

Price and Control Elasticities of Demand for Savings*

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ABSTRACT

Assumptions about individual demand for savings underlie workhorse models of macroeconomics, intertemporal choice, and intra-household bargaining, and policy interventions. In a randomized experiment, a Philippine bank tested sensitivity to interest rates and account ownership requirements in 10,000 door-to-door solicitations for a commitment savings account. The price elasticity is not significantly different than zero for both the full sample and sub-groups of plausibly marginal savers, and it has an upper bound that implies an elasticity of intertemporal substitution below the 0.7 emphasized by Attanasio and Weber (2010). Nor do we find sensitivity to ownership requirements in the full sample or sub-groups.

Keywords: savings elasticities, elasticity of intertemporal substitution, microsavings, microfinance

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Assumptions about the individual demand for saving underlie workhorse models in macroeconomics, intertemporal choice, and intrahousehold bargaining. They also underlie policy design on asset-building, capital mobilization, and financial security around the world. Yet there is relatively little empirical evidence on key demand parameters. We present evidence from a field experiment where First Valley Bank in the Philippines made over 10,000 door-to-door savings commitment savings account offers, with randomized pricing and individual/joint ownership options, in rural and peri-urban Philippines. 23% of individuals took-up an offer. The sample frame, although not explicitly randomly sampled from a census, is effectively a representative sample of rural and peri-urban households, and includes both middle class and poor neighborhoods.

The price sensitivity of demand for savings is a particularly important parameter for modeling, policy analysis, and financial institution strategy. For modeling, price sensitivity can be used to identify the elasticity of intertemporal substitution (EIS), the key parameter measuring how households move consumption across time as the yield on saving (i.e., on postponing consumption) changes. For policy, assumptions about price sensitivity underlie the billions of dollars in subsidies designed to encourage saving worldwide through instruments like preferential tax treatment for 401(k)s and matching grants for deposits (e.g., Individual Development Accounts in the U.S.). For financial institution strategy, savings instrument pricing is critical for maximizing profits, managing liquidity and related risks, and providing social benefits (by, e.g., expanding access to mainstream financial products).¹

We estimate the price sensitivity of demand for saving by randomizing, at the individual offer level, potential clients into one of three price conditions: 1) the Bank's "normal" rate (e.g., 1.5% APY on balances up to \$200 over 3-11 months), 2) a "high" rate that the Bank was considering offering, that was 1.5% APY above its normal rate, 3) the high rate, but only conditional on the client meeting her self-set goal amount (ranging from \$40 to \$2,000), within

¹ For small balance accounts, fixed costs of servicing accounts are often considered first-order cost drivers, yet interest rate elasticities do matter as well, particularly for an analysis of costs for mobilizing savings (see Portocarrero et al. (2006)).

her self-set time period (ranging from 1 to 24 months). These prices are all within the range offered in the market, and thought sustainable by our financial institution (and other for-profit institutions). Other studies have tackled demand sensitivities, but typically as tests of government or otherwise-subsidized policies, with much larger but heavily subsidized ranges²

Estimating the price sensitivity of demand for saving using this setup has some methodological tradeoffs. The strengths include clean identification of a price (i.e., a substitution) effect that is not confounded by potential income or wealth effects.³ Furthermore, the door-to-door marketing provides for a fairly representative sample frame; thus we include those who already have experience savings (30% have had a savings account in the past; 25% own their home) as well as those likely to be credit constrained. The relatively short-term price variation maps well into macro models where the relevant margin for the consumption versus savings decision is a short-term interest rate. The somewhat illiquid accounts studied here—commitment savings accounts where clients set a goal amount and target date and face withdrawal restrictions until both the goal amount and target date have been reached⁴-- share characteristics with products like CDs and retirement accounts that are used to hold trillions of dollars of financial assets in more-developed countries like the U.S. Indeed, one of the elasticity estimates highlighted by Attanasio and Weber (2010) is identified using variation in employer match rates in U.S. 401(k) plans (Engelhardt and Kumar 2009).

Our setup also has some methodological weaknesses. We only capture partial equilibrium and micro effects, not general equilibrium and aggregate effects. The external validity of our results to other populations of interest is uncertain, although we can use within-sample variation in baseline savings, income, wealth, education, etc. to engage in some informed speculation.

² Kast et al (2012) compares a market rate, 0.3%, to 5.0%. Schaner (2012) compares a market rate, 0%, to 4%, 12%, and 20%. Mills et al. (2008) and Grinstein-Weiss et al. (2011) compare a market rate to 100%-200% (1:1 or 2:1 matches) in Individual Development Accounts. Duflo et al. (2006) compare a market rate (no match) to 20% and 50% matches in Individual Retirement Arrangement accounts. Cole et al. (2011) and Dupas and Robinson (2012) randomize account-opening subsidies, but not interest rates.

³ We check the validity of the random assignments in Section I, and also note that the bank reported no complaints about interest rate offers; e.g., there does not seem to have been any gossip that might have induced reference point effects where someone responds not (only) to her rate, but (also) to the rate her neighbor received.

⁴ First Valley Bank allows emergency withdrawals in cases of documented “severe emergency—defined only as 1) hospitalization of immediate family member; or 2) death of immediate family member. The only other case allowing early withdrawal is if the client moves to a barangay where there is no 1st Valley Bank branch.” 0.8% of the commitment accounts opened during this study took early withdrawals.

Our results suggest price-inelastic demand for savings within the price range tested, regardless of specification. Even the upper bounds of our confidence intervals imply price elasticities < 0.5 . And these upper bounds are themselves upper bounds of elasticity with respect to aggregate savings, assuming some substitution across savings vehicles, since we measure savings only in a single account, rather than net savings from the household's complete balance sheet or income statement.

Are our findings can be explained by liquidity constraints or some other factor that renders marginal variation in savings account price or ownership requirements irrelevant? We think not. Households who are plausibly marginal savers—including those with savings at baseline, those who have saved before, or those with relatively high wealth—are also unresponsive to the variation in price and ownership requirements.⁵ Yet we *do* find evidence of strong sensitivity to other margins under the bank's control: who the marketer is, and when marketing takes place. We also find strong correlations between baseline consumer characteristics and savings demand. In all, savings is unresponsive to price and to ownership requirements, but responsive to other factors.

As such our estimates imply an EIS that is closer to Hall's (1988) controversial zero than to the EIS' in the 0.7 to 0.8 range the emphasized by Attanasio and Weber (2010).⁶

Whether our results differ from 0.7 because of differences in the sample characteristics, or differences in methods, merits further research. For example, it would be interesting to see whether, using the setup here, one obtains similar estimates in different (e.g., more developed-country) settings. Within our sample, we can estimate whether price responses differ across consumers with different characteristics measured using a short baseline survey. We find little evidence of significant price elasticities in (or significant differences across), sub-groups by baseline savings, gender, education, wealth, income, prior savings behavior (formal and

⁵ We find some evidence of heterogeneity by asset market participation a la Vissing-Jorgensen (2002) and Guvenen (2006), in that those who have saved before have larger elasticities than those who have not, but even the upper bounds of the larger elasticities are economically small.

⁶ Besides Hall's zero, the specific estimates discussed by Attanasio and Weber (2010) are the abovementioned Engelhardt and Kumar's 0.74; Attanasio and Weber's 0.8's (Attanasio and Weber 1993; 1995) , estimated from Euler equations on cohorts least likely to be liquidity constrained, and controlling for taste shifters; and Scholz et al.'s (2006) 0.67, calibrated from a life-cycle model.

informal), satisfaction with current savings, present-bias, (im)patience, and intrahousehold decision making power.

We also estimate elasticities with respect to the account ownership requirement, which was randomly assigned among married individuals to: individual account only, joint only, or the choice of individual or joint (the standard option).⁷ The demand for financial control is important to pro-savings female-focused policy efforts (Hashemi et al., 1996), to financial institutions interested in the optimal design of savings products, and to models of intra-household decision making (e.g., Anderson and Baland (2002), Anderson and Eswaran (2009), Ashraf (2009), Schaner (2012)). In such models, requiring joint ownership can strictly reduce savings demand if there are bargaining failures due to, e.g., limited commitment.

We do not find significant ownership requirement elasticities in the full sample, despite the fact that when offered the choice between individual and joint accounts in the “choice” arm, 89% choose individual. So it seems that people (very) weakly prefer individual accounts, but not to the extent that a take-it-or-leave-it offer of joint account discourages them from saving. Nor do we find strong evidence of significant ownership elasticities across two dozen different sub-groups. In particular, we find no evidence that ownership requirement sensitivity varies with baseline measures of intra-household decision making power. It may be the case that a commitment account itself increases decision power (Ashraf et al. 2010) and/or mitigates the underlying bargaining inefficiency—by, e.g., making it easier to monitor withdrawals—in a way that a more liquid account would not. I.e., the external validity of our finding (to more liquid accounts) is uncertain, and a topic for future research.

In all, we do not find strong evidence that savings demand responds significantly to either price (yield) or to account ownership requirements. Note that it is not simply the case that demand was low: the take-up rate was 23%. Nor is the case that demand is completely unresponsive to observables; rather, we find strong conditional correlations between demand and several types of variables—baseline individual characteristics, marketer fixed effects, and offer timing.

⁷ Note that offers of accounts were done at the household or enterprise, but privately to the individual.

The paper proceeds as follows. The next section describes the experimental design and implementation, including the setting/sample. Section II presents our results, first on take-up and usage, and then on price and ownership sensitivity/elasticities, for both full samples and sub-groups. Section III concludes.

I. Experimental Design and Implementation

First Valley Bank (FVB), a for-profit bank operating in Western Mindanao, Philippines, worked with us to randomize interest rates and account ownership requirements as part of the rollout of its Gihandom (Dream) Savings product.

Gihandom allows a client to set her own savings goal amount (US\$50 or above, \$1 \approx 40 Philippine pesos during our sample period) and goal term (from three months to two years). Once the client opens the account with a minimum deposit of US\$2.50, there is no fixed deposit schedule to fulfill. The client receives a savings lockbox and is encouraged at sign-up to make small deposits on a daily basis. When the lockbox is full, the client goes to the bank to deposit the money. The account is designed to be illiquid, as a commitment device: money can be withdrawn only after both the goal amount and the goal date have been reached, except in hardship cases.⁸ In this sense the Gihandom accounts are similar to other types of accounts with provisions that make early withdrawal costly, like certificates of deposit (CDs) and retirement accounts (e.g., IRAs, 401(k)s). The Gihandom account is also similar to the SEED account, tested by Ashraf et al. (2006) by a different bank but also in Mindanao, in the Philippines. For SEED, the goals were *either* amount *or* date based, whereas the Gihandom account requires both an amount and date goal be set.

