

Do basic savings accounts help the poor to save? Evidence from a field experiment in Nepal*

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Abstract

Recent studies have shown that the majority of the poor lack access to formal banking services of any kind and have emphasized the importance of enabling savings. Does access to a formal savings account enable poor households to save, accumulate assets, and invest in health and human capital? A savings account was randomly offered to poor female household heads through local bank-branches in 19 slums in Nepal. Results show that there is untapped demand for savings accounts and that the poor do save: 78% of the individuals offered the account took it up and used it actively. In addition, despite the absence of commitments, account holders, over the course of a year, made on average 0.75 deposits per week, saving about 7% of their weekly income. Access to the savings account increased monetary assets by more than 50% and total assets by 15% without causing any crowding out in other kind of assets or savings institutions. Most importantly, financial access strongly increased household investment in health and education.

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1 Introduction

Households in developed and developing countries save for different reasons, among which the life-cycle motive, the precautionary motive, and the enterprise motive (Keynes, 1936). Access to savings may provide an important pathway out of poverty by promoting asset accumulation, protecting against shocks, and releasing credit constraints. Although the potential benefits of savings are obvious, the majority of the world's poor generally lack access to reliable formal savings accounts or formal banking services of any kind (Banerjee and Duflo, 2007). 2.5 billion adults worldwide do not use formal financial banking services. While 60% of unserved adults reside in East and South Asia, even in developed countries, a large fraction of low-income people is unbanked (Chaia, Dalal, Goland, Gonzalez, Morduch and Schiff, 2009)). In the U.S. 25% of low-income households do not have either a checking or a savings account (Bucks, Kennickell and Moore, 2006). In addition, recent studies have emphasized the importance of savings constraints (Ashraf, Karlan, and Yin, 2006; Atkinson, de Janvry, McIntosh, and Sadoulet, 2010; Brune, Goldberg, Giné, and Yang, 2011; Burgess and Pande, 2005; Dupas and Robinson 2011b).

An increasing amount of evidence however, shows that the world's poor are willing and able to save (Aizcorbe, Kennickell, and Moore, 2003; Collins, Morduch, Rutherford, and Ruthven, 2009; von Pischke, 1978). The evidence suggests that they save largely through informal mechanisms such as storing cash savings at home or with friends/family and joining informal savings clubs, where each option presents tradeoffs especially in terms of reliability and price (Karlan and Morduch, 2010; Collins et al., 2009).

As for most of the poor needs come in lump-sums, whereas their income often comes in little installments, they could benefit from a savings account that allows them to accumulate small sums into large sums. Using a randomized field experiment, I estimate the effects of expanding household access to a formal bank account on assets accumulation, expenditure in health and education, and ability to cope with negative shocks. To my knowledge, this paper is the first one to provide, for a diverse sample of households, detailed evidence showing that access to a fully liquid savings account can facilitate monetary assets building and investment in health and human capital.

The population considered in the study includes, but it is not limited to, members of microfinance institutions and owner-operators, such as entrepreneurs and farmers. I randomly offered poor female household heads a savings account through local bank-branches in 19 slums in Nepal. The account

operates like any formal savings accounts through local bank-branch offices open twice a week during established days and times. In addition, the savings account is fully flexible and operates without any commitments to save a given amount or to save for a specific purpose.

The field experiment generated several interesting findings. First, results show that there is untapped demand for savings products and that the poor do save: 82% of the individuals offered the account opened it up and 78% used it actively. In addition, despite the absence of commitments, account holders made on average 0.75 deposits per week, saving about 7% of their weekly income. Within the first year of opening the account individuals made on average three withdrawals, each on average of the size of their weekly household income. Moreover, account usage statistics show that the frequency of deposits is high and the average weekly amount deposited is small. Households seem to slowly accumulate small sums into large sums that they occasionally withdraw to pay for a health or education expenses, to buy food, or repay a debt. This savings behavior is very different from the one observed by Dupas and Robinson (2011a) who consider a sample of entrepreneurs who made few and large deposits and who reported using the money withdrawn mostly for business purposes. Furthermore, households seem to have different savings motives than entrepreneurs for which microenterprise development is an important motive (Dupas and Robinson, 2011a).

Second, access to the savings account increased monetary assets by more than 50% and total assets by 15%. Such increases did not come at the cost of crowding out savings in the form of consumer durables and livestock. Moreover, financial access partly reduced monetary assets inequality, as the treatment has a stronger effect in the middle of the distribution than at the top of the distribution. Furthermore, the evidence show that, when households gain access to a savings account, they do not shift away assets from other types of savings institutions, formal or informal.

Third, being offered access to a savings account strongly increases household investment in health, in the form of expenditure in medicines and traditional remedies, and education, in the form of textbooks and school uniforms. The increase in investment in human capital seems to be on the intensive margin, not on the extensive margin, as households in the treatment group are not more likely to have their children (of school age) enrolled in school.

Fourth, suggestive evidence tends to show that assets accumulation might be coming from small

changes in household savings behavior. Treatment households seem to have less cash at home, to spend less money on temptation goods, and to engage slightly less in informal arrangements. Even if tiny, such changes could be very important in increasing assets. For example, Ananth, Karlan, and Mullainathan (2007) show that vegetable sellers in India could save her way out of poverty in about a month if they could accumulate a small pot of money instead of borrowing it every day at an interest rate of 10%/day.

My study contributes to the fast-growing literature on savings accounts and savings access in developing countries. Few randomized designs have been used to explore the effects of offering commitment savings products. Ashraf et al. (2006) offer a savings target-based commitment device to current or former clients of a bank. Brune et al. (2011) give smallholder cash crop farmers access to commitment savings accounts to help them satisfy the specific need of saving crop proceeds to finance agricultural inputs in the subsequent season. Commitment savings account however, might not easily allow for withdrawals in times of need, and may not be thought of being used as a buffer stock.¹

This study is also linked to the non-experimental literature on the impact access to financial services might have on the poor. Aportela (1999) studies an exogenous expansion of a Mexican savings bank targeted to low-income households. He finds an increase in the average savings rate of more than 3% for households in areas where new bank branches were opened, with the highest impact, up to 8%, on the poorest households in the sample and no effect for high-income households. Unfortunately, the data do not allow to see if the increase in formal savings is a net increase or came at the expense of informal savings, nor they allow to measure the impact on household welfare, assets, and expenditure. Burgess and Pande (2005) consider a natural experiment in the 1980s in India that increased formal access to savings and credit by requiring banks to build four branches in rural areas for every bank they built in urban areas. The authors find the intervention decreased the extent of rural poverty and increased non-farm output. However, it is difficult to separate the program's effects from the large transfers of resources from the government to the rural areas, e.g. large subsidies on rural interest rates. Finally, Bruhn and Love (2009) study the effects of a Mexican retail chain that in 2002 opened bank branches in 815 stores across the country. They find an increase in employment and income, but it is unclear what caused these effects.

¹Another strand of the literature finds that reminders to save could be as important as commitment savings products, showing that limited attention could also be important (Karlan, McConnell, Mullainathan, and Zinman, 2011; Kast, Meier, and Pomeranz, 2011).

The idea to provide a safe and convenient way to save via a savings product that could normally be offered in a functioning banking system is borne from several reasons. First, near to subsistence households might not want to be constrained to exercise their self-control early on through a target-based commitment device, as they could face negative shocks. Hence, they might find more appealing an account that allows them to the flexibility to use their savings for whatever they want, while permitting them to safely store their money. Second, as remarked by Mullainathan and Shafir (2009), keeping money in a bank could reduce the ability and the temptation to spend it immediately, making it easier to accumulate assets. Also, Bernheim, Ray and Yeltekin (2011) show that a low assets trap can arise due to self-control problems that are larger for poor and credit constrained individuals than they are for rich ones. Moreover, as small amounts are more likely to be spent, compared to large ones, and the poor are more likely to deal with small sums (Mullainathan and Shafir, 2009), they could be further discouraged to save without the ability to deposit any amount, even a tiny one. Furthermore, recent studies have highlighted that the poor find difficult to protect their income from demands from friends and family and use costly mechanisms to hide their wealth (Dupas and Robinson 2011a, 2011b; Brune et al. 2011; Jakiela and Ozier, 2011).

Finally, my research is linked to the studies highlighting the importance of institutional mechanisms that encourage savings. For example, in the U.S. a high proportion of workers at the bottom of the income distribution participate in 401(k) plans when offered a chance to do so (Orzsag and Greenstein, 2005). Savings among low-income employees, as well as minorities, can considerably increase with automatic enrollment in employer-sponsored pension plans (Choi et al. 2002, Madrian and Shea, 2001). Additional studies of savings behavior have shown that mechanisms, such as savings defaults and direct deposits into savings accounts, largely increase savings (Benartzi and Thaler, 2004; Madrian and Shea, 2001). However, a large fraction of adults worldwide typically cannot benefit from this good savings defaults, as they do not have access to a bank account and work in the informal sector, and have to use informal and more costly schemes to save. Hence, expanding access to savings accounts could be a first step in the direction of savings defaults.

The following section describes the field experiment, the savings account and the data. Section 3 shows the results in terms of take-up and usage. Section 4 measures the impact of access to the

savings account on assets accumulation and shifting. Section 5 estimates the effects on household expenditures. Section 6 studies the impact on risk-coping ability and informal arrangements. Finally, Section 7 concludes.

2 Experimental Design and Background

2.1 The Savings Account

GONESA is a non-governmental organization (NGO) operating in 21 slums in Pokhara, Nepal. These areas, despite being commonly referred as slums, are permanent settlements. The NGO started operating in these slums in the early 90s establishing one kindergarten center in each area.

In 2008 GONESA started operating as a bank and thus began offering formal savings accounts. The account is very basic but has all the characteristics of any formal savings account. The enrollment procedure is quick and simple and account holders are provided with an easy-to-use passbook savings account. Customers can make transactions through local bank-branch offices that are open twice a week during established days and times. Account holders have no opportunity to deposit or withdraw money in the slum outside these working hours. However, they can make any transactions Sunday through Friday from 10am to 4pm in the bank's main office. Nevertheless, this option is highly inconvenient as it requires customers to spend up time and money to travel to the city center.

The bank does not charge any opening or transaction fees and pays a 6% nominal yearly interest (inflation is 14.4% in Nepal²), similar to the average alternative available in the Nepalese market. In addition, the savings accounts have no maintenance fees and no minimum balance requirement, making the account particularly suited for the households of this study. Savings in the accounts are fully liquid for withdrawal at any time in the bank's main office and twice a week in the local bank-branch office. The account's conditions were guaranteed for as long as people choose to have an account open, i.e. the bank did not impose any time limit. Finally, the savings account is fully flexible and operates without any commitment to save a given amount or to save for a specific purpose.

²World Bank, Economic Policy and Poverty Team, South Asia Region (2009).

2.2 Experimental Design and Data

The full-scale field experiment took place in the remaining 19 slums, as two slums were initially used to pilot-test the savings account. The population in the areas considered in the study ranges from 20 to 150 households.

A baseline survey was conducted in May 2010 in each slum. Only households with a female head between the ages of 18-55 were sampled. The background survey collected information on household composition, education, income, income shocks, monetary and non-monetary assets ownership, borrowing, expenditure in durables and non-durables. A total of 1,236 households were surveyed at baseline.

After completion of the baseline survey, GONESA's bank progressively began operating in the slums between the last week of May and the first week of June of 2010, as described below. A pre-announced community meeting was held in each slum. At this meeting, participants were told (1) about the benefits of savings; (2) that GONESA was about to launch a savings account; (2) the characteristics of the savings account; (3) what the savings account could have helped them with and how they could have used it; (4) that the savings account would have been offered only to half of the households via a public lottery. The short talk was given by an employee of GONESA's bank with the support of a poster and was followed by a session of questions and answers. The main aim of the session was to provide some kind of financial literacy on the benefits of savings and savings accounts to the entire sample, so that the effect of the intervention would be mainly caused by the offer of the accounts. Then, separate public lotteries were held in each slum to randomly assign the 1,236 female household heads to either the treatment group (offered the savings account) or the control group (not offered the savings account).³ Those women that were sampled for treatment were offered the option to open a savings account at the local bank-branch office.⁴ Those women sampled for the control group were not given such option, though were not barred to open a savings account at another institution.

