Project Name: The Psychology and Economics of Long Term Savings and Pensions - A Randomized Experiment among Low-Income Entrepreneurs in Maharashtra, India

Principal Investigators: KarnaBasu and Shailendra Singh Bisht

Partner Organisation: CMF's partner organization for the study, Mann DeshiMahilaSahakari Bank, 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 individuals. Mann Deshi is based in the Satara district of Maharashtra and is named so after the Mann Taluka (where most of its work is). The banking operations of Mann Deshi are executed by a strong and extensive network of door-to-door agents who collect deposits and loan repayments, give mini-statements and often act as financial advisors to the customers. There are many occasions in which a customer's interaction with the branch is minimal and their entire banking experience is via the agent.

The CEO and Founder of Mann Deshi is ChetnaSinha who is also responsible for a philanthropic sister organization called the Mann Deshi Foundation. The Mann Deshi Foundation undertakes social oriented tasks such as cattle camps, canal building, a women's business school, etc. Other key personnel are RekhaKulkarni(CFO), SushamaShendge (Chief Accounts Officer and also the go-to person for the UTI pension scheme). The bank headquarters are based in Mhaswad and that is also where their stronghold is. Mann Deshi is trusted in these areas but less so in its Satara branch which has more such organisations and is more urbanized.

Background: India's elderly potentially face significant economic insecurity. With life expectancy increasing, and non-existent 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 a country where over 70% of the population continues to be a part of the informal labor force and government or employer-based savings and pension schemes are absent, contributions to long-term savings products 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 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. Also the focus of MFIs is more geared towards loans as a route out of poverty instead of savings. While some progress has been made in understanding how carefully-designed savings products can increase people's participation (Karlan&Morduch, 2009), little work has been conducted on long-term savings in developing countries.

In this project, we utilize a pension product to study behavioral aspects associated with long term saving. We hypothesize that the families most likely to adopt pension plans are ones 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:

Using a randomized design, we 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 clie nts (across all treatment groups) to see if they are willing to purchase the product. The randomization was done across the 6 branches and the initial savings account held by the clients (Pigmi accounts/Recurring Deposit accounts)

Unit Trust of India (UTI) Pension Product: The product that we are using in this study is the UTI Retirement Benefit Pension Fund. The features of the product are as follows:

- Age Eligibility 18-55
- Minimum contribution – Rs.100 per month
- Nominee's name is required and can be anyone in the household
- Payoffs start when the client reaches 58 years
- Interest rates are market-linked but have averaged between 10-12% since the product was initially launched
- Clients can withdraw at any time but there is penalty for premature withdrawal (1%-5%)
- Clients are supposed to receive account statements from UTI every 3 months

Baseline: A total of 3306 respondents were covered during the baseline which contains a full profile of households, financial accounts, consumption, time and risk preference and financial planning data.

RA to contact: Ujjawal and Tithee

Agent Survey: This survey was conducted for the door-to-door agents who were working at Mann Deshi to find out their backgrounds (sources of incomes, approximate earnings and commission rates).

RA to contact: Ujjawal and Tithee

Intervention: The total sample reached during the baseline (3300) was divided into 3 treatment groups (T1, T2, T3) and 1 control (C) of 825 respondents each. The intervention consisted mainly of 3 marketing as described below:

T1: involved basic information about the UTI pension scheme and attempted to measure the effect of a marginal visit by a marketing agent. All details of the product – maturity, minimum deposits and adoption procedures were disclosed in a neutral manner and extra emphasis was put on the penalty.

T2: involved the same information as T1 except that the "penalty" aspect was reframed to imply something positive that would help respondents save more instead of as a deterrent to early withdrawal.

T3: involved the same information as T1 except with the option of weekly payments instead of monthly. The marketers focused on the penalty for early withdrawal, while emphasizing the value of the product in transforming loose cash into something of higher value.

C: 825 respondents who were in the control group were not contacted at all regarding the product. They had access to the product by their visits to the branch (informational posters, branch officials) and by whatever information was conveyed to them by their agents. This access was uniform across the other treatments as well.

Apart from the marketing treatments that we carried out, Mann Deshi agents were told about our study and were asked to cooperate (assist interested clients, offer information and answer queries regarding the product). One hurdle encountered during this stage of the study was that Mann Deshi's agents were not being paid any commission for promoting the UTI pension scheme (till date) even though they had put in prior effort for the same. The commission rate from other products that they make collections for was around 3% which clearly indicated that they would not like to spend time marketing the UTI product when they can devote themselves entirely to products which give them higher returns.