Between April and August 2007, bank employees conducted door-to-door marketing in rural and small urban areas and offered 9,992 individuals the opportunity to open one or more Gihandom accounts. Marketers conducted a brief five to ten minute “baseline” survey prior to making an offer (the Appendix details the survey questions), and used the survey to screen out unpromising prospects: they were instructed by FVB management to only offer the accounts to

⁸ 0.8% of account holders withdrew balances early.

people with regular income, and without an existing FVB account.⁹ Marketers used personal digital accessories (PDAs) for the baseline survey and random assignment to treatments. The PDAs independently randomized, for each individual to which they offered an account, both the interest rate and the account ownership requirement.¹⁰

The interest rate randomization has three arms, each assigned with 1/3 probability: (a) a regular interest rate of 1.5% APY, (b) a high interest rate of 3% APY, (c) the regular interest rate of 1.5% APY if a client does not achieve their goal, and a 3% APY if a client achieves her goal.¹¹ FVB was considering offering the higher rate and the reward rate on a permanent basis, and wanted to test the impact these more generous yields would have on take-up (customer acquisition), balances, and profits. Experimental compliance, as measured by the congruity between the interest rate assigned versus actually applied to opened accounts, was high: only 8 of 2,265 have a rate that differed from their assigned rate offer.

The account ownership randomization also has three arms, each assigned with 1/3 probability in cases where the individual offered the account is married: (a) individual account only; (b) joint account only; (c) option of individual or joint account. Unmarried individuals were not randomized and offered only an individual account. Experimental compliance, as measured by the congruity between the ownership requirement assigned versus actually applied to opened accounts, was high: only 11 of the 1523 accounts opened by married individuals or couples have ownership that is inconsistent with their assigned ownership offer.

Table 1 performs additional checks on the validity of these randomizations, and also describes some baseline characteristics of our sample.

Starting with orthogonality checks in Panel A, out of 28 tests, for only 2 covariates can we reject equality across treatment assignments (Columns 5 and 9). This frequency is about what one would expect to find by chance. Panel B reports estimates of whether the baseline survey variables jointly predict either treatment assignment, using multinomial logits. They do not. Panel C confirms that the two treatments were assigned independently: the p-value from a

⁹ In a credit setting one might worry about the accuracy of baseline survey measures that were elicited by a bank employee (e.g., respondents distorting their replies to make themselves appear more creditworthy), but the savings accounts here were not subject to underwriting.

¹⁰ Account takers with a cell phone (65% of the sample) were subsequently, in the office (i.e., not at the marketing visit), randomized to receive reminder messages or not (Karlan et al. 2010).

¹¹ The inflation rate during our study period was 2.5% annualized.

likelihood ratio chi-square-test of whether one treatment assignment is correlated with the other in a multinomial logit is 0.48.

Our sample is primarily female (67%); women tend to be the head of household with respect to financial matters in the Philippines.¹² 64% of the sample is married, and the mean age is 34 (both typical for the Philippines). 44% of the sample have attended college (the national average is 29%, per the 2008 World Development Indicators). 75% report having saved before informally (primarily at home; only 4% report informal savings group participation), and 30% report having saved before in a formal financial institution. Mean (median) reported savings at the time of the survey is about \$220 (\$24). 54% of individuals say they are \geq “somewhat satisfied” with their current amount of savings. 18% of the sample appears present-biased in response to standard hypothetical questions designed to measure time-inconsistency (choosing smaller-sooner instead of larger-later for today versus one month from today, but then choosing larger-later for six months versus seven months from today), and 41% of the sample is “impatient” (choosing 200 pesos today instead of 250 or 300 pesos one month from today). Mean (median) individual income during the last seven days is about \$25 (\$17). 66% of the sample owns their dwelling, and we classify 25% of the sample as relatively high wealth (defined as owning one’s dwelling and having high-quality building materials). Respondents have a moderate degree of decision power in their households, as measured by three questions about who decides: whether to make purchases of appliances and of personal things, and whether and how much to support family members financially. Also, as noted above, our sample is comprised of people with (self-reported) regular income, and without a pre-existing account with FVB.

II. Results

A. Account Take-up and Usage

Of the 9,992 offers, 23% “took-up”: opened an account.¹³ Table 2 shows conditional correlations between various measures of take-up or subsequent savings balances, and individual

¹² Indeed, our measure of intra-household decision power shows that married women have higher mean decision power (3.9) than married men (3.3). This measure sums three survey responses regarding who makes household decisions (appliance acquisition, personal things acquisition, and family support), with two points given if answer is the respondent; one point if both; and zero points otherwise.

¹³ Account openers could open more than one Gihandom account at their randomly assigned terms, and 6% of openers did open multiple accounts. Our measures of savings below span all Gihandom accounts.

characteristics measured from the baseline survey. The correlations are estimated using an OLS model that includes fixed effects for marketer, the individual's neighborhood, and week-of-offer, as well as the individual variables shown in the table. Column 1 shows that take-up is significantly correlated with being female, married, more-educated, wealthier, higher-income, patient, and having more decision power and relatively high savings at baseline.¹⁴

The marketer and week-of-offer fixed effects are also strongly correlated with take-up: they are strongly jointly significant. Most of these same baseline characteristics, as well as the marketer and timing variables, are also correlated with various measures of savings balances in the accounts after one year (Columns 2-8).

92% account openers set goal terms of one year or less (Figure 1), with 17% in the 1-3 month range, 27% in the 3-6 month range, and 48% in the 6-12 month range.

65% of account openers set the minimum goal amount of 2,000 pesos (\$50). Another 28% set goals of <10,000 (Figure 2). Account openers had a mean (median) balance of 841 (102) pesos over their first 12 months, and a mean (median) high balance of 1252 (102) pesos over their first 12 months. The correlation between mean balance and high balance is 0.92.

98% of account openers started with the only the minimum opening deposit of 100 pesos. 61% never made additional deposits after the opening deposit; mean (median) balance of these stranded accounts is 107 (101). Among those who made more than one deposit, the mean (median) number of deposits over the entire 20-month period for which we have transaction data (March 2007 – November 2008) is 5 (4).

¹⁴ Interestingly, as compared to Ashraf et al. (2006), we do not find that present-biasedness predicts take-up of the commitment savings account studied here (Table 2). We consider several potential explanations for the lack of replication. First, the questions in the (Ashraf et al. 2006) study were spaced further apart, in a longer survey. In contrast, our shorter survey might generate more (artificial) time-consistency if participants recognize the similarity between the smaller-sooner vs. larger-later choices. Indeed, our subjects exhibit less time-inconsistency (18%) than Ashraf et al.'s (26%). Second, the professional surveyors in Ashraf et al. may have elicited more informative responses than the marketers here, due to differences in training and/or in respondent perceptions of how the enumerator might use the information. One way of exploring the validity of our present-bias measure is to see how it correlates with other baseline characteristics in a multivariate regression. We find that it is strongly negatively correlated with income and wealth (as expected), but not with satisfaction with current savings (surprising). Third, Ashraf et al.'s sample included only prior savers at a particular bank, whereas the product studied here was offered more broadly. Fourth, one of the studies may simply have generated an outlier statistically and thus be drawing the wrong inference.

19% of account holders had reached their goal as of November 24, 2008, the last date for which we have balance data. The mean (median) high balance over our 20-month sample was 4391 (3000) pesos for those who reached their goal, and 669 (101) pesos for those who did not.

B. Price Elasticities

Our estimates of price elasticities of demand for saving start with the following OLS equation on the full sample of 9,992 offers:

$$(1) Y_i = \alpha + \beta^1 HighRate_i + \beta^2 RewardRate_i + \eta L_i + \delta M_i + \Phi T_i + \Gamma X_i + \varepsilon$$

Where Y is a measure of saving (various measures are detailed below) for individual i , and β^1 and β^2 are the coefficients of interest (with *RegularRate* as the omitted category). L is a vector of fixed effects for i 's barangay (neighborhood), M is a vector of fixed effects for each marketer, T is a vector of fixed effects for the week in which the offer was made, X is a vector of categorical variables for amount saved at baseline,¹⁵ and ε is the error term. We calculate Huber-White standard errors.

We then calculate point estimates and upper bounds on the price elasticity of demand using the formula:

$$(2) \text{Elasticity} = (f(\beta^1)) / \text{mean}(Y_{RegularRate}) * 100 / 100$$

When $f(\beta^1)$ is simply β^1 from (1), then equation (2) is a point estimate of the price elasticity. We also report results using the upper bound of the 95% confidence interval of β^1 , to estimate whether even a very generous estimate of our implied elasticity falls in the range of 0.7 to 0.8 (more on this below).

We use β^1 instead of β^2 because of the conditionality of the high rate in the *Reward* treatment; in practice this assumption does not matter because we find that β^1 and β^2 generally have similar, precisely estimated null results. Scaling $f(\beta^1)$ by the mean of the outcome in the control group, and then multiplying by 100, translates the treatment effect estimate into a percentage change in

¹⁵ Including additional variables from the baseline survey as controls does not change the results (unsurprisingly, given the orthogonality results in Table 1).

savings (or take-up). The most rightward term in (2) is 100 because the *HighRate* treatment (3%) represents a 100% increase over the normal rate (1.5%).

An elasticity calculated using (2) will equal the elasticity of intertemporal substitution (EIS) under the assumption that the percent change in savings equals the percent change in consumption. As noted above, the percent change in savings we measure covers only one line item on the household balance sheet, and hence overstates price sensitivity if there is any substitution from other accounts into these (or if these account balances are financed with debt, as they might well be given the commitment feature; see e.g., (Laibson et al. 2003)). So we think of our elasticities as generous upper bounds on the true, net, price elasticity of demand for savings.

Table 3 presents price sensitivity results for five different outcome measures. The first is take-up, which does not respond significantly to either of the higher interest rates. Column (2) sets Y = (average balance over 12 months subsequent to treatment assignment) and again finds no significant effects. The point elasticity is 0.16, with an upper bound of 0.41. Column (3) winsorizes (censors) at the 95th percentile, and Column (4) winsorizes at the 99th percentile. Neither of these treatment effects are significant either, and the largest upper bound elasticity is 0.22. Column (5) finds no significant effects on a discrete measure of saving: average 12-month balance $\geq 1,000$ pesos. Appendix Tables 1 and 2 show similar results using a 6-month (instead of at 12-month) horizon, and high balance (instead of average balance). Results are also similar if we condition on take-up (results available upon request).

