

COMMITMENTS TO SAVE

Commitment savings products have increased savings and investments in low- and middle-income settings. Providers can improve the impacts of commitment savings products by including design features that meet the needs of the local population.



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KEY RESULTS:

There is substantial demand for commitment savings products: many who were offered commitment savings accounts opened them, but this did not always lead to use. For all twenty-one commitment savings products featured in this bulletin, over 20 percent of those offered these products chose to open accounts.

Commitment savings products increased formal savings balances in many contexts. Not only did people open commitment savings accounts, but many individuals also used these accounts to save more.

Some clients benefited from simple commitment devices, while others needed a stricter commitment to save. The strictness of commitment savings devices can vary according to the consumer, savings goal, and context, including local market, legal, and logistical infrastructure. Providers should ensure that clients can access and understand a variety of products to meet their diverse needs.

Commitment savings products helped users earmark savings for particular use and dedicate funds to various investments. People who were offered commitment savings products tied to specific goals invested more in agricultural inputs, durable goods, education, and preventive healthcare.

Effectively managing finances is difficult for low- and high-income households alike, but households living in poverty often face more acute challenges. When it comes to saving, the primary issue for many low-income households is the obvious: having low income leaves little to save. As a result, households have fewer resources to cope with unexpected costly events, such as illness or a poor harvest, or to make investments with long-term goals. While many financial service providers in low- and middle-income countries (LMICs) offer savings products, formal savings rates remain low: only 21 percent of adults in low-income countries saved at a formal financial institution in 2017.ⁱ

But little savings does not mean no savings, and indeed evidence suggests that people living in poverty have substantial demand for savings and often desire to reserve some of their small, irregular income for making larger investments in businesses or their family's future.ⁱⁱ They often save through informal means such as hiding cash under mattresses, forming savings groups, or building houses one room at a time (see Box 1). They plan for and worry about the future, at times devising costly and complicated methods for building up assets and insuring against shocks.

However, individuals also face many constraints, beyond mere low income, that hinder their ability to save. Some extent of low savings may be about features of the savings product besides mere access or price. Why is it that many people do not achieve their savings goals, either depositing less than they had planned or withdrawing more? Although increasing access and lowering costs are clearly important goals for financial service providers, sometimes people want to voluntarily restrict access to withdrawals or nudge themselves to fulfill plans to deposit. Products that conform more closely to the needs of individuals, taking into consideration behavioral and social challenges they may face, may hold promise for helping low-income households save more.

How can financial service providers in LMICs embrace insights from behavioral economics to help people achieve their savings goals? Research suggests that commitment savings products could play a role in helping individuals living in poverty overcome behavioral and social barriers that otherwise lead to lower savings than desired. But there is no perfect, one-size-fits-all product. Rather, there are some broad concepts to consider, as a financial institution, in designing cost-effective products to help people achieve their savings goals.

This bulletin reviews twelve randomized evaluations that incorporated twenty-one different commitment savings products to help provide such guidance.



ⁱ Demirüç-Kunt, Asli, Leora Klapper, Dorothe Singer, Saniya Ansar, and Jake Hess. *The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution*. Washington, DC: World Bank, 2018.

ⁱⁱ Karlan, Dean, Aishwarya L. Ratan, and Jonathan Zinman. 2014. "Savings by and for the Poor: A Research Review and Agenda." *Review of Income and Wealth* 60, no. 1: 36–78.

CONTEXT

WHY SAVING IS DIFFICULT: BEHAVIORAL AND SOCIAL BARRIERS TO SAVING

Psychology and behavioral economics offer several potential explanations for why people frequently save less than they would like and might instead take out high-interest loans, when available, or cut back on essential consumption to invest in their businesses or their family’s education and health. One theory suggests that some people systematically expect to be more patient than they inevitably are when the time comes, thus leading them to spend too much and save too little. Economists call this being “present-biased,” a form of having time-inconsistent preferences. For these people, saving requires self-control: the discipline to overcome the temptation to purchase goods today. Other people may have a problem of “inattention,” where they undersave because they do not think about how much money they will need in the future. Saving may also be difficult because many individuals living in poverty face pressure from their family and social networks to share their savings.

HOW COMMITMENT SAVINGS PRODUCTS CAN HELP

Commitment devices are binding arrangements that people voluntarily enter in order to reach specific goals that may otherwise be difficult to achieve. When built into savings products, commitment devices can help address the behavioral and social obstacles to saving by providing a mechanism that forces people to save according to their self-set plans (see Table 1). By imposing financial penalties (such as fees) or psychological penalties (such as guilt) when users fail to make deposits or meet their savings goals, commitment devices can help people overcome time-inconsistent preferences or self-control problems. Commitment savings products may also help users protect their savings from spouses, relatives, or others in their social networks by restricting access to their savings. These products could address problems of inattention by bringing the need to save to the top of people’s minds. If this is the case, there may be ways to increase savings that do not impose any restrictions at all, such as simply reminding people to save. Finally, commitment devices that require users to label savings for a specific use could increase saving by enabling mental accounting: the process by which individuals mentally classify money to be used for specific purposes.

Commitment savings devices are not uniform. They are a category of financial products that vary along a number of aspects—described in Result 3—but they all require users to commit to achieve a certain goal.

TABLE 1. HOW COMMITMENT DEVICES OVERCOME SPECIFIC BARRIERS

BEHAVIORAL BARRIER	HOW COMMITMENT HELPS	EXAMPLE ACCOUNT DESIGN
Present bias: A form of time-inconsistent preferences where people systematically expect to be more patient than they inevitably are when the time comes to make spending decisions. They are more likely to spend and less likely to save.	Commitment devices allow individuals to “tie the hands” of their future selves to ensure self-control. By making it harder to access one’s savings, these devices encourage people to “cool off” before making an impulsive decision.	A Save, Earn, Enjoy Deposits (SEED) account (1, 9b) prevented clients from withdrawing funds until they met a prespecified goal, removing their ability to withdraw savings for impulsive purchases (e.g., sweets). Similarly, direct deposit into a savings account like a Salary Susu Plus account (8) removed the opportunity to spend, rather than save, part of one’s salary.
Inattention: Some people save too little because they fail to consider infrequent or “exceptional” expenses like school fees, fertilizer purchases, or emergency health expenditures.	Some commitment devices include features that remind people to save for specific expenses like school fees or health emergencies, making it harder to forget about such expenses.	In addition to reducing the costs of saving, recurring visits from program representatives (6) or deposit collectors (5, 10) served as regular reminders for clients to contribute to their savings accounts.
Demands from social network: Accumulating savings may be difficult for some because of requests for money from family and friends.	Restricting access to savings allows people to protect themselves not only from impulsive purchases but also from demands imposed by others.	An account that did not allow easy withdrawals, like a Lockbox (3b) or SEED account (1, 9b), imposes an external barrier that may prevent friends or relatives from demanding that savers share their accumulated savings.

CONTEXT

BOX 1: INFORMAL COMMITMENT DEVICES

Even when formal savings products are unavailable or unaffordable, individuals living in poverty use many alternative means to save, like savings groups or saving through assets like livestock that can be sold for cash. While banks in LMICs have not traditionally offered a large variety of commitment savings products, informal savings devices often have features that address the same barriers that formal commitment devices seek to overcome.

Throughout Africa, Asia, and Latin America, a popular type of savings group is a rotating savings and credit association (ROSCA). ROSCAs are informal groups that meet regularly to make contributions to a joint fund. At each meeting, members take turns receiving the pooled pot of savings and must deposit their portion into the pot in order to qualify to receive the payout when it is their turn. While ROSCAs provide a secure savings option when formal banking services are not available, they can be an inflexible option; because each member receives the pool of funds on a specific schedule, the savings cannot be used for unexpected expenses.

Physical assets, like livestock or durable goods, offer households a way to store value, but it may be difficult for households to convert those assets into cash in the face of an emergency or investment opportunity. In addition, assets may be stolen or lose their value over time, making this a potentially risky option for vulnerable households.

In the past few decades, several large international nonprofits have promoted an extended and more flexible model of ROSCAs, often generally referred to as “savings groups” or “village savings and loan associations” (VSLAs). These programs have scaled considerably, reaching an estimated 14 million individuals in 2016.ⁱⁱⁱ These programs are also rooted in some of the same behavioral insights behind commitment savings products. For example, regular savings group meetings may serve as reminders to save, impose social pressure to save, and motivate saving through observing others’ saving successes.

Randomized evaluations of savings group expansions have found positive effects. In four countries in sub-Saharan Africa (Ghana, Malawi, Mali, and Uganda), promoting the creation of such groups increased savings and, in some cases, increased women’s influence over household decisions.^{iv,v} In Kenya, Tanzania, and Uganda, researchers found an alternative operational strategy that led to even stronger results: switching from field agents being salaried employees paid by nonprofits to local leaders paid by their peers led to stronger treatment effects with lower costs to the organization facilitating the groups.^{vi}



PHOTO: JONATHAN TORGOVNIK | GETTY IMAGES | IMAGES OF EMPOWERMENT

ⁱⁱⁱ Allen, Benjamin S. 2018. “State of Practice: Savings Groups and the Dynamics of Inclusion” SEEP Network. https://seepnetwork.org/files/galleries/SEEP_State-of-Practice_Savings-Groups-and-the-Dynamics-of-Inclusion_20180925.pdf.