Two endline surveys were conducted four and twelve months after the beginning of the intervention. The first endline survey was conducted starting in October 2010, contained modules similar to those

³GONESA required that the random assignment into treatment and control group were to be done publicly. Thus, stratification on occupation or income was not possible.

⁴The offer did not have a deadline.

administered at baseline. In addition, the survey included questions for the treatment group on savings goals, savings product features they liked most, and supply of similar savings account by other institutions. The second endline survey was carried out starting in June 2011 and contained, in addition to the modules contained in the first endline, information on household expenditure, time preferences, and networks. 96% and 91%⁵ of the households interviewed at baseline survey were found and surveyed in the first and second endline surveys, respectively, and 89% of the households are in all three surveys.⁶ Attrition for completing the second endline or both endlines was not differential across treatment and control groups, as shown in Appendix Table A1. Hence, performing the analysis on the restricted sample for which there are endline data will not bias the estimates of the treatment effect.

In addition to the data from the baseline and endline surveys, I use administrative data from GONESA's bank on savings account's usage at the individual level. This data include date, location (local bank-branch office or main office), and amount of every deposit and withdrawal, as well as the reason of withdrawal for all of the treatment accounts.

2.3 Sample Characteristics and Balance Check

Table 1, Panel A, illustrates that female household heads have an average age of about 36.5 years and about two years of schooling. Roughly 95% of respondents are married or living with their partner. The average household size at baseline is 4-5 people, with two children.

Weekly household income at baseline averaged 1,600 Nepalese rupees,⁷ although there is considerable variation. However, household income in a typical week averages 2,900 rupees. Households earn their income from several source: working as an agricultural or construction worker, collecting sand and stones, selling agricultural products, raising livestock and poultry, running a small shop, working as a driver. Only 17% of the households list as their primary source of income an entrepreneurial activity.⁸ In addition, households receive remittances and pensions, and earn rents. Also, the majority

⁵1,182 and 1,118 out of 1,236, for the first and second endline, respectively.

⁶Those households who could not be traced had typically moved out of the area, with a minority migrating outside the country.

⁷70 Nepalese rupees are approximately 1 U.S. dollar.

⁸I code as entrepreneurial activities: selling agricultural products, raising livestock and poultry, having a small shop, working as driver, making garment, and making alcohol.

of households (82%) lives in a house owned by a household member, and 76% owns the plot of land on which the house is built.

Table 1, Panel B, shows household's assets and liabilities at baseline. Total assets owned by the average household have a value of more than 50,000 rupees. Monetary assets account for 35% of total assets and non-monetary assets, consumer durables and livestock and poultry,⁹ accounted for the remaining 65%. Roughly 17% of the households at baseline were banked,¹⁰ 18% had money in a ROSCA (called "dhukuti" in Nepal), and more than 54% stored money in a microfinance institution (MFI). Households also typically had about one week's worth of income stored as cash in their home. Furthermore, 89% of the households had at least one outstanding loan. Most loans are taken from shopkeepers (40%), MFIs (38%), family, friends, or neighbors (31%), and moneylenders (13%), in that order. Formal loans from a bank are rare, with only 5% of the sample with an outstanding loan borrowing from a bank. Summary statistics from Table 1, Panel B, show a high level of participation by the sample population in financial activities. Most transactions are carried out with "informal" partners, such as kin and friends, moneylenders, and shopkeepers, rather than with formal institutions, like banks. This is consistent with previous literature showing that the poor have a portfolio of transactions and relationships (Banerjee, Duflo, Glennerster, and Kinnan 2010; Collins et al. 2009; Dupas and Robinson 2011a and 2011b).

The population of the study seems highly vulnerable to shocks, as 41% of the sample indicated having experienced a negative external income shock during the month previous to the baseline survey. 52% of the households hit coped using cash savings, while 17% coped borrowing from family and friends, and 17% coped borrowing from a moneylender. Only 1% coped by cutting consumption, suggesting that households have some ability to smooth consumption when facing by a negative shock.

Overall, Table 1 shows that for the final sample considered for the analysis, i.e. those 1,118 households that completed both the baseline survey and the second endline survey, treatment and comparison groups are balanced along all characteristics.¹¹

⁹Livestock and poultry include goats, pigs, baby cows/bulls/buffaloes, cows, bulls, buffaloes, chickens, and ducks.

¹⁰In Nepal 20% of the adult population uses financial services (Honohan, 2008).

¹¹The analysis carried out in this paper focuses on those 1,118 households that completed both the baseline survey and the second endline survey. Results are robust when restricting the sample to those households in both endlines.

3 Results: Take-up and Usage

Of the 1,236 households surveyed in the baseline, 626 were given the opportunity to open the savings account. As shown in Table 2, 82% took up the account and 78% used it actively, making at least one transaction within the first 4 months of being offered the account. This is a high take-up rate, compared to take-ups of similar studies, e.g. Dupas and Robinson (2011a) found that only 53% of the treatment group opened the account and made at least one deposit within the first six months of being offered the account.¹²

Figure 1 shows the histogram of the number of deposits, withdrawals, and overall transactions (deposits plus withdrawals) made by the account holders within the first year of being offered the account. The cumulative distribution functions illustrate that the majority of the transactions account for deposits. In fact, as shown in Table 2, account holders made an average of 45 transactions: 42 deposits and 3 withdrawals.¹³ 42 deposits in a period of 12 months are equivalent to 0.78 deposits per week. Since the savings product lacked any form of commitment or reminder, this is quite striking. Even when compared with similar products with commitments, usage rates are very high.

The average amount deposited on a weekly basis is Rupees 124, roughly 7% of the average weekly household income as reported in the baseline survey. Account holders did not demonstrate a significant preference for making deposits either the first or second day of the week in which the bank was open in the village. Rather, deposits are evenly distributed between the two days, and are of very similar amounts. Finally, the average size of a withdrawal is Rupees 1,724, roughly equivalent to a week of household income. Bank administrative data show that the primary reasons for withdrawing money were to pay for a health emergency (17.3%), to buy food (17.2%), to repay another debt (16.7%), and to pay for school fees and material (12%). The administrative data are in line with the motives for saving in the account, reported by the account holders in the second endline and shown in Table 3, Panel B. While the savings motives are very diverse, the table shows that the top three reasons for saving in the account are clearly health, education and consumption smoothing. Some households are also saving

¹²According to the bank's administrative data, the primary reasons for refusing to open the account were that the individual had no desire for a savings account (26%) or was already involved in many other financial organizations (19%).

¹³Collins et al. (2009) found a similar savings behavior when looking at people offered the Grameen II savings account: users typically saved a little each week, and withdrew between 2-3 times a quarter.

to be able to invest in their current business, buy agricultural inputs, and buy livestock or poultry.

As this is the first randomized field experiment evaluating the impacts of offering access to formal savings accounts to households, it is important to understand how the account is used and for what purpose. Based on the savings motives listed in the previous paragraph, generally households seem to have different savings objectives than owner-operators such as entrepreneurs who might save to reinvest in their own business (Dupas and Robinson 2011a) or farmers who might save to finance agricultural inputs in the subsequent season (Brune et al. 2011).

Also, given the high frequency of deposit and the small size of weekly deposits, households seem to slowly accumulate small sums into large sums that they occasionally withdraw to pay for a health or education expenses, to buy food, or repay a debt. This savings behavior is very different from the one observed by Dupas and Robinson (2011a) who consider a sample of entrepreneurs who made few and large deposits¹⁴ and who reported using the money withdrawn mostly for business purposes.

To study the determinants of take-up of the savings account, I restrict the sample to the treatment group, i.e. those individuals ever offered the account. I consider two outcome variables: A_i and D_i . A_i is a binary variable equal to 1 if the account is active, i.e. if the individual made at least one transaction within the first four months after opening the account. D_i is the natural logarithm of the sum of total deposits made in the first year. I use a linear regression model such as:

$$Y_i = \alpha_0 + \alpha_1 * X_i + \mu_i \quad (1)$$

where $Y_i = \{A_i, D_i\}$, X_i is a vector of baseline characteristics and μ_i is an error term for individual i . Table 3 shows the results of these regressions. Columns 1-2 consider A_i and columns 3-4 D_i . For both variables, active use of the account and total deposits, the coefficients associated with the years of education of the account holder are positive and statistically significant. Active use of the account and the total amount deposited in the savings account are strongly and positively related to the value of assets in a ROSCAs. In fact, a 1% increase in the money saved in a ROSCA at baseline increases by more than 5% the total amount deposited in the account. However, the

¹⁴Dupas and Robinson (2011a) report that the average deposit size for the median women who actively used the account was equivalent to 1.6 days of average expenditures.

amount saved in a bank at baseline, and the value of livestock and poultry owned by the household do not seem to be statistically significant determinants of active use and total deposits. Having a higher level of education is positively correlated with using an account actively. Finally, the coefficients of the variable “married/living with partner” is not statistically significant. This could be due to the fact that 89% of the women in the sample are either married or living with a partner.

4 Results: Impact on Assets Accumulation and Shifting

This section studies the impact of access to a formal savings account on household assets, a year after the start of the randomized intervention. The main outcome variables of interest are monetary assets (MA), non-monetary assets (NMA), and total assets (TA) at the household level. Monetary assets include cash at home; money in a bank; money in an MFI, credit cooperative, or savings organization; money in a ROSCA; money kept for safekeeping by a friend, relative, or employer; and, for the treated individuals only, money in the savings account they were offered. Non-monetary assets include consumer durables and livestock and poultry. Total assets include monetary and non-monetary assets. These multiple measures allows to detect if there was any effect on monetary assets and whether there was any crowding-out to other assets owned by the household or any kind of assets shifting.

It is generally difficult to measure whether access to a savings account causes any crowding out of other type of savings. Most previous studies have data on one savings product only, or on savings products in the same institution. For example, Ashraf et al. (2006) shows that the commitment savings accounts offered in their study do not crowd out savings in other accounts in the same bank. However, they cannot observe the effect on other form of savings outside that bank.

Figure 2 shows the cumulative distribution functions (CDFs) of monetary, non-monetary and total assets for the treatment (blue line) and the control group (red line) a year after the introduction of the device. The monetary assets CDF for treatment group appears to the right of the one for the control group, indicating the positive effect of getting access to a savings account on monetary assets. When considering total assets, the differences between treatment and control groups seem to be smaller, while when considering non-monetary assets there do not seem to be sizeable differences. In fact,

the two-sample Kolmogorov-Smirnov test for equality of distribution functions rejects at 99% (95%) confidence interval that the distribution of monetary assets (total assets) for the treatment group is the same to the one of the control group, as the p-value equals to 0.001 (0.047). However, I cannot reject that the CDF of non-monetary assets for the treatment group is the same than the one for the control group, as the p-values equals to 0.308.

I then estimate the average effect of having been assigned to the treatment group, or intent-to-treat effect (ITT), on each outcome variable Y a year after the launch of the savings account.¹⁵ I use the following regression specification:

$$Y_i = \beta_0 + \beta_1 * T_i + \beta_2 * X_i + \epsilon_i \quad (2)$$

where T is an indicator variable for assignment to the treatment group, X_i is a vector of baseline characteristics (age, years of education, and marital status of the account holder; number of household members; number of children below 16 years of age; most relevant source of household income; total value of livestock and poultry; total amount saved in ROSCAs; total amount saved in banks, and pre-intervention level of the outcome variable), and ϵ_i is an error term for individual i .

The coefficient of interest is β_1 which gives an estimate of the intent-to-treat effect. Moreover, assuming that being offered the savings account does not have any other direct effect on savings besides causing an individual to use the account, it is possible to estimate the treatment-on-the-treated effect by dividing the ITT by the take-up rate ($\frac{\beta_1}{take-up\ rate}$).