In all, we find no evidence of significant price elasticities of demand for saving in the full sample. Even the largest upper bound estimate of the price elasticity implied by our confidence intervals, 0.41, is strictly below the range of 0.7 to 0.8 emphasized in Attanasio and Weber (2010).

Tables 4 and 5 explore heterogeneity by estimating price elasticities for sub-groups measured using baseline characteristics. We estimate separate regressions for each characteristic Z (but each of Table 4 and 5's columns presents results for several different regressions, to save space), of the form:

$$(3) Y_i = \alpha + \beta^3 HighRate_i * Z=1_i + \beta^4 HighRate_i * Z=0_i + \beta^5 (RewardRate_i) * Z=1_i + \beta^6 (RewardRate_i) * Z=0_i + \xi Z=1_i + \eta L_i + \delta M_i + \Phi T_i + \Gamma X_i + \varepsilon$$

Where Z is one of baseline savings, ever saved in formal institution, ever saved informally, relative wealth, relative income, satisfied with current savings, gender, education, present-bias, impatience, or one of two measures of intrahousehold decision power. The coefficients on the interaction terms identify sub-group point estimates that we use to calculate elasticities per equation (2), substituting the sub-group outcome mean in the *RegularRate* group for the full sample mean.

The results suggest fairly homogenous and very price-inelastic demand across sub-groups. Tables 4 and 5 present 240 elasticity estimates: (mean estimates and upper bound estimates) \times (5 outcomes) \times (24 sub-groups). Only one of the 120 mean estimates reject zero with 90% confidence (and this point estimate is negative), and none of the mean estimates is ≥ 0.7 . Only 5 of the 120 upper bound estimates are ≥ 0.7 .

Table 4 contains groups that parse the sample into plausibly marginal vs. infra-marginal savers. As one would expect, there is some evidence that marginal savers respond more to price; e.g., take-up sensitivity is significantly higher for those with savings at baseline than for those without (Column 1a), and there is some evidence that balance sensitivity is significantly higher for those who have ever saved outside of a formal institution than for those who have not (Column 2a). Despite this evidence of *heterogeneity* in price sensitivity, we nevertheless find low *levels* of price sensitivity even among the relatively elastic groups. None of the six plausibly marginal sub-groups (those with baseline savings, prior formal or informal savings experience, higher wealth, higher income, or not satisfied with current savings) exhibits any statistically significant price sensitivities, and the largest upper bound balance elasticity among the 18 estimated for these groups is 0.6 (Columns 2, 3, and 4).

Recall from our previous results that it is not simply the case that demand is low: take-up is 23%. Nor is it the case that demand is uncorrelated with everything: it is correlated strongly with consumer characteristics, and with non-price efforts undertaken by the bank (namely marketing). Table 2 shows that many of the baseline characteristics themselves (i.e., the “main effects”) are significantly correlated with saving demand, as are the marketer and week-of-offer fixed effects. Figure 3 shows the magnitude of the marketer fixed effects (relative to the worst marketer), and how they dwarf the (non-) response to the higher interest rate, in the specification reported in Table 2, Column 2. Four out of the 15 marketer effects have confidence intervals that are strictly above the point estimate of the interest rate treatment effect. Thus, baseline characteristics and

other observables help predict savings demand, but price does not (nor do account ownership requirements, as we see in the next sub-section).

C. Account Ownership Elasticities

Table 6 estimates the (non-)response of each of our five outcome measures to account ownership requirements. The only difference in specification from Table 3 (and equation (1)) is that we limit the sample here to married individuals. We do not find any significant ownership sensitivities, and the point estimates are uniformly small in magnitude. Appendix Tables 3 and 4 show similar results for the 6-month instead of the 12-month horizon, and for high-balance instead of average balance.

Tables 7 and 8 explore heterogeneity in impact of account ownership requirements. The analysis follows equation (3) and Tables 4 and 5 above for interest rates, except here we present coefficients instead of elasticities (there being no natural way to define an elasticity with respect to account ownership requirements). As in Tables 4 and 5, each column of Tables 7 and 8 presents results for many different regressions, with each regression containing the interactions and main effect for a different baseline characteristic Z . One can also read across rows to get a sense for whether a particular sub-group is sensitive to account ownership requirements in a way that manifests robustly across different measures of saving.

Overall we find no more significant results than one would expect to find by chance. It is particularly noteworthy that we do not find any significant heterogeneity with respect to baseline decision making power in the household (Table 8). It may be that the illiquidity provided by the Gihandom account dampened the impact of control rights by increasing the decision power of those offered the account and/or making it easier for spouses to monitor the use (or at least withdrawal) of joint funds.

Interestingly, the lack of account ownership elasticities comes despite a clear preference for the individual account: among those given a choice of a joint or an individual account, 89% chose individual. This preference is ultimately (quite) weak in the sense that the take-it-or-leave-it offer of “joint only” does not depress take-up or savings. Nor does having the choice seem to change the composition of who takes up, in the observable sense: Appendix Table 5 reports estimates of our take-up regressions separately for each ownership arm, and shows that

correlations between observables (e.g., decision power, gender, marital status) and take-up are stable across arms.

III. Conclusion

We worked with a for-profit bank to study determinants of demand for a new commitment savings product. 10,000 door-to-door solicitations produced a 23% take-up rate. The bank randomized both the yield (within a range offered in the market) and account ownership requirement it offered, at the individual level. We find strikingly small demand sensitivities on both dimensions. These results do not appear to be driven by liquidity constraints: we find null elasticities, and small upper bounds, even among plausibly marginal savers (e.g., those with savings at baseline, those who have saved before, and those with relatively high wealth or income).

Evidence on price and ownership sensitivities is critical for calibration of microeconomic and macroeconomic models of household behavior and intertemporal choice, and our evidence does not square easily with other recent estimates of key parameters.

Much of the intra-household bargaining literature suggests that the joint ownership requirement tested here should depress take-up and savings among married individuals, but we do not find that is the case (despite that fact that people exhibit a clear preference for individual accounts when given the choice). It may be the case that the commitment features of the account studied here dampen the value of ownership/control; conversely, one might expect that a joint ownership requirement would depress savings in more-liquid accounts.

Turning to price, Hall's (1988) argument that the elasticity of intertemporal substitution (EIS) is close to zero has spurred a large literature, with much of it finding estimates closer to one. Attanasio and Weber's recent review (2010) emphasizes estimates in the 0.7 to 0.8 range. Other studies have found higher elasticities among those participating in the relevant asset market (e.g., Vissing-Jorgensen (2002); Guvenen (2006)). Our results imply an EIS of zero, with a generous upper bound below 0.7, across the board (i.e., including sub-groups who participate in the formal saving market).

Our results may differ from others' for several reasons. Our estimates may be more accurate because we use experimental variation that is not confounded by income effects or unobservables. Other estimates may be more accurate because they study more representative

samples and a broader swath of financial markets and marketing channels, in general equilibrium. Both sets of estimates may be accurate, if context and/or time horizon matters. We do not feel there is sufficient evidence to take a position on which of these explanations has the most merit. Additional studies that replicate methodologies across settings would certainly help adjudicate.

But replication alone may not suffice to interpret and apply the range of intertemporal price sensitivities found in various studies. Why, for example, does microcredit demand respond nontrivially (Karlan and Zinman 2008), and even quite strongly (Karlan and Zinman 2012), to randomized interest rates, while microsavings demand does not (at least in the current study)? And why do other studies find strong sensitivity to savings account-opening fees (Cole, Sampson, and Zia 2011; Dupas and Robinson 2012; Prina 2012)? Nonlinearities may be important, and future studies would do well to identify more complete pictures of demand curves.¹⁶

¹⁶ See, e.g., Karlan and Zinman (2008) on credit, and Kremer and Holla (2009).

