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Female Empowerment: Impact of a Commitment Savings Product in the Philippines*

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Female "empowerment" has increasingly become a policy goal, both as an end to itself and as a means to achieving other development goals. Microfinance in particular has often been argued, but not without controversy, to be a tool for empowering women. Here, using a randomized controlled trial, we examine whether access to an individually-held commitment savings product leads to an increase in female decision-making power within the household. We find positive impacts, particularly for women who have below median decision-making power in the baseline, and we find this leads to a shift towards female-oriented durables goods purchased in the household.

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Preface

One important theme in the work of the Center for Global Development is the search for ways to make foreign aid agencies more effective. It is a tough problem because aid agencies are not accountable to the people they aim to serve in aid-receiving countries. One symptom of this lack of accountability, noted by CGD's Evaluation Gap Working Group, is that donors too rarely commission rigorous, independent studies of how the programs they back affect clients. This leaves donors vulnerable to development fads and waste.

CGD non-resident fellow Dean Karlan and his co-authors are exemplars of a growing movement within academia to change that. This paper comes out of a program of work that strives to bring the highest scientific standards to the study of microfinance, an area in which public and private donors are heavily involved. Understanding how microfinance affects clients is not straightforward because there are several possible explanations for why, say, a borrower is doing well compared to her non-borrowing peers. The credit may be helping—or perhaps she only borrowed because she was already well-off. This, and other papers in the series, elucidates cause and effect by performing controlled experiments, in which a few parameters are randomly varied and the effects measured. The result is sharper answers, in specific contexts, to questions such as: How sensitive are potential borrowers to high interest rates? At the margin, does access to credit increase their incomes? Does it empower women? In the solidarity group lending method made famous by the Grameen Bank, wherein small groups of borrowers guarantee each other's loans, is that mutual guarantee the essential glue that holds the system together?

This paper contributes both by giving donors insight into the programs they fund, and, more generally, by demonstrating the value of rigorous impact evaluation.

I. Introduction

Female "empowerment" has increasingly become a policy goal, both as an end to itself and as a means to achieving other development goals.[1] A growing literature on intra-household bargaining finds that exogenous increases in female share of income, interpreted as providing the female more power in the household, lead to an allocation of resources that better reflect preferences of the woman (Duflo 2003; Rangel 2005). This often leads to greater investment in education, housing, and nutrition for children (Thomas 1990; 1994; 1995; Duflo 2003). Many development interventions have thus focused on transferring income as a way of inducing empowerment.

However, it is not clear in theory that transfers of income alone to women can improve their status in the household. Marginal increases in income given to women may be bargained over in the same way as existing income, and are therefore not guaranteed to lead to gains in bargaining power. What may be important is providing access to additional sources of income flows, and giving control and property rights over allocated money.[2] One could increase power directly by providing unilateral access to a financial service, such as a loan or a savings account. Indeed, microfinance proponents often argue that these empowerment mechanisms justifies increased attention and financing to microfinance institutions, and perhaps even subsidies (Hashemi, Schuler and Riley 1996; Kabeer 1999). There is, however, little rigorous evidence that interventions that focus on power directly actually can promote female empowerment. Nor have we been able to assess the consequences of such induced (rather than "naturally" encountered) empowerment. This study contributes to this literature by exogenously creating a financial asset

[1] See, for example, *Engendering Development* (World Bank 2001). By "female empowerment" we mean increasing the bargaining power of the woman within the household, manifested through increased influence in household decisions and through household outcomes that greater reflect her preferences.

[2] Anderson and Eswaran (2005) find that income needs to be in the control of women- not just generated by them- in order to impact their bargaining power in the household. The relevant threat point in their context, as in ours where divorce is uncommon, is non-cooperative behavior.

to which one and only one person has legal control, and measuring its impact on both decision making power and household outcomes.[3]

We designed and implemented a commitment savings product with the Green Bank of Caraga, a rural bank in the Philippines. Current bank clients were randomly chosen to receive an offer to open an additional "commitment" account in their own name. Of course, commitment devices for savings could benefit those with self-control as well as familial or spousal control issues. The literature on household savings, and on informal savings devices in particular, has focused on separating self-control motivations and impacts from spousal or familial-control explanations (Anderson and Baland 2002; Gugerty 2006). However, such devices can serve both purposes. Indeed, we find compelling evidence for both motives.

The savings product provided individuals with a commitment to restrict access to their savings. Each individual defined either a "date" goal or an "amount" goal, and was then not able to withdraw their funds until the goal was reached. We reported earlier (Ashraf, Karlan and Yin 2006) that after one year individuals who were offered the product increased their savings by 81% relative to a control group, and that in accordance with the theoretical literature on hyperbolic preferences (Laibson 1997; O'Donoghue and Rabin 1999) and dual-self models (Gul and Pesendorfer 2001; 2004; Fudenberg and Levine 2005), time-inconsistent individuals were the ones most likely to demonstrate a preference for this commitment.

Using two new sources of data, a follow-up survey collected after one year and administrative bank data collected after two and a half years, we examine here the impact of this commitment savings product on both self-reported decision making processes within the household and the subsequent household allocation of resources. The product caused an increase in household

[3] A commitment savings account could generate differences in household outcomes not because of the "legal" control built in to the product, but merely because it establishes a norm within the household that the funds are for certain purposes, and this norm is not then unwound by ex-post reallocation of resources. This is much akin to the findings in Duflo and Udry (2003) in which crop revenue in Cote d'Ivoire is labeled as either male, female, or family, and shocks to one "mental account" remain in that account and are not reallocated fully ex-post.

decision making power for married women, measured both in the women's own reporting of how household decisions were made and in the household's purchases of goods typically used by women. Notably, the effect on decision making power is strongest for married women who had below-median household decision making power prior to the intervention. The effect is found for four categories of decisions: expenditures on large purchases, personal items, assisting family members, and number of children. We also find that households in which a woman was offered the commitment product were more likely to buy durables typically used by women within the household. We find no such effects on household durables when a man was offered the commitment savings account.

We also find an impact on self-perception of savings behavior. Note that in earlier work we found that time-inconsistent women (as measured through time preference questions in a baseline survey) were more likely to open the commitment savings account than time consistent women. Here we find that for time-inconsistent women, the commitment savings account made them more likely to perceive themselves as a disciplined saver and to report saving available cash rather than spending it. Thus, evidence exists to show that the commitment device had an impact on both spousal control and (at least the self-perception of) self-control.

