic characteristics of individuals as well as institutional restrictions imposed by the VSLA methodology. However, the impact on goal achievement is statistically irrelevant.

In terms of savings, treatment effects are very significant for individuals who are less economically constrained in their ability to save and insignificant for individuals that are less able to save, even prior to the intervention. For that reason, individuals experience different ability to respond to the treatment interventions that must be considered in the analysis.

Self-help groups such as VSLA are an alternative to poor and extremely poor households to help them manage financial assets and smooth consumption. Creating commitments exogenously may enable individuals to think about strategies to improve the use of assets and financial decisions in the future in order to maximize their utility. This intervention translates recent theoretical insights into experimental strategies implemented in the field to both test the theory and possibly improve the impacts of a large-scale public policy program. The methodology represents a new approach to the study of individual behavior and provides valuable insights and information to program administrators and policy makers involved in the design and diffusion of commitment-savings products. The increased availability of these and other products with similar features may serve to increase savings, improve financial literacy amongst poor households, which may contribute to generate income to fight poverty.

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Table 1. Treatment effects on savings[1]

Dependent variable:	A. *Number of Shares Bought*			B. *Savings Balance*		
	(1)	(2)	(3)	(4)	(5)	(6)
	Total	*First 6 meetings*	*p=COL 5,000*	*Total*	*First 6 meetings*	*p=COL 5,000*
Private tmt	6.03*	1.99*	8.12*	-5.764	-2.07	22.55*
	(3.45)	(1.01)	(4.5)	(11.72)	(4.05)	(12.51)
Public tmt	12.35***	3.26***	11.19**	14.11	3.12	31.09**
	(3.47)	(1.113)	(4.58)	(11.19)	(3.68)	(12.71)
Constant	35.03***	12.83***	32.72***	82.53***	29.79***	90.9***
	(2.02)	(.722)	(1.9)	(8.702)	(2.96)	(5.27)
Observations	1474	1474	654	1474	1474	654
F for (Public-Private)	10.76	8.46	7.85	0.18	0.02	7.85

1. Source: Administrative data. Significance level: * 10%; ** 5%; *** 1%. Robust standard errors are in parenthesis.

Figure 1. Trend of the number of share purchased over the entire savings cycle
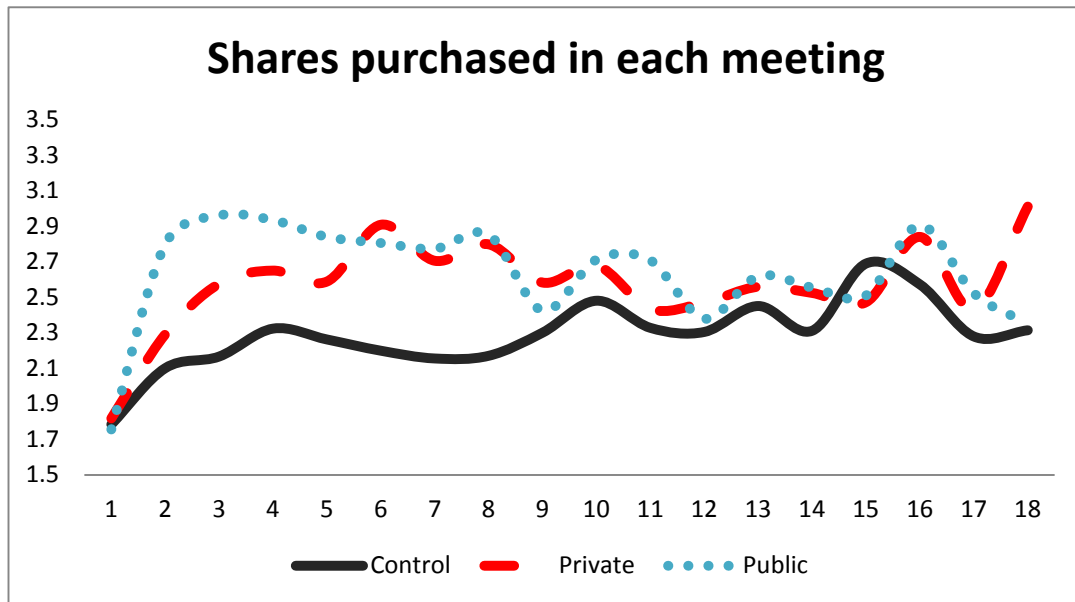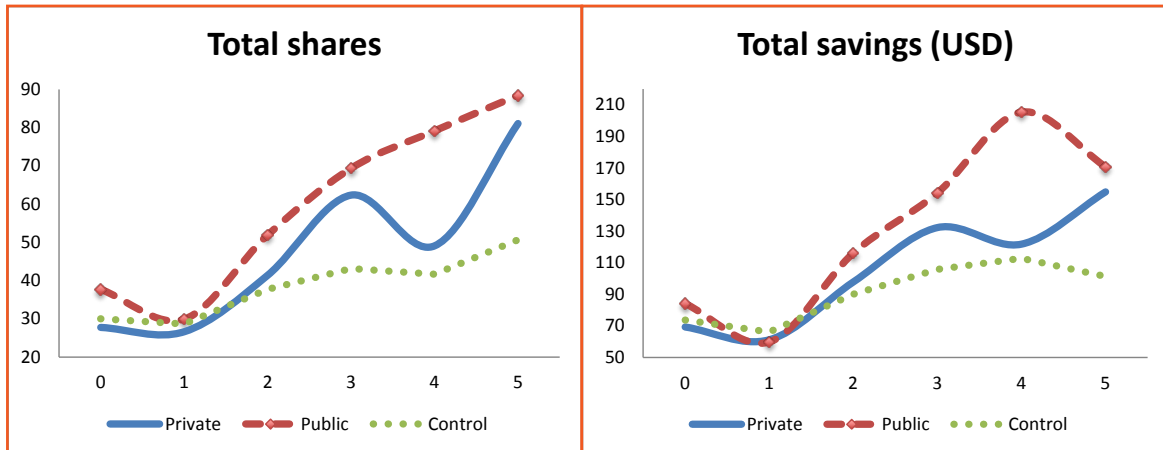
Figure 2. Total heterogeneous treatment effects on savings

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