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Examining Micro Credit through the Behavioural Lens

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Introduction

It is estimated that microcredit sector lends approximately USD 125 billion annually to nearly 96 million people in over 121 countries through a little over 10,000 microfinance institutions.[1] Despite its exponential growth in last three decades, the sector is still seen as ancillary to the regular financial sector. Microcredit also faces severe criticism over high interest rates, over-indebtedness of low-income households, and little to no impact on poverty alleviation. An impressive and continued growth in the face of such criticism encourages an analysis on the behavioural triggers for the growth as well as the aspects for which the sector is critiqued. In this Note, we explore the behavioural explanations and triggers behind these phenomena.

Why Does Microcredit Work?

According to recent behavioural research, microcredit is governed by two predominant behavioural biases- Scarcity[2] and Present Biased Preference.[3] The task of making decisions in an environment of scarce and highly volatile monetary resources consumes significant cognitive bandwidth available to the low income people. As a result, they have a tunnelled focus on managing their immediate scarcity. Thus they have high preference to fulfil their immediate need for cash through borrowing upfront and fulfilling the commitment of repaying the loan from regular income through "routinising the debt".[4] In addition, the absence of resources for frequently occurring emergencies (and unplanned expenses) force low income people create lump sums of cash at frequent intervals. This is done either through "saving up" (savings) or "saving down" (credit).[5]

However, more than the access and availability of debt, microcredit helps people manage their money either despite or because of these behavioural biases and trends.

Interestingly, microcredit mechanisms work as behavioural levers on the same features that distinguish it from formal lending methodologies, as we discuss below.

Group based lending methodology

Microcredit leverages people's tendency to reciprocate their peers. Over time, regular repayment has become a social norm. As the Grameen II and other Bangladeshi MFIs have shown, even in absence of joint liability, group based lending helps people discipline themselves through the behavioural lever of social proof. Owing to both scarcity and irregularity of cash-flows, borrowers tend to make time inconsistent preferences in spending money. Hence, in spite of the inconvenience involved, some actually prefer group-based mechanisms, which help resist the temptation to default in face of scarcity.

Loan repayment through highly frequent small instalments

Both microcredit borrowers and lenders are aware of the present biased preference behind the temptation to get the loan. In order to impose pre-emptive over-control[6] against possible future default, MFIs make repayment mechanism a constantly salient feature with frequent instalment collections. Moreover, small instalment size reduces the pain of repayment for sophisticated present biased microcredit borrowers.[7] A similar characteristic is visible in case of RoSCAs,[8] where present biased individuals prefer to participate in more frequent (daily/weekly as compared to monthly) meetings.[9]

No or negligible, moratorium/grace period

Unlike a typical business/income generating loan, repayment in microcredit starts almost immediately after disbursement. This feature demands that part of the repayment be done from existing regular income of the household - a feature that makes microcredit similar to contractual commitment savings devices. In other words, microcredit offers a mechanism similar to RoSCAs –

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[1] MIX MarketMullainathan, S., & Shafir, E. (2013), "Scarcity: Why Having Too Little Means So Much", *Macmillan.*
[2] Mullainathan, S., & Shafir, E. (2013), "Scarcity: Why Having Too Little Means So Much", *Macmillan.*
[3] Michal Bauer, Julie Chytilová, Jonathan Morduch (2010), "Behavioral Foundations of Microcredit: Experimental and Survey Evidence from Rural India", IZA
[4] Mas, I. & Mukherjee, P. (2013), "Musings on Money", *MicroSave*
[5] Rutherford, S. (2001). "The Poor and Their Money" (Oxford India Paperbacks).
[6] O'Donoghue T, Rabin M. (1999), "Do it Now or Later"; *American Economic Review*
[7] Fischer G., Ghatak M. (2010), "Repayment Frequency in Microfinance Contracts with Present-Biased Borrowers", *LSE*, London
[8] Rotating Savings and Credit Associations
[9] Tanaka T., Nguyen Q. (2009), "ROSCA as a Saving Commitment Device for Sophisticated Hyperbolic Discounters", Field Experiment from Vietnam (*Manuscript*).

except that it provides an even more disciplined instalment payment.