We also examine whether any increase in savings held by the individual in this account reduced the overall savings held by the household. Although we cannot distinguish between the *individual* crowding out his or her own savings elsewhere versus the spouse saving less, we can test whether the commitment device overall leads to higher aggregate household savings.[4] This is an important policy question in general regarding illiquid savings, not just relevant to an understanding household bargaining (Feldstein 1974; 1982; 1996). Furthermore, existing evidence on commitment devices focuses mostly on the impact on savings *in the commitment*

[4] Indeed, commitment savings devices are thought to increase savings for present-biased discounters (Laibson 1997).

device itself (e.g., Benartzi and Thaler (2004) and Ashraf, Karlan and Yin (2006)).[5] We find that increases in institutional savings resulting from the commitment product offering do *not* crowd out other savings in the household, regardless of who controls the other asset. Thus, the savings put into the commitment product did not appear to reduce the savings controlled by other household members: rather, it was likely a result of an overall reduction in and shifting of consumption in the household.

This paper proceeds as follows. Section II describes the commitment savings product and the experimental design. Section III presents the empirical results on household decision making and self-perception of savings behavior. Section IV presents the empirical results on crowd-out of other savings in order to examine whether the increase was a shift from other member's savings. Section V concludes.

II. Intervention and Experimental Design

The SEED Account

We designed and implemented a commitment savings product called a SEED (Save, Earn, Enjoy Deposits) account with the Green Bank of Caraga, a small rural bank in Mindanao, Philippines. The SEED account requires that clients commit not to withdraw funds that are in the account until they reach a goal date or amount but does not explicitly commit the client to deposit funds after opening the account. The SEED accounts are *individual* accounts, even if the participants were married. There are three critical design features to the account, one regarding withdrawals and two regarding deposits. First, individuals restricted their rights to withdraw funds until they reached a specific goal. Clients could restrict withdrawals until a specified

[5] The latter study shows that *institutional* savings increase in response to a randomized offering of a commitment savings account. However, neither study is able to assess whether savings increases are accompanied by contemporaneous crowd-out of savings held in physical assets, savings at other formal or informal institutions, or accompanied by negative savings as represented by increased debt. Similar crowd-out questions remain unanswered in other interventions which increase savings held in specific accounts (Duflo, Gale, Liebman, Orszag and Saez 2006).

month when large expenditures were expected, e.g. the beginning of school, Christmas, a particular celebration, or when business needs arose. Alternatively, clients could set a goal amount and only have access to the funds once that goal was reached (e.g., saving a quantity of money known to be needed for a new roof). The clients had complete flexibility to choose which of these restrictions they would like on their account. Once the client had made the decision they could neither change it, nor could they withdraw from the account until they met their chosen goal amount or date.[6] After the goal is reached, the SEED client, not his or her spouse, could withdraw the funds. All clients, regardless of the type of restriction they chose, were encouraged to set a specific savings goal as the purpose of their SEED savings account. SEED marketers insisted that the client herself or himself, and not another household member, set the goal.[7]

The savings goal was written on the SEED form used to open the account, as well as on a "Commitment Savings Certificate" that was given to the client to keep. Forty-eight percent of clients reported wanting to save for a celebration, such as Christmas, birthday or fiesta.[8] Twenty-one percent of clients chose to save for tuition and education expenses, while 20 percent of clients chose business and home investments as their specific goals.

The bank offered each client a locked box (called a "ganansiya" box) for a small fee in order to encourage deposits. This locked box is similar to a piggy bank: it has a small opening to deposit money and a lock to prevent the client from opening it. In our setup, only the bank, and

[6]Exceptions are allowed for medical emergency, in which case a hospital bill is required, for death in the family, requiring a death certificate, or relocating outside the bank's geographic area, requiring documentation from the area government official. The clients who signed up for the SEED product signed a contract with the bank agreeing to these strict requirements. After six months of the project, no instances occurred of someone exercising these options. For the amount-based goals, the money remains in the account until either the goal is reached or the funds withdrawn or the funds are requested under an emergency.

[7] SEED marketers reported instances of household visits in which the husband tried to influence the goal-setting process. Typically the marketers then asked that only the wife to give her goal and this was recorded, but at no point did the marketer make an issue out of the goal setting process. Green Bank prohibits spouses from being able to withdraw from each others' accounts, unless the account was explicitly opened as a joint account. No SEED accounts were opened as joint accounts.

[8]Fiestas are large local celebrations that happen at different dates during the year for each barangay (smallest political unit & defined community, on average containing 1000 individuals) in this region. Families are expected to host large parties, with substantial food, when it is their barangay's fiesta date. Families often pay for this annual party through loans from local high-interest-rate money-lenders.

not the client, had a key to open the lock. Thus, in order to make a deposit, clients need to bring the box to the bank periodically. Out of the 202 clients who opened accounts, 167 opted for this box. This feature can be thought of as a mental account with a small, physical barrier; the box is merely a mechanism that provides individuals a way to save their small change. Individuals put loose change or small bills on a daily basis, hence making "deposits" that normally would be too small to warrant a trip to the bank. These small daily "deposits" keep cash out of one's (and others') pocket; eventually, once enough money accumulates in the box, the client deposits the funds at the bank. The barrier, however, is largely psychological; the box is easy to break and hence is a weak physical commitment at best.[9]

Other than providing a possible commitment savings device, no further benefit accrued to individuals with this account. The interest rate paid on the SEED account was identical to the interest paid on a normal savings account (4 percent per annum).

The Experimental Design and Data Collection

Our sample for the field experiment consists of 4001 adult Green Bank clients who have savings accounts in one of two bank branches in the greater Butuan City area, and who have identifiable addresses. We randomly chose 3125 out of 4001 bank clients to interview for our baseline survey. We then performed a second randomization to assign these individuals to three groups: commitment-treatment (T), marketing-treatment (M), and control (C) groups. One-half the sample was randomly assigned to T, and a quarter of the sample each were randomly assigned to groups M and C. We verified at the time of the randomization that the three groups were not statistically different in terms of preexisting financial and demographic data. Of the 3125, 1776 were located by the survey team and then completed a survey. See Ashraf, Karlan and Yin

[9] To facilitate deposits, clients also were offered automatic transfers from a primary checking or savings account into the SEED account. This feature was not popular. Many clients reported not using their checking or savings account regularly enough for this option to be meaningful. Even though preliminary focus groups indicated demand for this feature, only 2 out of the 202 clients opted for automated transfers.

(2006) for analysis that shows that the treatment and control groups were observably statistically similar at the time of the baseline.

