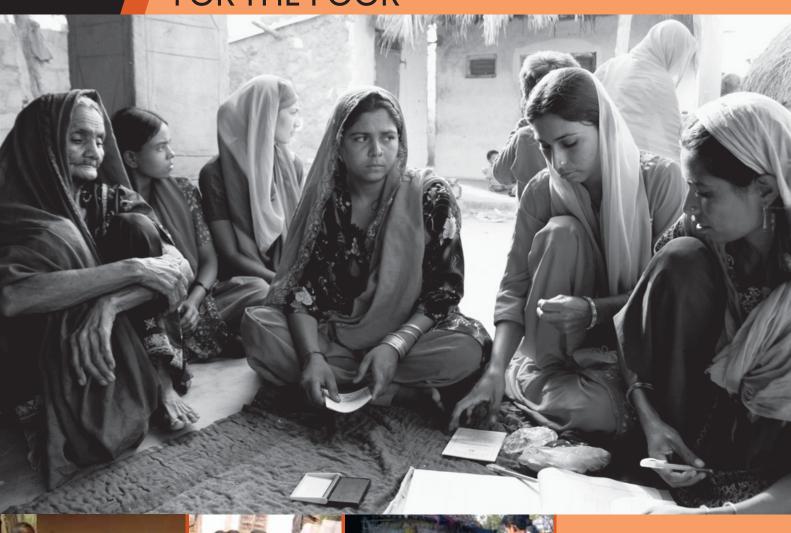


Report of the Centre for Micro Finance at IFMR Research

FIVE YEARS OF RESEARCHING FINANCIAL SERVICES FOR THE POOR

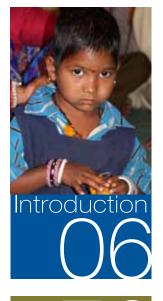


Editors:
Shardul K. Oza,
Jagori Saha





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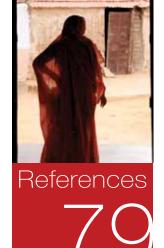
















Acknowledgements

This volume would not have been possible without the support and assistance of numerous CMF researchers. In particular, the editors would like to thank Shahid Vaziralli for his guidance at all stages of the project. We would also like to thank the following CMF staff members for their contributions: Samik Adhikari, Abhay Agarwal, Parul Agarwal, Surabhi Agarwal, Amulya Champatiray, Abraham Holland, Laura Litvine, Sushmita Meka, Amy Mowl, Sitaram Mukherjee, Tithee Mukhopadyay, Lisa Nestor, Saravana Rabindran, Hari Ramesh, Bhakti Shah, Misha Sharma, Niharika Singh, Dhruv Sood, Ajay Tannirkulam, Anushree, Manaswini Rao and Mudita Tiwari.

Introduction: Five Years of Financial Services Research



The Centre for Micro Finance at IFMR Research was founded in 2005 with the mission of improving financial services programs for low-income individuals through rigorous evaluation and policy dissemination. When the organization first entered the research space, the Indian microfinance sector was growing rapidly with hundreds of institutions, for-profit and non-profit, working in the area of financial services for the poor. At the time, many practitioners believed that their programs could transform the lives of their clients and lift them out of poverty. However, practitioners could not be sure their programs were making a difference, since almost no systematic knowledge existed about the effectiveness of these types of interventions on well-being.

The Centre for Micro Finance found its niche in rigorously evaluating the effectiveness of financial services programs, with a strong focus on measuring individual and household-level impacts. CMF's researchers believe that by identifying the mechanisms that drive greater impact, policymakers and practitioners could design programs that more effectively transform the lives of low-income individuals. In addition to conducting evaluations of specific financial products such as microcredit and microinsurance, the Centre's researchers are actively involved in analyzing broader financial access issues.

CMF Today

More than five years later, the Centre for Micro Finance continues its work in rigorously analyzing the impact of anti-poverty programs through a variety of field-based studies. The organization has also diversified its areas of research beyond traditional financial services to include livelihoods, agricultural risk and information, and financial education. This organizational shift is driven by the recognition that finance can be a powerful vehicle for achieving social objectives but that more research is needed to understand how financial interventions can serve as an effective complement to social services programs.

Research Areas

CMF conducts research across four broad areas: Financial Inclusion, Livelihoods, Social Objectives and Policy and Regulation. The Centre's numerous sector-wide and policy studies provide policymakers with information they need in order to improve existing programs and design new ones.

Methodology

Approximately half of CMF's studies are randomized controlled trial studies of development interventions. From evaluating the impact of urban microcredit expansion to testing whether expert agricultural advice delivered by mobile phone can improve agricultural practice, CMF's RCT studies form an important part of the organization's research corpus. A research method common in the medical field, randomized

control trials help researchers separate the causal impact of an intervention from effects that could be driven by the individual characteristics of participants or other non-program related differences. By randomly selecting who receives a particular intervention, researchers are able to create two groups that are similar in every way except for the fact that some participate in the program being evaluated and some do not. After measuring the difference between treatment and control groups at the end of the evaluation period, researchers can gauge the true impact of the intervention.

In addition to randomized control trials, CMF uses other rigorous academic methods to collect quality data.

The organization employs more than 30 full-time research associates and hundreds of support staff working in four offices across the country. The Centre draws on the expertise of its academic research partners which include academic institutions such Harvard University, University of Pennsylvania, Yale University, London School of Economics, IIM – Calcutta and others as well as the field-level knowledge of its partner organizations, a group that includes top development institutions such as Bandhan, SEWA, Kshetriya Grameen Financial Services, Development Support Centre, among others. The organization's work is funded by a diverse group

of institutions such as 3ie, World Bank, USAID, DFID and the Agricultural Technology Adoption Initiative.

Outreach and Impact

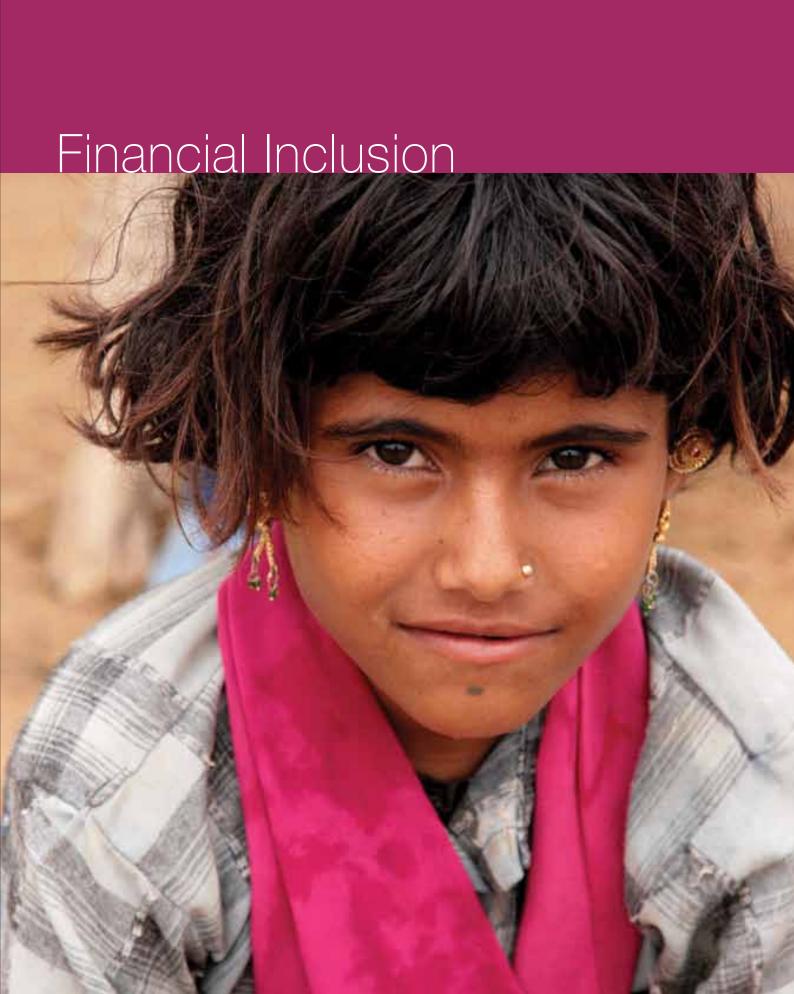
CMF has advocated evidence-based policy outreach based on the belief that policy should be informed by knowledge about what works for low-income households. Since its inception, the organization has worked hard to forge ties with key decision-makers and practitioners in India and abroad to ensure that its cutting-edge research is incorporated into practice. Every January, the Centre co-sponsors a conference with the College of Agricultural Banking - Reserve Bank of India in Pune titled "Microfinance: Translating Research into Practice," where policymakers, practitioners and researchers gather to discuss how programs and services can be designed to better serve the poor. Researchers and members of CMF's Policy and Outreach team also meet regularly with industry specialists and government officials to present research and discuss matters of policy relevance.

CMF has come a long way since its founding in 2005, both in the area of research and policy dissemination. The organization's research has

been broadly cited in national and international outlets and the organization has played a key role in shaping the global debate on how financial services can be tailored to help low-income individuals. Over the last five years, the Centre and its affiliated researchers have produced a considerable body of work on financial access, knowledge which will play a key role in informing policymakers as they shape the country's poverty alleviation agenda.

Purpose of Summary Report

This report, a collection of key CMF studies conducted over the last five years, is meant to serve as a reference document for policymakers, practitioners, researchers and others interested in financial services for the poor. More specifically, the studies presented here are intended to inform both general and expert audiences about current academic work being conducted in India, which has become a central hub for financial access research. The report, organized thematically, describes the organization's current work and summarizes key findings from completed studies. The report also identifies potential areas for future research and recommends ways that financial services practice could evolve to meet the needs of low-income households.



Financial Inclusion

The burgeoning microfinance movement, aimed at providing quality financial services to the poor, has helped focus the attention of policymakers and private sector actors on the plight of the world's millions of unbanked citizens. Financial inclusion has become an important development objective for policymakers, many of whom believe that access to a variety of financial instruments could help the poor escape poverty. In India, government officials, private sector institutions and non-profit organizations have experimented with different approaches to financial inclusion from the creation and expansion of regional rural banks to the more recent SHG-bank linkage program initiated by the National Bank for Agriculture and Rural Development (NABARD). However, the challenge remains as daunting as ever – more than 40% of India's adults lack access to formal financial services (Reserve Bank of India estimate). CMF's financial inclusion projects test the effectiveness of financial products and programs and identify potential barriers facing financial inclusion efforts.

Several studies in this area evaluate the design and impacts of financial services programs aimed at the poor. An evaluation of an urban microcredit program in Hyderabad finds that microcredit could increase business investment and help people start new businesses, but that it has little impact on other dimensions of well-being such as health, women's empowerment and education. Several experiments with microfinance repayment schedules show that contract design affects client behaviour - while giving clients a 2-month grace period helps them invest more in riskier, potentially high-return assets, it also leads to increased delinquency and default. Microfinance clients who meet weekly rather than monthly develop more social capital - they interact more with their fellow group members and these relationships tend to translate into greater informal risk-sharing and lower default. The low takeup of non-credit products is also a key area of concern for policymakers - here researchers find that trust and liquidity constraints substantially impact demand for weather insurance among agricultural households.

CMF actively studies the domestic financial inclusion space, where researchers are exploring the structural, organizational and behavioural barriers to increased financial access. A study on migrant remittances finds that many migrants use informal agents to transfer money because they are more convenient and accessible than formal institutions such as banks. Studying financial inclusion drives in two Southern states, researchers discover that, for a variety of reasons ranging from poor marketing to lack of knowledge, many families do not open or use bank accounts that are intended to provide them with a safe way to save. A survey of rural access to finance in Andhra Pradesh shows that people are rarely insured, hold high levels of debt (mainly to informal sources) and make frequent non-routine expenditures. These studies collectively highlight key access asymmetries that policymakers must consider when designing new programs to reach the unbanked.

Studies in this Section:

- Access to Finance in Andhra Pradesh
- A Study on Cost and Revenue Pattern of Business Correspondents and Assessing Clients' Willingness to Pay
- Financial Inclusion Studies: Analyzing No Frills Accounts Drives in Gulbarga and Cuddalore
- > Putting Money in Motion: How Much Do Migrants Pay for Domestic Transfers?
- ➤ Miracle of Microfinance? Evidence from a Randomized Evaluation
- > The Impact of Access to Finance in Rural Tamil Nadu: Evidence from a Randomized Control Trial
- > Does Microfinance Repayment Flexibility Affect Entrepreneurial Behaviour and Loan Default?
- > Understanding the Psychology of Mass Default: A Case Study of Eastern Maharashtra
- Social Networks and Microfinance
- The Economic Returns to Social Interaction: Experimental Evidence from Microfinance
- Understanding the Incentives of Commission Motivated Agents: Theory and Evidence from Indian Life Insurance
- Incentivizing Calculated Risk-Taking: Evidence from Experiments with Commercial Bank Loan Officers
- > Barriers to Household Risk Management: Evidence from India
- Selling Formal Insurance to the Informally Insured
- The Economics and Psychology of Long-term Savings and Pensions: A Randomized Experiment Among Low-Income Entrepreneurs in Maharastra
- Map of Microfinance Distribution in India 2010

Access to Finance in Andhra Pradesh

Researchers : Doug Johnson (CMF), Sushmita Meka (CMF)

Location : Andhra Pradesh, India

Project Status: Complete

Background

A key strategic priority of the Government of India in recent years has been to increase financial services penetration among the country's many unbanked citizens. Many of the unbanked live in remote rural areas where delivering financial services cheaply and effectively remains difficult. Despite the interest in expanding access in rural areas, policymakers still lack key information about the state of financial access among the rural population. If researchers, policymakers and private institutions had better information about financial access in these areas, they could possibly design programs and products that would help improve the financial lives of the rural poor. In this study, CMF researchers hoped to capture the status of financial services access by administering an in-depth household survey in rural Andhra Pradesh, a state that has seen considerable progress in the area of financial inclusion. Though numerous surveys have been conducted in the past, the present study, conducted in 2009 and 2010, is the one of the only surveys which is representative of the entire rural population of an Indian state and gauges access to microfinance.

Methodology

Researchers aimed to construct a robust sample that would accurately represent the rural population by randomly selecting districts, villages and households to be included in the study.

8 districts were selected from 22 districts in Andhra Pradesh using stratified random sampling: The 22 districts in Andhra Pradesh were stratified on two variables: the number of households below the official poverty line and the proportion of adult women belonging to a microfinance group. Two districts were then chosen from each stratum using simple random sampling.

64 villages were chosen from the selected 8 districts using stratified random sampling: Each district was divided into four strata depending on the distance to the nearest bank branch or town. From each stratum two villages were chosen using simple random sampling.

1920 households were selected from 64 villages: Researchers randomly selected 30 households from each village to be surveyed.

Findings

Savings

More than two-thirds of surveyed households have access to a formal savings account. Though this percentage is high, many of these accounts (approximately 41%) remain dormant (they contain only a balance of Rs. 0 or Rs. 50). Rural households opened most of these accounts in order to receive government benefits or to be eligible for a loan (79%) but rarely in order to save (only 14% opened accounts in order to save).

Despite RBI's attempts to relax Know Your Customer (KYC) requirements and remove procedural barriers to bank access, 49% of unbanked households reported not having documents or procedural difficulties as the reason for not opening a bank account. Also, a considerable percentage (28%) of our survey households reported lack of knowledge about banks and their products as a reason for not being a part of the formal banking system.

Lastly, the survey found that banked households tend to be better-off (measured by the Progress out of Poverty Index (PPI)) than unbanked households.

Borrowing

The study observed that overall indebtedness in rural Andhra Pradesh is high - about 93% of households had a loan outstanding at the time of survey. Informal borrowing is much more prevalent than formal borrowing, both in terms of overall debt and in terms of the percentage of households who had a loan outstanding from an informal source. Informal borrowing constituted about 75% of total debt held by surveyed households. More than 80 percent of households borrowed from informal sources while 50% of households had at least one loan from an SHG and about 11% from an MFI. Approximately three-quarters of survey households had a member who belongs to an SHG.

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Figure 2: Households use money from different sources differently (%)



Source: "Access to Finance in Andhra Pradesh." 2010.

Households used loans from different sources for different purposes. Household used a surprisingly high percentage of bank loans, 58%, to buy agricultural inputs. Households used a significant percentage of SHG and MFI loans (50% and 32% respectively) to finance consumption and no more than 3% of any type of loan (SHG, MFI, bank) was used to start a new business, calling into question the claim that microcredit is regularly used for entrepreneurship.

A majority of survey households had made non-routine expenditures in the last six months. Many financed these expenditures by borrowing from informal sources, with 43% borrowing from friends or relatives, 13% from moneylenders and 11% from landlords; or by spending their own income/savings (29%). The most common reason for making a non-routine expenditure was health, which may explain why households borrow largely from informal agents, who tend to be quicker and more flexible in disbursing cash.

The survey found that multiple borrowing was quite prevalent in rural Andhra Pradesh - about 84% of rural households had more than one loan outstanding at the time of survey. Interestingly, multiple borrowing was primarily driven by informal borrowing -more than two-thirds (70%) of households had at least two loans outstanding from informal sources.

Lastly, researchers found that comparatively better-off families (measured by PPI scores) were more likely to borrow from multiple sources compared to families that were less well-off.

Key Findings

- Informal debt constituted about 75% of total debt held by survey households.
- The study found that multiple borrowing was quite prevalent in Andhra Pradesh – about 84% of rural households had more than one loan outstanding at the time of survey.
- Over 60% of households made a non-routine expenditure in the last 6 months.
- Less than 3% of households had access to formal insurance.

Insurance

The penetration of insurance coverage in rural Andhra Pradesh remains low – very few households have access to insurance products other than life insurance. Excluding life insurance and Arogyasri health insurance, less than 3% of rural households had access to formal insurance.

About 4.6% of surveyed households had received treatment through Arogyasri, a state health insurance scheme for Below Poverty Line (BPL) households. The study found that even though the Arogyasri program was available only to BPL households, approximately 3% of beneficiaries did not have BPL cards, indicating possible leakage or corruption. Also, though the program is designed to allow BPL families to access health care for free, about 36% of surveyed beneficiaries who received treatment through Arogyasri had to pay for their medical treatment.