^{iv} In Ghana, Malawi, and Uganda, researchers found that promoting the creation of VSLAs, groups in which individuals contribute savings and then lend the accumulated savings out, led to increased savings balances and women’s influence over household decisions. Karlan, Dean, Beniamino Savonitto, Bram Thuysbaert, and Christopher Udry. 2017. “Impact of Savings Groups on the Lives of the Poor.” *PNAS* 114, no. 12: 3079–3084. <https://doi.org/10.1073/pnas.1611520114>.

^v The Savings for Change program evaluated in Mali offered similar assistance and also led to increased savings, although it did not affect outcomes related to women’s empowerment. Beaman, Lori, Dean Karlan, and Bram Thuysbaert. “Saving for a (not so) Rainy Day: A Randomized Evaluation of Savings Groups in Mali.” NBER Working Paper No. 20600, October 2014.

^{vi} Greaney, Brian P., Joseph P. Kaboski, and Eva Van Leemput. 2016. “Can Self-Help Groups Really Be ‘Self-Help’?” *Review of Economic Studies* 83, no. 4 (October): 1614–1644. <https://doi.org/10.1093/restud/rdw004>.

EVALUATIONS

This bulletin reviews twelve randomized evaluations from seven countries in Africa and Asia that examined the impact of a variety of commitment savings products. The studies tested how different products affect the take-up and use of savings accounts, savings balances, and users' ability to achieve personal financial goals. They also examined how these effects vary for different users. In these evaluations, individuals were randomly assigned to receive an offer for a commitment savings product. Together, this rigorous body of evidence sheds light on how commitment savings products affect how people save. The table below summarizes key aspects of these evaluations.

TABLE 2. COMMITMENT SAVINGS PRODUCTS REVIEWED IN BULLETIN

NUMBER	LOCATION	PRODUCT	TARGET CUSTOMERS	RESEARCHERS
1	Philippines	SEED account that prevented clients from withdrawing savings until they reached a savings goal or until a specific time period had passed	Clients of Green Bank of Caraga with a savings account	Ashraf, Karlan, and Yin
2	Malawi	Savings account that restricted access to funds until a future date, in addition to an ordinary, unrestricted savings account	Smallholder tobacco farmers with existing loans	Brune, Giné, Goldberg, and Yang
3a	Kenya	Safe Box: a small, locked metal box (to which users had the key) to save for preventive or emergency health expenses. While there was no external verification, users were encouraged to use savings for health purposes.	ROSCA members	Dupas and Robinson
3b		Lockbox: a small, locked metal box (to which an NGO staff member held the key) to save for preventive health expenses		
3c		Health Pot: an additional ROSCA savings pot that could only be used for preventive health expenses		
3d		Health Savings Account: ROSCA-administered individual accounts for savings that could only be spent on emergency health expenses		
4	Kenya	Bank account with no opening fee but high withdrawal fees	Previously unbanked microentrepreneurs	Dupas and Robinson
5	Philippines	Regular visits from savings deposit collectors, who deposited collected funds at the local bank, which users paid for in advance	Clients of Green Bank of Caraga	Ashraf, Karlan, and Yin
6a	Uganda	Super Savers cash: weekly visits to encourage students to save for school; at the end of the school term, students received their savings in cash	Students in final 3 years of primary school	Karlan and Linden
6b		Super Savers voucher: weekly visits to encourage students to save for school; at the end of the school term, students received their savings in vouchers for educational products		

EVALUATIONS

TABLE 2. COMMITMENT SAVINGS PRODUCTS REVIEWED IN BULLETIN, CONTINUED

NUMBER	LOCATION	PRODUCT	TARGET CUSTOMERS	RESEARCHERS
7a	Kenya	Voucher for fertilizer at regular price to be delivered for free at a time of farmer's choosing, offered after harvest (Year 1)	Farmers	Duflo, Kremer, and Robinson
7b		Voucher for fertilizer at regular price to be delivered for free at a time of farmer's choosing, offered after harvest (Year 2) ^{vii}		
7c		Offer to select time in the future when NGO representative will return to offer voucher for fertilizer at regular price to be delivered for free at a time of farmer's choosing, offered immediately before harvest		
8	Ghana	Salary Susu Plus account that allowed clients to specify a fixed amount to be taken directly from their salary and put in a separate account that could only be accessed before the end of an 18-month cycle for a fee	Salaried workers who received electronic salary payments into accounts at North Volta Rural Bank (NVRB)	Buehren, Goldstein, Klapper, Koroknay-Palicz, and Schaner
9a	Philippines	Installment savings account that allowed clients to commit to an installment savings plan and charged a fee if they failed to follow the plan	Individuals living near partner bank branches	John
9b		SEED-style account that prevented clients from withdrawing savings until they reached a savings goal or until a specific time period had passed ^{viii}		
10	Sri Lanka	Regular visits from deposit collectors	Previously unbanked individuals	Callen, de Mel, McIntosh, and Woodruff
11a	Kenya	Encouragement to open a mobile bank account connected to participants' M-PESA accounts, delivered during parent meetings held at elementary schools	Parents with children in the last year of primary school	Habyarimana and Jack
11b		Encouragement to open a lock savings account that allowed clients to specify a date before which funds could only be withdrawn by forfeiting interest payments, in addition to encouragement to open a mobile bank account		
12a	Afghanistan	Enrollment in M-Pasandaz phone-based savings account that automatically deducted a set percentage of monthly salary payments into the account, with initial contribution rate set at 5%	Employees of a large telecommunications firm	Blumenstock, Callen, and Ghani
12b		Enrollment in M-Pasandaz savings account, with initial contribution rate set at 0%		

^{vii} While 7a and 7b are the same commitment savings product—a voucher for regular-priced fertilizer to be delivered at no charge at the time of the farmer's choosing—using (or learning about) the fertilizer voucher and being offered delivery in year 1 (7a) may influence take-up in year 2 (7b). Therefore, this bulletin reports the take-up of the two separately.

^{viii} The “Withdrawal Restriction” account studied in (9) was designed to replicate the SEED account studied in (1).

RESULTS

1. THERE IS SUBSTANTIAL DEMAND FOR COMMITMENT SAVINGS PRODUCTS: MANY WHO WERE OFFERED COMMITMENT SAVINGS ACCOUNTS OPENED THEM, BUT THIS DID NOT ALWAYS LEAD TO USE.

Many people were aware of how hard it is for them to save and requested products to help overcome these difficulties.

In the Philippines, when a bank offered existing clients the opportunity to open a SEED account (1) that prevented clients from withdrawing savings until they reached a savings goal or until a specific time period had passed, 28 percent opened an account. Similarly, when clients at another bank in the Philippines were offered an account with the same rules (9b), 42 percent of clients opened the account. In Kenya, when farmers were asked just before the harvest when they would like NGO field officers to return to offer them the opportunity to purchase fertilizer (7c), 44 percent asked the field officer to come back immediately after the harvest, when they typically have the most cash on hand. Requesting the field officer to return in the future suggests that these farmers knew they would have a tendency to procrastinate and wanted to prevent themselves from doing so. In another study in Kenya, about 12 percent of ROSCA members who were offered Lockboxes (3b), locked metal boxes for preventive health expenses to which NGO staff members had the key, asked if the program could be extended so that the NGO staff member would continue to hold the key. This suggests that people recognized that they had difficulty saving.

When offered commitment savings products, many households opened accounts. For all twenty-one commitment savings products in this bulletin, the percent of people who opened commitment savings accounts when offered exceeded 20 percent (see Figure 1), even though two of these products imposed a financial penalty on participants who did not comply with contract requirements, and two charged fees for the additional services related to the commitment account. This suggests that many people are aware of their limited ability to save and recognize the potential benefits of an account that purposefully guides them to achieving their savings goals.

Take-up was high for accounts with both hard and soft commitment rules, unless the rules were highly restrictive. In some cases, people were willing to adopt, and even pay for, devices that limited access to their money. In Kenya, 87 percent of microentrepreneurs without a formal savings account opted to open a savings account that had no opening costs but high fees for withdrawal (4). This meant that their deposits would effectively earn a negative interest rate. In the Philippines, 21 percent (9b) and 50 percent (1) of clients who opened SEED accounts actually deposited money into their accounts, although they would not have access to the funds until they met their savings goals. In these contexts, demand for formal savings products that could



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help users save more was high enough that people were willing to incur costs and restrict access to their money in order to have a secure place to accumulate savings. However, clients were less likely to take up commitment products that imposed both withdrawal restrictions and recurring deposit requirements: in Malawi, 21 percent of farmers signed up for a commitment account that would automatically deposit a portion of their proceeds from crop sales into an account that was locked until a predetermined date (2). In the Philippines, 27 percent of those offered an installment savings account (9a) accepted the offer.