Next, we trained a team of marketers hired by the partnering bank to go to the homes and/or businesses of the clients in the commitment-treatment group, to stress the importance of savings to them – a process which included eliciting the clients' motivations for savings and emphasizing to the client that even small amounts of saving make a difference – and then to offer them the SEED product. We were concerned, however, that this special (and unusual) face-to-face visit might in and of itself inspire higher savings. To address this concern, we created a second treatment, the "marketing" treatment. We used the same exact script for both the commitment-treatment group and the marketing-treatment group, up to the point when the client was offered the SEED savings account. For instance, members of both groups were asked to set specific savings goals for themselves, write those savings goals into a specific "encouragement" savings certificate, and talk with the marketers about how to reach those goals. However, members of the marketing-treatment group were neither offered nor allowed to open the SEED account. Bank staff were trained to refuse SEED accounts to members of the marketing-treatment and control groups, and to offer a "lottery" explanation: clients were chosen at random through a lottery for a special trial period of the product, after which time it would be available for all bank clients. Green Bank reported that this happened on fewer than ten occurrences.[10]

After one year, we conducted a follow-up survey on each of the participants. The tracking rate was high: 92% of those in the baseline were tracked and agreed to a second survey. Those in the treatment group were equally likely to complete a follow-up survey as those in the marketing or control group. This survey contained three sections: (1) inventory of assets, in order to measure whether the impact on savings represented a net increase in savings or merely a crowd-

[10]In only one instance an individual in the control group opened a SEED account. This individual is a family member of the owners of the bank and hence was erroneously included in the sample frame. Due to the family relationship, the individual was dropped from all analysis.

out of other assets; (2) impact on household decision making and savings attitudes; and (3) impact on economic decisions, such as purchase of durable goods, health and consumption.

III. Impact on Household Decision Making and Self-Perception of Savings Behavior

Household Decision Making Power

We first examine whether being offered the SEED account changed the decision making roles in the household. In the follow-up survey, we ask questions regarding family planning, financial and consumption decisions in order to ascertain the structure of spousal or familial control within married households. For each decision category, we record whether the principle decision-maker is the respondent, the spouse, or both. Responses are assigned values of two, zero and one, respectively. We construct two decision making indices from the nine categories: (1) equally-weighted mean of each response given, and (2) a linear combination, determined through a factor analysis, of the individual responses to each question (Pitt, Khandker and Cartwright 2003). The nine categories are decisions on what to buy at the market, expensive purchases, giving assistance to family members, family purchases, recreational use of the money, personal use of the money, number of children, schooling of children, and use of family planning. [11]

Table 2, Panel B shows the impact of treatment assignment on household decision making for married women, as measured by the two indices mentioned above.[12] We find that assignment to the treatment group leads to a 0.14 standard deviation increase in the first (equally-weighted) decision making index (Table 2, Panel B, Column 1), and a 0.25 standard deviation increase in

[11] See Pitt, Khandker and Cartwright (2003) for a discussion of alternative constructions of a household decision making index. Our results are robust to summing across the measures, and to specifications that measure changes, rather than controlling for baseline levels as we report in the text. Furthermore, since the factor analysis drops observations for which any answer is missing, we also examine the first measure of equal weights but omitting all observations for which any one answer is missing. Results for the equally-weighted mean index do not change on this smaller sample of individuals.

[12] This applies to married women whose spouses live at home with them. 53 out of 696 married women had no spouse in the house in both baseline and follow-up; 24 out of 541 married men had no spouse during both surveys. These married individuals were not included in our analysis.

the second (factor-analysis) decision making index (Table 2, Panel B, Column 3).[13] Next, we separately analyze the impact on women who began the year below (above) the median decision making power. We find that the average effect is largely driven by increases in decision making ability for women who were *below* the baseline median (comparing Panels A and B in Table 2b) - a fact consistent with initially less-empowered women gaining decision making ability through increased financial savings and control over committed assets. In contrast, we find no such treatment effect for married men (Table 2b, Panel A, Columns 5-8).

Table 3 reports the impact for married women for each of the nine household decision categories that comprise the indices used in Table 2. Panel A shows the results for the full sample. We find impact on two decisions: expensive purchases and number of children. For women below the median in terms of household decision making power (Panel B), we find a significant impact of treatment assignment regarding purchases of expensive items, decisions to assist family members and purchases of items for personal use. For women above the baseline median (Panel C), the categories with significant treatment impacts are those beyond financial decision making: schooling for children and number of children.

Next, we examine whether the increased reported decision making led to a difference in the types of goods purchased for the household. By increasing the assets available for lumpy purchases, the mere presence of the SEED account may increase female decision-making power in the household and hence increase the likelihood that the household acquires female-oriented durables. Naturally, if the account is held in the women's name this effect should be even stronger.

We use three categories for expenditures: house repair, female-oriented durables (washing machines, sewing machines, electric irons, kitchen appliances, air-conditioning units, fans and stoves), and other durables (vehicles/motorcycles, entertainment and recreational goods). Table 4

[13] The standard deviation shift is calculated by dividing the point estimates of 0.056 and 0.198 from Table 2 by the standard deviations of each index for married women as found in Table 1..

finds no significant impacts on the choice and/or quantity of durables purchased in the household in aggregate, nor broken down by gender. Table 5 analyzes the same dependent variables, but separately for those above and below the median in terms of household decision making power at the baseline (similar to Table 3 Panel B and Panel C when analyzing the impact on specific decision-making power). We find that both the number of items purchased and the total expenditures of consumer durables traditionally associated with female use in the Philippines increase for married women who were below the median in pre-existing bargaining power. This effect is smaller, and not statistically significant, for married women above the median. This finding is consistent with the impact on decision making ability for purchases of personal items and durable goods. We do not, however, find that married households where the women are below the median in decision making ability increase expenditures on other non-female specific durables. Likewise, we do not find any effect for men offered SEED, either in aggregate or for those above or below the median in household decision making power (Table 5, Panels C and D).

Taken together, the presence of both direct impact on self-reported decision making measures, and a greater composition of female oriented durables, suggest that women who were offered the commitment savings product indeed increased their power within their household.

Crowdout

Next we examine whether the increase in savings held *alone* by the participant led to a reduction in savings held *jointly* with their spouse. Table 6 reports the intent-to-treat (ITT) effect of random assignment to the treatment group on several asset and financial savings categories as measured in the one-year follow-up survey, as well as the one-year administrative data (reported in an earlier paper) and new 32-month administrative data.

We first show the replication of our earlier results (Column 1) which demonstrate the simple effect of the treatment on savings held at the Green Bank one year after the treatment began.

Column 4 shows that these savings did *not* crowdout total household savings.[14] Most importantly for this paper, Column 6 shows that these savings did not lead to a reduction in savings held by the participant in communal household savings accounts, or to a reduction in savings held by others in the household in their own accounts. This final result however deserves a note of caution: we surveyed the respondents, not their household members. Hence, we are only measuring savings of which they are aware.