Repeated borrowing cycles

Microcredit thrives on providing its borrowers continuous outstanding loans. Apart from making microcredit similar to borrowers' intuitive strategy of "saving through",[10] the repeated borrowing cycle showcases an important behavioural trend of microcredit borrowers. They tend to avoid the uncomfortable feeling of loss associated with the declining to borrow increased loan amounts in progressive cycles. This feature encourages them to:

a) Borrow even if they do not have explicit immediate needs for one or a number of intermediate cycles; and

b) Not to default on current loan repayment since it reduces their chance of future borrowing.

Since the option of refinance works as an incentive in microcredit, it can be deduced that the borrowers are "sophisticated" - in the sense that they are aware that they will need credit even in future. If they were "naïve" about their present bias, the proclivity to access refinance would remained limited since they would underestimate the need of loan in future.[11]

Behavioural economics does not only explain the design intricacies of microcredit, but helps in making sense of the anomalies in the model as well. In the section below we delve deeper into such anomalies and their behavioural explanations.

Demand side anomalies

Multiple borrowing and over-indebtedness

By virtue of their scarce resources, low income microcredit borrowers cannot plan future expenses in detail. Instead they choose to meet these expenses - as and when they become "salient" to them - from periodic lump-sum "windfall" incomes.[12] Having loans for such lump-sum is preferred over liquid savings since a loan is less likely to be wasted on temptations. To achieve this objective, they allocate different loans into separate buckets or "mental accounts" to be met from their income and in turn ensure lump-sums at different intervals. Over-indebtedness as a result of such multiple borrowing. However, it only occurs when the microcredit borrower falls prey to planning fallacy, i.e. when she overestimates her ability to fund the allocated mental accounts.

Price indifference

Microcredit borrowers think about their loans in terms of how much they owe[13] on a weekly basis, but know/care little about interest rates or total interest expenses. This price indifference is partly on account of the anchored/ reference point comparison with money lenders' interest rates. Moreover, the structure and monitoring mechanism in microcredit offers a valuable mechanism for financial discipline, which they value higher than the return achievable otherwise in savings.[14,15] Interest payable on structured microcredit, therefore, is a cost borrowers are willing to absorb for the convenience of commitment - a feature visible in cases where people prefer to save in a commitment savings in spite of negative interest rate.

Supply side anomalies

Mono product culture

MFIs have traditionally seen microfinance simply as "credit for enterprise", and have not adequately addressed people's need for consumption-smoothing, emergencies and medium term financial needs. This occurs due to a heavy a reliance on the past reference or primacy bias around the celebrated Grameen Bank model. However, as the demand side anomalies show, client-centric savings and insurance products will not only improve client loyalty[16] for MFIs, but can also be effective in managing multiple borrowing and over-indebtedness.

Obsession with discipline

Another aspect based on past reference of Grameen model is the obsession of MFIs with discipline. Though fixed tenure loans and disciplined repayment makes the sector work, the obsessive focus on discipline in meeting results in strict penalties for slightest non-compliance, coercive delinquency management practices and petty humiliation[17] of borrowers, all of which harm the reputation and positioning of the institution.

Conclusion

It is clear that microcredit works due to some intrinsic behavioural levers in the model that resonate with low income people's money management mechanisms. As the microfinance industry moves ahead, it is important to take these insights and build on them to re-define products, processes and methodologies to incorporate the effects of human behaviour - especially on how the low income people deal with different aspects of their lives, from managing their finances to provide for their families.

[10] Rutherford, S. (2001). Ibid.
[11] Quidt J., Ghatak M. (2013), "Is the Credit Worth it? For Profit Lenders in Microfinance with Rational and Behavioral Borrowers", *LSE*, London
[12] Mas I., Mukherjee P. et. Al. (2013), Musings on Money, *MicroSave*
[13] Tiwari, A., Khandelwal, A., & Ramji, M. (2008). How Do Microfinance Clients Understand their Loans? IFMR, Centre for Micro Finance Working Paper Series No. 25.
[14] Basu K. (2008), "A Behavioral Model of Simultaneous Borrowing and Saving".
[15] Mullainathan S., Krishnan S. (2008), "Psychology and Economics: What it Means for Microfinance".
[16] Natu, A. J. (2009), "Market Strategy Development and 3rd Generation Microfinance in India", *MicroSave*.
[17] Escobar, A. (1995), "Encountering Development: The Making and Unmaking of the Third World", *Princeton University Press*.