

Deposit Collectors*

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ABSTRACT

Informal lending and savings institutions exist around the world, and often include regular pickup of cash. Some banks have adopted similar services in order to expand access to banking services for the poor. Using a randomized control trial, we evaluate the impact of offering a deposit-collection service for micro-savers of a rural bank in the Philippines. In this service, a bank employee comes to the individual's home once per month to pick up a savings deposit. The individual is charged a nominal fee equal to the transport cost. Of 137 individuals offered the service in the treatment group, 38 agreed to sign-up. Those offered the service saved 188 pesos more (which equates to about a 25% increase in savings stock) and were slightly less likely to borrow from the bank.

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1. Introduction

A vast economics literature exists on moneylenders and microcredit, yet little is written about the asset side of microfinance—microsavings. An informal sector microfinance service often includes regular pickup of cash with unrestricted rights to withdraw it later. These savings typically earn a *negative* nominal return. While it is clear that firms supply such services both to mobilize savings as well as to screen for reliable lending clients, it is less clear why deposit collection services are demanded by savings clients, or whether deposit collection is able to generate savings.

Explanations from both economics and psychology exist for why individuals are willing to pay for a deposit collection service. From an economics perspective, take-up of deposit collection may simply represent an individual's commitment to facing future settings where cash deposits can be made at lower marginal cost. That is, it simply reduces transaction costs for making deposits because community members share the transport and labor costs (much akin to assigning one person to run an errand for the community as a whole rather than having each person run the same errand) (Wright 1997).

Furthermore, keeping the savings outside of the home may be desirable for the same reasons some have put forth as an explanation for the preponderance of rotating and savings associations (ROSCAs): to help individuals overcome either self-control problems (Gugerty 2001) or household bargaining issues (Anderson and Baland 2002).

Individuals for whom bargaining issues are important may be more sensitive to reductions in the marginal transaction cost to deposit cash.

From a psychological perspective, a simple “planning fallacy” may explain demand for these services. Individuals who may make plans (as an economist assumes is done implicitly or explicitly in typical savings and consumption decisions) often do not succeed in following through with their plans.¹ Individuals may take-up deposit collection services with the understanding that it will offer repeated opportunities to confront the initial commitment to deposit. Not following through would result in negative mental cognition. Another possibility is that some clients may want deposit collection because they know they manage their time poorly, suffer from procrastination, are over-optimistic on available time, or simple forgetfulness, and see deposit collection as an easy way to make sure they follow through with their intentions.

Deposit collection services may also help to reduce information asymmetries, an important cause of friction in credit markets (Stiglitz and Weiss 1981; Karlan and Zinman 2005), by providing lenders a low risk method of learning more about potential lending clients. For potential clients, the reward of a future loan may be enough to encourage them to save regularly via the service.² On the other hand, individuals may find that the deposit collection service helps build savings. Hence, when large expenditures are needed (whether planned or due to a shock), there is no need to borrow: savings are drawn down instead. Thus, the deposit collection services would lead to a reduction in borrowing from the bank.

¹ Economists recently have begun to build models that do predict such behavior (O'Donoghue and Rabin 1999; Fudenberg and Levine 2005).

² *Safesave* in Bangladesh reports this as a common motivation for their clients.

Using a randomized control methodology, we evaluate the impact on savings balances and borrowing behavior from a deposit collecting program at the Green Bank of Caraga in Mindanao in the Philippines. Anecdotal evidence, discussed below, suggests that deposit-collection services are popular around the developing world; however, high savings of participants may simply reflect the selection bias of those who choose to use such a service. Without a proper control group one cannot conclude that the service *causes* higher savings.

We find that a client's distance to the local bank branch to be a statistically significant predictor of take-up deposit collection services. This suggests that clients demand deposit collection services in part as a commitment to lowering future marginal cost of depositing cash. Psychological mechanisms, described above, are not specifically identified by the field experiment. However, differences across gender in the ability of key demographic characteristics to predict take-up suggest that intra-household bargaining issues play a strong role in the take-up and use of deposit collection services.