Self-Perception of Savings Behavior

In the follow-up survey, we included several questions about personal savings habits and attitudes. In earlier research we found that time-inconsistent women were more likely than time-consistent women to take up the SEED product, but that no such differential was found for men.[15] Here we examine whether there are heterogeneous treatment effects on savings attitudes and practices for men versus women and time-inconsistent versus time-consistent clients. Table 7 presents the results on four outcomes using an ordered probit specification. For each outcome, the respondent was asked whether they strongly agree, agree, are neutral, disagree or strongly disagree with a specific statement. First, we ask about savings practices: (1) (Columns 1 and 2) "Although my income is low, I am a disciplined saver", (2) (Columns 3 and 4) "I never save", and (3) (Columns 5 and 6) "When I have a little cash, I spend it rather than save it." We find no aggregate effect, although we do find that time-inconsistent women who were offered the SEED account report being more likely to be a disciplined saver, less likely to never save, and less likely to report spending rather than saving extra cash. This indicates that at least in their perception,

[14] The large standard error may be due to unsystematic measurement error in self-reported savings levels, or to wide heterogeneity in the degree of savings crowd-out due to the treatment. We lack institutional data for savings held at non-Green Bank institutions to compare self-reported savings to actual savings levels. However, for Green Bank savings, we have both institutional data and self-reported savings. We regress true institutional savings on self-reported savings, and find that the residuals of the regression are not predicted by assignment to treatment group. Results are not shown, but available upon request. Therefore, the imprecision in the estimated impact on total household savings is likely the outcome of unsystematic measurement error in self-reported savings.

[15] Individuals defined as present-biased time-inconsistent when in hypothetical time preference questions in the survey, they revealed a higher discount rate for tradeoffs between now and 30 days than tradeoffs between 6 months and 7 months.

the SEED account helped them overcome their self-control problem and led to improved savings practices (in earlier research, we do not find that the time-inconsistent women actually save more than the time-consistent women).

The final statement (Columns 7 and 8) is "I often find that I regret spending money. I wish that when I had cash, I was better disciplined and saved it rather than spent it." Being assigned to treatment makes individuals *more* likely to report feeling regret over their spending and savings decisions.[16] Note that only 28% of those offered SEED took up, and of those only about one-third regularly used the account.[17] Hence it follows that although SEED helped 10% of the treatment group save more (and generate an overall positive intent-to-treat effect), the mere *offer* of the SEED account generated, on average, a feeling of remorse. Perhaps those who did not take up and use felt remorse, and those who did take up and use did not feel remorse, but the average effect is an increase in remorse because of the relative size of these two groups. Perhaps a second marketing would have been more successful than the first, if the first offer made individuals more aware of their inability to save as much as they would like.

IV. Conclusion

Even when husbands appropriate their wives' loans, microcredit is thought to empower women in household decision making processes (Mizan 1993). Policymakers frequently cite these arguments as a key motivation for targeting microfinance and microsavings interventions to women. On the other side, some have argued that microfinance usage and the subsequent need to repay (e.g., in order to protect her reputation amongst her peers) may subjugate women to the power of their spouses, hence potentially increasing domestic violence (Rahman 1999). Evidence (albeit weak) points both ways, and naturally may depend largely on the region-specific economic

[16] Interestingly, agreeing with this statement is also correlated with being time-inconsistent when answering hypothetical time preference questions.

[17] Appendix Table 1 shows that about half of the individuals who have not withdrawn their funds never actually used the account beyond the initial account opening deposit..

and social setting.[18] The effects of microcredit and, more generally, microfinance, which includes savings and/or insurance products, on female empowerment remain unclear, in large part because studies of it tend to suffer from a pronounced selection bias in the type of women who access microcredit (Pitt, Khandker and Cartwright 2003).

Using a randomized controlled trial, we evaluate the impact of a commitment micro-savings account. We find that the commitment product positively impacts both household decision making power for women (i.e., the household is more likely to buy female-oriented durables), self-perception of savings behavior (time-inconsistent females report being more disciplined savers), as well as actual consumption decisions regarding durables goods. We also find no evidence that this is a result of crowd-out of other savings held at the same financial institution or elsewhere by either the individual or their spouse.

However, we do find that the strong (72%, as reported in Table 6, Column 1) impact on savings that was observed after 12 months diminishes to 32% after 32 months (Table 6, Column 2) and is no longer statistically significant. We posit several reasons for the diminished impact of the commitment product, which may have to do with the ease of undoing commitment over a longer-time period—either because one returns to one's habit (if commitment is sought for self-control reasons) or because one's spouse finds ways of regaining control (if commitment is sought for spousal control reasons). In other words, perhaps the SEED account caused a deviation from equilibrium (either in one's own savings behavior or in the household dynamics), and gradually, individuals and households found ways to return back to the equilibrium they were in before. There is some qualitative evidence that this type of pressure occurred for some of the women who were SEED clients. For instance, from these qualitative interviews with SEED

[18] Recent evidence from a randomized controlled trial in South Africa finds no impact from access to *credit* on household decision-making (Karlan and Zinman 2006). See Chapter 7 of Armendariz de Aghion and Morduch (2005) for more discussion on this.

clients, it appears that some women who desired the commitment feature of the SEED account had husbands who did not want to have any household funds tied up.[19]

There are other more superficial explanations: the Green Bank engaged in no activity whatsoever to promote continually the SEED account or encourage individuals to use the account. If in each moment in time a client has a certain probability, less than one, of continuing to use the account, then clearly usage in aggregate will diminish over time. Perhaps the product would have been more successful in the long run with continued marketing and promotion, by asking clients for an active decision to renew (Choi, Laibson, Madrian and Metrick 2005), or through interventions that automatically defaulted clients into depositing into the account.

Through continued experimentation in this and other settings, we can learn more about how savings product design can help individuals fulfill their savings plans, whether savings product designs alter savings plans, and how these impacts on household decision making affect the efficacy of different savings products. The results here suggest that design features appeal to those with self-control, and have a positive impact on spousal control. These are not contradictory findings, but rather point out that a simple design feature such as a restriction on withdrawals can benefit both those in search of self control devices as well as those who desire to have more decision making power in the household.

[19] One woman who was not able to reach her goal complained that her "husband would not let her save; he said they needed to be able to get the money." Another woman said she "always fought with [her] husband about not being able to withdraw the money in an emergency." Similarly, a lab experiment conducted with clients of the Green Bank in the Philippines finds that married men will act strategically and shield experimental money from their wives when possible, especially when their wife is the primary decision-maker for household savings (Ashraf 2005).