In other cases, softer commitment devices, which imposed no financial penalties and instead required mental commitments from users, were more popular. In Kenya, 74 percent of ROSCA members who were offered Safe Boxes (3a), a small, locked metal box (to which users had the key) to save for preventive or emergency health expenses, used the box. By comparison, usage was 65 percent among ROSCA members offered Lockboxes (3b) to save for preventive health expenses, which used similar metal boxes but restricted access by requiring users to leave their key with an NGO staff member. In this context, while participants desired access to a safe place to save, they were less willing to use savings products that inhibited their ability to respond to unexpected shocks. Similar patterns hold for education-focused savings products: in Kenya, when parents of students in the final year of elementary school were encouraged to open either an ordinary mobile bank account or a lock commitment savings account (11), take-up was higher for the ordinary account than for the commitment account. In Uganda, students saved more in Super Savers accounts (6) when they would receive their savings in cash rather than in vouchers that could only be used to purchase school supplies.

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Clients, however, did not always use accounts actively after opening them. Opening accounts is distinct from and does not guarantee using savings accounts. The definition of “using” is not binary, but here “usage” refers to making one or more deposits after opening. This is important for correctly interpreting the impacts of commitment savings products on the amount of savings generated. For example, if a product leads to higher savings balances but only 25 percent of individuals use the account, this pattern suggests the account may be “working” well for some but not for all.

In Kenya, even though 87 percent of individuals offered a free savings account with high withdrawal fees (4) opened one, 40 percent never made a deposit after opening the account. Similarly, in the Philippines, half of those who opened a SEED account (1) never made a deposit, and 21 percent made a deposit in a replication of that account with another bank (9b). And even when clients were required to pay fees if they failed to meet their commitments (9a),^{ix} only 45 percent successfully completed their savings contract. In Ghana (8), where clients also paid a penalty for withdrawing money before the end of their savings cycle, 87 percent completed their savings cycles, likely because savings were automatically deducted from wage payments and therefore required no action on the part of the saver. This suggests that some people, when presented with a commitment savings product, may have opened an account because they recognized its potential to help them save, but when it came time to make deposits, they were unable or unwilling to follow through on their plan. To help these users follow through, financial service providers should explore options for engaging users after they open accounts, such as reminders or social pressure.

Understanding who takes up commitment savings products can enable financial service providers to more effectively design and target such products to the clients who will be most likely to use and benefit from them. Economic theory suggests that those who take up commitment products will be more likely to be present-biased. Of the twelve studies featured here, five examine whether present-biased individuals were more likely to take up the commitment savings products being evaluated, with most finding no difference between individuals with or without a present bias. Present-biased individuals were more likely to open Salary Susu Plus accounts in Ghana (8) and to open SEED accounts in one instance in the Philippines (1), though a replication of the SEED account (9b) found no differences in take-up.



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Present-biased individuals were no more likely to sign up for deposit collection services in the Philippines (5) than individuals without a present bias. These results are consistent with the fact that individuals may not recognize that they are present-biased and therefore demonstrate little difference in terms of product take-up. However, the impacts of many of these commitment savings products do vary according to whether clients are present-biased (see Result 3).

Similarly, those with less power in the household (primarily women) may be more likely to take up commitment savings products if the accounts served as a tool to increase their control over some resources. Five of the studies included here examined whether individuals with limited control over their financial resources were more likely to take up commitment savings accounts, again with mixed results. In the Philippines and Malawi, those who faced larger financial demands from others were more likely to take up the SEED-style account (9b) and the commitment account (2), respectively. On the other hand, individuals who faced strong demands from others were no more likely to take up Salary Susu Plus accounts in Ghana (8) or Installment Savings accounts in the Philippines (9a). These results are consistent with the fact that individuals who face strong demands on their finances may have a need for accounts that restrict withdrawals but not necessarily for accounts that require them to make regular deposits.

^{ix} Note that, in practice, it is rare for financial service providers to charge and enforce fees on clients who do not follow through on their savings-related commitments. For example, in (1), while clients were told that the bank had a “hard” commitment to not withdraw funds until a goal was reached, the bank’s policy was to grant any requests for an exception due to hardship. However, noncompliance fees were enforced for two of the products included in this bulletin (8 and 9a).

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TABLE 3. ACCOUNT OPENING AND USAGE RATES

STUDY	PRODUCT	TARGET CUSTOMERS	TAKE-UP	USAGE (OF TAKERS)
1	SEED	Philippines bank clients	28%	50% made any deposits beyond opening deposit
2	Commitment accounts	Farmers in Malawi	21%	Not reported
3a	Safe Box	ROSCA members in Kenya	100%	74% had nonzero account balance after 6 months
3b	Lockbox	ROSCA members in Kenya	100%	65% had nonzero account balance after 6 months
3c	Health Pot	ROSCA members in Kenya	65%	100% made at least one contribution to Health Pot after 6 months
3d	Health savings account	ROSCA members in Kenya	93%	100% had nonzero account balance after 6 months
4	Ordinary account	Kenya microentrepreneurs	87%	60% made any deposits
5	Deposit collectors	Philippines bank clients	28%	53% made any deposits
6a	Super Savers cash	Students in Uganda	Not reported	47% saved with Super Savers
6b	Super Savers vouchers	Students in Uganda	Not reported	38% saved with Super Savers
7a	SAFI (Year 1)	Farmers in Kenya	31%	n/a
7b	SAFI (Year 2)	Farmers in Kenya	39%	n/a
7c	SAFI with ex ante choice of timing	Farmers in Kenya	41%	n/a
8	Salary Susu Plus	Salaried NVRB clients in Ghana	72%	87% completed savings cycle
9a	Installment savings account	Unbanked individuals in the Philippines	27%	45% completed savings cycle
9b	SEED	Unbanked individuals in the Philippines	42%	21% made any deposits
10	Deposit collectors	Sri Lanka unbanked	89%	89% made any deposit
11a	Mobile bank account	Kenya parents	58%	Not reported
11b	Lock savings account	Kenya parents	27%	Not reported
12a	M-Pasandaz account with 5% default contribution and 25% employer match	Telecommunications firm employees in Afghanistan	100%	68% were making contributions 2 months after M-Pasandaz account was opened
12b	M-Pasandaz account with 0% default contribution and 25% employer match	Telecommunications firm employees in Afghanistan	100%	28% were making contributions 2 months after M-Pasandaz account was opened