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Figure 1: Goal Term

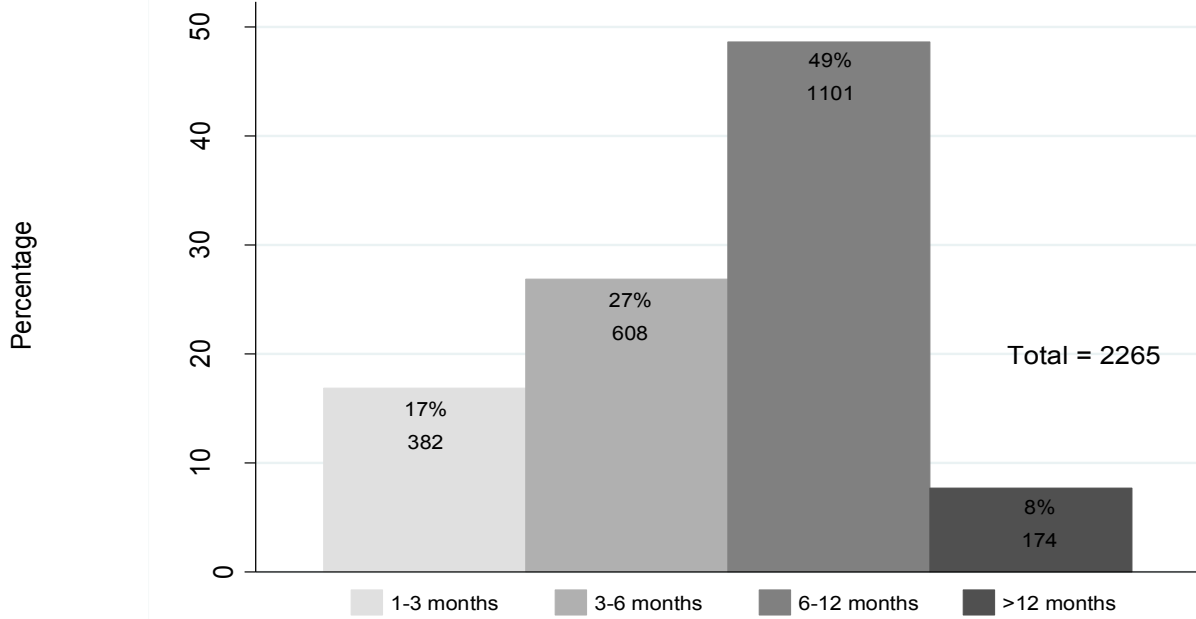


Figure 2: Goal Amount in Pesos

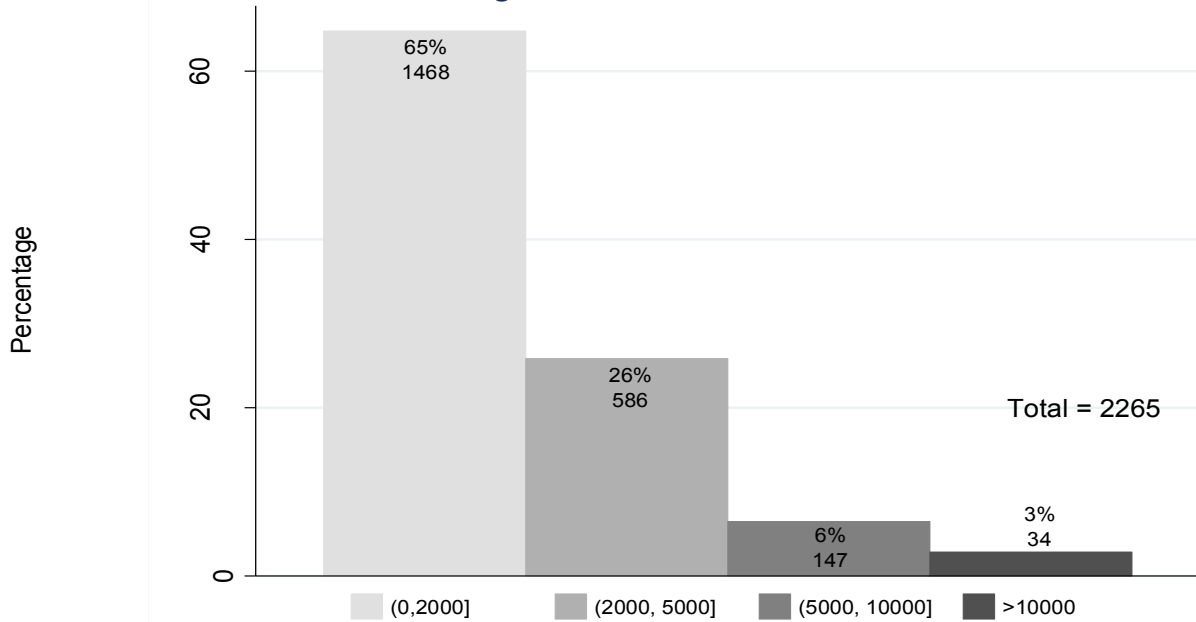
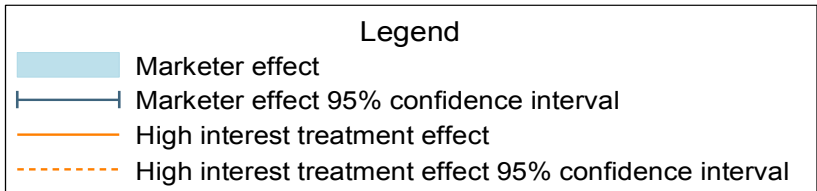
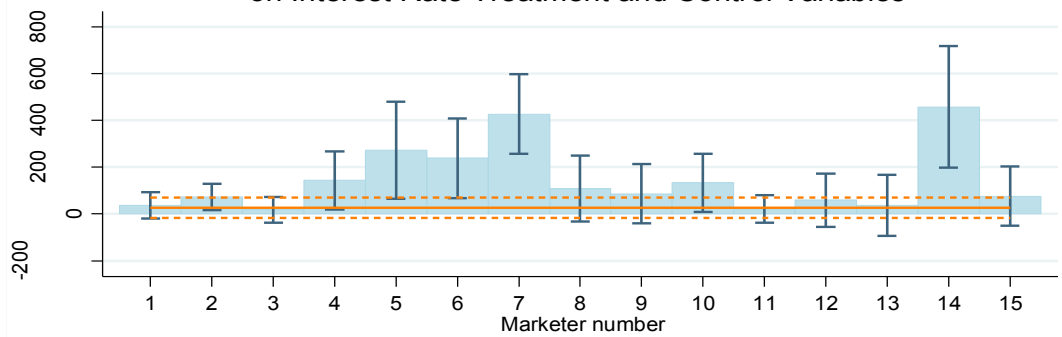


Figure 3: Marketer Fixed Effects
 From OLS Regression of Mean Balance Over 12 Months
 on Interest Rate Treatment and Control Variables



Note: Same specification as Table 2, Column 2

Table 1: Baseline Sample Characteristics, and Orthogonality of Treatment Assignments

	Interest Rate Treatment				P-value from F-test of joint significance of (2) and (3) relative to (4)	Account-Ownership Treatment			P-value from F-test of joint significance of (6) and (7) relative to (8)
	Full Sample	Regular	High	Reward		Single	Joint	Option	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Panel A: Baseline Survey Variables - Means and Standard Errors									
Female	0.673 (0.005)	0.673 (0.008)	0.663 (0.008)	0.683 (0.008)	0.229	0.669 (0.008)	0.664 (0.008)	0.685 (0.008)	0.142
Married	0.640 (0.005)	0.644 (0.008)	0.640 (0.008)	0.636 (0.008)	0.761	0.634 (0.008)	0.639 (0.008)	0.646 (0.008)	0.574
Age	34.076 (0.126)	34.287 (0.219)	34.080 (0.217)	33.860 (0.217)	0.385	34.089 (0.220)	34.005 (0.217)	34.133 (0.216)	0.914
Education >= some college	0.443 (0.005)	0.443 (0.009)	0.444 (0.009)	0.443 (0.009)	0.994	0.452 (0.009)	0.432 (0.009)	0.445 (0.008)	0.254
High wealth (owns home with high quality materials)	0.252 (0.004)	0.254 (0.008)	0.251 (0.007)	0.250 (0.008)	0.943	0.260 (0.008)	0.242 (0.007)	0.252 (0.007)	0.207
Income >= median (in-sample)	0.503 (0.005)	0.507 (0.009)	0.510 (0.009)	0.492 (0.009)	0.276	0.492 (0.009)	0.496 (0.009)	0.520 (0.009)	0.051*
Ever saved at home or (in)formal institutions	0.746 (0.004)	0.739 (0.008)	0.752 (0.007)	0.746 (0.008)	0.472	0.748 (0.008)	0.738 (0.008)	0.750 (0.007)	0.495
Ever saved formally	0.300 (0.005)	0.298 (0.008)	0.299 (0.008)	0.304 (0.008)	0.830	0.307 (0.008)	0.301 (0.008)	0.294 (0.008)	0.506
Satisfied with current savings	0.537 (0.005)	0.530 (0.009)	0.552 (0.009)	0.527 (0.009)	0.074*	0.525 (0.009)	0.542 (0.009)	0.542 (0.009)	0.260
Current savings amount (pesos)	8808.58 (539.76)	8562.62 (868.64)	8561.00 (739.15)	9308.97 (1156.0)	0.845	7923.40 (579.43)	9788.58 (1228.1)	8716.54 (885.23)	0.353
Present-bias	0.182 (0.004)	0.183 (0.007)	0.178 (0.007)	0.184 (0.007)	0.823	0.182 (0.007)	0.176 (0.007)	0.187 (0.007)	0.530
Impatient	0.408 (0.005)	0.410 (0.009)	0.411 (0.008)	0.403 (0.009)	0.753	0.406 (0.009)	0.404 (0.009)	0.414 (0.008)	0.675
Intra-household decision power v1 (possible range is [0,6])	2.417 (0.021)	2.449 (0.036)	2.399 (0.035)	2.403 (0.036)	0.543	2.392 (0.036)	2.406 (0.036)	2.451 (0.035)	0.463
Intra-household decision power v2 (possible range is [0,3])	1.713 (0.014)	1.733 (0.024)	1.703 (0.024)	1.703 (0.024)	0.591	1.703 (0.024)	1.706 (0.024)	1.729 (0.024)	0.709
Panel B: Multinomial Logit of Treatment Assignment on Survey Variables									
P-value from Likelihood Ratio Chi-Square Test of joint significance of survey variable coefficients for interest rate treatment					0.793				
P-value from Likelihood Ratio Chi-Square Test of joint significance of survey variable coefficients for account-ownership treatment					0.259				
Panel C: Multinomial Logit of Interest Rate Treatment on Account-Ownership Treatment									
P-value from Likelihood Ratio Chi-Square Test of joint significance of interest rate treatment coefficients					0.475				
Number of Observations	9992	3329	3367	3296		3275	3283	3434	

Notes: *p<.10 **p<.05 ***p<.01. Huber-White standard errors are shown in parentheses. Present-bias is a binary variable indicating whether respondent is less patient, in hypothetical sooner-lesser vs. larger-later choices, when making a choice between today or 1 month from today than when making a choice between 6 months from today or 7 months from today. Impatient is a binary variable indicating if respondent chooses the sooner-lesser amount when faced with choice of today vs. 1 month from today. "Intra-household decision power v1" is a sum of three survey responses on who makes household decisions (appliance acquisition, personal things acquisition, and family support), with two points given if answer is myself; one point if both; and zero point otherwise. "Intra-household decision power v2" gives one point if answer is myself or both and zero point otherwise. In multinomial logits, base outcomes are regular interest rate and single account only treatments. The multivariate logits in Panel B include the v1 but not the v2 variable. \$1 ≈ 40 Philippine pesos during our sample period.

Table 2: Is Demand Correlated with Observables?