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Table 1: Summary Statistics

	All	Control	Treatment	Marketing	F statistic
	(1)	(2)	(3)	(4)	(5)
Total	3,125	803	1,553	769	
Completed baseline survey	1,776	469	842	465	
Completed follow-up survey	1,629	428	771	430	
Baseline					
Female, proportion	0.595	0.624	0.601	0.558	0.136
Married, proportion	0.773	0.806	0.767	0.753	0.151
Household decision making power index 1	1.209	1.225	1.220	1.171	0.190
	(0.422)	(0.423)	(0.416)	(0.432)	
Household decision making power index 2	0.004	0.024	0.019	-0.045	0.480
	(0.812)	(0.799)	(0.808)	(0.834)	
Household decision making power index 1 (married female)	1.264	1.288	1.271	1.220	0.275
	(0.401)	(0.385)	(0.399)	(0.424)	
Household decision making power index 2 (married female)	0.026	0.091	0.036	-0.076	0.167
	(0.799)	(0.739)	(0.803)	(0.856)	
Total savings at Green Bank, MIS	509.974	536.489	504.440	493.505	0.423
	(506.408)	(515.373)	(500.692)	(507.773)	
Total household savings	5428.758	5894.524	5764.304	4363.517	0.262
	(15781.820)	(16279.700)	(18305.750)	(8852.169)	
Total household informal savings	967.125	968.960	1078.983	764.733	0.531
	(4641.664)	(5697.623)	(4988.806)	(2171.288)	
Savings in shared accounts (client is not the principal user)	211.739	335.801	202.528	104.767	0.475
	(2784.990)	(3533.014)	(2885.735)	(1426.876)	
Formal savings of other household members	1212.963	1143.356	1445.227	865.791	0.415
	(7365.828)	(7212.905)	(8639.445)	(4462.855)	
Followup					
Household decision making power index 1	1.103	1.090	1.117	1.093	0.270
	(0.286)	(0.289)	(0.285)	(0.282)	
Household decision making power index 2	-0.001	-0.048	0.040	-0.027	0.203
	(0.775)	(0.799)	(0.766)	(0.763)	
Household decision making power index 1 (married female)	1.168	1.140	1.193	1.152	0.068
	(0.273)	(0.266)	(0.270)	(0.284)	
Household decision making power index 2 (marriedd female)	0.079	-0.003	0.159	0.017	0.036
	(0.779)	(0.773)	(0.771)	(0.789)	

Standard deviations are reported in the parentheses. Household decision making power indices are composed from answers to "Who decides" on the following 9 domains: what to buy at the market, expensive purchases, giving assistance to family members, family purchases, recreational use of the money, personal use of the money, number of children, schooling of children, and use of family planning. The value for each item takes zero if the decision making is done by spouse, one if the decision making is done by the couple, and two if decision making is done by the respondent. Index 1 is the equally-weighted mean of an individual's responses across the nine decision categories; index 2 is the first factor of an individual's responses across the nine categories. The factor index (2) is created only for those who have no missing response to the nine questions on household decision making power, and thus removes all individuals without children. Analytical results throughout do not change if index 1 is calculated with the same sample restriction as index 2.

Table 2: Impact on the Aggregate Household Decision-making power

Sample: Individuals who have children and whose spouses/partners live in the same household

	Index 1 (mean)		Index 2 (factor)	
	Level	Change	Level	Change
	(1)	(2)	(3)	(4)
Panel A: All				
Treatment	0.029	0.040	0.107**	0.124*
	(0.018)	(0.028)	(0.053)	(0.064)
Marketing	0.012	0.052	0.054	0.102
	(0.021)	(0.033)	(0.061)	(0.076)
Constant	0.778***	-0.138***	-0.061	-0.080
	(0.028)	(0.021)	(0.043)	(0.050)
Observations	1184	1184	1114	1114
R-squared	0.14	0.00	0.12	0.00
Panel B: Female				
Treatment	0.056**	0.073**	0.198***	0.241***
	(0.023)	(0.034)	(0.069)	(0.080)
Marketing	0.023	0.071*	0.087	0.192*
	(0.027)	(0.042)	(0.085)	(0.103)
Constant	0.793***	-0.147***	-0.032	-0.090
	(0.040)	(0.025)	(0.054)	(0.060)
Observations	643	643	600	600
R-squared	0.16	0.01	0.15	0.01
Panel C: Male				
Treatment	0.001	-0.002	0.006	-0.019
	(0.029)	(0.047)	(0.083)	(0.103)
Marketing	0.018	0.030	0.041	0.012
	(0.032)	(0.052)	(0.091)	(0.115)
Constant	0.791***	-0.125***	-0.105	-0.068
	(0.039)	(0.037)	(0.069)	(0.084)
Observations	541	541	514	514
R-squared	0.10	0.00	0.09	0.00

Robust standard errors in parentheses, * significant at 10%; ** significant at 5%; *** significant at 1%. Dependent Variable: Index of household decision making power on what to buy at the market, expensive purchases, giving assistance to family members, family purchases, recreational use of the money, personal use of the money, number of children, schooling of children, and use of family planning. The value for each item takes zero if the decision making is done by spouse, one if the decision making is done by the couple, and two if decision making is done by the respondent. See notes under Table 1 for the exact definition of each index. Regressions in columns (1) and (3) control for the household decision making power in the baseline (August 2003).

Table 2b: Impact on Aggregate Household Decision-making Power, by gender

Sample: Individuals who have children and whose spouses/partners live in the same household

	Female				Male			
	Index 1 (mean)		Index 2 (factor)		Index 1 (mean)		Index 2 (factor)	
	Level	Change	Level	Change	Level	Change	Level	Change
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A: Household decision making power below median in baseline								
Treatment	0.089***	0.094**	0.291***	0.341***	0.018	0.021	0.041	0.025
	(0.032)	(0.039)	(0.097)	(0.102)	(0.036)	(0.047)	(0.102)	(0.115)
Marketing	0.023	0.061	0.123	0.223*	0.051	0.075	0.133	0.132
	(0.040)	(0.050)	(0.117)	(0.131)	(0.040)	(0.051)	(0.117)	(0.128)
Constant	0.800***	0.075**	-0.124	0.233***	0.751***	0.105***	-0.128	0.296***
	(0.068)	(0.030)	(0.090)	(0.080)	(0.056)	(0.037)	(0.101)	(0.095)
Observations	322	322	303	303	296	296	284	284
R-squared	0.08	0.02	0.07	0.03	0.06	0.01	0.07	0.00
Panel B: Household decision making power above median in baseline								
Treatment	0.026	0.022	0.111	0.109	-0.027	0.015	-0.061	-0.004
	(0.032)	(0.037)	(0.098)	(0.103)	(0.049)	(0.058)	(0.137)	(0.149)
Marketing	0.027	0.019	0.068	0.045	-0.030	0.027	-0.092	-0.027
	(0.037)	(0.048)	(0.120)	(0.137)	(0.053)	(0.062)	(0.145)	(0.157)
Constant	0.879***	-0.342***	0.115	-0.380***	0.954***	-0.440***	0.123	-0.579***
	(0.103)	(0.027)	(0.096)	(0.078)	(0.137)	(0.047)	(0.139)	(0.122)
Observations	321	321	297	297	245	245	230	230
R-squared	0.04	0.00	0.03	0.00	0.01	0.00	0.00	0.00

