GLOBAL FINANCIAL INCLUSION

INITIATIVE

Helping the Poor Manage and Grow their Money

www.poverty-action.org/financialinclusion
Dear Reader,

On behalf of the Global Financial Inclusion Initiative at Innovations for Poverty Action (IPA), it is our pleasure to invite you to learn about our work to answer pressing questions on how the poor can better access, use, and benefit from improved financial products and services. The Initiative currently houses two research funds, the Yale Savings and Payments Research Fund supported by the Bill & Melinda Gates Foundation, and the Citi IPA Financial Capability Research Fund supported by the Citi Foundation, with over thirty projects ongoing in 22 countries.

Here we provide examples of projects in each of the three focal areas of the Initiative – Savings, Payments, and Financial Capability – and showcase the new research projects initiated and supported since 2011. We also discuss key priority research areas of the Initiative moving forward. The targeted barriers and questions cover the range of constraints faced by the poor in using improved financial products and tools – from cost barriers, to information and learning gaps, to social constraints and behavioral impediments.

The Initiative’s work does not stop at producing the best experimental research and evidence in this field. You will read about some of our ecosystem-strengthening activities: training workshops conducted with in-country researchers in South Asia and Sub-Saharan Africa on how to design and implement robust field experiments; matchmaking programs that actively facilitate early-stage conversations between researchers and practitioners with similar interests; and collaborations to design new financial products and programs. We also actively communicate the evidence we generate to policymakers and practitioners, through events such as our recent regional policy conferences in Latin America (www.poverty-action.org/financialcapability/lima2013) and Africa (www.poverty-action.org/microsavings/kampala2013).

We hope that you find this compilation helpful in informing and guiding your own work and interest in financial inclusion, and help us build in the future on the existing evidence.

Warm regards,

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Aishwarya Lakshmi Ratan, Director of the Global Financial Inclusion Initiative, Yale University and IPA
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ABOUT IPA

Innovations for Poverty Action (IPA) is a non-profit dedicated to discovering which anti-poverty programs work best in helping the world’s poor. Established in 2002, IPA partners with researchers at top universities and implementing organizations across the world to design rigorous evaluations of programs seeking to improve the lives of the poor. When a program has been tested and proven, IPA communicates the findings to development practitioners, policymakers, and donors and works with implementing partners and governments to bring those programs to scale around the world. IPA achieves these aims through five primary activities:

**INNOVATE** new approaches to alleviating poverty

**EVALUATE** programs to find out what works and why

**REPLICATE** successful programs in new contexts

**COMMUNICATE** what we learn to donors and implementers

**SCALE** programs that have been tested and proven

IPA has ongoing and completed research projects in 51 countries around the world, with IPA country programs established in 14 of them. These country programs not only provide enhanced research support, but also ensure that IPA research is aligned with local policy priorities and that evidence is shared locally, regionally, and internationally.
It is not always obvious which policy, program, or product will have the most desirable effects on the welfare of clients. Does microcredit for the average poor borrower lead to welfare improvements through business investment, or does it fuel consumption and lead to cycles of high-cost debt? What is the best way to support the accumulation of savings for particular life goals like retirement, the education of one’s children, and financing lump sum investments in housing improvements and preventative healthcare? What types of information or training programs are most effective in enabling the poor to make sound financial decisions around their choice and usage of financial products?

To design sound policy and effective financial products, we need to know how well the program or product is working and whether it provides a good return on investment from a social and financial perspective. This involves assessing whether there are alternative ways of achieving the same outcomes at a lower cost. It also requires an understanding of whether some aspects of the program have no impact and only add to the cost of the program.

Randomized evaluations offer a simple way to test programs and innovations, and to compare their effectiveness. Individuals are randomly selected to receive a program based on a lottery. Those who do not receive the program form a comparison group. At sufficient scale, the two groups are similar in every respect, except that one group receives the program – e.g. the offer of a new savings account – while the other does not (for the duration of the study).

It is then sufficient to compare outcomes, such as savings balances, across these two groups over some period of time to measure whether the new program has a direct and causal impact on the behavior and welfare of clients. If the program is deemed to be a success through this rigorous process, the case for the intervention’s effectiveness is strong, and gathering support and resources for scaling it up would make for good policy and sound management.
Designing a product

There is always more than one way to design a product, market a service, or run a business. Even if one could be confident that the product or service would work well, is it the best product or service that could be offered? Is it the most cost-effective and does it have the greatest impact on clients? Randomized evaluations allow one to make such comparisons in a rigorous way and to determine an optimal operational strategy.
The **Global Financial Inclusion Initiative** supports a portfolio of 38 evaluations of savings products, payment channels, and financial capability interventions around the world, including ◇ pilots and ◇ full research projects.

IPA and J-PAL have more than 60 ongoing and completed randomized evaluations ◇ on savings, payments and financial capability.
The Global Financial Inclusion Initiative (GFII), managed by IPA, works to identify innovative products and programs that enhance poor households’ access to and usage of improved financial products, services, and tools. The Initiative is focused on three key areas of research within the financial inclusion domain:

SAVINGS
The poor can and do save. In fact, saving is critical to households whose income flows do not match their daily consumption needs, much less their need to plan for risks and make investments. GFII studies innovations that help individuals to access savings services, overcome temptation and social demands, and build savings habits, while measuring the impact of meeting one’s savings goals, on consumption, investment, and risk mitigation.

PAYMENTS
The ability to move money from one location to another is critical to allowing personal, business, and government transactions to occur. Innovations in payment channels, driven by the widespread use of technologies such as mobile phones, allow the poor to transact in a faster, cheaper, and more secure manner. Our studies measure the impact of these new transaction mechanisms on the welfare of the poor.

FINANCIAL CAPABILITY
Simply having access to financial products and services is only part of the solution to maintaining a healthy financial portfolio. Individuals must also know how to choose and use the right products based on their specific needs, and know how to balance products and services to optimize sustenance and growth. GFII assesses the effectiveness of various innovative tools designed to help the poor make better decisions on their own financial portfolios.

