MicroSave Briefing Note #158

How Saving Is Influenced by Behavioural Biases

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Savings products and services have traditionally been designed assuming the normative theory of life cycle consumption smoothing over years.[1] This theory makes two assumptions about savers' rationality. One, that savers accumulate and then liquidate assets over years to maximise different lifetime utility functions; and second, having determined their optimum lifetime consumption patterns, households have sufficient willpower to save accordingly. However, the theory, from its origin, has not been able to explain several anomalies in savings behaviour. The questions that trouble savings service providers are:

- Why is it difficult for people to switch from informal savings schemes to formal savings mechanisms?
- Why people procrastinate to commit and start saving?
- Why people discontinue long term savings plans even after committing to them? and
- Why people tend to choose "fixed return" even at the cost of low or negative interest?

In this Note, starting with a generic model of mass-market savings, we delve deeper into the behavioural factors in play at several decision points on savings.

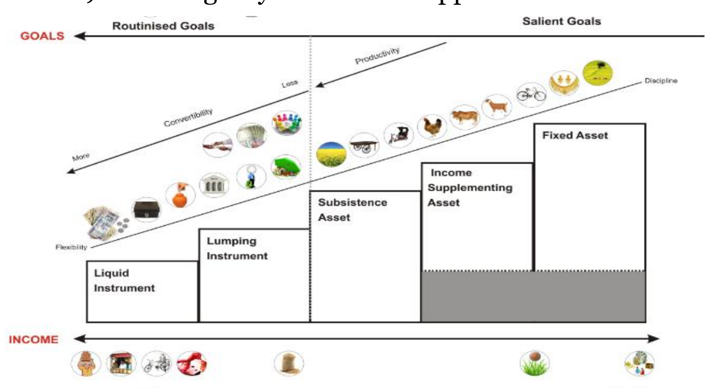
Mental Model of Mass-Market Savings Behaviour

In *MicroSave*'s [MetaMon](#) research, we have seen that money management of the mass-market is governed by interaction between their income and goals as well as the instruments (saving/lumping/buffering) that help them convert income into goals. People's savings behaviour is a direct result of the way they perceive goals in their life, and how they manage income and expenses through a variety of lumping/buffering mechanisms.

Goal Function: Contrary to the normative theory of life cycle, the MetaMon research shows that for a large part of population, goals are not a function of time as much as they are a function of certainty of the event and its negotiability over competing goals (e.g. buying a TV vs. house reconstruction). There are certain goals that are immediate, regular and recurrent in nature. People generally fulfil these goals (or needs) through their routine income. However, there is a portfolio of goals that are less certain and are negotiable over each other. These goals are fulfilled depending on proximity of the event, social pressure/norm, and availability of money or temptation.

Beyond these, there is an amorphous category of "aspirational goals" (e.g. buying land), which are so distant in their mental model that these do not play any major role in the immediate money management strategies of people. This explains why schemes with pre-defined "final amount" are preferred over medium to long term savings programmes that are designed around certain fixed goal or event (e.g. marriage savings, house building savings etc.).[2]

Instrument Function: Since income patterns and goals are not always similar in frequency or magnitude, people use financial instruments as catalytic mechanisms to build up savings to fulfil their goals. These instruments are defined based on how easily they can be converted to liquid form in case of need, and how productive they are. There are some "lumping mechanisms" where people build up their savings in a disciplined (e.g. RoSCA or recurring deposit) or flexible (e.g. lock-box, piggy bank) way to create a lump-sum "windfall" income/cash inflow at a future date. The second category of instruments, also called "assets", are accumulated from any windfall income/cash inflow and are used either to augment regular income (e.g. a cow that gives milk regularly) or store value (e.g. jewellery, utensils) for emergency use or value appreciation.



Formal savings products or services will have more traction with clients, if they are aligned to this mental money management model. In other words, unless a formal savings product feels like and serves the purpose of cow, goat, hen, jewellery or any of the lumping mechanisms, low income clients will not naturally prefer choose and use them. While mental models explain preference for informal savings/lumping mechanisms over

[1] Modigliani, Franco, (1966) 'The Life Cycle Hypothesis of Saving, the Demand for Wealth and the Supply of Capital", Social Research.
[2] CGAP Focus Note 37, (2006), "Safe and Accessible: Bringing Poor Savers into the Formal Financial System".

the formal ones, other predominant anomalies can be explained by other behavioural factors, as discussed in the next section.