Policy Implications

• The fact that many households who have savings accounts do not use them suggests that there is still scope for banks in rural India to improve access through better marketing, awareness campaigns and product innovation. Policymakers should create incentives for savings account holders to use their accounts for savings, not simply to receive loans or access government benefits. Additionally, banks should make it easier for rural households to open savings accounts by streamlining their bureaucratic processes and implementing relaxed KYC norms set out by the RBI.

- There is a huge gap between rural households' demand for medical funds and available financial services. Since many families finance non-routine health expenses by borrowing from informal sources, policymakers could create financial products that are specially designed to help families cope with health risks. State officials should do a better job of making sure that all households with a BPL card are able to access the state sponsored medical insurance program, Arogyasri, free of cost.
- Financial service providers and institutions should work on designing and selling general insurance products that help the rural poor better cope with livelihood and health risks. Insurance penetration is extremely low, and can be improved through more efficient and innovative delivery systems, financial literacy programs, awareness campaigns, and improved product competition through the relaxation of regulations that create barriers to market entry.

A Study on Cost and Revenue Pattern of Business Correspondents and Assessing Clients' Willingness to Pay

Researchers : Amulya Champatiray (CMF), Ujjawal (CMF), Santadarshan Sadhu (CMF)

Location : India Project Status : Ongoing

Background

A recent policy initiative started by the Reserve Bank of India to further the goal of financial inclusion, the business correspondent model (BC Model), or the third-party agent model, allows banks to appoint third party agents who can offer standard banking services to hard-to-reach populations. Since its inception, the RBI has licensed many institutions and individuals to be business correspondents/ facilitators for banks. However, while many institutions and individuals working as BCs are experiencing business growth, they still struggle to achieve financial sustainability. A study conducted by Skoch Development Foundation reveals that, at the end of two years, the gap between costs and what banks pay their BCs is between Rs. 26.25 to Rs. 73.45 per account. While the model faces viability issues in the short/medium term, some advocates believe that the model has the potential to be profitable in the long-run by expanding its client base and providing value-added services.

Since practitioners and researchers know little about how various BC models work, it is difficult to gauge the potential advantages and disadvantages of this approach to financial inclusion. CMF researchers, in an attempt to gauge the financial viability of the BC model, will examine a host of issues related to client services and agent behaviour. Specifically, CMF aims to:

- · understand the financial model of various BCs
- understand the reasons behind client attrition and bad transactions

 gauge how the incentives offered by different BC models affect the behaviour of agents

Methodology and Research Design

CMF is conducting this study in collaboration with Bankers Institute of Rural Development (BIRD) - an institute supported by the National Bank for Agriculture and Rural Development (NABARD). Researchers plan on conducting a two-step analysis. For the first phase of the project, they will look at the costs incurred and revenue generated by business correspondents. This part of the project will involve collecting detailed data on cost and revenue patterns of selected business correspondents. Researchers will then focus on a host of issues related to agent and client behaviour. Researchers will choose agents and clients from different locations across the country and different operational models to provide a representative sample for the study.

Study Status

The study is in its exploratory phase. CMF's researchers will first visit the central and the field offices of business correspondents to collect information on their finances, and interview these representatives of organizations. Subsequent field visits will be conducted to interview both agents and clients of BCs. Researchers aim to present the findings of the study at CMF's annual conference (Microfinance: Translating Research into Practice) which attracts policymakers, practitioners and academic audiences.

Financial Inclusion Studies: Analyzing No Frills Accounts Drives in Gulbarga and Cuddalore

Researchers : Minakshi Ramji (CMF), S. Thyagarajan (College of Agricultural Banking),

Jayaram Venkatesan (CMF)

Location : Tamil Nadu, Karnataka

Project Status: Complete

Background

Policymakers the world over believe that financial inclusion could be a powerful vehicle for poverty alleviation. As part of India's broad poverty alleviation agenda, the Reserve Bank of India (RBI) initiated a financial inclusion drive in 2005 to bring unbanked households across the country into the formal financial sector. As part of the initiative, each state in India was asked to select at least one district where the government would achieve 100% financial inclusion. The main goal of the drive was to increase access to 'no frills accounts,' accounts that could be opened with zero or minimum balances. The RBI also loosened Know Your Customer (KYC) requirements, a series of protocols in which banks are required to check identity documents for each customer opening an account.

CMF researchers conducted two separate studies in two districts, Cuddalore in Tamil Nadu and Gulbarga in Karnataka, to evaluate access to finance after policymakers and state officials had declared that these districts had reached 100 percent financial inclusion. The key objectives of the study were to check whether states had achieved their financial inclusion goals and to see whether and how clients used their newly-opened accounts.

Methodology

The two studies used different methodologies to gather information about the drives. The Cuddalore study was based on results published by a lead bank, surveys conducted by banks involved in the drive, household and bank interviews by the study team, and transaction data from selected branches. The Gulbarga study surveyed 999 households deemed Below Poverty Line (BPL) approximately one year after the drive began.

Cuddalore

Indian Bank, the lead bank involved in the drive, published a booklet called "Financial Inclusion

Project in Cuddalore District," after Cuddalore district was declared to have reached 100% financially inclusion in September 2007. Researchers used data from this booklet for their core analysis. After finding inconsistencies in the data between different banks regarding the number of households banks had deemed "unwilling" to open an account, surveyors prepared a simple questionnaire for these households to see what factors had prevented them from opening accounts. Finally, to complement survey data and to understand how the program was implemented, CMF staff conducted interviews with branch managers.

Gulbarga

Surveyors selected 2 of 11 blocks in Gulbarga district: Shorapur and Gulbarga for the study. They then randomly selected 25 villages from each block and 20 BPL households from each village whom they then interviewed. They also spoke to bank managers about their experience during the drive.

Findings

Access and usage

In Cuddalore and Gulbarga a large part of the population remained without access to formal financial services, even though officials had

Key Findings

- In Cuddalore and Gulbarga a large part of the population remained without access to formal financial services, even though officials had declared these districts 100 percent financially included.
- In addition, many of households who had opened accounts had not used them.
 For example, 72% of accounts in Cuddalore had a zero or minimum balance one year after they were opened.

declared these districts 100 percent financially included. About 25.3% of households in Cuddalore and 36% of households in Gulbarga still did not have access to a bank account at the time of survey. In addition, many of households who had opened accounts had not used them. For example, 72% of accounts in Cuddalore had a zero or minimum balance one year after they were opened.

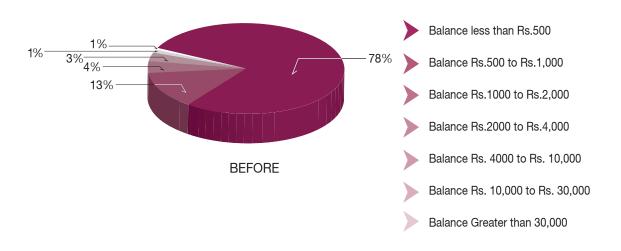
Reasons for low usage

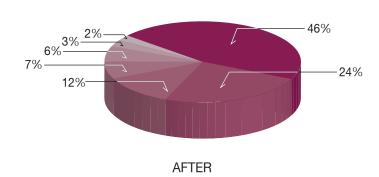
In Gulbarga district, households claimed that they opened accounts mostly to receive payments from the NREGP (National Rural Employment Guarantee Programme). Households cited a number of

reasons for not using accounts: insufficient savings, currently using SHGs for savings, and a lack of awareness about being able to use the accounts for saving.

In Cuddalore, people who used their accounts were successful at saving, suggesting the accounts could have potentially large benefits for low-income clients. The average balance of an active account increased from Rs.533 to Rs.1195. The percentage of account holders with a balance less than Rs.500 decreased from 78% to 48%, indicating substantial increase in savings among these households.

Figure 3: Account Balance of Customers Before and After Inclusion Drive, Cuddalore _





The study in Cuddalore finds that there is almost certainly a relationship between the number of households that were reported as unwilling to open an account and the effort invested by banks during the drive. For example, ICICI Bank reported that 76% of financially excluded households were unwilling to open accounts, while Indian Bank reported a much higher percentage of households that were willing. These inconsistencies suggest that banks that put less effort in the drive may have incorrectly classified households as unwilling to open an account when households may have in fact been "willing." The success of Indian Bank in opening accounts is mainly attributable to the fact that they appointed separate officers to handle the programme, a measure that other banks had not taken.

Costs

The study finds that maintenance and transaction costs remain high - the approximate cost of opening a no frills account is Rs.50.45 and its maintenance cost is Rs.13.40 per transaction. In Cuddalore, for an account with an average balance of Rs. 2430, banks would only break even on maintenance costs if the average number of transactions was 13 or less. Breaking even on a higher number of transactions would require even higher balances.

Key Findings

 The study finds that maintenance and transaction costs remain high - the approximate cost of opening a no frills account is Rs.50.45 and its maintenance cost is Rs.13.40 per transaction.

Policy Implications

- Policymakers may be able to achieve greater uptake and usage of savings accounts by training prospective account holders on how to use these accounts and the importance of savings. Financial education is critical not just for excluded households, but also for village panchayats and counsellors, who play a crucial role in promoting bank services.
- Banks should improve key marketing and compensation practices if they hope to reach the unbanked. Banks must work with local leaders such as panchayat presidents to disseminate accurate information about no frills accounts to their constituents. Banks should also provide better incentives to staff responsible for implementing inclusion drives. Unless bank officials are incentivized to open accounts, few will do so.



Putting Money in Motion: How Much Do Migrants Pay for Domestic Transfers?

Researchers: Shreyas Gopinath (CMF), Justin Oliver (CMF), Ajay Tannirkulam (CMF),

Supriyo Bhattacharya (College of Agricultural Banking),

R. R. Kulkarni (College of Agricultural Banking)

Location : Various States, India

Project Status: Complete

Background

Due to poor conditions and limited employment opportunities in rural areas, Indians are increasingly migrating to cities or towns to find work. Some estimates suggest that there are more than 100 million seasonal domestic migrants in the country. A major concern for these individuals is being able to transfer money safely and efficiently from their place of work to their family back home. Because migrants come from socially vulnerable households that use the funds to finance household consumption and investment, it is essential that they be able to transfer as much of their hard-earned money as possible. The present study aimed to examine the various transfer mechanisms available to 274 Indian migrants and their families along four major migration "corridors." Researchers also attempt to identify reasons why migrants may choose some remittance channels over others. To find a diverse sample, CMF researchers surveyed migrants and their families from the following migration routes:

- Bihar to Hoskote, Karnataka (a small town)
- Semi-urban Tamil Nadu to Mumbai
- Rural Orissa to Surat
- Semi-urban West Bengal to New Delhi

Methodology

Researchers worked with local NGOs to identify large migrant communities in each of the study's four migration corridors. They also spoke to local leaders who provided them information about migrants' occupations and their geographical dispersion.

The survey includes respondents from different professions: construction workers, factory workers, skilled labourers, self-employed shop owners, drivers and casual and domestic labourers. Researchers used purposive sampling to ensure that the sample was representative of different economic strata and occupations. The study

considers five channels for transfer services: banks, post offices, hawala couriers, cash couriers, and friends/self-transfers.

Researchers knew that there are both direct and indirect costs associated with transferring funds; therefore, they included: formal fees and commissions, travel costs, opportunity costs of the time spent, risk of loss, fraud or theft, demands for bribes and tips in their cost calculations.

Findings²

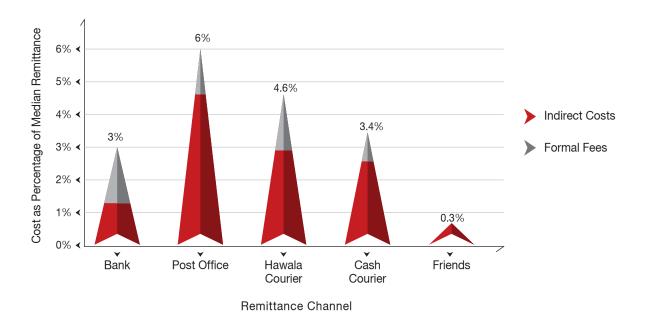
The majority of respondents, 57%, use informal methods - most commonly hawala couriers - to transfer money to their families. Almost half of the migrants in the study prefer to use banks for transfers but only 30% do so; reflecting possible demand for bank services. Sending money across the country remains expensive - migrants pay close to 80 rupees when transferring a median remittance amount of Rs. 2000. The average monetary cost of using a bank for a median fund transfer of Rs. 2000 (\$44 approx.) was 3%, significantly cheaper than other commonly-used methods like the India Post (6%) and informal hawala couriers (4.6%).

Key Findings

- The majority of respondents, 57%, use informal methods - most commonly hawala couriers - to transfer money to their families.
- Sending money across the country remains expensive – migrants pay close to 80 rupees when transferring a median remittance amount of Rs. 2000.

Since researchers used purposive sampling, the findings of this case study should not be interpreted as representative of the entire Indian domestic migrant population or even of specific "corridors."

Figure 4: Cost of Sending Rs. 2000 (as percentage of total remittance amount).

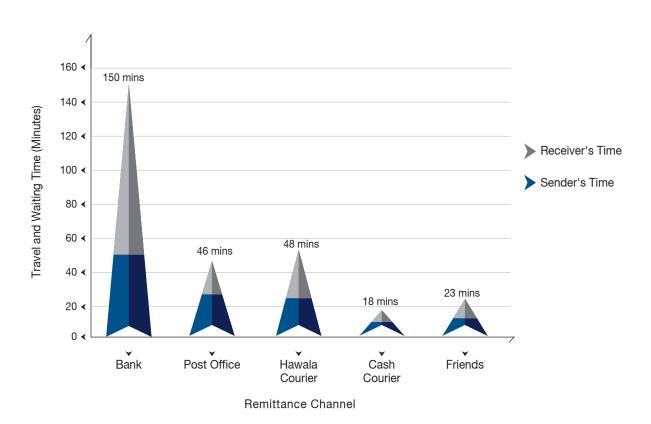


Source: "Putting Money in Motion: How Much Do Migrants Pay for Domestic Transfers?" November 2010.

Bank transfers, however, involve substantial non-monetary transaction costs - the total time required to send remittances through a bank (travel and waiting time) was much higher than any other mode of transfer at 150 minutes. The travel and

waiting time for the post office was 46 minutes, and 48 minutes for hawala couriers. More than three quarters of the financially-excluded migrants in our survey cited not having proper documentation as the primary reason why they do not have a bank account.

Figure 5: Travel and Waiting Time Involved in Making a Transfer _____



Source: "Putting Money in Motion: How Much Do Migrants Pay for Domestic Transfers?" November 2010.

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Researchers found that the two formal methods of remitting money, banks and post offices, are either inconvenient or expensive. Given the inconvenience of travelling to the nearest bank branch, the waiting costs and the elaborate documentation in case of using the bank transfers and the high costs associated with post offices, many migrants choose to use informal sources, which remain convenient and accessible. Notably, about 19% of respondents who did not use banks to transfer money would prefer to use them instead of their current method.

Though households incur significant costs in sending and receiving money, cost is only the third most important attribute that migrants value in a payment system. The most important characteristic they value is security, with 72% of respondents mentioning safety and security as their top concern. This finding implies that households could be willing to pay higher prices for a more secure transfer mechanism.

Policy Implications

 Banks should take specific steps to make their services more accessible to migrants and their families. They should build more branches in rural areas and reduce the waiting time at existing branches to make transfers quicker and more convenient. Also, since migrants can deposit money in banks even if they do not possess a personal account, extending bank accounts to migrants' families is just as important as increasing access for migrants themselves. Therefore policymakers should not just target destination areas but also out-migration areas, where they would be able to reach migrants' families.

- In order to expedite financial inclusion of the migrant community and, policymakers in India should do the following: a) build more bank branches especially in out-migration and destination areas b) make it easier for the banks and non-banks to leverage business correspondent networks to bring deposit and transfer services closer to migrants (perhaps by expand mobile verification of transfers) c) widely distribute ATMs and debit cards among the migrant community d) expanding the range of institutions that are allowed to process remittance payments.
- The India Post has a vast network in rural India but its technological infrastructure needs to be upgraded. Currently, the remittance service offered by the Post Office is slow and expensive, a key reason why migrants are switching to other methods of transfer. For this reason, it's imperative that the Post Office introduce electronic clearance services and online instant money orders, measures which could greatly reduce the time and cost associated with transfers.



Miracle of Microfinance? Evidence from a Randomized Evaluation

Researchers : Abhijit Banerjee (MIT), Esther Duflo (MIT), Rachel Glennerster

(Jameel Abdul Latif Poverty Action Lab), Cynthia Kinnan (Northwestern University)

Location : Andhra Pradesh, India

Project Status: Complete

Background

In recent years, the movement to provide credit to the poor has grown rapidly in India and abroad. Many practitioners believe that greater access to affordable credit could help the poor invest in enterprise and improve their standard of living. However, there is little empirical evidence to support claims about the positive impact of microfinance on poor households. In this study, the researchers use the expansion of a microcredit provider in Hyderabad to evaluate the impact of microcredit access on business investment and household well-being.

Methodology

CMF researchers conducted the study in the urban neighbourhoods of Hyderabad, Andhra Pradesh in partnership with a large Indian MFI, Spandana. In the first stage of the study, Spandana identified 120 slums where microcredit providers were not active and where households had expressed interest in accessing microcredit. Next, researchers conducted a baseline survey of 2800 households living in these slums. Surveyors eventually dropped 16 of the 120 slums that had a large percentage of migrant families and paired up the remaining 104 groups on the basis of certain similarities such as: fraction of households that had a business, households that hold high levels of debt etc. Researchers then randomly assigned one slum in each of these pairs to be in the treatment group. The treatment group received access to Spandana's microcredit services while the control group did not. Finally, researchers conducted an endline survey 15-18 months after loan disbursements. Researchers also tracked the same households one year after the initial endline and administered a second endline survey to gauge longer-term impacts.