Table 5 presents the overall average effects of the savings account on monetary assets (columns 1-2), non-monetary assets (columns 3-4), and total assets (columns 5-6). The results show that access to a savings account strongly increases monetary assets and total assets without decreasing non-monetary assets. In particular, column 1 shows that monetary assets are about 58%¹⁶ higher in the treatment group. The increase in monetary assets causes a growth in total assets of 16%, as shown in column 5.¹⁷ The coefficient measuring the intent-to-treat effect remains similar in magnitude and statistically

¹⁵I do not analyze the average effect for those who actively used the account, as less than 4% of the individuals who opened the account did not use it.

¹⁶As β_1 is the coefficient of a dummy variable in a log-linear regression, the correct size effect is not given by β_1 , but by $\hat{\gamma}_1 = \text{antilog}(\hat{\beta}_1 - 1) = \text{antilog}(0.46) - 1 = 0.58$ (Hanushek and Quigley, 1978, Table 2).

¹⁷Similarly, $\hat{\gamma}_1 = \text{antilog}(\hat{\beta}_1 - 1) = \text{antilog}(0.15) - 1 = 0.16$.

significant when additional controls are added. In addition, columns 3-4 show that there is no statistically significant impact on non-monetary assets. This indicates that the increase in monetary and total assets did not come at the cost of crowding out savings in the form of consumer durables and livestock.

Are the effects heterogeneous? Figure 2 shows that, for monetary assets, the differences between the treatment and the control groups CDFs are larger or smaller at different points of the distribution, signaling that it is important to study the distribution of impacts. Figures 3 and 4 show the average levels of monetary and total assets, a year after the start of the randomized intervention, on treatment and control households overall (left hand side) and by quartiles of total assets at baseline (right hand side). Access to a savings account seems to benefit proportionately more households in the second and third quartiles, than households in the top quartile. In order to identify who gained the most from gaining access to a savings account, I run the same regression specification (2) separately for each quartile. Results are reported in Table 6. For monetary assets, there is no statistically significant effect for the bottom or top quartile, but there is a strong and statistically significant effect for the second and third quartile of the assets distribution. Thus, access to a savings account does not seem to help the bottom quartile. However, the treatment has a stronger effect in the middle of the distribution than at the top of the distribution, suggesting that being offered a savings account not only increases average monetary assets (as shown in Table 5), but also partly reduces monetary assets inequality.

Detailed survey data on all kindS of assets allow for examination of assets shifting. Table 7 reports the intent-to-treat effect on cash at home (columns 1-2), money in a bank (columns 3-4), money in MFIs or savings organizations (columns 5-6), and ROSCA's contributions, conditional on being part of a ROSCA at baseline (columns 7-8). Having access to a savings account reduced by 13% the amount of cash at home. This effect however, is not statistically significant. Columns 3-8 provide some suggestive evidence that, when a savings account becomes part of a household's financial portfolio, there is not considerable assets shifting from other types of savings institutions, formal or informal.

Finally, Table 8 shows that, a year after the intervention, households offered financial access do not seem to be borrowing or lending more than households who were not. Treatment households however, have a statistically significant higher net worth. This could be interpreted as indication that access to a savings account might allow to build some precautionary savings that could be used when hit

by a negative shock, instead of having to borrow money.

5 Results: Impact on Household Expenditures

Thus far, the analysis has shown that access to a savings account has positive and substantial impacts of on monetary and total assets. I now study whether provision of an account has any effects on household expenditures. Tables 9A, 9B, 9C and 10 estimate the average effect of having been assigned to the treatment group on the amount spent¹⁸ in each expenditure category in the last 30 days. I use the same regression specification as in (2).

Table 9A shows the impact on health-related expenditures, Table 9B on education-related expenditures, and Table 9C on other expenses. Expenditure on health is broken down in medicines and traditional remedies, and health services, e.g. hospital charges and doctors fees. Education related expenditures include: school fees, textbooks, uniforms, and school supplies, such as pens and pencils. Other expenses consider money spent on personal care items, house cleaning articles, house maintenance, and transportation.

Table 9A (columns 1-2) shows that, considering the entire population in the study, financial access increases health expenditures in the form of medicines and traditional remedies by more than 45%. Also, for the full sample, there is a negative but not statistically significant effect on expenditures in health services, such as hospitalization charges and doctors' visits, which might be sustained only in the case of serious illnesses. When restricting the sample to those households hit by a health shock in the last 30 days prior to the endline, results are much stronger. Access to a savings account increases expenditure in medicines by more than 100% and decreases expenditure in health services by more than 100%. Both effects are statistically significant at the 5% level. A plausible explanation of such results could be that treatment households spend more on medicines to treat the illness early on so that the illness does not worsen and they do not have to incur hospitalization charges later on.

Regression results reported in Table 9B show large effects on education-related expenditures. The possibility of opening a savings account raises investment in human capital in the form of textbooks

¹⁸I obtain the same results when using as a dependent variable a dummy for each expenditure category, equal to one if the household spent money for that item.

and school uniforms by more than 50%. There is also some evidence of a positive effect on school fees and material.¹⁹ The increase in investment in human capital is on the intensive margin, not on the extensive margin. In fact, as the last two columns of Table 9A show, households in the treatment group are not more likely to have their children (of school age) enrolled in school. This would be expected as 97% of the children of school age are in school.

Table 9C instead considers household expenditures on clothing and footwear (columns 1-6), and on other expenditures (columns 7-14). There is no statistically significant impact on any of these expenditure categories.

Overall, evidence from Tables 9A and 9B indicates that access to a savings account has a significant positive effect on both health- and education-related expenses. These findings are consistent with the primary withdrawal reasons gathered from the bank administrative data, and with the main motives for saving in the account, reported by the account holders in the second endline.

Finally, Table 10 investigates whether having access to a savings account reduces expenditure in temptation goods, i.e. tobacco and cigarettes, alcohol, and gambling. The negative sign of the intent-to-treat coefficients only offer suggestive evidence that having access to a savings account decreases the likelihood of having spent money in temptations goods, as well as in the amount spent. This is in line with the idea, developed by Mullainathan and Shafir (2007), that keeping money in a bank could reduce the ability and temptation to spend it.

6 Results: Impact on Risk-Coping, Overall Financial Situation, and Transfers

Financial access might improve the household risk-coping ability and its overall financial situation. Roughly 30% of the households in the study were hit by at least one negative shock in the 30 days prior to the endline survey. Shocks include health shocks (for 75% of the households hit by a negative shock), lost job (11%), livestock loss (6%), broken/damaged/stolen good or equipment (6%), low demand for business (4%), decrease in the wage rate (3%), and death of a household member (1.5%).

Table 11 analyzes whether access to a savings account improves the ability to cope with shocks.

¹⁹When restricting the sample to those households with children enrolled in school the effects are similar in magnitude and statistical significance.

Two caveats are in order. First, the analysis restricts the sample to those 337 households hit by at least one shock, thus increasing variability. Second, even if the treatment group does not appear less likely to be hit by a shock than the control, shocks might not be exogenous. For example, on the one side, the treatment group could feed better its livestock than the control because of the increased ability to save, and thus might be less likely to suffer livestock loss. On the other side, the treatment group could own more animals than the control because of the increased ability to save and thus might be more likely to suffer livestock loss. Keeping these two caveats in mind, households can cope with shocks using cash, savings in a bank, selling household durables, or borrowing money. There is a positive correlation with the ability to cope using savings in a bank (statistically significant at the 12% level). Instead, there is a negative correlation between access to a savings account and the likelihood of coping with cash, selling household possessions, or borrowing money. The latter negative correlation, combined with the positive correlation with the ability to cope using savings in a bank, could be indication that financial access helps building precautionary savings that in the event of a negative shock replace costlier sources of smoothing consumption, such as borrowing money.

Also, treatment households perceive to be better off financially. In fact, Table 12 present the average effects of access to a savings account on the household self-assessed financial situation. I use three different questions from the endline survey a year after the start of the intervention. As shown in columns 3-4, households offered the savings account are 10% more likely to describe their financial situation as “living comfortably” or “having a little left for extras.” In addition, estimates from columns 5-6 indicate that treatment households are also 8% more likely not to feel very or at all financially stretched month to month. Access to a savings account however, does not improve households’ sense of financial insecurity, as presented in columns 1-2.

Finally, Table 13 analyzes the intended-to-treat effect on transfers. Access to a savings account could affect informal arrangements both negatively and positively. On the one hand, treatment households could reduce transfers to their network as having a savings account allowed them to build some precautionary savings that reduced their dependence on loans from the network. In

addition, the ability to safely store their monetary assets into a bank account could help them reduce exposure to network's requests (e.g. Dupas and Robinson 2011a, Brune et al. 2011). On the other hand, if access to a savings account allows for assets accumulation that is visible to the network, treatment households might be pressured to increase their transfers to the network. I consider the total volume of transfers in the past 30 days (outflows plus inflows), as well as net transfers (outflows minus inflows). I divide transfers into loans, gifts, and loans and gifts. In addition, I separate transfers to/from regular, non-regular, and all partners. Overall, regression results show only suggestive evidence that access to a savings accounts might reduce the volume and the net outflows of informal arrangements, as the majority of the coefficients bear a negative sign. Such weak evidence is consistent with Brune et al. (2011) and Dupas and Robinson (2011b). It has to be noted however, the increase in the volume of gifts to/from non-regular and all partners.

7 Conclusion

The poor often lack access to formal financial services, such as a savings account. Access to formal financial services that might allow to save and build assets might be important for low-income households to help them smooth sudden income fluctuations due to negative shocks such as job loss, medical emergencies, etc. Savings can also provide capital to be invested in education, health, to start or improve an income generating activity.

The field experiment generated several interesting findings. First, results show that there is untapped demand for savings products and that the poor do save, despite the absence of commitments. Households' savings behavior appear to be different than the one of entrepreneurs. The former seem to slowly accumulate small sums into large sums that they occasionally withdraw to pay for a health or education expenses, to buy food, or repay a debt, while the latter make few and large deposits and report using the money withdrawn mostly for business purposes (Dupas and Robinson, 2011a). In addition, households seem to have different savings motives, such as saving for education and health expenditures, than entrepreneurs for which microenterprise development is an important motive (Dupas and Robinson, 2011a).

Second, access to the savings account increased monetary assets and total assets without crowding

out savings in the form of consumer durables and livestock. Moreover, treatment households did not shift away assets from other types of savings institutions, formal or informal. Also, financial access partly reduced monetary assets inequality, as the treatment has a stronger effect in the middle of the distribution than at the top of the distribution.

Third, being offered access to a savings account strongly increases household investment in health, in the form of expenditure in medicines and traditional remedies, and education, in the form of textbooks and school uniforms. This suggest that, in the long-run, savings accounts could potentially give high returns.

Recent studies have shown the relevance of savings constraints (Ashraf, Karlan, and Yin, 2006; Atkinson, de Janvry, McIntosh, and Sadoulet, 2010; Brune, Goldberg, Giné, and Yang, 2011; Burgess and Pande, 2005; Dupas and Robinson 2011b). In addition, the evidence suggests that institutional mechanisms that encourage savings are very important (Barr and Blank, 2009). Hence, the findings in this study have important policy implications and would support subsidization of basic savings accounts.

