

BANKING THE POOR VIA SAVINGS ACCOUNTS: EVIDENCE FROM A FIELD EXPERIMENT*

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Abstract

The majority of the poor lack access to bank accounts and have to use costly informal savings mechanisms. Using a field experiment, I randomly gave access to simple bank accounts with no fees at local bank branches to a large sample of female household heads in Nepal. Results show that there is untapped demand for savings accounts and that the poor do save. Access to the savings accounts increased monetary assets and total assets without crowding out other kinds of assets or savings institutions. Finally, financial access strongly increased households' investments in health and education.

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1 Introduction

Saving promotes asset accumulation, helping to create a buffer against shocks and to relax credit constraints, thus providing an important pathway out of poverty. Although increasing evidence shows that the poor are willing and able to save, they do so largely through informal mechanisms, such as storing cash at home, joining savings clubs, and buying livestock and durable goods, which are illiquid and riskier than bank accounts (Collins, Morduch, Rutherford, and Ruthven 2009; Karlan and Morduch 2010; Dupas and Robinson forthcoming). Unfortunately, the majority of the world’s poor generally lack access to formal savings accounts or banking services of any kind (Banerjee and Duflo 2007).

Would poor households open a basic savings account if given access to one? Would this access help them to save, accumulating small sums into large sums? Would there be any crowding out of other types of assets or savings institutions? Would households increase their investments?

I address these questions via a randomized field experiment that considers a large and diverse sample of households. Access to a simple, fully liquid bank account—with no opening, maintenance or withdrawal fees—was randomly offered to a sample of 1,118 female household heads in 19 slums in Nepal.¹ The account that was offered operates through local bank-branches. Through this experiment, I assess the causal impact of access to the bank account on household saving behavior, asset accumulation, expenditures, and income. I use two data sources: detailed household surveys at baseline and a year after the start of the intervention, and bank administrative data.

My results show, first, that there is untapped demand for fully liquid savings accounts: 84% of the households that were offered the account opened one. Second, the poor do save: 80% of the households that were offered the account used it frequently, making deposits of about 8% of their weekly income 0.8 times per week. Households slowly accumulated small sums into large sums that they occasionally withdrew.

Third, access to the savings account increased monetary assets by more than 50%. In addition, total assets, which include monetary and non-monetary assets (consumer durables and livestock), grew by 16%. Hence, the increase in monetary assets did not seem to come at the cost of crowding out savings in non-monetary assets. By accompanying the experiment with detailed survey data on monetary assets, I am able to measure if any shifting within monetary assets occurred. Results show that when households gain access to a savings account, they might reduce the amount of

¹Female household head is defined here as the female member taking care of the household. Based on this definition, 99% of the households living in the 19 slums were surveyed.

cash savings, but they do not seem to shift assets away significantly from other types of savings institutions, formal or informal. The positive effect on monetary assets is stronger for households at the bottom and middle of the asset distribution than for those at the top and for households that were not linked to banks or informal financial institutions before the intervention.

Fourth, being offered access to a savings account strongly increases household investment in health (in the form of expenditures in medicines and traditional remedies). Moreover, treatment households do not suffer large changes in weekly income when hit by a health shock during the previous month. Also, access to a savings account raises household investment in education (in the form of textbooks and school uniforms). The increase in investment in human capital seems to be on the intensive (as opposed to extensive) margin because households in the treatment group are not more likely to have their school-age children enrolled in school.

The results also suggest that asset accumulation might be coming from small changes in behavior. A year after the start of the intervention, suggestive evidence indicates that treatment households spent less money on temptation goods, such as alcohol and cigarettes. In addition, access to a savings account seemed to have some effect on reducing income volatility for households in the treatment group that were hit by a health shock in the month prior to the endline survey. Moreover, treatment households had a higher net worth and appeared less likely than control households to borrow money when hit by a negative shock. These and previous findings could be interpreted as indications that access to a savings account might enable households to build some precautionary savings that could be used for unexpected needs instead of having to contract a costly loan. In fact, Ananth, Karlan, and Mullainathan (2007) show that individuals in India could save their 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% a day. Hence, even if tiny, such changes could be very important for increasing assets over the course of a year.

Overall, my findings show that, if given access to a basic savings account with no fees, poor households do save more than if they have only alternative informal strategies at their disposal. This in turn enables them to accumulate assets and invest in health and education. These results are the first to highlight that provision of a bank account to a general sample of households enables them to save and use the money saved in the account to make productivity-enhancing investments in human capital and health. My research complements the recent literature that focuses on entrepreneurs' access to bank accounts and that shows that savings are mostly used for

microenterprise development (Dupas and Robinson 2013).²

Another relevant result of this study is to show that, despite the lack of target-based commitments, households are able to accumulate small sums into large sums that are invested in health or education, rather than spent on temptations. A fully liquid account might have advantages and disadvantages for the poor. On the one hand, poor households might value a savings account that is fully liquid so that they can dip into their savings to address a shock, while permitting them to safely store their money in good times. On the other hand, liquidity might be an obstacle for accumulating savings. While few randomized experiments have shown that commitment savings products help current or former bank clients and cash crop farmers to save for a specific purpose, exercising their self-control early on (Ashraf, Karlan, and Yin 2006; Brune, Giné, Goldberg, and Yang 2011), this study shows that poor households are able to save even with a fully liquid savings account.

Also, this study contributes to a better understanding of the characteristics that poor households may value in a formal savings account and that may help explain take-up and usage. Poor households appear to value a product that is associated with low transaction costs due to proximity to a local bank-branch, in line with descriptive evidence by Collins, Morduch, Rutherford, and Ruthven (2009). Also, the saving accounts in this study did not charge any fees, and their usage rate was very high. High fees may indeed discourage usage, as suggested by anecdotal and survey evidence from Banerjee and Duflo (2011) and Dupas, Green, Keats, and Robinson (forthcoming).

What mechanisms are at play? First, the money saved in the account is readily available, but is not available at arm's reach. This is a subtle but important difference. Keeping savings in cash rather than in the bank increases the ability and temptation to spend immediately (Mullainathan 2004; Mullainathan and Shafir 2009). Moreover, a savings account that fits the needs of the poor enables them to save small amounts that would otherwise likely be spent (Mullainathan and Shafir 2009). This is consistent with my finding that access to a savings account has a stronger effect on asset accumulation for the poorest households and for those not linked to the financial system than for the richest and already linked to the financial system. In addition, because households in this study regularly saved small amounts of money with some saving motive, it is possible that some kind of mental accounting effect might be at work. This is in line with previous research showing that even a simple metal box can have a large impact on health savings because when the

²Dupas and Robinson (2013) consider bicycle taxi drivers and market vendors in Kenya. Ongoing work by Abraham, Kast, and Pomeranz (2011) considers micro-entrepreneurs who are members of a microfinance institution in Chile.

money is put in the box, it is mentally allocated towards health expenditures (Dupas and Robinson forthcoming). Furthermore, the fact that local bank-branches are opened only twice a week might have caused some habit formation to save regularly.

This study is linked to the non-experimental literature that shows that providing access to financial services to the poor appears to increase income and reduce poverty (Aportela 1999; Burgess and Pande 2005; Bruhn and Love 2009). My field experiment provides detailed evidence on the causal effects of access to a fully liquid bank account on savings and investment behavior.

Finally, my research is connected to the studies that highlight the importance of institutional mechanisms that simplify and encourage savings in the U.S. (Madrian and Shea 2001; Choi, Laibson, Madrian, and Metrick 2002; Thaler and Benartzi 2004; Orzsag and Greenstein 2005; Beshears, Choi, Laibson, and Madrian 2012). However, a large fraction of adults worldwide typically cannot benefit from these helpful savings mechanisms because they do not have access to a bank account, work in the informal sector, and have to use informal and more costly schemes to save. Hence, expanding access to savings accounts should be a first step in the direction of implementing some of these institutional mechanisms for the poor.

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, and explores possible heterogeneous treatment effects. Section 5 estimates the effects on household welfare, focusing on expenditures, income, and perceived financial situation. Finally, Section 6 concludes.

2 Background and Experimental Design

The field experiment took place in 19 slums in the area surrounding Pokhara, Nepal’s second largest city. Some of these slums are right at the outskirts of the city, whereas others are farther out in semi-rural and rural areas. This variation allowed me to have a large and diverse sample of households.

2.1 Savings Institutions in Nepal

Formal financial access in Nepal is very limited. Only 20% of Nepalese households have a bank account, according to the nationally representative “Access to Financial Services Survey,” conducted in 2006 by the World Bank (Ferrari, Jaffrin, and Shrestha 2007). Not surprisingly, access

is concentrated in urban areas and among the wealthy. Thus, most households typically save via microfinance institutions, savings and credit cooperatives, and Rotating Savings and Credit Associations (ROSCAs).³ Also, households commonly have cash at home and save in the form of durable goods and livestock.

The main reasons reported in the World Bank survey for not having a bank account are transaction costs, especially distance from banking institutions, and complicated deposit and withdrawal procedures. In addition, among those households that reported having a bank account, usage is low: 54% of these households report going to the bank less than once a month.⁴ Furthermore, having a bank account does not necessarily mean that savings are deposited there. Only 37% of the households that had an account and had savings in the previous year declared that they had deposited money in the account. Moreover, banks typically charge high opening, withdrawal, and maintenance fees and require a minimum balance.⁵

In line with the figures reported in the nationally representative World Bank survey, in my sample, 17% of the households had a bank account, 18% of the sample were members of a ROSCA, and 54% belonged to a microfinance institution or savings cooperative at baseline. Similarly to the nationally representative sample, distance from banking institutions helps to explain why households are unbanked. Indeed, there are no bank offices in the slums in which the sample population lives, and the vast majority of bank branches are located in the city center. Analysis of baseline data shows that a 1% increase in transportation costs as a fraction of monetary assets reduces the likelihood of having a bank account by 9%.⁶ Finally, 42% of the households with a bank account use it to receive a pension or remittances.

2.2 The Savings Account

I worked in collaboration with GONESA, a non-governmental organization (NGO), operating in 21 slums in the area of Pokhara, Nepal.⁷ In the early 1990s the NGO began to establish and manage one kindergarten center in each area. In 2008, GONESA started operating as a bank and began

³A ROSCA is a savings group formed by individuals who decide to make regular cyclical contributions to a fund in order to build together a pool of money, which then rotates among group members, being given as a lump sum to one member in each cycle.

⁴Going to the bank is a very good proxy of account usage because online banking is almost nonexistent in Nepal.

⁵Minimum balance requirements vary from bank to bank and depend on the savings account type. Among the ten Nepalese banks with most branches, the most common minimum balance requirement is Rs. 500, equivalent to about \$7, as Rs. 70 were approximately \$1, during the intervention period.

⁶The t-statistic of the coefficient is -2.48. Results available upon request.

⁷Two of the 21 slums were used to pilot the savings account. The field experiment analyzed in this study was then conducted in the remaining 19 slums.

offering formal savings accounts. The accounts are very basic but have all the characteristics of any formal savings account.⁸ The enrollment procedure is simple and account holders are provided with an easy-to-use passbook savings account. Customers can make transactions at the local bank-branch offices in the slums, which are open twice a week for three hours.⁹ Account holders have no opportunity to deposit or withdraw money in the slum outside of these working hours. However, they can make any transactions during regular business hours at the bank's main office, located in downtown Pokhara. Nevertheless, this option is inconvenient because it requires customers to spend time and money to travel to the city center.

The bank does not charge any opening, maintenance, or withdrawal fees and pays a 6% nominal yearly interest (inflation is above 10% in Nepal¹⁰), similar to the average alternative available in the Nepalese market (Nepal Rastra Bank, 2011). In addition, the savings accounts have no minimum balance requirement.¹¹

The money deposited in the savings account is fully liquid for withdrawal twice a week at the local bank-branch office, or at any time at the bank's main office. Finally, the savings account is fully flexible and operates without any commitment to save a given amount or to save for a specific purpose.

2.3 Experimental Design and Data

Before the introduction of the savings accounts, a baseline survey was conducted in May 2010 in each slum. All households with a female head ages of 18-55 were surveyed. This survey collected information on household composition, education, income, income shocks, monetary and non-monetary asset ownership, borrowing, and expenditures on durables and non-durables. In total, 1,236 households were surveyed at baseline.

After completion of the baseline survey, GONESA bank progressively began operating in the 19 slums between the last two weeks of May and the first week of June 2010, as follows. A pre-announced public meeting was held in each slum. At this meeting, participants were told (1) about the benefits of savings; (2) that GONESA bank was about to launch a savings account; (3) the

⁸The product offered by GONESA in this field experiment is the result of focus groups, product design, and pilot testing that I conducted jointly with the NGO.

⁹The established weekdays and business hours of each bank-branch office were publicly announced at the start of the intervention and did not change.

¹⁰The International Monetary Fund Country Report for Nepal (2011) indicates a 10.5% rate of inflation during the intervention period.