Findings

Business Investment: The study provides tentative support that microcredit can lead to new business creation. Treatment areas saw an increase in the

number of new businesses that were started. Researchers find that 32% more new businesses started in the areas where Spandana operated compared to areas where households were not offered any microcredit services.

Expenditure: Households with microcredit access experienced a shift in the composition of their expenditure. Though there were no significant changes in overall household expenditure, treated households spent Rs. 22 per capita per month more on general durable goods and Rs. 12 per capita per month more on durable goods for household businesses. Treatment households spent Rs. 9 per capita per month less on temptation goods such as alcohol and tobacco.

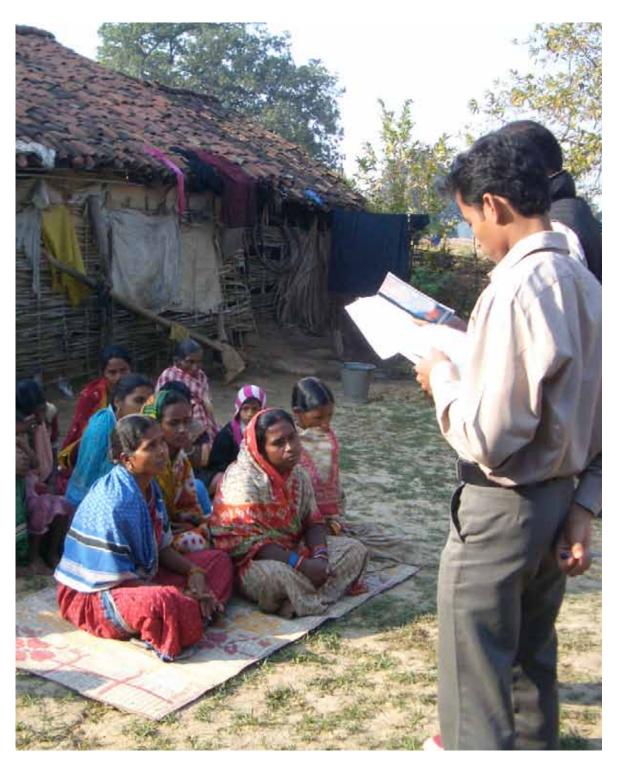
Social Impact: Researchers did not observe any significant impact of microcredit provision on health, education or women's empowerment.

Entrepreneurship: Researchers observed different impacts for households that were likely to start a business, those that had an existing business, and those that had a low propensity to start a business. The households that already owned businesses or were likely to start one spent more durable goods as a result of microcredit access compared to those who were least likely to start a business.

Key Findings

- Microcredit can lead to new business creation.
- Researchers did not observe any significant impact of microcredit provision on health, education or women's empowerment.

- The findings on expenditure suggest that microcredit could help households cut back on temptation goods and make targeted business investments. Microcredit organizations hoping to spur business investment and new business generation could target those who have existing businesses and those who have a high likelihood of starting a business.
- Policymakers must be cautious about using microcredit as an instrument for improving health, education or women's empowerment -
- the current study does not show any significant impact on these indicators. However, researchers should conduct further research on the long-term effects of microcredit programs since these effects on well-being may not be immediately observable.
- Researchers should also analyze the profitability or return on investment for business investments that are financed by microcredit to have a better understanding about whether microcredit leads to sustainable, profitable enterprise.



The Impact of Access to Finance in Rural Tamil Nadu: Evidence from a Randomized Control Trial

Researchers : Erica Field (Duke University), Rohini Pande (Harvard Kennedy School),

John Papp (Princeton University)

Location : Tamil Nadu, India

Project Status: Ongoing

Background

Poor households are sometimes forced to forgo significant economic opportunities because they lack access to sufficient capital. Many of these households also experience income shocks that negatively affect their ability to pursue important economic goals. In the past ten years, policymakers in the developing world have heightened their focus on providing financial services to the poor, motivated by the belief that these services allow the poor to develop income-generating activities and improve their ability to cope with shocks.

Previous studies of microfinance, largely focused on microcredit, have not found large effects on poverty alleviation. In contrast, non-experimental evaluations of rural bank branches in India report significant poverty reduction. This intervention provides academics with an opportunity to rigorously evaluate the impact of rural bank branch expansion at both the household and village level. Using a randomized controlled trial research design, researchers will evaluate a financial service delivery model that uses bank branches in villages to provide a full range of credit, savings, and insurance services to low and medium-income households.

Together with partner organization PKGFS (Pudhuaaru Kshetriya Grameen Financial Services), a rural financial services provider in Tamil Nadu, researchers aim to gain an in-depth understanding of the impact of using rural bank branches to provide comprehensive financial services. The results of such a study could help shape the development of financial instruments targeted at the poor and inform policy on financial inclusion in India and abroad.

Methodology and Research Design

Researchers use a randomized controlled trial (RCT) approach that is built upon the randomised

expansion of PKGFS branches. Out of 160 proposed study sites, half will be assigned to treatment and half will be assigned to control. For the first part of the intervention, PKGFS branches are placed only in treatment villages, while the control villages receive no PKGFS branch. PKGFS branches and banking activity will be withheld from villages in the control group for a minimum of months, in order to twenty-four provide researchers adequate opportunity to observe measurable effects of PKGFS' rural banking intervention in the treatment areas. The baseline survey covers approximately 6,800 households in the experimental area; 3,400 households in the treatment group and in the control group.

Treatment groups have been assigned so that each treatment branch is paired with a control branch, based on a variety of geographic and demographic characteristics. This pairing of treatment and control allows the study to guard against effects that may result from seasonality or geography rather than the introduction of banking services. Randomized rollout allows researchers to estimate the causal impact of financial services since the presence of a branch will be uncorrelated with village and household characteristics.

Study Status

The randomized rollout of PKGFS branches serves as a platform for measuring and analyzing a variety of potential impacts of increased access to finance. Researchers are currently administering midline surveys for the first 8 treatment and control pairs (700 households) 18 months after their respective branch openings. These midline surveys are expected to finish by January 2012. Beyond this, the baseline surveys for the remaining 76 treatment and control pairs (5900 households) are expected to begin in February/March 2012. The midline and

baseline surveys aim to capture effects at the household and village levels. At the household level, researchers are particularly interested in understanding how access to finance affects financial behaviour, such as savings, loans, insurance, sources of income, and consumption; at the village level, they aim to study the impact of access to finance on formal and informal credit and insurance markets.

Researchers will also exploit PKGFS' randomized branch rollout in order to study the connection between access to finance and agricultural

technology, as well as that between access to finance and village-level social networks. They are currently piloting the survey instrument and use of soil tests to examine changes in agricultural practice and technology adoption. In addition, resumption of the baseline survey will be accompanied by mapping of social networks that exist within select villages. Respondents will be asked whom they spend the most time with, whom they borrow money from, and whom they lend money to; relationships that researchers anticipate may change after the introduction of a PKGFS branch to the area.



Does Microfinance Repayment Flexibility Affect Entrepreneurial Behaviour and Loan Default?

Researchers: Erica Field (Duke University), Rohini Pande (Harvard Kennedy School),

John Papp (Princeton University)

Location : West Bengal, India

Project Status: Complete

Background

Proponents of microfinance claim that providing credit to the poor can enable them households to invest in businesses enterprises, increase their earnings, and boost their standard of living. However, in recent years a number of empirical studies (Banerjee et al., 2009, Karlan and Zinman, 2009) have cast doubt on general claims about microcredit's efficacy in the area of poverty alleviation as well its ability to spur business creation and expansion. Academic work has led researchers to questiona whether specific methods common to microcredit practice, could be fine-tuned to boost entrepreneurial activity.

For example, some researchers think that the immediate repayment component of MFI lending, designed to instil discipline and keep default rates low, prevents borrowers from investing in higher-risk, higher return businesses. The current repayment structure used by MFIs, they assert, may not be conducive to entrepreneurship because higher-return investments can be illiquid and take a longer time to generate profits. Because these investments take a longer time to pay off, clients who have to pay their debt back immediately may be less likely to invest their money in ventures that do not guarantee a shorter-term return. This study tests whether increasing repayment flexibility, by delaying the time before a client is required to make her first repayment, increases entrepreneurial activity.

Methodology

The study was conducted in partnership with the Village Welfare Society (VWS), an MFI operating in the state of West Bengal, India. The entire sample consisted of 169, 5-member borrowing groups. The researchers randomized at the group level by offering 84 groups an extra grace period of two months before repayment (the treatment group)

while the rest of the borrowing groups formed a control group whose members paid back based on a standard schedule (first repayment due two weeks after disbursal). The loan amounts ranged from Rs. 4,000 to Rs. 10,000.

The data for this study comes from two sources the default rates data comes from VWS and loan officers, while data on business investment is based on the baseline and endline surveys.

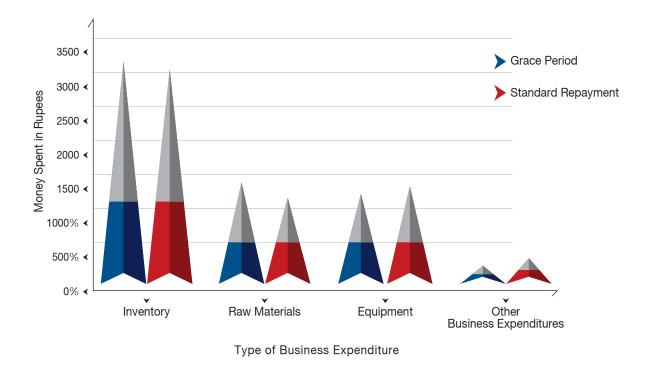
Findings

Researchers found that the borrowers in the grace period group spent 8% more on business investments, and a significant percentage more on raw materials. This finding is in line with what researchers had predicted; since more significant investments require more time to be profitable, giving clients a grace period may enhance their ability to undertake them. The grace period was also successful at generating new ventures - borrowers who were given a grace period were twice as likely to start a new business compared to the control group.

Key Findings

- Borrowers who were given a grace period were twice as likely to start a new business compared to the control group.
- Grace period borrowers were significantly more likely to default on their loans than the control group - they had a 6-8% greater chance of defaulting.

Figure 6: Business Expenditure by Grace Period and Standard Repayment Clients _



Source: "Does Microfinance Repayment Flexibility Affect Entrepreneurial Behaviour and Loan Default?" October 2009.

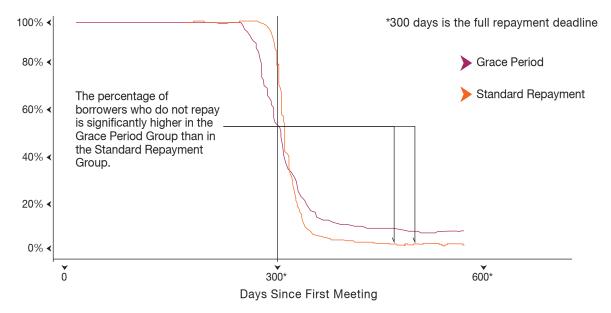
However, researchers found that grace period borrowers were significantly more likely to default on their loans than the control group - they had a 6-8% greater chance of defaulting than those on a standard repayment schedule.

The study did find that positive effects on business investments were larger for risk-averse individuals, suggesting that clients who are risk-averse benefit more from receiving a higher grace period (since they may be even less likely than their peers to invest under a standard payment regime).

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Figure 7: Percentage of Clients Who Did Not Repay - Standard vs. Grace Period Clients _

Percentage of Clients



Source: "Does Microfinance Repayment Flexibility Affect Entrepreneurial Behaviour and Loan Default?" October 2009.

Policy Implications

- Microfinance organizations that aspire to increase business spending and new business creation among their clients could introduce a grace period before the first repayment is due. While this policy may help spur business investment, MFIs might have to find the means to pay for the increase in defaults. However, policymakers should also acknowledge that the many poor borrowers do not use their microcredit loans for business purposes, and that microcredit serves other key purposes such as consumption smoothing.
- In the end, more research needs to be conducted on the long-term gains that accrue to individual borrowers when they receive a grace period as well as the long-term costs of offering such a contract.
- Academics should also conduct further research is to explore how more flexible contracts can positively shape borrowers' investment decisions without necessarily increasing default rates for lending organizations to unsustainable levels.



Understanding the Psychology of Mass Default: A Case Study of Eastern Maharashtra

Researchers : Lisa C. Nestor (CMF), Deeptha Umapathy (CMF), Sachin Srivastava (CMF)

Location : Maharashtra, India

Project Status: Ongoing

Background

The microfinance industry has witnessed rapid growth over the last 30 years. India in particular has demonstrated an intensifying demand for microfinance services with the number of domestic microfinance institutions (MFIs) rising from 10 in the year 2001 to 90 by 2010, while the number of active borrowers increased from approximately 1 million in 2001 to an estimated 30.7 million today (mixmarket.org).

Generally, the industry has proved resilient, pushing past the challenges of high transaction costs, poor infrastructure (particularly in rural locations) and low financial literacy. However, microfinance, both globally and in India, continues to face challenges to its stability and long-term sustainability. In particular, the industry has witnessed a series of mass community defaults, such as the Andhra Pradesh 'Krishna Crisis' of 2006, the Karnataka 'Kolar Crisis' of 2009, and more recently the Maharashtra 'Marathwada Crisis' of 2010/2011.

In each case, community-driven resistance encouraged historically responsible borrowers to engage in a mass default on their current loans. Although these movements are normally small in size, they have consistently proved difficult to contain, often spreading to surrounding communities and resulting in a permanent state of non-repayment. Community defaults have both short-term and long-term consequences for MFIs and local communities, impacting local access to finance, trust in the market, and the operating capacity and liquidity of regional MFIs.

In an effort to better understand the cause and motivation behind these community- based loan defaults, CMF, in association with RBI-CAB and MFIN, has initiated an independent study of recent community defaults in the Marathwada districts of

Eastern Maharashtra. Using quantitative data from local MFI branch offices and qualitative stakeholder interviews, the study will investigate the nature (i.e. pace of growth, spread, etc) of the defaults in an effort to identify both primary and secondary causes of individual and group loan defaults. In particular, the study aims to model the incentive structures and decision-making processes behind individual and group loan defaults.

Methodology and Research Design

The Maharashtra Default Study will test the hypothesis that defaults tend to occur at the centre level, and examine the effect of current loan cycles at the time of the community shock on default rates (Breza, 2010). This will be examined through a combination of individual client interviews, facilitated group discussions, credit officer interviews, and branch level data gathered from partner MFIs.

The study follows a non-randomized research design, investigating client behaviour through a series of 'post-event' interviews. However, the sample will be drawn using targeted random selection. This is achieved by randomly eliciting group and client participation in targeted communities which have been pre-identified as having high or low rates of loan default. Sample selection will also follow a 3:1 ratio for defaulting vs. non-defaulting clients.

The total research sample will comprise approximately 120 client interviews (90 default, 30 non-default) and approximately 50 facilitated group discussions. The individual client interview participants will be selected from the group discussion participants, with two to three candidates selected from each group discussion. Researchers will also conduct 8-12 credit officer interviews and 6-7 MFI branch manager interviews.

Qualitative interviews will then be combined with branch level portfolio data from 3 MFIs. This macro-level data will compliment the stakeholder interviews by providing a broad perspective on the timing, pace, and breadth of the community defaults.

Initial Findings

From piloting exercises, researchers have found that there is strong local demand for microfinance loans within both defaulting and non-defaulting communities.

It also appears that there is no singular cause for default, even within the closely-linked local communities. Researchers think it is more likely that several minor causes for default converged once the momentum of the community default began.

Lastly, defaulting clients do not seem to target specific MFIs. Once clients decided that they would default, they generally defaulted on all current loans, not loans administered by a specific MFI.

Study Status

Research and preparation for the Maharashtra default study began in late August, 2011. Field work began in early November 2011 and will be complete by the first week of December 2011. Initial data analysis is scheduled to be completed by the end of 2011.

Researchers hope to present their findings at industry seminars and conferences throughout early 2012.



Social Networks and Microfinance

Researchers: Abhijit Banerjee (MIT), Arun Chandresekar (MIT), Esther Duflo (MIT),

Matthew Jackson (Stanford University)

Location : Karnataka, India

Project Status: Ongoing

Background

Social networks are essential for understanding how societies and economic agents function. As Matthew Jackson states in "Social and Economic Networks," it is important to not only know how social networks affect behaviour, but also to understand which network structures are likely to emerge and how they evolve.

The Social Networks project in Karnataka is the first empirical study that attempts to understand the role of networks in the adoption of innovation, by examining the spread of microfinance. In the second phase of the project, the researchers study information diffusion, peer influence and network evolution processes. In addition, researchers will explore whether homophily a measure of how segregated a network is, where segregation is a function of household characteristics is a contributing factor to network formation, as well as the spread and speed of information flow.

Methodology and Research Design

The study includes 75 different social networks of 75 villages close to Bangalore. Researchers worked with partner organization Bharat Swamukti Samsthe (BSS), an MFI, to study the diffusion of microfinance. BSS helped select the 75 study villages, out of which 43 eventually received BSS services.

Some of the common characteristics of study villages are:

- i. Small size on an average 220 households
- ii. Isolation from other villages and towns in the taluka
- iii. Approachable by major roads
- iv. Absence of any other MFIs
- v. Homogeneous in language but heterogeneous in caste

Researchers sampled almost 50% of all households in the first phase and 100% of all households in the second phase and in doing so, obtained a wealth of information on household characteristics, social relationships covering 13 different types of relationships - close friends, going to temple together, borrowing money, etc. - and microfinance product takeup. For the study, researchers only consider within-village networks and exclude links between villages.

Surveyors constructed village networks using a household as a unit of analysis because MFI loans are typically limited to one per household. The variation in the network structures across these 75 villages enables the researchers to test alternative theories of information diffusion.

The intervention involves two key types of households - injection and follow-up. Injection households act as the information seed. A member in the household is given information either on MFI products (first phase) or on a game that involves probabilities of winning different amounts of money (second phase). The first phase of the study involved identification of village 'leaders' such as anganwadi workers, panchayat leaders and others as injection points. In the second phase, researchers study two varieties of injections randomly chosen injection points versus giving information to those with a high degree of importance in their respective social network. The followup data points are formed by the waves of client data provided by BSS. In the second phase, researchers conduct follow-up interviews with a random sample of households in a village and make them play a probability game.