Procrastination to Commit

Even if a well-designed savings product is offered, people generally show an aversion towards committing to save. Often, they defer the decision to start savings (especially long term savings) in spite of logical needs and availability of choices. Behavioural explanations of such behaviour are as follows:

***Status Quo Bias* and Hassle Factor:** People are inclined to behavioural inertia and tend to not actively shift from their current practices of no, or informal, savings. Moreover, in products with the option to increase contribution over time, people tend to continue with initial contribution level even when their income, and thus ability to save, increases. The processes and documentation involved around formal savings schemes also work as a deterrent for people to shift from informal/ semi-formal mechanisms where processes are relatively smooth and hassle free.

***Hyperbolic Discounting* and Present Bias:** People tend to prioritise their current liquidity needs over future requirements for lump-sums. This "present bias" restricts people from committing to savings even when they realise the substantial future benefit of doing so. Often, the regular contribution required to build such future lump-sum is so huge that people tend to feel intimidated by it. This feature is exploited by fly-by-night operators who promise unrealistically high returns where such contribution-return disparity is not immediately visible.

***Mental Accounting* and *Primacy*:** People generally associate a service provider with a typical product provision, as well as frequency, magnitude and duration of transactions involved with it. Accepting the provider in a different product category is psychologically incongruent for them. Savings products are often offered to the mass-market by providers better known for other products and services (e.g. MFIs, better known for credit). Since they would have exhausted their mental "account" for the provider in the core service (e.g. credit), it becomes difficult for them to save any more with them. Even if they enrol, they tend save the minimal required amount as a proportion of usual transaction value with the same provider. For example, with most of the MFIs, the savings occurs as percentage of the loan instalment.[3]

Discontinuance of Committed Savings

Even if people commit and start saving, often medium to long term savings schemes lapse for want of continued contributions.[4] While lack of a clear goal often translates into lack of motivation, some of the other factors responsible for the phenomenon are discussed as follows:

***Planning Fallacy*:** When convinced, people make time-inconsistent commitments towards regular savings, often overestimating their future well-being and regular income. This leads to over-commitment, which they find difficult to adhere to on a regular basis.

Non-Salience of Renewal Contribution: Through their incentive and marketing mechanisms, service providers try to "acquire" and "enrol" clients into medium to long term savings products. They assume that clients will discipline themselves into persistency. As a result, the importance of regular on-going contributions are not made as clear (and are not as immediate) as the first contribution. Hence, clients tend to not focus on fulfilling the commitment to regular payments. In other words, enrolment is made a "salient goal" to a client, but the regular contributions are not.

Choice of Fixed/No Return

Low income people seem to prefer savings products which offer fixed rather than variable return. This preference leads them to subscribe to schemes that offer minimal or even negative interest rates. The ambiguity about the final amount and aversion of associated loss explains only part of the trend. For low income people, the mechanism of disciplined, committed savings (e.g. in RoSCA or savings collectors) is of more importance than the expectation of returns. The need for the imposed discipline to save is such an intuitive preference for present-biased people that they are even willing to incur costs to use these services.

Conclusion

Financial inclusion is often defined as the process of shifting people's financial lives from informal to formal mechanisms. Though many research studies have demonstrated that low-income people have active and vibrant savings practices, providers across the globe continue to struggle to make formal savings products attractive to them.

As this Note highlights, in order to make this significant shift, a provider has to:

- Design products aligned to the mental money management model of the clientele;
- Help them commit to and start using formal savings mechanisms as tools in their daily life;
- Enable them to continue savings at regular intervals; and
- Assure clients of security of and return from it.

[3] See *MicroSave* IFN 108, "How Can BC-MFIs Tap Household Savings?"
[4] Smith S., (2009), "Stopping short? Evidence on contributions to long-term savings from aggregate and micro data", *LSE*, London.