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FIGURE 1. PERCENT OF INDIVIDUALS WHO OPENED ACCOUNTS WHEN OFFERED

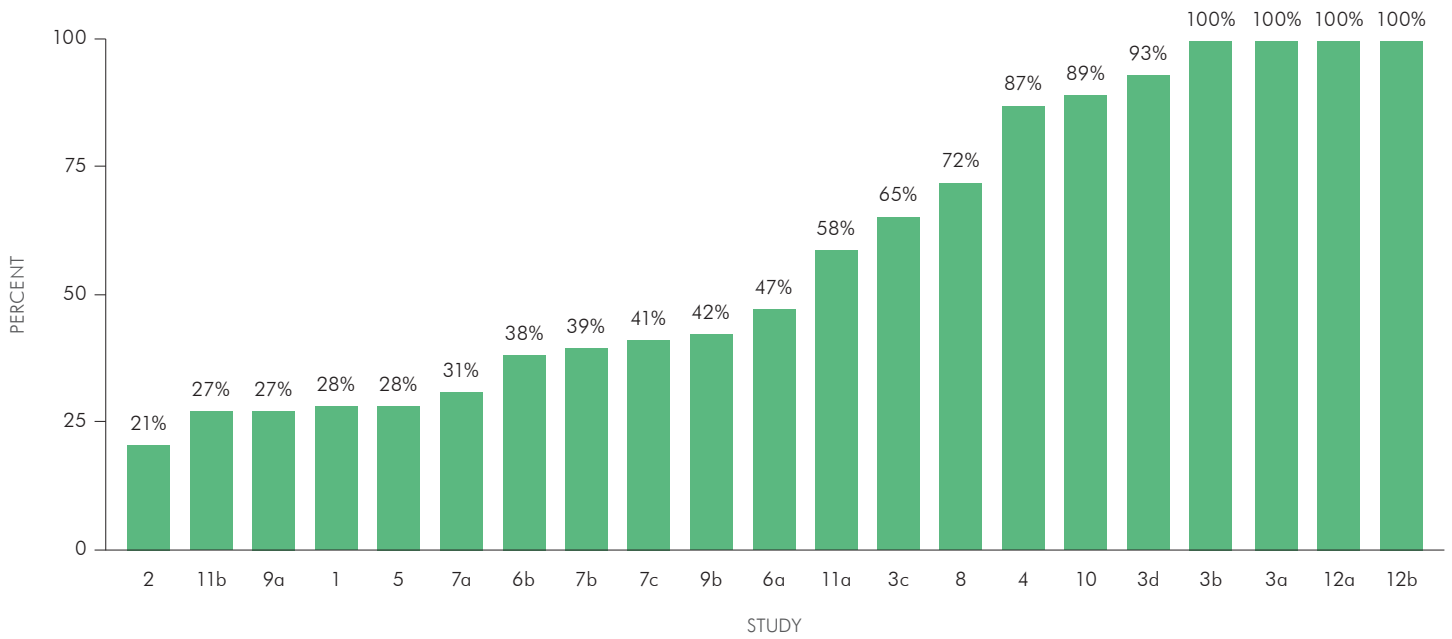
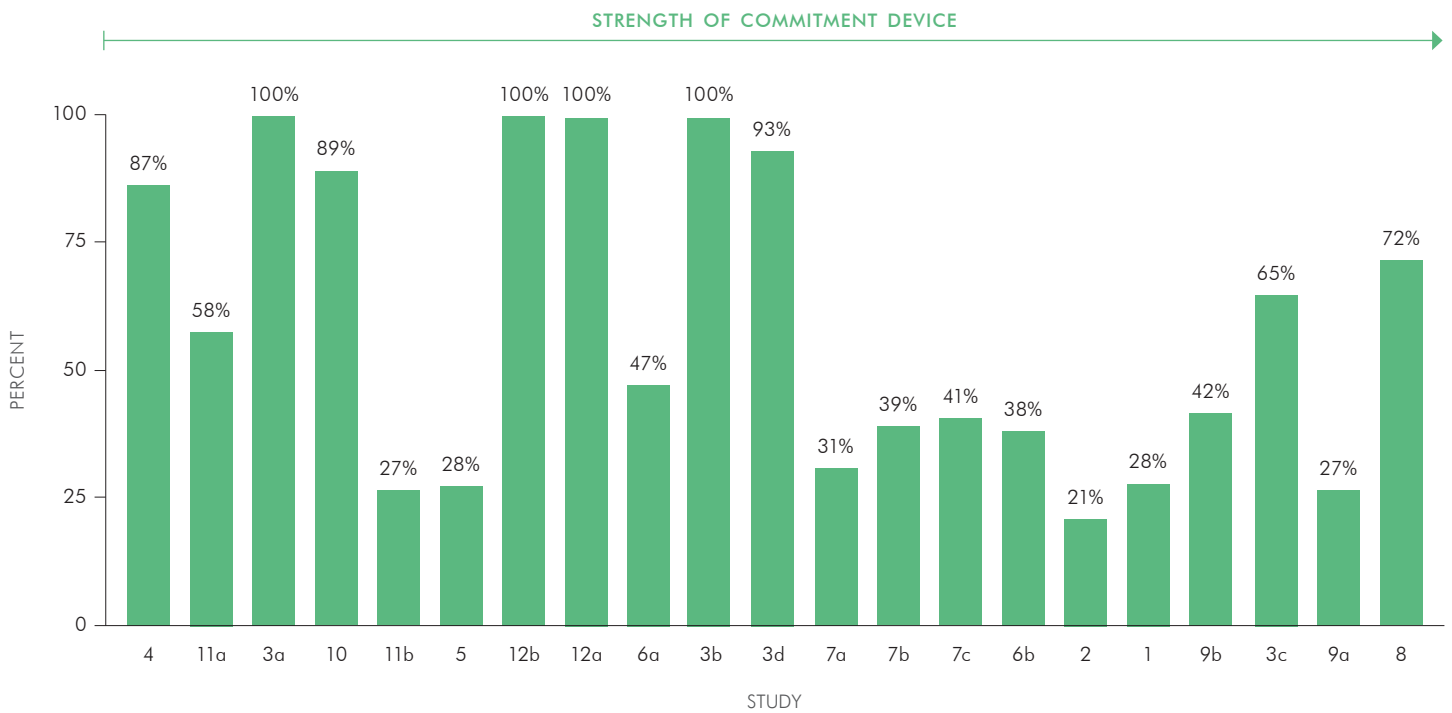


FIGURE 2. PERCENT OF INDIVIDUALS WHO OPENED ACCOUNTS WHEN OFFERED, ORDERED BY STRENGTH OF COMMITMENT DEVICE



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FIGURE 3. PERCENT OF INDIVIDUALS WHO USED ACCOUNTS WHEN OFFERED

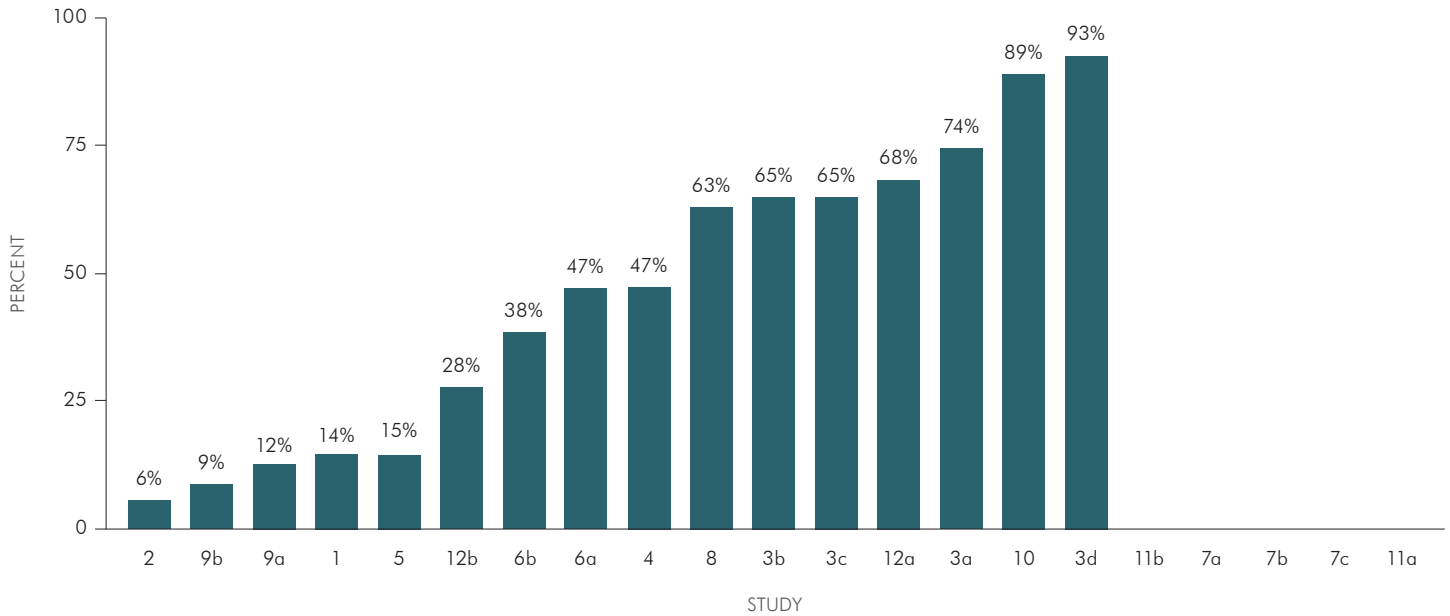
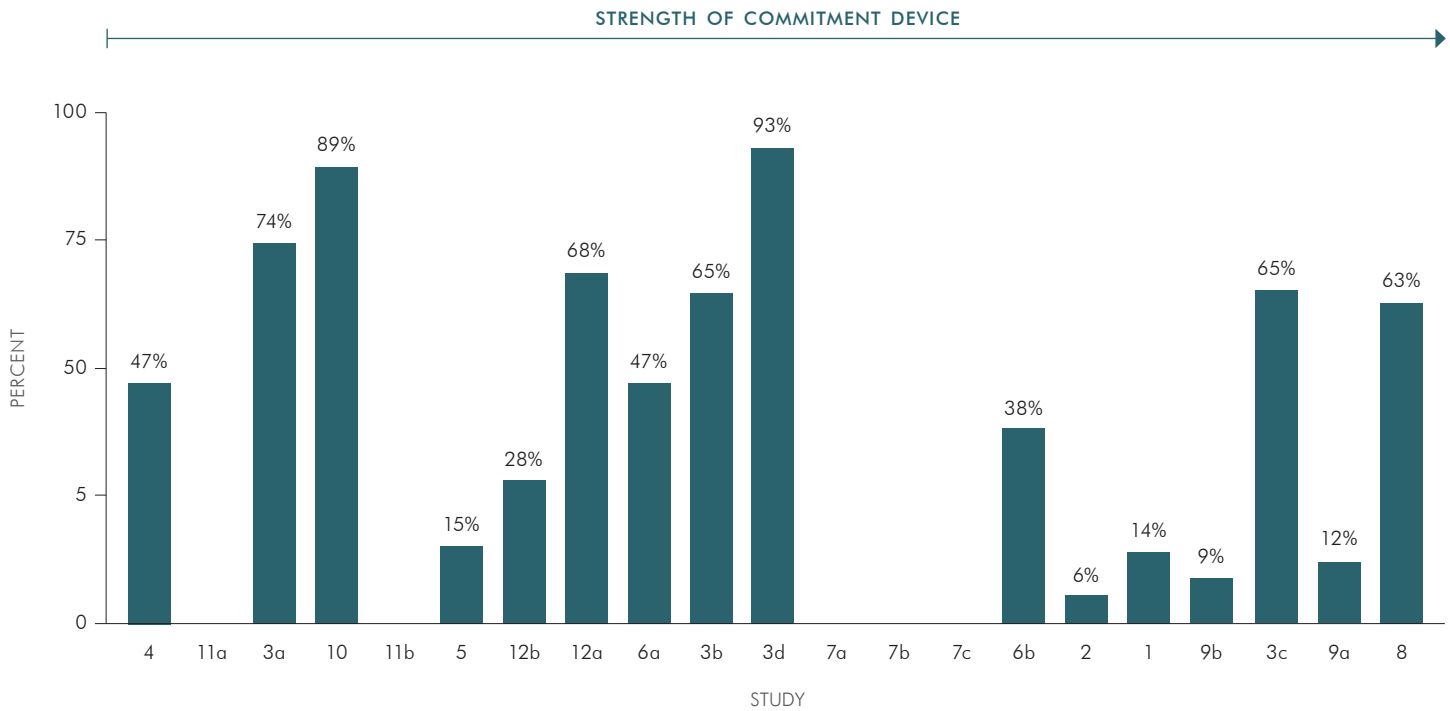


FIGURE 4. PERCENT OF INDIVIDUALS WHO USED ACCOUNTS WHEN OFFERED, ORDERED BY STRENGTH OF COMMITMENT DEVICE



These charts show the percentage of potential clients who opened accounts when offered them and the percentage of clients who used accounts after being offered them, when reported in the paper. Account usage is measured using slightly different metrics for each study; see Table 3 for more information. In Figure 1 and Figure 2, the account usage rates are reported for study 6, as the intervention design meant that all participants in the treatment group had access to accounts.

