FINANCIALLY INCLUSIVE BANKING: UNDERSTANDING THE DETERMINANTS OF LONG TERM SAVINGS BEHAVIOR AND PENSIONS AMONG LOW-INCOME HOUSEHOLDS

Niriksha Shetty*

POLICY MOTIVATION

This policy brief describes lessons from a large-scale field experiment that utilizes a pension instrument to understand the determinants of long-term savings among low income entrepreneurs in rural and semi-urban Western India.[1] With a majority of the Indian working population employed in the informal sector without access to social security benefits, savings and pension products, and minimal access to sources of credit, the financial vulnerability of these groups is of growing concern. As we attempt to economically empower these vulnerable groups, a key policy concern is encouraging them to voluntary participate in long term savings, irrespective of variations in time and income flows – a move which will go a long way in ensuring financial security. We use a commitment savings pension instrument to explore different demand-side factors to inform policy on incentivizing long term savings behavior among low income households across developing countries.

We find that while interest in the product is high, initial take-up was not very high. A follow-up experiment reveals that logistical issues with form-filling are a major concern given the low levels of financial literacy in the country, with the second phase of this project leading to higher take-up among respondents. Provision of initial assistance, while low-cost in nature, can have significant impact on long-term savings among low income households. Although incentives do help take-up, they seem to negatively impact actual savings amounts, suggesting the importance of further cost-benefit analyses to understand the effectiveness of incentivized savings instruments. Our findings seem to suggest that demand-side constraints significantly affect long-term savings behavior among low-income households; an immediate cost-effective solution to improve this is to get rid of administrative hurdles involved in setting up an account. Given the pension reforms attempted by the Government over the past few years, such as the National Pension Scheme (NPS) or NPS Lite that aims to improve long-term savings among the poor, we believe our findings help in identifying key issues, which influence take-up of these government schemes, and positively impact long-term savings behavior among the disadvantaged.

INTERVENTION

In order to implement this intervention, we partner with Mann Deshi Mahila Bank in Satara district, Maharashtra. The intervention was implemented to 3300 randomly selected low-income women clients of Mann Deshi with active savings accounts.[2] The intervention provides access to a commitment savings instrument developed by the Unit Trust of India. This instrument is a market-indexed long-term savings account, which matures when a respondent

---

* Research Associate at Institute for Financial Management and Research

[1] Basu, Karna and Shailendra Singh Bisht (2014), "The Economics and Psychology of Long Term Savings and Pensions: A Randomized Experiment among Low-Income Entrepreneurs in Maharashtra, India", *3ie Report OW2.161*

[2] The sample includes low income households in rural and semi-urban areas of Satara district, engaging primarily in agriculture.

WHAT IS MANN DESHI MAHILA BANK?

- One of the few cooperative banks with authority to mobilize public deposits and offer long-term savings and pension products
- Founded in 1997
- Over 185,000 clients
- Asset worth (2013) : US$ 470,459.32
- 6 branches in Satara, Maharashtra
- Clientele: 50% are low-income rural women
  85% from "priority or weak sector"
  70% from backward castes or scheduled tribes

turns 58 years old. If the respondent withdraws before maturity, they are charged a penalty (declining over time).

The intervention was rolled out in the form of two randomized experiments. In the first experiment conducted in 2012, we focus on understanding how product framing influences take-up. The sample was randomly split into four groups of roughly 825 respondents each – three treatments and a control group (refer box *Experiment 1: Study Design).*

EXPERIMENT 1: STUDY DESIGN
Variation in Framing

Treatment 1: All basic information including administrative details, interest calculations, and graphs regarding potential rewards, with focus on the penalty clause
Treatment 2: Provides a more positive message focusing on the potential rewards of long-term savings; deemphasizes the penalty clause
Treatment 3: Similar to Treatment 1 but with greater "flexibility" of choosing to deposit weekly (instead of monthly).
Control: No visits from marketing agents

The second experiment, rolled out in 2013, focused on how the mitigation of procedural hurdles in the signing-up process can influence adoption. The experiment was conducted with a sub-sample from the first experiment, with four different treatment groups and a control group (refer box *Experiment 2: Study Design).* The average respondents was usually in their mid-thirties,

EXPERIMENT 2: STUDY DESIGN
Variation in logistics

Treatment A: Received initial assistance in signing up for the product, financial training on interest calculations and an unconditional monetary incentive in the form of the first deposit (Rs. 100).
Treatment B: Received initial assistance and financial training, along with a monetary incentive in the form of the third deposit (Rs. 100), conditional on the first two payments coming from the respondent.
Treatment C: Received financial training and assistance but no monetary incentive
Treatment D: Received financial training but no monetary incentive or assistance in signing up
Control (Treatment E): No incentive, visits or training from agents

with some formal education and is someone who is already part of the formal banking system (as a Mann Deshi client) but has minimal exposure to more complex savings instruments.