Robust standard errors in parentheses, * significant at 10%; ** significant at 5%; *** significant at 1%. Dependent Variable: Index of household decision making power on what to buy at the market, expensive purchases, giving assistance to family members, family purchases, recreational use of the money, personal use of the money, number of children, schooling of children, and use of family planning. The value for each item takes zero if the decision making is done by spouse, one if the decision making is done by the couple, and two if decision making is done by the respondent. See notes under Table 1 for the exact definition of each index. Regressions in columns (1) and (3) control for the household decision making power in the baseline (August 2003).

Table 3: Impact on household decision makring

Sample: Women whose spouses/partners are living in the same house

Dependent Variable:	What to buy in market	Expensive purchases	Number of children	Family planning	Assist family members	Personal use	Recreation	Family purchase	Schooling for children
Specification:	Ordered Probit (1)	Ordered Probit (2)	Ordered Probit (3)	Ordered Probit (4)	Ordered Probit (5)	Ordered Probit (6)	Ordered Probit (7)	Ordered Probit (8)	Ordered Probit (9)
Panel A: Female									
Treatment	-0.004	0.203*	0.217*	0.023	0.143	0.013	0.112	0.174	0.162
	(0.117)	(0.109)	(0.114)	(0.110)	(0.113)	(0.118)	(0.107)	(0.111)	(0.125)
Marketing	-0.026	0.060	0.139	-0.117	0.046	-0.124	0.062	0.115	0.220
	(0.134)	(0.128)	(0.137)	(0.131)	(0.125)	(0.137)	(0.120)	(0.138)	(0.151)
Constant									
Observations	641	642	639	641	642	643	642	641	609
R-squared									
Panel B: Females with household decision making power below median in baseline									
Treatment	-0.005	0.409**	0.175	0.010	0.323**	0.243	0.229	0.237	-0.065
	(0.162)	(0.162)	(0.164)	(0.162)	(0.158)	(0.167)	(0.152)	(0.164)	(0.199)
Marketing	-0.154	0.148	0.165	-0.192	0.316*	-0.238	0.282*	0.150	-0.123
	(0.182)	(0.181)	(0.182)	(0.187)	(0.174)	(0.183)	(0.171)	(0.191)	(0.228)
Constant									
Observations	320	321	321	321	321	322	321	320	306
R-squared									
Panel C: Females with household decision making power above median in baseline									
Treatment	0.005	0.037	0.297*	0.033	-0.002	-0.222	0.022	0.136	0.328*
	(0.171)	(0.148)	(0.159)	(0.151)	(0.160)	(0.170)	(0.152)	(0.155)	(0.168)
Marketing	0.169	0.020	0.178	-0.048	-0.174	0.130	-0.143	0.127	0.509**
	(0.205)	(0.184)	(0.207)	(0.186)	(0.179)	(0.213)	(0.169)	(0.197)	(0.210)
Constant									
` Observations	321	321	318	320	321	321	321	321	303
R-squared									

Robust standard errors in parentheses, * significant at 10%; ** significant at 5%; *** significant at 1%. All regressions in this table control for the initial household decision making power in the baseline. The value for each item takes zero if the decision making is done by husband, one if the decision making is done by the couple, and two if decision making is done by wife.

Table 4: Impact on consumer durables

Sample Framework: Those whose spouses are living in the same house

	House repair		Female-oriented durables			Other durables		
	Binary	Cost	Binary	Total number	Cost	Binary	Total number	Cost
	(1)	(2)	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: All								
Treatment	0.007	172.201	-0.019	0.009	48.293	-0.015	-0.006	-2,293.060
	(0.033)	(1,611.810)	(0.032)	(0.062)	(312.882)	(0.030)	(0.042)	(1,529.312)
Marketing	0.018	-1,393.116	-0.035	-0.017	144.558	-0.011	-0.024	-2,493.613
	(0.038)	(1,648.315)	(0.036)	(0.072)	(475.376)	(0.034)	(0.047)	(1,543.340)
Constant		7,615.907***		0.495***	1,997.997***		0.305***	6,095.462***
		(1,299.894)		(0.047)	(242.252)		(0.034)	(1,344.654)
Observations	1181	1181	1183	1183	1183	1183	1183	1183
R-squared		0.00		0.00	0.00		0.00	0.00
Panel B: Females								
Treatment	0.026	2,758.632	-0.023	0.086	504.622	-0.002	0.050	-2,146.550
	(0.045)	(1,960.731)	(0.043)	(0.086)	(433.285)	(0.040)	(0.052)	(2,340.491)
Marketing	0.020	-1,133.261	-0.023	0.038	-56.553	0.029	0.043	-1,731.438
	(0.053)	(1,875.305)	(0.051)	(0.104)	(508.971)	(0.048)	(0.058)	(2,401.692)
Constant		6,761.989***		0.489***	1,947.878***		0.261***	6,230.154***
		(1,289.453)		(0.060)	(297.011)		(0.036)	(2,032.658)
Observations	641	641	642	642	642	642	642	642
R-squared		0.01		0.00	0.00		0.00	0.00
Panel C: Males								
Treatment	-0.016	-3,137.328	-0.012	-0.086	-519.682	-0.032	-0.080	-2,453.800
	(0.051)	(2,759.733)	(0.049)	(0.090)	(456.142)	(0.044)	(0.071)	(1,739.883)
Marketing	0.016	-2,010.130	-0.043	-0.071	315.665	-0.055	-0.107	-3,165.144*
	(0.056)	(2,942.709)	(0.052)	(0.103)	(805.930)	(0.047)	(0.077)	(1,764.869)
Constant		8,796.324***		0.504***	2,066.774***		0.365***	5,910.628***
		(2,534.068)		(0.077)	(406.126)		(0.062)	(1,555.118)
Observations	540	540	541	541	541	541	541	541
R-squared		0.00		0.00	0.00		0.00	0.01

Robust standard errors in parentheses, * significant at 10%; ** significant at 5%; *** significant at 1%. Female-oriented durables consist of washing machines, sewing machines, electric iron, kitchen appliances, air conditioners, fans, and stoves. Other durables include vehicles, motorcycles, and entertainment items (i.e. CD players, TV, and radio).