Initial Findings

The results from the first phase of the study - the diffusion of microfinance - show a significant effect of providing information to people who are central to their village networks in information transmission. There is also a significant participation effect where a program participant is more likely to transmit information than a non-participant. However, peer effects, where an individual's decision on participation is dependent on that of their network neighbours, is found to be insignificant.

Study Status

The second phase of the study will try to overcome some of the identification and statistical issues encountered during the first phase, first, by covering at least one adult individual in every household across the 75 study villages. And lastly, by using the network data in conjunction with first phase data, the study will be able to shed light on network evolution processes.

The Economic Returns to Social Interaction: Experimental Evidence from Microfinance

Researchers : Benjamin Feigenberg (MIT), Erica Field (Duke University),

Rohini Pande (Harvard Kennedy School)

Location : West Bengal, India

Projects Status: Complete

Background

The penetration of formal insurance among low-income populations in developing countries remains low. Under such circumstances, some researchers theorize that social capital can lead to better informal risk-sharing among households. By increasing the social ties between individuals, development organizations may be able to expand or deepen their informal risk-sharing networks and help the poor hedge against individual or household-level risks. Some experts believe that greater social capital can lead to other advantageous economic outcomes for the poor such as increased cooperation and enhanced risk-sharing. For these reasons, many development organizations attempt to build social capital through programs that focus on community interaction and group activity.

In this study, CMF researchers tested whether one development intervention that involves constant group interaction, standard microfinance lending, builds social capital. By closely tracking borrowing outcomes for groups that meet more frequently, researchers attempted to measure the returns to enhanced social capital.

Methodology

Researchers used several randomised experiments to test whether or not increased microfinance meeting frequency leads to increases in social capital. The study was conducted in the impoverished urban and peri-urban parts of West Bengal, India in partnership with Village Welfare Society (VWS), an MFI operating in the state. Researchers randomized traditional microfinance borrowing groups into either a monthly repayment cohort or a weekly repayment cohort.

There were broadly two kinds of experiments:

- Testing for effects of more frequent interaction
 - Researchers chose 100 first-time loan client

groups, each consisting of 10 members. The members of a group generally lived close to each other or were neighbours. Surveyors randomly selected 30 of these groups to attend weekly meetings and the rest (70 groups) to attend monthly meetings. The MFI provided approximately Rs. 4000 in loans to each member. The first group had to make weekly repayments of Rs. 100 starting two weeks after loan disbursal and the second group was required to make monthly repayments of Rs. 400 after the first month.

• Testing for trust among group members – Researchers ran another experiment more than a year later in which select loan clients from the same groups were given lottery tickets to thank them for participating in the first loan experiment. The client could choose any number of her group members to receive lottery tickets. If the client trusts that the other members would share their winnings with her either directly or at a later point in time, she should be motivated to give out more tickets. The tickets were randomly assigned to isolate the effect of trusting others in the group from altruistic motives.

Findings

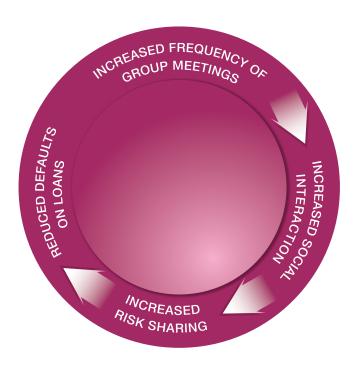
The study finds that weekly group members are 26% more likely to meet fellow members outside group meetings compared to women who meet monthly. The effects were stronger for women who lived closer to each other. Also, researchers found that while only about 10% of monthly group members had met everyone in their group socially in the last 30 days, 100% of members in the weekly group had met fellow members socially.

The increase in social interaction among members

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who met more frequently is associated with increases in risk-sharing. The researchers found that weekly group members were 29% more likely to make transfers to their friends and distant family after their loan cycles. Though researchers could not directly trace borrower to borrower transfers, they observed increased risk sharing through the trust game. Weekly clients were 48% more likely to distribute Rs. 50 vouchers, an outcome which suggests that weekly clients, more so than monthly clients, saw their fellow group members as

individuals who would make reciprocal exchanges. Most significantly, default risk decreased for the groups that met more frequently - weekly group members were 3.5 times less likely to default on their loans compared to monthly group members. Researchers conclude that in this case, default decreased, not because of the pressure to repay, but rather because individuals with enhanced social capital (weekly members) were more likely to share risk.



Policy Implications

- Higher meeting frequency resulted in reduced default risk, which should theoretically decrease costs for a lending organization. However, the cost of conducting more frequent meetings is also high for MFIs and for individuals. Because both monthly meetings and weekly meetings have significant costs and benefits associated with them, it is hard to conclude that one approach is clearly better than the other. Given the short-term and long-term increases in social capital associated with weekly meetings, organizations holding monthly meetings should consider moving to a weekly schedule. To further inform the policy debate, academics should conduct on the costs borrowers incur in attending repayment meetings.
- Many have discussed the merits of individual liability versus joint liability methodologies in microfinance. This study builds on literature that

- suggests that the inherent joint liability feature of JLG is not the mechanism which guarantees repayment, but that more frequent group meetings may lead to increases in social capital which improves risk-sharing, which in turn decreases default.
- Researchers should investigate whether other development programs are also successful at boosting social capital and whether increases in social capital lead to economically significant outcomes.

Key Findings

 Weekly group members were 3.5 times less likely to default on their loans compared to monthly group members.

Understanding the Incentives of Commission Motivated Agents: Theory and Evidence from Indian Life Insurance

Researchers: Shawn Cole (Harvard Business School),

Santosh Anagol (Wharton School of Business, University of Pennsylvania),

Shayak Sarkar (Harvard University)

Location : Gujarat and Tamil Nadu, India

Project Status: Ongoing

Background

Financial products in developing countries are primarily sold through agents who compensated through sales commissions. In an environment where customers may lack the information and financial knowledge to make informed product choice decisions, agents are expected to serve as advisors as well. In this study, researchers ask whether motivating agents with commissions is the best way to incentivize them to sell products that are welfare-maximizing to the consumer. The market for life insurance in India is the ideal testing ground for this hypothesis for several reasons;1) The market is very large, with approximately 44 billion dollars in premiums collected in 2008, 2) all sales are executed through the commissions motivated agent channel and 3) life insurance is a complex product, and consumers need help in making decisions.

Two types of life insurance products exist in India: term life insurance and whole life insurance. Term insurance is a pure insurance product which covers risk for a specific term. Whole life insurance products cover risk but also have a committed savings device built into them. These products cover the client's risk of death for life and provide a cash payout at age 80 based on the amount that has accumulated throughout the premium-paying years. premiums for whole products are substantially higher than those for term products, and for the client, term insurance is almost always a better purchase decision. The amount of money saved in paying premiums for a term product rather than a whole product, if invested in a fixed deposit account, yields a substantially higher savings balance over the period of comparison. In general, a term insurance product is better than a whole product if clients have the discipline to save. However, whole insurance in the Indian

market is much more popular than term insurance.

In this study, researchers explore why people prefer whole insurance over term insurance when the latter may yield large benefits. One possible reason for the popularity of whole insurance may be the incentive scheme insurance companies provide their agents. In other words, it is possible that insurance companies and sales agents oversell whole insurance since agents earn higher commissions on sale of whole products. However, there could be a few other reasons why consumers make this choice; such as loss aversion and clients' inability to comprehend compound interest. The study tests possible explanations as to why people make sub-optimal purchase decisions.

Methodology and Research Design

Researches designed a field and lab experiment to test the behavioural factors that lead to purchase decisions. The field experiment, a randomized controlled trial, takes the form of an audit study where CMF researchers trained a few individuals to be mystery shoppers and meet with life insurance sales agents to solicit recommendations on life insurance products. In this part of the study, mystery shoppers are randomly assigned a script to use in their meeting with agents. These scripts explain the profile of the customer whom mystery shoppers are assigned to role play.

This audit was conducted in both Ahmedabad and Chennai. In Ahmedabad, five mystery shoppers completed 229 audits (meetings with life insurance agents to collect data without the agent's knowledge). Their profiles were randomized from a set of 5 scripts which varied the mystery shopper's level of sophistication,

preference for term insurance, whether or not they had met the competition, and whether or not they should ask about ULIP disclosure. In Chennai, the 4 mystery shoppers hired by CMF completed 594 audits where their profiles varied based on 8 scripts which differed on: whether customers were biased towards one of the products, whether customers were actually suited towards one of the products, and whether customers had visited other agents before. The objective was to understand whether agents advised CMF's mystery shoppers to purchase products that were suitable them or not.

In addition to this experiment, researchers will conduct a lab experiment that will test consumers' behavioural biases. The experiment, also a randomized control trial, invites people to attend a session where they watch a randomly assigned video of an agent making a sales pitch, and respond to a short survey about their product choice. Participants will be randomized between two videos: the first is a control video, which contains information about types of life insurance products and its characteristics. The control video gives participants reasons why they should purchase life insurance. The other (treatment)

video provides more truthful information about the economic advantages of term insurance over whole insurance.

Initial Findings

Researchers have found that agents do provide misleading advice to clients by recommending products that are not suitable for them. In most cases, the products that agents recommend earn them a higher commission. Even in cases where the customer either expressed a preference for term insurance or had a financial profile suited towards it, agents advised against it and instead recommended whole life insurance products.

Study Status

The audit phase of the intervention is complete and researchers are working on piloting the lab experiment. For this phase of the intervention, researchers hope to collect data from approximately 600 participants. The average participant will be a middle-aged, middle-income working professional. Data collected from this group will help researchers understand the extent to which information can influence purchase decisions.

Incentivizing Calculated Risk-Taking: Evidence from Experiments with Commercial Bank Loan Officer

Researchers : Shawn Cole (Harvard Business School), Leora Klapper (World Bank),

Martin Kanz (World Bank), Andreas Fuster (Federal Reserve Bank of New York)

Location : Gujarat, India Project Status : Ongoing

Background

Given the massive sanctioning of bad loans leading up to the recent financial crisis, the incentive structure of lending organizations, specifically banks, has been called into question. While the management of lending organizations was held responsible for bad lending decisions (perhaps for good reason), lower-level employees often have more influence over decisions regarding smaller loans. The current study examines how bank loan officers, who are largely responsible for making decisions on small and medium loans, respond to various incentive schemes. In developing countries, loan officers are generally more informed about small and medium borrowers and are sometimes better equipped to make a lending decision compared to their supervisors. But since loan officers enjoy limited liability, they may not put much effort into screening applications or evaluating the risk that prospective clients pose to the institution. For this reason, understanding how loan officers can be incentivized to make smarter lending decisions is critical to improving individual staff as well as bank performance.

Methodology and Research Design

The present study is being conducted in partnership with the Bank of Baroda, the third largest public sector bank in India. In the first stage of the intervention, researchers collect files for loans of between 1 and 5 lakhs that have already been sanctioned by the bank. These files include information about the client, the client's business, and his business' performance. The files also indicate how well the loan has performed over the last year. Researchers then registered 256 loan officers to participate a lab experiment where they are given loan files to evaluate. Loan officers have the option of sanctioning a loan or a rejecting a loan based on information they are shown about the client and his business.

The experiment is comprised of 3 basic incentive schemes. These incentive schemes differed in terms of magnitude of penalties and returns for sanctioning a bad loan file or a good loan file. To evaluate whether the loan officer made a "good" or "bad" decisions, researchers match the loan officer's lending decision to the loan's historical delinquency status.

Initial Findings:

The study finds that a higher-powered incentive scheme which combines compensation for sanctioning a good file and a penalty for sanctioning a bad one, positively impacts lending profitability. Loan officers become more conservative in their lending decisions under the scheme but they also make better lending decisions. Researchers found that the high-powered incentive scheme was successful in improving loan officer performance in terms of the effort they invest in screening the files, the quality of their risk evaluation, and the quality of their final lending decisions. Under the high-powered incentive scheme, loan officers sanctioned loans which were approximately Rs. 8,230 more profitable on average than the loans that they sanctioned under nominal incentive schemes.

When compared to loans that officers sanctioned under a scheme that paid them based on lending volume. loan officers with high-powered incentives sanctioned loans that approximately Rs. 13,340 more profitable. Unsurprisingly, loan officers who were told that they would be rewarded for approving more loans (on volume), rather than on the quality of their lending portfolio, sanction a significantly higher share of the loans.

Notably, when researchers delayed incentive payments by three months, loan officers put less

effort into screening loan files than when the payments were made on the spot, suggesting that incentives should be paid immediately in order to be effective.

Policy Implications

- Based on the findings from this study, banks could try to improve loan staff performance by providing loan officers with high-powered monetary incentives that reward them for making good decisions and penalize them for bad decisions.
- However, because deferred incentive payments adversely impact loan officer performance, banks may face difficulty tying incentives to the performance of a loan (since loan officers would not receive a payout until sometime in the future).
- Academics should conduct more research to understanding the incentives that drive good and bad lending decisions. This research

could help practitioners identify incentive schemes that would improve bank operations and increase profitability.

Study Status

A second series of experiments started in October 2011. Under the new framework there are 3 incentive schemes. The loan officers can choose one incentive from two randomly chosen incentives. They also have an option to evaluate the loans in teams or individually. Researchers will study the dynamics of group decision-making as well as the behaviour of differently incentivized individuals within a group setting.

Key Findings

 A higher-powered incentive scheme which combines compensation for sanctioning a good file and a penalty for sanctioning a bad one, positively impacts lending profitability.

Barriers to Household Risk Management: Evidence from India

Researchers : Shawn Cole (Harvard Business School),

Jeremy Tobacman (Wharton School, University of Pennsylvania),

Petia Topalova (IMF), Xavier Gine (World Bank), Robert Townsend (MIT),

James Vickery (Federal Reserve Bank of New York),

Sarthak Gaurav Paranthesis (Indira Gandhi Institute of Development Research),

Daniel Stein (The London School of Economics), Raghabendra Chattopadhyay (IIM-Calcutta)

Location : Gujarat, India Project Status : Ongoing

Background

Many rural poor in the developing world engage in agricultural work, either as cultivators or labourers. These individuals often face serious risks from weather fluctuations - above all, erratic, excess or inadequate rainfall. Households attempt to informally insure themselves against these risks by diversifying the crops that they grow and by relying on friends and family in times of distress. However, informal mechanisms do not work as well when everybody in a given area is affected by the same adverse weather event. Several governments and development institutions have attempted to provide formal yield-based crop insurance to farmers to help them cope with agricultural risks. However, these programs suffer from monitoring, selection, and incentive problems as well as high administrative costs.

Rainfall index insurance is a product that could help farmers hedge against agricultural losses due to excessive or deficit rainfall, which is often cited as the largest risk to agricultural households. In a rainfall-index product, policies pay out when rainfall exceeds or falls below pre-determined triggers based on historical rainfall data. Payouts are easy to calculate and index-based policies are simpler to price since rainfall data is readily available. Another advantage of rainfall insurance is that the transaction costs are lower because insurance companies do not need to verify claims. Further, since farmers have no control over the level of rainfall, they have no incentive to alter their behavior/production patterns, a common problem with yield-based crop programs.

This randomised evaluation of an index based rainfall insurance product attempts to evaluate the impact index-based insurance has on agricultural decision-making and household well-being.

Researchers also evaluate the efficacy of various marketing methods in an attempt to understand why take-up of rainfall insurance remains low.

Methodology

Marketing Experiments

Researchers offered a rainfall-indexed weather insurance product to randomly-selected households in rural Gujarat and Andhra Pradesh. In Andhra Pradesh, researchers surveyed 1,047 landowner households in 37 villages. The sample was selected using stratified random sampling. In Gujarat, researchers offered products to 50 randomly selected villages of 100 total study villages chosen by SEWA and CMF.

The following is a brief summary of the experiments: Andhra Pradesh

- To test the sensitivity of insurance demand to liquidity constraint, researchers first offered cash compensation of either
 Rs.25 or Rs.100 to some randomly selected households (the cost of insurance is between Rs.80 and Rs.125).
- Some randomly selected households were personally visited by an insurance educator.
- In two-thirds of the treatment villages, agents working for BASIX, (a well regarded and trusted MFI in AP) endorsed the institution selling the product This was done to test the role of trustworthiness in determining demand. Some households received additional education about the measurement of rainfall and how it translates into changes in soil moisture for their soil types.

Gujarat

- Video Experiments: A video-taped product presentation was randomised along four dimensions - a) some of the videos were endorsed by SEWA (a well regarded grassroots development organization) and some not; b) Some videos were endorsed by a fellow farmer (to test "Peer" effects) and some were endorsed by an authority figure such as the village teacher; c) Some messages were delivered with a message that the product pays out 2 of 10 times and some by saying that the product does not pay out 8 of 10 times (in order to test framing effects); d) some videos emphasized safety of purchasing insurance while others focused on the protection the product provides and a third group of videos emphasized vulnerability, i.e. warns the client about the difficulties he may face during drought even if he has insurance.
- Flyer Experiments: The flyer experiments
 were randomised along two dimensions a)
 Some flyers projected religious identities
 (Hindu, Muslim) with the photograph in the
 background of the flyer of either a temple or
 mosque; b) Some flyers emphasized the
 community benefits of purchasing the
 insurance and others emphasized the
 personal gains of the farmer who purchases
 the product.
- Discount Coupons: This sub-intervention provided policy discounts to randomly-selected farmers and is used to estimate the price elasticity of demand of the insurance product.

Financial Literacy

In 2010, while marketing the rainfall insurance policy, researchers conducted short financial literacy modules at the village level. Out of the treatment group, 50% of villages were randomly selected to receive the financial literacy component as part of their training. The financial literacy component, conducted during village meetings, consisted of a discussion of risk in general, agricultural risk, and covariate vs. idiosyncratic risk, and finally, a game that demonstrated how rainfall insurance works.