GFII manages two research funds to address these evidence and innovation gaps: the Yale Savings and Payments Research Fund supported by the Bill & Melinda Gates Foundation, and the Citi IPA Financial Capability Research Fund supported by the Citi Foundation.
Savings can help households to smooth consumption, respond to shocks, and finance productive investments in human and business capital. However, market frictions – such as transaction costs, regulatory barriers, and a lack of trust – hinder the supply of savings products, while demand-side constraints like behavioral biases and a lack of knowledge can lead to sub-optimal levels of saving. Despite these barriers, evidence suggests that the poor have substantial (latent) demand for savings. Even when formal savings products are unavailable or unaffordable, the poor often save under mattresses, in informal groups, or in livestock.

Potential explanations for “undersaving” in formal accounts can be grouped into five broad categories: transaction costs, lack of trust and regulatory barriers, information and knowledge gaps, social constraints, and behavioral biases. Savings interventions should ideally be motivated by a desire to mitigate at least one of these constraints, rather than by paternalism. One should therefore think beyond whether a policy will simply lead people to save more and also ask if the intervention will alleviate a particular constraint or lower an existing cost barrier.

Recent evidence has shown large positive impacts on welfare from improvements in access to and usage of formal savings, hinting at more transformative impacts than found thus far in similar evaluations of microcredit. For instance, reducing the opening fees on a simple savings account has led to significant impacts on household assets and microenterprise investment. Allowing commitment features on savings accounts that overcome self- and other-control problems has resulted in significant increases in preventative health expenditures, agricultural investment, and expenditures on female-oriented durable goods.

With many microfinance institutions broadening their focus beyond microcredit, and growing policy interest in “nudging” people to save more, it is not clear whether, to what extent, in what context, and for whom such nudges would be desirable. The Initiative produces research to answer these questions. Our portfolio of evaluations of savings interventions adds to the existing evidence base across all five categories of constraints to saving among the poor.
1 TRANSACTION COSTS, BARGAINING POWER, AND SAVINGS ACCOUNT USE

Early results show that lowering transaction costs via ATM cards significantly increased the use of savings bank accounts owned by men and accounts jointly owned by men and women. In contrast, savings accounts owned by women with low household bargaining power were used significantly less when ATM cards were provided.

Author: Simone Schaner (Dartmouth College)
Partner: Family Bank
Location: Kenya
Sample: 748 married couples
Timeline: 2009 - 2013

POLICY ISSUE
Transaction costs such as account opening, maintenance, and operating fees pose significant barriers to the adoption of formal savings by the poor. Recent evidence on commitment savings, however, suggests that individuals may actually benefit from some transaction costs on savings accounts: both internal and external constraints to saving — such as time inconsistent preferences (valuing present over future consumption) and pressures to share resources with other members of the household and community — may be reduced when money is locked away and costly to access.

To inform product design, this project aims to understand how the poor respond to reduced transaction costs on formal savings accounts.

CONTEXT
ATM cards are a common tool for reducing bank account transaction costs in the developed world as they facilitate withdrawals and, in some cases, are associated with reduced fees. This randomized evaluation assesses the impact of providing ATM cards to holders of savings accounts in Western Kenya. All study participants were offered Family Bank’s Mwananchi account, which has no recurring maintenance fees, a minimum balance of around US$1.25, and no deposit fees. Withdrawal fees are US$0.78 without an ATM card and US$0.38 with an ATM card. The account does not require the purchase of an ATM card.

DESCRIPTION OF INTERVENTION
Seven hundred and forty-eight low-income married couples were given the opportunity to open up to three accounts with Family Bank of Kenya: a joint account, an individual account for the husband, and an individual account for the wife. Each account was randomly assigned a temporary six-month interest rate, which ranged from zero to 10 percent. Altogether, these couples opened 1,121 accounts.
One-quarter of the opened accounts were randomly selected to receive a free ATM card. The cost of the card was prohibitive for the vast majority of the study participants – consequently the “free ATM” treatment increased ATM card take-up from around 7 percent in the comparison group to 96 percent in the group who received the ATM card for free. In addition to survey data on a variety of demographic and decision making questions, administrative data on bank account use was also collected for the first six months after the account was opened.

A follow-up survey was conducted in 2012. This survey focused on measuring total household saving and measuring individual bargaining power in the household. A three year time series of administrative data on Family Bank account use was also provided for individuals in the study.

**PRELIMINARY RESULTS**

Even though all couples included in the study reported that they were interested in opening a savings account with the bank, just 27 percent of the couples who opened accounts had deposited money in at least one of their new accounts after six months. Results indicate that lowering costs via ATM cards significantly increased savings rates (by 8 percentage points) and average daily balances (by 23 percent) in bank accounts owned by men and accounts jointly owned by men and women. In contrast, accounts owned by women with low household bargaining power were used significantly less when ATM cards were provided.

These results imply that lowering transaction costs to formal savings increases access for many savers. However, the findings also suggest that transaction cost-saving technologies that make account balances easier to view and access may favor individuals who have more bargaining power within the household. Incorporating additional security features into transaction-cost-reducing technologies may be a promising way of making accounts more attractive to individuals with weaker bargaining positions in the household.
Commitment accounts allow customers to restrict access to their own funds until a future date of their choosing. Across a set of key outcomes – such as deposits, agricultural input use, household expenditures, and crop sales – the offer of an additional commitment savings account was found to have larger positive effects than the offer of just an ordinary savings account.

Authors: Lasse Brune (U. Michigan), Xavier Giné (World Bank), Jessica Goldberg (U. Maryland), and Dean Yang (U. Michigan)
Partner: Opportunity Bank Malawi
Location: Malawi
Sample: 3,150 farmers in 299 farmers’ clubs
Timeline: 2009 - 2010

POLICY ISSUE
Provision of financial services could help farmers in developing countries accumulate funds for the purchase of agricultural inputs such as fertilizer, thereby helping increase production. If barriers to financial services are reduced or eliminated by offering enhanced savings products, what is the impact on the use of different agricultural inputs, farm output, and overall well-being in rural farming households?