Table 5: Impact on consumer durables

Sample Framework: Those whose spouses are living in the same house

	House repair		Female-Oriented Durables		Other Durables	
	Binary	Cost	Total number	Cost	Total number	Cost
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Females with household decision-making power below median in baseline						
Treatment	-0.027	2,480.870	0.192*	1,456.938**	0.006	-3,887.597
	(0.063)	(2,133.872)	(0.108)	(654.295)	(0.073)	(4,109.914)
Marketing	0.081	-1,149.406	0.126	600.512	0.052	-4,446.125
	(0.075)	(1,676.488)	(0.142)	(786.664)	(0.088)	(3,691.585)
Constant		5,206.818***	0.386***	1,518.750***	0.273***	8,037.500**
		(1,276.748)	(0.069)	(359.206)	(0.058)	(3,550.889)
Observations	322	322	322	322	322	322
R-squared		0.01	0.01	0.01	0.00	0.01
Panel B: Females with household decision-making power above median in baseline						
Treatment	0.080	3,247.131	-0.008	-403.082	0.092	-623.256
	(0.063)	(3,231.059)	(0.131)	(552.084)	(0.075)	(2,436.893)
Marketing	-0.048	-625.615	-0.036	-702.348	0.029	926.486
	(0.077)	(3,433.478)	(0.148)	(586.010)	(0.077)	(3,346.618)
Constant		8,130.540***	0.580***	2,325.510***	0.250***	4,639.690**
		(2,145.179)	(0.094)	(458.549)	(0.046)	(2,202.953)
Observations	319	319	320	320	320	320
R-squared		0.00	0.00	0.00	0.00	0.00
Panel C: Males with household decision-making power below median in baseline						
Treatment	-0.006	-4,114.137	-0.080	-741.921	-0.092	-2,878.840
	(0.066)	(4,284.529)	(0.122)	(619.640)	(0.103)	(2,561.748)
Marketing	-0.052	-3,657.542	0.014	841.101	-0.212**	-4,822.457**
	(0.072)	(4,618.274)	(0.148)	(1,316.247)	(0.102)	(2,415.286)
Constant		9,718.987**	0.468***	2,072.152***	0.405***	6,301.975***
		(4,083.798)	(0.105)	(569.847)	(0.089)	(2,352.200)
Observations	296	296	296	296	296	296
R-squared		0.01	0.00	0.01	0.02	0.02
Panel D: Males with household decision-making power above median in baseline						
Treatment	-0.030	-1,795.457	-0.100	-259.666	-0.058	-1,881.499
	(0.079)	(2,829.019)	(0.132)	(666.850)	(0.094)	(2,182.161)
Marketing	0.093	104.123	-0.177	-288.920	0.023	-1,172.725
	(0.087)	(2,980.016)	(0.143)	(836.159)	(0.114)	(2,466.193)
Constant		7,517.544***	0.552***	2,059.448***	0.310***	5,377.586***
		(2,156.450)	(0.113)	(568.124)	(0.082)	(1,813.668)
Observations	244	244	245	245	245	245
R-squared		0.00	0.01	0.00	0.00	0.00

Robust standard errors in parentheses, * significant at 10%; ** significant at 5%; *** significant at 1%. Female-oriented durables consist of washing machines, sewing machines, electric iron, kitchen appliances, air conditioners, fans, and stoves. Other durables include vehicles, motorcycles, and entertainment items (i.e. CD players, TV, and radio).

Table 6: SEED Impact on Household Savings

OLS

Dependent variable:	Green Bank savings, Aug 04 baseline sample (12 month) (1)	Green Bank savings, Apr 06 (32 month) (2)	Non-SEED Green Bank savings, Aug 04 (12 month) (3)	Total household savings (12 month) (4)	Total household informal savings (12 month) (5)	Savings in shared accounts, where respondent is not principal user (12 month) (6)	Formal savings of other household members (12 month) (7)
Panel A: All							
Treatment	-32.050	-32.050	173.052	635.630	110.023	-133.274	435.145
	(30.751)	(30.751)	(247.068)	(1,528.336)	(328.798)	(199.891)	(357.412)
Marketing	-42.985	-42.985	70.831	431.497	-204.228	-231.034	-46.531
	(34.923)	(34.923)	(166.457)	(2,065.756)	(294.566)	(184.071)	(279.866)
Post	89.641	119.535	30.595	-1,176.211	-351.105	-65.708	1,201.090
	(137.254)	(200.089)	(240.080)	(1,437.881)	(310.218)	(238.216)	(829.897)
Treatment x Post	388.493	173.294	-94.696	-765.850	139.738	-109.907	-957.661
	(266.817)	(318.289)	(401.401)	(1,841.086)	(428.022)	(260.317)	(912.670)
Marketing x Post	117.250	-150.320	-264.563	-1,962.504	-0.744	-8.594	-417.709
	(170.061)	(216.754)	(271.056)	(2,251.314)	(333.927)	(249.134)	(1,023.733)
Constant	536.490***	536.490***	624.495***	7,070.735***	968.960***	335.801**	807.554***
	(24.905)	(24.905)	(134.985)	(1,203.571)	(275.337)	(170.732)	(202.638)
Number of individuals	1629	1629	1629	1629	1629	1629	1629
Observations	3258	3258	3258	3258	3258	3258	3258
R-squared	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Panel B: Female							
Treatment	-25.140	-25.140	15.652	93.610	333.530	-0.739	130.177
	(42.067)	(42.067)	(311.576)	(2,138.988)	(362.452)	(281.494)	(418.242)
Marketing	-65.062	-65.062	52.655	-3,559.278*	7.018	-243.932	-134.758
	(48.589)	(48.589)	(258.876)	(1,906.222)	(281.287)	(230.890)	(404.348)
Post	167.794	-132.264	-298.934	-1,864.689	-290.655	79.689	1,852.497
	(214.898)	(134.907)	(249.230)	(2,069.854)	(300.078)	(345.891)	(1,313.925)
Treatment x Post	169.591	571.220	456.643	-321.694	-31.787	-369.644	-1,304.087
	(318.075)	(427.518)	(526.824)	(2,545.251)	(516.741)	(387.318)	(1,390.769)
Marketing x Post	115.095	78.402	-38.491	2,047.061	-208.778	-116.981	-1,601.105
	(263.380)	(168.034)	(304.773)	(2,257.843)	(349.298)	(353.996)	(1,432.346)
Constant	552.541***	552.541***	717.713***	8,135.578***	916.749***	323.307	927.091***
	(33.739)	(33.739)	(212.253)	(1,795.772)	(230.258)	(222.198)	(279.155)
Number of individuals	970	970	970	970	970	970	970
Observations	1940	1940	1940	1940	1940	1940	1940
R-squared	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Panel C: Male							
Treatment	-39.948	-39.948	424.126	1,615.619	-234.063	-334.444	912.131
	(43.152)	(43.152)	(395.048)	(1,966.478)	(645.267)	(265.908)	(632.975)
Marketing	-8.754	-8.754	130.633	5,893.331	-491.699	-219.680	112.157
	(48.754)	(48.754)	(135.411)	(3,878.893)	(636.629)	(297.617)	(361.357)
Post	-39.966	537.115	577.081	-34.448	-451.354	-306.832	120.807
	(77.774)	(481.705)	(485.369)	(1,677.985)	(658.678)	(268.529)	(329.839)
Treatment x Post	729.681	-463.950	-974.617	-1,540.336	406.961	303.099	-335.840
	(458.663)	(494.203)	(630.813)	(2,480.583)	(761.178)	(269.115)	(737.654)
Marketing x Post	150.861	-538.749	-680.365	-7,299.324*	285.928	185.780	1,334.561
	(143.885)	(501.664)	(517.329)	(4,098.299)	(678.848)	(300.599)	(1,196.087)
Constant	509.871***	509.871***	469.904***	5,304.815***	1,055.547*	356.522	609.317**
	(35.398)	(35.398)	(69.251)	(1,162.696)	(625.386)	(265.656)	(275.589)
Number of individuals	659	659	659	659	659	659	659
Observations	1318	1318	1318	1318	1318	1318	1318
R-squared	0.00	0.00	0.00	0.01	0.00	0.01	0.00