	Average Balances Over 12 Months Post-Treatment Assignment				
	(1)	(2)	(3)	(4)	(5)
	Take-up	Balance	Balance (censored at 95th percentile)	Balance (censored at 99th percentile)	Balance >= 1000 pesos
Mean of dependent variable	0.227	190.630	107.848	158.053	0.062
Female	0.117*** (0.008)	91.346*** (21.256)	64.523*** (6.113)	89.713*** (10.703)	0.040*** (0.005)
Education >= some college	0.053*** (0.009)	41.320* (20.550)	24.486*** (6.973)	27.545* (12.033)	0.015** (0.005)
High wealth (owns home with high quality materials)	0.040*** (0.011)	14.158 (26.788)	29.166*** (8.767)	43.261** (15.692)	0.020** (0.007)
Income >= median (in-sample)	0.080*** (0.009)	90.262*** (22.746)	39.596*** (6.812)	63.135*** (11.575)	0.021*** (0.005)
Ever saved at home or (in)formal institutions	0.018 (0.037)	-7.888 (57.528)	10.748 (30.993)	18.429 (48.765)	0.010 (0.024)
Ever saved formally	-0.025* (0.012)	-8.677 (37.410)	7.307 (9.890)	11.347 (17.509)	0.004 (0.008)
Baseline savings amount - quintile 1 (omitted category: amount = 0)	0.014 (0.038)	-11.214 (57.271)	-12.738 (31.494)	-31.328 (49.175)	-0.016 (0.024)
Baseline savings amount - quintile 2	0.058 (0.038)	62.939 (57.844)	22.832 (31.544)	24.148 (49.547)	0.008 (0.024)
Baseline savings amount - quintile 3	0.080* (0.038)	134.044 (75.885)	34.482 (31.784)	46.726 (50.233)	0.020 (0.025)
Baseline savings amount - quintile 4	0.092* (0.038)	108.277 (61.183)	22.466 (31.764)	38.015 (50.399)	0.010 (0.025)
Baseline savings amount - quintile 5	0.147*** (0.039)	286.530*** (81.412)	69.498* (33.144)	135.584* (53.869)	0.038 (0.026)
Baseline savings amount - missing values	0.076 (0.048)	-16.461 (66.294)	-12.265 (36.352)	-41.544 (55.225)	-0.020 (0.028)
Satisfied with current savings	-0.014 (0.009)	-34.366 (24.121)	-5.107 (7.165)	-14.060 (12.275)	-0.003 (0.006)
Present-bias	-0.001 (0.012)	-29.591 (36.278)	6.282 (9.575)	2.943 (16.687)	0.005 (0.007)
Impatient	-0.063*** (0.010)	-37.502 (32.627)	-30.757*** (7.841)	-40.006** (14.162)	-0.018** (0.006)
Intra-household decision power v1	0.006* (0.002)	7.143 (4.614)	3.606* (1.737)	6.287* (2.958)	0.003 (0.001)
P-value from F-test of joint significance of baseline savings amount coefficients	0.000	0.000	0.000	0.000	0.000
P-value from F-test of joint significance of marketer coefficients	0.000	0.000	0.000	0.000	0.000
P-value from F-test of joint significance of week of offer coefficients	0.000	0.000	0.000	0.000	0.000
P-value from F-test of joint significance of neighborhood coefficients	0.000	0.517	0.109	0.406	0.303
R-squared	0.163	0.043	0.084	0.069	0.055
Observations	9992	9992	9992	9992	9992

Notes: *p<.10 **p<.05 ***p<.01. Each column reports results from a single OLS regression of a demand measure on the baseline variables shown or summarized in the rows. Robust standard errors are shown in parentheses. Present-bias is a binary variable indicating whether respondent is less patient, in hypothetical sooner-lesser vs. larger-later choices, when making a choice between today or 1 month from today than when making a choice between 6 months from today or 7 months from today. Impatient is a binary variable indicating if respondent chooses the sooner-lesser amount when faced with choice of today vs. 1 month from today "Intra-household decision power v1" is a sum of three survey responses on who makes household decisions (appliance acquisition, personal things acquisition, and family support), with two points given if answer is myself; one point if both; and zero point otherwise.

Table 3: Is Savings Demand Price-Sensitive? Full Sample Estimates

	Average Balances Over 12 Months Post-Treatment Assignment				
	(1)	(2)	(3)	(4)	(5)
	Take-up	Balance	Balance (censored at 95th percentile)	Balance (censored at 99th percentile)	Balance >= 1000 pesos
Mean of dependent variable	0.227	190.630	107.848	158.053	0.062
High interest rate (3%) (omitted category: Regular interest rate (1.5%))	0.008 (0.010)	27.335 (22.508)	4.070 (7.430)	8.479 (12.978)	0.002 (0.006)
Reward interest rate (3% if goal reached, 1.5% if not)	0.013 (0.010)	16.232 (21.476)	9.705 (7.581)	10.731 (13.014)	0.006 (0.006)
Mean elasticity	0.034	0.156	0.039	0.056	0.039
Upper bound elasticity	0.120	0.408	0.181	0.224	0.228
P-value from F-test of joint significance of baseline savings amount coefficients	0.000	0.000	0.000	0.000	0.000
P-value from F-test of joint significance of marketer coefficients	0.000	0.000	0.000	0.000	0.000
P-value from F-test of joint significance of week of offer coefficients	0.000	0.000	0.000	0.000	0.000
P-value from F-test of joint significance of neighborhood coefficients	0.000	0.551	0.071	0.372	0.337
R-squared	0.127	0.037	0.065	0.056	0.043
Observations	9992	9992	9992	9992	9992

Notes: *p<.10 **p<.05 ***p<.01. Each column reports results from a single OLS regression of a demand measure on interest rate treatment variables and control variables. Robust standard errors are shown in parentheses. We calculate the point elasticity by dividing the point estimate for *HighRate* treatment effect by the mean of the outcome for the *LowRate* group (the % change in yield from *LowRate* to *HighRate* is 100, so no further scaling is needed). The upper bound elasticity uses the upper endpoint of the *HighRate* 95% confidence interval instead of the point estimate of the mean effect.

Table 4: Is Savings Demand Price-Sensitive? Marginal vs. Infra-Marginal Households

	Average Balances Over 12 Months Post-Treatment Assignment									
	(1)	(1a)	(2)	(2a)	(3)	(3a)	(4)	(4a)	(5)	(5a)
	Take-up	P-value from F-test of equality of HighRate interaction terms	Balance	P-value from F-test of equality of HighRate interaction terms	Balance (censored at 95th percentile)	P-value from F-test of equality of HighRate interaction terms	Balance (censored at 99th percentile)	P-value from F-test of equality of HighRate interaction terms	Balance >= 1000 pesos	P-value from F-test of equality of HighRate interaction terms
Mean elasticity: Baseline savings > 0	0.091		0.192		0.058		0.089		0.038	
Upper bound elasticity: Baseline savings > 0	0.186		0.471		0.212		0.274		0.240	
		0.011		0.129		0.473		0.252		0.895
Mean elasticity: Baseline savings = 0	-0.184		-0.131		-0.052		-0.133		0.048	
Upper bound elasticity: Baseline savings = 0	0.019		0.273		0.299		0.256		0.575	
Mean elasticity: Ever saved formally	0.100		0.070		-0.016		-0.016		-0.039	
Upper bound elasticity: Ever saved formally	0.234		0.415		0.185		0.220		0.219	
		0.185		0.875		0.591		0.577		0.526
Mean elasticity: Never saved formally	-0.007		0.250		0.092		0.131		0.118	
Upper bound elasticity: Never saved formally	0.105		0.607		0.289		0.368		0.392	
Mean elasticity: Ever saved at home or (in)formal institutions	0.085		0.196		0.069		0.090		0.050	
Upper bound elasticity: Ever saved at home or (in)formal institutions	0.178		0.467		0.221		0.270		0.248	
		0.006		0.088		0.212		0.178		0.637
Mean elasticity: Never saved at home or (in)formal institutions	-0.239*		-0.209		-0.168		-0.206		-0.055	
Upper bound elasticity: Never saved at home or (in)formal institutions	-0.014*		0.247		0.212		0.231		0.532	
Mean elasticity: High wealth (owns home with high quality materials)	0.052		0.026		0.154		0.132		0.221	
Upper bound elasticity: High wealth (owns home with high quality materials)	0.198		0.353		0.401		0.421		0.558	
		0.701		0.572		0.237		0.455		0.181
Mean elasticity: Not high wealth	0.028		0.232		-0.015		0.019		-0.047	
Upper bound elasticity: Not high wealth	0.135		0.580		0.157		0.225		0.181	
Mean elasticity: Income >= median (in-sample)	0.054		0.094		-0.016		-0.012		-0.051	
Upper bound elasticity: Income >= median (in-sample)	0.156		0.401		0.148		0.184		0.166	
		0.434		0.873		0.373		0.377		0.242
Mean elasticity: Income < median (in-sample)	0.001		0.341		0.166		0.230		0.249	
Upper bound elasticity: Income < median (in-sample)	0.156		0.779		0.438		0.554		0.618	
Mean elasticity: Not satisfied with current savings	0.044		0.234		0.071		0.141		0.052	
Upper bound elasticity: Not satisfied with current savings	0.163		0.592		0.267		0.380		0.312	
		0.802		0.418		0.625		0.291		0.863
Mean elasticity: Satisfied with current savings	0.029		0.073		0.010		-0.030		0.030	
Upper bound elasticity: Satisfied with current savings	0.154		0.429		0.216		0.209		0.307	

Notes: *p<.10 **p<.05 ***p<.01. Point estimates for elasticities are computed from separate OLS regressions, on the full sample, of a demand measure on a single binary variable (e.g., *Female*), each value of that variable interacted with interest rate variables (e.g., *Female*HighRate*, *Female*LowRate*, *Male*HighRate*, *Male*LowRate*) and control variables. We calculate the point elasticity for each sub-group of our baseline characteristics by dividing the point estimate for HighRate treatment effect by the mean of the outcome for the LowRate group (the % change in yield from LowRate to HighRate is 100, so no further scaling is needed). The upper bound elasticity uses the upper endpoint of the HighRate 95% confidence interval instead of the point estimate of the mean effect.

Table 5: Is Savings Demand Price-Sensitive? Results for Other Sub-Groups

	Average Balances Over 12 Months Post-Treatment Assignment									
	(1)	(1a)	(2)	(2a)	(3)	(3a)	(4)	(4a)	(5)	(5a)
	Take-up	P-value from F-test of equality of HighRate interaction terms	Balance	P-value from F-test of equality of HighRate interaction terms	Balance (censored at 95th percentile)	P-value from F-test of equality of HighRate interaction terms	Balance (censored at 99th percentile)	P-value from F-test of equality of HighRate interaction terms	Balance >= 1000 pesos	P-value from F-test of equality of HighRate interaction terms
Mean elasticity: Female	0.010		0.118		0.028		0.064		0.042	
Upper bound elasticity: Female	0.102		0.392		0.181		0.248		0.247	
		0.303		0.823		0.765		0.808		0.960
Mean elasticity: Male	0.184		0.391		0.146		0.069		0.084	
Upper bound elasticity: Male	0.412		1.055		0.505		0.479		0.561	
Mean elasticity: Education >= some college	0.059		0.111		0.062		0.053		0.066	
Upper bound elasticity: Education >= some college	0.171		0.455		0.246		0.267		0.308	
		0.436		0.994		0.611		0.883		0.654
Mean elasticity: Education < some college	0.005		0.233		0.008		0.061		0.000	
Upper bound elasticity: Education < some college	0.137		0.598		0.228		0.331		0.300	
Mean elasticity: Present-bias	0.096		0.309		0.255		0.336		0.446	
Upper bound elasticity: Present-bias	0.314		0.835		0.637		0.798		0.996	
		0.556		0.667		0.237		0.206		0.119
Mean elasticity: No present-bias	0.021		0.128		-0.001		0.005		-0.030	
Upper bound elasticity: No present-bias	0.114		0.409		0.151		0.185		0.171	
Mean elasticity: Impatient	0.094		0.384		0.158		0.285		0.205	
Upper bound elasticity: Impatient	0.240		0.844		0.405		0.594		0.542	
		0.355		0.302		0.261		0.081		0.249
Mean elasticity: Not impatient now	0.001		0.045		-0.024		-0.060		-0.046	
Upper bound elasticity: Not impatient now	0.108		0.338		0.147		0.139		0.180	
Mean elasticity: Intra-household decision power v1 >= 3	0.051		0.246		0.037		0.057		0.026	
Upper bound elasticity: Intra-household decision power v1 >= 3	0.157		0.591		0.212		0.267		0.258	
		0.608		0.262		0.990		0.918		0.895
Mean elasticity: Intra-household decision power v1 < 3	0.013		0.005		0.049		0.061		0.069	
Upper bound elasticity: Intra-household decision power v1 < 3	0.159		0.348		0.289		0.344		0.394	
Mean elasticity: Intra-household decision power v2 >= 2	0.057		0.251		0.042		0.053		0.028	
Upper bound elasticity: Intra-household decision power v2 >= 2	0.163		0.591		0.216		0.260		0.258	
		0.487		0.233		0.936		0.984		0.898
Mean elasticity: Intra-household decision power v2 < 2	-0.002		-0.017		0.039		0.068		0.066	
Upper bound elasticity: Intra-household decision power v2 < 2	0.145		0.328		0.281		0.356		0.397	