¹¹The account's conditions were guaranteed for as long as the participants chose to have an account open; in other words, the bank did not impose any time limit.

characteristics of the savings account; (4) what the savings account could help them with and how they could use it; and (5) that the savings account would only be initially offered to half of the households via a public lottery. The short public talk was given by an employee of the bank with the support of a poster and was followed by a short 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.¹² Then, separate public lotteries were held in each slum to randomly assign the female household heads to either the treatment group or the control group.¹³ The treatment group was offered the option of opening a savings account at the local bank-branch office.¹⁴ The control group was not given this option, but was not barred from opening a savings account at another institution. Treatment households could open the account on the first and subsequent days in which the bank was opened in the slums, usually one to five days after the lottery.¹⁵

A year after the beginning of the intervention, in June 2011, the endline survey was conducted. In addition to the modules contained in the baseline survey, information on household expenditures and networks was also collected. The survey included questions specifically addressed to the treated group that were aimed at understanding the role played by supply and demand factors in explaining take-up and usage of the account. Of the 1,236 households interviewed at baseline, 91% (i.e., 1,118) were found and surveyed in the endline survey.¹⁶ Attrition for completing the endline survey does not differ statistically between treatment and control households and is not correlated with observables, as shown in the Appendix Table A1. Hence, performing the analysis on the restricted sample for which there is endline data should not bias the estimates of the treatment effect.

Finally, for the analysis presented in this paper, I also use GONESA bank's administrative data on savings account usage. These data include date, location (local bank-branch office or main office), and amount of every deposit and withdrawal, as well as the withdrawal reason, for all of the treatment accounts.¹⁷

¹²Only one public session was held in each slum. There were no individual marketing sessions.

¹³GONESA required that the random assignment into treatment and control groups be done publicly with balls in an urn, making stratification based on occupation or income infeasible.

¹⁴The offer did not have a deadline.

¹⁵The vast majority of account holders opened the account within the first month (22%, 45%, 17% and 16% of the account holders opened the account in the first, second, third, and fourth week, respectively).

¹⁶Considering treatment and control groups separately, 91% and 90% of the households in each group were found, respectively. Those households that could not be tracked had typically moved out of the area, with a minority leaving the country.

¹⁷Households were not required to provide the reason of their withdrawal to the bank employee managing the transaction. Provision of such information was optional.

2.4 Sample Characteristics and Balance Check

My sample comprised households whose female heads were, on average, 36.6 years old and had about two years of schooling (see Table 1A). Roughly 90% of respondents were married or living with their partner. The average household size at baseline was 4-5 people, two of whom were children.

Weekly household income at baseline averaged Rs. 1,687 (equivalent to about \$24, as Rs. 70 were approximately \$1 during the intervention period) although there is considerable variation. Households earned their income from varied sources: 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 or helper, making and selling wool and garments, working as a teacher, receiving remittances and pensions, and collecting rents. Only 17% of the households listed an entrepreneurial activity as their primary source of income.¹⁸ Also, the majority of households (84%) reported living in a house owned by a household member, and 78% reported owning the plot of land on which the house was built.

Table 1B shows households' assets and liabilities at baseline. Total assets owned by the average household had a value of more than Rs. 40,000. Monetary assets accounted for 35% of total assets. Non-monetary assets—consumer durables, and livestock and poultry¹⁹—accounted for the remaining 65%.

As mentioned previously, 17% of the households were banked at baseline, 18% had money in a ROSCA, and 54% stored money in a microfinance institution (MFI). Households also typically had more than one week's worth of income stored as cash in their home.²⁰

Considering liabilities, 89% of the households had at least one outstanding loan.²¹ Most loans are taken from shopkeepers (40%), MFIs (38%), family, friends, or neighbors (31%), and moneylenders (13%). Formal loans from banks are rare, with only 5% of the sample reporting an outstanding loan borrowed from a bank.

Summary statistics from Table 1B show a high level of participation by the sample population in financial activities. However, most transactions were carried out with informal partners, such as kin and friends, moneylenders, and shopkeepers rather than with formal institutions like banks. This is

¹⁸I code as entrepreneurial activities: having a small shop, working as a driver, raising and selling livestock and poultry, selling agricultural products, making and selling wool and garments, and making and selling alcohol.

¹⁹Livestock and poultry include goats, pigs, baby cows/bulls/buffaloes, cows, bulls, buffaloes, chickens, and ducks.

²⁰The average household had Rs. 2,068 in cash savings, which corresponds to 1.23 times the average weekly income.

²¹This is in line with the national average from the 2006 World Bank survey showing that over two-thirds of Nepalese households had an outstanding loan from a formal or informal institution (Ferrari et al. 2007).

consistent with previous literature showing that the poor have a portfolio of financial transactions and relationships (Collins et al. 2009; Banerjee, Duflo, Glennerster, and Kinnan 2010; Dupas and Robinson 2013).

Finally, going back to Table 1A, the sample population seems highly vulnerable to shocks; 41% of the households indicated having experienced a negative external income shock during the month previous to the baseline survey.²² Of the households, 52% coped with a shock using cash savings, 43% coped by borrowing (17% from family and friends, 17% from a moneylender, and 9% from other sources). Only 1% reported coping by cutting consumption or selling household possessions, possibly suggesting that households have some ability to smooth consumption when facing a negative shock.²³

Overall, Tables 1A and 1B show that for the final sample considered for the analysis (i.e., those 1,118 households that completed both the baseline survey and the endline survey), treatment and comparison groups are balanced along all characteristics, except the total amount owed by the household in logs.²⁴

3 Results: Take-Up and Usage

Of the 1,118 households included in the final sample, 567 were given the opportunity to open a savings account. As shown in Table 2, 84% opened an account and 80% used it actively, making at least two deposits within the first year of being offered the account.²⁵

To study of the determinants of take-up and active use of the account I restrict the sample to the treatment group, i.e. those individuals ever offered the account.²⁶ Results, reported in the Appendix Table A2, show that take-up and active use of the account are strongly and positively related to the value of assets in a ROSCA or in a bank. However, the value of livestock and poultry owned by the household do not seem to be a statistically significant determinant. Also, the years of education of the account holder appear to be another important determinant of take-up and active

²²Shocks include health shocks, lost job, livestock loss, broken/damaged/stolen goods or equipment, low demand for business, decrease in the wage rate, and death of a household member.

²³An alternative explanation could be that shocks were small in economic terms.

²⁴The analysis carried out in this paper focuses on those 1,118 households that completed both the baseline survey and the endline survey. However, the initial sample of 1,236 households that completed the baseline survey is also balanced.

²⁵For the original sample of 1,236 households surveyed at baseline, take-up and usage rates are not different: 622 were given the opportunity to open a savings account, 82% took up the account, and 78% used it actively.

²⁶Take-up is a binary variable equal to 1 if the account was opened. Active use is a binary variable equal to 1 if the account holder made at least two deposits within the first year of being offered the account.

use.

The majority of the transactions that treated households made during the study period were deposits. In fact, as shown in Table 2, account holders made an average of 48 transactions: 44 deposits and 4 withdrawals. Forty-four deposits in a period of 12 months is equivalent to 0.8 deposits per week. The average amount deposited on a weekly basis was Rs. 131, roughly 8% of the average weekly household income as reported in the baseline survey. The average weekly balance steadily increased over the study period, reaching, a year after the start of the intervention, Rs. 2,362 for the average account holder.²⁷ Account holders did not demonstrate a significant preference for making deposits either sooner or later in the week. Rather, deposits were evenly distributed between the the first and second day of the week in which the bank was open in the village, and were of very similar amounts. Nevertheless, the fact that the local bank branch is open on pre-established days and at predetermined times could potentially cause some kind of “reminder effect” and help the account holders develop some habit formation to save regularly.²⁸

Comparisons of savings account balances across time show that households differ in savings behavior. Savings were accumulated at different rates by each household, depending on the frequency and size of deposits. Moreover, although 17% of the households with a bank account actively deposited money over the course of the year without making a single withdrawal, the majority accumulated small sums into larger sums that then were eventually withdrawn, in full or in part.

Households also had different savings motives. Bank administrative data showed that the main reasons for withdrawing money were to pay for a health emergency (17%), to buy food (17%), to repay a debt (17%), to pay for school fees and materials (12%), and to pay for festival-related expenses (8%). Hence, the savings accumulated in the account were reportedly used for both planned expenditures and unexpected shocks. The average size of a withdrawal was Rs. 1,774, slightly more than a week’s household income.

Figures 1 and 2 show the number of withdrawals made in any given week for the five main withdrawal reasons listed above. Figure 1 considers withdrawals made for education (school fees and school material) and festival-related expenditures. These expenditures can be considered planned because the start of the school year and the religious festivals happen on (arguably known) precise dates. In fact, withdrawals for education-related expenditures spiked 49 weeks after the accounts

²⁷Bank administrative data on the interest rate accrued in a year by each account show that, on average, account holders earned a yearly interest of Rs. 126.

²⁸Previous research has shown that reminders, via text messages or self-help group meetings, have a positive effect on savings (Karlan, McConnell, Mullainathan, and Zinman 2011; Kast, Meier, and Pomeranz 2011).

had been offered (i.e., during the week of April 18-24, which corresponds to the first week of school for the Nepalese academic year 2011-2012). Similarly, withdrawals for festival-related expenditures spiked at weeks 17, 22, 25, 35, 47, and 51 in correspondence with the Teej festival, Dashain festival (which is considered the most important and lasts a week), Tihar festival, Maghe Sankranti, New Year according to the Nepali calendar, and Dumji festival, respectively.²⁹

Figure 2 illustrates withdrawals made for health-related expenditures, to buy food when income was low, and to repay a debt. There are not particular dates on which withdrawals spike. This is partly explained by the fact that these are unplanned expenditures incurred due to a negative shock to health or employment that occurred randomly or that happened in the past, for which a loan was taken out. Hence, households might be using the savings in the account as a buffer.

The administrative data are in line with the motives for saving as reported by the households that had an account in the follow-up survey a year after the introduction of the bank accounts (see Appendix Table A3, Panel A.) The top five reported reasons for withdrawing the money saved in the account were health, consumption smoothing, education, to pay for festival-related expenses, and to repay a debt. Hence, households appear to save in the account for some specific motives, suggesting that some mental accounting mechanism might be taking place.

The picture that emerges from the savings motives reported by the treated households in my sample tends to indicate that households might value access to a savings account for different reasons than entrepreneurs do. When given access to the basic savings account, households generally did not report using the money saved in the account for microenterprise development, as entrepreneurs do (Dupas and Robinson 2013).³⁰ Nevertheless, they still reported using their savings to make productivity-enhancing investments in human capital and health.

The bank administrative data also suggests that, given the high frequency of deposits and the small size of weekly deposits, households seem to slowly accumulate small sums into large sums. This saving behavior is very different from that observed in entrepreneurs. In Dupas and Robinson (2013), entrepreneurs in Kenya made few and large deposits, equivalent to about 25% of their weekly income.

²⁹During the intervention period (i.e., May 2010-May 2011) the Teej festival happened on September 11, Dashain festival from October 17-23, Tihar festival from November 4-8, Maghe Sankranti on January 15, Nepali's New Year on April 14, and Dumji festival on April 25.

³⁰Only 5% of the treated households withdrew to buy poultry or livestock, or to invest in their current business. However, when restricting the sample to those households whose main source of income comes from an entrepreneurial activity, this percentage raises to 13%.

3.1 Discussion on Take-Up, Usage, and Account Features

A comparison of take-up and usage, and account features of the savings account considered in this study with those offered in other interventions could shed some light on the characteristics that the poor value in savings products. Compared to other studies that offered a savings account with no opening or minimum balance fees, there are not big differences in take-up rates.³¹ However, differences in usage rates are quite important. In Dupas and Robinson (2013), 52% of their treatment entrepreneurs actively used the account (making at least one transaction within the first six months), while in Dupas et al. (forthcoming) only 18% of the treatment individuals actively used the account (making at least two deposits in a year). By contrast, 80% of treatment households in my study used the account, making at least two deposits in a year.³²

These differences in usage rates may be explained partly by diverse savings behaviors and informal saving options available to the poor in Kenya and Nepal. However, formal and informal savings options in Kenya and Nepal are comparable in terms of features, costs, and convenience. Moreover, previous literature has shown that the poor want to save and do so using several savings mechanisms that are similar across countries (Collins et al. 2009).

Diverse occupations (e.g., entrepreneurs versus non-entrepreneurs) could also explain such differences in usage rates. Nevertheless, the bank administrative data do not show any differences in usage rates when comparing frequency and amounts of deposits, and frequency of withdrawals between households involved in entrepreneurial activities and the rest of the sample.³³

Another explanation may be the lack of trust in banking institutions and their service reliability. Trust, however, does not seem to be an issue in Nepal as it is in other developing countries (Dupas et al. forthcoming).³⁴ In my sample, trust was considered the most valued account feature by only 9% of the users.³⁵

The most likely explanation for the differences in usage rates may rely on the reduction of transaction costs, e.g., the proximity of bank-branches and the lack of fees. Of the households that opened a bank account when offered one, 84% reported the “ability to easily deposit and

³¹For instance, Dupas and Robinson (2013) obtained a 92% take-up rate when offering the option to open an account to a sample of microentrepreneurs, and Dupas et al. (2012) found a 62% take-up rate when offering the option to open an account to a random subset of unbanked individuals. The take-up rate in my study was 84%.

³²When considering only the treated households (i.e. those that when offered an account decided to open one) the percentage of active users is 95%.