Robust standard errors in parentheses, * significant at 10%; ** significant at 5%; *** significant at 1%. This table reports difference-in-difference analysis on household savings for 1629 individuals who completed the follow-up survey. Post is an indicator variable for the post-intervention observations. Column (1) is shown in order to reconcile the results in this table with the results reported in the earlier paper, Ashraf, Karlan and Yin (2006).

Table 7: Impact on Savings Attitude

Ordered Probit

Dependent variable:	Although my income is low, I'm a disciplined saver		I never save		When I have a little cash, I spend it rather than save		I often regret spending, I wish I was more disciplined to save	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A: All								
Treatment	0.025	-0.053	-0.104	-0.021	-0.095	-0.051	0.181***	0.160**
	(0.069)	(0.080)	(0.072)	(0.083)	(0.065)	(0.077)	(0.066)	(0.078)
Marketing	0.057	0.073	-0.105	-0.064	-0.084	-0.105	0.070	0.102
	(0.078)	(0.091)	(0.085)	(0.098)	(0.075)	(0.090)	(0.074)	(0.088)
Time inconsistent, baseline		-0.147		0.252*		0.109		0.043
		(0.126)		(0.138)		(0.115)		(0.120)
Treatment x Time inconsistent, baseline		0.300*		-0.303*		-0.163		0.082
		(0.156)		(0.165)		(0.146)		(0.149)
Marketing x Time inconsistent, baseline		-0.050		-0.152		0.064		-0.102
		(0.175)		(0.195)		(0.161)		(0.161)
Observations	1629	1626	1629	1626	1629	1626	1629	1626
Panel B: Female								
Treatment	-0.021	-0.136	-0.049	0.069	-0.104	-0.005	0.130	0.153
	(0.088)	(0.103)	(0.093)	(0.107)	(0.081)	(0.097)	(0.084)	(0.101)
Marketing	0.176*	0.160	-0.148	-0.082	-0.214**	-0.209*	0.118	0.184
	(0.103)	(0.123)	(0.112)	(0.132)	(0.099)	(0.123)	(0.096)	(0.118)
Time inconsistent, baseline		-0.310**		0.308*		0.216		0.069
		(0.158)		(0.173)		(0.136)		(0.140)
Treatment x Time inconsistent, baseline		0.395**		-0.389*		-0.339*		-0.072
		(0.196)		(0.209)		(0.180)		(0.180)
Marketing x Time inconsistent, baseline		0.040		-0.209		-0.018		-0.216
		(0.225)		(0.246)		(0.199)		(0.203)
Observations	970	968	970	968	970	968	970	968
Panel C: Male								
Treatment	0.105	0.065	-0.199*	-0.155	-0.084	-0.123	0.257**	0.170
	(0.112)	(0.128)	(0.116)	(0.133)	(0.110)	(0.126)	(0.109)	(0.121)
Marketing	-0.066	-0.007	-0.077	-0.066	0.073	-0.000	0.010	-0.001
	(0.118)	(0.135)	(0.131)	(0.148)	(0.118)	(0.134)	(0.117)	(0.134)
Time inconsistent, baseline		0.128		0.196		-0.118		-0.014
		(0.213)		(0.222)		(0.212)		(0.241)
Treatment x Time inconsistent, baseline		0.133		-0.200		0.168		0.344
		(0.263)		(0.266)		(0.255)		(0.277)
Marketing x Time inconsistent, baseline		-0.249		-0.080		0.285		0.066
		(0.283)		(0.312)		(0.279)		(0.288)
Observations	659	658	659	658	659	658	659	658

Robust standard errors in parentheses, * significant at 10%; ** significant at 5%; *** significant at 1%. Dependent variables are categorical, indicating how strongly the respondent agrees to each statement. The variable equals one if the respondent strongly disagree, two if somewhat disagree, three if neutral, four if somewhat agree, and five if strongly agree.

Appendix Table 1: Qualitative Feedback from SEED Account Holders

Those that did not withdraw: Reason for not withdrawing	Frequency
Argued with spouse	1
Bad bank service/bank is far	3
Could not save	43
Damaged passbook	1
Destroyed ganansiya box	2
Did not need money	1
Did not like terms/low interest	3
Forgot about it	13
Inconvenience	8
Money stolen (7)/lost (1)	9
Never joined/not a member	5
Nobody collected	2
Not interested	1
Not to term	51
Rolled over	3
Total	149

Those that withdrew: Spent SEED Money on:	Frequency
Fiesta	7
Children's schooling	6
Other/did not say	4
Add to capital of business/sari-sar	2
Birthday (own, child, grandchild, missus, etc)	5
Child is giving birth	1
Children's graduation	2
Christmas	3
Contruction of house/repair of kitchen	2
Everyday needs/necessities/groceries	4
Medical treatment	2
Reached time goal (3 months)	1
Refrigerator	1
Supplement mothers budget	2
Total	42
Spent money on original goal	26
Spent money on different goal from original	14