CONTEXT
Tobacco is one of Malawi’s primary exports, employing many of the country’s farmers. Income volatility influenced by macroeconomic forces can be particularly harmful to those farmers living near the poverty line, causing households to skip meals and forego necessary healthcare expenses.

Opportunity International, an international NGO, opened the Opportunity Bank Malawi (OBM) in 2002 with a license from the Central Bank of Malawi. OBM provides financial services to the rural poor and partnered with researchers and two private agricultural buyers, Alliance One and Limbe Leaf, to offer enhanced savings products to tobacco farmers.
DESCRIPTION OF INTERVENTION

The study assessed the impact of OBM’s savings programs on the behavior and well-being of local farmers. Farmers were organized into farmer clubs by one of the agricultural buyers, with an average of 10-15 members each. Farmer clubs were randomly assigned to one of two savings account treatment groups or a comparison group.

Clubs in the comparison group received information about the benefits of having a formal savings account. Clubs in the treatment groups received the same information about savings accounts and were also offered individual savings accounts into which proceeds, after loan repayment, would be directly deposited. Farmers in the first treatment group were offered an “ordinary” savings account with an annual interest rate of 2.5 percent. Those in the second treatment group received the same individual savings account, in addition to a “commitment” savings account which allowed farmers to specify an amount of money to be frozen until a specified date (e.g., immediately prior to the planting season, so that funds are preserved for farm input purchases).

To assess the impact of public information on financial behavior, farmer clubs in both treatment groups were also randomly assigned to one of three raffle schemes providing information about club-level savings: a public raffle, a private raffle, or no raffle at all.

RESULTS

Savings Behavior: Twenty one percent of farmers in the commitment savings group made transfers into their ordinary OBM account, compared to 16 percent of farmers in the ordinary savings group, and no farmers in the comparison group.

Inputs, crop sales, and expenditures: Farmers who were offered commitment savings accounts had cultivated more land, used 17.1 percent more inputs, and had a greater value of harvest than farmers in the comparison group. This led to a 20.1 percent increase in the value of crop output and increased total expenditures reported in the last 30 days by 13.5 percent. Overall, farmers in the ordinary savings group did not have welfare outcomes that were different from those in the comparison group at a statistically significant level.

Farmers in the commitment savings group received 89 percent of funds in their ordinary accounts, indicating that self-control may not have been the key barrier to saving here. There is also no direct evidence that positive results in the commitment savings group are due to farmers wanting to keep funds from their social networks, though the evidence on this mechanism is currently inconclusive. Alternatively, psychological phenomena such as mental accounting may be behind the impact of the commitment accounts.
Payments are the backbone of any financial system. Individuals send money to family and friends, employers pay wages to their employees, and marketplaces are built on payments between buyers and sellers. However, across sub-Saharan Africa and South Asia, payments (especially payments from and to the poor) are constrained by transaction costs and information problems. Relaxing these constraints might enhance welfare by increasing the amount, frequency, and speed of these transactions.

Transaction costs in sending payments originate from both the supply and the demand side. The monetary costs of making payments can be daunting, especially in remote areas with little infrastructure. Individuals and financial institutions might have to pay high fees or travel long distances to make payments. In addition, payments may include hidden costs such as the time it takes to make a transaction and the risk involved in doing so.

Reducing the transaction costs of sending payments may lead to two sets of benefits. First, reducing the amount that individuals and institutions spend in fees or time in making a payment transaction creates an income effect, through which the overall amount of money left for other activities and spending increases. Second, reducing transaction costs reduces the overall cost of a payment and may lead to an increase in the number, amount, and speed of payments made, as would be the case for a price reduction for any normal good or service. These enhanced payments might help households spread risk better and make more strategic investments.

Information problems also pose a barrier to sending and receiving payments. Innovations which address such problems may be able to increase transparency and reduce corruption. Increased information may also improve value chains by reducing the risk involved in making payments.

Electronic payments have received much attention for their potential to expand financial portfolios. Payment systems such as mobile money might be able to reduce the time, cost, and risk associated with making payments, but there are still many open questions on whether these nascent systems will succeed in expanding financial inclusion for the poor. Indeed, many systems are subject to low demand and to supply-side challenges around the introduction of a new channel for conducting financial transactions.

We look closely at these barriers to the adoption and use of new payment channels in the Initiative, and systematically measure the gains to business and poor clients.
This study will examine the impact of access to electricity using a solar-powered, off-grid electric system linked to mobile payments, on the profitability and growth of small businesses.

Authors: Tavneet Suri (MIT) and William Jack (Georgetown Univ.)
Partners: Angaza Design and Sunny Money
Location: Kenya
Sample: 1,500 retailers
Timeline: January 2013 - ongoing

Retailers lacking access to electricity are limited in their ability to operate during nighttime hours and reach customers who might be at work during the day. Solutions like kerosene do a poor job of lighting the room, have negative health effects, and require repeat purchases. Traditional off-grid solutions require significant one-time investments to pay for the fixed equipment of generators, solar panels or alternatives.

Angaza Design has developed the SoLite-3, a solar-powered off-grid electric system embedded with Angaza’s Pay-As-You-Go (PAYG) technology. PAYG allows energy consumption to be tracked and, if necessary, remotely cut off. Angaza can provide the SoLite-3 on credit with a minimal down payment because it has a low-cost enforcement mechanism that aligns the incentives of customers towards repayment. Angaza and IPA are teaming up to test the roll out of the SoLite-3 to retailers under different pricing schemes. A randomized design will be used to study the impact of access to electricity on businesses, along with how variation in pricing schemes and enforcement through the PAYG system affects usage and repayment.
Universal access to safe and reliable financial services from regulated providers is still a long way off in many developing countries. However, the share of those with access to formal finance has been growing steadily over the past few decades and today 41 percent of the adult population in low- and middle-income economies has access to a formal bank account. Although this is a significant and growing share, 10 percent of these adults do not make any transactions and leave their accounts inactive, and the use of other products such as insurance, more sophisticated savings instruments, and loans remains limited. The depth and quality of the interaction with the formal financial sector is still very low for most account holders in developing economies.