³³There is a difference in the average withdrawal size, which is Rs. 2,751 for households whose main source of income comes from an entrepreneurial activity and Rs. 1,578 for the rest of the sample.

³⁴Part of the reason could be due to the fact that in Nepal insurance of deposits up to Rs. 200,000 is mandatory for banks and financial institutions in order to safeguard savings of small depositors.

³⁵Detailed percentages on the account features most valued are reported in Appendix Table A3, Panel B.

withdraw any amount of money any time” as their most valued feature (see Appendix Table A3, Panel B). This could partly be explained by the proximity of a local bank-branch. In fact, 99% of total transactions made by account users over the first year took place in the local bank-branches, despite the fact that they were open only twice a week for three hours. Moreover, at baseline, households are less likely to be banked, the higher the cost of going to the bank.³⁶ Similarly, the 2006 World Bank survey indicates that most Nepalese households do not have or use a bank account because of distance. Lack of withdrawal fees may also be playing a role. Whereas in the other two studies, account opening fees and minimum balance fees were waived, only in my study did withdrawal fees get waived as well. Anecdotal and survey evidence from Banerjee and Duflo (2011) and Dupas et al. (forthcoming) emphasizes the importance of high withdrawal fees in the poor’s decision not to use a savings account.

4 Results: Asset Accumulation and Crowding Out

4.1 Asset Accumulation

The high take-up and usage rates of the account that was offered suggest potential effects on asset accumulation and crowding out. In this section, I study 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, non-monetary assets, and total assets. Monetary assets include cash at home; money in banks; money in MFIs; money in ROSCAs; money kept for safekeeping by a friend, relative, or employer; and, for the treated households only, money they report having in the savings account they were offered by GONESA bank. Reported balances are highly predictive of actual account balances. For more than 95% of the treated households the reported balances are within a 5% difference of the actual balance they have in the account. Non-monetary assets include consumer durables, and livestock and poultry. Total assets include monetary and non-monetary assets. These detailed asset measures allow me to study not only whether there was any effect on monetary assets, but also whether there was any crowding out of other assets owned by the household.

The main results from this section can easily be appreciated in Figure 3, which shows the cumulative distribution functions (CDFs) of monetary, non-monetary, and total assets for the

³⁶The cost of going to the bank is defined as the transportation cost, by bus, from each slum to the center of Pokhara, where bank-branches are, as fraction of monetary assets.

treatment (black line) and control (grey line) groups a year after the introduction of the savings accounts. The monetary asset CDF for the 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 non-monetary assets, there do not seem to be sizeable differences. Finally, when considering total assets, the differences between treatment and control groups is smaller, consistent with the fact that monetary assets represent 35% of total assets. In fact, the two-sample Kolmogorov-Smirnov test for equality of distribution functions rejects that the distributions of monetary and total assets for the treatment group are the same as those of the control group; however, I cannot reject that the CDFs of non-monetary assets are the same for the treatment and the control groups.³⁷ These non-parametric results suggest that access to a savings account had a positive impact on asset accumulation.

In order to quantify the effects of the intervention, I 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.³⁸ Because there is a high dispersion of the asset variables,³⁹ I run the regressions in logarithms to compress the distribution and avoid having the results driven by outliers because of the excessive importance given to very large residuals.⁴⁰ I use the following regression specification:

$$Y_i = \beta_0 + \beta_1 T_i + \beta_2 X_i + \lambda_v + \epsilon_i \quad (1)$$

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 under 16; 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 household i clustered at the village level. I also include village fixed effects λ_v because the randomization was done within

³⁷The p-values are equal to 0.001, 0.047, and 0.308, for monetary assets, total assets, and non-monetary assets, respectively.

³⁸I do not analyze the average effect for those who actively used the account because, among those who opened an account, only 5% (26/477) did not actively use it.

³⁹For example, the median, mean, and the 99th percentile of monetary assets are Rs. 6,150, Rs. 21,868, and Rs. 211,800, respectively.

⁴⁰All households in the sample have some assets. In particular, there are no observations with zeroes for total assets, only 2 for monetary assets, and 5 for non-monetary assets. Other outcome variables considered have a higher number of zeroes. Hence, I use the transformation $\ln(\text{var}+1)$ and report those estimates. Nevertheless, none of the estimates changes in magnitude or significance when using alternative transformations, such as the inverse hyperbolic sine (MacKinnon and Magee 1990). These results are available upon request.

village. Standard errors are clustered at the village level because outcomes for households in a given village may not be independent. In the tables, I report the regression results both with and without controls and village fixed effects. The coefficient of interest is β_1 , which estimates the intent-to-treat effect.⁴¹

Table 3 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). Consistent with the non-parametric results, the estimated coefficients show that access to a savings account strongly increases monetary assets and total assets without decreasing non-monetary assets. In particular, column 2 shows that monetary assets increase by 49% for the average household in the treatment group.⁴² The increase in monetary assets causes a growth in total assets of 12%, as shown in column 6.⁴³ Without controls, coefficients are slightly larger in magnitude and remain statistically significant. In addition, columns 3-4 show that there is no statistically significant impact on non-monetary assets. This suggests 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.

While the regressions in logs show the proportional effects of having access to a savings account, one might be interested in the level effects. Thus, I have also run the regressions in levels. Due to the dispersion of the asset variables, I consider a regression estimator that is robust with respect to outliers because it minimizes a measure of dispersion of the residuals that is less sensitive to extreme values than the variance. In particular, I use the MS-estimator proposed by Maronna and Yohai (2000), which is the suggested robust fitting approach when some dummy variables are among the explanatory variables (Verardi and Croux 2009).⁴⁴ The results, reported in Appendix Table A4, show, consistent with the regressions in logs, that access to a savings account has a positive and statistically significant effect on increasing monetary assets and total assets, but does not affect non-monetary assets.

⁴¹Assuming that being offered the savings account does not have any other direct effect on savings other than motivating 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 ($\frac{\beta_1}{take-up\ rate}$).

⁴²As β_1 is the coefficient of a dummy variable in a log-linear regression, the correct effect size is not given by β_1 , but by $\hat{\gamma}_1 = \text{antilog}(\hat{\beta}_1 - 1) = \text{antilog}(0.40) - 1 = 0.49$.

⁴³Similarly, $\hat{\gamma}_1 = \text{antilog}(\hat{\beta}_1 - 1) = \text{antilog}(0.11) - 1 = 0.12$.

⁴⁴The results do not change when considering other robust estimators that use a different measure of dispersion of the residuals.

4.2 Differential Effects by Baseline Asset Levels

Both non-parametric and parametric results indicate that access to a savings account increased monetary assets and total assets. Nevertheless, the CDFs for the treatment and control group presented in Figure 3 suggest that effects are heterogeneous along the asset distribution. In particular, for monetary assets, the differences between the treatment and the control group CDFs are larger or smaller at different points of the distribution, signaling that it may be important to study the distribution of impacts.

In order to identify who gained the most from having access to a savings account, I run quantile regressions for the quartiles of the asset distribution on a dummy for treatment group assignment. The estimates of the ITT coefficients correspond to the estimated treatment effect for each quartile. Each coefficient is interpreted as the difference in monetary assets, a year after the introduction of the savings account, between two individuals, both positioned at a given quartile of the distribution of monetary assets, one in the treatment group, the other in the control group. Regression results are presented in Table 4. Considering monetary assets (column 1), I find statistically significant effects for the 25th and 50th percentiles, but not for the 75th percentile. Furthermore, the results tend to indicate that the treatment has a stronger effect at the bottom of the distribution than in the middle. In fact, the ITT coefficients for each of the three quartiles are statistically different from each other.^{45,46}

These findings suggest that being offered a savings account not only increases average monetary assets (as shown in Table 3) but also helps to reduce monetary asset inequality. The result can be partly explained by the fact that the fraction of households with a bank account decreases moving from the top of the assets distribution to the bottom. In fact, whereas 42% of households in the top quartile (richest) have at least one bank account, the percentage decreases to 17% for the third quartile, to 8% for the second, and to only 0.7% for the bottom quartile (poorest). Similarly, the lower the monetary asset level, the lower the access to formal and informal financial sources (including ROSCAs and MFIs).

Columns 2 and 3 of Table 4 consider non-monetary assets and total assets, respectively. A year after the introduction of the savings account, total assets are higher for treatment households than

⁴⁵The null hypothesis of equality of the ITT coefficients for the 25th and 50th percentiles, for the 25th and 75th percentiles, and for the 50th and 75th percentiles is rejected (the p-values are equal to 0.003, 0.004 and 0.070, respectively).

⁴⁶The same pattern is observed when I run the estimates in levels. Quantile regressions in levels are reported in Appendix Table A5.

for control households in the middle of the distribution, and the effect is statistically significant at the 5% level. The treatment, however, has no effect on non-monetary assets, consistent with the results from the OLS regressions shown in Table 3.

4.3 Asset Shifting

Finally, detailed survey data on all kinds of assets allow for examination of asset shifting. It is generally difficult to measure whether access to a savings account causes any crowding out of other types of saving. Most previous studies have data on one savings product only, or on savings products offered by the same institution.⁴⁷ Table 5 reports, in columns 1-10, the intent-to-treat effect on cash at home, money in banks other than GONESA, money in MFIs, money in ROSCAs,⁴⁸ and money safekept by someone trusted.⁴⁹ In addition, columns 11-12 show the ITT effect on all monetary assets except savings in GONESA bank.

As ITT estimates in columns 1-2 show, having access to a savings account appears to have reduced the amount of cash at home by more than 10%.⁵⁰ However, the effect is not statistically significant. Nevertheless, this finding, combined with the increase in monetary assets, indicates that keeping savings in the bank rather than in cash might decrease the ability to spend immediately and facilitate asset accumulation, as emphasized by Mullainathan and Shafir (2009). Columns 3-10 provide some indication that, when a savings account becomes part of a household's financial portfolio, there is not considerable asset shifting from other types of savings institutions, formal or informal.⁵¹ Also, estimates from columns 11-12 do not show a statistically significant change in monetary assets when savings in the account offered in the intervention are not included. Thus, although it is possible that, when offered access to the savings account, households made some

⁴⁷For example, Ashraf et al. (2006) show that the commitment savings accounts offered in their study do not crowd out savings in other accounts at the same bank. However, they cannot observe the effect on other forms of savings outside that bank.

⁴⁸Results are similar when considering, instead of money in ROSCAs, an indicator for being part of a ROSCA at endline.

⁴⁹Safekeeping does not appear to be common in this sample. Only 14 households (1.25% of the entire sample) declare to have given any money to someone for safekeeping. Moreover, only five households with an account at GONESA bank report to safekeep in the account money that belongs to someone else. Hence, while it is possible that treatment households deposited someone else's money into their account, the data do not appear to support this.

⁵⁰The correct effect size is given by $\hat{\gamma}_1 = \text{antilog} \hat{\beta}_1 - 1$, which is equal to -13% and -21% for columns 1 and 2, respectively.

⁵¹One might worry that the lack of differential change in ROSCAs contributions between treatment and control households might be due to an alternative explanation. In particular, it is possible that treatment households offered the account might have dropped out of some ROSCAs, causing some ROSCAs to stop operating, thus forcing control households to stop using those ROSCAs. However, I do not seem to find evidence supporting this. To the contrary, both the fraction of control and treatment households belonging to a ROSCA increased from baseline to endline (from 0.17 to 0.20 for control households, and from 0.19 to 0.21 for treatment households).

changes to their asset portfolio, I did not find evidence that the increase in monetary assets came entirely from crowding out of other financial institutions. Estimates in levels, reported in Appendix Table A6, show a similar pattern.⁵² Households have a sophisticated portfolio of financial transactions and relations. Hence, it is possible that they might see a savings account as a valuable addition to the set of financial institutions they use, but not as a substitute (or a superior option).⁵³ Another possible explanation could be that it may take more than a year for households to change their asset portfolio.

4.4 Differential Effects by Household Characteristics

Next, I study differential impacts along some household characteristics. I use the same regression specification as in (1), but add the interaction between the treatment dummy with one characteristic at a time. The baseline variables considered for the interaction are: female household head has above average years of education (three years or more); household has a bank account; household has no financial access, formal or informal,⁵⁴ and household is involved in an entrepreneurial activity.⁵⁵

Results are presented in Table 6. The coefficient on the interaction term is not statistically significant for all variables, except for “no financial access.” This suggests that, within the treatment group, the average effect of the treatment assignment is working fairly uniformly across the household characteristics considered. There do not appear to be heterogeneous treatment effects for households whose female head has above average level of education, nor for households involved in an entrepreneurial activity. Similarly, monetary assets of both banked and unbanked households that were offered a savings account were positively affected, but there is no statistically significant difference in the percentage increase.

I find some evidence, however, that access to a savings account had a larger, statistically significant, impact on raising monetary assets for households not previously linked to banks or informal

⁵²Similarly to the estimates in levels for total, monetary, and non-monetary assets, reported in Appendix Table A3, I use the MS-estimator proposed by Maronna and Yohai (2000) that is robust with respect to outliers.