We also test for a financial impact of deposit collection, and find a substantial increase in savings for those offered the service. This is despite the fact that the deposit collection services were not daily, as is the case for many informal arrangements, but monthly (or in a few cases weekly). Of the 137 who were randomly offered the service, 38 (28%) took it up. Comparing those who were offered the service to those who were not, we find an impact on savings balance equivalent to 188 pesos, or approx. 4 US Dollars, over a 15 month period.

Further, we find a slight *decrease* in borrowing for those clients randomly offered the deposit collection service. Deposit collection may still serve as an encouragement

for clients to rid the information asymmetries in the credit market. Overall, however, it is likely that the *net* effect of having higher savings balances decreases the demand for borrowing.

These results are consistent with the observed expansion of deposit collection around the world (Rutherford, Mutesasira, Sampangi and Mugwanga 1999), and offer insight into the reasons for its sustained presence.³ In Asia, several large microfinance institutions employ deposit collecting system in remote areas. Seibel and Shrader (1999) documents the development of Himalaya Finance & Savings Company (HFSC), one of a few saving associations in Nepal that uses door-to-door collecting service. Daily deposit collecting services played an important role for HFSC in mobilizing savings and then transforming the organization into a formal financial institution, expanding to over 50,000 clients. *SafeSave* in Bangladesh also adopted deposit collectors for their savings services to increase the accessibility for the clients, offering a flexible combination of savings and loans, and helping to teach the discipline of making small deposits (or loan payments). Clients are explicitly rewarded with access to credit based on their successful deposit history. As of June, 2005, *Safesave* served 10,000 clients in the slums of Dhaka.

The existence of profitable money keepers in developing countries, where formal financial services are often absent, suggests that people are willing to earn a *negative* nominal return on savings simply in order to have money held for them. This implies

³ Rutherford, Mutesasira, Sampangi and Mugwanga (1999) also notes that such services vary greatly by region and institution. For example, in West Africa we often observe deposit collectors who *only* take deposits, whereas in other areas such as East Africa deposit collectors are also moneylenders (Steel, Aryeetey, Hettige and Nisanke 1997). In Ghana, Aryeetey and Gockel (1991) observes that over seventy-five percent of women who participate in credit markets in three major cities also save through professional deposit collectors, also known as *susu* collectors (and *tontiniers* in francophone Africa). As a means to encourage savings, some collectors provide savings prizes, such as radio cassette and bicycles, for the best savers of the month.

that the demand for safe saving is quite high, and that within-household solutions (such as the mattress) are not sufficient. Where a bank is available, the demand for deposit collectors suggests that the simple presence of a safe place to save is not sufficient to mobilize savings.

This paper proceeds as follows. Section 2 presents the experimental design and setting. Section 3 analyses who takes-up the service. Section 4 analyses the impact on savings and borrowing at the bank. Section 5 concludes.

2. Experimental Design and Setting

We partnered with the Green Bank of Caraga, a rural bank in Mindanao in the Philippines. The same bank participated in a study on a commitment savings product, SEED (Ashraf, Karlan and Yin 2004). The sample frame used for this study on deposit collection services is a subset of the sample from the SEED study. In the prior study, we first obtained administrative data for 3,153 clients from Green Bank. Then, independently of the Green Bank, we administered a household survey of 1,777 existing clients of the bank. These same baseline data are used for this study, including hypothetical time discounting questions in order to identify individuals as having hyperbolic preferences (although with a six month delay before the deposit collection intervention began, the interpretation of state-sensitive questions is questionable).⁴

⁴ After the survey, we randomly chose half of the clients and offered them a new account called a “SEED” (Save, Earn, Enjoy Deposits) account. This account was a pure commitment savings product that restricted access to deposits as per the client’s instructions upon opening the account, but did not compensate the client for this restriction. The other half of the surveyed individuals were assigned to either a control group that received no further contact or a marketing group that received a special visit to encourage savings