The financial products available are often too complex or rigid and do not adequately satisfy the needs of low-income clients. Clients may not have the tools to choose between various products and services in order to satisfy their particular financial needs. This may lead to choices that adversely affect their business and the welfare of their family.

As access to increasingly sophisticated financial services expands, the gap between access and the financial capability of individuals, understood as the ability to make healthy financial decisions, widens. Bridging this gap requires improving knowledge and information around financial services and improving the tools used for decision making. Evidence on the impact of financial education programs on knowledge and behavior has so far shown mixed results. Building on this preliminary evidence, the Global Financial Inclusion Initiative promotes research on finding more impactful and cost-effective ways to build knowledge that could provide a business case for scale-up.

Beyond financial education, recent research in behavioral economics highlights how common behavioral biases such as temptation, time-inconsistent preferences, and inattention are common obstacles to healthy financial behaviors. Innovating on the design of financial products is as important as finding impactful and scalable ways to improve financial knowledge. Research on product design can help financial service providers devise features that nudge clients towards making better financial decisions and improve the ways in which they manage their money. Our work therefore spans both financial education approaches and new learning possibilities linked to product design changes.
1 FINANCIAL LITERACY AND RULES OF THUMB

Simplifying financial training programs to focus on practical and actionable advice can be very beneficial.

Authors: Alejandro Drexler (U. Texas at Austin), Greg Fischer (LSE), and Antoinette Schoar (MIT)
Partner: Asociación Dominicana para el Desarrollo de la Mujer (ADOPEM)
Location: Dominican Republic
Sample: 1,193 existing ADOPEM clients
Timeline: 2006 - 2008

POLICY ISSUE
Microfinance institutions (MFIs) seek to enable entrepreneurship by providing small personal loans to borrowers who otherwise would have difficulty accessing capital markets, but new entrepreneurs are also faced with complex financial decisions for which they may be unprepared. Studies have shown that there is a strong association between higher financial literacy and better business decisions and outcomes, but there is little evidence on the best ways to quickly convey complex financial practices to business owners. Should courses place more weight on conveying every aspect of complex materials, or on teaching basic concepts in greater depth?

CONTEXT
In the Dominican Republic, ADOPEM is a savings and credit bank which serves primarily low-income urban individuals and small businesses. They offer loans of US$70 – US$1,400 to both individuals and groups, and also operate a training center with programs covering basic computing, entrepreneurship, and trade skills. Many ADOPEM clients operate small businesses with few or no employees, including enterprises such as general stores, beauty salons, and food services, which bring in an average of US$85 per week. Many clients have been found to have errors in their accounting books, and relatively few individuals kept their business and personal accounts separate.
DESCRIPTION OF INTERVENTION

From a pool of 1,193 clients who had expressed interest in financial training, two-thirds were assigned to receive five to six weeks of training, which was offered once a week for three hours at a time and included out-of-class assignments. These classes were taught by qualified local instructors with experience in adult education, and were offered for free or nearly free. Two variations of the training were tested: an “accounting” treatment focused on a traditional, principles-based approach to accounting techniques and covered topics such as daily record-keeping of cash and expenses, inventory management, accounts receivable and payable, and calculating cash profits, and investment; and a “rules of thumb” treatment that taught participants simple rules for financial decision making, focusing on the need to separate business and personal accounts. The program taught clients about paying oneself a fixed salary, distinguishing between business and personal expenses, and easy-to-implement tools for reconciling accounts. Additionally, a randomly selected subset of each treatment group received weekly follow-up visits from a financial counselor.

PRELIMINARY RESULTS

Effects on Business Practices: The “rules of thumb” treatment had significant effects on clients’ business practices. The likelihood that clients were separating business and personal cash and accounts, keeping accounting records, and calculating revenues formally increased by approximately 10 percentage points relative to the comparison group. By contrast, the accounting treatment seemed to have no impact on business practices.

Effect on Business Outcomes: Participants in the “rules of thumb” treatment reported an increase of 0.11 standard deviations on an index of revenue measures. The most significant effect is observed in the level of sales during bad weeks. The “accounting” treatment had no impact on revenues.

There was no discernible impact on either treatment group of receiving follow-up visits from counselors. There were, however, some differences in treatment effects across various groups. Training had a larger effect on the likelihood that more educated clients would separate cash for business and personal use, and on their likelihood to save. Additionally, the “rules of thumb” treatment also had a larger impact on entrepreneurs at the lower end of the performance, ability or interest spectrums. This suggests that the value of simplification may depend on the targeted client base.
Clients that received monthly reminders to save increased their savings balances and were more likely to reach savings goals.

Authors: Dean Karlan (Yale Univ.), Margaret McConnell (Harvard School of Public Health), Sendhil Mullainathan (Harvard Univ.), and Jonathan Zinman (Dartmouth College)
Partner: First Valley Bank
Location: Philippines
Sample: 2,259 households
Timeline: 2007 - 2009

POLICY ISSUE
With little money to spare, the poor are particularly vulnerable to the income shocks associated with unexpected events such as natural disasters or health emergencies. Many households facing these unexpected costs may be forced to take on debt, or to sell assets to remain afloat. However, those with access to accumulated savings may be better able to maintain constant consumption levels and avoid more drastic measures. Of course, savings are not useful only in times of emergency: many microfinance clients borrow repeatedly as a way of getting liquid cash, with some clients always having loans outstanding. Savings may provide a cheaper, interest-free way for microentrepreneurs to finance business investments.