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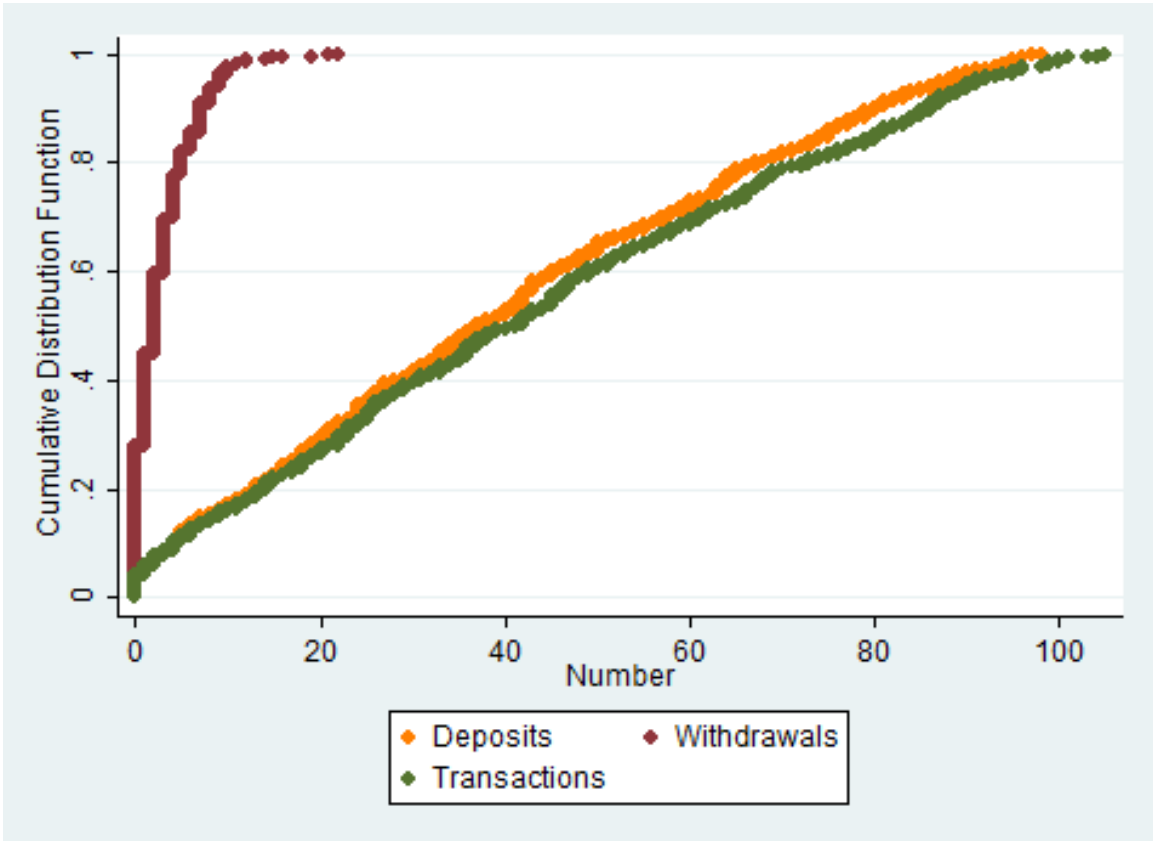


Figure 1: CDFs of Deposits, Withdrawals, and Transactions

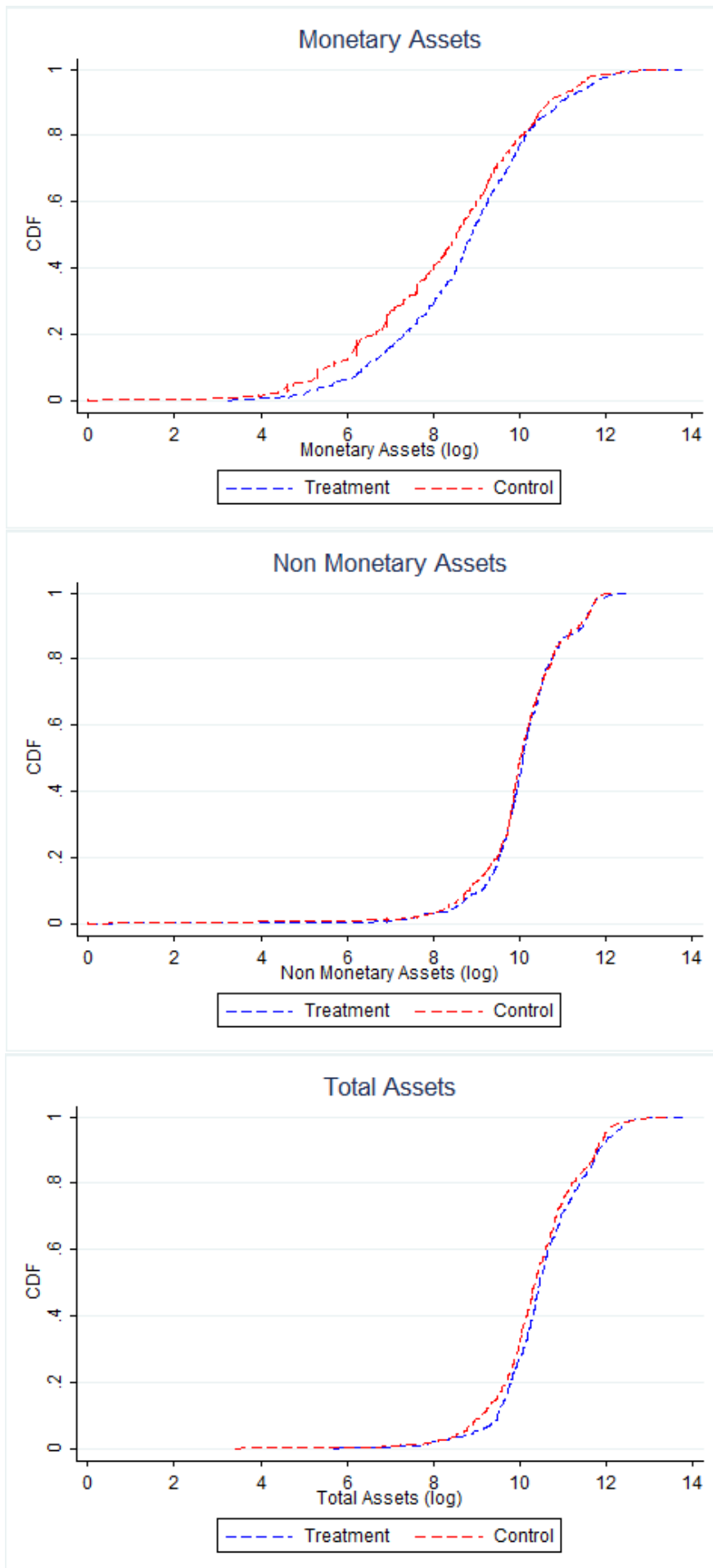


Figure 2: CDFs of Monetary, Non Monetary, and Total Assets by treatment status (after a year)

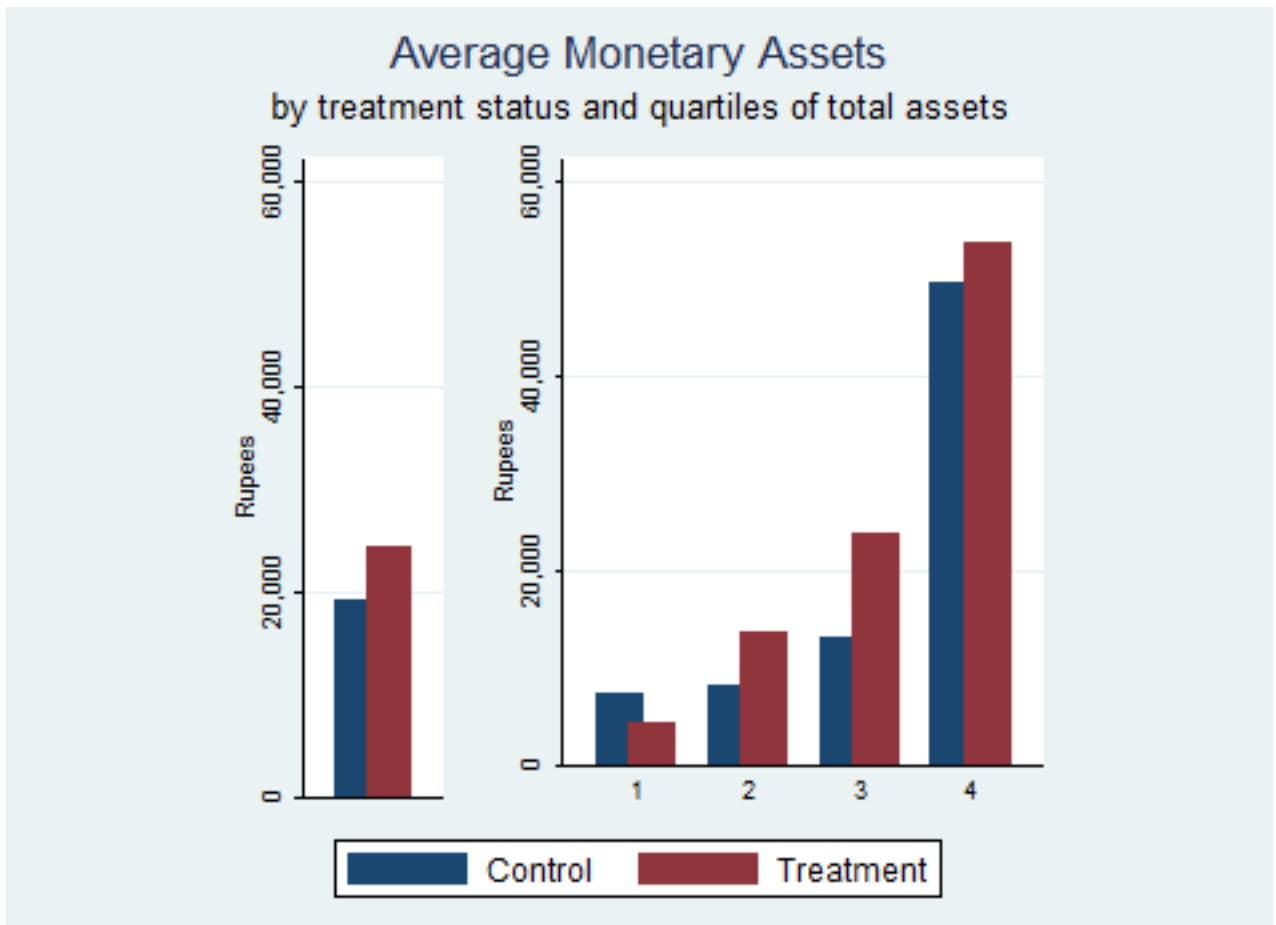


Figure 3: Average Monetary Assets after a year (by treatment status and quartiles of total assets at baseline)

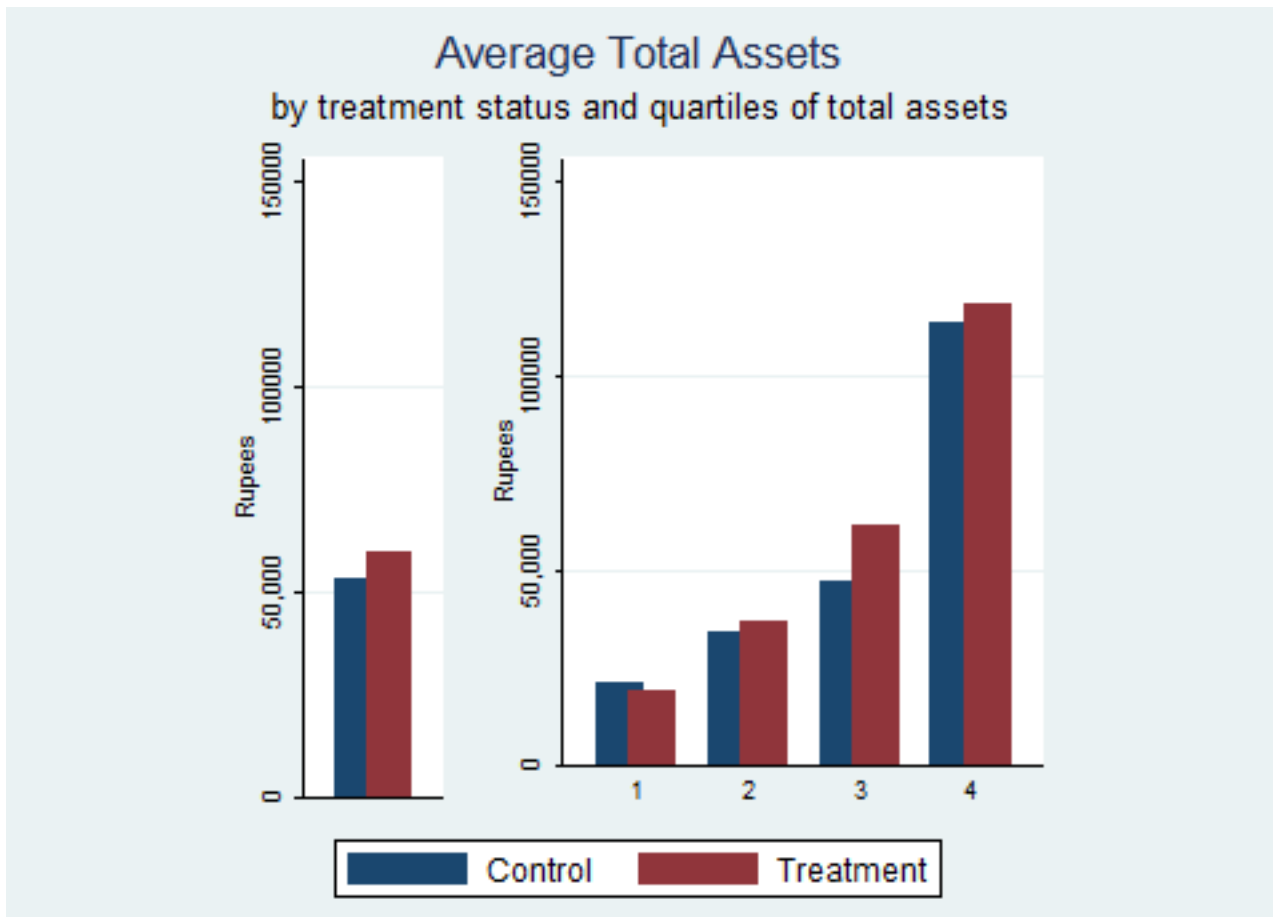


Figure 4: Average Total Assets after a year (by treatment status and quartiles of total assets at baseline)

