DVARA Research

Proceedings of the Participant Sessions at the Workshop on Suitability in Microcredit October 5, 2018, Mumbai, India

Section I: Introduction

The Right to Suitability features as one of the rights in Reserve Bank of India (RBI)'s Charter of Customer Rights. Lending to low-income households is particularly important from the perspective of this Right as these households face vulnerabilities as the cashflows from their uninsured productive assets are risky, seasonal and volatile. Microcredit regulations acknowledge this and contain a set of directives that limit the number and sizes of loans that a borrower can avail if borrowing from an RBI-regulated microfinance institution, bringing in clarity to the microfinance sector and resulting in its orderly expansion. However, a closer look at institutional practices and local competition, both at a micro (household) level and at a macro (regional) level, reveal pockets of over-leveraging – of both household balance sheets and of local economies. This increases stress on these households and economies and can have debilitating effects on their ability to thrive and grow. This Workshop aims to engage with practitioners to share findings from recent research efforts to answer the question of suitability in microcredit.

The research conducted by Dvara Research and published in a paper titled "When is Microcredit Unsuitable?" (Prathap and Khaitan, 2016) forms the foundation for this Workshop. The Workshop was conducted with the intention of engaging microfinance institutions, namely NBFC-MFIs and NGO-MFIs, in a discussion regarding the issue of assessing suitability of microcredit to the end- borrower's household. The issue of affordability itself was exhibited through the evidence presented. This session helped to set up an active discussion between the researchers and the practitioners, including CEOs of MFIs who, while keeping an eye on current operating realities, are keenly considering what the future might look like for their businesses. Following this, the participants were inserted into a design-thinking exercise, which was aimed at mapping vulnerabilities at the household level, and fleshing out the factors influencing them. This in turn led into a session targeting solutions based on specific issues. These solutions were further put into context by a presentation on existing policy surrounding suitability and affordability assessments for credit. The Workshop was closed by partner presentations on the effects of demonetisation on repayment ability of microfinance borrowers, as well as on tech solutions to aid low income households. This document is an attempt at documenting proceeds of the participant deliberations at the Workshop.

Section II: Key Findings of our Research

The reach of formal credit in rural India remains low, and JLG type products dominate formal credit to low-income consumers. JLG loans were alone available in 84% of all Indian districts, with 64% of districts having 15 or more providers. Dvara Research took a closer look at household- level indebtedness through a monthly-household-diaries study between February 2015 and May 2016, administered to 400 households who are active borrowers of microcredit in the district of Krishnagiri in Tamil Nadu. Krishnagiri was chosen since it had a higher rate of formal lending compared to the All India rural outreach (29% versus 22%), and it exhibited much higher median outstanding debt as compared to All India levels (Rs. 34,606 versus Rs. 18,488).

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There were three types of repayment structures reported:

1. Fixed tenure, regular repayment
2. Fixed tenure, "bullet" repayment
3. Flexible repayment

In our research, Prathap and Khaitan measure the debt affordability at a household level for all the households in the survey. A household's disposable income is taken to be their Debt Servicing Capacity (DSC). The Debt-to-Service capacity Ratio (DSR) is calculated as the ratio of repayments to DSC. If it is below 1, a household is assumed to have the ability to repay. Based on DSC and DSR, the paper found four categories of borrowers:

Category	Description	% households
Surplus DSC	Monthly debt obligations upto 0.8 times surplus	68%
Borderline DSC	Monthly debt obligations 0.8 - 1.2 times surplus	10%
Deficit DSC	Monthly debt obligations greater than 1.2 times surplus	19%
Deficit Income	Income lesser than minimum expenses	2%

Figure 1 - Categorisation of households according to DSR[1]

Income and expense metrics are tabulated as follows:

	(1) Surplus DSC	(2) Borderline DSC	(3) Deficit DSC	(4) Deficit Income
				Amount in Rs.
Income	13693[a]	11506	8545[b]	4994[b]
Expenses				
Food	2727[a]	2366[b]	2122[b]	1893[b]
Medical	898[a]	752	722	1160
Celebrations	1580[a]	1128	1323	572
Other non-food	3429[a]	2923	2686[b]	2865

[a] Null hypothesis of equality with zero rejected at 5%

[b] Null hypothesis of equality with corresponding column 1 estimate rejected at 5%

Figure 2 - Breakdown of expenses for household categories[2]

Informal loans were also observed to be used to finance social or health expenses, while formal loans were used more for investment purposes (in agriculture, business, and property). Both formal and informal loans were used for repayment of debt without any documented preference.

Borrowers with borderline or deficit DSC were found to use coping mechanisms such as social networks and the curtailing of consumption at levels higher than those with surplus DSC. They also

[1] Pg.22, Prathap and Khaitan, 2016

[2] Pg. 23, Prathap and Khaitan, 2016

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borrowed more often to repay existing loans. Overall, we found evidence of over-indebtedness from microcredit, and of households undertaking suboptimal coping mechanisms that adversely affected their financial and non-financial lives.