Access to formal financial services is increasing, but many households in the developing world still do not have a savings account, or do not use the one they have. Though many people express a desire to save more, little is known about the best way to encourage people to follow through on that desire.

CONTEXT
For a variety of reasons, the poor in the Philippines are underserved by traditional banks. Many live far away from bank branches, or are unable to meet minimum deposit requirements to open an account. However, despite high levels of poverty, mobile phones are extremely prevalent. Sixty percent of all Filipinos are estimated to be mobile phone subscribers and the total number of text messages sent everyday to phones in the Philippines averaged one billion in 2007. Even among poor households, mobile phones can be an essential communication tool and many Filipinos send and receive text messages regularly, thus offering a unique opportunity to test whether text message reminders can influence savings behavior.

DESCRIPTION OF INTERVENTION
The First Valley Bank designed a savings product to allow clients to commit to saving and avoid spending saved funds. Clients who opened the “Dream” savings account were given a small box into which they could insert coins; only bank staff could open the box to take coins out.
The client could take the box to the bank, where the contents would then be deposited into the client’s account. Clients were restricted from withdrawing from their accounts until they had reached a certain “goal amount” and after a certain maturity date.

The principle intervention consisted of sending periodic text messages to a subset of randomly chosen savings account clients. Of the individuals that received reminders, half received positively framed messages, which emphasized that the client’s dreams would come true if she continued to save money. The other half received negatively framed messages, which emphasized that the client’s dreams would not come true if she failed to save. A third group, the comparison group, received no “reminder” text messages.

An independent randomization assigned some clients to receive “late” text message reminders, regardless of whether or not they had already been assigned to receive a regular reminder. This late deposit reminder was only activated if the client failed to make her monthly deposit. These lateness reminders also varied between loss and gain wording, emphasizing either the gain of achieving one’s dreams, or the loss of failing to achieve them.

**RESULTS**

As part of a cluster of savings experiments conducted in the Philippines, Bolivia, and Peru, results indicated that receiving a reminder increased the total amount saved in the bank by 6 percent. Clients randomly assigned to receive some form of reminder were also 3 percentage points more likely to reach their savings goal by the goal date.

There was no evidence of a difference in the savings rates of clients receiving positively-framed versus negatively-framed reminders, or late versus regular reminders.
Recent years have seen innovative developments in technological platforms that support faster and safer payment transactions and improved savings services. The introduction of mobile money products and new banking channels using local agents appears to be the beginning of a new financial ecosystem that can better serve the poor. Yet the impact of such innovations on poverty alleviation is still unknown. The Yale Savings and Payments Research Fund seeks to fill this gap by building evidence on:

1. Innovations that most effectively enable improved usage of savings products and payment services by the poor (through reduced cost, reduced risk, improved learning, behavioral incentives, and regulatory reform).

2. The impact that the use of improved savings products and payment channels has on the welfare of the poor.

The Yale Savings and Payments Research Fund supports new research projects through a competitive fund with approximately $1.3 million in research funding. Across the first two competitive rounds, the fund’s Executive Committee has chosen 12 projects to receive research funding for a total of $890,000 in awarded grants. The third and final round of submissions to the competitive fund ran from June through August 2013.

The Yale Savings and Payments Research Fund also oversees an additional $2 million in consultative research funds allocated and managed by the Initiative’s Director and the Academic Lead, in partnership with the Bill & Melinda Gates Foundation, to pursue and implement priority research projects.
FUNDED PROJECTS

Full Research Projects

Financial Services in the Amazon Bolivia
Evaluating the impact of introducing lockboxes for saving on impulsive expenditures among native communities in a recently monetizing region.

Cash Transfers through Savings Accounts Chile
Evaluating the impact of receiving cash transfers electronically in bank accounts with and without savings defaults, and of using text message reminders, on savings and other outcomes.

Incentives to Save for Habit Formation Ghana
Testing whether incentives to save are effective at increasing savings levels and whether these higher savings levels persist after the incentives are removed.

Messaging Replications Global
Unpacking the theory behind why and how sending people text messages improves their saving and payment behaviors, and deriving a more robust set of prescriptions on how to implement effective messaging programs.

Saving for Birth Kenya
Evaluating the impact of financial and informational incentives on the savings behavior of pregnant women offered a commitment savings account for delivery-related expenses.

Solar Energy under Different Pricing Schemes Kenya
Studying the impact of access to electricity using a solar-powered, off-grid electric system linked to mobile payments, on the profitability and growth of small businesses.

Transaction Costs and Savings Account Use Kenya
Assessing the longer-run impacts, especially on women’s bargaining power and bank account use, of reducing transaction costs by providing ATM cards to savings account holders.

Behavioral Insights for Financial Products Malawi
Evaluating the impact of three interventions that leverage psychological phenomena to increase savings for a population of rural and peri-urban households in Malawi.

Effect of Income Timing on Savings Malawi
Analyzing the response of consumption and savings decisions to variations in the temporal structure of income, by varying the frequency and timing of income flows.

Savings Accounts to Help the Poor to Save Nepal
Measuring the impact of providing households in Nepalese slums with access to a formal bank account on financial behaviors, household consumption, and wealth.
Pilots and Preparatory Projects

Savings-linked Weather Insurance  Bangladesh
Understanding which design for a savings-linked insurance product is most appropriate for reducing the vulnerability of maize producers to extreme weather events.

Informal Savings  Global
Exploring informal saving mechanisms, costs, returns, and behaviors through qualitative and quantitative research across 13 countries.

Soft Commitment Savings Products  India
Piloting the offer of a soft commitment savings product and gaining insights into the most effective product design to increase savings among clients of a financial institution.

Understanding the Micro-Pensions Market  India
Understanding the economic and institutional aspects of defined contribution retirement benefit schemes currently being tested for informal sector workers in India.