⁵³For example, savings accounts and ROSCAs differ greatly across several characteristics. The social component of ROSCA participation, with its structure of regular contributions made publicly to a common fund, helps individuals to commit themselves to save (Gugerty 2007). This feature is not present in a formal savings account such as the one offered. Also, ROSCAs are usually set up to enable the group members to buy durable goods and are unsuitable devices to save for anticipated expenses that are incurred by several members at the same time (e.g., school expenses at the beginning of the school year), because only one member of a ROSCA can get the pot in each cycle.

⁵⁴The dummy variable “no financial access” is equal to one if the household does not have a bank account, nor belongs to any MFIs or ROSCAs.

⁵⁵A household is defined as being involved in an entrepreneurial activity if part of its weekly income comes from running a small shop, working as a driver, raising and selling livestock and poultry, selling agricultural products, making and selling garments, and making and selling alcohol. Results do not change when defining as entrepreneurs only those households whose *main* source of income comes from an entrepreneurial activity.

institutions than for households already linked to the financial system. Although households with no financial access at baseline had lower monetary assets a year after, the positive and statistically significant interaction coefficient in column 6 suggests that households with no access that were offered a savings account did accumulate more assets (yet the coefficient is marginally significant). Such results are consistent with the positive correlation between asset level and access to formal and informal financial sources discussed previously. Also, they are in line with the results of Ashraf et al. (2006) who found that commitment savings accounts got inactive savers to save, but did not improve savings behavior in bank customers who were already active savers.

5 Effects on Household Welfare

5.1 Household Expenditures and Income

The evidence provided thus far shows strong positive effects on asset accumulation. While this is an interesting result, it is relevant to determine whether there have been actual welfare improvements for the household. Hence, I study the effects of access to a savings account on household expenditures and income, and on the household perceived financial situation.

Table 7 estimates the average effect of having been assigned to the treatment group on the amount spent on expenditures categories in the 30 days prior to the endline survey.⁵⁶ I use the same regression specification as in (1). Estimates show that financial access has a positive and statistically significant effect on expenditures in education, meat and fish, and festivals and ceremonies. There appear to be no statistically significant impact on expenditures on clothes and footwear, dowries, and other expenditures, which include personal care items, house cleaning articles, house maintenance, and bus and taxi fares.

Being offered a savings account appears to increase overall health expenditures, but the effect is not statistically significant. As the endline survey separately collected expenditures in medicines and traditional remedies, and expenditures in health services (e.g., hospital charges and doctors fees), I am able to estimate their impact individually.⁵⁷ Table 8 reports the effects on the health expenditures subgroups and on income. Regression estimates in columns 1-2 show that, considering the entire population in the study, financial access increases health expenditures in the form of

⁵⁶All expenditures items collected in the endline survey are included. Regarding food expenditures, only information on consumption of meat and fish was collected. Regression results are fairly similar when expenditures in each item are calculated as the fraction of total expenditures, or as a dummy equal to one if the household spent money for that item.

⁵⁷Medicines and traditional remedies were not surveyed separately, but in a unique category.

medicines and traditional remedies by more than 45%.⁵⁸ 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, in columns 7-10, results are much stronger and both effects are statistically significant at the 5% level.⁵⁹

A plausible explanation of these results could be that treatment households spend more on medicines to treat illnesses early on so that illnesses do not worsen and they do not have to incur hospitalization charges later on. This is supported by previous research showing that patients who use more drugs consume less inpatient care (e.g., Lichtenberg 2000, 2007; Goldman, Joyce, and Karaca-Mandic 2006). In addition, it is also possible that, a year after the start of the intervention, the health capital of treatment households is higher than is that of control households. So a health shock affects treatment households less because regular and preventative treatments have strengthened its members, who are able to avoid serious illnesses that may require hospitalization. A more varied diet that includes meat and fish (columns 7-8, Table 7) could also contribute to strengthen the health of treatment households.

These explanations are consistent with the effects we observe on income in columns 5-6 and 11-12. In fact, for the full sample, there is a positive but not statistically significant effect on weekly income earned by the household. When restricting the sample to those households hit by a health shock in the last 30 days prior to the endline, the weekly income of the average treatment household is about 50% higher than the one of the average control household, and this difference is statistically significant at the 10% level (column 12). Moreover, the weekly income of the average control household hit by a shock is 40% lower than the one of the average control household in the full sample (Rs. 1,799 versus Rs. 3,012). Hence, this evidence tends to suggest that households offered a savings account do not suffer large changes in weekly income when hit by a health shock during the previous month. This would be consistent with members of treatment households being affected by a health shock less strongly than control households, as well as being able to recover faster treating their illness early, thus missing less working days. A decrease in income volatility might also decrease the need to borrow money.

⁵⁸As noted previously, $\hat{\gamma}_1 = \text{antilog} \hat{\beta}_1 - 1 = \text{antilog}(0.39) - 1 = 0.48$.

⁵⁹About 23% of the households in the study were hit by one health shock in the 30 days prior to the endline survey. Access to a savings account does not appear to have reduced exposure to health risk. In fact, 23% of the treatment households and 22% of the control households were hit by a health shock, and the difference is not statistically significant.

The endline survey also collected expenditures in education in four different subgroups: school fees, textbooks, uniforms, and school supplies, such as pens and pencils. Regression results reported in Table 9, in columns 1-10, show large effects on education-related expenditures. The possibility of opening a savings account raises investment in human capital in the form of textbooks and school uniforms by more than 50%. This effect is equivalent to the treatment spending Rs. 494 more in textbooks, and Rs. 183 more in school uniforms. There is also some evidence of a positive effect for expenditures on school fees and materials. The increase in investment in human capital is on the intensive margin, not on the extensive margin. In fact, as columns 9-10 of Table 9 show, when restricting the sample to those households with children 6-16 years of age, the treatment group is not more likely than the control group to have at least one of their children enrolled in school. This would be expected because an already high percentage of households with children 6-16 years of age has at least one child in school (82%). No effect on enrollment and a positive effect on school fees could signal that some parents in the treatment group are pulling their children out of public schools, which provide low-quality education, and paying tuition fees to send them to private schools, as shown by Banerjee and Duflo (2007).⁶⁰ The estimated effects on the education-related expenditures are likely to be a lower estimate of the actual effects. The peak in withdrawals for education expenditures, as shown in Figure 1, was around the beginning of the school year, which happened almost two months before the start of the of the endline survey. In fact, restricting the sample to those households with children 6-16 years of age enrolled in school, the impact of access to a savings account on the overall expenditures in education is higher (0.780 versus 0.586 for the entire sample).

Finally, columns 11-14 of Table 9 investigate whether having access to a savings account reduces expenditures on temptation goods (i.e., tobacco and cigarettes, alcohol, and gambling) in the 30 days prior to the endline survey. Temptations were surveyed separately from the expenditures categories considered previously. I analyze whether the household spent any money in temptation goods, and how much the female household head reports having spent. The negative signs of the intent-to-treat coefficients only offer suggestive evidence that having access to a savings account decreases the likelihood of having spent money on temptations goods, as well as the amount spent. This is in line with the idea, developed by Mullainathan and Shafir (2007), that keeping money in a bank could reduce one's ability and temptation to spend it.

⁶⁰In addition, even though public schools are not allowed to charge tuition fees, many public schools get around this by charging fees under the name of school repairs, or extracurricular activities.

5.2 A Falsification Test

Overall, evidence from Tables 7-9 indicates that access to a savings account has a significant positive effect on health-, education-, meat and fish-, and festival-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 as reported by the account holders in the second endline survey.

An alternative way to test whether the higher expenditures on education and health for the treatment group are explained by having a savings account is to show that there is no effect for those treatment households that never withdrew money from their accounts. In order to test this formally, I build a dummy variable equal to one if the household made at least one withdrawal. I then regress expenditures against the intent-to-treat dummy, the withdrawal dummy, and their interaction.

Regression results, not reported but available upon request, do not show any impact, on expenditures on health, education, meat and fish, and festivals and ceremonies for those households that never made a withdrawal. In fact, the ITT coefficient is not statistically significant. The interaction coefficients instead are large in magnitude and statistically significant at the 1% level, and their sign is positive. The only negative interaction coefficient is that associated with the expenditures in health services, which is consistent with the negative effect of having access to a savings account on such expenditures. Hence, it seems to be that the effects on investments in health and education, and on expenditures for festivals and meat and fish, are driven by those households that actively use their savings accounts, both accumulating and withdrawing money. As this falsification test could be suffering from an omitted variable bias, this evidence is only suggestive.

5.3 Overall Financial Situation

Financial access might improve the overall financial situation of the household. A year after the intervention, households offered a savings account seem to have a level of net borrowing (defined as amount borrowed minus amount lent) that is Rs. 7,055 less than households who were not. This difference, although not statistically significant, is quite large and equivalent to more than four times the average household weekly income at baseline.⁶¹ Moreover, treatment households have a statistically significant higher net worth than control households. These findings could be

⁶¹Results not shown but available upon request.

interpreted as an indication that access to a savings account helps to build precautionary savings that can be used in the event of a negative shock instead of borrowing money, a much costlier alternative. In fact, when hit by a negative shock, treatment households appear more likely than control households to cope using savings in a bank than to cope selling household possessions, or borrowing money.

Finally, treatment households perceive themselves to be better off financially. Table 10 presents the average effects of access to a savings account on the households' self-assessed financial situations. The endline survey a year after the start of the intervention contained three questions aimed at measuring the household's perceived financial situation. As shown in columns 1-2, 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 3-4 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 security, as presented in columns 5-6.

6 Conclusion

The poor often lack access to formal financial services, such as savings accounts, and have to adopt costly alternative strategies to save. Access to formal financial services that enable saving and asset building might be important for low-income households to smooth sudden income fluctuations due to negative shocks such as medical emergencies. Savings can also provide capital to be invested in education, health, and to start or improve an income-generating activity.

I use a randomized field experiment and the combination of pre- and post-survey data with bank administrative data to study the effects of access to a savings account on household savings behavior and welfare. My study shows that there is high demand for savings accounts and that households regularly deposit small amounts of money. Poor households save more if given access to basic savings accounts with no fees than if they have to rely on alternative informal strategies to accumulate assets. Moreover, the increase in savings does not appear to be strongly due to crowding out of assets elsewhere in the balance sheet. The analysis illustrates the results for the entire distribution, not only the average effects. Furthermore, access to savings accounts enables households to build some precautionary savings that could be used to cope with unexpected shocks instead of contracting costly loans. Finally, my study shows that savings accounts are beneficial

even when the households do not use the money saved for microenterprise development because they permit households to make productivity-enhancing investments in human capital and health.

These findings suggest that increasing the scope of banking services could potentially lead to high returns in the long run. In addition, banking the poor, could also increase the ability to apply mechanisms, such as defaults, that have been shown to be powerful in increasing savings in other settings (Madrian and Shea 2001; Thaler and Benartzi 2004; Beshears et al. 2012).

High take-up and usage rates may partly be explained by convenient access and lack of fees of any kind. However, banks might not find managing small accounts appealing because of the high administration costs associated with running them. Nevertheless, costs might be reduced providing access to local bank-branches that operates for limited hours. In addition, some efforts are being made to design savings products that meet the needs of the poor and are economically viable.

Some caveats apply to this study. First, I consider a general sample of poor households in Nepal; future research should assess whether the large and positive effects of offering a basic savings account without fees is generalizable to households in other countries and if offered to men as opposed to women. Similar results in other settings would validate the importance of account characteristics such as simplicity and lack of fees for poor households. Second, the design of the field experiment with randomization at the household level, rather than at the village level, does not allow me to study the general equilibrium effects of giving access to bank accounts to the entire sample of households. Although this is a relevant topic on which future work should focus, my study aimed at first showing that basic savings accounts are in high demand and positively affect households' savings and investment behavior.

REFERENCES

- Abraham, Ronald, Felipe Kast, and Dina D. Pomeranz.** 2011. “Insurance Through Savings Accounts: Evidence from a Randomized Field Experiment among Low-Income Micro-Entrepreneurs in Chile.” Unpublished.
- Ananth, Bindu, Dean Karlan, and Sendil Mullainathan.** 2007. “Microentrepreneurs and Their Money: Three Anomalies.” Unpublished.
- Aportela, Fernando.** 1999. “Effects of Financial Access on Savings by Low-Income People.” Unpublished.
- Ashraf, Nava, Dean Karlan, and Wesley Yin.** 2006. “Tying Odysseus to the Mast: Evidence from a Commitment Savings Product in the Philippines.” *Quarterly Journal of Economics*. 121(2): 635–672.
- Banerjee, Abhijit V., and Esther Duflo.** 2007. “The Economic Lives of the Poor.” *Journal of Economic Perspectives*, 21(1): 141–167.
- Banerjee, Abhijit V., and Esther Duflo.** 2011. *Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty*. New York: NY, Public Affairs.
- Banerjee, Abhijit V., Esther Duflo, Rachel Glennerster, and Cynthia Kinnan.** 2010. “The Miracle of Microfinance? Evidence from a Randomized Evaluation.” Unpublished.
- Bruhn, Miriam, and Inessa Love.** 2009. “The Economic Impact of Banking the Unbanked: Evidence from Mexico.” World Bank Policy Research Working Paper 4981.
- Brune, Lasse, Xavier Giné, Jessica Goldberg, and Dean Yang.** 2011. “Commitments to Save: A Field Experiment in Rural Malawi. Unpublished.
- Burgess, Robin, and Rohini Pande.** 2005. “Do Rural Banks Matter? Evidence from the Indian Social Banking Experiment.” *American Economic Review*, 95(3): 780–795.
- Choi, James, David I. Laibson, Brigitte Madrian, and Andrew Metrick.** 2002. “Defined Contribution Pensions: Plan Rules, Participants Decisions, and the Path of Least Resistance.” in *Tax Policy and the Economy*, ed. James M. Poterba. Cambridge, MA: MIT Press.
- Collins, Daryl, Jonathan Morduch, Stuart Rutherford, and Orlanda Ruthven.** 2009. *Portfolios of the Poor: How the World’s Poor Live on \$2 a Day*. Princeton, NJ: Princeton University Press.
- Dupas, Pascaline, Sarah Green, Anthony Keats, and Jonathan Robinson.** Forthcoming. “Challenges in Banking the Rural Poor: Evidence from Kenya’s Western Province.” *National Bureau of Economic Research: Africa Project Conference Volume*.
- Dupas, Pascaline, and Jonathan Robinson.** 2013. “Savings Constraints and Microenterprise Development: Evidence from a Field Experiment in Kenya.” *American Economic Journal*:

Applied Economics. 5(1): 163–192.