Willingness to Pay

In order to elicit the willingness to pay of farmers,

researchers used specially designed scratch cards where they asked farmers to write down their reservation price for rainfall insurance. Farmers were then asked to scratch off the price on the card. If the price shown on the card was below their reservation price, they were allowed to purchase the policy at this lower price. If the price shown on the card was higher, they had the option to purchase the policy at its full market price or not purchase it at all. This is known as the Becker-DeGroot-Marschak method to elicit willingness to pay.

Findings

There are many factors that affect the demand for rainfall insurance among farmers, with price and trust playing a major role in purchasing decisions. Researchers found that the household demand for weather insurance was highly price-elastic, ranging from -0.66 to -0.88. This means that a 100% increase in the price of the product is expected to decrease demand by 66%-88%. Also, they found that insurance is more expensive than it should be (based on expected value of a payout). Researchers estimate that if the product was offered with the same premium to payout ratio as US insurance contracts then the purchase rate could increase by 50-75%.

Liquidity constraint was another significant determinant of insurance purchase. In Andhra Pradesh, those households treated with a positive liquidity shock are twice more likely to buy the product and this effect is stronger among poorer households. Wealthier households are also more likely to buy insurance.

Key Findings

- The household demand for weather insurance was highly price-elastic, ranging from -0.66 to -0.88.
- In Andhra Pradesh, an endorsement by a trusted organization increases take-up by 10.4%.

Among other non-price factors, researchers found that the trustworthiness of the insurance provider was significant. In Andhra Pradesh, an endorsement by a trusted organization increases take-up by 10.4% if households are familiar with the organization. The Gujarat experiments also

provides tentative evidence that trust matters in purchasing decisions. In these experiments, religious cues significantly impacted insurance takeup among the sample population. Takeup was positively correlated with a household receiving flyers with same religion cues and negatively correlated when they received flyers that contained symbols of a different religion. This may be because households tend to trust their own religious community more than they trust other communities.

The study found that framing effects were not significant as a determinant of insurance purchase, i.e. a households is not likely to change its preference for insurance depending on whether they are told that the policy will pay 2 out of 10 times or are told it will not pay 8 out of 10 times. A household visit increases the purchase rate by 11.9-17.2%.

Policy Implications

- Given that trust can positively impact insurance take-up, products should be marketed by individuals whom potential buyers know and trust. Insurance providers hoping to increase take-up should partner with local organizations that maintain strong relations with low-income households.
- To the extent that price remains a barrier to adoption, agencies and governments should consider subsidizing rainfall insurance, in the initial stages of marketing, to increase take-up. Other ways to decrease the price of insurance need to be studied, such as delivering it through channels like MFIs that are operationally efficient, and improving market competition by lowering formal barriers to entry.

- Because lack of liquidity hampers takeup, marketing the insurance product when farmers have reasonable amounts of cash on hand like the harvesting season could be a possible way of increasing uptake. Bundling the insurance with a loan may be another way to overcome liquidity constraints.
- Door-to-door marketing is critically important in increasing the number of farmers who purchase insurance.

Study Status

Researchers are currently in the seventh year of the rainfall insurance project in Gujarat and hope to continue the impact evaluation study for at least another three years. Along with continued efforts to map out the demand function for rainfall insurance, researchers would also like to explore the impact that factors such as like ambiguity, risk, and time preferences have on farmers' demand for rainfall insurance. Another prospective area of research is experimenting with traditional timelines of marketing in an attempt to see whether farmers alter their demand for rainfall insurance when they have the opportunity to purchase insurance during periods of high liquidity and low stress. At some point in the future, researchers hope to introduce new innovative products like a term-based rainfall insurance policy, which would combine savings and insurance elements.

In its entirety, the project hopes to provide a comprehensive impact evaluation and an evidence based set of recommendations for index-based rainfall insurance, a product that will be rolled out at scale by the Government of India in the coming years.

Selling Formal Insurance to the Informally Insured

Researchers : Mark Rosenzweig (Yale University), Mushfiq Mobarak (Yale University)

Location : Uttar Pradesh, Andhra Pradesh, and Tamil Nadu

Project Status : Ongoing

Background

In this study spanning three states, researchers seek to understand why Indian farmers who are exposed to risks of volatile rainfall patterns are reluctant to purchase formal insurance products that might help reduce their exposure to these risks. Rainfall insurance, an innovative product designed to protect farmers against weather fluctuations, pays out in cases of excess or deficit rainfall. For the core part of the study, researchers marketed rainfall index insurance using different approaches to numerous subcaste communities.

The study aims to answer the following questions: (a) Is rainfall insurance a 'missing market', or are farmers already fully covered by informal mechanisms?; (b) Is there a significant lack of trust in the insurance system?; (c) How important are liquidity constrains in preventing market development and can subsidies encourage such transactions?; (d) What are the consequences of purchasing/not purchasing insurance on household investment decisions and income strategies (ex: planting decisions, agricultural inputs, labour migrations, etc).

This study adopts an innovative approach by using natural variation in levels of access to informal insurance (due to membership in sub-caste risk-sharing networks) with designed variation in price and marketing approaches. By marketing to farmers of numerous sub-castes, researchers will be able to test the hypothesis that farmers who are informally insured through their caste networks will demand less formal insurance at all price points, and that they will also be more price-sensitive compared to those who are less informally-insured. Researchers will also test whether liquidity constraints, complexity of the insurance product, or lack of trust in insurance explain low take-up rates. The study is conducted in partnership with Agriculture Insurance Company of India Ltd (AIC).

Methodology and Research Design

The study spans 63 villages across the states of Uttar Pradesh, Andhra Pradesh, and Tamil Nadu. These villages were randomly selected from the 2006 Rural Economic Development Survey (NCAER), which provides information on jati (caste) identity, occupation, and landownership. Of the 63 villages randomly selected from this database, one-third or 21 villages were randomly assigned to be control villages. The control villages received no intervention and were not monitored during the baseline (because much of the data collected from that survey was available through the REDS database). Control villages will be visited during the follow-up survey in each state.

The remaining 42 villages served as locations for treatment households - with households in these villages receiving one of eight variations of a marketing intervention. These variations in the marketing methodology combined four distinct intervention treatments, which were randomly assigned to households. These treatments aim to test specific demand-side factors which are hypothesized to influence take-up of insurance.

The total 'baseline' sample size was 5179 households (comprised of 4800 agricultural households and 379 non-agricultural households). All baseline households received the marketing intervention. The full sample of baseline households will be re-surveyed during follow-up field activities along with select control households.

The households within the 63 villages were divided into (i) farmers and agricultural labourers and (ii) non-agricultural professionals, as categorized by the REDS survey. This sample was filtered and sub-castes which did not have 50 or more household within the sample size were removed, as they did not have enough representatives to characterize relevant risk sharing information. From the 118 castes left after filtering,

25 were randomly selected as control castes - these individuals did not receive any intervention.

Initial Findings

The takeup of the insurance product in Tamil Nadu was approximately 39% with 347 units purchased, in Andhra Pradesh was approximately 38% with 772 units, and in Uttar Pradesh was 42% with 762 units sold.

Study Status

As of November 2011, the follow-up survey (post-intervention) for Tamil Nadu has been completed and the data is currently being entered, cleaned and prepared for analysis. By December 2011, initial findings from the Tamil Nadu data will be available. An initial paper will be presented in March 2012. Preparations are also underway for village pay-out meetings and follow-up surveys will be conducted in Uttar Pradesh and Andhra Pradesh within the next three months.



The Economics and Psychology of Long-term Savings and Pensions: A Randomized Experiment among Low-Income Entrepreneurs in Maharastra

Researchers : Karna Basu (City University of New York),

Shailendra Singh Bisht (IFCAI Business School, Hyderabad)

Location : Maharashtra, India

Project Status: Ongoing

Background

India's elderly face significant economic insecurity. With life expectancy increasing, and almost no old age security for most poor households, access to long-term savings and pensions is critical for the country's poverty alleviation and financial inclusion efforts. In India, over 70% of the population is employed in the informal sector. Government or employer-based savings and pension schemes are absent, and contributions to long-term savings are largely voluntary. Given these barriers to financial security, one important question facing policymakers and financial institutions is how to encourage the poor to participate in long-term savings.

While some progress has been made in understanding how carefully-designed savings products can increase people's participation (Karlan and Morduch, 2009), little work has been conducted on long-term savings in developing countries.

In this project, researchers utilize a pension product to study behavioral aspects associated with long-term savings. Researchers hypothesize that the families most likely to adopt pension plans are those that face greater risks, have less access to alternate sources of insurance, and are less certain about their children's income. Better understanding of household decision-making processes could help policymakers design programs and products that encourage the poor to save for old age.

Methodology

While India is host to some of the largest microfinance institutions in the world, regulatory restrictions prevent these institutions from

offering long-term pensions and savings products. CMF's partner organization for this study, Mann Deshi, a cooperative bank, is one of the few institutions allowed to mobilize public deposits and, one of the few institutions offering pension products to low-income women. Mann Deshi's work is executed by a strong network of agents.

Using a randomized design, researchers hope to understand how certain features associated with the design and the presentation of a pension product affect participation and savings. For the study, 3300 existing clients of Mann Deshi were randomly selected from a list of 7038 clients. Selected clients receive three different types of marketing treatments, while other clients receive no intervention. After a visit from marketers, the Mann Deshi agents will follow up with treatment clients (across all treatment groups) to see if they are willing to purchase the product.

In the first treatment group, 825 individuals receive basic product information about Mann Deshi UTI pension plan. Marketers will visit potential clients and describe the pension scheme in a neutral way, with an emphasis on how they will be penalized for early withdrawal.

In the second treatment, 825 individuals receive basic product information (as in the first treatment) but they also hear a positively framed message. Marketers will "reframe" the penalty for early withdrawal, focusing more on the potential gains of long-term savings.

The last 825 treatment clients will be offered a slightly different pension product. They will be given the option of being able to save weekly rather than monthly. Marketers will focus on the penalty for early withdrawal, while emphasizing the value of the product in transforming loose cash into something of higher value. The remaining 825 individuals will form the control group and will not receive any visits from marketers.

Study Status

Researchers have begun administering the marketing treatments and will follow this initial

phase with a take-up survey. Though many of the impacts of participation in a pension scheme are likely to be long-term, participation may have shorter-term impacts on consumption, financial behaviour, life aspirations and psychological well-being. Such impacts may be small and could take place over time. But the survey will help researchers to understand the impact of this pension product on participation rates and savings patterns. Researchers will observe, in particular, features that are neglected by neoclassical models of decision-making, such as: deadlines, positive communication, and voluntary commitment.

Map of Microfinance Distribution in India 2010

Researchers : Amulya Champatiray (CMF), Parul Agarwal (CMF), Santadarshan Sadhu (CMF)

Location : Various States, India

Project Status : Ongoing

Background

The Map of Microfinance Distribution in India 2010, developed by the Centre for Micro Finance, is an attempt to aggregate information related to the spread of financial services for the poor in India. The project captures policy-relevant information such as penetration of financial services and the salient models of microfinance in various states, districts, and areas of the country. The map also identifies regions that are untouched and undeserved by financial providers. With this information, practitioners, policymakers and researchers can better understand the geographic distribution of financial services and make more informed decisions regarding expansion, replication and evolution of financial services.

Methodology

Researchers gathered general institutional information, district-wise outreach, details of portfolio, product offering and other details from 103 MFIs across India. Researchers collected similar data from secondary sources for the preceding three years (2007-2009). State-level data on the SHG-linkage program was collected from publicly-available sources such as the Micro Credit Innovation Department and NABARD for the years 2008-2010. Researchers used this data to visually display growth in microfinance penetration among various groups for the last four years. Finally, researchers collected demographic and socioeconomic data for states, union territories and districts to enhance their analysis.

Findings

MFIs serve over 24 million clients who maintain Rs. 19,676 crores in loans outstanding as of March 2010. For-profit MFIs account for a large percentage of total client outreach (about 89%) and loans outstanding (about 90%). As of March 2010, nearly 81 million people (77% of whom are women) are being served by the SHG-linkage

program which has Rs. 6,199 crores of savings deposits and Rs. 28,048 crores in loans outstanding.

Imbalance in Penetration across Regions

Over the past three years, MFIs in India experienced phenomenal growth, increasing the number of clients reached by 66 percent CAGR and total loan portfolio above 100 percent CAGR. Despite this growth, regional penetration has emerged as a challenge for the sector. The majority of microfinance services are concentrated in the south of the country, which accounts for 52% of all microfinance clients and 54% of all microfinance loan portfolio, compared to 23% clients and 22% of loan portfolio in the eastern states. The northeastern, northern, and central regions have very underdeveloped microfinance sectors - these regions account for only 2%, 6%, and 6% of client outreach respectively.

SHGs show a similar regional imbalance, with the south accounting for 52% of client outreach and 68% of loan portfolios and eastern states accounting for 21% of client outreach and 13% of loan portfolio. The northeastern, northern, and central regions account for 3%, 9%, and 3% of client outreach and 2%, 8%, and 2% of loan portfolio respectively.

Microfinance penetration among different groups MFI penetration among the total population (6%) and among females (11%) is highest in the south, with 26% of all households in the region currently being served by MFIs. The western and northern states have the lowest penetration among all households and among women compared to other parts of the country. In Andhra Pradesh, 16% of women and 36% of all households are served by MFIs. Similarly, in Karnataka, MFIs have reached 12% of women and 32% of all households. In Tamil Nadu, these numbers are 9% and 20% respectively.

SHG (credit-linked) penetration is also highest in the south, where SHGs serve 24% of all women, 13% of the total population, and 61% of all households. Again, Andhra Pradesh, Kerala and Tamil Nadu have the highest penetration of SHGs among the southern states.

Sector growth

The number of districts served by MFIs increased dramatically in all regions from year to year. The number of clients served by MFIs increased dramatically as well, with the greatest increase occurring in the Southern and Eastern regions. The SHG-linkage program grew rapidly as well at a rate of 22% from 2009 to 2010.

Product diversity

Productive loans are the most popular product offered by MFIs but a fair number of institutions offer other products as well. Approximately 30% of MFIs offer consumption/emergency loans and 15% offer housing loans. The 15% of MFIs registered as cooperatives, societies, and trusts offer savings products. Nearly 60% of MFIs offer

life insurance and 10% of MFIs offer either cattle insurance, health insurance, or accidental insurance. Two MFIs offer remittance products and two MFIs offer pension products.

Outreach in the poorest districts

The average level of microfinance penetration (among women) in India's 210 poorest districts is a surprisingly low 1.05%. Data reveals that out of these 210 districts, 80 districts have 0% penetration and another 62 have penetration of less than 1%. The poor districts with the highest penetration levels are located in the south of the country.

Conclusion and Further Research

The Map of Microfinance Distribution in India 2010 has collected MFI and SHG data to analyze penetration over time by region and state, drilling down to the district level. The project provides researchers and practitioners with a snapshot of the operations and outreach efforts of MFIs. In the future, researchers hope to collect data from more MFIs and SHG sources to enhance district and state-level information.



3. 210 districts of India have been declared poor either by the government of India or by the UNDP during planning and execution of their various development schemes. These districts account for around 3.4% of the entire population

Livelihoods



Livelihoods

Low-income individuals living in developing countries regularly engage in a variety of formal and informal labor activities to support themselves and their families. However, due to environmental and political risks as well as a lack of employment opportunities in rural areas, the poor face enormous challenges in securing stable income-earning opportunities. Our research in the area of livelihoods focuses on understanding how practitioners and policymakers can increase the economic and social returns to the poor's diverse income-generating activities. Specifically, our researchers aim to understand how livelihoods interventions, ranging from large government programs to smaller targeted interventions, can provide the poor with the skills, knowledge and opportunities they need to improve their standard of living.

Our evaluation of an ultra-poor program in West Bengal finds that asset transfers coupled with livelihood or business training can help ultra-poor families boost food consumption, reduce food insecurity, and access microfinance. The study suggests that new livelihoods opportunities could lead to improvements in household well-being for a vulnerable, marginalized population. The futures prices project, which provides both futures and spot prices of crops to farmers via village boards and mobile phones, finds that price information can help farmers form better price expectations, which in turn may lead to better investment decisions during the sowing and growing phases.

CMF's two evaluations of NREGA in Andhra Pradesh suggest that NREGA, one of India's largest poverty alleviation efforts, could have positive impacts if the program is implemented transparently. The first study finds that participation in NREGA in the lean part of the year changes based on variation in rainfall during the agricultural season. In other words, the poor may be using participation in NREGA as a risk-coping mechanism after bad harvests. The second study, finds that, in spite of concerns about corruption and capture in NREGA at the local level, the identity of locally elected leaders in Andhra Pradesh had little significant impact on the way the program is implemented. In other words, locally-elected leaders were not able to exert influence over who participated in NREGA.

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Studies in this Section:

- Targeting the Hard-Core Poor: An Impact Assessment
- Measuring the Impact of Providing Futures and Spot Prices of Crops to Farmers
- Avaaj Otalo: Investigating the Impact of a Mobile-based Agricultural Extension Service
- > Can Workfare Serve as a Substitute for Weather Insurance? The Case of NREGA in Andhra Pradesh
- How Do Caste, Gender and Party Affiliation of Locally Elected Leaders Affect Implementation of NREGA?

Targeting the Hard-Core Poor: An Impact Assessment

Researchers : Abhijit Banerjee (MIT), Esther Duflo (MIT),

Raghabendra Chattopadhyay (IIM Calcutta) and Jeremy Shapiro (Yale University)

Location : West Bengal, India

Project Status: Complete

Background

Few development programs have proven effective at helping the poorest of the poor, a failure which highlights the need for interventions that can successfully improve the welfare of this vulnerable population. One promising program, cited as a success by development practitioners, is the "Challenging the Frontiers of Poverty Reduction-Targeting the Ultra Poor" program pioneered by BRAC, a Bangladeshi development organization. This program provides ultra-poor families income-generating and livelihood training with the goals of improving well-being and graduating them into standard microfinance programs.