In the deposit collection experiment, the Green Bank offered door-to-door deposit collection services in five barangay around Butuan City in northern Mindanao, where the head office of the Green Bank is located. Green Bank first identified ten barangay (out of 60 in the area) that were good candidates for the deposit collection service. These areas were reasonably accessible and had a significant enough number of existing clients to warrant sending an employee into the area. The ten barangay were then grouped into five pairs, so that the two barangays in each pairing were similar in terms of depth of their outreach, density of population, distance to their branch and number of SEED clients. We then randomly chose one of the two barangay from each of these pairings. The Green Bank offered deposit collection services to all existing clients in the five randomly chosen barangay. In all analysis, we will estimate standard errors that allow for clustering within the barangay, and we will include fixed effects for each pair of pre-matched barangay.

In these ten barangay, we had administrative data from the Green Bank for 640 individuals (399 in the five treatment barangay and 241 in the control barangay) from the earlier SEED study, and 346 individuals (196 in the treatment barangay and 150 in the control barangay) were part of the SEED survey which serves as a baseline for this study. In February 2004 (six months after the baseline survey was conducted), the Green Bank marketing representatives went to the 399 clients' houses in the treatment barangay and offered the collection service. The cost of the service was 4 pesos per pickup, and clients had a choice for the pickup schedule of either monthly or bi-weekly.

using existing savings products only (i.e., these individuals were encouraged to save more, but were not offered the new product). We found that the SEED product had a significant impact on savings behavior.

Although recruiters offered the service primarily to the existing clients, anyone who belonged to the treatment barangays could sign up for the service even if he/she did not previously have an account at the Green Bank. Of the 399 clients in the treatment barangays, 137 were reached by the marketing representatives and offered the door-to-door deposit collection service. Of these 137, 38 (28%) agreed to take up the service. 18 new individuals, not in the baseline survey, also signed up for the service (for a total of 58 deposit collection clients). These 18 individuals are not included in the analysis presented here since they were not part of the sample frame at the time of the randomization. Our analysis also excludes two clients who do not live in treatment barangays and two clients who did not complete the baseline survey. Since no attempt was made to contact the control group, we do not know which of these clients would have been reached. Hence, all analysis will include all 399 individuals in the treatment barangays (the 262 not reached as well as the 137 contacted individuals) and 241 individuals in the control barangays. Of the 38 clients who took up the deposit collection service, 35 chose monthly service, and 18 of them never deposited money through the collectors during the 10-month study period. Individuals who did not make a deposit were still supposed to pay the transport cost of the deposit collector, although this was not always enforced.

Table 1 (Panel A and B) reports summary statistics for major administrative variables (pre-intervention savings balances, participation in the previous SEED study, borrowing status at the Green Bank) and for key demographic variables gathered from the baseline survey (household income, sex, age, hyperbolic preferences obtained from

hypothetical time preference questions, and level of education). Column 4 reports F-statistics for differences in variable means across individuals in the treatment and control groups. Of the 12 key outcome and control variables used throughout the analysis, only one variable is statistically different across the treatment groups. Individuals in the control group completed the baseline survey more often than individuals in the treatment group.

The average number of deposits for these 38 clients was 3.85, and average amount of single deposit was 497 pesos (Table 1, Panel C). Over fifteen months, the average total savings stock for those who used the deposit collection service was 1910 pesos.

3. Determinants of Take-up

In Table 2, we examine the determinants of take-up. The take-up rate is 30% (slightly higher for women, but insignificant statistically). Results from the pooled sample of male and females are shown in column (1). Clients who exhibit impatience in the near-term frame were more likely to take-up the product. The effect is positive for men and women (column (1) and (2)). The effect is large and positive (but imprecisely estimated) when the sample is restricted to women, and smaller (but precisely estimated) when the sample is restricted to men, only. Pooling men and women allows for a more precise estimate, overall.