Dupas, Pascaline, and Jonathan Robinson. Forthcoming. “Why Don’t the Poor Save More? Evidence from Health Savings Experiments,” *American Economic Review*.

Ferrari, Aurora, Guillemette Jaffrin, and Sabin R. Shreshta. 2007. *Access to Financial Services in Nepal*. The World Bank, Washington, D.C.

Goldman, Dana P., Geoffrey F. Joyce, and Pinar Karaca-Mandic. 2006. “Varying Pharmacy Benefits with Clinical Status: The case of Cholesterol-Lowering Therapy.” *American Journal of Managed Care*, 12(1): 21–28.

Gugerty, Mary Kay. 2007. “You can’t save alone: Commitment in Rotating Savings and Credit Associations in Kenya,” *Economic Development and Cultural Change*, 55: 251–282.

International Monetary Fund. 2011. “Nepal Country Report No. 11/319.” Asia and Pacific Department.

Karlan, Dean, Margaret McConnell, Sendil Mullainathan, and Jonathan Zinman. 2011. “Getting to the Top of Mind: How Reminders Increase Savings.” Unpublished.

Karlan, Dean, and Jonathan Morduch. 2010. “Access to Finance.” in *Handbook of Development Economics*, ed. Dani Rodrik and Mark Rosenzweig, Volume 5, Chapter 2, Amsterdam: North-Holland, Elsevier.

Kendall, Jake. 2010. “A Penny Saved: How Do Savings Accounts Help the Poor?” FAI Focus Note. New York, NY: Financial Access Initiative.

Kast, Felipe, Stephen Meier, and Dina D. Pomeranz. 2011. “Undersavers Anonymous: Evidence on Self-Help Groups and Peer Pressure as a Savings Commitment Device.” Unpublished.

Lichtenberg, Frank R. 2000. “The Effect of Pharmaceutical Use and Innovation on Hospitalization and Mortality,” in *Productivity, Technology and Economic Growth*, ed. Bart van Ark, Simon K. Kuipers, and Gerard H. Kuper, 317344. Boston: Kluwer Academic.

Lichtenberg, Frank R. 2007. “The Impact of New Drugs on U.S. Longevity and Medical Expenditure, 19902003: Evidence from Longitudinal, Disease-Level Data.” *American Economic Review*, 97(2): 438-443.

MacKinnon, James G., and Lonnie Magee. 1990. “Transforming the Dependent Variable in Regression Models.” *International Economic Review*, 31(2): 315–339.

Madrian, Brigitte C., and Dennis F. Shea. 2001. “The Power of Suggestion: Inertia in 401(k) Participation and Savings Behavior.” *Quarterly Journal of Economics*, 116(4): 1149–1187.

Mas, Ignacio, and Dan Radcliffe. 2010. “Mobile Payments go Viral: M-PESA in Kenya,” in *Yes Africa Can: Success Stories from a Dynamic Continent*, ed. Punam Chuhan-Pole and Manka Angwafo, 353–369. Washington, D.C.: World Bank.

McKinsey and Company. 2010. “Global Financial Inclusion,” Washington, D.C.: McKinsey Publishing.

Morduch, Jonathan. 1995. “Income Smoothing and Consumption Smoothing.” *Journal of Economic Perspectives*, 9(3): 103–114.

Mullainathan, Sendil. 2004. “Psychology and Development Economics.” Unpublished.

Mullainathan, Sendil, and Eldar Shafir. 2009. “Savings Policy and Decisionmaking in Low-Income Households.” in *Insufficient Funds: Savings, Assets, Credit and Banking Among Low-Income Households*, ed. Michael Barr and Rebecca Blank, 121–145. New York: Russell Sage Foundation Press.

Nepal Rastra Bank. 2011. “Quarterly Economic Bulletin - Mid October 2011.”

Orzsag, Peter, and Robert Greenstein. 2005. “Toward Progressive Pensions: a Summary of the U.S. Pension System and Proposals for Reform.” in *Inclusion in the American Dream: Assets, Poverty, and Public Policy*, ed. Michael Sherradan. New York: Oxford University Press.

Thaler, Richard H., and Shlomo Benartzi. 2004. “Save More Tomorrow: Using Behavioral Economics to Increase Employee Saving.” *Journal of Political Economy*, 112(1): 164–187.

Verardi, Vincenzo, and Cristophe Croux. 2009. “Robust regression in Stata.” *The Stata Journal*, 9(3): 439–453.

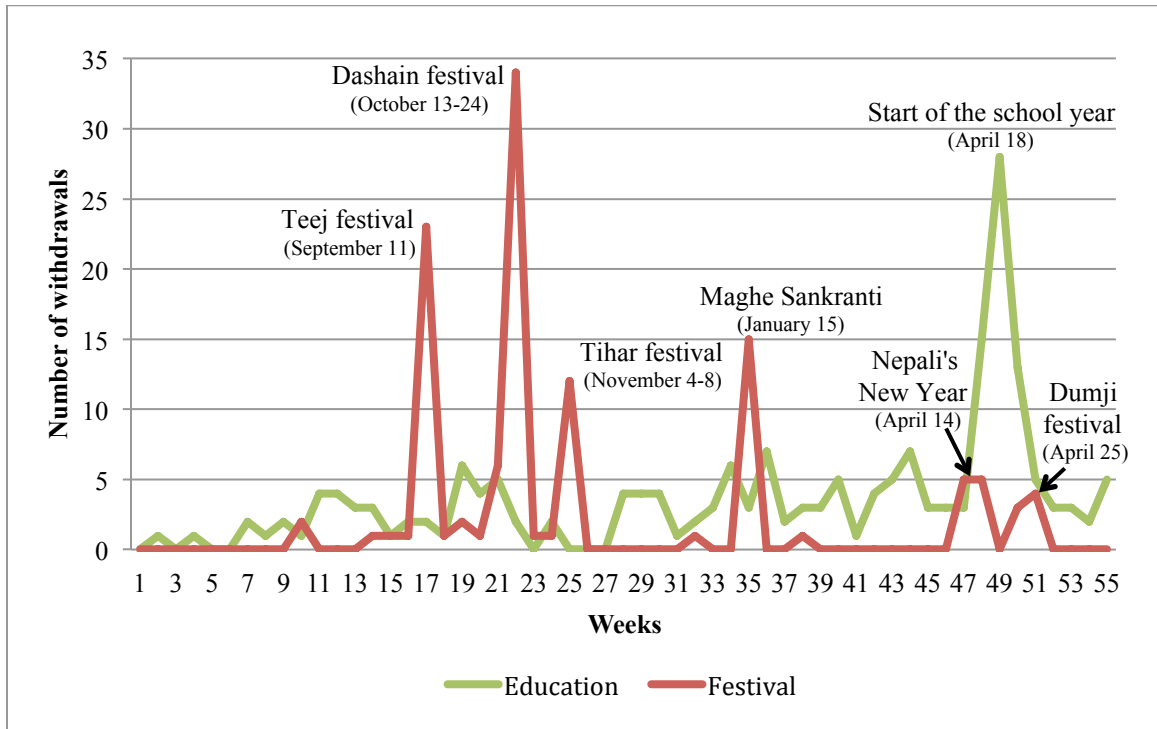


Figure 1: Number of withdrawals per week for education- and festival-related expenditures

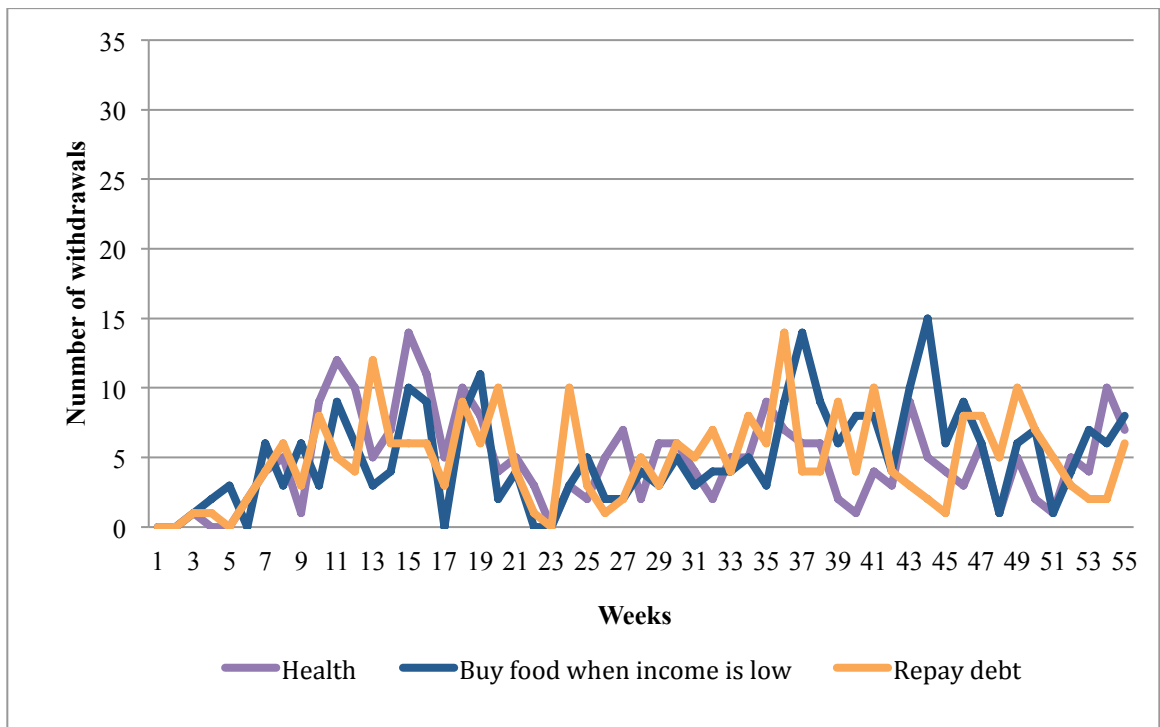


Figure 2: Number of withdrawals per week for health-related expenditures, to buy food when income is low, and to repay a debt