RESULTS

2. COMMITMENT SAVINGS PRODUCTS INCREASED FORMAL SAVINGS BALANCES.

Commitment savings products helped people save more in formal accounts in multiple contexts. Fourteen commitment savings products tested in six countries increased formal savings at the bank offering the account. In addition, commitment products in Kenya (3), Uganda (6), and Malawi (2) increased investments in health, education, and agriculture, respectively. People offered a SEED account in the Philippines (1), which restricted access to deposits until a certain savings goal or date was reached, had formal savings balances at the partner bank that were 47 percent higher than their peers in the comparison group after six months and 82 percent higher after twelve months.

Even particularly soft commitment devices, like merely earmarking accounts for specific purposes, improved savings. In Kenya, a simple Safe Box (3a), which encouraged users to save for preventive or emergency health expenses in a metal box to which they had the key, increased the likelihood that people would meet their health savings goal by about 14 percentage points, a 41 percent increase over a base of 34 percent in the comparison group. This encouragement, without external verification or restrictions on when users could withdraw the funds, could have prompted users to label savings for health expenses. In another study in Kenya, offering an ordinary mobile bank account (11a) during a parents' meeting held at elementary schools (effectively "labeling" the savings account for education) increased mobile savings balances, while a more restrictive commitment account (11b) did not.

In studies that measured total savings, there was little evidence that the increased savings in commitment savings accounts came at the expense of other savings. Evaluations in Kenya (4), the Philippines (1, 9a), and Sri Lanka (10) found no evidence to suggest that people shifted savings away from other formal or informal savings options, like livestock or ROSCAs, to save in the commitment accounts. This suggests that the increase represented new savings and not merely a transfer of savings from other locations. In Sri Lanka (10), savings balances increased because people spent more hours working, which led to increased income. However, in Ghana (8), clients did reduce other savings, leading to no average increase for those who were offered the commitment savings account. Note that aggregate savings is difficult to measure, and thus this question remains important to continue to study, and furthermore, studying debt levels is equally important (see Box 2).

BOX 2: CHALLENGES IN MEASURING SAVINGS AND FINANCIAL HEALTH

Generating accurate measures of household savings is a challenge for research focused on savings and other financial behaviors. While banks collect a wealth of administrative data that can be used to evaluate a client's savings behavior in accounts held at that bank, data from a single bank does not provide a full picture of an individual's savings behavior. Clients may hold informal savings, including savings at home or with savings groups, as well as formal savings at other financial institutions (although it is rare for low-income households to have relationships with multiple financial institutions). These measurement challenges are particularly relevant when studying commitment accounts, as clients may feel the need to move savings from other accounts in order to meet their commitments.

Measuring clients' outstanding debts to assess net savings (i.e., savings minus debt) is also an important aspect of understanding clients' overall financial health. In four of the studies featured in this publication, commitment savings products had impacts on clients' use of credit, with the precise impact varying based on the financial products available to clients and their behavioral tendencies. In Kenya, providing households with mobile bank accounts (11a, 11b) increased their use of credit, likely because opening a mobile bank account or lock savings account automatically provided households with a loan account on the same digital platform. In Ghana, the Salary Susu Plus account (8) led those who were more frequent users of the bank's overdraft option to take on new debt and reduce their other savings balances during the commitment period.^x On the other hand, less frequent overdrafters increased their total savings balances during and after the commitment period, with no change in their average debt balances. Clients in the Philippines who were offered deposit collection services (5) reduced their borrowing from the partner bank, suggesting that facilitating savings did, in this context, enable clients to become less reliant on debt.

Taken together, these results highlight the importance of taking a holistic view of clients' financial behaviors when measuring overall financial health.

^x Overdrafts are short-term, high-interest loans that many banks allow clients to take out against their incoming salaries (similar to payday loans). At North Volta Rural Bank (the partner bank for this study), the fee for taking an overdraft is 18 percent, and the loan period is until the next salary payment is received.

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3. COMMITMENT DEVICES CAN TAKE MANY FORMS, VARYING IN TERMS OF BOTH THE MECHANISM AND THE STRENGTH OF COMMITMENT, AS WELL AS THE COMPLEMENTARY FEATURES THAT ENCOURAGE CLIENTS TO SAVE. PROVIDERS SHOULD ENSURE THAT CLIENTS CAN ACCESS AND UNDERSTAND A VARIETY OF PRODUCTS, AS SOME CLIENTS WILL BENEFIT FROM SIMPLE COMMITMENT DEVICES, WHILE OTHERS WILL NEED A STRICTER COMMITMENT TO SAVE.

3.1. Strength of Commitment

The “cost” of failing to follow through with a commitment savings product can be financial or psychological.

Financial service providers should offer a range of options that meet the varied needs of their clients; while simple products help some clients increase savings, others require harder commitment devices. In Kenya, free bank accounts with high withdrawal fees but no other commitment features (4) increased savings for female market vendors. Also in Kenya, a technology as simple as a Safe Box (3a) increased users’ annual investment in preventive health products and reduced their vulnerability to unexpected and costly health events. The product assisted people in using mental accounting, or labeling funds for certain uses, to save more. However, this simple technology did not help individuals with a strong tendency to undervalue the future relative to the present.

Financial service providers should design commitment products that are hard enough to create the desired behavior change but soft enough that they minimize the risk of welfare losses due to overoptimism or unlucky outcomes. Especially for clients with a present bias, hard commitment devices may be attractive as they create more intense future incentives to save. In Kenya, for example, ROSCA members with a strong present bias increased their health investment when offered the Health Pot (3c), which tied their hands to make regular deposits at ROSCA meetings and spend savings on health, but did not benefit from the Safe Box (3a) or Lockbox (3b). In Sri Lanka (10), regular visits from deposit collectors—which may remind participants to save, impose social pressure to save, or act as a commitment device by making it less costly to deposit than to withdraw funds—had larger impacts on income, wage employment, and savings for individuals who were more present-biased.

However, some users do not want to give up access to their savings while using commitment accounts. In the Philippines (9b), 79 percent of clients who opened a SEED-style account did not make a single deposit after their opening deposit. In Malawi, farmers who were offered both an ordinary savings account and a commitment account (2) made about 91 percent



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of their deposits in the ordinary account. They also withdrew a majority of savings almost immediately after being deposited, likely because visiting the bank required an average of two hours of travel each way. In Kenya, softer Safe Boxes (3a) were much more effective than harder Lockboxes (3b) at increasing preventive health investment (see Figure 5). These results suggest that the cost of restricting the use of cash too much can outweigh savings benefits for some people, as it may leave them unable to respond to emergencies or unexpected expenses.

To increase take-up and ensure clients’ wellbeing, providers should always allow clients to withdraw their savings in the case of emergency. Because clients may experience bad luck, or may be unable to select the products most appropriate for them, providers should avoid products that both require regular deposits and restrict access to savings. For clients who overestimate their ability to save, requiring regular deposits without allowing withdrawals can lead them to take on new debt or incur financial losses. For example, in Ghana (8), among participants who specified an automated deposit into a commitment savings account from their monthly paycheck, more frequent overdrafters reduced their savings from other formal sources or took on new debt over the eighteen-month commitment period. In the Philippines (9a), 55 percent of clients who signed up for an installment savings plan defaulted on their contracts and incurred monetary losses as a result. Those who were less aware of their present bias were more likely to default. Further work to learn how individuals can set accurate expectations is needed before endorsing commitment savings products with hard financial penalties, particularly for low-income and/or financially less literate households.

RESULTS

For clients with limited power over their financial decisions, commitment savings products can enable savings by preventing peers from accessing cash. Commitment devices may help individuals protect their savings from others by providing a reason for why their cash is inaccessible, allowing them more control over their personal savings. In the Philippines, single women were more likely to take up the SEED accounts (1) than their married peers. This may be because in that context most single women live in multigenerational households and may feel like they have little ability to protect resources from relatives in their household. Moreover, one year after the study, women who had been offered the SEED account reported having more decision-making power within their households. In another study in the Philippines, individuals who reported facing strong financial claims from others were more likely to take up SEED-style commitment accounts (9b).