In many instances, estimates from the pooled sample masks heterogeneity in the effect that demographic characteristics have on take-up of the deposit collection service

across gender. Several demographic variables predict take-up of deposit collection. Overall, married clients were significantly more likely to take up the service. For women, being married increases the likelihood of take-up by 23.7%. Married women in the Philippines typically are responsible for household finances (Echavez, 1996; Ashraf, 2005). In related work on ROSCAs (Anderson and Baland 2002), it has been suggested that women join savings programs in order to find a way to fulfill their responsibilities to the family to save. Saving at home can be difficult due to either self-control or spousal control reasons. That married women are more likely to take-up deposit collection services is consistent with both hypotheses. The fact that married men are less likely to take-up deposit collection is consistent with Filipino women being responsible for household financial matters.

An inverted-U relationship exists between household income and take-up of deposit collection services. Higher household income positively predicts take-up of the service; but the effect is negative at high levels of income. Again, this effect differs across gender. This inverted-U relationship holds for women; yet for men, we find no statistically significant predictive effect of household income.

Gender differences also exist for education and age. For women, we find that less educated and younger women were significantly more likely to take-up deposit collection services. For men, on the other hand, age and education have little ability to predict take-up.

One of the most striking determinants of take-up is distance to the Green Bank branch. Clients who live in barangays situated farther from the Green Bank branch are more likely to take-up. The effect is small in magnitude, but precisely estimated. This

result is consistent with clients' demand for a product that commits themselves to future environments where transaction costs for making cash deposits is lower.

4. Impact

Savings

The amount that was deposited through door-to-door collection service over 15 months varied greatly. While 7% of the clients saved over 3000 pesos using this service, 17 clients (40% of those who took up the service) never used the service. Despite the wide variance in the impact on savings of the deposit collection, we find that on average, the impact is positive relative to savings changes of clients in the control barangays. To test for the treatment impact, we regress savings balances after a specified period on the randomized treatment assignment of a client's barangay of residence. While randomization ensures that, in expectation, the distribution of client characteristics is statistically similar across the two groups, the modest sample size and barangay-level randomization compels us to include client demographic in the regression to control for differences in characteristics of clients in the treatment and control groups. A fixed effect is included for each "block" or pair of barangay within which we randomized into treatment and control. As a result of randomization at the barangay level, all regression specifications include standard error estimations that allow for clustering within barangays.⁵

⁵ Standard errors are also calculated, but not reported, with the White robust estimator. For the treatment impact estimate, the corresponding White standard errors are higher relative to clustered standard errors. The estimated treatment effect declines in significance; for the 10-month analysis (Table 3, column 7), the estimated impact with White standard errors is significant at the 5% level (with clustered standard errors,

Table 3 reports these regression results. Coefficient estimates on the treatment variable represents the effect on savings of being randomly assigned to the treatment group. These clients were offered the deposit collection service. After six months there was no impact, but after 10 months, clients residing in treatment barangay increased their total savings by 262 pesos (specification without individual demographic control variables) and 238 pesos (specification with individual demographic control variables) relative to clients in the control barangays. After 15 months, the increases were 268 pesos and 188 pesos for the specifications without and with control variables, respectively. These results are significant statistically, at 95% and 99% for the ten-month and fifteen month results, respectively.

Table 4 reports savings impact regression results where various interaction effects with various demographic and time preference characteristics. We do not find that any of these variables interact significantly with deposit collection services to change savings balances.

The impact is economically significant when considered in the context of large financial expenditures. Savings stock increased up to 40%. Nominally, the savings increases are also important: a doctor's visit in this area of the Philippines costs about 150 pesos, and a one month supply of rice for a family of five costs 400 pesos.

The magnitude of the impact of the deposit collection service is significant but less than that of the SEED commitment savings experiment. In both cases, about 10% of the sample frame offered the service end up using it actively. The SEED impact after 12

the effect is significant at 1%); for the 15-month analysis (Table 3, column 8), the estimated impact is positive and significant at the 10% (with clustered standard errors, the effect is significant at 5%). Randomization at the barangay level, as well as inefficiency of the White estimator with small sample size, justifies our reporting barangay clustered standard errors.

months is to increase savings by about 80% (intent to treat), whereas the deposit collection service after 10 months increases savings by about 25%. We do not find that the two programs additively are any better than the sum of the parts.