Islamic Mobile Micro-Savings and Credit  Somaliland
Gathering background information to help develop user and non-user profiles for a future evaluation of the impact of new mobile-based financial services.

financial education.
OPPORTUNITIES FOR RESEARCHERS

The Yale Savings and Payments Research Fund engages with researchers from Sub-Saharan Africa and South Asia who are interested in developing rigorous evaluations of savings and payment innovations, and measuring their impact on the welfare of the poor. By collaborating with researchers and academics in these regions, the Fund aims to create a network of scholars who can help spearhead new projects, advocate for more rigorous research and evaluation in the field, and inform policy decisions on savings and payment interventions.

We primarily engage with researchers in Sub-Saharan Africa and South Asia through three programs:

Research Methods Workshops

In order to support researchers in their development of savings and payment evaluations, the Fund conducts research methods workshops. These workshops are designed to help selected researchers learn about current developments in the field of savings and payments research, as well as work through the nuts and bolts of conducting a randomized experimental evaluation in this domain. In addition, the participants expand their research network to include other like-minded scholars and receive guidance from experienced researchers in the IPA network.

Research Partnership Program

The Fund matches in-country researchers from our network with PhD students who have some experience with conducting randomized trials, in order to encourage joint research projects between in-country scholars and PhD students, while building the technical capacity of in-country researchers to pursue field experiments on savings and payments.

Policy Analysis

The Fund works with in-country researchers to write opinion pieces for various media outlets, to set up forums and conferences to discuss results from the latest randomized evaluations, and to apply learnings to policy-relevant questions in South Asian and Sub-Saharan African countries.
As access to financial services expands for low- to moderate-income households around the world, there seems to be a gap between access to financial services and the ability to take advantage of these tools to make healthy financial decisions. The Fund seeks to generate rigorous evidence on products and product-linked innovations aimed at improving financial capability, or the ability of individuals to make informed and effective decisions about the use and management of their money.

With the goal of supporting at least ten randomized evaluations and several pilots, the Fund will work towards identifying effective interventions that improve financial capability and can provide a promising business case for scale-up by financial service providers. The three focus areas of the Fund are: i) product-linked financial education, ii) incentives for behavior change and use of financial services, and iii) product design solutions to encourage appropriate use of financial instruments.

The Fund manages $1.7 million in competitive awards for randomized evaluations and research preparation activities. The first competitive round of funding was completed in February 2013, with $770,000 awarded to six randomized evaluations and $150,000 awarded in grants to thirteen promising applicant teams who intend to further develop their study ideas. Submissions for the second round of funding were accepted from June through August 2013.
FUNDED PROJECTS

Full Research Projects

Phone-Based Defined-Contributions Afghanistan
Testing the impact of providing default defined-contribution savings programs and informational text messages to employees over a mobile money salary payment platform.

Messaging Replications Global
Unpacking the theory behind why and how sending people text messages improves their saving and payment behaviors, and deriving a more robust set of prescriptions on how to implement effective messaging programs.

Training Agents to Promote Savings India
Comparing the impact on the financial capabilities of end users of providing them with financial information versus incentivizing financial intermediaries.

Conditional Cash Transfers via Savings Accounts Mexico
Testing whether mental accounting and default mechanisms can improve the ability of poor households to save, cope with negative shocks, and invest in health and education.

Education vs. Access to Finance Philippines & Singapore
Comparing the impact of access to financial services against financial education programs of varying lengths, and assessing the complementarities between financial access and education.

Sticking to Long-Term Savings Turkey
Testing the efficacy of different types of text message reminders and campaigns in helping individuals maintain commitments to personal pension plans.

Pilots and Preparatory Projects

Incentives for Financial Education Trainers China
Exploring how best to measure the impact of financial and non-financial incentives on the motivation of loan officers to offer financial education programs, and on the quality of program delivery.

Social Capability for Savings among Youth China
Comparing a group-level savings curriculum against an individual-level savings curriculum to test which curriculum is most effective in improving the savings habits of youth.

Default Savings Deposits for Retail Clients Colombia
Assessing the viability of a product that allows consumers to automatically deposit a percentage of their expenditures into a savings account when shopping at participating retail stores.

Changing the Frequency of Government Transfers Colombia
Providing cash transfer beneficiaries with more frequent transfers of their CCT payments and rules-of-thumb financial education.

Repairing Defaulters’ Damaged Credit Scores Colombia
Designing a product bundle of small loans, credit education, and reminders to help credit defaulters repair their credit scores.
Incentives and Reminders to Save  Dominican Republic
Designing a savings account for housing expenditures with reminders and a housing loan contingent on achieving a particular savings goal.

Micro-franchising Loans & Training  Dominican Republic
Introducing loans linked to inclusive distribution programs and enterprise development training as a way to improve business outcomes and the financial capability of low-income clients.

Payday Reminders for City Council Workers  Kenya
Exploring the possibility of sending a variety of simple behavior tips via SMS messages to City Council of Nairobi employees, and testing their impact on savings habits.

Optimizing Health Savings Education Delivery  Nigeria
Piloting a bundled savings and health insurance product and testing the impacts of education, SMS reminders, and incentives in improving clients’ savings behaviors.

Micro-franchising as a Complement to Credit  Paraguay
Comparing the impact of offering a bundled micro-franchising and micro-credit product with micro-credit alone.

Demand for No-Claims Rebate Life Insurance  Peru
Introducing no-claims rebates as a way to improve take-up of a life insurance product among the rural poor.

Financial Rules of Thumb  Peru
Piloting a financial rules of thumb training program for coffee farmers, to help design an evaluation that measures the impact of delivering SMS follow-ups to the program.
PARTNERSHIP DEVELOPMENT

Creating a space for financial service providers and researchers to meet and engage in conversations on product design and operations is no easy task, but it is critical to foster innovation and learn what works and what does not in improving the financial capabilities of the poor.