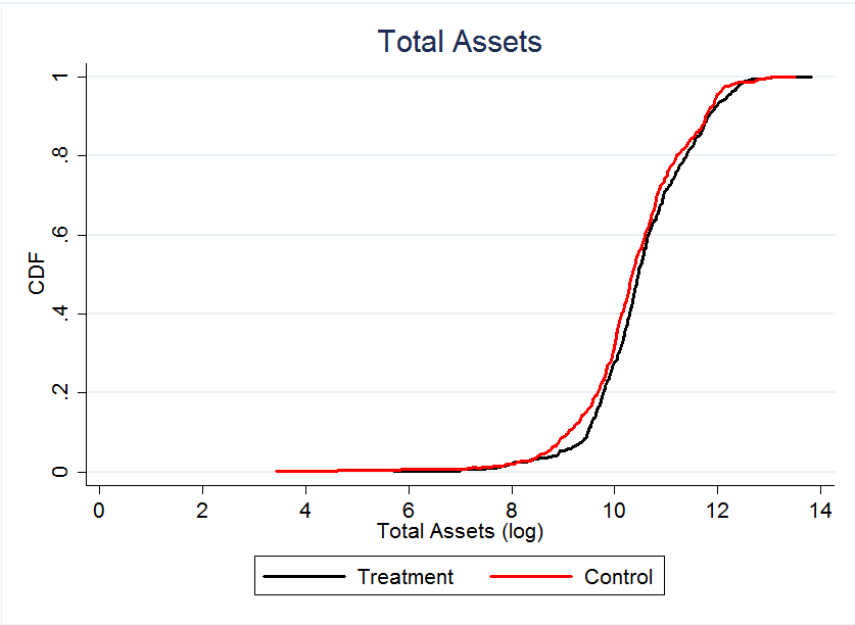
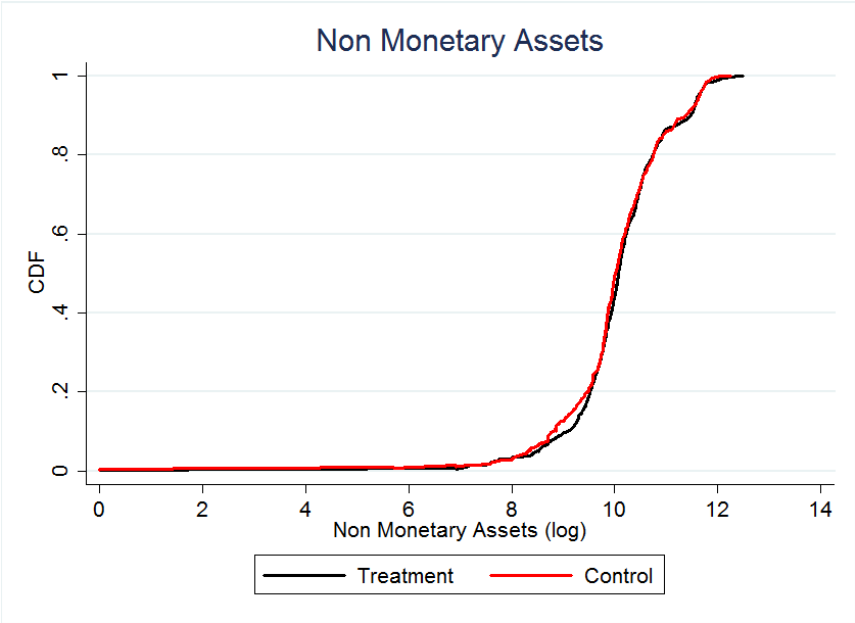
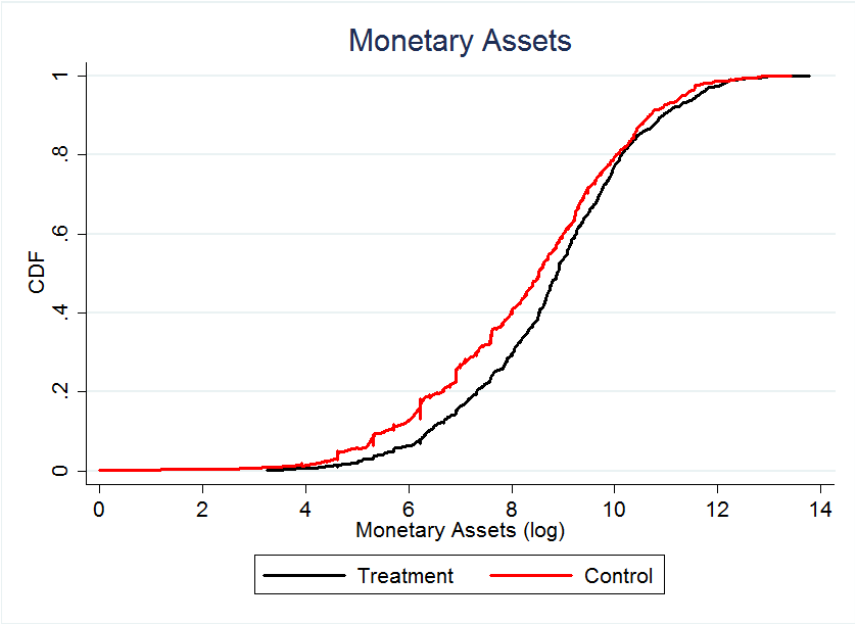


Figure 3: CDFs of Monetary, Non Monetary, and Total Assets by treatment status (after a year)l

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
Proportion married/living with partner ¹	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
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
Log(total income last week + 1)	1,118	3.49 (3.70)	3.48 (3.69)	3.50 (3.72)	0.08
Proportion of households entrepreneurs	1,118	0.17 (0.37)	0.17 (0.37)	0.17 (0.38)	0.26
Proportion of households owning the house	1,115	0.84 (0.37)	0.83 (0.38)	0.85 (0.36)	0.74
Proportion owning the land on which the house is built	1,112	0.78 (0.41)	0.77 (0.42)	0.79 (0.41)	0.77
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 moneylenders	462	0.17 (0.37)	0.15 (0.36)	0.18 (0.38)	0.75
Coped borrowing from other sources	462	0.09 (0.28)	0.10 (0.30)	0.08 (0.27)	-0.76
Coped cutting consumption	462	0.01 (0.08)	0.01 (0.10)	0.01 (0.06)	0.68
Coped selling household possessions	462	0.01 (0.08)	0.01 (0.07)	0.01 (0.09)	0.47
Coped in other ways	462	0.05 (0.21)	0.05 (0.22)	0.04 (0.20)	-0.52

¹Marital 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
Proportion 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
Proportion 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
Proportion of households with money in an MFI	1118	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
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 Non-Monetary 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 Non-Monetary Assets + 1)	1,118	9.85 (1.32)	9.85 (1.28)	9.86 (1.36)	0.16
Log(non-monetary assets from consumer durables + 1)	1,118	9.69 (1.32)	9.69 (1.24)	9.69 (1.39)	-0.05
Log(non-monetary 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*
Proportion of households with outstanding loans	1,118	0.89 (0.31)	0.88 (0.33)	0.91 (0.29)	1.61
Received loan from shopkeepers	1,118	0.40 (0.49)	0.38 (0.49)	0.42 (0.49)	1.26
Received loan from MFIs	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 moneylenders	1,118	0.13 (0.34)	0.12 (0.32)	0.14 (0.35)	1.33
Received loan from banks	1,118	0.05 (0.22)	0.05 (0.22)	0.05 (0.23)	0.29
Received loan from ROSCAs	1,118	0.03 (0.17)	0.03 (0.16)	0.03 (0.18)	0.80

Table 2: Account Usage

	Obs.	Mean	Std. Dev.	Median	Min	Max
Take-up rate	567	0.84	0.37	-	0	1
Proportion actively using the account ¹	567	0.80	0.40	-	0	1
Weeks savings product has been in operation (by slum)	19	53.59	2.23	54	53	55
Total number of transactions made	451	47.54	28.17	46.00	2.00	106.00
Total number of deposits made	451	44.02	26.32	42.00	2.00	98.00
Number of deposits per week	451	0.82	0.49	0.78	0.04	1.81
Weekly amount deposited	451	131.04	187.33	73.43	0.83	1,649.44
Average size of deposits per week	451	268.95	422.62	140.63	14.38	3,962.88
% of times deposits made in the 1 st open day of the week	451	0.51	0.14	0.51	0.00	1.00
Amount deposited in the 1 st open day of the week	451	71.72	102.73	37.45	0.00	969.69
% of times deposits made in the 2 nd open day of the week	451	0.49	0.14	0.49	0.00	1.00
Amount deposited in the 2 nd open day of the week	451	75.82	119.96	38.83	0.00	935.53
Total number of withdrawals made	451	3.52	3.59	2.00	0.00	28.00
Average amount withdrawn	376	1,774.26	3,471.19	957.74	133.33	35,000.00
Total amount withdrawn	451	5,081.01	8,415.65	2,250.00	0.00	70,000.00
Average Balance After 55 Weeks	451	2,361.66	5,144.16	704.28	1.46	51,012.51

Source: Bank administrative data. ¹Made at least two deposits within the first year of being offered the account.

Table 3: Effects on Assets

	Monetary		Non-Monetary		Total	
	Assets ¹		Assets ¹		Assets ¹	
	(1)	(2)	(3)	(4)	(5)	(6)
ITT: Offered the Savings Account	0.461*** (0.110)	0.404*** (0.091)	0.075 (0.077)	0.058 (0.056)	0.154** (0.065)	0.112** (0.047)
Age of female household head		0.005 (0.005)		0.000 (0.003)		0.001 (0.003)
Years of schooling		0.092*** (0.014)		0.026*** (0.010)		0.033*** (0.008)
Married/living with partner ²		-0.071 (0.160)		0.073 (0.145)		-0.012 (0.095)
Number of children below 16		0.023 (0.054)		0.009 (0.030)		0.027 (0.027)
Number of household members		-0.003 (0.040)		0.041 (0.019)		0.005 (0.014)
Main source of household income ³		-0.001 (0.009)		0.006 (0.005)		0.002 (0.004)
Value of livestock and poultry ¹		0.026** (0.012)		0.024*** (0.008)		0.014** (0.006)
Money in ROSCAs ¹		0.026 (0.017)		0.013** (0.006)		0.008 (0.007)
Money in banks ¹		0.049*** (0.012)		0.022*** (0.006)		0.011 (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*** (0.136)	4.825*** (0.548)	9.990*** (0.069)	4.799*** (0.829)	10.369*** (0.071)	3.812*** (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. ³There are 20 income sources: sales of agricultural production, agricultural labor, sales of livestock and poultry, sand and stone collection labor, construction labor, driver, bus fare collector, helper, small shop, garment and wool spinning, jewelry, government job, teacher, pension, rent, remittances, alcohol making, other full time job, other part-time job, other income source.

Table 4: Impact on Assets (Quantile Regressions)

	Monetary Assets¹	Non-Monetary Assets¹	Total Assets¹
25th percentile	(1)	(2)	(3)
ITT: Offered the Savings Account	0.765*** (0.142)	0.013 (0.095)	0.088 (0.060)
Constant	6.909*** (0.067)	9.636*** (0.065)	9.831*** (0.034)
50th percentile			
ITT: Offered the Savings Account	0.366*** (0.133)	0.068 (0.045)	0.117** (0.046)
Constant	8.517*** (0.089)	10.010*** (0.031)	10.340*** (0.040)
75th percentile			
ITT: Offered the Savings Account	0.192 (0.179)	-0.009 (0.094)	0.152 (0.103)
Constant	9.741*** (0.143)	10.567*** (0.072)	11.019*** (0.086)
Obs.	1,118	1,118	1,118

Note: Quantile regressions. Standard errors reported in parenthesis. Statistically significant coefficients are indicated as follows: *10%; **5%; ***1%. ¹Dependent variable in natural logs.

Table 5: Asset Shifting to/from Other Financial Institutions

	Cash at Home ¹		Money in Other Banks ¹		Money in MFIs ¹		Money in ROSCAs ¹		Money Safekept by Someone Trusted ¹		All Monetary Assets Except Savings in GONESA Bank ¹	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
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)	0.147 (0.186)	0.059 (0.152)	0.069 (0.077)	0.040 (0.075)	0.019 (0.147)	-0.044 (0.128)
Age of female household head		0.007 (0.007)		0.030** (0.010)		-0.008 (0.014)		-0.011 (0.018)		0.001 (0.004)		0.003 (0.006)
Years of schooling		0.115*** (0.019)		0.177** (0.055)		0.105** (0.045)		0.113*** (0.034)		0.016* (0.010)		0.124*** (0.017)
Married/living with partner ²		0.218 (0.148)		-0.297 (0.340)		0.630 (0.406)		0.361 (0.285)		0.137* (0.074)		0.028 (0.198)
Number of children below 16		-0.040 (0.057)		0.016 (0.086)		-0.041 (0.119)		-0.016 (0.118)		-0.030 (0.045)		-0.017 (0.059)
Number of household members		-0.011 (0.038)		0.008 (0.067)		0.064 (0.058)		0.031 (0.092)		0.005 (0.018)		-0.023 (0.039)
Main source of household income ³		0.007 (0.008)		0.027 (0.018)		-0.020 (0.020)		0.004 (0.017)		0.004 (0.004)		-0.003 (0.013)
Value of livestock and poultry ¹		0.026* (0.015)		0.008 (0.016)		0.049* (0.025)		0.057** (0.026)		-0.004 (0.006)		0.033*** (0.013)
Money in ROSCAs ¹		0.035** (0.015)		0.097** (0.040)		-0.003 (0.031)		0.271*** (0.050)		0.013 (0.016)		
Money in banks ¹		0.052*** (0.018)		0.436*** (0.043)		0.084** (0.036)		0.115*** (0.040)		0.010 (0.010)		
Cash at home ¹		0.167*** (0.030)										
Money in MFIs ¹						0.469*** (0.049)						
Safekept money ¹										0.030 (0.040)		
Total monetary assets ¹												0.405*** (0.052)
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)	1.846*** (0.168)	-0.036 (0.910)	0.077 (0.047)	-0.226 (0.195)	8.317*** (0.135)	4.283*** (0.606)
Village dummies	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
R ² (overall)	0.001	0.221	0.000	0.269	0.001	0.320	0.000	0.139	0.001	0.048	0.000	0.334
Mean of Dep.Var. (Control Group)	2,601.92		8,247.19		4,060.48		4,281.63		86.03		19,277.24	
Std. Dev. of Dep.Var. (Control Group)	5,830.98		40,378.34		8,185.08		12,947.20		1,148.19		48,870.46	

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. ³There are 20 income sources: sales of agricultural production, agricultural labor, sales of livestock and poultry, sand and stone collection labor, construction labor, driver, bus fare collector, helper, small shop, garment and wool spinning, jewelry, government job, teacher, pension, rent, remittances, alcohol making, other full time job, other part-time job, other income source.