Borrowing

We also examine the impact of savings mobilization on borrowing behavior. The effect is a priori ambiguous. It may help lenders overcome adverse selection problems, hence making clients more likely to receive a loan from the bank. We have no anecdotal evidence from the bank that the deposit history of the clients contributed to any loan decisions, yet this mechanism remains a practical possibility. This link could also be driven by demand: clients who use the service may become more loyal to or familiar with this particular bank. When they need a loan, they may be more likely to borrow from Green Bank rather than from another lender. On the other hand, accumulation of savings should lessen the demand for a loan because it builds the asset base of clients, which they could subsequently draw down when capital is needed.

To test these competing hypotheses, we repeat the savings impact analysis above, but replace savings levels with a binary outcome variable for borrowing from the Green Bank. This variable takes the value one when a client is borrowing (or has borrowed) from the bank after 10 months; it takes zero otherwise. Without covariates, we find that clients who reside in a barangay that is randomly assigned to be treated are 3.4 percentage points *less* likely to be active borrowers (Table 3 Column 9). However, once

we include covariates (Column 10), this effect falls to 1.6 percentage points, and is no longer significant statistically.

In Table 4, just as with savings, we now examine whether the impact is driven by any particular individual characteristics. We find that married individuals, prior savers and hyperbolic individuals are even less likely to borrow after being offered the deposit collection services. If the lower borrowing (noted in Table 3) is occurring because individuals are accumulating sufficient savings to avoid having to borrow, then it follows that the effect should be strongest on those who actually raise enough savings to reach the minimum loan size. Since prior active borrowers start with more savings, they are perhaps more likely to reach that critical point.

5. Conclusion

Many believe that the poor need financial services that allow for frequent small deposits and infrequent large withdrawals. If the withdrawal comes first, this is called a loan; if the deposits come first, this is called savings. Some argue that the order is not important, but rather merely the access to a safe and reliable vehicle for the inflows and outflows matters (Rutherford 2000). A deposit collection service is about helping individuals make little deposits (with perhaps a goal towards later large withdrawals).

In this paper, we found that offering the financial service of deposit collection had an economically and statistically significant impact on increasing savings and a small, but significant, impact on decreasing borrowing. There are several mechanisms, both

psychological and economic, through which deposit collection could increase savings: decreasing transaction costs, facilitating following through on financial planning, providing a public commitment device for impulse-control or for spousal control, among other explanations. We do not distinguish empirically between these mechanisms in this paper. Although the analysis on the factors driving demand for the service is suggestive of certain explanations, particularly regarding married women, a larger sample would be needed in order to distinguish between the possible motivations.

The impact of higher savings and lower debt, barring substitution to or from other non-Green Bank financial assets or liabilities, has one clear implication: individuals consumed less if offered the deposit-collection service. Given the entirely voluntary nature of the program, it suggests that there is a demand for savings vehicles that help individuals save when they otherwise do not. When given the right vehicle to facilitate such savings, individuals change shift consumption back, and consume less now. This implication should be verified with further field work and experimentation.

Deposit collection has long been popular informally among the poor, but these informal services have drawbacks. First, there is a moral hazard problem: if collectors are individual and mobile money-keepers rather than employees monitored by microfinance institutions (and hence regulators), the money-keeper is effectively an unregulated bank. If the money-keeper is on-lending, bank runs could be a problem. Or the money-keeper could simply commit fraud if the reward was high enough. Aryeetey and Gockel (1991) notes that 40.3 % of savers in Ghana had lost their money to run-away deposit collectors and 79.6% knew people who lost money to these collectors. A second drawback is cost,

relative to group mechanisms. ROSCAs, for instance, could serve a similar function and typically do not include any fees (although do incur the risk of default as well).