The Citi IPA Financial Capability Research Fund hosts periodic matchmaking programs during which financial service providers and practitioners engage with researchers to discuss research ideas and explore opportunities for collaboration. Matchmaking programs consist of a series of one-on-one meetings among potential researcher-practitioner pairs with similar interests, selected from a pool of applicants. The most promising partnerships that develop are supported by the Fund through grants for initial piloting and preliminary research, intended to prepare the team to submit a full proposal for a randomized evaluation. Full proposals then compete for funding under the competitive research fund.

THE 2012 MATCHMAKING PROGRAM

In August 2012 in Bangkok, Thailand, we brought together 24 researchers and practitioners from around the world to participate in a two-day matchmaking program. During this meeting, practitioners like FINO Fintech Foundation in India and the Kenya Financial Education Centre connected with faculty from Harvard Business School and the National University of Singapore, respectively. They began exploring ideas around two specific challenges: identifying cost-effective ways to encourage beneficiaries of a government cash transfer program to increase their personal savings, such as by incentivizing agents in India, and testing whether product-linked interventions through payday reminders and educational messages can improve the financial management of municipal workers in Nairobi.

These are just two examples of research partnerships that were developed in Bangkok and received grants for preliminary research and piloting activities. The grants allowed the researchers and practitioners to solidify their partnerships and design plans for their randomized evaluations.
PRIORITY RESEARCH AREAS
Many microcredit providers now force, or encourage, their borrowers to save, even when the interest offered on these savings is significantly lower than the interest being paid on outstanding loans. This practice only makes sense for the client if the long-run habit formation benefits outweigh the short-term pecuniary costs of simultaneous saving and borrowing (as opposed to just borrowing less), and if there is no other way to generate the long-run habit. This proposition can and should be tested, since it can prove to be extremely costly for the client. It is also worth testing whether habit formation can be molded (and mentally accounted for) in a way that is more advantageous to the client: can the “habit” of making regular loan payments be transferred to “paying oneself” (i.e., saving) once the loan is paid back?

Offset accounts are special savings accounts that allow borrowers to link their savings balances to their outstanding credit. They are an example of products that minimize the ‘interest penalty’ to clients from simultaneously saving and borrowing. By promoting balanced savings deposits and loan repayments for credit clients, such accounts provide borrowers with an incentive to accumulate savings and develop a savings habit, while simultaneously using their surplus funds to reduce their interest burden.

IPA is looking for financial institutions to collaborate with in jointly designing and offering offset savings accounts that meet the needs of credit clients and measure the product’s effects on both client welfare and the financial institution’s balance sheet.
Payment transactions in developing countries – between individuals, between customers and enterprises, between citizens and governments – are often burdened by high costs, a lack of information, and even social constraints. In some countries, cash payments and transfers often occur through informal channels, through friends, relatives, or even public transport. These mechanisms come with significant delays, high costs, and a high risk of theft. The rapid expansion of mobile phone ownership in developing countries offers an opportunity to relax these constraints via an alternative payment channel: mobile money.

Numerous countries across sub-Saharan Africa and South Asia have introduced mobile payment systems that give their customers access to a broad range of financial services that can be used through their mobile phones. The electronic value stored in these accounts can be increased or decreased easily at local stores serving as cash points that are, in some countries, already ubiquitous and accessible. Mobile money often makes payment transactions quicker, safer, less costly, and more convenient. It is thus starting to become popular as a tool to transfer money and send remittances, pay bills, distribute government transfers, and save or borrow money.

Mobile money’s welfare effects are expected to work through mechanisms such as consumption smoothing, risk-sharing, and intra-household decision making. Initial findings from a panel study in Kenya and randomized evaluations in Mozambique and Niger suggest that mobile money reduces transaction costs, and allows individuals and households to respond to shocks better by drawing on peer support. However, more research needs to be done to understand the impact on efficiency and welfare and improve the design of financial services built on the mobile money platform.

GFII is looking for partners to conduct evaluations of mobile money interventions to answer research questions such as: what is the best way to facilitate growth of mobile payments among the poor? What is the role of social networks in influencing take-up of this technology? How do electronic, when compared to cash, payments affect the financial lives of the poor, and what are the long-run welfare impacts of making payments easier, faster, and safer?
Time inconsistence, self-control problems, and limited attention are significant barriers to the poor being able to accomplish their financial goals. Evidence from a number of studies (see p. 26-27 for instance) has shown that simple and frequent messages to individuals can effectively modify such behaviors and lead to improved financial behavior. Reminders sent through a variety of channels – including text messages, emails, and postcards – have been shown to increase savings balances, improve loan repayment rates, and increase contributions towards long-term savings plans.

IPA is committed to bringing the benefits of mobile phone messaging to scale across the globe. But many questions remain about why reminders are so effective at improving financial behaviors, and how to implement them best for long run behavior change. To this end, GFII is looking for financial service providers who are interested in partnering on a messaging replication program. The program seeks to unpack the theory behind why sending people messages improves their payment behaviors and to explore the most effective design for implementing interventions around reminders, primarily delivered through SMS.

With a clearer understanding of why messaging changes behavior, more robust prescriptions can be made for new institutions in new settings, to help design optimal strategies for interacting with clients. A comprehensive set of tests will focus on exploring how information, attention, persuasion, and habit formation combine to form optimal messages for various groups of people. The tests will also feature variations in timing, frequency, dynamics, salience strategies, content, and personalized information, among others. In the end, we aim for a set of guidelines, backed by evidence, that will help financial institutions design their own messaging campaigns to help improve their relationships with their clients, by helping clients use financial services efficiently. The messaging replication program will aim to conduct 30 randomized evaluations, primarily using administrative data, with 10 or more partners worldwide.
Commitment savings products are an effective way to encourage savings accumulation towards life goals and large lump sum expenditures. They help to overcome behavioral and social barriers that prevent many households from reaching their savings targets. IPA is looking for partners to bring the proven impact of commitment savings to beneficiaries around the world through a structured scale-up program.