This study evaluated a similar ultra-poor program administered by Bandhan in Murshidabad district of West Bengal. Bandhan's program is part of a worldwide pilot of ultra-poor initiatives led by the Consultative Group to Assist the Poor (CGAP), and funded by the Ford Foundation. Bandhan's program aims to help ultra-poor households gain a steady source of income with the hope that a new source of income would reduce households' vulnerability, boost their well-being, and put them in a position to access standard microfinance services. Conducted by CMF in partnership with academic researchers based in the United States and India, the study evaluated the impact of the asset transfers and training on the economic and social well-being of ultra-poor households.

Methodology

The study was conducted in Murshidabad district of West Bengal. First, researchers set out to identify "ultra-poor" households by using 'Participatory Rural Appraisals'. Bandhan developed the identification criteria for sample participants in close consultation with BRAC. Households were required to meet the following criteria:

 Each household had to have a healthy female member (a major focus of this project was improving the financial situation of female members of the ultra-poor households)

- 2) The household could not be affiliated with any other microfinance organisation
- 3) The household's assets had to lie within certain income and asset cut-offs

After identifying 991 "ultra-poor" individuals in 45 villages, 512 potential beneficiaries were randomly selected into the treatment group and offered an asset transfer as well as livelihood training. Beneficaries received assets such as animals (cows and goats) for which they were responsible. Participants were not allowed to sell their assets, and the program was rigorously monitored by Bandhan. Participants also received a fixed weekly allowance depending on the type of the asset that was transferred to them. Once some participants received graduation training and joined regular microfinance programs, researchers tracked changes in their well-being along key dimensions through a second endline survey.

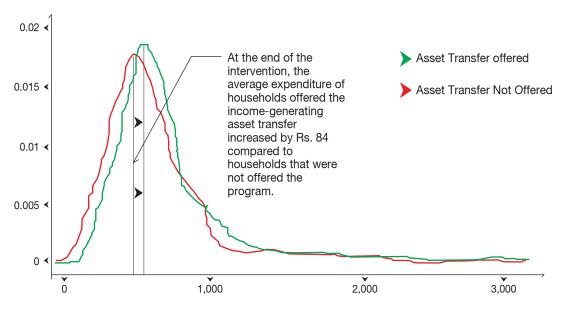
Findings

Bandhan's program was successful at both improving key dimension of household well-being and graduating households into the regular microfinance program. At the end of 18 months, the majority of the participants in the treatment group joined one of Bandhan's microfinance groups and had taken a loan.

Key Findings:

Consumption: The program was successful at boosting food and non-food consumption of treatment households. Treatment households spent a total of Rs. 84 more per person and Rs. 64 more per person on food and fuel. Also, the non-food expenditure of the treatment group was greater than the control group by Rs. 20 per person. (Given that the ultra-poor tend to be self-employed or work in the informal sector, food consumption serves as a key indicator of well-being).

Fraction of Respondents



Per Capita Monthly Income in Indian Rupee

Source: "Targeting the Hard - Core Poor - An Impact Assessment." October 2010.

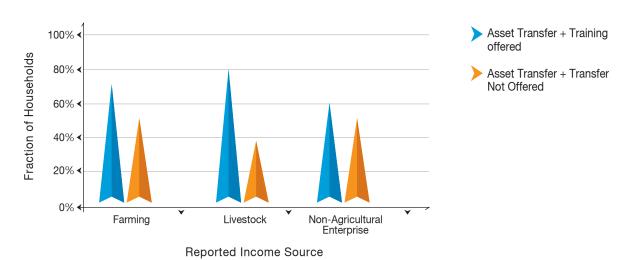
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Key Findings

 Treatment households spent a total of Rs. 84 more per person and Rs. 64 more per person on food and fuel. Food Security: The treatment households ate greater quantities and more regularly than the control and suffered less from food insecurity (as measured by a food insecurity index). Also, a large percentage of food expenditure of the treatment households was on fruits and nuts, meat and eggs, dairy etc. suggesting that households may have started consuming more nutritious food.

Income: Treatment households were more likely to report that their main source of income as self-employment or non-agricultural activities. Hence, the treatment group was less dependent on agriculture for earning opportunities.

Figure 9: Income Source Reported by Households Post-Intervention



Source: "Targeting the Hard - Core Poor - An Impact Assessment." October 2010.

Attitude towards Credit: The treatment households were 17% more likely to borrow than the control group after the program.

Work v/s Leisure: Researchers found that the individuals in the treatment group worked more hours than the control group but did not necessary earn more for their extra hours. This could be because treatment households spent much of their extra work time tending to livestock.

Health: The program did not have any noticeable impact on the health of treatment households. However, individuals in this group scored higher than the control group on an index of mental health and were more optimistic about the future.

Differences in who benefited: The program was more successful at graduating the comparatively wealthier families i.e. the program displayed larger positive impacts for households that were better-off pre-treatment. Households who had a pre-existing small-scale household enterprise were more likely to benefit from the program.

Policy Implications

- Bandhan's program proved successful at improving key dimensions of well-being for ultra-poor households. Similar programs could help reduce the vulnerability of poor households, help them establish stable sources of income and move up the economic ladder. Governments and private organizations should gradually scale-up programs of this type to larger sections of vulnerable populations in developing countries.
- More microfinance organizations could establish ultra-poor programs to increase their social impact while increasing their standard client base.
- More research should be conducted to determine how ultra-poor programs can be further customized to have a larger positive impact on household well-being. Specifically, researchers and practitioners should try to identify livelihood activities that are both highly remunerative and sustainable.



Measuring the Impact of Providing Futures and Spot Prices of Crops to Farmers

Researchers: Shawn Cole (Harvard Business School),

David Yanagizawa-Drott (Harvard Kennedy School)

Location : Gujarat, India Project Status : Ongoing

Background

In 2003, the Indian government legalized future contracts for trading on all agricultural commodities. This regulatory change allowed large scale farmers and traders to engage in futures contracts. Farmers could insure themselves against any potential price fluctuations during the selling season by locking in a price for their agricultural inputs. However, small and medium scale farmers may not benefit from the new law because they generally grow quantities that are not large enough to legally enter futures contracts.

Knowledge of current as well as future market prices of crops is important to many farmers who could use this information to make better planting decisions. In theory, farmers could use current and future spot prices to allocate inputs during planting season, store crops that they could potentially sell at a higher price later during the storing season, and increase their bargaining power relative to local buyers and market auctioneers. The Centre for Micro Finance (CMF) in association with Self Employed Women's Association (SEWA) is currently evaluating the impact of providing small and medium scale farmers in rural Gujarat access to spot and future prices for cash crops like cotton, castor, and guar. Specifically, researchers are measuring the effect that providing price information has on agricultural decision-making.

Methodology and Research Design

The future prices intervention targets 108 villages in Gujarat. Researchers selected 10 respondents from each village based whether or not they grew one of three cash crops— cotton, castor, or guar. Only those who grew one of the three crops were selected for the intervention.

Among the 108 villages, 54 villages were randomly assigned to receive a public village board which

displays price information. The boards contain prices of three commodities – cotton, castor, and guar, for up to three markets per crop. CMF and SEWA then updates these boards on a weekly basis. Farmers in these villages also receive training on future prices and financial literacy.

The other 54 villages, which form the control group, are surveyed on a semi-annual basis just as the farmers in the treatment group are, but they do not receive price information. Since both groups of villages are randomly assigned, researchers are able to measure the casual impact of price information on agricultural behaviour.

Recently, researchers began surveying approximately half of the sample over the phone on a monthly basis. A phone survey gives researchers a high frequency data collection mechanism and allows them to measure the agricultural behaviour of farmers during all stages of the agricultural season.

Initial Findings

Analysis of preliminary data shows that the provision of price information positively impacts farmers' price expectations. Respondents in treatment villages consistently score higher on coefficients measuring knowledge of futures markets. Treatment households rely less on other forms of media such as radio, television, and newspaper and use village boards more often to receive price information. This is a potentially important change because other forms of

Key Findings

 Individuals who received price information were less likely to visit the market for price information and reported greater trust in financial markets.



media (i.e. newspapers) report prices in ranges, a way of reporting that which limits the usefulness of price information.

Individuals who received price information were less likely to visit the market for price information and reported greater trust in financial markets. These farmers were 10-15 percentage points more likely to express a desire to trade on futures markets.

However, researchers still have not found enough evidence to say for certain that price information affects planting, harvesting, storing, and selling decisions of farmers.

Study Status

In addition to the village board intervention, researchers have recently started sending futures and spot prices to a randomly-selected group of individuals from treatment villages on their mobile phones.

For this purpose, researchers use Reuters Market Light (RML) a technology that aggregates prices from different local markets across India. Farmers in treatment can now receive prices for markets where they regularly sell their crops. Previously, the village boards only contained information on relatively larger markets in the state.

The next phase of the project will include a sub-intervention that will allow researchers to track whether or not farmers pay attention to prices. This information will help researchers test one explanation for why the provision of information by itself may not be impactful - people are simply limited in their cognitive ability to pay attention to multiple pieces of information. For the new experiment, Limited Attention Trials, researchers ask farmers price knowledge and expectation questions based on SMSs they receive, and incentivize farmers who recall and predict prices accurately.



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Avaaj Otalo: Investigating the Impact of a Mobile-based Agricultural Extension Service

Researchers: Shawn Cole (Harvard Business School),

Nilesh Fernando (Harvard Kennedy School), Jessica Wallack (Centre for Development Finance)

Location : Gujarat, India Project Status : Ongoing

Background

A wealth of agricultural information, from weather forecasts to knowledge about appropriate use of fertilizer and pesticides, is produced by agricultural research universities in India. However, a critical challenge remains in making this information accessible to the people who need it the most: millions of farmers in rural and hard-to-reach areas. The expansion of mobile networks in India presents an unparalleled opportunity to give rural farmers access to information that could transform their livelihoods and eventually lift them out of poverty.

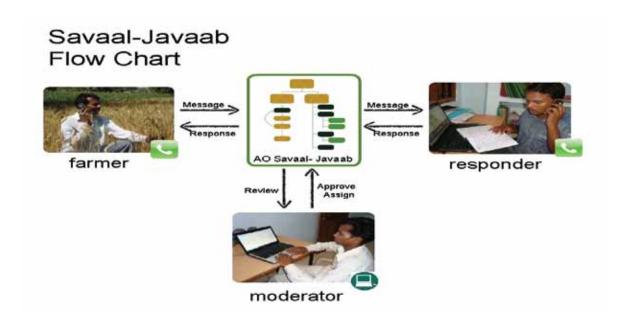
The current research project leverages the opportunity offered by mobile telephones to develop a scalable and sustainable solution to the problem of critical, livelihood-relevant agricultural information gaps in rural areas. The study, the Avaaz Otalo (AO) project -- literally, 'voice stoop' -- involves providing farmers agricultural advice through a new information and communication

technology, and rigorously evaluating the impact of this program through a large-scale field study. This study is being conducted in partnership with the Development Support Centre (DSC) and Sajjata Sangh, local organizations which have many years of experience of conducting agricultural extension training with farmers.

Methodology and Research Design

Researchers randomly selected a group of 1200 farmers across 40 villages in rural Gujarat who grow cotton, have mobile phone access, and serve as the chief agricultural decision maker of their household. Treatment farmers receive weekly voice calls with agricultural advice on their mobile phones, and they can also call in with questions. CMF's agricultural experts then answer these questions within two days. All of this content is then available on a phone line which farmers can call into and access at their convenience.

How Avaaz Otalo Works



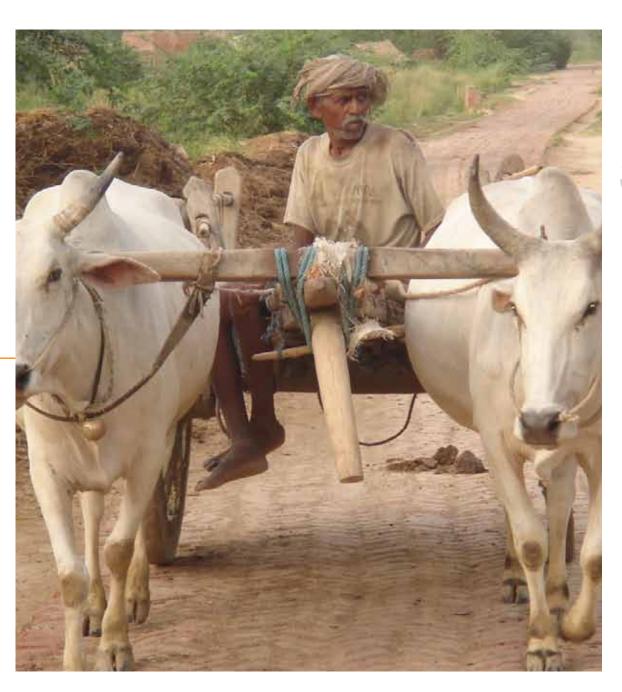
The intervention involves three groups: Group 1 receives information through the Avaaz Otalo service coupled with one physically relayed agricultural advice session, Group 2 receives only Avaaz Otalo, and Group 3 forms the control group. In each village, there are 30 study farmers split evenly across the three groups; in total, there are 400 farmers in Group 1, 400 farmers in Group 2 and 400 farmers in Group 3.

Through the intervention, researchers will attempt to understand the impact of AO technology on the knowledge and agricultural practices of farmers. They measure knowledge acquisition through an index of questions gauging awareness of agricultural practices and technical knowledge such as seed spacing, and symptoms of plant nutrition deficiency. They also expect to see

effects on fertilizer and pesticide expenditure and usage, since preliminary field work suggests that farmers use fertilizers and pesticides sub-optimally. Researchers have gathered social networks data in hopes of understanding whether and how information travels within networks.

Study Status

The study is ongoing; treatment began in September 2011 and will continue for two years. Researchers have encouraging results from initial usage data. More than 500 questions have come in on the AO phone line in the first two months of the intervention, and over 75% of study farmers have received voice calls on a weekly basis. Monthly phone surveys starting in November 2011 and annual paper surveys will gather data required to understand the impact of the intervention.



Can Workfare Serve as a Substitute for Weather Insurance? The Case of NREGA in Andhra Pradesh

Researchers : Doug Johnson (CMF)
Location : Andhra Pradesh, India

Project Status: Complete

Background

The income of rural households can be volatile and many are extremely dependent on revenue from agricultural activities. Income shocks, caused by erratic or adverse weather, prevent families from maintaining steady consumption levels and threaten gains that accrue to them during successful harvest seasons. What are the risk-coping mechanisms available to rural households in face of such weather fluctuations?

Affected households generally use informal measures, such as selling income-generating assets or working on other agricultural plots, to cope with risk. But in case of a shock which affects an entire region, like bad rainfall, such informal coping strategies are not effective because a household's entire risk-sharing network may be suffering from the same event. In India, one formal risk mitigation measure that has been championed by state governments is yield-based crop insurance. However, due to measurement problems, noncompliance, and cost, these programs have not succeeded.

Workfare programs are one policy initiative designed to provide income stability and gainful employment to people in rural areas. However, policymakers rarely think of participation in workfare as a risk management tool for families in distress. This study attempts to find whether such programs can help rural households find other sources of income after a negative income shock and hence increase their ability to cope with weather risks. The workfare program analyzed in this study is NREGA (National Rural Employment Guarantee Act). The act guarantees 100 days of work in a year at minimum wage to all households willing to engage in manual labour. The crucial question in this study is whether NREGA serves as a risk-coping mechanism by providing households work when they need it most.

Methodology

This study used secondary data provided by the Andhra Pradesh government to estimate the responsiveness of program participation to changes in rainfall. Andhra Pradesh was chosen as the study location for two reasons: a) the AP state government has made NREGA data publicly available b) the NREGA program in AP was administered transparently, relative to other states in India.

One of the main methodological challenges that the author faced was to isolate the impact of income shocks (caused by rainfall fluctuation) on NREGA participation from the other channels through which weather might impact NREGA participation. In order to control for other potential direct impacts of rainfall on participation, CMF analysed the impact of rainfall in each agricultural season on NREGA participation in the following non-agricultural (lean) season, the assumption being that NREGA participation in the lean season would rise after a particularly bad agricultural season.

Regression analysis is then conducted to estimate the impact of rainfall (as measured by different weather indicators) on wages per working age adult, a variable that is considered to be the best indicator of overall NREGA participation. Further specifications were then added to disentangle the channels through which wages per working age adult might be impacted. The effect of rainfall on the population engaged in NREGA, number of days worked, and daily wages were assessed.

Findings

The findings of the study indicate that rainfall during the agricultural season significantly impacts NREGA participation levels. Adverse weather during the agricultural season leads to higher overall participation in NREGA programs during the following lean season, and vice versa, good weather leads to lower participation levels.

To test for the policy effectiveness of NREGA, CMF compared its responsiveness to adverse income shocks with other aid programs. A Jayachandran (2006) study found that access to banking services can be a very effective risk coping mechanism for households who had suffered an adverse shock to agricultural productivity. Findings were also compared to the Indiramma program, a scheme that provides beneficiaries with materials and cash payments to help them build or improve their homes. Both comparisons seem to indicate that NREGA acts as at least an efficient risk-coping mechanism as the other programs.

Policy Implications

 Since participation in NREGA may help families supplement their income after a bad agricultural

Key Findings

 Rainfall during the agricultural season significantly impacts NREGA participation levels.

season, policymakers could scale-up NREGA in areas that are more vulnerable to weather risk to help agricultural households hedge against income shocks.

 NREGA, if implemented transparently, could improve household welfare in the long-run by reducing vulnerability to risk.



How Do Caste, Gender and Party Affiliation of Locally Elected Leaders Affect Implementation of NREGA?

Researcher : Doug Johnson (CMF)
Location : Andhra Pradesh, India

Project Status: Complete

Background

NREGA, a rural workfare program, is one of India's largest anti-poverty programs. The program guarantees 100 days of manual work to every household in the country, helping provide income support and employment to millions of low-income individuals across the country. However, local politics can negatively influence the implementation of large government programs such as NREGAespecially when local leaders have influence over who receives the benefits. For example, local leaders may decide to parcel out welfare benefits to their own communities rather than distributing benefits to those who need them most. Previous studies furnish evidence that political leaders in India tend to discriminate in favour of their own caste community when implementing government schemes (Besley, 2004). Further, politics may influence the implementation of the program insofar as leaders who have strong party allegiances may decide to allocate resources to districts of fellow party members. Researchers in this study investigated whether participation in NREGA was influenced by the identity of locally-elected leaders or their political affiliation.