Similarly, for ROSCA members who financially supported members of their community but did not report receiving any money in return, the Lockbox (3b) improved their ability to make preventive health investments. This suggests that, for these individuals, the additional restriction the Lockbox imposed on access to their savings was less of a concern because they would have been asked to give away their savings by those in their social network.

3.2. Commitment Structure: Deposits versus Withdrawals

Commitment products can encourage clients not to withdraw their savings until a certain goal is met, encourage clients to make deposits on a regular basis, or some combination of the two.

Commitment savings products can be structured as commitments to deposit or commitments not to withdraw. Both have been found to work. Shifting a portion of future income to be saved by default is particularly powerful.

Of the products included here, take-up rates were similar across those that restricted withdrawals (27 to 93 percent) and required regular deposits (27 to 87 percent), with substantial overlap between the two categories. The savings impacts, and resulting impacts on other outcomes, are varied, but one does not appear more beneficial than the other, with one key exception: when individuals are paid electronically and can have a portion automatically deposited into savings, this has large and lasting effects on savings. Specifically, in Afghanistan, enrolling employees of a large telecommunications company into a savings program by default (12a) led to large increases in savings balances relative to providing access to the account but requiring employees to actively set a contribution rate (12b). Defaulting employees to save 5 percent of their salary increased the participation rate by an amount equivalent to the impact of a 50 percent employer match.

TABLE 4. HOW COMMITMENT SAVINGS PRODUCTS VARY

FEATURE	DESCRIPTION
Commitment activity	<p>Commitment savings ask clients to commit to one or more specific savings behaviors, such as:</p> <ul style="list-style-type: none"> • agreeing to follow a given deposit schedule • agreeing not to withdraw savings until a certain date or until they have reached a certain savings balance • agreeing to use savings only for a specific purpose, e.g., school fees or preventive health products
Consequences of failing to fulfill the commitment	<p>Hard, or strong, commitment devices impose financial penalties on clients for failure or rewards for success, such as:</p> <ul style="list-style-type: none"> • paying a monetary penalty for failing to achieve their goal • not being able to access their savings until a certain date or goal has been met^{xi} <p>Soft, or weak, commitment savings products do not formally penalize savers but leverage behavioral tendencies that discourage clients from breaking the commitment, such as:</p> <ul style="list-style-type: none"> • labeling an account for a particular use • being reminded of the importance of setting money aside for a particular goal • publicly committing to save alongside peers <p>Note that the binary “hard” and “soft” commitment labels are overly simplistic. In reality the strength of the commitment feature is a continuum.</p>
Control over how savings are spent	<p>Commitment savings products vary in terms of how much control clients have over how to spend their savings, ranging from:</p> <ul style="list-style-type: none"> • receiving their savings in the form of vouchers for specific items • proving that they spent cash savings on a specific type of good or service • withdrawing their savings in cash and spending as they choose

^{xi} As mentioned in footnote ix, in some cases, financial institutions purposefully do not follow through on their stated withdrawal restrictions to provide clients with some flexibility in case of unforeseen hardship. In such cases, classification as “hard” or “soft” is ambiguous and depends on how clients interpret the strength of the commitment.

RESULTS



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3.3. Complementary Features: Labels, Reminders, and Social Pressure

Financial service providers can encourage savings through complementary account features like “labeling” savings for a specific purpose, regular reminders to save, and deposit collection methods that impose social pressure to save.

Low-cost add-ons like “labeling” savings for a specific purpose and reminding clients to save can help clients achieve their financial goals. The Safe Box (3a) and mobile bank account (11a) in Kenya relied primarily on savings labels, without hard commitment features, to help clients save; both led to improved outcomes in the designated setting (preventive health and secondary school enrollment, respectively). Adding stricter commitment features through the Lockbox (3b) or lock savings account (11b) led to slightly lower take-up rates.

Simple reminders delivered in the form of a letter, text message, or prompt from a bank teller can also help people save more by bringing saving to the top of their minds, especially when reminders include personal touches. In Bolivia, Peru, and the Philippines, researchers partnered with banks to send letters or text messages to customers reminding them to save. People who opened a commitment savings account to save for a specific goal and were randomly assigned to receive reminders increased savings by about 6 percent and were about 3 percentage points more likely to have met their stated savings goal, compared to 55 percent of the comparison group that did not receive reminders.^{xii} In Peru, reminders that mentioned a client’s specific savings goal

or a specific future expenditure increased formal savings balances by 13 percent.^{xiii} Reminders to save are also an implicit feature in many of the products included here, including regular visits from deposit collectors or program officers (5, 6, 10) or regular group meetings (3). All of these products led to increased savings, and most led to improvements in other outcomes including health investment or labor income. It is important to note that these products also include additional explicit and implicit features, like social pressure, so the reminders are just one of multiple factors driving the positive impacts.

These results suggest that simply providing clients with a safe place to store their money and labeling it for a specific purpose can help them save and invest more. As described above, however, clients who are more present-biased and clients who face strong demands from their social network are likely to benefit from harder commitment devices.

Encouragement (or pressure) from peer groups can help some people save more. In Kenya, of the four commitment savings products for ROSCA members tested, only the Health Pot (3c) helped present-biased individuals improve spending on preventive health. Women in villages in Mali with access to a savings group that required members to make regular contributions, distributed savings balances to all members at the end of the year, and also provided members with access to loans throughout the year increased total savings by 30 percent, increased investments in livestock, and improved food security.^{xiv} While peer encouragement is not the only force driving the increase in savings in these examples, this study suggests that social pressure can be a powerful tool to help participants reach savings goals.

Financial service providers should be willing to refine and adapt their commitment savings products based on client take-up and usage behaviors. Given the many dimensions along which financial service providers can make product design modifications, and the varied needs of potential clients, providers should leverage their administrative data on product take-up and usage to continually improve their product offering. By understanding clients’ demand for, and willingness to store savings in, different types of accounts, providers can ensure they meet clients’ savings needs and preferences. For example, take-up rates were lower for the products designed for farmers (2, 7) included here, suggesting there may be something unique about farmers’ cash flows that makes them less willing to save in traditional accounts. Given this result, a provider could consider product design modifications that better align with farmers’ income and expenditure patterns in their specific context.^{xv}

RESULTS

4. COMMITMENT SAVINGS PRODUCTS HELPED USERS DEDICATE SAVINGS FOR PARTICULAR INVESTMENTS AND SUBSEQUENTLY LED TO IMPROVEMENTS IN EDUCATIONAL, HEALTH, AND OTHER OUTCOMES.

People who were offered commitment savings products tied to specific goals invested more in agricultural inputs, durable goods, education, and preventive healthcare.

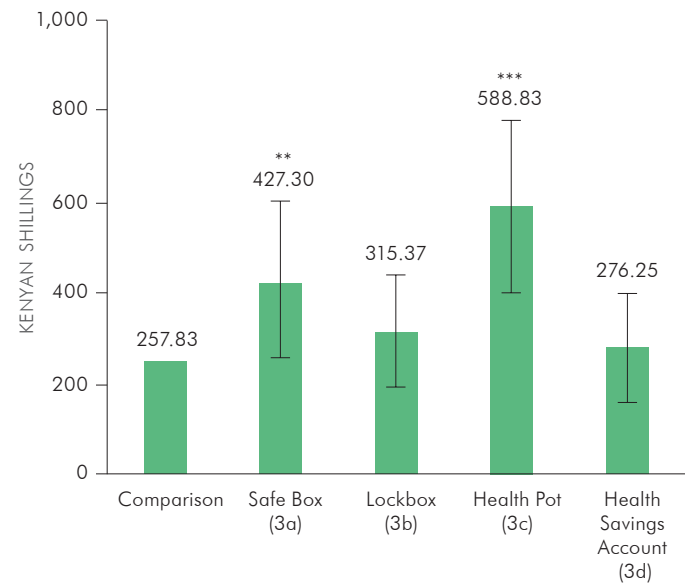
Commitment devices in agriculture have increased farmers' fertilizer adoption. In Kenya, researchers examined the effects of the Savings and Fertilizer Initiative (SAFI) on the use of fertilizer among farmers who were offered the option of purchasing a fertilizer voucher at the time of harvest for free delivery when the farmer was ready to use it (7a, 7b). The program increased fertilizer adoption by 11–14 percentage points relative to the comparison group in the first season and 16–18 percentage points in the second season. However, increased fertilizer use did not continue after the program stopped.

When offered a commitment savings account in addition to an ordinary savings account (2), farmers in Malawi spent 17 percent more on agricultural inputs like fertilizer, pesticides, and labor than those in the comparison group. This resulted in an average increase in crop output of 20 percent over the comparison group. In this particular account, farmers' income from crop sales was deposited directly into their savings accounts, which could have driven the increased savings, at least in part. This suggests that financial service providers can leverage commitment savings accounts by directly depositing income into these accounts.^{xvi}

In one case, a commitment savings product also helped users improve investment in health. In Kenya, providing ROSCA members with a Safe Box (3a) for preventive or emergency health savings increased their investment in preventive health by 66–75 percent. ROSCA members who were encouraged to use the existing ROSCA structure to create a separate Health Pot (3c) increased their investment in preventive health by 128–138 percent. As Figure 5 shows, this suggests that commitment savings products not only enabled people to save more funds labeled for their family's health but also helped users make targeted investments in this area.