Table 1A: Descriptive Statistics by Treatment Status

| | Obs. | Mean | | T-stat | |
|---|-------|-------------------------|------------------------|-------------------------|-----------|
| | | Sample | Control | | Treatment |
| Characteristics of the Female Head of Household) | | | | | |
| Age | 1,118 | 36.63 (11.45) | 36.56 (11.51) | 36.69 (11.41) | 0.19 |
| Years of Education | 1,114 | 2.35 (2.57) | 2.29 (2.45) | 2.42 (2.68) | 0.86 |
| Percent Married/Living with Partner' | 1,118 | 0.89 (0.29) | 0.88 (0.30) | 0.90 (0.28) | 0.99 |
| Household Characteristics | | | | | |
| Household size | 1,118 | 4.51 (1.67) | 4.52 (1.66) | 4.49 (1.68) | -0.33 |
| Number of Children | 1,118 | 2.16 (1.29) | 2.16 (1.29) | 2.16 (1.29) | -0.11 |
| Log(Total Income in a Typical Week + 1) | 1,118 | 7.73 (0.77) | 7.72 (0.83) | 7.73 (0.72) | 0.22 |
| Total Income in a Typical Week | 1,118 | 2,928.92 (2,279.18) | 2,994.76 (2,509.22) | 2,864.93 (2,031.05) | -0.95 |
| Log(Total Income Last Week + 1) | 1,118 | 3.49 (3.70) | 3.48 (3.69) | 3.50 (3.72) | 0.08 |
| Total Income Last Week | 1,118 | 1,687.16 (5,718.20) | 1,656.57 (5,338.91) | 1,716.89 (6,068.69) | 0.18 |
| from Sales of Agricultural Products | 26 | 375.31 (481.33) | 426.67 (493.48) | 305.27 (478.44) | -0.63 |
| from Agricultural Labor | 107 | 363.60 (485.87) | 380.42 (488.62) | 349.92 (487.39) | -0.32 |
| from Livestock and Poultry | 119 | 383.49 (1,426.46) | 588.39 (1,802.50) | 201.35 (958.57) | -1.44 |
| from Sand and Stone Activities | 178 | 1,053.54 (2,026.60) | 1,031.61 (2,418.04) | 1,074.51 (1,577.76) | 0.14 |
| from Construction and Masonry | 311 | 743.25 (1,223.97) | 678.62 (1,110.61) | 805.03 (1,323.87) | 0.91 |
| from Work as a Driver | 92 | 1,291.30 (2,583.70) | 909.52 (2,060.29) | 1,612.00 (2,935.26) | 1.34 |
| from Work as a Bus Fare Collector | 7 | 2,085.71 (3,553.13) | 66.67 (115.47) | 3,600.00 (4,225.19) | 1.62 |
| from Work as a Helper | 11 | 736.36 (1,457.58) | 788.89 (1,605.03) | 500.00 (707.11) | -0.42 |
| from a Small Shop | 108 | 1,073.33 (2,211.52) | 842.73 (1,222.45) | 1,312.64 (2,897.82) | 1.09 |
| from Garment and Wool Spinning | 21 | 250.00 (552.27) | 481.25 (846.82) | 107.69 (180.10) | -1.25 |
| from a Government Job | 52 | 888.27 (2,754.70) | 807.60 (2,766.85) | 962.96 (2,793.97) | 0.2 |
| from a Pension | 66 | 416.67 (2,926.78) | 0.00 (0.00) | 982.14 (4,477.27) | 1.16 |
| from Rent | 18 | 1,344.44 (3,647.92) | 2,280.00 (4,770.47) | 175.00 (494.97) | -1.38 |
| from Remittances | 273 | 2,725.28 (10,414.02) | 2,791.67 (9,659.28) | 2,663.12 (11,108.31) | -0.10 |
| from Other Sources | 129 | 985.04 (2,326.96) | 1,175.30 (2,832.92) | 785.71 (1,638.95) | -0.96 |
| from Alcohol Making | 75 | 871.07 (2,506.42) | 964.29 (3,526.40) | 780.75 (1,029.96) | -0.31 |
| from a Private Job | 149 | 355.44 (1,225.10) | 382.43 (1,042.96) | 328.80 (1,388.25) | -0.27 |
| Percentage of Households Entrepreneurs | 1,118 | 0.17 (0.37) | 0.17 (0.37) | 0.17 (0.38) | 0.26 |

^aMarital status has been modified so that missing values are replaced by the village averages.

Table 1B: Descriptive Statistics by Treatment Status

| | Obs. | Mean | | T-stat | |
|--|-------|---------------------------|---------------------------|---------------------------|-----------|
| | | Sample | Control | | Treatment |
| Assets | | | | | |
| Total Assets | 1,118 | 46,414.03 (56,860.40) | 44,272.35 (53,303.61) | 48,495.28 (61,758.13) | 1.25 |
| Total Monetary Assets | 1,118 | 16,071.82 (44,335.77) | 14,063.67 (37,620.67) | 18,023.31 (49,961.80) | 1.50 |
| Log(Total Assets + 1) | 1,118 | 10.23 (1.08) | 10.20 (1.06) | 10.25 (1.09) | 0.81 |
| Log(Total Monetary Assets + 1) | 1,118 | 7.90 (2.27) | 7.87 (2.24) | 7.92 (2.31) | 0.37 |
| Percentage of Households with Money in a ROSCA | 1,118 | 0.18 (0.39) | 0.17 (0.38) | 0.19 (0.39) | 0.78 |
| Log(Total Money in ROSCA + 1) | 1,118 | 1.61 (3.44) | 1.52 (3.36) | 1.70 (3.53) | 0.85 |
| Percentage of Households with Money in an MFI | 1,118 | 0.54 (0.50) | 0.56 (0.50) | 0.52 (0.50) | -1.18 |
| Log(Total Money in MFIs + 1) | 1,118 | 4.31 (4.11) | 4.44 (4.08) | 4.19 (4.13) | -1.00 |
| Percentage of Households with Money in a Bank | 1,118 | 0.17 (0.37) | 0.16 (0.37) | 0.17 (0.38) | 0.35 |
| Log(Total Money in Bank Accounts + 1) | 1,118 | 1.51 (3.46) | 1.46 (3.37) | 1.57 (3.54) | 0.56 |
| Log(Total Amount of Cash at Home + 1) | 1,118 | 6.32 (1.99) | 6.26 (2.00) | 6.39 (1.98) | 1.12 |
| Total Nonmonetary Assets | 1,118 | 30,342.21 (28,826.34) | 30,208.68 (29,088.98) | 30,471.96 (28,593.90) | 0.15 |
| Log(Total Nonmonetary Assets + 1) | 1,118 | 9.85 (1.32) | 9.85 (1.28) | 9.86 (1.36) | 0.16 |
| Log(Nonmonetary Assets from Consumer Durables + 1) | 1,118 | 9.85 (1.32) | 9.85 (1.28) | 9.86 (1.36) | 0.16 |
| Log(Nonmonetary Assets from Livestock + 1) | 1,118 | 3.36 (4.20) | 3.21 (4.18) | 3.52 (4.22) | 1.24 |
| Grams of Gold in Savings | 1,118 | 12.46 (17.79) | 12.39 (18.34) | 12.52 (17.25) | 0.12 |
| Liabilities | | | | | |
| Total Amount Owed BY the Household | 1,118 | 50,968.62 (210,366.50) | 53,834.81 (281,568.80) | 48,183.31 (101,388.80) | -0.44 |
| Log(Total Amount Owed BY the Household + 1) | 1,118 | 8.55 (3.39) | 8.38 (3.53) | 8.71 (3.25) | 1.64 |
| Percentage of Households with Outstanding Loans | 1,118 | 0.89 (0.31) | 0.88 (0.33) | 0.91 (0.29) | 1.61 |
| Received Loan from Grocery/Shop | 1,118 | 0.40 (0.49) | 0.38 (0.49) | 0.42 (0.49) | 1.26 |
| Received Loan from MFI | 1,118 | 0.38 (0.49) | 0.37 (0.48) | 0.39 (0.49) | 0.74 |
| Received Loan from Family/Friends/Neighbors | 1,118 | 0.31 (0.46) | 0.33 (0.47) | 0.30 (0.46) | -1.10 |
| Received Loan from Moneylender | 1,118 | 0.13 (0.34) | 0.12 (0.32) | 0.14 (0.35) | 1.33 |
| Received Loan from Bank | 1,118 | 0.05 (0.22) | 0.05 (0.22) | 0.05 (0.23) | 0.29 |
| Received Loan from Dhukuti | 1,118 | 0.03 (0.17) | 0.03 (0.16) | 0.03 (0.18) | 0.80 |

Table 1C: Descriptive Statistics by Treatment Status

| | Obs. | Mean | | | T-stat |
|---|-------|----------------|----------------|-----------------|--------|
| | | Sample | Control | Treatment | |
| Experienced a Negative Income shock | 1,118 | 0.41 (0.49) | 0.39 (0.49) | 0.43 (0.50) | 1.42 |
| Coped Using Cash Savings | 462 | 0.52 (0.50) | 0.51 (0.51) | 0.52 (0.50) | 0.05 |
| Coped Borrowing from Family/Friends | 462 | 0.17 (0.38) | 0.18 (0.37) | 0.16 (0.37) | -0.51 |
| Coped Borrowing from a Moneylender | 462 | 0.17 (0.37) | 0.15 (0.36) | 0.18 (0.38) | 0.75 |
| Coped Cutting Consumption | 462 | 0.01 (0.08) | 0.01 (0.10) | 0.005 (0.06) | 0.68 |
| Owns the house | 1,115 | 0.84 (0.37) | 0.83 (0.38) | 0.85 (0.36) | 0.74 |
| Owns the land on which the house is built | 1,112 | 0.78 (0.41) | 0.77 (0.42) | 0.79 (0.41) | 0.77 |

Table 2: Account Usage After 1 Year

| | Obs | Median | Mean | Std. Dev. | Min | Max |
|--|------------|---------------|-------------|------------------|------------|------------|
| Take-Up Rate | 626 | - | 81.47 | 38.89 | 0 | 100 |
| Proportion Actively Using the Account ¹ | 509 | - | 96.07 | 19.45 | 0 | 100 |
| Weeks Savings Product has been in Operation (By Village) | 19 | - | 54.26 | 0.65 | 53 | 55 |
| Total Number of Transactions Made | 489 | 43 | 45.02 | 28.43 | 1 | 106 |
| Total Number of Deposits Made | 489 | 40 | 42.10 | 26.82 | 1 | 98 |
| Number of Deposits per Week | 489 | 0.75 | 0.78 | 0.5 | 0.02 | 1.81 |
| % of Weeks in Which at Least 1 Deposit is Made | 489 | 56 | 54.39 | 29.39 | 1.82 | 98.18 |
| Weekly Amount Deposited | 489 | 70.82 | 123.75 | 182.05 | 0.19 | 1649.44 |
| Average Size of Deposits per Week | 489 | 118.85 | 220.76 | 342.91 | 10.00 | 3816.11 |
| % of Times Deposits Made in the 1 st Open Day of the Week | 489 | 43 | 44.29 | 29.06 | 0 | 100 |
| Amount Deposited in the 1 st Open Day of the Week | 489 | 35.21 | 68.00 | 99.88 | 0 | 969.69 |
| % of Times Deposits Made in the 2 nd Open Day of the Week | 489 | 41 | 44.02 | 28.67 | 0 | 100 |
| Amount Deposited in the 2 nd Open Day of the Week | 489 | 36.38 | 71.36 | 116.38 | 0 | 935.53 |
| Total Number of Withdrawals Made | 489 | 2 | 3.38 | 3.52 | 0 | 28 |
| Average Amount Withdrawn | 400 | 950.00 | 1724.37 | 3373.49 | 133.33 | 35000 |
| Total Savings (Deposits + Interest) | 489 | 3909.02 | 7023.31 | 10637.75 | 10.97 | 103812.50 |
| Average Balance After 55 Weeks | 489 | 595.18 | 2206.06 | 4972.52 | 0.27 | 51012.51 |

Source: Bank administrative data. ¹Made at least one deposit within the first 12 months of being offered the account.