Methodology

Researchers used secondary data to isolate the effect of a leader's identity and political affiliation on the demographic composition of NREGA beneficiaries. They first collected detailed data on each individual participant from the Andhra Pradesh NREGA web portal. After aggregating this data at the Gram Panchayat and Mandal levels, the author merged this data with the Andhra Pradesh State Election Commission data to identify gender and caste of local candidates.

Since the study uses secondary data, it is difficult to find the exact causal effect of a leader's identity on NREGA outcomes, as voters could consider a candidate's caste, gender etc. before electing him. In other words, the leader's identity is endogenous and a simple analysis would simply produce a summary of voters' preferences. Therefore, the author uses a policy that reserves a certain percentage of seats for women and marginalized castes to estimate a causal impact of reserving a sarpanch seat for a minority candidate. To analyze the impact of political affiliation, the author looks closely at districts where the winning party "Congress" contested a very close election (the assumption being that these districts would be similar in ways other than political affiliation).

Findings

In general, the study found that reserving a sarpanch seat for a specific caste or gender does not have very significant impact on the makeup of the group that participates in NREGA. For example, researchers find that reserving a sarpanch seat for a Backward Classes candidate only increases the percentage of Backward Class workers in the NREGA program by 2 percentage points. Similarly, reserving a sarpanch seat for a Scheduled Caste (SC) candidate increases the share of SC workers in the NREGA program by only 2.4 percentage points.

Surprisingly, reserving a sarpanch seat for a Scheduled Tribe (STs) or a woman candidate does not significantly affect participation rates, wages or the demographic composition of workers participating in NREGA.

Researchers find that the effect of party affiliation on NREGA outcomes is not very significant - the difference between NREGA outcomes of the areas where the Congress party won (Congress was elected in the State) and constituencies where Congress loss was very small.

Policy Implications

- Policymakers should study the structure of Andhra Pradesh's program to identify features of the program that may successfully prevent local leaders from distributing benefits to individuals who share the same background as them. (For example, unelected Mandal-level officers like engineers exercised influence over how program money was spent at the local level, a unique feature of AP's program.)
- Implementing a large-scale government program transparently and effectively may help to prevent capture at the local level. Further research is required to check whether it is the nature of the NREGA program (work-for-cash) that makes it effective at guarding against local leader biases or whether AP's program was unique in its success at blocking discriminatory implementation.



Social Objectives



Social Objectives

In recent years, policymakers and practitioners have recognized that simply providing the poor with financial services may not be enough to lift them out of poverty or bring about desirable changes in their well-being. Instead, organizations could take a more holistic approach by offering programs that combine traditional financial services with other development interventions. By leveraging the infrastructure of financial services providers, practitioners could provide social services to the poor more effectively and efficiently. However, crucial questions remain about the feasibility of integrating social programs with traditional financial services. CMF's Social Objectives projects measure the effectiveness and sustainability of hybrid programs – those that provide services which are not purely financial in nature.

Our evaluation of an innovative program that distributes anti-malarial insecticide treated nets on microcredit shows that offering nets with loans boosts takeup and usage but does not positively affect health outcomes. The study suggests that microcredit may be a useful vehicle for organizations hoping to boost the takeup and usage of individual or household-level health goods, especially for products that do not need community-level adoption and intense monitoring in order to work.

Several of CMF's Social Objectives studies focus on the impact of financial education and business training on peoples' financial ability and decision-making behaviour. Collectively, they provide evidence that financial literacy could have positive impacts on financial knowledge and product takeup. A study conducted among the urban poor in Gujarat suggests that financial literacy training may help boost people's awareness of financial products but not necessarily their numeracy skills. The goal of financial education is also to positively impact financial decisions making and in this area, researchers find that financial literacy sessions that contained product-relevant information were successful at boosting the purchase of a complex rainfall insurance product among agricultural households. Another study conducted in the same state suggests that a combined business training and financial literacy module helped boost entrepreneurial activity among certain groups of women. The study finds that the training had differential impacts for women of different castes and religions and suggests that to an extent, women who face more social restriction could see higher returns to training.

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Studies in this Section:

- Tamil Nadu Socioeconomic Mobility Survey
- Microloans, Bednets and Malaria: Evidence from a Randomized Controlled Trial in Orissa
- > The Effect of Financial Literacy Training on Personal Financial Decision-making
- Evaluating FINO's Financial Literacy Education Programme
- Marketing Complex Financial Products in Emerging Markets: Evidence from Rainfall Insurance in India
- ▶ Impact Evaluation of Savings Training on Microcredit Groups in Rural India
- Do Traditional Institutions Constrain Female Entrepreneurship? A Field Experiment on Business Training in India
- Inclusive Growth through Microfinance and Entrepreneurial Training: An Impact Study.

Tamil Nadu Socioeconomic Mobility Survey

Researchers : Mark Rosenzweig (Yale University), Amy Mowl (CMF)

Location : Tamil Nadu, India

Project Status: Ongoing

Background

Economic development is inherently a dynamic but often slow process characterized by changes in institutions, the natural environment and the mobility of individuals. Greater understanding of the multi-level causes and consequences of development has been hampered by the lack of comprehensive data tracking individuals, their environment and institutions over the long term. The Tamil Nadu Socioeconomic Mobility Survey (TNSMS) was initiated to overcome these difficulties in knowing the long-term pathway of development.

The following are some of the main objectives of the survey:

- i. The primary objective of the panel survey is to provide a new laboratory for carrying out a wide range of potential studies of the medium and long-term processes of economic development. Researchers are particularly interested in providing a framework for the investigation of the large set of issues that have remained outside the scope of scientific analysis because of the short time frame and narrow methodological focus of most existing surveys in developing countries.
- ii. Another goal of the project is to understand the pathways through which local social and political institutions influence patterns of economic development, while taking into account the possibility that the process of economic development itself may shape the evolution of these institutions.
- iii. A third goal is to investigate long-term interactions between economic development and individual health, nutrition and education.
- iv. The project will help clarify academic understanding of the long-run connections between environmental and economic change.

For example, CMF will monitor how land resource management and farming systems evolve with economic growth. Similarly, connections between local environmental threats (indoor air pollution, agricultural chemicals, and water-borne diseases) and individual health, production, and consumption choices will be explored.

Methodology and Research Design

The Tamil Nadu Socioeconomic Mobility Survey is a long-term collaboration between the Yale Economic Growth Center and the Centre for Micro Finance, funded principally by the Economic Growth Center and ICICI Foundation for Inclusive Growth.

The survey has been designed to enable close monitoring of the behaviour of households, individuals, and enterprises, to eliminate the selectivity associated with migration in assessing socio-economic mobility, and to permit precise estimates from the randomization of experimental interventions.

The survey includes a random sample of 10,000 households located in 200 rural villages and 200 sampling units in urban areas of Tamil Nadu. All members of a household are included in the sample frame.

The village component of the study consists of 200 randomly selected census villages, and a random sample of 25 households from each village. The urban component of the study utilizes the National Sample Survey's Urban Frame Survey (UFS) block divisions. The urban component consists of 200 randomly-selected UFS blocks, and a random sample of 25 households from each block. The urban sample covers small, medium, and large towns, including slum communities.



Researchers will conduct surveys once every three years. The interval length is chosen to conserve on costs, and because three years is sufficient to begin to observe significant changes beyond the short-run fluctuations that have been the focus of many other studies. Every three years following the initial survey, each individual in the original 10,000 households will be re-interviewed. Individuals and households will be followed irrespective of whether they move out of their original community. This aspect of the study design is essential to capture the important, but heretofore understudied, spatial component of economic mobility as we follow individuals over their lifetime.

Each round of the survey will consist of three key elements: a census questionnaire administered to all households in each of the 400 sample units, a set of questionnaires based on in-house interviews with the 10,000 sampled households, and community inventory questionnaires.

Census of the entire community - The census of all inhabitants of the community, based on house-to-house interviews, provides the sample frame for the next stage, and also permits measurement of

the broad characteristics of the community's inhabitants and their relationships to others.

Household-level questionnaires - A comprehensive household-level survey, based on face-to-face interviews, captures detailed socioeconomic and health data for each sample household and its members.

Community Inventory - A community inventory, based on key informant interviews, documents a broad range of natural and institutional features of the community, covers key topics such as quality and quantity of infrastructure, formal and informal financial institutions, presence of various development programs, political organizations and local governance, settlement patterns and land tenure systems, agriculture and livestock production, business structure and employment etc.

Study Status

Data collection for the baseline survey round was completed in mid-2010, and data collection for the second wave of the survey will begin in summer 2012. Analysis for baseline data is currently underway.



Microloans, Bednets and Malaria: Evidence from a Randomized Controlled Trial in Orissa

Researchers : Alessandro Tarozzi (Duke University), Aprajit Mahajan (Stanford University),

Brian Blackburn (School of Medicine, Stanford University), Dan Kopf (CMF),

Lakshmi Krishnan (CMF), Joanne Yoong (RAND Corporation)

Location : Orissa, India Project Status : Complete

Background

The development field has witnessed a spirited debate over the optimal pricing of health goods and services. Given that price remains a significant barrier to adoption, some policymakers argue, development organizations should distribute health goods for free in order to achieve high takeup and usage. Others maintain that charging for a good is the best policy choice because it both helps select out only those who are likely to use the product and makes it more likely that beneficiaries will use the good.

Insecticide treated bednets (ITNs), designed to help protect against malaria, have been at the centre of this debate on the pricing of health goods, with some experts advocating free distribution and others championing price-sharing between distributing agencies and the beneficiary. Recent academic work suggests that free distribution may be more effective than charging for nets (Cohen and Dupas, 2004). But this option could be prohibitively expensive for some organizations. In this study, researchers explore a third option: offering nets on microcredit. This distribution scheme could allow poor families with lower incomes to pay for a beneficial product over time rather than in one lump sum, a payment schedule that may better match their cash flows.

The present study, conducted in a malaria-endemic part of Orissa, attempts to gauge the impact of two different distribution schemes: 1) free distribution, and 2) offering nets on microcredit loans, on the adoption and usage of insecticide

treated nets. The study also examines the impact of ITN distribution on health outcomes.

Methodology

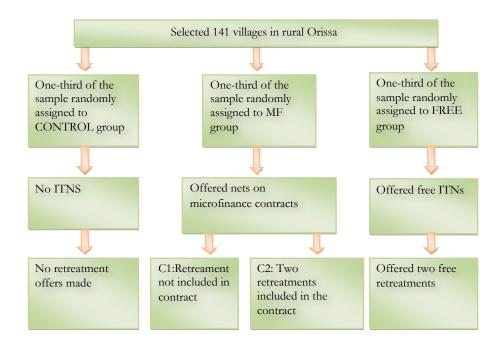
The study was conducted in partnership with Bharat

Key Findings

- Offering ITNs on credit helped increase the usage and takeup of insecticide nets. In the villages where households were offered the microcredit repayment option, nearly 52% of households purchased an ITN.
- The study found almost no difference in malaria prevalence and other health indicators between individuals in the free distribution villages, microcredit villages and those in the control villages - the program did not reduce the incidence of malaria.

Integrated Social Welfare Agency (BISWA), a microcredit provider operating in rural Orissa. Researchers randomly selected 141 villages in a malaria-prone area of rural Orissa for participation in the study. A third of the 141 villages were randomly selected to be control villages and two-thirds of the 141 villages were selected for the treatment group. Researchers evenly divided the treatment group into two smaller groups: one group of villages where households received bednets for free and another group of villages where households received the offer to buy ITNs on contract. Researchers targeted approximately 15 households in each treatment and control village for the intervention.

Because ITNs need periodic insecticide retreatment to work optimally, researchers presented treatment households with the option to retreat the nets 6 months and 12 months after initial purchase. They offered all households purchasing ITNs two types of contracts: one which would allow them to commit to future insecticide retreatment by purchasing



retreatments upfront and another which allowed them to purchase insecticide retreatment six or twelve months after purchasing the net (at the time of recommended retreatment). Households in the free distribution villages were retreated for free at the same intervals.

Findings

Offering ITNs on credit helped increase the usage and takeup of insecticide nets. In the villages where households were offered the microcredit repayment option, nearly 52% of households purchased an ITN.

With respect to usage, those who received nets for free used them more than those who purchased their nets on a microloan contract or those in the control group. In free distribution villages, nearly 47% of households had used a net the previous night compared to a 16% usage rate for households that had purchased nets on credit.

Researchers found a difference in retreatment rates between people who received nets for free, people who chose the commitment contract, and people who were offered the non-commitment contract. The free group had the highest retreatment rates while the group that purchased retreatment upfront also chose to retreat their nets in high numbers. The group that was offered retreatments for cash had the lowest retreatment rates.

The study found almost no difference in malaria prevalence and other health indicators between individuals in the free distribution villages, microcredit villages and those in the control villages - the program did not reduce the incidence of malaria.

Researchers hypothesize that the negligible impact of the program on health indicators is attributable to the fact that the program did not provide enough coverage to create a mosquito-free environment nor did it include a heavy monitoring component, essential elements of past ITN interventions that have had a noticeable impact on health.

Policy Implications

- Offering health products on microcredit may be an effective way of boosting product usage and takeup, but may not be ideal for products that require high takeup in order to work. Since ITNs work largely through creating a mosquito-free environment and not through the physical protection effect, they should be distributed in a way that maximizes coverage. However, microfinance organizations should consider offering their customers the chance to purchase health products that do not need high coverage or intense monitoring to be effective on microcredit.
- The difference between retreatment rates for the two contract types: commitment and non-commitment suggest that organizations offering health products which require retreatment or future purchases should build in the costs of future treatments upfront to maximize effective usage.
- Researchers should partner with other microcredit providers to explore whether offering health products on microcredit contracts can help boost their takeup, usage and effectiveness.

The Effect of Financial Literacy Training on Personal Financial Decision-making

Researchers : Fenella Carpena (University of California - Berkeley),

Bilal Zia (World Bank), Jeremy Shapiro (Yale University),

Shawn Cole (Harvard Business School)

Location : Gujarat, India Project Status : Ongoing

Background

The microcredit movement has been driven by the desire to make financial products and services available to low-income households. However, in recent years, researchers and practitioners have discovered that access is only one of the factors limiting the adoption and effective use of financial services. Evidence suggests that there may be serious demand-side constraints that limit the spread and impact of financial services. Among these practitioners see low financial literacy as a large obstacle to improving the demand for and effective usage of financial products. One proposed solution to this problem has been to provide financial services clients with training in financial concepts and skills.

However, researchers have not yet been able to identify the mechanism by which financial education may lead to changes in financial behaviour. Through this study, CMF and affiliated researchers attempted to test whether financial education leads to improved financial knowledge and better financial decision-making by evaluating the effectiveness of a video-based financial education module.

The sample for the study is comprised of a diverse group of participants from the slums of Ahmedabad. CMF researchers partnered with Saath, a local NGO and microfinance provider with extensive operations in rural and urban Gujarat.

Methodology and Research Design

The study, a randomised control trial, was conducted among 1200 urban households associated with SAATH. Half of these households were SAATH MFI clients while the rest were not SAATH microfinance clients. Two-thirds of the total sample households were shown financial

education videos which contained basic information about budgeting, savings, loans and insurance while the remaining 33% of selected households were shown health awareness videos. Participating households visited CMF's office once a week, for 45 minutes sessions over 5 weeks to receive their training.

During these sessions, participants were told that they would receive monetary compensation if they performed well on a post-intervention survey which would test their general knowledge as well as their mastery of the material covered in the video training. The purpose of this follow-up survey was to check whether people retained knowledge from the lessons and to see whether paying an individual increases the likelihood that he will focus during lessons (and consequently learn more). Lastly, researchers administered an endline survey 3 to 6 months after the video trainings to measure whether the sessions had an impact on financial behaviour.

Findings

The findings show that financial education can increase financial awareness and boost basic financial knowledge but that it does not improve financial numeracy skills. The lack of impact on numeracy suggests that other factors such as previous math education or cognitive ability severely limit the efficacy of numeracy training.

Financial literacy training increased participants' awareness and basic knowledge about financial concepts. The results show that aggregate financial awareness increases by 7.7% post-training. Individuals who receive training are also 5% more likely to know the concept of a household budget, 17% more likely to know minimum bank account opening requirements

Key Findings

 The findings show that financial education can increase financial awareness and boost basic financial knowledge but that it does not improve financial numeracy skills.

and 20% points more likely to understand which loans can be classified as unproductive.

The study finds that trained individuals are more likely to offer good financial advice. Specifically, when they were asked to give financial advice to a friend in a simulation, treated individuals are 5% more likely to suggest using a loan for productive purposes, 9% more likely to suggest buying an insurance product, and 21% more likely to suggest making a budget to track household income and expenditure.

Study Status

As of November 2011, field operations for the project have been completed. Researchers are reconciling and analyzing data from the final phase of the project. However, initial data has already been analyzed and researchers have authored a working paper on the effectiveness of the financial education module.

Policy Implications

- Since financial education has limited impacts on financial numeracy, practitioners should design trainings to focus on increasing people's awareness of financial products. The fact that participants in the present study changed their financial attitudes suggests that programs targeted at increasing awareness could be more effective rather those that attempt to improve numeracy skills.
- If organizations would like to boost numeracy skills, they should focus on building basic mathematical ability which is required for more advanced financial calculations.
- Researchers should conduct more studies to understand how increased financial awareness can translate into meaningful changes in financial behaviour. In general, academics could conduct more work to understand potential mechanisms changing financial behaviour. Practitioners should continue to examine effectiveness of different financial education programs rather than relying on claims about their effectiveness.