The shift to the formalization (and hence commercialization) of deposit collecting may be helpful not just for mobilizing deposits but also for removing information asymmetries in lending markets. In many cases, such saving services are accompanied by lending to the same group of people to utilize the daily deposit collectors. Aryeetey and Steel (1995) analyzes the efficiency of door-to-door lending/saving services by comparing the cost of lending between two types of informal services in Ghana: a credit association that uses daily savings collectors (Greater Accra *Susu* Collectors' Cooperative Society (GASCCS)), and regular commercial banks. They calculate the cost of lending by valuing the time spent on lending activity on the basis of the *susu* collectors' monthly wage (which equal to one thirtieth of the deposit he collected during that month). Because savings collectors already have information on clients' reliability from their saving patterns, screening cost for lending is substantially lower for GASCCS than for commercial banks. In addition, monitoring cost is essentially zero since savings collectors have daily contact with borrowers. They conclude that the expansion of lending mechanism through savings collectors will reduce the cost associated with individual-collector savings mechanism.

While there is a growing volume of the literature on the impact assessment of various lending programs in developing countries, the studies on the impact of micro-saving devices are still limited. We have evidence that such programs work, but much remains to be learned about *why* they work and, correspondingly, how best to design such programs. Learning about the behavioral responses these savings products invoke not

only can deepen our understanding of what drives the decision to save, but can also inform us about how to best design savings products and who to target.

Appendix: Marketing Instructions Given to Deposit-Collector Marketing Team

WHAT:

A new service is being offered by Green Bank to its valued clients in a specially chosen set of barangay. This service makes saving easy--it provides you with home pick up of your deposits! A representative from Green Bank, with official ID, can schedule a time with you, once a month, to come to your house to pick up your deposits. You know that they'll be coming so it helps remind you to save too!

WHY: *(This is really where you sell them on the service--don't let them say no to begin; make sure they get a chance to hear all the great reasons for this service!)*

Sometimes it's easy to forget to deposit your money or even sometimes to spend the money before even getting to the Bank! (give personal examples/stories (Jollibee, etc.) This is a service to help you save more and reach your dreams and goals. This service saves you and time and money coming to the Bank, and helps make sure the money you intended for savings actually goes -derecho, asegurado- into savings. Some expressions to use: Init Ang Kwarta!!! When the money is in the house or hands it is easily spent.

HOW:

You the client schedule a time with the Green Bank representative who will be visiting your barangay once a month. All we charge for this great service is 4 pesos, for the fuel of the Green Bank representative that comes to pick up your deposits. If you sign up for this service, we schedule your pickup and come to your house. Because we plan to come to your house, you will need to pay the 4 pesos each time (once every month) even when you don't have anything to deposit. Then, you can deposit as much or as little as you like!! Remember that no amount is too small to be deposited into your account! Even 50 pesos is not too small-50 pesos a month becomes 300 in 6 months and 600 in a year! 100 pesos a month becomes 1,200 pesos in a year! Just think of how much extra money you can have in your account just by saving little by little.

You can also feel safe depositing large sums of money with us. You sign 3 deposit slips--one is your copy, and 2 we take to the Bank. Your deposits will be posted by the next day and you can come in anytime to update your passbook. As well, when we return the following month to your barangay, we will return with one of the Bank's copy of the deposit slip showing that the money was posted. Your original copy will always be with you as proof of the deposits you made with us.

WHEN:

We will be scheduling one day a month to come to your barangay (*could be 2 days for bigger barangay like San Vicente*). Please let us know your preferred dates and times and we will try to accommodate everybody's schedule.

WHERE:

Wherever you, the client, likes: home, office or store!