Table 3: Savings Motives and Savings Account Characteristics

| Panel A: Most Relevant Characteristic of the Savings Account | |
|---|--------|
| Savings Account Characteristics | |
| Easy to deposit and withdraw any amount of money any time | 70.24% |
| The account is simple to understand | 13.57% |
| Trust | 8.75% |
| Bank opens twice a week in the community | 3.50% |
| Bank has a female employee | 2.63% |
| Cannot open a savings account in another bank/fin. institution | 0.66% |
| The account offers a high interest rate | 0.44% |
| Don't feel confident opening a savings account in another bank/fin. institution | 0.22% |
| Don't know any other financial institution | 0.00% |

| Panel B: Reasons for Saving in the Account (After 12 Months) | |
|---|--|
| Savings Motive | % of account holders with such motive |
| To pay for a health emergency | 88.86% |
| To buy food when income is low | 66.38% |
| To pay for school fees or school material | 50.66% |
| To pay for a festival | 18.34% |
| To repay a debt | 9.82% |
| To pay for home maintenance | 7.21% |
| To buy poultry or livestock | 6.33% |
| To invest in my current business | 6.11% |
| To buy agricultural inputs (pesticides, fertilizer, etc.) | 5.02% |
| To pay bills | 4.80% |
| To start a new business | 3.49% |
| To pay for a funeral | 1.97% |
| To buy gold | 1.31% |

Table 4: Determinants of Active Use

| | Active Use of Bank Account | | Total Deposits After a Year ¹ | |
|---|----------------------------|---------------------|--|---------------------|
| | (1) | (2) | (3) | (4) |
| Background Characteristics | | | | |
| Age | -0.001 (0.002) | -0.001 (0.002) | -0.002 (0.008) | -0.004 (0.008) |
| Years of schooling | 0.010** (0.005) | 0.009* (0.005) | 0.010 (0.020) | -0.018 (0.025) |
| Married/Living with Partner ² | -0.014 (0.062) | -0.021 (0.067) | 0.167 (0.213) | 0.120 (0.217) |
| Money in ROSCAs ¹ | | 0.007** (0.003) | | 0.054** (0.022) |
| Money in banks ¹ | | 0.003 (0.003) | | 0.022 (0.014) |
| Value of Livestock and Poultry ¹ | | 0.004 (0.005) | | -0.004 (0.017) |
| Constant | 0.524*** (0.108) | 0.535*** (0.113) | 6.849*** (0.339) | 6.822*** (0.113) |
| Village dummies | Yes | Yes | Yes | Yes |
| Observations | 616 | 616 | 485 | 485 |
| Adjusted R-Squared | 0.120 | 0.130 | 0.140 | 0.167 |

Note: Robust standard errors, clustered at the village level, reported in parenthesis. Statistically significant coefficients are indicated as follows: *10%; **5%; ***1%. ¹In natural logs. ²Marital status has been modified so that missing values are replaced by the village averages.

Table 5: Effects on Assets (after 1 year)

| | Monetary | | Non-Monetary | | Total | |
|---|---------------------|-----------|---------------------|-----------|---------------------|-----------|
| | Assets ¹ | | Assets ¹ | | Assets ¹ | |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| ITT: Offered the Savings Account | 0.461*** | 0.404*** | 0.075 | 0.058 | 0.154** | 0.112** |
| | (0.110) | (0.091) | (0.077) | (0.056) | (0.065) | (0.047) |
| Age of female HH head | | 0.005 | | 0.000 | | 0.001 |
| | | (0.005) | | (0.003) | | (0.003) |
| Years of schooling | | 0.092*** | | 0.026*** | | 0.033*** |
| | | (0.014) | | (0.010) | | (0.008) |
| Married/living with partner ² | | -0.071 | | 0.073 | | -0.012 |
| | | (0.160) | | (0.145) | | (0.095) |
| # children below 16 | | 0.023 | | 0.009 | | 0.027 |
| | | (0.054) | | (0.030) | | (0.027) |
| # HH members | | -0.003 | | 0.041 | | 0.005 |
| | | (0.040) | | (0.019) | | (0.014) |
| Main source of HH income | | -0.001 | | 0.006 | | 0.002 |
| | | (0.009) | | (0.005) | | (0.004) |
| Value of Livestock and Poultry ¹ | | 0.026** | | 0.024*** | | 0.014** |
| | | (0.012) | | (0.008) | | (0.006) |
| Money in ROSCAs ¹ | | 0.026 | | 0.013** | | 0.008 |
| | | (0.017) | | (0.006) | | (0.007) |
| Money in banks ¹ | | 0.049*** | | 0.022*** | | 0.011 |
| | | (0.012) | | (0.006) | | (0.008) |
| Monetary assets ¹ | | 0.321*** | | | | |
| | | (0.053) | | | | |
| Non-monetary assets ¹ | | | | 0.467*** | | |
| | | | | (0.088) | | |
| Total assets ¹ | | | | | | 0.609*** |
| | | | | | | (0.050) |
| Constant | 8.319*** | 4.825*** | 9.990*** | 4.799*** | 10.369*** | 3.812*** |
| | (0.136) | (0.548) | (0.069) | (0.829) | (0.071) | (0.493) |
| Village dummies | No | Yes | No | Yes | No | Yes |
| Obs. | 1,118 | 1,113 | 1,118 | 1,113 | 1,118 | 1,113 |
| R ² (overall) | 0.015 | 0.340 | 0.001 | 0.433 | 0.005 | 0.520 |
| Mean of Dep. Var. (Control Group) | | 19,284.06 | | 34,067.52 | | 53,351.58 |
| Std. Dev. of Dep. Var. (Control Group) | | 48,869.22 | | 32,793.38 | | 65,864.47 |

Note: Robust standard errors, clustered at the village level, reported in parenthesis. Statistically significant coefficients are indicated as follows: *10%; **5%; ***1%. ¹In natural logs. ²Marital status has been modified so that missing values are replaced by the village averages.

Table 6: Impact on Assets, Regressions by Quartiles of Total Assets at Baseline (after 1 year)

| | 1 st quartile | 2 nd quartile | 3 rd quartile | 4 th quartile |
|------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Monetary Assets¹ | | | | |
| ITT: Offered the Savings Account | 0.181 (0.214) | 0.739*** (0.183) | 0.627*** (0.172) | 0.096 (0.202) |
| Constant | 7.303*** (0.202) | 7.787*** (0.185) | 8.518*** (0.106) | 9.753*** (0.197) |
| Total Assets¹ | | | | |
| ITT: Offered the Savings Account | -0.006 (0.148) | 0.088 (0.082) | 0.232*** (0.062) | 0.113 (0.125) |
| Constant | 9.492*** (0.115) | 10.212*** (0.079) | 10.564*** (0.047) | 11.304*** (0.123) |

Note: Each individual coefficient is statistically significant at the *10%, **5%, or ***1% level. ¹In natural logs.

Table 7: Assets Shifting to/from Other Financial Institutions (after 1 year)

| | Cash at Home ¹ | | Money in Banks ¹ | | Money in MFIs ¹ | | ROSCA's Contributions ¹ | |
|---|---------------------------|---------------------|-----------------------------|---------------------|----------------------------|---------------------|------------------------------------|---------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| ITT: Offered the Savings Account | -0.126 (0.149) | -0.193 (0.133) | -0.024 (0.189) | -0.098 (0.147) | 0.186 (0.200) | 0.218 (0.201) | 0.042 (0.166) | -0.146 (0.212) |
| Age of female HH head | | 0.007 (0.007) | | 0.030** (0.010) | | -0.008 (0.014) | | 0.021 (0.018) |
| Years of schooling | | 0.115*** (0.019) | | 0.177** (0.055) | | 0.105** (0.045) | | 0.048 (0.043) |
| Married/living with partner ² | | 0.218 (0.148) | | -0.297 (0.340) | | 0.630 (0.406) | | -0.455 (0.563) |
| # children below 16 | | -0.040 (0.057) | | 0.016 (0.086) | | -0.041 (0.119) | | 0.155 (0.157) |
| # HH members | | -0.011 (0.038) | | 0.008 (0.067) | | 0.064 (0.058) | | 0.048 (0.113) |
| Main source of HH income | | 0.007 (0.008) | | 0.027 (0.018) | | -0.020 (0.020) | | 0.002 (0.022) |
| Value of Livestock and Poultry ¹ | | 0.026* (0.015) | | 0.008 (0.016) | | 0.049* (0.025) | | 0.001 (0.022) |
| Money in ROSCAs ¹ | | 0.035** (0.015) | | 0.097** (0.040) | | -0.003 (0.031) | | |
| Money in banks ¹ | | 0.052*** (0.018) | | 0.436*** (0.043) | | 0.084** (0.036) | | 0.024 (0.032) |
| Cash at home ¹ | | 0.167*** (0.030) | | | | | | |
| Money in MFIs, savings org. ¹ | | | | | | 0.469*** (0.049) | | |
| Constant | 6.668*** (0.149) | 4.425*** (0.449) | 2.068*** (0.934) | -1.121** (0.149) | 4.531*** (0.381) | 1.436*** (0.852) | 8.707*** (0.122) | 7.463*** (0.995) |
| Village dummies | No | Yes | No | Yes | No | Yes | No | Yes |
| Obs. | 1,118 | 1,113 | 1,118 | 1,113 | 1,118 | 1,113 | 145 | 145 |
| R ² (overall) | 0.001 | 0.221 | 0.000 | 0.269 | 0.001 | 0.320 | 0.000 | 0.241 |
| Mean of Dep.Var. (Control Group) | 2,601.92 | | 8,247.19 | | 4,060.48 | | 2,799.58 | |
| Std. Dev. of Dep.Var. (Control Group) | 5,830.98 | | 40,378.34 | | 8,185.08 | | 21,343.82 | |

Note: Robust standard errors, clustered at the village level, reported in parenthesis. Statistically significant coefficients are indicated as follows: *10%; **5%; ***1%. ¹In natural logs. ²Marital status has been modified so that missing values are replaced by the village averages.