CMF came up with a solution which also offered another research angle to the study. The total sample of 3300 was divided into two phases (across treatment groups). The first group consisted of clients for whom the agents were **not**incentivized, i.e. any UTI accounts opened by them would not yield any commission amount for the agents. On the other hand, if any accounts were opened by clients in the second group, the agents would get a commission of 1% of the deposit amount and a one-time flat Rs.10 at the time of adoption. CMF would be paying the commission to the agents directly.*(Note: this distinction between the two phases was later dropped since the agents could not keep track of customers who would yield a commission and those who would not and due to the low take-up rate. This was put into effect after the Take-Up survey)*

RA to contact - Tithee

Take Up Survey: The Take-Up survey was conducted to assess the adoption rates of the UTI pension scheme and get a general idea of the other products available in the market and their popularity. There were also questions on time preferences, future planning, math awareness and propensity to save/consume. The total sample size was 3173 (after the dropouts from the 3 treatments were excluded from the 3300 – the 825 from the control group were all included as there was no question of them dropping out during the intervention).

Prior to the Take-Up survey, respondents were being asked for age proof so overage clients (who were not eligible for the UTI product could be excluded). This decision was reversed with the premise that such clients were already excluded during the Baseline survey and so that this was not cited as a reason for dropouts. Further, apart from adoption of the pension product, information relating to saving habits, time preferences etc. were still relevant despite the clients' age.

During the Take-Up survey, the adoption rate for the UTI pension scheme was found to be very low at around 1%. From an initial look at the data, the low adoption rate was attributed to a lack of interest on the part of the Mann Deshi agents and the fact that this was a drought year leaving clients with insufficient funds to invest in such long-term schemes. Since only 35 clients had adopted the product, there could be no distinction among the treatments and the phases. After the Take-Up survey was completed, the 1% commission was then given to all agents who opened UTI account for their clients regardless of which phase they belonged to.

RA to contact – Tithee and Nayantara

Midline Survey: The Midline survey was conducted mainly to get information about the clients' financial behavior and awareness and a small experiment was conducted with piggybanks which were given as gifts for participating in the surveys.Out of the total 3173 clients that carried over after the Intervention, 3059 were interviewed during the Midline.

One of the main components of the survey was about Mann Deshi's most popular product, "Pigmi accounts", which were short-term saving accounts with low minimum deposits, frequent interaction with agents and a penalty for early withdrawal. These accounts could be renewed on maturity. Questions were also asked about outstanding loans with Mann Deshi.

This survey also attempted to capture levels of financial literacy and biases therein. The findings from this section laid the groundwork for future work about exponential growth bias. The section about the piggybanks that we gave the respondents as gifts asked questions about how they would use the gift, expectations of how much they would save in two months and under what circumstances they would withdraw from the piggybank. This was followed up with hypothetical questions about mobile vouchers and self-control (Ameriks, et.al. 2007). All respondents were told that they could use the piggybank as they chose but we would prefer it if they saved and we would be back in 2 months just to find out how they have used the coinbox.

For the experiment regarding the piggybanks, respondents were randomized into 2 groups (the randomization was done across previous treatment groups, branches and initial account types). The first group (G1) received a plastic strip (like those in airport security) which had to be cut through to access any savings accumulated in the piggybank while the second group (G0) did not receive the plastic strips*. Additionally, all respondents received a small lock and key with the piggybank and a sticker pasted on it to keep track of deposits and withdrawals from the piggybank.

**Initially, it was decided to give plastic strips to everyone in the first group and offer it to those in the second group. In the first two days, however, it was seen that everyone who was offered the strip wanted it – thus removing almost all distinction between the two groups. Following the first two days, a clear cut distinction was maintained as mentioned above for the rest of the survey. All "Gift - 0" clients who opted for a plastic strip during the first two days were later classified as "Gift-1" clients.*

**During the midline survey, some respondents who were not supposed to receive plastic strips ended up getting them due to surveyor errors. Those respondents in addition to those who chose the plastic strips in the first few days have been recoded as "Gift-1". The correct variable to use is gift_final.*

RA to contact - Nayantara

Midline Follow Up Survey: This survey was a very short visit to all respondents who received the Midline piggybanks. A total of 2992 respondents out of the total 3059 responded to this survey. This questionnaire mainly checked how much the respondents managed to save over 2 months, whether their plastic strips were intact or cut and whether they recorded their savings on the sticker provided. The field lists were given out in a phased manner such that it was roughly 2 months after they received the gifts.

RA to contact - Nayantara

Second Intervention: Due to the low take-up rate we decided to conduct a second intervention to overcome the institutional hurdles to adopting the pension product. In particular we focused on making the adoption process simpler since the staff members at Mann Deshi Bank were not too familiar with it.

First, we randomly selected 1265 individuals fromthe sample that responded to the Midline survey (3059). After stratifying by branch and original treatment, we randomly selected 300 each for treatments A, B, C and D. The remaining members of the sample serve as a control and were not contacted at all.