Table 6: Heterogeneous Treatment Effects

	Monetary Assets ¹							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ITT: Offered the Savings Account	0.439*** (0.135)	0.513*** (0.115)	0.438*** (0.118)	0.442*** (0.109)	0.382*** (0.126)	0.261*** (0.101)	0.441*** (0.134)	0.406*** (0.118)
Above average education at baseline	0.749*** (0.173)	0.508*** (0.141)						
ITT*Above average education	0.040 (0.261)	-0.256 (0.246)						
Having a bank account at baseline			1.436*** (0.227)	0.549*** (0.168)				
ITT*Having a bank account			0.066 (0.246)	-0.220 (0.217)				
No financial access at baseline					-1.465*** (0.238)	-0.506*** (0.253)		
ITT*No financial access					0.278 (0.288)	0.460* (0.259)		
Entrepreneurial activity at baseline							0.735*** (0.192)	0.157 (0.152)
ITT*Entrepreneurial activity							-0.036 (0.245)	-0.017 (0.220)
Constant	8.070*** (0.131)	4.900*** (0.534)	8.085*** (0.142)	4.759*** (0.550)	8.800*** (0.145)	4.868*** (0.637)	8.099*** (0.137)	4.847*** (0.552)
Additional controls ²	No	Yes	No	Yes	No	Yes	No	Yes
Village dummies	No	Yes	No	Yes	No	Yes	No	Yes
Obs.	1,118	1,113	1,118	1,113	1,118	1,113	1,118	1,114
R ² (overall)	0.052	0.336	0.100	0.340	0.126	0.338	0.046	0.341

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 variable in natural logs. ²Additional controls include monetary assets at baseline, age, 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 (not included in specifications 7 and 8), value of livestock and poultry, money in ROSCAs (not included in specifications 5 and 6), and money in banks (not included in specifications 3 and 4) at baseline.

Table 7: Effects on Household Expenditures Categories¹

	Health ²		Education ³		Meat and Fish ⁴		Clothes and Footwear ⁵		Festivals and Ceremonies ⁶		Dowries		Other Expenditures ⁷	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
ITT: Offered the Savings Account	0.108 (0.186)	0.112 (0.188)	0.586* (0.354)	0.495* (0.287)	0.493*** (0.154)	0.446*** (0.157)	-0.160 (0.178)	-0.212 (0.156)	0.260*** (0.098)	0.260*** (0.099)	-0.142 (0.127)	-0.149 (0.130)	0.017 (0.093)	-0.032 (0.071)
Age of female household head		0.005 (0.012)		-0.039*** (0.014)		-0.015 (0.011)		-0.016 (0.009)		0.005 (0.007)		0.008 (0.006)		0.006 (0.005)
Years of schooling		-0.015 (0.054)		0.095** (0.045)		0.097** (0.040)		0.121 (0.029)		0.022 (0.021)		0.015 (0.023)		0.079*** (0.018)
Married/living with partner ²		0.177 (0.460)		0.374 (0.368)		0.455 (0.409)		0.771** (0.367)		0.121 (0.173)		0.117 (0.191)		0.101 (0.277)
Number of children below 16		0.040 (0.120)		0.833*** (0.172)		-0.198* (0.107)		-0.154 (0.131)		-0.015 (0.088)		0.010 (0.055)		-0.014 (0.030)
Number of household members		0.031 (0.077)		0.152 (0.096)		0.132 (0.081)		0.129 (0.088)		-0.001 (0.035)		0.005 (0.039)		0.076*** (0.019)
Main source of household income ⁸		0.011 (0.011)		0.024 (0.016)		-0.002 (0.019)		0.023 (0.020)		0.010 (0.007)		0.003 (0.009)		0.011* (0.006)
Value of livestock and poultry ¹		0.013 (0.022)		0.034 (0.023)		0.035 (0.027)		-0.003 (0.025)		0.029*** (0.009)		0.020** (0.010)		0.006 (0.015)
Money in ROSCAs ¹		-0.075** (0.036)		-0.024 (0.047)		0.068** (0.030)		0.044 (0.037)		0.021 (0.021)		0.020 (0.017)		-0.002 (0.015)
Money in banks ¹		0.042 (0.036)		0.076 (0.031)		0.054** (0.023)		0.042 (0.024)		0.030 (0.023)		0.039 (0.025)		0.047*** (0.013)
Constant	2.305*** (0.328)	2.484*** (0.815)	4.352*** (0.367)	1.003 (0.890)	4.624*** (0.143)	4.618*** (0.737)	3.763*** (0.244)	2.096** (0.821)	0.616*** (0.198)	-0.177 (0.375)	0.605*** (0.175)	-0.368 (0.395)	5.108*** (0.132)	4.995*** (0.309)
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	0.091	0.006	0.258	0.005	0.055	0.001	0.120	0.004	0.197	0.002	0.117	0.000	0.172
Mean of Dep. Var. (Control Gr.)	1,864.62		1,982.48		1,052.41		799.098		110.327		291.461		279.802	
Std. Dev. of Dep. Var. (Control Gr.)	10,683.04		3,342.15		1,394.34		1,609.32		784.867		4,295.12		283.758	

Note: Robust standard errors, clustered at the village level, reported in parenthesis. Statistically significant coefficients are indicated as follows: *10%; **5%; ***1%. ¹Expenditures sustained 30 days prior to the endline survey, in natural logs. ²Health expenditures include medicines and traditional remedies, and health services (e.g., hospital charges). ³Education expenditures include school fees, textbook, school uniforms, school supplies (e.g., pencils, pens). ⁴Meat and fish expenditures include goat, lamb, poultry, and fish. ⁵Clothes and footwear for children, male and female adults. ⁶Cerimonies include birth, marriage, funeral and other cerimonies. ⁷Other expenditures include personal care items, house cleaning articles, house maintenance, bus and taxi fares. ⁸There are 20 income sources: sales of agricultural production, agricultural labor, sales of livestock and poultry, sand and stone collection labor, construction labor, driver, bus fare collector, helper, small shop, garment and wool spinning, jewelry, government job, teacher, pension, rent, remittances, alcohol making, other full time job, other part-time job, other income source.

Table 8: Effects on Household Health-related Expenditures and Income¹

	Full Sample						Restricted Sample (Households Hit by a Health Shock Only)					
	Medicines and Traditional Remedies		Health Services (e.g. hospital charges)		Income		Medicines and Traditional Remedies		Health Services (e.g. hospital charges)		Income	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
ITT: Offered the Savings Account	0.389**	0.385**	-0.215	-0.206	0.160	0.138	1.048**	1.181**	-1.279**	-1.351***	0.470	0.560*
	(0.166)	(0.172)	(0.166)	(0.160)	(0.195)	(0.196)	(0.494)	(0.505)	(0.551)	(0.447)	(0.337)	(0.326)
Age of female household head		-0.006		0.006		0.012		-0.005		0.038		0.021
		(0.011)		(0.010)		(0.017)		(0.021)		(0.028)		(0.020)
Years of schooling		-0.037		0.029		0.003		-0.091		0.122		-0.025
		(0.031)		(0.041)		(0.034)		(0.066)		(0.104)		(0.126)
Married/living with partner ²		0.132		0.177		-0.141		0.274		0.838*		-0.851
		(0.257)		(0.380)		(0.319)		(0.662)		(0.484)		(1.204)
Number of children below 16		0.016		0.014		0.097		-0.100		-0.315		0.287
		(0.099)		(0.113)		(0.142)		(0.207)		(0.260)		(0.177)
Number of household members		0.010		0.033		0.168		0.010		0.013		0.073
		(0.061)		(0.046)		(0.120)		(0.159)		(0.067)		(0.220)
Main source of household income ³		-0.004		0.011		-0.028		-0.013		-0.018		-0.014
		(0.010)		(0.012)		(0.022)		(0.024)		(0.044)		(0.046)
Value of livestock and poultry ¹		0.005		0.003		0.032*		-0.016		0.030		0.024
		(0.018)		(0.015)		(0.019)		(0.047)		(0.079)		(0.051)
Money in ROSCAs ¹		-0.047*		-0.037*		-0.011		-0.0124		-0.014		-0.017
		(0.028)		(0.020)		(0.034)		(0.086)		(0.067)		(0.071)
Money in banks ¹		0.020		0.028		0.007		0.030		0.095		0.027
		(0.022)		(0.029)		(0.036)		(0.063)		(0.075)		(0.093)
Constant	1.263***	1.037*	1.309***	1.196*	4.326***	2.709***	3.408***	1.501*	4.742***	3.893**	4.400***	2.723
	(0.298)	(0.625)	(0.256)	(0.719)	(0.324)	(1.032)	(0.919)	(1.215)	(0.746)	(1.719)	(0.321)	(2.253)
Village dummies	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	253	253	253	253	253	253
R ² (overall)	0.004	0.153	0.002	0.114	0.000	0.093	0.018	0.546	0.028	0.388	0.004	0.100
Mean of Dep.Var. (Control Group)	719.973		1,144.644		3,012.858		2,666.364		4,362.521		1,799.298	
Std. Dev. of Dep.Var. (Control Gr.)	4,902.117		9,564.301		10,185.020		10,092.630		18,769.550		3,587.401	

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. Health-related expenditures include all expenditures sustained 30 days prior to the endline survey. Household income includes all income earned the week prior to the endline survey. ²Marital status has been modified so that missing values are replaced by the village averages. ³There are 20 income sources: sales of agricultural production, agricultural labor, sales of livestock and poultry, sand and stone collection labor, construction labor, driver, bus fare collector, helper, small shop, garment and wool spinning, jewelry, government job, teacher, pension, rent, remittances, alcohol making, other full time job, other part-time job, other income source.

Table 9: Effects on Household Expenditure on Education and School Enrollment, and on Temptation Goods

	Expenditure on Education								Expenditure on Temptation Goods ⁴					
	School Fees ¹		Textbooks ¹		School Uniforms ¹		School Supplies ¹ (e.g. pencils, pens)		School Enrollment ³		Dummy =1 if money spent on Temptations		Amount Spent ¹	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
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)	0.013 (0.032)	-0.001 (0.012)	-0.025 (0.022)	-0.021 (0.017)	-0.154 (0.150)	-0.125 (0.115)
Age of female household head		-0.024** (0.252)		-0.022** (0.009)		-0.028*** (0.009)		-0.026*** (0.009)		-0.001 (0.003)		0.008*** (0.002)		0.055*** (0.013)
Years of schooling		0.125*** (0.042)		0.068* (0.041)		0.067* (0.036)		0.015 (0.036)		0.014* (0.007)		-0.007 (0.006)		-0.045 (0.035)
Married/living with partner ²		0.491 (0.439)		0.050 (0.297)		0.258 (0.339)		0.060 (0.243)		0.113 (0.090)		-0.038 (0.025)		-0.374 (0.456)
Number of children below 16		-0.335 (0.239)		0.521*** (0.120)		0.325*** (0.100)		0.666*** (0.139)		0.065*** (0.012)		-0.011 (0.011)		-0.081 (0.076)
Number of household members		0.469 (0.143)		0.106* (0.061)		0.014 (0.060)		0.148** (0.069)		0.006 (0.011)		0.006 (0.010)		0.067 (0.067)
Main source of household income ⁵		0.028** (0.011)		0.018 (0.014)		0.015 (0.016)		0.020 (0.015)		0.007*** (0.003)		-0.003 (0.003)		-0.022 (0.030)
Value of livestock and poultry ¹		0.065*** (0.024)		0.031 (0.024)		0.017 (0.019)		0.030 (0.019)		-0.002 (0.003)		0.000 (0.003)		-0.003 (0.020)
Money in ROSCAs ¹		-0.035 (0.038)		0.011 (0.031)		0.042 (0.036)		-0.039 (0.031)		-0.004 (0.007)		-0.007 (0.005)		-0.047 (0.031)
Money in banks ¹		0.049 (0.032)		0.091*** (0.024)		0.019 (0.027)		0.052** (0.022)		-0.005 (0.006)		0.005 (0.005)		-0.021 (0.030)
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)	0.813*** (0.031)	0.503*** (0.109)	0.274*** (0.032)	-0.012 (0.125)	1.734*** (0.209)	-0.421 (0.847)
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	478	475	1,118	1,113	1,118	1,113
R ² (overall)	0.002	0.176	0.010	0.251	0.009	0.136	0.005	0.227	0.000	0.132	0.001	0.157	0.001	0.165
Mean of Dep.Var. (Control Gr.)	878.022		555.036		268.577		280.844		0.813		0.274		243.601	
Std. Dev. of Dep.Var. (Control Gr.)	1,944.47		1,231.845		676.024		468.245		0.391		0.446		613.721	

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. Expenditures in a given subgroup include all expenditures sustained 30 days prior to the endline survey in that subgroup. ²Marital status has been modified so that missing values are replaced by the village averages. ³Sample restricted to households with children age 6-16. ⁴Temptation goods are: cigarettes and tobacco, alcohol, and gambling. ⁵There are 20 income sources: sales of agricultural production, agricultural labor, sales of livestock and poultry, sand and stone collection labor, construction labor, driver, bus fare collector, helper, small shop, garment and wool spinning, jewelry, government job, teacher, pension, rent, remittances, alcohol making, other full time job, other part-time job, other income source.