While access to and usage of formal banking services remains limited, evidence shows that the poor can and do save, though not as much or as frequently as they want to, often due to immediate temptations and pressure from social networks to share any surplus. Commitment savings products allow households to set aside money for a predefined goal that they are keen to achieve in the future. They can take the form of soft commitments, such as simply labeling a savings account with a particular goal, or hard commitments, such as the imposition of withdrawal restrictions on money stored in an account.

Randomized evaluations in Ghana, Kenya, Malawi, and the Philippines have shown that commitment savings products help people improve their savings balances. In the case of a hard commitment savings product designed and tested in the Philippines, individuals who were offered the account increased their savings balances by as much as 80 percent compared to the control group. In addition, commitment savings products have led to higher investments in agricultural inputs that led to greater agricultural profits, increased investment in preventative health expenditures, reduced vulnerability to health shocks, and positive impacts on female decision making within the household.

IPA is working to take the power of commitment savings products to scale by working with microfinance institutions and commercial banks to adapt their products to offer suitable commitment devices to their clients. The scale-up program will continue to test product design variations to determine the characteristics and delivery mechanisms with the greatest welfare impact and strongest business case.
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<th>PARTNERS ON GFII-FUNDED PROJECTS</th>
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Guided by the belief that every life has equal value, the Bill & Melinda Gates Foundation works to help all people lead healthy, productive lives. In developing countries, it focuses on improving people’s health with vaccines and other life-saving tools and giving them the chance to lift themselves out of hunger and extreme poverty. In the United States, it seeks to significantly improve education so that all young people have the opportunity to reach their full potential. Based in Seattle, Washington, the foundation is led by CEO Jeff Raikes and co-chair William H. Gates Sr., under the direction of Bill and Melinda Gates and Warren Buffett.


The Citi Foundation is committed to the economic empowerment and financial inclusion of low- to moderate-income individuals and families in the communities where we work so that they can improve their standard of living. Globally, the Citi Foundation targets its strategic giving to priority focus areas: Microfinance, Enterprise Development, College Success, and Financial Capability and Asset Building. In the United States, the Citi Foundation also supports Neighborhood Revitalization programs. The Citi Foundation works with its partners in Microfinance, Enterprise Development, and Neighborhood Revitalization to support environmental programs and innovations. Additional information can be found at:

Aishwarya Lakshmi Ratan is the Director of the Global Financial Inclusion Initiative at Yale University and IPA. She provides leadership and guidance for both funds, overseeing the Initiative’s research and policy agenda, project development and management, and external outreach to stakeholders in the sector. Prior to joining the Initiative in June 2011, Aishwarya was at the Microsoft Research Lab in Bangalore, India. She received a Bachelor’s degree in Economics from Wellesley College and a Master’s degree in Public Administration and International Development from the Kennedy School at Harvard University.

Beniamino Savonitto is the Director of the Citi IPA Financial Capability Research Fund supported by the Citi Foundation. He oversees all of the Fund’s activities in project development, research oversight and communication. Since joining IPA in 2008, Beniamino has managed several randomized evaluations of financial services and ICT applications in sub-Saharan Africa and Latin America. He holds a Master’s degree in International Relations from Johns Hopkins University and a Bachelor’s degree in political science from LUISS University in Rome.

Zahra Niazi joined the Yale Savings and Payments Research Fund as a Project Manager in December 2012. She oversees overall project development and management of the Fund. Zahra joined IPA in January 2010 as a Project Coordinator working on project development and researcher outreach at IPA headquarters in New Haven. She holds a Master’s degree in Public Policy from the Harvard Kennedy School of Government and a Bachelor’s degree in Economics from the Lahore University of Management Sciences.

Aaron Dibner-Dunlap works as a Project Manager on the Reminders Replication program implemented under the Global Financial Inclusion Initiative. Aaron joined IPA in 2010 as a Project Coordinator for a four-site study conducted on the impact of access to savings accounts in Chile, Malawi, the Philippines, and Uganda. He holds a Master’s degree in International Affairs from Columbia University and a Bachelor’s degree from Northwestern University.
Amber Davis works as a Project Coordinator on the Yale Savings and Payments Research Fund. She oversees the development of new savings and payments projects and coordinates outreach to local researchers. Prior to joining IPA in 2013, she worked on impact evaluations with USAID and the World Bank. She also conducted research on market access and competitiveness issues with the Inter-American Development Bank. Amber holds a Master’s degree in International Relations and International Economics from Johns Hopkins University and a Bachelor’s degree in Public Policy from Stanford University.

Pooja Wagh joined IPA in August 2012 as the Project Coordinator for the Citi IPA Financial Capability Research Fund supported by the Citi Foundation. She helps manage the portfolio of projects supported by the Fund and organizes events related to the Fund’s matchmaking program. Prior to joining IPA, she earned a Master’s degree in Public Policy at the Harvard Kennedy School of Government, where she focused on innovations in financial services for the base of the pyramid. Pooja also holds a Bachelor’s degree in Electrical Engineering from the Massachusetts Institute of Technology.

Rohit Naimpally works as a Senior Project Associate on the Citi IPA Financial Capability Research Fund supported by the Citi Foundation. He helps manage the competitive funding process and prepares web and print communication material for the initiative. He joined IPA in 2010 to work as a Project Associate on data analysis for a set of Village Savings and Loan replications in East Africa. In addition, he worked on a project on trade costs and price markups in various developing countries. Rohit holds a Bachelor’s degree in Economics and a Master’s degree in Social Sciences, both from the University of Chicago.

Hugo Gerard is a Senior Project Associate for the Yale Savings and Payments Research Fund. Hugo works on the mobile money studies helping with research design and analysis. Prior to joining IPA in November 2012, Hugo was an Economist in the Research Department at the Reserve Bank of Australia. Hugo holds a Bachelor’s degree from Macquarie University in Sydney, and a Master’s degree in Economics from Pompeu Fabra University and the Barcelona Graduate School of Economics.