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Table 1: Summary Statistics

	All (1)	Treatment (2)	Control (3)	T-test (4)
A. Administrative Data				
Total savings balance 6 months prior to the project (pesos)	487.664 (19.473)	473.126 (24.577)	511.732 (31.920)	0.337
Total savings balance 1 month prior to the project (pesos)	754.824 (83.342)	719.846 (106.764)	812.733 (133.392)	0.590
SEED treatment	0.520 (0.027)	0.531 (0.036)	0.507 (0.041)	0.660
SEED takeup	0.078 (0.011)	0.080 (0.014)	0.075 (0.017)	0.802
Completed survey	0.541 (0.020)	0.491 (0.025)	0.622 (0.031)	0.001
Proportion of clients who are borrowing from GB at follow-up		0.123 (0.016)	0.158 (0.024)	0.213
Observations	640	399	241	
B. Survey Data				
Household income (thousands, pesos)	1.353 (0.069)	1.298 (0.086)	1.423 (0.112)	0.367
Female	0.587 (0.027)	0.622 (0.035)	0.540 (0.041)	0.123
Age	42.708 (0.755)	42.306 (1.024)	43.233 (1.115)	0.543
Time inconsistent, impatient now, patient later	0.251 (0.023)	0.219 (0.030)	0.293 (0.037)	0.117
Some college	0.633 (0.026)	0.628 (0.035)	0.640 (0.039)	0.813
SEED treatment	0.520 (0.027)	0.531 (0.036)	0.507 (0.041)	0.660
Observations	346	196	150	
C. Deposit Collection Data				
Proportion of clients who signed up for the service*		0.284		
Proportion of clients who signed up for the service and made at least one deposit		0.142		
Average number of deposits made in 10 months (conditional on >0 deposit)		3.85		
Average deposit amount (conditional on >0 deposit)		497.39		

Standard errors in parentheses. 52 pesos = US\$1. *Proportion of clients who signed up for the service and the proportion of those who used the service are calculated by the number of those who signed up for deposit collector service in treatment barangays divided by the number of people who are reached by a GB marketer.

Table 2: Determinants of Signing up for Deposit Collection Service

Dependent Variable: Indicator variable for signing up for the service

Probit			
	All	Female	Male
	(1)	(2)	(3)
Time inconsistent, impatient now, patient later	-0.015 (0.177)	-0.134 (0.084)	0.034 (0.076)
Impatient, now versus 1 month	0.174** (0.075)	0.155 (0.186)	0.037** (0.015)
Patient, now versus 1 month	0.145 (0.194)	-0.010 (0.252)	0.160 (0.121)
Impatient, 6 months versus 7 months	-0.186 (0.157)	-0.179 (0.163)	-0.044 (0.047)
Patient, 6 months versus 7 months	-0.047 (0.216)	0.045 (0.239)	-0.021 (0.041)
Female	-0.005 (0.030)		
Married	0.094** (0.043)	0.237*** (0.060)	-0.994*** (0.011)
Some college	-0.062** (0.026)	-0.245*** (0.082)	0.037 (0.031)
Number of household members	-0.011 (0.014)	-0.022* (0.013)	-0.004 (0.006)
Unemployed	0.378 (0.509)	0.091 (0.403)	0.988*** (0.016)
Age	-0.004 (0.003)	-0.009*** (0.003)	0.001 (0.002)
Total household income (thousands, pesos)	0.206*** (0.056)	0.447*** (0.136)	0.094 (0.072)
Total household monthly income - squared	-0.052*** (0.013)	-0.097*** (0.029)	-0.055 (0.043)
Active savings client prior to deposit collector service	0.012 (0.151)	0.121 (0.202)	-0.035 (0.039)
SEED treatment	0.261*** (0.082)	0.226** (0.090)	0.082*** (0.023)
SEED marketing	0.060 (0.198)	0.006 (0.143)	-0.418** (0.163)
Distance to Green Bank	0.007*** (0.002)	0.009*** (0.003)	0.003 (0.002)
Observations	196	122	74

Robust standard errors in parentheses. * significant at 10%; ** significant at 5%; *** significant at 1%. 52 pesos = US\$1. Time inconsistent and impatient variables derived from responses to hypothetical time preference questions asked six months prior the offering of the deposit collection service. See the text and Ashraf, Karlan and Yin (2005) for more details on these questions. "Active savings client" defined as an individual with transactions the six months prior the offering of the deposit collection service.