Table 10: Effects on the Household Self-Reported Financial Situation

	How would you describe your household's financial situation?		How financially stretched your household is, month to month?		On the whole, I feel secure with the financial situation of my household	
	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 if "strongly agree," or "agree." 0 if "feel neutral," "disagree," or "strongly disagree."	
	(1)	(2)	(3)	(4)	(5)	(6)
ITT: Offered the Savings Account	0.106*** (0.028)	0.093*** (0.026)	0.078*** (0.023)	0.078*** (0.021)	0.031 (0.025)	0.023 (0.024)
Age of female household head		-0.001 (0.002)		-0.002 (0.002)		-0.000 (0.001)
Years of schooling		0.019*** (0.004)		0.010** (0.003)		0.004 (0.005)
Married/living with partner ²		0.007 (0.047)		0.075* (0.045)		0.022 (0.042)
Number of children below 16		-0.033** (0.016)		-0.045*** (0.014)		-0.020 (0.013)
Number of household members		-0.011 (0.011)		0.004 (0.011)		-0.006 (0.008)
Main source of household income ³		0.005** (0.002)		0.003 (0.002)		0.005*** (0.002)
Value of livestock and poultry ¹		0.008*** (0.003)		0.001 (0.002)		0.005** (0.002)
Money in ROSCAs ¹		0.018*** (0.004)		0.011** (0.005)		0.013*** (0.004)
Money in banks ¹		0.030*** (0.005)		0.017*** (0.005)		0.014** (0.006)
Constant	0.303*** (0.038)	0.162** (0.071)	0.292*** (0.050)	0.076 (0.085)	0.214*** (0.030)	0.035 (0.070)
Village dummies	No	Yes	No	Yes	No	Yes
Obs.	1,118	1,113	1,118	1,113	1,118	1,113
R ² (overall)	0.012	0.247	0.007	0.252	0.001	0.142

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. ³There are 20 income sources: sales of agricultural production, agricultural labor, sales of livestock and poultry, sand and stone collection labor, construction labor, driver, bus fare collector, helper, small shop, garment and wool spinning, jewelry, government job, teacher, pension, rent, remittances, alcohol making, other full time job, other part-time job, other income source.

APPENDIX TABLES

Appendix Table A1: Attrition

	Completed Endline		
	(1)	(2)	(3)
ITT: Offered the Savings Account	0.014 (0.016)	0.013 (0.016)	0.013 (0.015)
Age of female household head			0.001 (0.001)
Years of schooling			0.000 (0.003)
Married/living with partner ¹			0.009 (0.037)
Number of children below 16			0.003 (0.010)
Number of household members			0.005 (0.005)
Main source of household income ²			0.001 (0.001)
Constant	0.897*** (0.022)	0.859*** (0.008)	0.805*** (0.045)
Village dummies	No	Yes	Yes
Obs.	1,236	1,236	1,223
R ² (overall)	0.001	0.045	0.052
Mean of Dependent Variable		0.91	

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. ²There are 20 income sources: sales of agricultural production, agricultural labor, sales of livestock and poultry, sand and stone collection labor, construction labor, driver, bus fare collector, helper, small shop, garment and wool spinning, jewelry, government job, teacher, pension, rent, remittances, alcohol making, other full time job, other part-time job, other income source.

Table A2: Determinants of Take-up and Active Use

	Take-up		Active Use of Bank Account ¹	
	(1)	(2)	(3)	(4)
Background Characteristics				
Age	-0.000 (0.002)	0.000 (0.003)	-0.003 (0.002)	-0.001 (0.002)
Years of schooling	0.010* (0.005)	0.008 (0.006)	0.010** (0.005)	0.005 (0.005)
Married/Living with Partner ²	-0.011 (0.060)	-0.018 (0.060)	-0.040 (0.069)	-0.024 (0.076)
# children below 16		0.025* (0.013)		0.036*** (0.013)
# HH members		-0.007 (0.010)		-0.027** (0.011)
Main source of HH income ³		-0.000 (0.002)		0.000 (0.002)
Money in ROSCAs ⁴		0.006* (0.003)		0.007** (0.003)
Money in banks ⁴		0.005* (0.003)		0.008** (0.004)
Value of Livestock and Poultry ⁴		0.005 (0.003)		0.002 (0.005)
Constant	0.697*** (0.119)	0.644*** (0.129)	0.602*** (0.114)	0.587*** (0.108)
Village dummies	Yes	Yes	Yes	Yes
Obs.	565	565	565	565
R ² (overall)	0.117	0.129	0.154	0.174

Note: Robust standard errors, clustered at the village level, reported in parenthesis. Statistically significant coefficients are indicated as follows: *10%; **5%; ***1%. ¹Made at least two deposits within the first year of being offered the account. ²Marital status has been modified so that missing values are replaced by the village averages. ³There are 20 income sources: sales of agricultural production, agricultural labor, sales of livestock and poultry, sand and stone collection labor, construction labor, driver, bus fare collector, helper, small shop, garment and wool spinning, jewelry, government job, teacher, pension, rent, remittances, alcohol making, other full time job, other part-time job, other income source. ⁴In natural logs.

Appendix Table A3: Savings Account Characteristics and Savings Motives

Panel A: Reasons for Saving in the Account (Multiple Choice)¹	
Savings Motives	% of account holders
To pay for a health emergency	88.25
To buy food when income is low	65.85
To pay for school fees or school material	49.89
To pay for a festival	18.40
To repay a debt	9.98
To pay for home maintenance	7.10
To invest in my current business	6.21
To buy poultry or livestock	6.21
To buy agricultural inputs (pesticides, fertilizer, etc.)	5.10
To pay bills	4.88
To start a new business	3.33
Other	2.88
To pay for a funeral	2.00
To buy gold	1.33
Panel B: Most Valued Feature of the Savings Account	
Savings Account Characteristics	% of account holders
Easy to deposit and withdraw any amount of money any time	70.24
The account is simple to understand	13.23
Trust	8.97
Bank opens twice a week in the community	3.59
Bank has a female employee	2.69
Cannot open a savings account in another bank/fin. institution	0.67
The account offers a high interest rate	0.45
Don't know any other financial institution	0.22
Do not feel confident opening a savings account in another bank/fin. institution	0.00
Do not know how to open a savings account in another bank/fin. institution	0.00
Total	100.00

¹Percentages for the savings motives do not add up to 100 as households could select more than one savings motive.

Appendix Table A4: Effects on Assets (in Levels)

	Monetary Assets		Non-Monetary Assets		Total Assets	
	(1)	(2)	(3)	(4)	(5)	(6)
ITT: Offered the Savings Account	1,091.063*** (284.038)	890.283*** (286.448)	1,037.695 (983.802)	56.172 (582.009)	2,656.841* (1,376.572)	2,309.137** (972.651)
Age of female household head		1.382 (16.385)		0.390 (36.740)		-65.745 (80.007)
Years of schooling		190.957** (87.191)		-82.378 (173.888)		-63.006 (253.780)
Married/living with partner ¹		-82.742 (621.671)		844.920 (1,117.432)		1348.534 (1,101.866)
Number of children below 16		-73.653 (174.495)		395.796 (375.358)		-229.123 (524.864)
Number of household members		152.292 (125.831)		-196.928 (273.202)		-310.380 (385.670)
Main source of household income ²		12.727 (24.285)		45.675 (64.643)		110.372 (79.773)
Value of livestock and poultry		0.013 (0.017)		-0.232*** (0.032)		-0.029 (0.055)
Money in ROSCAs		-0.083 (0.060)		0.039* (0.024)		-0.902*** (0.102)
Money in banks		0.305*** (0.017)		-0.006 (0.005)		0.361*** (0.055)
Monetary assets		0.146*** (0.015)				
Non-monetary assets				0.956*** (0.028)		
Total assets						0.956*** (0.045)
Constant	2,418.018*** (167.697)	163.363 (1,062.598)	18699.570*** (685.898)	-174.259 (2,389.966)	23,318.190*** (969.404)	1,190.306 (3,594.851)
Village dummies	No	Yes	No	Yes	No	Yes
Obs.	1,118	1,113	1,118	1,113	1,118	1,113

Note: Robust regressions. Standard errors reported in parenthesis. Statistically significant coefficients are indicated as follows: *10%; **5%; ***1%. ¹Marital status has been modified so that missing values are replaced by the village averages. ²There are 20 income sources: sales of agricultural production, agricultural labor, sales of livestock and poultry, sand and stone collection labor, construction labor, driver, bus fare collector, helper, small shop, garment and wool spinning, jewelry, government job, teacher, pension, rent, remittances, alcohol making, other full time job, other part-time job, other income source.

Appendix Table A5: Impact on Assets (Quantile Regressions, in Levels)

	Monetary Assets	Non-Monetary Assets	Total Assets
25th percentile	(1)	(2)	(3)
ITT: Offered the Savings Account	1,150*** (292.706)	200 (1,373.472)	1,700 (2,039.041)
Constant	1000*** (87.546)	15,300*** (941.034)	18,600*** (1,121.124)
50th percentile			
ITT: Offered the Savings Account	2,209*** (442.065)	1,558 (970.709)	3,846** (1,603.078)
Constant	5,000*** (328.233)	22,242*** (595.759)	30954*** (1,154.709)
75th percentile			
ITT: Offered the Savings Account	3,600 (2,955.739)	-332 (2,564.948)	10,004 (7,192.385)
Constant	17,000*** (2,169.471)	38,832*** (1,902.323)	61,000*** (3,731.322)
Obs.	1,118	1,118	1,118

Note: Quantile regressions. Standard errors reported in parenthesis. Statistically significant coefficients are indicated as follows: *10%; **5%; ***1%.

Table A6: Assets Shifting to/from Other Financial Institutions (in Levels)

	Cash at Home ¹		Money in Other Banks ¹		Money in MFIs ¹		Money in ROSCAs ¹		Money Safekept by Someone Trusted ¹		All Monetary Assets Except Savings in GONESA Bank ¹	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
ITT: Offered the Savings Account	-353.483 (315.842)	-482.619 (266.622)	542.936 (2,926.530)	-1,664.68 (1,768.794)	2,189.76* (1,205.27)	1,437.93 (1,076.58)	614.363 (1,371.680)	48.292 (1,178.057)	151.188 (122.959)	97.711 (115.680)	3,144.76 (3,926.73)	-206.995 (2,548.43)
Age of female HH head		7.734 (15.686)		196.555 (121.545)		33.869 (23.744)		16.448 (64.390)		-0.001 (0.001)		232.542* (139.103)
Years of schooling		144.769* (75.482)		1,238.85*** (474.073)		575.025** (276.546)		201.738 (175.690)		2.08 (6.593)		1,741.24*** (659.089)
Married/living with partner ¹		-762.749 (903.568)		-3,653.03** (1,724.58)		2,580.881** (1,127.360)		1,086.14 (1,332.37)		275.716* (155.280)		-1,576.12 (3,340.27)
# children below 16		22.884 (144.519)		3,092.55 (2,269.61)		-41.691 (291.044)		81.282 (450.308)		-50.075 (73.820)		2,109.54 (1,754.96)
# HH members		-66.428 (137.684)		65.466 (438.772)		-206.100 (262.794)		-465.592 (365.588)		-22.147 (36.902)		-564.074 (685.646)
Main source of HH income ²		33.116** (15.292)		60.728 (169.448)		26.435 (41.733)		-74.107* (40.431)		10.026 (9.951)		-52.593 (172.296)
Value of Livestock and Poultry		0.052** (0.023)		0.104 (0.096)		0.002 (0.021)		410.614** (166.271)		-0.003 (0.001)		0.199 (0.112)
Money in ROSCAs		0.037*** (0.014)		0.151 (0.139)		0.161** (0.067)		0.268*** (0.056)		0.000 (0.002)		
Money in banks		0.005 (0.004)		0.684** (0.268)		0.034** (0.016)		444.736** (179.342)		0.003 (0.003)		
Cash at home		0.155 (0.092)										
Money in MFIs, savings org.						0.217 (0.189)						
Safekept money										-0.001 (0.001)		
Total Monetary Assets												0.754*** (0.170)
Constant	2,601.92*** (317.879)	996.966 (1,440.66)	8,247.19*** (2,512.55)	-13,978.54 (9,488.39)	4,060.48*** (531.318)	-861.642 (1,564.14)	4,281.63*** (751.568)	2,509.09 (3,044.72)	86.025 (63.372)	-260.019 (233.340)	19,277.24*** (3,156.16)	-7,040.95 (9,367.07)
Village dummies	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
R ² (overall)	0.001	0.107	0.000	0.301	0.005	0.168	0.000	0.118	0.002	0.029	0.001	0.410
Mean of Dep.Var. (Control)	2,601.92		8,247.19		4,060.48		4,281.63		86.03		19,277.24	
Std. Dev. of Dep.Var. (Control)	5,830.98		40,378.34		8,185.08		12,947.20		1,148.19		48,870.46	

Note: Robust regressions. Standard errors reported in parenthesis. Statistically significant coefficients are indicated as follows: *10%; **5%; ***1%. ¹Marital status has been modified so that missing values are replaced by the village averages. ²There are 20 income sources: sales of agricultural production, agricultural labor, sales of livestock and poultry, sand and stone collection labor, construction labor, driver, bus fare collector, helper, small shop, garment and wool spinning, jewelry, government job, teacher, pension, rent, remittances, alcohol making, other full time job, other part-time job, other income source.