Commitment devices have also been effective at helping users cope with unanticipated health costs. ROSCA members offered the Health Savings Account, individual savings accounts that could only be spent on emergency health expenses (3d), were 12 percentage points less likely to be unable to afford medical care, a decrease from a base of 31 percent in the comparison group.

FIGURE 5. AMOUNT SPENT ON PREVENTIVE HEALTH PRODUCTS (AFTER 12 MONTHS)



Note: Error bars represent 95% confidence intervals. Statistically significant difference relative to the comparison group is noted at the 1% (***), 5% (**), or 10% (*) level.

^{xii} Karlan, Dean, Margaret McConnell, Sendhil Mullainathan, and Jonathan Zinman. 2016. "Getting to the Top of Mind: How Reminders Increase Saving." *Management Science* 62, no. 12: 3393–3672. <https://doi.org/10.1287/mnsc.2015.2296>.

^{xiii} Note that Karlan et al. (2016) is not included as a "Featured Evaluation" in this policy bulletin because the study evaluated the impact of reminders to save rather than the impact of being offered a commitment account.

^{xiv} Beaman, Lori, Dean Karlan, and Bram Thuysbaert. "Saving for a (not so) Rainy Day: A Randomized Evaluation of Savings Groups in Mali." NBER Working Paper No. 20600, October 2014.

^{xv} Abdul Latif Jameel Poverty Action Lab (J-PAL). 2019. "Facilitating Savings among Smallholder Farmers to Smooth or Increase Consumption." J-PAL Policy Insights. Last modified May 2019.

^{xvi} For a more detailed discussion of the impacts of savings products on farmers' investment, output, and consumption, see the following: Abdul Latif Jameel Poverty Action Lab (J-PAL). 2019. "Facilitating Savings among Smallholder Farmers to Smooth or Increase Consumption." J-PAL Policy Insights. Last modified May 2019.

RESULTS

Soft commitment devices have helped improve educational outcomes.

The Super Savers program in Uganda found that primary school students who were offered a soft commitment device—a savings account where withdrawals were disbursed in cash but intended for educational purchases (6a)—combined with a parental outreach program about ways to support their children’s education increased spending on school supplies and improved test scores. However, researchers were unable to pinpoint whether the changes were triggered by the parental outreach, the messaging to the students, or the form of the savings account. In Kenya, the mobile bank account (11a) increased enrollment in secondary school by 6 percentage points, and the lock savings account (11b) increased enrollment by 5 percentage points, relative to an enrollment rate of 72 percent in the comparison group. The similar impacts between these two products suggest that “labeling” the mobile bank account by offering it during a meeting held at the school was sufficient to increase savings for education.

In some cases, commitment savings products helped increase clients’ business investment and income.

Free bank accounts in Kenya (4) led to a 60 percent increase in the average daily amount that microentrepreneurs invested in their businesses, with results driven by female market vendors, who purchased more from their wholesale suppliers. Deposit collection services in Sri Lanka (10) enabled participants who were self-employed in the manufacturing sector to increase their earnings through working harder in their own businesses. Participants who were self-employed in other sectors, which were more constrained by local markets and therefore less able to expand, shifted out of self-employment and into wage work. These results suggest that savings products are most likely to generate new savings when offered to households with the potential to increase their income, and regular reminders to save (through deposit collectors’ visits, for instance) can encourage clients to exert the effort required to increase their incomes.

In one case, access to commitment savings accounts also improved women’s position within the household.

In the Philippines, among married women who had below-average decision-making power before opening accounts, those who used the SEED account (1) reported greater decision-making power within the household. This improvement was accompanied by an increase in the amount spent on assets commonly used by women like sewing machines, stoves, and washing machines in households where women had reported low levels of decision-making power before the SEED accounts were introduced.

BOX 3: COMMITMENT DEVICES IN OTHER DOMAINS

Commitment devices can reduce unhealthy behaviors, but results are inconsistent and need further testing.

In the Philippines, researchers partnered with a local bank to offer smokers a commitment savings contract whereby signees forfeited their savings balance if they failed to quit smoking within one year. Eleven percent of those offered such a contract agreed to it. After twelve months (six months after the end of the contract), those offered the contract were 3.4–5.7 percentage points more likely to have quit smoking than their peers in the comparison group. Thus this was highly successful for those who took up the contract, but much further marketing, positive feedback from peers, or alternative noncommitment contract approaches are needed for the large majority who did not accept the offer of a contract.^{xvii} Similarly, in India, researchers found that cycle rickshaw drivers were willing to pay for a commitment for sobriety. However, while financial incentives for sobriety shifted alcohol consumption to later times of day, they did not reduce drinking overall.^{xviii}



PHOTO: JUNPINZON | SHUTTERSTOCK.COM

^{xvii} Giné, Xavier, Dean Karlan, and Jonathan Zinman. 2010. “Put Your Money Where Your Butt Is: A Commitment Contract for Smoking Cessation.” *American Economic Journal: Applied Economics* 2, no. 4 (October): 213–235. <https://doi.org/10.1257/app.2.4.213>.

^{xviii} Schilbach, Frank. 2019. “Alcohol and Self-Control: A Field Experiment in India.” *American Economic Review* 109, no. 4: 1290–1322. <https://doi.org/10.1257/aer.20170458>.

RESULTS

BOX 4: COMMITMENT SAVINGS PRODUCTS NOT LIMITED TO FINANCIAL SERVICE PROVIDERS

Individuals who earn income from their labor market activities demonstrate demand for payment systems that help them save. Any institution that makes payments to individuals may find that those individuals want delays to their payments for the same underlying reason behind the demand for commitment savings. Such institutions can leverage the same tools as traditional commitment savings accounts by reducing participants' access to part of their income until a prespecified date. For example, in Malawi, nearly 50 percent of agricultural workers who were offered the option to delay receiving a portion of their wages until the end of the harvest season chose to do so.^{xxix} Similarly, dairy farmers in Kenya have demonstrated a willingness to sell milk at substantially lower prices if they receive infrequent payments, driven by a desire to meet savings goals and overcome self-control challenges.^{xx} However, employers should not offer delayed payments with mandatory participation, as such programs may generate institutional and reputational issues that render such policies dissatisfactory.

Government-provided social protection schemes can leverage behavioral tools to help participants achieve their saving and spending goals. In Morocco, for example, researchers evaluated the differential impacts between two types of government cash transfers: some households were offered a conditional cash transfer, which required recipient households' children to attend school in order to receive the cash, while others were offered a "labeled" cash transfer, which had no monitored attendance condition but was explicitly described as a program meant to support education. After two years, the unconditional, labeled education transfers led to slightly larger reductions in dropout rates than the conditional transfer. These results suggest that changing parents' perceptions of education was sufficient to improve attendance and doing so was possible through a clear, externally defined label for educational purposes.^{xxi}

In Bogotá, Colombia, a conditional cash transfer program that saved one-third of each bi-monthly transfer in a bank account whose funds were made available to families at the end of the school year, just before they faced the costs associated with enrolling in the next grade level, increased enrollment rates in secondary and tertiary education. A basic version of the program, which distributed the full transfer each month, had little to no impact on secondary or tertiary enrollment rates.^{xxii} These results suggest that social protection programs can be designed to help households overcome the barriers they face when it comes to saving for the future.



PHOTO: IVAN _ SABO | SHUTTERSTOCK.COM

BOX 5: COMMITMENT SAVINGS PRODUCTS IN THE UNITED STATES

While the commitment savings products featured here were designed and evaluated in low- and middle-income settings, many of the savings barriers they seek to overcome are universal tendencies that characterize individuals across contexts. Demand for commitment devices has been documented in many different fields in the United States: completing university homework assignments,^{xxiii} limiting the time spent playing online games,^{xxiv} and going to the gym.^{xxv, xxvi} In addition to demonstrating that Americans express a demand for commitment, researchers have also found that higher withdrawal penalties can increase the amount that participants allocate to commitment accounts, relative to traditional accounts.^{xxvii}

Light-touch nudges like automatic enrollment in defined contribution retirement savings plans have also been widely studied in the United States. For example, civilian employees of the US Army increased their contributions to retirement accounts when they were enrolled with a default contribution rate of 3 percent instead of having a default of nonparticipation.^{xxviii} In the private sector, researchers found that requiring employees to make an active decision about their contribution rate to a retirement savings plan was more cost-effective than other, more intensive, efforts to increase retirement savings.^{xxix}

Interested readers should consult Beshears et al. (2018) for an in-depth review of household financial behavior in the United States.^{xxx}