Table 8: Effects on Lending, Borrowing, and Net Lending (after 1 year)

| | Lending ¹ | | Borrowing ¹ | | Net Worth | |
|---|----------------------|---------------------|------------------------|---------------------|---------------------------|---------------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| ITT: Offered the Savings Account | 0.220 (0.279) | 0.036 (0.278) | 0.170 (0.149) | 0.056 (0.120) | 13,739.11** (6,293.01) | 8,564.68 (9,066.68) |
| Age of female HH head | | 0.004 (0.008) | | -0.016 (0.014) | | 1,023.651* (552.834) |
| Years of schooling | | 0.032 (0.033) | | 0.025 (0.041) | | 5,925.808** (2,302.52) |
| Married/living with partner | | 0.384 (0.361) | | 0.190 (0.402) | | -4,160.356 (12,481.79) |
| # children below 16 | | -0.024 (0.116) | | -0.043 (0.153) | | 1,071.59 (4,012.746) |
| # HH members | | 0.002 (0.066) | | 0.153 (0.084) | | -678.311 (2,811.083) |
| Main source of HH income | | -0.019 (0.020) | | 0.019 (0.020) | | -1,246.979* (650.299) |
| Value of Livestock and Poultry ¹ | | 0.009 (0.030) | | 0.030* (0.017) | | |
| Money in ROSCAs ¹ | | 0.082** (0.037) | | -0.013 (0.023) | | |
| Money in banks ¹ | | 0.143*** (0.056) | | -0.063* (0.034) | | |
| Amount Lent at baseline ¹ | | 0.253*** (0.043) | | | | |
| Amount Borrowed at baseline ¹ | | | | 0.400*** (0.060) | | |
| Net Lending at baseline ¹ | | | | | | |
| Net Worth at baseline ¹ | | | | | | 0.367*** (0.033) |
| Constant | 2.006*** (0.336) | 0.152 (0.759) | 8.465*** (0.126) | 4.770*** (0.954) | 3,410.28 (7,463.53) | -23,778.41 (28,404.52) |
| Additional controls ² | No | Yes | No | Yes | No | Yes |
| Village dummies | No | Yes | No | Yes | No | Yes |
| Obs. | 1,118 | 1,113 | 1,118 | 1,113 | 1,118 | 1,113 |
| R ² (overall) | 0.001 | 0.175 | 0.001 | 0.174 | 0.002 | 0.336 |
| Mean of Dep.Var. (Control Group) | | 9,726.62 | | 59,667.93 | | 3,410.28 |
| Std. Dev. of Dep.Var. (Control Group) | | 43,789.80 | | 139,721.90 | | 158,949.40 |

Note: Robust standard errors clustered at the village level in parenthesis. Each individual coefficient is statistically significant at the *10%, **5%, or ***1% level. ¹Dependent variables in natural logs. ²Additional controls include age and marital status of the account holder, number of household members, number of children below 16 years of age, and most relevant source of household income.

Table 9A: Effects on Household Expenditure on Health (after 1 year)

| | Full Sample | | | | Restricted Sample (Households Hit by a Health Shock Only) | | | |
|---|---------------------------------------|--------------------|--|--------------------|--|--------------------|--|---------------------|
| | Medicines and Traditional Remedies | | Health Services (e.g. hospital charges) | | Medicines and Traditional Remedies | | Health Services (e.g. hospital charges) | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| ITT: Offered the Savings Account | 0.389** (0.166) | 0.385** (0.172) | -0.215 (0.166) | -0.206 (0.160) | 1.048** (0.494) | 1.181** (0.505) | -1.279** (0.551) | -1.351** (0.447) |
| Age of female HH head | | -0.006 (0.011) | | 0.006 (0.010) | | -0.005 (0.021) | | 0.038 (0.028) |
| Years of schooling | | -0.037 (0.031) | | 0.029 (0.041) | | -0.091 (0.066) | | 0.122 (0.104) |
| Married/living with partner ² | | 0.132 (0.257) | | 0.177 (0.380) | | 0.274 (0.662) | | 0.838* (0.484) |
| # children below 16 | | 0.016 (0.099) | | 0.014 (0.113) | | -0.100 (0.207) | | -0.315 (0.260) |
| # HH members | | 0.010 (0.061) | | 0.033 (0.046) | | 0.010 (0.159) | | 0.013 (0.067) |
| Main source of HH income | | -0.004 (0.010) | | 0.011 (0.012) | | -0.013 (0.024) | | -0.018 (0.044) |
| Value of Livestock and Poultry ¹ | | 0.005 (0.018) | | 0.003 (0.015) | | -0.016 (0.047) | | 0.030 (0.079) |
| Money in ROSCAs ¹ | | -0.047* (0.028) | | -0.037* (0.020) | | -0.0124 (0.086) | | -0.014 (0.067) |
| Money in banks ¹ | | 0.020 (0.022) | | 0.028 (0.029) | | 0.030 (0.063) | | 0.095 (0.075) |
| Constant | 1.263*** (0.298) | 1.037* (0.625) | 1.309*** (0.256) | 1.196* (0.719) | 3.408*** (0.919) | 1.501* (1.215) | 4.742*** (0.746) | 3.893** (1.719) |
| Village dummies | No | Yes | No | Yes | No | Yes | No | Yes |
| Obs. | 1,118 | 1,113 | 1,118 | 1,113 | 253 | 253 | 253 | 253 |
| R ² (overall) | 0.004 | 0.153 | 0.002 | 0.114 | 0.018 | 0.546 | 0.028 | 0.388 |
| Mean of Dep. Var. (Control Group) | 719.973 | | 1,144.644 | | 2,666.364 | | 4,362.521 | |
| Std. Dev. of Dep. Var. (Control Group) | 4,902.117 | | 9,564.301 | | 10,092.630 | | 18,769.550 | |

Note: Robust standard errors, clustered at the village level, reported in parenthesis. Statistically significant coefficients are indicated as follows: *10%; **5%; ***1%.

¹In natural logs. ²Marital status has been modified so that missing values are replaced by the village averages.

Table 9B: Effects on Household Expenditure on Education¹ and on School Enrollment (after 1 year)

| | Expenditure on Education | | | | | | | | School Enrollment | |
|---|--------------------------|---------------------|---------------------|---------------------|---------------------|----------------------|---|----------------------|---------------------|---------------------|
| | School Fees | | Textbooks | | School Uniforms | | School Supplies (e.g. pencils, pens) | | (9) | (10) |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | | |
| ITT: Offered the Savings Account | 0.280 (0.286) | 0.194** (0.252) | 0.696*** (0.255) | 0.636*** (0.238) | 0.573*** (0.167) | 0.519*** (0.154) | 0.412 (0.271) | 0.370* (0.222) | 0.008 (0.013) | 0.005 (0.012) |
| Age of female HH head | | -0.024** (0.252) | | -0.022** (0.009) | | -0.028*** (0.009) | | -0.026*** (0.009) | | 0.004*** (0.001) |
| Years of schooling | | 0.125*** (0.042) | | 0.068* (0.041) | | 0.067* (0.036) | | 0.015 (0.036) | | -0.002 (0.002) |
| Married/living with partner ² | | 0.491 (0.439) | | 0.050 (0.297) | | 0.258 (0.339) | | 0.060 (0.243) | | 0.021 (0.018) |
| # children below 16 | | -0.335 (0.239) | | 0.521*** (0.120) | | 0.325*** (0.100) | | 0.666*** (0.139) | | 0.029*** (0.009) |
| # HH members | | 0.469 (0.143) | | 0.106* (0.061) | | 0.014 (0.060) | | 0.148** (0.069) | | -0.010** (0.005) |
| Main source of HH income | | 0.028** (0.011) | | 0.018 (0.014) | | 0.015 (0.016) | | 0.020 (0.015) | | -0.001 (0.001) |
| Value of Livestock and Poultry ¹ | | 0.065*** (0.024) | | 0.031 (0.024) | | 0.017 (0.019) | | 0.030 (0.019) | | 0.000 (0.002) |
| Money in ROSCAs ¹ | | -0.035 (0.038) | | 0.011 (0.031) | | 0.042 (0.036) | | -0.039 (0.031) | | -0.001 (0.002) |
| Money in banks ¹ | | 0.049 (0.032) | | 0.091*** (0.024) | | 0.019 (0.027) | | 0.052** (0.022) | | -0.001 (0.002) |
| Constant | 2.816*** (0.365) | -0.549 (0.910) | 2.285*** (0.369) | -1.159 (0.656) | 1.500*** (0.223) | -0.413 (0.527) | 3.031*** (0.302) | 0.716 (0.581) | 0.967*** (0.009) | 0.809*** (0.036) |
| Village dummies | No | Yes | No | Yes | No | Yes | No | Yes | No | Yes |
| Obs. | 1,118 | 1,113 | 1,118 | 1,113 | 1,118 | 1,113 | 1,118 | 1,113 | 935 | 931 |
| R ² (overall) | 0.002 | 0.176 | 0.010 | 0.251 | 0.009 | 0.136 | 0.005 | 0.227 | 0.001 | 0.092 |
| Mean of Dep. Var. (Control Gr.) | 878.022 | | 555.036 | | 268.577 | | 280.844 | | 0.967 | |
| Std. Dev. of Dep. Var. (Control Gr.) | 1,944.47 | | 1,231.845 | | 676.024 | | 468.245 | | 0.179 | |

Note: Robust standard errors, clustered at the village level, reported in parenthesis. Statistically significant coefficients are indicated as follows: *10%; **5%; ***1%. ¹In natural logs. ²Marital status has been modified so that missing values are replaced by the village averages.

Table 9C: Effects on Household Expenditure¹ (after 1 year)

| | Expenditure on Clothing and Footwear | | | | | | Other Expenditures | | | | | | | |
|---|--------------------------------------|--------------------|---------------------|----------------------|---------------------|---------------------|---------------------|---------------------|-------------------------|---------------------|------------------------------|--------------------|--------------------|---------------------|
| | For Women | | For Men | | For Children | | Personal Care Items | | House Cleaning Articles | | House Maintenance and Repair | | Bus and Taxi Fares | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| ITT: Offered the Savings Account | -0.059 (0.109) | -0.079 (0.111) | -0.017 (0.171) | -0.045 (0.171) | 0.091 (0.196) | 0.043 (0.166) | 0.017 (0.093) | 0.008 (0.098) | 0.033 (0.155) | 0.019 (0.155) | -0.061 (0.076) | 0.081 (0.069) | -0.077 (0.178) | -0.111 (0.156) |
| Age of female HH head | | -0.013 (0.011) | | -0.012 (0.009) | | -0.014 (0.012) | | 0.001 (0.004) | | 0.008 (0.008) | | 0.021** (0.009) | | -0.003 (0.007) |
| Years of schooling | | 0.044 (0.033) | | 0.073*** (0.025) | | 0.133*** (0.032) | | 0.059*** (0.014) | | 0.019 (0.021) | | 0.061** (0.025) | | 0.025 (0.025) |
| Married/living with partner ² | | 0.288 (0.236) | | 0.346 (0.271) | | 0.506 (0.333) | | 0.105 (0.208) | | 0.033 (0.175) | | -0.012 (0.187) | | 0.204 (0.382) |
| # children below 16 | | -0.110 (0.119) | | -0.157 (0.207) | | 0.269** (0.132) | | -0.019 (0.046) | | -0.022 (0.061) | | 0.032 (0.055) | | 0.046 (0.075) |
| # HH members | | -0.011 (0.077) | | -0.252*** (0.092) | | 0.077 (0.060) | | 0.083*** (0.022) | | 0.088** (0.038) | | 0.017 (0.025) | | 0.002 (0.055) |
| Main source of HH income | | 0.015 (0.016) | | 0.133*** (0.039) | | 0.031** (0.015) | | 0.006 (0.006) | | 0.014 (0.009) | | 0.013 (0.012) | | 0.002 (0.012) |
| Value of Livestock and Poultry ¹ | | 0.019 (0.019) | | -0.006 (0.013) | | -0.005 (0.021) | | 0.008 (0.011) | | 0.030*** (0.009) | | -0.025 (0.024) | | 0.015 (0.021) |
| Money in ROSCAs ¹ | | 0.014 (0.019) | | 0.073** (0.032) | | 0.053 (0.033) | | 0.010 (0.011) | | 0.005 (0.015) | | -0.003 (0.019) | | 0.019 (0.028) |
| Money in banks ¹ | | 0.041 (0.028) | | -0.017 (0.019) | | 0.039* (0.021) | | 0.022* (0.012) | | 0.022* (0.013) | | 0.034* (0.018) | | 0.063*** (0.023) |
| Constant | 1.982*** (0.203) | 1.157** (0.517) | 0.997*** (0.160) | 0.707 (0.598) | 2.460*** (0.173) | 0.881 (0.808) | 5.108*** (0.132) | 4.387*** (0.313) | 0.891*** (0.144) | -0.101 (0.317) | 0.443 (0.128) | -0.567* (0.324) | 3.705 (0.351) | 3.038*** (0.581) |
| Village dummies | No | Yes | No | Yes | No | Yes | No | Yes | No | Yes | No | Yes | No | Yes |
| Obs. | 1,118 | 1,113 | 1,118 | 1,113 | 1,118 | 1,113 | 1,118 | 1,113 | 1,118 | 1,113 | 1,118 | 1,113 | 1,118 | 1,113 |
| R ² (overall) | 0.000 | 0.080 | 0.000 | 0.083 | 0.000 | 0.130 | 0.000 | 0.171 | 0.000 | 0.088 | 0.000 | 0.105 | 0.000 | 0.215 |
| Mean of Dep.Var. (Control Gr.) | 266.425 | | 151.924 | | 380.750 | | 279.802 | | 18.185 | | 1111.978 | | 364.492 | |
| Std. Dev. of Dep.Var. (Control Gr.) | 687.043 | | 595.222 | | 1187.997 | | 283.758 | | 53.232 | | 7711.468 | | 725.192 | |

Note: Robust standard errors, clustered at the village level, reported in parenthesis. Statistically significant coefficients are indicated as follows: *10%; **5%; ***1%. ¹In natural logs. ²Marital status has been modified so that missing values are replaced by the village averages.