Notes: *p<.10 **p<.05 ***p<.01. Point estimates for elasticities are computed from separate OLS regressions, on the full sample, of a demand measure on a single binary variable (e.g., *Female*), each value of that variable interacted with interest rate variables (e.g., *Female*HighRate*, *Female*LowRate*, *Male*HighRate*, *Male*LowRate*) and control variables. We calculate the point elasticity for each sub-group of our baseline characteristics by dividing the point estimate for HighRate treatment effect by the mean of the outcome for the LowRate group (the % change in yield from LowRate to HighRate is 100, so no further scaling is needed). The upper bound elasticity uses the upper endpoint of the HighRate 95% confidence interval instead of the point estimate of the mean effect. Present-bias is a binary variable indicating whether respondent is less patient, in hypothetical sooner-lesser vs. larger-later choices, when making a choice between today or 1 month from today than when making a choice between 6 months from today or 7 months from today. Impatient is a binary variable indicating if respondent chooses the sooner-lesser amount when faced with choice of today vs. 1 month from today. "Intra-household decision power v1" is a sum of three survey responses on who makes household decisions (appliance acquisition, personal things acquisition, and family support), with two points given if answer is myself; one point if both; and zero point otherwise. "Intra-household decision power v2" gives one point if answer is myself or both and zero point otherwise.

Table 6: Is Demand Sensitive to Account Ownership Requirements?

	Average Balances Over 12 Months Post-Treatment Assignment				
	(1)	(2)	(3)	(4)	(5)
	Take-up	Balance	Balance (censored at 95th percentile)	Balance (censored at 99th percentile)	Balance >= 1000 pesos
Mean of dependent variable	0.238	207.946	114.825	0.823	0.067
Individual accounts only (omitted category: choice of individual or joint account)	-0.003 (0.012)	-6.589 (28.809)	3.468 (9.543)	-3.006 (16.498)	-0.002 (0.007)
Joint accounts only	-0.013 (0.012)	14.111 (30.854)	3.043 (9.547)	10.611 (17.247)	0.001 (0.007)
P-value from F-test of joint significance of baseline savings amount coefficients	0.000	0.000	0.000	0.000	0.000
P-value from F-test of joint significance of marketer coefficients	0.000	0.000	0.000	0.000	0.000
P-value from F-test of joint significance of week of offer coefficients	0.000	0.001	0.000	0.000	0.000
P-value from F-test of joint significance of neighborhood coefficients	0.000	0.279	0.033	0.212	0.065
R-squared	0.152	0.046	0.076	0.066	0.051
Observations	6396	6396	6396	6396	6396

Notes: *p<.10 **p<.05 ***p<.01. Each column reports results from a single OLS regression of a demand measure on account ownership treatment variables. Sample size is lower than in interest rate tables, because account ownership requirements are only relevant for married individuals, and hence we restrict the sample here to married individuals only. Robust standard errors are shown in parentheses.

Table 7: Heterogeneity in Account Ownership Sensitivity? Marginal vs. Infra-Marginal Households

	Average Balances Over 12 Months Post-Treatment Assignment									
	(1)	(1a)	(2)	(2a)	(3)	(3a)	(4)	(4a)	(5)	(5a)
	Take-up	P-value from F-test of equality of Individual Account Only interaction terms	Balance	P-value from F-test of equality of Individual Account Only interaction terms	Balance (censored at 95th percentile)	P-value from F-test of equality of Individual Account Only interaction terms	Balance (censored at 99th percentile)	P-value from F-test of equality of Individual Account Only interaction terms	Balance >= 1000 pesos	P-value from F-test of equality of Individual Account Only interaction terms
Individual accounts only * Baseline savings > 0	-0.014 (0.015)	0.132	-26.525 (38.600)	0.160	-5.272 (11.974)	0.118	-18.345 (20.890)	0.099	-0.007 (0.009)	0.302
Individual accounts only * Baseline savings = 0	0.024 (0.020)		40.278 (26.317)		24.202 (14.498)		33.492 (23.480)		0.008 (0.011)	
Joint accounts only * Baseline savings > 0	-0.020 (0.015)	0.175	10.772 (41.197)	0.548	-1.592 (12.066)	0.225	6.945 (22.193)	0.435	-0.002 (0.009)	0.386
Joint accounts only * Baseline savings = 0	0.013 (0.019)		40.783 (25.569)		21.035 (14.151)		31.745 (22.547)		0.011 (0.011)	
Individual accounts only * Ever saved formally	-0.007 (0.023)	0.812	-10.401 (47.429)	0.916	-5.926 (18.918)	0.515	-26.247 (33.811)	0.356	-0.014 (0.015)	0.270
Individual accounts only * Never saved formally	-0.001 (0.014)		-4.291 (34.927)		8.267 (10.704)		9.073 (17.831)		0.004 (0.008)	
Joint accounts only * Ever saved formally	-0.016 (0.023)	0.880	86.285 (65.254)	0.119	10.215 (19.633)	0.624	24.889 (36.829)	0.593	0.005 (0.015)	0.730
Joint accounts only * Never saved formally	-0.012 (0.014)		-24.488 (30.894)		-0.691 (10.330)		3.037 (17.752)		-0.001 (0.008)	
Individual accounts only * Ever saved at home or (in)formal institutions	-0.013 (0.015)	0.060	-23.918 (36.628)	0.093	-3.866 (11.559)	0.071	-15.570 (20.044)	0.066	-0.007 (0.009)	0.138
Individual accounts only * Never saved at home or (in)formal institutions	0.034 (0.021)		55.567* (27.992)		30.388* (14.925)		43.193 (24.726)		0.015 (0.011)	
Joint accounts only * Ever saved at home or (in)formal institutions	-0.023 (0.014)	0.066	5.847 (39.901)	0.443	-2.380 (11.701)	0.175	4.565 (21.390)	0.363	-0.002 (0.009)	0.402
Joint accounts only * Never saved at home or (in)formal institutions	0.022 (0.020)		43.705 (26.212)		22.431 (14.004)		33.108 (22.845)		0.010 (0.011)	
Individual accounts only * High wealth (owns home with high quality materials)	-0.017 (0.028)	0.584	-21.447 (61.632)	0.785	-14.585 (23.407)	0.370	-48.948 (41.214)	0.184	-0.016 (0.018)	0.359
Individual accounts only * Not high wealth	0.000 (0.013)		-2.573 (32.006)		8.328 (10.142)		10.500 (17.358)		0.002 (0.008)	
Joint accounts only * High wealth (owns home with high quality materials)	-0.038 (0.028)	0.273	-5.564 (58.676)	0.703	-1.569 (24.383)	0.789	0.638 (46.131)	0.769	-0.003 (0.019)	0.771
Joint accounts only * Not high wealth	-0.004 (0.013)		20.822 (36.245)		5.495 (9.989)		15.193 (17.633)		0.003 (0.008)	
Individual accounts only * Income >= median (in-sample)	0.008 (0.016)	0.291	0.437 (42.389)	0.790	6.994 (13.370)	0.711	-0.847 (23.708)	0.942	-0.001 (0.010)	0.864
Individual accounts only * Income < median (in-sample)	-0.017 (0.018)		-13.353 (31.149)		0.068 (12.935)		-3.150 (20.549)		-0.003 (0.010)	
Joint accounts only * Income >= median (in-sample)	-0.012 (0.016)	0.941	12.372 (44.947)	0.922	0.439 (13.126)	0.693	7.204 (24.418)	0.767	-0.001 (0.010)	0.736
Joint accounts only * Income < median (in-sample)	-0.014 (0.018)		18.024 (35.889)		7.811 (13.204)		16.992 (21.999)		0.004 (0.010)	
Individual accounts only * Not satisfied with current savings	-0.001 (0.019)	0.888	29.977 (44.540)	0.251	7.748 (14.737)	0.701	16.926 (26.706)	0.298	0.001 (0.012)	0.680
Individual accounts only * Satisfied with current savings	-0.004 (0.016)		-34.972 (36.438)		0.261 (12.612)		-18.492 (20.844)		-0.005 (0.010)	
Joint accounts only * Not satisfied with current savings	-0.005 (0.019)	0.537	89.267 (55.601)	0.052	23.903 (15.312)	0.059	49.887 (28.151)	0.052	0.017 (0.012)	0.064
Joint accounts only * Satisfied with current savings	-0.020 (0.015)		-43.344 (36.755)		-12.929 (12.105)		-19.374 (21.645)		-0.012 (0.009)	

Notes: *p<.10 **p<.05 ***p<.01. Each column reports results from separate OLS regressions, on the sub-sample of married individuals, of a demand measure on a binary baseline variable (e.g., *Female*), interactions between both values of that variable and the account ownership treatment variables (e.g., *Female*Individual Account Only*, *Female*Joint Account Only*, *Male*Individual Account Only*, *Male*Joint Account Only*, and control variables. Present-bias is a binary variable indicating whether respondent is less patient, in hypothetical sooner-lesser vs. larger-later choices, when making a choice between today or 1 month from today than when making a choice between 6 months from today or 7 months from today. Impatient is a binary variable indicating if respondent chooses the sooner-lesser amount when faced with choice of today vs. 1 month from today "Intra-household decision power v1" is a sum of three survey responses on who makes household decisions (appliance acquisition, personal things acquisition, and family support), with two points given if answer is myself; one point if both; and zero point otherwise. "Intra-household decision power v2" gives one point if answer is myself or both and zero point otherwise.