Table 3: Impact of Deposit Collection Service

Dependent Variable:	Total savings balance								Borrowing	
	OLS								Probit	
	Length: 6 months (1)	10 months (2)	15 months (3)	6 months (4)	10 months (5)	15 months (6)	10 months (7)	15 months (8)	15 months (9)	15 months (10)
Treatment	-42.723 (51.061)	262.402*** (49.427)	268.888** (98.027)	-58.468 (58.300)	238.776*** (38.217)	187.915** (82.848)	355.558*** (93.718)	515.571** (171.109)	-0.034* (0.020)	-0.016 (0.025)
SEED Treatment							250.674 (225.591)	669.361*** (189.579)		
Female							-277.970 (253.927)	62.915 (347.288)		
Treatment * SEED Treatment							-519.683 (313.225)	-1,025.260** (441.853)		
Treatment * Female							12.417 (371.107)	-612.913 (368.429)		
Treatment * SEED Treatment * Female							216.383 (543.518)	1,079.873 (851.958)		
Constant	-298.725** (95.886)	-402.298* (201.815)	-618.428** (218.276)	-484.195** (180.518)	-530.089** (206.212)	-696.241*** (178.969)	-575.671** (234.115)	-945.894*** (277.953)		
Observations	640	640	640	640	640	640	640	640	640	640
R-squared	0.09	0.07	0.04	0.12	0.10	0.06	0.10	0.06		
Fixed effect for block in randomization	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control for pre-intervention savings balance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control for individual characteristics	No	No	No	Yes	Yes	Yes	Yes	Yes	No	Yes

Standard errors in parentheses, and corrected for clustering within barangay. * significant at 10%; ** significant at 5%; *** significant at 1%. 52 pesos = US\$1. Columns (1) through (3) do not include covariates for individual-level demographics. Columns (4) through (6) include covariates for female, married, unemployed, age, number of household members, education, active clients, and household income. For 294 out of the 640 individuals, no baseline survey was completed and hence no individual-level information is available. Covariates are included as zero, and an indicator variable is included for whether the individual was surveyed or not (hence has these data or not). Dependent variable for Columns (1) through (9) is total savings balance after either 6 months, 10 months or 15 months. The dependent variable for Column (10) is an indicator variable for active lending client at Green Bank 15 months after the deposit collection service started.

Table 4: Impact of Deposit Collection Service, Interaction Terms

	Dependent Variables:	
	Total savings balance	Borrowing
	OLS (1)	Probit (2)
Time inconsistent, impatient now, patient later	-822.298 (501.052)	-0.097*** (0.026)
Impatient, now versus 1 month	1.453 (128.033)	-0.025 (0.034)
Impatient, 6 months versus 7 months	-279.562 (293.240)	-0.038 (0.027)
Female	-390.211 (378.554)	0.069 (0.060)
Married	-504.404 (280.725)	-0.080*** (0.026)
Some college	-581.702 (433.472)	-0.054* (0.030)
Age	-9.519 (6.691)	-0.001 (0.001)
Unemployed	-1,322.094 (742.666)	- -
Number of household members	-52.554 (59.122)	-0.007 (0.007)
Total household income (thousands, pesos)	91.330 (184.410)	-0.024 (0.023)
Active savings client prior to deposit collector service	297.284 (876.814)	-0.112*** (0.029)

Standard errors in parentheses, and corrected for clustering within barangay. * significant at 10%; ** significant at 5%; *** significant at 1%. Each cell reports the coefficient on the interaction term from a separate regression. In each regression, one (and only one) demographic variable is interacted with treatment, and the coefficient on the interaction term is reported in the above table. All specifications include the same control variables as included in Table 3 Column 4 through 6. Total savings amount is in Philippine pesos (52pesos = US\$1). There are no unemployed clients in the sample who are borrowing from Green Bank, hence the missing coefficient in Column 2. Each specification has 640 observations.