FEATURED EVALUATIONS

- (1) Ashraf, Nava, Dean Karlan, and Wesley Yin. 2010. "Female Empowerment: Impact of a Commitment Savings Product in the Philippines." *World Development* 38, no. 3: 333–344. <https://doi.org/10.1016/j.worlddev.2009.05.010>.
- (1) Ashraf, Nava, Dean Karlan, and Wesley Yin. 2006a. "Tying Odysseus to the Mast: Evidence from a Commitment Savings Product in the Philippines." *The Quarterly Journal of Economics* 121, no. 2: 635–672. <https://doi.org/10.1162/qjec.2006.121.2.635>.
- (2) Brune, Lasse, Xavier Giné, Jessica Goldberg, and Dean Yang. 2016. "Facilitating Savings for Agriculture: Field Experimental Evidence from Malawi." *Economic Development and Cultural Change* 64, no. 2: 187–220. <https://doi.org/10.1086/684014>.
- (3) Dupas, Pascaline and Jonathan Robinson. 2013a. "Why Don't the Poor Save More? Evidence from Health Savings Experiments." *American Economic Review* 103, no. 4: 1138–1171. <https://doi.org/10.1257/aer.103.4.1138>.
- (4) Dupas, Pascaline and Jonathan Robinson. 2013b. "Savings Constraints and Microenterprise Development: Evidence from a Field Experiment in Kenya." *American Economic Journal: Applied Economics* 99, no. 2: 163–192. <https://doi.org/10.1257/app.5.1.163>.
- (5) Ashraf, Nava, Dean Karlan, and Wesley Yin. 2006b. "Deposit Collectors." *The B.E. Journal of Economic Analysis & Policy* 6, no. 2: 1–22. <https://doi.org/10.2202/1538-0637.1483>.
- (6) Karlan, Dean and Leigh L. Linden. "Loose Knots: Strong versus Weak Commitments to Save for Education in Uganda." Working Paper, January 2018.
- (7) Duflo, Esther, Michael Kremer, and Jonathan Robinson. 2011. "Nudging Farmers to Use Fertilizer: Theory and Experimental Evidence from Kenya." *American Economic Review* 101, no. 6: 2350–2390. <https://doi.org/10.1257/aer.101.6.2350>.
- (8) Buehren, Niklas, Markus Goldstein, Leora Klapper, Tricia Koroknay-Palicz, and Simone Schaner. "The Limits of Commitment: Who Benefits from Illiquid Savings Products." Working Paper, November 2020.
- (9) John, Anett. 2019. "When Commitment Fails: Evidence from a Field Experiment." *Management Science* 66, no. 2: 503–529. <https://doi.org/10.1287/mnsc.2018.3236>.
- (10) Callen, Michael, Suresh De Mel, Craig McIntosh, and Christopher Woodruff. 2019. "What Are the Headwaters of Formal Savings? Experimental Evidence from Sri Lanka." *Review of Economic Studies* 86, no. 6: 2491–2529. <https://doi.org/10.1093/restud/rdz020>.
- (11) Habyarimana, James and William Jack. "High Hopes: Experimental Evidence on Saving and the Transition to High School in Kenya." Working Paper, January 2018.
- (12) Blumenstock, Joshua, Michael Callen, and Tarek Ghani. 2018. "Why Do Defaults Affect Behavior? Experimental Evidence from Afghanistan." *American Economic Review* 108, no. 10: 2868–2901. <https://doi.org/10.1257/aer.20171676>.

The studies featured in this Bulletin were made possible by a number of partners and funders. For specific information on each study, please refer to the academic papers listed above.

^{xix} Brune, Lasse, Eric Chyn, and Jason Kerwin. 2021. "Pay Me Later: Savings Constraints and the Demand for Deferred Payments." *American Economic Review*, forthcoming. <https://doi.org/10.1257/aer.20191657>.

^{xx} Casaburi, Lorenzo and Rocco Macchiavello. 2019. "Demand and Supply of Infrequent Payments as a Commitment Device: Evidence from Kenya." *American Economic Review* 109, no. 2: 523–555. <https://doi.org/10.1257/aer.20180281>.

^{xxi} Benhassine, Najj, Florencia Devoto, Esther Duflo, Pascaline Dupas, and Victor Pouliquen. 2015. "Turning a Shove into a Nudge? A 'Labeled Cash Transfer' for Education." *American Economic Journal: Economic Policy* 7, no. 3: 86–125. <https://doi.org/10.1257/pol.20130225>.

^{xxii} Barrera-Osorio, Felipe, Marianne Bertrand, Leigh Linden, and Francisco Perez-Calle. 2011. "Improving the Design of Conditional Transfer Programs: Evidence from a Randomized Education Experiment in Colombia." *American Economic Journal: Applied Economics* 3, no. 2 (April): 167–195. <https://doi.org/10.1257/app.3.2.167>.

^{xxiii} Ariely, Dan and Klaus Wertenbroch. 2002. "Procrastination, Deadlines, and Performance: Self-Control by Precommitment." *Psychological Science* 13, no. 3: 219–224. <https://doi.org/10.1111/1467-9280.00441>.

^{xxiv} Acland, Dan and Vinci Chow. 2018. "Self-Control and Demand for Commitment in Online Game Playing: Evidence from a Field Experiment." *Journal of the Economic Science Association* 4, no. 1: 46–62. <https://doi.org/10.1007/s40881-018-0048-3>.

^{xxx} Milkman, Katherine L., Julia A. Minson, and Kevin G. M. Volpp. 2015. "Holding the Hunger Games Hostage at the Gym: An Evaluation of Temptation Bundling." *Management Science* 60, no. 2: 283–299. <https://doi.org/10.1287/mnsc.2013.1784>.

^{xxxi} Royer, Heather, Mark Stehr, and Justin Sydnor. 2015. "Incentives, Commitments, and Habit Formation in Exercise: Evidence from a Field Experiment with Workers at a Fortune-500 Company." *American Economic Journal: Applied Economics* 7, no. 3: 51–84. <https://doi.org/10.1257/app.20130327>.

^{xxxii} Beshears, John, James J. Choi, Christopher Harris, David Laibson, Brigitte C. Madrian, and Jung Sakong. 2020. "Which Early Withdrawal Penalty Attracts the Most Deposits to a Commitment Savings Account?" *Journal of Public Economics* 183 (March). <https://doi.org/10.1016/j.jpubeco.2020.104144>.

^{xxxiii} Beshears, John, James J. Choi, David Laibson, Brigitte C. Madrian, and William L. Skimmyhorn. "Borrowing to Save? The Impact of Automatic Enrollment on Debt." NBER Working Paper No. 25876, July 2019.

^{xxxiv} Carroll, Gabriel D., James J. Choi, David I. Laibson, Brigitte Madrian, and Andrew Metrick. 2009. "Optimal Defaults and Active Decisions." *Quarterly Journal of Economics* 124, no. 4: 1639–1674. <https://doi.org/10.1162/qjec.2009.124.4.1639>.

^{xxxv} Beshears, John, James J. Choi, David Laibson, and Brigitte C. Madrian. "Behavioral Household Finance." In *Handbook of Behavioral Economics: Foundations and Applications 1*, edited by B. Douglas Bernheim, Stefano DellaVigna, and David Laibson, 177–276. Amsterdam: Elsevier, 2018.

POLICY LESSONS

Commitment devices can help people overcome self-control issues, issues of present-biased preferences, and other barriers to saving. Evidence from rigorous evaluations conducted in a variety of contexts suggests that commitment savings products are often popular and effective for some consumers. Financial service providers should consider offering commitment savings products alongside traditional savings and loan products to address some of these widespread barriers to saving.

Commitment products should strike a balance between being hard enough to create the desired behavior change but soft enough that they minimize the risk of welfare losses due to overoptimism or unlucky outcomes. Especially for clients with a present bias, hard commitment devices may be attractive as they create more intense future incentives to save. However, some users do not want to give up access to their savings while using commitment accounts, as doing so may leave them unable to respond to emergencies or unexpected expenses. To increase take-up and ensure clients' well-being, providers should always allow clients to withdraw their savings in the case of emergency.

More rigid commitment devices are most useful for clients who undervalue future outcomes relative to the present and who face competing demands on their savings. Many commitment savings products were especially effective for present-biased individuals. These types of products were also more popular among clients with limited financial decision-making power, as they can help protect their savings balances from demands within their social network. However, because clients do not always understand their behavioral biases and may overestimate their ability to make regular deposits, providers should not impose strict requirements to make deposits into accounts that completely restrict access to savings.

It is not always necessary to restrict access to cash for commitment devices to increase savings; soft, purely psychological devices like account labels and reminders can achieve the same goals at a lower cost and with less risk of harm to clients. Since some of the value of a commitment savings product appears to come from the labeling, earmarking, and mental accounting it facilitates, a product that does not severely limit access to money is preferable to one that does, especially for people living in poverty. Overly rigid commitment devices might prevent people from using the savings products if they fear they will not be able to access their savings when needed. When designing commitment savings products, financial service providers should weigh the need for commitment against an individual's desire for flexibility.

Because there is no perfect, one-size-fits-all commitment product, financial service providers should pilot, evaluate, and refine their product offerings using both descriptive statistics from administrative data and rigorous impact evaluations. The studies included in this policy brief highlight many ways that commitment savings products can vary and many possible results of those product design choices; there is no "one-size-fits-all" product that will help all clients achieve their savings goals. Financial service providers can contribute to this expanding body of knowledge by examining their own data, studying take-up and usage of products with different features and marketing in the short run, and conducting impact evaluations to measure long-run impact on total savings and well-being. Such research can be win-win, in delivering important lessons that lead to more profitable savings products for the financial institution as well as key insights that help the global community interested in furthering healthy financial inclusion policies.

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