Table 10: Spending on Temptation Goods (after 1 year)

| | In the last week, has your household bought any cigarettes and tobacco, alcohol, or gambled? | | In the last week, how much was spent on such goods? ¹ | |
|---|--|---------------------|--|---------------------|
| | (1) | (2) | (3) | (4) |
| ITT: Offered the Savings Account | -0.025 (0.022) | 0.021 (0.017) | -0.119 (0.120) | -0.096 (0.093) |
| Age of female HH head | | 0.008*** (0.002) | | 0.043*** (0.027) |
| Years of schooling | | -0.007 (0.006) | | -0.34 (0.027) |
| Married/living with partner ² | | -0.038 (0.025) | | 0.281 (0.364) |
| # children below 16 | | -0.011 (0.011) | | 0.066 (0.061) |
| # HH members | | 0.006 (0.010) | | 0.059 (0.054) |
| Main source of HH income | | -0.003 (0.003) | | 0.017 (0.017) |
| Value of Livestock and Poultry ¹ | | 0.000 (0.003) | | -0.003 (0.016) |
| Money in ROSCAs ¹ | | -0.007 (0.005) | | -0.037 (0.024) |
| Money in banks ¹ | | 0.005 (0.005) | | -0.014 (0.023) |
| Constant | 0.274*** (0.032) | -0.012 (0.125) | 1.357*** (0.166) | -0.400 (0.676) |
| Village dummies | No | Yes | No | Yes |
| Obs. | 1,118 | 1,113 | 1,118 | 1,113 |
| R ² (overall) | 0.001 | 0.157 | 0.001 | 0.166 |
| Mean of Dep.Var. (Control Group) | | 0.274 | | 60.900 |
| Std. Dev. of Dep.Var. (Control Group) | | 0.4464382 | | 153.430 |

Note: Robust standard errors, clustered at the village level, reported in parenthesis. Statistically significant coefficients are indicated as follows: *10%; **5%; ***1%. ¹In natural logs. ²Marital status has been modified so that missing values are replaced by the village averages.

Table 11: Effects on Risk-Coping Ability (after 1 year)

| | Coped Using Cash | | Coped Using Bank Savings | | Coped Selling HH Possessions | | Coped Borrowing Money | |
|---|---------------------|--------------------|--------------------------|-------------------|------------------------------|-------------------|-----------------------|----------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| ITT: Offered the Savings Account | -0.0526 (0.047) | -0.0489 (0.048) | 0.040* (0.025) | 0.037* (0.023) | -0.006 (0.006) | -0.005 (0.005) | -0.027 (0.047) | -0.018 (0.045) |
| Age of female HH head | | 0.004* (0.002) | | 0.001 (0.001) | | -0.001 (0.001) | | -0.003 (0.003) |
| Years of schooling | | 0.019* (0.009) | | -0.001 (0.003) | | 0.001 (0.001) | | -0.018** (0.009) |
| Married/living with partner ² | | 0.058 (0.103) | | -0.043 (0.030) | | -0.003 (0.003) | | -0.116 (0.085) |
| # children below 16 | | -0.037 (0.033) | | 0.013 (0.010) | | -0.006 (0.007) | | 0.001 (0.023) |
| # HH members | | -0.001 (0.019) | | -0.000 (0.003) | | 0.001 (0.002) | | 0.018 (0.012) |
| Main source of HH income | | 0.003 (0.006) | | -0.002 (0.002) | | -0.001 (0.001) | | 0.001 (0.005) |
| Value of Livestock and Poultry ¹ | | 0.008* (0.004) | | -0.002 (0.002) | | -0.001 (0.001) | | -0.012*** (0.005) |
| Money in ROSCAs ¹ | | 0.011* (0.006) | | 0.003 (0.002) | | -0.001 (0.001) | | -0.015*** (0.005) |
| Money in banks ¹ | | 0.011 (0.010) | | 0.001 (0.004) | | -0.001 (0.000) | | -0.019*** (0.007) |
| Constant | 0.650*** (0.045) | 0.348* (0.183) | 0.006 (0.005) | -0.001 (0.032) | 0.006 (0.006) | 0.033 (0.030) | 0.430*** (0.051) | 0.780*** (0.179) |
| Village dummies | No | Yes | No | Yes | No | Yes | No | Yes |
| Obs. | 337 | 337 | 337 | 337 | 337 | 337 | 337 | 337 |
| R ² (overall) | 0.003 | 0.170 | 0.015 | 0.139 | 0.003 | 0.055 | 0.001 | 0.203 |
| Mean of Dep.Var. (Control Gr.) | | 0.650 | | 0.006 | | 0.006 | | 0.430 |
| Std. Dev. of Dep.Var. (Control Gr.) | | 0.478 | | 0.078 | | 0.078 | | 0.497 |

Note: Robust standard errors, clustered at the village level, reported in parenthesis. Statistically significant coefficients are indicated as follows: *12%; **10%; **5%; ***1%. ¹In natural logs. ²Marital status has been modified so that missing values are replaced by the village averages.

Table 12: Effects on the Household Self-Reported Financial Situation (after 1 year)

| | On the whole, I feel secure with the financial situation of my household | | How would you describe your household's financial situation? | | How financially stretched your household is, month to month? | |
|---|---|--|--|--|---|--|
| | 1 if "strongly agree," or "disagree." | 0 if "feel neutral," "disagree," or "strongly disagree." | 1 if "live comfortably," or "meet basic expenses with little left for extras." | 0 if "just meet basic expenses," or "don't even have enough to meet basic expenses." | 1 if "not very stretched," or "not at all stretched." | 0 if "stretched to the absolute limit," "very stretched," or "somewhat stretched." |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| ITT: Offered the Savings Account | 0.031 (0.025) | 0.023 (0.024) | 0.106*** (0.028) | 0.093*** (0.026) | 0.078*** (0.023) | 0.078*** (0.021) |
| Age of female HH head | | -0.000 (0.001) | | -0.001 (0.002) | | -0.002 (0.002) |
| Years of schooling | | 0.004 (0.005) | | 0.019*** (0.004) | | 0.010** (0.003) |
| Married/living with partner ² | | 0.022 (0.042) | | 0.007 (0.047) | | 0.075* (0.045) |
| # children below 16 | | -0.020 (0.013) | | -0.033** (0.016) | | -0.045*** (0.014) |
| # HH members | | -0.006 (0.008) | | -0.011 (0.011) | | 0.004 (0.011) |
| Main source of HH income | | 0.005*** (0.002) | | 0.005** (0.002) | | 0.003 (0.002) |
| Value of Livestock and Poultry ¹ | | 0.005** (0.002) | | 0.008*** (0.003) | | 0.001 (0.002) |
| Money in ROSCAs ¹ | | 0.013*** (0.004) | | 0.018*** (0.004) | | 0.011** (0.005) |
| Money in banks ¹ | | 0.014** (0.006) | | 0.030*** (0.005) | | 0.017*** (0.005) |
| Constant | 0.214*** (0.030) | 0.035 (0.070) | 0.303*** (0.038) | 0.162** (0.071) | 0.292*** (0.050) | 0.076 (0.085) |
| Village dummies | No | Yes | No | Yes | No | Yes |
| Obs. | 1,118 | 1,113 | 1,118 | 1,113 | 1,118 | 1,113 |
| R ² (overall) | 0.001 | 0.142 | 0.012 | 0.247 | 0.007 | 0.252 |

Note: Robust standard errors, clustered at the village level, reported in parenthesis. Statistically significant coefficients are indicated as follows: *10%; **5%; ***1%. ¹In natural logs. ²Marital status has been modified so that missing values are replaced by the village averages.

Table 13: Impact on Transfers

| | Volume of Transfers | | | Net Transfers | | |
|------------------------|---------------------------|----------------------------|-----------------------------|----------------------------|--------------------------|------------------------------|
| | Regular Partners | Non-Regular Partners | All Partners | Regular Partners | Non-Regular Partners | All Partners |
| Loans and Gifts | 192.563 (1,630.102) | -440.645 (794.626) | -248.082 (2,132.107) | -439.371 (1,429.711) | 163.829 (742.842) | -275.542 (1,785.128) |
| Constant | 4,232.868*** (994.108) | 2,261.466** (1,125.624) | 6,494.334*** (1,857.936) | -2,913.466*** (755.143) | -1,635.078 (862.066) | -4,548.544*** (1,250.855) |
| Loans only | 88.691 (1,619.363) | -601.577 (778.811) | -512.886 (2,105.630) | -333.049 (1,413.982) | 251.284 (740.055) | -81.765 (1,761.474) |
| Constant | 4,163.194*** (978.134) | 2,161.887* (1,127.768) | 6,325.082*** (1,844.739) | -2,881.270*** (748.659) | -1,573.503* (860.060) | -4,454.773*** (1,244.417) |
| Gifts only | 103.872 (71.222) | 160.933** (70.321) | 264.804** (125.087) | -106.323 (71.246) | -87.455 (69.690) | -193.777 (128.578) |
| Constant | 69.673*** (24.068) | 99.579*** (36.428) | 169.252*** (43.008) | -32.196** (15.265) | -61.575 (38.290) | -93.771** (42.681) |

Note: Each individual coefficient is statistically significant at the *10%, **5%, or ***1% level.

Table A1: Attrition

| | Completed Endline 2 (endline after 1 year) | | | Completed Both Endlines | | |
|--|--|---------------------|---------------------|-------------------------|---------------------|---------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| ITT: Offered the Savings Account | 0.014 (0.016) | 0.013 (0.016) | 0.013 (0.015) | 0.022 (0.017) | 0.021 (0.017) | 0.018 (0.016) |
| Age of female HH head | | | 0.001 (0.001) | | | 0.001 (0.001) |
| Years of schooling | | | 0.000 (0.003) | | | 0.001 (0.004) |
| Married/living with partner ¹ | | | 0.009 (0.037) | | | 0.009 (0.011) |
| # children below 16 | | | 0.003 (0.010) | | | -0.001 (0.006) |
| # HH members | | | 0.005 (0.005) | | | 0.020 (0.042) |
| Main source of HH income | | | 0.001 (0.001) | | | 0.001 (0.001) |
| Constant | 0.897*** (0.022) | 0.859*** (0.008) | 0.805*** (0.045) | 0.879*** (0.024) | 0.830*** (0.009) | 0.753*** (0.042) |
| Village dummies | No | Yes | Yes | No | Yes | Yes |
| Obs. | 1,236 | 1,236 | 1,223 | 1,236 | 1,236 | 1,223 |
| R ² (overall) | 0.001 | 0.045 | 0.052 | 0.001 | 0.045 | 0.054 |
| Mean of Dependent Variable | | 0.91 | | | 0.89 | |

Note: Robust standard errors clustered at the village level in parenthesis. Each individual coefficient is statistically significant at the *10%, **5%, or ***1% level.

¹Marital status has been modified so that missing values are replaced by the village averages.