Table 8: Heterogeneity in Account Ownership Sensitivity? Results for Other Sub-Groups

	Average Balances Over 12 Months Post-Treatment Assignment									
	(1)	(1a)	(2)	(2a)	(3)	(3a)	(4)	(4a)	(5)	(5a)
	Take-up	P-value from F-test of equality of Individual Account Only interaction terms	Balance	P-value from F-test of equality of Individual Account Only interaction terms	Balance (censored at 95th percentile)	P-value from F-test of equality of Individual Account Only interaction terms	Balance (censored at 99th percentile)	P-value from F-test of equality of Individual Account Only interaction terms	Balance >= 1000 pesos	P-value from F-test of equality of Individual Account Only interaction terms
Individual accounts only * Female	-0.000 (0.015)		0.914 (36.509)		9.168 (12.374)		2.610 (21.301)		0.002 (0.010)	
		0.986		0.740		0.391		0.672		0.456
Individual accounts only * Male	-0.001 (0.018)		-17.833 (43.121)		-6.144 (12.773)		-10.562 (22.597)		-0.009 (0.010)	
Joint accounts only * Female	-0.020 (0.015)		19.873 (39.250)		7.108 (12.457)		17.200 (22.503)		0.003 (0.010)	
		0.156		0.892		0.692		0.708		0.725
Joint accounts only * Male	0.013 (0.017)		11.560 (47.009)		0.043 (12.743)		5.101 (23.193)		-0.002 (0.010)	
Individual accounts only * Education >= some college	0.000 (0.023)		-25.481 (62.635)		0.845 (18.945)		-18.238 (33.217)		-0.012 (0.015)	
		0.782		0.682		0.899		0.551		0.376
Individual accounts only * Education < some college	-0.007 (0.014)		2.396 (26.711)		3.600 (10.245)		4.209 (17.445)		0.003 (0.008)	
Joint accounts only * Education >= some college	-0.023 (0.022)		-17.775 (68.907)		-7.889 (19.052)		-14.873 (34.641)		-0.013 (0.015)	
		0.492		0.489		0.397		0.293		0.199
Joint accounts only * Education < some college	-0.005 (0.014)		34.255 (29.313)		10.553 (10.391)		26.762 (18.786)		0.009 (0.008)	
Individual accounts only * Present-bias	-0.001 (0.029)		36.886 (45.355)		13.822 (23.029)		15.712 (37.179)		0.002 (0.018)	
		0.942		0.344		0.620		0.585		0.781
Individual accounts only * No present-bias	-0.003 (0.013)		-16.008 (33.463)		1.220 (10.544)		-7.066 (18.461)		-0.003 (0.008)	
Joint accounts only * Present-bias	-0.047 (0.028)		8.383 (42.460)		-8.732 (22.330)		0.047 (38.097)		-0.005 (0.017)	
		0.194		0.911		0.571		0.771		0.734
Joint accounts only * No present-bias	-0.007 (0.013)		14.743 (36.513)		5.341 (10.597)		12.549 (19.363)		0.002 (0.008)	
Individual accounts only * Impatient	-0.016 (0.019)		-3.882 (55.829)		1.538 (14.874)		-5.638 (26.526)		-0.003 (0.012)	
		0.352		0.948		0.850		0.883		0.940
Individual accounts only * Not impatient now	0.007 (0.016)		-8.049 (31.023)		5.235 (12.510)		-0.621 (21.269)		-0.001 (0.010)	
Joint accounts only * Impatient	-0.025 (0.019)		-27.139 (51.347)		-0.956 (15.203)		6.463 (28.206)		0.002 (0.012)	
		0.451		0.315		0.757		0.863		0.868
Joint accounts only * Not impatient now	-0.007 (0.015)		38.203 (38.958)		5.085 (12.263)		12.642 (21.801)		-0.000 (0.010)	
Individual accounts only * Intra-household decision power v1 (range is 0 to 6)	-0.000 (0.003)		-3.493 (7.602)		-0.061 (2.589)		-2.195 (4.501)		-0.001 (0.002)	
Joint accounts only * Intra-household decision power v1 (range is 0 to 6)	-0.003 (0.003)		2.448 (7.868)		0.279 (2.595)		2.159 (4.690)		-0.000 (0.002)	
Individual accounts only * Intra-household decision power v2 (range is 0 to 3)	-0.001 (0.005)		-5.596 (10.887)		0.182 (3.583)		-2.761 (6.208)		-0.002 (0.003)	
Joint accounts only * Intra-household decision power v2 (range is 0 to 3)	-0.004 (0.004)		2.357 (11.168)		0.796 (3.601)		3.362 (6.491)		-0.000 (0.003)	

Notes: *p<.10 **p<.05 ***p<.01. Each column reports results from separate OLS regressions, on the sub-sample of married individuals, of a demand measure on a binary baseline variable (e.g., *Female*), interactions between both values of that variable and the account ownership treatment variables (e.g., *Female*Individual Account Only*, *Female*Joint Account Only*, *Male*Individual Account Only*, *Male*Joint Account Only*, and control variables. Present-bias is a binary variable indicating whether respondent is less patient, in hypothetical sooner-lesser vs. larger-later choices, when making a choice between today or 1 month from today than when making a choice between 6 months from today or 7 months from today. Impatient is a binary variable indicating if respondent chooses the sooner-lesser amount when faced with choice of today vs. 1 month from today "Intra-household decision power v1" is a sum of three survey responses on who makes household decisions (appliance acquisition, personal things acquisition, and family support), with two points given if answer is myself; one point if both; and zero point otherwise. "Intra-household decision power v2" gives one point if answer is myself or both and zero point otherwise.

Appendix Table 1: Is Savings Demand Price-Sensitive? Full Sample Estimates for 6-Months Instead of 12 Months

	Average Balances Over 6 Months Post-Treatment Assignment			
	(1)	(2)	(3)	(4)
	Balance	Balance (censored at 95th percentile)	Balance (censored at 99th percentile)	Balance >= 1000 pesos
Mean of dependent variable	201.494	117.325	167.959	0.065
High interest rate (3%) (omitted category: Regular interest rate (1.5%))	38.085 (23.911)	5.200 (8.204)	13.388 (13.889)	0.003 (0.006)
Reward interest rate (3% if goal reached, 1.5% if not)	19.381 (22.002)	10.496 (8.362)	12.517 (13.789)	0.006 (0.006)
Mean elasticity	0.209	0.046	0.084	0.046
Upper bound elasticity	0.467	0.190	0.255	0.231
P-value from F-test of joint significance of baseline savings amount coefficients	0.000	0.000	0.000	0.000
P-value from F-test of joint significance of marketer coefficients	0.000	0.000	0.000	0.000
P-value from F-test of joint significance of week of offer coefficients	0.000	0.000	0.000	0.000
P-value from F-test of joint significance of neighborhood coefficients	0.595	0.095	0.346	0.318
R-squared	0.038	0.064	0.056	0.045
Observations	9992	9992	9992	9992

Notes: *p<.10 **p<.05 ***p<.01. Each column reports results from a single OLS regression of a demand measure on interest rate treatment variables and control variables. Robust standard errors are shown in parentheses. We calculate the point elasticity by dividing the point estimate for *HighRate* treatment effect by the mean of the outcome for the *LowRate* group (the % change in yield from *LowRate* to *HighRate* is 100, so no further scaling is needed). The upper bound elasticity uses the upper endpoint of the *HighRate* 95% confidence interval instead of the point estimate of the mean effect.

Appendix Table 2: Is Savings Demand Price-Sensitive? Full Sample Estimates for High Balance Instead of Average Balance

	High Balances Over 12 Months Post-Treatment Assignment			
	(1)	(2)	(3)	(4)
	Balance	Balance (censored at 95th percentile)	Balance (censored at 99th percentile)	Balance >= 1000 pesos
Mean of dependent variable	283.871	158.777	231.680	0.069
High interest rate (3%) (omitted category: Regular interest rate (1.5%))	44.309 (33.285)	6.849 (11.715)	13.776 (19.782)	0.002 (0.006)
Reward interest rate (3% if goal reached, 1.5% if not)	31.824 (31.445)	15.917 (11.976)	23.407 (19.984)	0.006 (0.006)
Mean elasticity	0.171	0.045	0.063	0.037
Upper bound elasticity	0.424	0.197	0.239	0.215
P-value from F-test of joint significance of baseline savings amount coefficients	0.000	0.000	0.000	0.000
P-value from F-test of joint significance of marketer coefficients	0.000	0.000	0.000	0.000
P-value from F-test of joint significance of week of offer coefficients	0.000	0.000	0.000	0.000
P-value from F-test of joint significance of neighborhood coefficients	0.680	0.170	0.640	0.361
R-squared	0.040	0.059	0.055	0.046
Observations	9992	9992	9992	9992

Notes: *p<.10 **p<.05 ***p<.01. Each column reports results from a single OLS regression of a demand measure on interest rate treatment variables and control variables. Robust standard errors are shown in parentheses. We calculate the point elasticity by dividing the point estimate for *HighRate* treatment effect by the mean of the outcome for the *LowRate* group (the % change in yield from *LowRate* to *HighRate* is 100, so no further scaling is needed). The upper bound elasticity uses the upper endpoint of the *HighRate* 95% confidence interval instead of the point estimate of the mean effect.

Appendix Table 3: Is Savings Demand Sensitive to Account Ownership Requirements? Married-Sample Estimates for 6 Months Instead of 12 Months

	Average Balances Over 6 Months Post-Treatment Assignment			
	(1)	(2)	(3)	(4)
	Balance	Balance (censored at 95th percentile)	Balance (censored at 99th percentile)	Balance >= 1000 pesos
Mean of dependent variable	220.762	124.953	181.680	0.070
Individual accounts only (omitted category: choice of individual or joint account)	-13.865 (31.073)	2.940 (10.533)	-5.075 (17.648)	-0.002 (0.008)
Joint accounts only	8.333 (32.791)	3.257 (10.574)	9.538 (18.415)	0.002 (0.008)
P-value from F-test of joint significance of baseline savings amount coefficients	0.000	0.000	0.000	0.000
P-value from F-test of joint significance of marketer coefficients	0.000	0.000	0.000	0.000
P-value from F-test of joint significance of week of offer coefficients	0.007	0.000	0.000	0.000
P-value from F-test of joint significance of neighborhood coefficients	0.469	0.048	0.306	0.064
R-squared	0.046	0.075	0.066	0.053
Observations	6396	6396	6396	6396

Notes: *p<.10 **p<.05 ***p<.01. Each column reports results from a single OLS regression of a demand measure on account ownership treatment variables. Sample size is lower than in interest rate tables, because account ownership requirements are only relevant for married individuals, and hence we restrict the sample here to married individuals only. Robust standard errors are shown in parentheses.