Evaluating FINO's Financial Literacy Education Programme

Researchers : Santadarshan Sadhu (CMF), Leopold Sarr (World Bank),

Nathan Fiala (World Bank), Mudita Tiwari (CMF)

Location : Uttar Pradesh, India

Project Status: Ongoing

Background

A major issue facing development practitioners and policymakers in the developing world is the limited access the poor have to financial services. While low-income households may be trying to escape poverty traps, it is difficult for them to do so without appropriate financial tools. This belief, that access to finance is critical for poverty alleviation efforts, has driven the financial inclusion effort in India and abroad. A key financial model aimed at increasing financial inclusion in India is the Business Correspondent (BC) model, a system which allows institutional and individual agents to provide banking services to traditionally-unbanked populations.

FINO, a diverse business and technology organization, is one of the few institutions to offer "doorstep" banking and financial services in the country. Most villages in which FINO operates have little or no access to banks and the organization specifically targets low-income families who have a hard time opening savings accounts. To solve access issues, FINO employs Business Correspondents also known as Bandhus, who visit clients door-to-door and conduct immediate savings and withdrawal transactions at clients' doorsteps.

CMF, in partnership with The World Bank, is conducting an impact evaluation of FINO's financial literacy (FE) program in two districts of Uttar Pradesh - Varanasi and Azamgarh. The financial literacy training FINO provides its clients includes information on the importance of savings, features of FINO's savings product as well as instructions about deposit and withdrawal transactions that take place through "doorstep" banking. FINO also provides its clients with a smart card, which allows them access to banking services via a portable transaction machine.

CMF researchers and the World Bank team will measure the impact of the FE program on clients'

savings behaviour and their overall financial well-being. In addition, CMF will also conduct a cost-benefit analysis of the program.

Methodology and Research Design

First, researchers selected FINO correspondents, Bandhus, for the study from FINO's household listing for 224 villages in Varanasi and Azamgarh districts. They then randomly assigned Bandhus to the treatment or control groups. Last, to ensure that they were capturing the effect of the intervention, researchers verified that key characteristics such as age and transaction history were similar across different groups in the study sample.

The final sample looks as follows:

- Total Number of Bandhus: 200
- Baseline Client Sample Size: 3004 Clients
- Varanasi: 56 Treatment Bandhus (843 clients);
 52 Control Bandhus (781 clients)
- Azamgarh: 44 Treatment Bandhus (660 clients); 48 Control Bandhus (720 clients)

Initial Findings

After observing the program for several months, CMF has identified the some factors that are essential for the intervention's long-term success:

- Frequent and consistent Bandhu visits are critical in establishing trust with clients, many of whom are already apprehensive about handing their money over to Bandhus.
- Bandhus must have up-to-date knowledge about products and must be persistent in communicating this information to their clients.

Study Status

Researchers have completed the baseline survey and are currently working with World Bank researchers to analyze the survey data. Recently,



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researchers conducted a post-harvest intervention to encourage clients to save more during the post-harvesting season, a time when they are expected to have surplus income. For this intervention, surveyors asked clients about the savings goals they had over the next year. In the sessions, researchers emphasized the importance of savings, determined savings goals, and informed clients about upcoming Bandhu visits. Approximately

100 Bandhus (50 treatment and 50 control) were randomly selected to participate in this experiment. In addition, researchers will provide clients with follow-up reminders to ensure that they remember their goals and save accordingly.

Results from the first round of post-harvest survey are currently being analysed. The endline survey will be administered in March 2012.



Marketing Complex Financial Products in Emerging Markets: Evidence from Rainfall Insurance in India

Researchers: Sarthak Gaurav (Indira Gandhi Institute of Development Research),

Shawn Cole (Harvard Business School) and Jeremy Tobacman

(Wharton School, University of Pennsylvania)

Location : Gujarat, India Project Status : Complete

Background

Practitioners and governments around the world have demonstrated a keen interest in crop insurance as a powerful risk mitigation and risk coping mechanism for the developing world's agricultural households. Index-based rainfall insurance is an innovative financial product which could help households mitigate the adverse effects of irregular, excessive or deficit rainfall. In index-based policies, payouts are dependent on rainfall levels in the growing period hitting pre-specified triggers, rainfall amounts calculated based on historical rainfall data. Structuring the policy to pay out based on a factor which affects rainfall rather than yield helps solve incentive problems common to standard crop insurance programs and lowers transaction costs (since there is no need for the insurer to verify claims).

Despite the advantages of such a product, takeup has been relatively low. Some reasons for low participation in insurance could be: a) practitioners have not yet developed effective marketing techniques; b) farmers lack information and may not trust the insurance company or; c) farmers may not understand the product well.

This project attempts to gauge whether providing financial literacy training on rainfall insurance to agricultural households influences their purchasing decisions.

Methodology

The study, based on a sample of 600 households from 15 villages in three coastal districts of Gujarat – Amreli, Bharuch and Bhavnagar, tests whether education and innovative marketing can have a positive impact on the takeup of rainfall insurance. Researchers partnered with an NGO,

the Development Support Centre, which helps market rainfall policies underwritten by the Agricultural Insurance Company of India.

Out of the 600 households in the sample, 300 were randomly assigned to a financial literacy treatment - they received an invitation to attend a pre-marketing financial literacy training held in their village. The rest of the sample households constituted the control group – they received no intervention.

After the financial literacy treatment sessions were held in the villages, researchers administered six other independent subtreatments to groups of 47 farmers each. These six treatments were as follows:

- i. A money-back guarantee for the insurance product which stated that the household would receive a refund of the full premium amount in case the policy did not payout
- ii. Weather forecasts about the quality of upcoming monsoons.
- iii. A demonstration of the relationship between millimetres of rainfall and soil moisture
- iv. A money-back guarantee, weather forecasts and 'mm' demonstration
- v. 'Mm' demonstration and weather forecasts
- vi. Money-back guarantee and weather forecasts

Prior to providing households with the financial literacy sessions, researchers asked them questions about interest rates, compound interest, inflation and risk diversification and debt literacy to judge their cognitive and financial ability.

The financial literacy intervention took the form of village-level lessons conducted by two researcher-trained DSC workers. The first half of each session provided households with general

lessons on personal financial management, savings, credit management and insurance with the help of customized materials such as a thirty-minute long video on the relevance of rainfall insurance. In the second half of the sessions, the participants played simulation games to learn about insurance mechanisms.

Findings

The financial literacy training led to an 8 percentage point increase in the takeup of rainfall insurance. Researchers also found the financial literacy training the most effective of all the treatments offered. Surprisingly, the money-back guarantee by itself had a limited effect on takeup and the other marketing treatments had little or no significant impact.

These results reinforce the view that individuals who receive financial literacy are significantly more

Key Findings

 Individuals who receive financial literacy are significantly more likely to purchase insurance. likely to purchase insurance. While the other treatments were found to be largely ineffective in isolation, a treatment combing all three interventions had substantial impacts on takeup.

Policy Implications

- Policymakers could influence the takeup of rainfall insurance through information campaigns. However, the relatively low takeup, even among the most intensely treated group, and the high cost of treatment, suggest that more efficient product delivery is needed before rainfall insurance can become a financially sustainable product.
- The study provides compelling evidence that financial education can influence purchasing behaviour.
- Randomized experiments can be used to test theories of consumer demand and to assess the cost effectiveness of different marketing programs. Thus, researchers could conduct similar studies to help develop a coherent theory of how financial literacy improves financial decision- making.



Impact Evaluation of Savings Training on Microcredit Groups in Rural India

Researchers : Santosh Anagol (Wharton School, University of Pennsylvania),

Anandi Mani (Warwick University)

Location : Uttar Pradesh, India

Project Status: Ongoing

Background

As the microfinance sector grows, pressure mounts on microfinance providers to demonstrate social impact. Many providers refrain from offering non-financial services, claiming that these services are too expensive and outside their area of expertise. However, even microfinance institutions that do integrate social services with financial offerings have little idea about whether these interventions are effective. In this study, researchers aim to determine whether providing financial education to rural women increases the impact of microfinance.

What we know

Academic literature on poverty and debt traps suggests that the poor may be stuck at low levels of income because they are too poor to save. Recent work has challenged this perspective by showing that the poor do in fact save. In fact, some academics think that the poor may borrow at rates far higher than would be justified by returns when they could simply increase savings, reducing their dependence on high-interest credit. The financial decisions made by low-income households show that they may be paying dearly because they have not thought through simple issues related to borrowing and saving (Ananth, Karlan and Mullainathan (2007)). One explanation for these suboptimal decisions is that the poor lack the skills and financial acumen to work out financial issues on their own. In a forthcoming study, Cole et al study the effect of a financial literacy program on probability of unbanked households in Indonesia to open a bank account. They find this program has a small, positive effect on probability of opening a bank account for those who had low levels of financial literacy at baseline. The current intervention, conducted by CMF researchers in partnership with Sonata Finance Private Limited in Eastern Uttar Pradesh, provides financial literacy training to rural microfinance clients with the aim of changing their financial behaviour.

Methodology and Research Design

The study targets 231 Sonata microcredit groups spread across 198 villages in three districts of rural Uttar Pradesh. For the purpose of the study, 198 villages were randomly divided into two groups: 100 treatment villages (receive intervention) and 98 control (receive no intervention) villages. After the completion of baseline survey in all 198 villages, groups in the 100 treatment villages were given financial literacy training.

Intervention: The intervention evaluated by this study consists of a financial literacy training module, with a special emphasis on savings, followed by financial counselling. The financial literacy module piloted by Sonata and CMF maintains a strong focus on financial planning. Another key point emphasized in the training is that repaying very high-interest debt may be a particularly effective form of savings - even compared to other standard savings instruments such as bank accounts or acquisition of other assets.

The module for the training was adapted from a module originally developed by Freedom From Hunger (FFH). The adapted version had a total of 9 sessions of 40 minutes that specially-hired trainers would deliver over 9 weeks. This training was conducted in group settings after each group had met for its weekly meeting. The content of the simple module included interactive features such as discussions, group activities, songs etc. In the ninth session, trainers summarized the eight earlier sessions and gave each individual in the group a savings calendar. Participants were encouraged to mark their daily savings, savings goals and savings channels on the calendar.

Researchers then designed a post-training financial counselling module which they administered at the individual level. The objective of this module was to review lessons from the training. This module consisted of six follow-up surveys each, 5-10 minutes in length. Each survey contained a set of questions aimed at gauging a participant's understanding of the basic concepts behind savings. Researchers conducted the first 4 follow- up surveys four weeks after the last

financial literacy session. The fifth and sixth follow-up surveys were administered in the 15th and 17th week of the intervention respectively.

Study Status

Data from baseline and intervention has been entered and is now being analysed. Researchers are planning to conduct a mid-line survey in August 2012 to test for any medium-term impact of training.

Do Traditional Institutions Constrain Female Entrepreneurship? A Field Experiment on Business Training in India

Researchers : Erica Field (Duke University), Seema Jayachandran (Northwestern University),

Rohini Pande (Harvard Kennedy School)

Location : Gujarat, India Project Status : Complete

Background

Microcredit in India and other countries around the world has been targeted mainly to women in poor households. One reason development organizations have built their model around providing credit to women is the belief that their low participation in entrepreneurial activities may be due to their limited access to finance. Recently some economists have hypothesized that the reason why women do not take to entrepreneurship is that they face obstacles such as traditional social restrictions on movement and low levels of financial knowledge. These experts believe that traditional restrictions on women working outside the home and specifically in business may limit their ability to acquire business-relevant knowledge as well as the opportunities they can access. If social restriction translates into low levels of business access and specialized knowledge, then business training that equips women with important skills may have potentially high returns.

In this study, researchers attempt to understand how social restriction influences the economic returns women see from business training and financial literacy. The study was conducted in partnership with SEWA Bank, a diverse microfinance services provider based in Ahmedabad, Gujarat.

Methodology

Researchers initially surveyed 636 female customers of SEWA Bank who had actively saved for past 2 years. Researchers then offered a two-day training programme in business skills and financial literacy to two-thirds of these women. In the end, 289 women participated in the programme. A follow-up survey was conducted 4 months after the training to measure differences across caste and religious groups in business attitudes and behaviour.

Findings

The study finds business training had a positive impact on one of the more restricted groups, upper

caste Hindu women, along several key dimensions. Upper caste (UC) Hindu women, if provided business training, are more likely to take a loan than upper caste women who received no training. The upper caste women in who received training were also 25% more likely to engage in labour market activities compared to their counterparts. As a result, researchers estimate that participating upper caste women saw a 30% increase in business income following the intervention. Researchers did not see these types of changes for scheduled caste (SC) Hindu or Muslim women.

Policy Implications

- Women, who are more socially restricted may gain more from business training interventions than comparatively less restricted women.
 Policymakers could target moderately socially restricted women for entrepreneurial training because the benefits for this group are higher compared to other groups.
- However, when women are highly socially restricted (ex. Muslim women in this study) they may see relatively lower returns to business training because training is not enough to overcome the barriers posed by social norms.
- Further research is necessary to understand the precise relationship between social restrictions and returns to microcredit provision and business training.

Key Findings

 Participating upper caste women saw a 30% increase in business income following the intervention. Researchers did not see these types of changes for scheduled caste (SC) Hindu or Muslim women.



Inclusive Growth through Microfinance and Entrepreneurial Training: An Impact Study

Researchers : Santosh Kumar (Harvard University), Mir Salim (University of Virginia)

Location : Tamil Nadu, India

Project Status: Ongoing

Background

The self-help group (SHG) program, which began as a women's empowerment initiative in the 1980's, added a significant financial component in 1992, when a National Bank for Agriculture and Rural Development (NABARD) initiative linked a small number of SHGs with banks. In India today, there are over 69.5 lakh savings-linked SHGs, covering approximately 9.7 crore households. SHGs are more than just a conduit for credit they also act as a delivery mechanism for various other services, ranging from entrepreneurial training to savings deposits. Despite the scale and potential of SHGs to improve the lives of some of India's poorest citizens, surprisingly little rigorous evidence has been produced on the impact of SHGs.

For example, while there have been numerous studies on the impact of microfinance programs, many of these studies have focused on the joint-liability group model.

The present study investigates the impact of an SHG-based microfinance and entrepreneurship training program provided by a Tamil Nadu-based NGO, Hand In Hand. While the broader objective of the project is to test whether microfinance improves well-being, researchers will specifically examine the impact of microfinance and business training on the following outcomes: consumption, savings and borrowing, business creation and profits, access to water and electricity, vulnerability to shocks, education, health and sanitation, domestic violence, and intra-household decision making. This study is

unique in two ways: a) it is the first randomized control trial impact evaluation of the self-help group model and b) it measures the combined impact of microfinance and entrepreneurial training on well-being.

Methodology and Research Design

This study uses a randomized control trial approach to investigate the impact of microfinance and business training on SHG members. A total of 315 Panchayats in 3 districts of southern Tamil Nadu were selected for the study. After researchers conducted a baseline survey, they randomly assigned panchayats to a treatment or control group. The treatment group is further sub-divided into two groups; some panchayats received financial access and business training (Treatment 1) while others received financial access with much more intensive business training (Treatment 2).

Out of the 315 Panchayats, 32%, of the sample form the Control group, 46% form the Treatment 1 group, and 22% are in the Treatment 2 group. At the end of the study, researchers will conduct an endline survey which will help them analyze the impact of the intervention on various social and economic outcomes.

Study Status

The baseline survey is complete. The study is currently approaching the mid-way mark and researchers are in the process of starting a midline survey. The project is scheduled to be complete by late 2013.

Conclusion



Conclusion

The studies contained in this report reflect the substantial work that has been conducted on financial access and livelihoods over the past five years. Through this work, researchers have produced critical knowledge about the effectiveness of financial services programs and the economic behaviour of low-income individuals. Researchers have also helped identify barriers to financial access and possible solutions to challenging inclusive growth problems. However, many important questions about the factors that drive the adoption and effective use of financial services have yet to be answered.

Many of CMF's initial studies focused on the impact and optimal design of microcredit programs. Through a series of experiments on repayment schedules, researchers learned about how varying the structure of microcredit contracts impacts social capital formation, investment behaviour and default among low-income clients. In other studies, CMF researchers examined the impact of microcredit on dimensions of well-being and the feasibility of offering important health goods to households on microcredit. These studies have helped practitioners and policymakers answer questions about how the poor use microcredit and the conditions under which microcredit can catalyze entrepreneurship and boost the provision of health goods. However, researchers still do not know enough about the impacts of differently designed credit products on low-income clients, or how microcredit changes behaviour and well-being at the household level. Further, given its scale and potential impact, the self-help group model has not received enough attention from the research community, which remains focused on joint-liability lending.

While learning about the impact of microcredit is critically important, the landscape of financial inclusion has shifted dramatically in the last few years and research should reflect this change. The 2010 crisis in Andhra Pradesh reshaped commercial microfinance in India, significantly altered the country's regulatory environment, and perhaps most importantly, forced practitioners to question the credit-heavy model that had dominated financial services practice. The crisis raised serious questions about the appropriate place for microcredit within the array of financial services that should be offered to the poor. Many conclude that financial services providers need to offer services that enhance the impact of microloans or that they should at the very least, rethink the assumption that providing credit enhances the lives of their clients. For many institutional and political reasons, microcredit will continue to figure prominently in financial services policy in developing countries, but researchers should begin to shift their focus towards studying the efficacy of savings, insurance, pensions and other financial products that could serve as an effective complement to or substitute for credit. Understanding how these products impact the poor is a critical first step in creating a more sophisticated, nuanced approach to financial services.

Another important area for future research is the relationship between financial products and services, and the livelihoods activities of the poor. Practitioners need a better understanding of how financial products can be optimally designed to help transform the lives of people working in agriculture and other important livelihood areas. To design effective products, researchers must understand the variable financing needs of people who are engaged in different types of livelihood activities.

CMF has begun to recalibrate its research portfolio to reflect recent developments in financial services policy, as well as new directions in development research. The organization's core belief remains the same – that research can play an integral role in informing policy by assessing the impacts of programs on the poor. To bridge the gap between what we know and what we need to know for effective financial services practice, researchers will continue to explore key questions surrounding financial access. Armed with rigorous knowledge about what works, policymakers can then begin to redirect resources towards more programs that bring about positive changes in the lives of the poor.

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