FINDINGS

I. **Framing influences interest, not take up:** Preliminary results show that over 30% of respondents (statistically significant) from all treatment groups express interest in the product. However, actual take-up is drastically lower (less than 2%, statistically significant for Treatment 1 and 3, not for Treatment 2). While interest was successfully created, other hurdles (some that are addressed in the second experiment) limited adoption.

II. **Self-control problems are important in financial decision-making:** Higher adoption among Treatment 1 and Treatment 3 (although extremely small in magnitude) show that respondents are more likely to respond when emphasis is placed on the penalties rather than the flexibility. This indicates that households are more likely to adopt instruments that give them a push toward making better decisions, contributing to previous literature that documents similar behavioral biases in financial decision-making.[3]

III. **Administrative hurdle severely hinder adoption:** We find that basic initial assistance significantly affects both initial form-filling and actual submissions of forms. Strong treatment effects are seen for those in Treatment A, B and C (greater than 20% for all, higher for incentivized groups, statistically significant). These findings show that a low-cost solution to minimize procedural hurdles can go a long way in encouraging users to adopt long-term savings mechanisms, emphasizing the importance of immediate and non-monetary costs in household financial decision-making.

IV. **Immediate incentive has a greater impact on take-up but does not always lead to higher savings:** High take-up can be observed for both incentivized and non-incentivized groups. However, greatest impact can be seen when the incentive is immediate, with each treatment coefficient significantly different from the other. However, incentives do not necessarily lead to higher savings. We find that those with incentivized accounts (Treatment A and B) save lesser in the long-run with smaller monthly deposits reflected in their accounts on completion of the study.

V. **Household characteristics influence long-term savings behavior:** We find a negative correlation between income and adoption, as well as education and adoption. Given that richer and educated people are also likely to have money invested in other savings instruments, we see a negative correlation between savings and take-up since they will be less likely to participate in this product if they already have other sources of savings.

VI. **Institutional characteristics also affect long-term savings:** Policymakers must always take in to account institutional factors, often unobservable in a controlled environment, since ground realities can often affect the research agenda. For instance, in our study, we find that Mann Deshi agents were unwilling to provide administrative assistance due to the low commission rates associated with long-term savings. While this factor is outside our control, it laid the groundwork for future research in understanding how procedural hurdles impact long-term savings behavior.

---

[3] Sustain, Cass and Richard Thaler (2012), "Nudge: Improving Decisions About Health, Wealth and Happiness", *Penguin Books*

THE WAY FORWARD - Policy Recommendations and Future Research

Since 2004, the government has attempted to launch a number of schemes that focus more on employer/employee contributions, with a lower contribution from the state. Not only will this reduce the fiscal burden on the state, but these products (NPS, NPS Lite) were also designed to offer flexibility to the consumers (primarily, employees of the state government) to cater to both short-term and long-term savings goals. However, these schemes (along with their counterparts in private markets) have witnessed low rates of adoption, particularly in the case of NPS Lite which was designed to cater primarily to the poor. This was mostly due to the same logistical issues we identify in this study including strict enrolment norms including documentation requirements, and a lack of incentives and interest among officials to provide information on the product. As discussed above, if the government focuses on streamlining the enrolment process, my increasing accountability and transparency, we expect to witness higher take-up rates, especially among the poor.

Our research helps identify some of the key demand-side factors that help influence participation and effective contribution towards long-term savings among low-income households. We identify a number of motivators of savings including behavioral mechanisms such as avoidance of immediate costs and recognition of self-control problems, logistical barriers to application, demographic characteristics as well as institutional structures. More importantly, we highlight the untapped potential for the role that commitment savings instruments that charge a penalty can play in expanding the long-term savings market for low-income households. In light of these findings, there is tremendous scope to revamp the current market for long-term savings instruments, giving new life to the government's attempts at pension reform.

Future research can involve further testing of both internal and external validity, understanding the cost-effectiveness of monetary incentives, exploring other household characteristics that might influence savings patterns, how the treatment effects vary over time, among other topics of interest. However, most importantly, as policymakers continue to explore the attractive options posed by increasingly sophisticated savings products, they must remember that they are dealing with a population that has relatively low levels of financial literacy. In such cases, simple solutions such as streamlining the application process, providing low-cost administrative assistance, and placing equal importance on both monetary and non-monetary incentives can help improve access to finance.

2nd Floor, Buhari Towers, No. 4, Moores Road, Near Asan Memorial Sr. Sec. School, Chennai - 600006.

Tel: +91 (44) 28303400, Fax: +91 (44) 2827 9208

5th Floor, Kiwanis Bhawan, B-35, Qutab Institutional Area, New Delhi 110016. Tel: 011 41660681