Appendix Table 4: Is Savings Demand Sensitive to Account Ownership Requirements? Married-Sample Estimates for High Balance Instead of Average Balance

	High Balances Over 12 Months Post-Treatment Assignment			
	(1)	(2)	(3)	(4)
	Balance	Balance (censored at 95th percentile)	Balance (censored at 99th percentile)	Balance >= 1000 pesos
Mean of dependent variable	309.109	169.349	248.165	0.073
Individual accounts only (omitted category: choice of individual or joint account)	-13.279 (42.888)	8.857 (15.143)	3.210 (25.245)	0.002 (0.008)
Joint accounts only	25.995 (45.963)	7.504 (15.060)	17.403 (25.812)	0.002 (0.008)
P-value from F-test of joint significance of baseline savings amount coefficients	0.000	0.000	0.000	0.000
P-value from F-test of joint significance of marketer coefficients	0.000	0.000	0.000	0.000
P-value from F-test of joint significance of week of offer coefficients	0.006	0.000	0.000	0.000
P-value from F-test of joint significance of neighborhood coefficients	0.584	0.074	0.482	0.162
R-squared	0.049	0.069	0.064	0.053
Observations	6396	6396	6396	6396

Notes: *p<.10 **p<.05 ***p<.01. Each column reports results from a single OLS regression of a demand measure on account ownership treatment variables. Sample size is lower than in interest rate tables, because account ownership requirements are only relevant for married individuals, and hence we restrict the sample here to married individuals only. Robust standard errors are shown in parentheses.

Appendix Table 5: Take-up Regressions by Each Account Ownership Requirement

	Take-up		
	Individual Accounts Only	Joint Accounts Only	Choice of Individual or Joint Account
	(1)	(2)	(3)
Female	0.125*** (0.014)	0.099*** (0.014)	0.118*** (0.014)
Married	-0.087** (0.030)	-0.066* (0.029)	-0.066* (0.028)
Education >= some college	0.061*** (0.016)	0.039* (0.015)	0.051** (0.015)
High wealth (owns home with high quality materials)	0.036 (0.019)	0.045* (0.019)	0.039* (0.018)
Income >= median (in-sample)	0.103*** (0.016)	0.078*** (0.016)	0.069*** (0.015)
Ever saved at home or (in)formal institutions	-0.014 (0.066)	0.004 (0.069)	0.060 (0.059)
Ever saved formally	-0.027 (0.021)	-0.016 (0.021)	-0.032 (0.021)
Baseline savings amount - zero amount	Omitted	Omitted	Omitted
Baseline savings amount - quintile 1	0.073 (0.068)	-0.013 (0.069)	-0.011 (0.062)
Baseline savings amount - quintile 2	0.123 (0.068)	0.043 (0.070)	0.023 (0.061)
Baseline savings amount - quintile 3	0.121 (0.067)	0.054 (0.070)	0.068 (0.061)
Baseline savings amount - quintile 4	0.105 (0.068)	0.093 (0.070)	0.077 (0.062)
Baseline savings amount - quintile 5	0.197** (0.070)	0.110 (0.072)	0.148* (0.065)
Baseline savings amount - missing values	0.131 (0.087)	0.066 (0.083)	0.043 (0.080)
Satisfied with current savings	-0.009 (0.017)	-0.011 (0.016)	-0.019 (0.016)
Present-bias	0.003 (0.023)	-0.013 (0.021)	0.001 (0.022)
Impatient	-0.062*** (0.018)	-0.065*** (0.017)	-0.058*** (0.017)
Intra-household decision power v1 (range is 0 to 6)	0.017* (0.007)	0.023*** (0.007)	0.020** (0.007)
P-value from F-test of joint significance of baseline	0.011	0.005	0.001
P-value from F-test of joint significance of marketer	0.000	0.000	0.000
P-value from F-test of joint significance of week of	0.000	0.000	0.000
P-value from F-test of joint significance of	0.030	0.000	0.000
Mean of dependent variable	0.242	0.211	0.228
R-squared	0.178	0.185	0.163
Observations	3275	3283	3434

Notes: *p<.10 **p<.05 ***p<.01. Each column reports results from OLS regression of a demand measure on the baseline variables shown or summarized in the rows. Robust standard errors are shown in parentheses. Present-bias is a binary variable indicating whether respondent is less patient, in hypothetical sooner-lesser vs. larger-later choices, when making a choice between today or 1 month from today than when making a choice between 6 months from today or 7 months from today. Impatient is a binary variable indicating if respondent chooses the sooner-lesser amount when faced with choice of today vs. 1 month from today. "Intra-household decision power v1" is a sum of three survey responses on who makes household decisions (appliance acquisition, personal things acquisition, and family support), with two points given if answer is myself; one point if both; and zero point otherwise.

Appendix 1: Baseline Survey Questions

Basic Information	
(1) Sex of respondent	(a) Male (b) Female
(2) Civil status	(a) Single (b) Married (c) Separated (d) Widowed
(3) How old were you at your last birthday?	Specify number of years
(4) What is the highest grade you obtained?	(a) No schooling (b) Some elementary (c) Elementary graduate (d) Some high school (e) High school graduate (f) Some college (g) Completed college
(5) What is your primary occupation?	(a) Government official (b) Professional or technical (non-production) (c) Administrative or clerical (d) Sari-sari store owner (e) Tricycle, jeepney, taxi, or other transport (f) Farmers, fisherman, hunters, loggers and related workers (g) Miners, quarrymen and related workers (h) Craftsman or production-process (i) Plant and machine operators and assemblers (j) Wage laborers (k) Entrepreneur Service (l) Microentrepreneur Service (m) Retired personnel (government and private organizations) (n) Houseworker (without wage) and unemployed student
(6) What was your own total income in the past seven days?	Specify number of pesos
(7) What is the source of your drinking water?	(a) Bottled water (b) Community water system (piped) - own use (c) Community water system (piped) - shared with other households (d) Deep/artesian well, own use (e) Deep/artesian well, shared with other households (f) River, stream, lake, or spring water
(8) What is the ownership status of your residence?	(a) Own house and lot (b) Rent house/room and lot (c) Own house and rent lot (d) Rent-free house/room and lot (e) Own house and rent-free lot; (f) Other (specify)
Household Wealth Indicators (answered by marketer based on his or her observation)	
(9) Construction materials used on the wall	(a) Strong materials (concrete, brick, stone, wood, galvanized iron, asbestos): 1 point (b) Light materials (bamboo, sawali, cogon, nipa): 2 points (c) Salvaged and makeshift materials: 3 points (d) Mixed but predominantly strong materials: 4 points (e) Mixed but predominantly light materials: 5 points (f) Mixed but predominantly salvaged materials: 6 points

(10) Construction materials used on the roof	(a) Strong materials (concrete, brick, stone, wood, galvanized iron, asbestos): 1 point (b) Light materials (bamboo, sawali, cogon, nipa): 2 points (c) Salvaged and makeshift materials: 3 points (d) Mixed but predominantly strong materials: 4 points (e) Mixed but predominantly light materials: 5 points (f) Mixed but predominantly salvaged materials: 6 points
(11) Construction materials used on the floor	(a) Strong materials (concrete, brick, stone, wood, galvanized iron, asbestos): 1 point (b) Light materials (bamboo, sawali, cogon, nipa): 2 points (c) Salvaged and makeshift materials: 3 points (d) Mixed but predominantly strong materials: 4 points (e) Mixed but predominantly light materials: 5 points (f) Mixed but predominantly salvaged materials: 6 points
Time Discounting I: Following hypothecial situation was presented: "Suppose you win the barangay raffle today. The lottery administrator gives you options for how you would like to accept your cash prize. One option will be to accept your cash prize today; the other option would be to accept a larger cash prize, but with a one month delay. You will be asked to pick the option you prefer. Please make your decisions based on how you expect you would answer if the choice were actual and not hypothetical."	
(12) Do you prefer a 200 pesos prize guaranteed today or a 250 pesos prize guaranteed 1 month from now?	(a) 200 pesos today (b) 250 pesos in 1 month
(13) Would you prefer to receive 200 pesos guaranteed today, or 300 pesos guaranteed in 1 month?	(a) 200 pesos today (b) 300 pesos in 1 month
(14) If answer is (a) to both Questions (12) and (13), how much would the prize have to be for you to choose to wait?	Specify number of pesos
Savings Habit	
(15) Have you ever saved at home or at any (in)formal institution regularly before?	(a) Yes (b) No
(16) Where have you saved your money?	(a) Formal financial institution (b) Informal financial institution/ROSCAs (c) At home (d) Other (specify)
(17) Were you able to save as much as you wanted?	(a) Yes (b) No
(18) If not, why?	(a) Income went down (b) Family/relatives asked for my money (c) I spent before I saved (d) There was unexpected expenditures (e) Other (specify)
(19) How much savings do you have?	Specify number of pesos
(20) Are you satisfied with your current amount of savings?	(a) Very satisfied (b) Somewhat satisfied (c) Somewhat unsatisfied (d) Very unsatisfied

(21) Do you agree with the following statement: <i>"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."</i>	(a) Strongly agree (b) Somewhat agree (c) Feel neutral (d) Somewhat disagree (e) Strongly disagree
Household Decision Making	
(22) In your household, who decides when and what expensive things to buy for the household such as radio and TV?	(a) Myself (b) Spouse (c) Both
(23) During quarrels or conflicts, who initiates reconciliation first?	(a) Myself (b) Spouse (c) Both
(24) Who decides when and what to give as assistance and support to parents, in-laws, siblings?	(a) Myself (b) Spouse (c) Both
(25) Who decides what items to buy for your personal use (e.g. clothing, etc.)?	(a) Myself (b) Spouse (c) Both
Time Discounting II	
Following hypothetical situation was presented: "Now the option will be to accept the raffle cash prize six months from now, or to accept a larger cash prize seven months from now. Please make your decisions based on how you expect you would answer if the choice were actual and not hypothetical."	
(26) Do you prefer a 200 pesos prize guaranteed 6 months or a 250 pesos prize guaranteed 7 months from now?	(a) 200 pesos in 6 months (b) 250 pesos in 7 months
(27) Would you prefer to receive 200 pesos guaranteed in 6 months, or 300 pesos guaranteed in 7 months?	(a) 200 pesos in 6 months (b) 300 pesos in 7 months
(28) If answer is (a) to both Questions 26 and 27, how much would the prize have to be for you to choose to wait for 7 months?	Specify number of pesos