- For individuals in treatment A, we provide basic financial training and complete the administrative steps necessary to open an account with an incentive of the first monthly deposit (Rs.100).
- For individuals in treatment B, we provide the same basic financial training and complete the administrative steps necessary to open an account, and also make the third monthly deposit conditional on the respondent's payment of the first two month's deposit (Rs.100).
- The individuals in treatment C receive the financial training and are given administrative assistance with account opening but no financial incentive.
- The individuals in treatment D receive only the financial training without administrative assistance or any incentives.

These experiments allow us to isolate the roles played by administrative/procedural costs, financial literacy, and small initial financial boosts. A total of 1205 out of the 1265 clients were treated. The remaining members of the sample are the control group (E).

RA to contact - Nayantara

Intervention Follow Up: After the intervention we sent phone reminders to all clients according to the following rule:

- For A treatment – clients were told that an initial deposit of Rs.100 has been made and that they should collect their passbooks from the branch and continue making regular monthly deposits on their own.
- For B treatment – clients who had not made their first deposit were told that their forms had been submitted to the branch and their account would be opened only after they submit the initial amount (Rs.100 or more). As for clients who had promptly made their first deposit, we kept a record of their subsequent deposits so that we could pay the third deposit (Rs.100) after they had made regular payments for 2 months.
- For C treatments - clients were told that their forms had been submitted to the branch and their account would be opened only after they submit the initial amount (Rs.100 or more). Once the clients made initial deposits on their own, they were not contacted afterwards.

- The D treatment clients were not contacted.

Attrition: The reasons for dropouts between the different rounds of surveys are mainly refusals to respond, migrations, death, duplicate households and age limits.

Endline: The endline survey was a final survey conducted to get information on the savings habits of respondents regarding different types of accounts – UTI, chain schemes, pigmi, loan and RD accounts. It also included questions on compound interest with varying terms. This survey was administered to all respondents – those who received the second intervention as well as those who did not. A total of 2938 respondents were interviewed.

**Note: At the end of this survey we also randomly selected 1800 respondents (1205 who received the intervention and 600 who did not) to seek consent from them so that we could access their financial data from Mann Deshi. This included their records about Pigmi, Loan, RD and UTI (SitaBachatThev) accounts. We were able to get consent from 1698 respondents.*

Mann Deshi Transaction Data: Mann Deshi agreed to give us access to their clients' financial transactions data for the purposes of our study. We collected data for 2 years (from March 2012 to March 2014) to corroborate responses and to map financial behavior for Mann Deshi's products. Mann Deshi uses a banking software called Custodian to generate reports (into XML formats) and statements. These formats can then be converted into Excel/Stata. The reports we generated are as follows:

1. End of month Pigmy (Mann DeshiBachat Deposit)account balance reports for all clients for all 6 branches (Scheme code 937)
2. End of month Recurring Deposit account balance for all clients for all 6 branches (Scheme code 835)
3. End of month UTI(SitaBachatThev) account balance for all clients for all 6 branches (Scheme code 130)
4. The total loan disbursement made by a branch till March, 2014 – the type of loan was restricted to a general loans and hire/repurchase loans which are the most common. (Scheme codes 3236 and 3233, respectively)

A data dictionary for each type of file is uploaded on dropbox, as is the file linking the account numbers to their respective IDs used in our surveys. The matching has been done using the names of each individual respondent and linking them to the names of the clients in Mann Deshi's database. The file has information on the relationship of the account holder to our respondent (only spouses and children included) and whether we have consent to access their financial data. The Excel files with the names and the matches are stored in a CD with Anup Roy for future reference.

There are a few things to take note of:

- **The file names are very important** – it includes the date for which the report is run (last working day of the month). E.g. 28Feb2013 refers to account balances as on 28th, February 2013. This applies to the Pigmy and the RD files.
- All UTI (SitaBachatThev) file names have only the month and year. This is because Mann Deshi transfers the monthly balance in these accounts to UTI at the end of the month so the only way of capturing a positive balance is just before month end. ALL excel files for the UTI

deposits have been run for the **26th** of each month. Again, please note that the file name is the only place where the date of the report is recorded – this is not inside the Excel file itself – so they need to remain the same until a variable with the date is created.

- The account numbers for Mann Deshi are unique only at the branch level and NOT at the bank level. E.g. there might be an account number "42" in Mhaswad and another "42" in Satara – both registered to different people. So to get a unique matching, the account number needs to be combined with the branch.
- While dealing with the RD and UTI account balances for **Mhaswad**, a filter needs to be added. While these reports were generated, the Pigmy and RD information was also included. E.g. the RD files also have data for Pigmy account balances and the UTI files have RD and Pigmy account balances. So to get information on RD balances the Scheme code needs to only "835" and the others can be ignored. Similarly, while looking at the UTI files, the scheme code needs to be only "130".

The person at Mann Deshi to contact regarding these reports is RupaliSalunkhe (Mhaswad branch) but branch managers at any of the other branches would also be able to assist in the generation of these reports.

RA to contact - Nayantara