The paper also discusses irregular income flows, and how they could potentially make households' DSC deficit at several points in the year, while giving the appearance of having adequate DSC overall at an annual level. Monitoring this irregularity, along with an accurate picture of household debt[3], could be key to accurately gauging affordability. The RBI requires all NBFC-MFI lenders to verify potential-borrower details against information obtained from a credit bureau, to ensure that no borrower carries more than two microloans, and exposures to not more than two NBFC-MFIs at any given time. Extending the scope to all institutions, lenders are required to ensure that no borrower has loans from three different providers (entity agnostic)[4]. Also, the total microcredit indebtedness of any borrower must not exceed Rs. 1 lakh[5] at any given point in time, while JLG/SHG loans should amount to less than Rs. 80,000[6]. However, as discussed in the paper, as well as in other studies conducted along similar lines, MFI bureaus tend to miss out on loan information due to cross-borrowing behaviours exhibited by households. Despite the RBI's guidelines and codes of conduct, we find evidence that borrowers with deficit repayment capacity relying heavily on new loans to help smooth financial difficulties and this is problematic for many reasons.

1. The fact that there is a lack of liquidity to help smooth shocks is evident
2. This leads to a vicious cycle of dependence for low income borrowers
3. This would suggest that some of the loans given out were mis-sold (Prathap and Khaitan estimate that 21% of households were carrying unaffordable loans, all made by institutions falling under the ambit of the RBI)

The existence of different types of lending institutions, falling under different regulatory norms, leads to the existence of blind-spots. One method of getting around this would be the reporting of debt and gathering of credit information at the household level, since that way debt affordability could be assessed for a family, rather than for individual borrowers. This would accurately capture the unit where risk is faced, since both the benefits and costs of a loan are felt by the household ultimately. Moving forward, it is then important to consider debt assessments at the household level instead of at the level of the individual borrower. The research presented by Dvara Research further speaks to the benefit of conducting assessments on debt servicing capacities, making these two levels of assessment necessary if we are to prevent cases of over-indebtedness and to ensure that credit provided is not unsuitable for the household.

Section III: Workshop Design and Summary of Proceedings

Following spirited discussions about the findings from the paper, the second segment of the Workshop involved a participatory product/process design session. This was facilitated by Deepa Bachu, a Human Centered Design (HCD) expert, and CEO of Pensaar, a design thinking and innovation consulting firm. There were two human-centric design-thinking sessions within this segment of the Workshop. Participants were divided into carefully picked groups and each group was then tasked with breaking down a central theme, while trying to shed any pre-existing notions and perceptions they might have

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[3] The authors find that bureaus did not capture 42% of household level debt
[4] Pg 4, MFIN Mutually Agreed Code of Conduct, 2016
[5] Pg 4, Master Circular- 'Non-Banking Financial Company-Micro Finance Institutions' (NBFC-MFIs) - Directions, 2016
[6] Pg 4, MFIN Mutually Agreed Code of Conduct, 2016

had relating to them. This exercise was born out of the need to get to the root of the issue of Suitability in Microcredit, without letting personal interests get in the way of problem solving.

Section IV: The WHY and the HOW of Considering Debt Serviceability Assessment for Households

The first session was based around an HCD tool called the "WHY-HOW Ladder", where groups were given a set of themes, and for those themes, they were required to keep asking themselves the question "WHY?". Below we summarise a list of reasons WHY providers must consider carrying out debt serviceability assessments of households of the borrowers before lending to them:

1. Incomes, expenses and surpluses in cash flows are shared freely between the household members, with supervision by the primary earning members / household heads. Many a times, more than one household member partakes in running of businesses by the household – this is the case in many micro- and small- enterprises and in certain agricultural households. The responsibility of making repayments on loans is shouldered by the entire family, since repayment capacity was something contributed to by the whole household. An observation made by participants representing providers was that loans taken by female members through JLGs, were quite often given to husbands or sons, since they would not be allowed to take JLG loans.
2. The household was acknowledged to be a more important unit in terms of assessment due to the ability to provide more appropriate products when considering the household as a whole. Assessments at the household level gives better indicators of income level and patterns of this income, as well as brings down credit risk assumed by the providers by smoothening the volatility inherent to individual income sources.
3. Assessments at the household level can provide more information about actual levels of volatility in cash flows of the household and can therefore provide comfort to providers to consider flexible payment structures, and loan-amount graduation programs.
4. Accounting for the family unit could also help providers design products more directed towards preventing consumption compromises, or even compromising on costs like education.
5. Making loan disbursement to the family, would cut out unnecessary process steps, and provide money for any member of the family who would require it. This could lead to increased risk-taking behaviour in the family.
6. Current regulations call for understanding household-level annual incomes for the same reasons. Also current processes already capture the nature of incomes of the household and is not restricted to collecting this information only for the woman borrower. Indeed, women without any primary source of income would be ineligible for credit but become eligible for microcredit due to this.
7. Such assessments pave way for better understanding of the households' lifecycle needs and can help build a multi-product need-based relationship for the provider, as well as serve as inputs into models that can provide early-warning signals of incipient credit risk events.
8. Such assessments can increase the debt-service capacity of the household, making it eligible for higher levels of credit. This can incentivise those households with more risk-taking abilities to undertake risky business and entrepreneurial activities that they were previously unable to engage in. Thus, such assessments will have a positive impact on households' abilities to meet the needs and ambitions of its individual members.
9. Such assessments are important from the point of view of business continuity for the microcredit provider, as it helps to achieve business objectives of serving more credit to underlying households and incentivises institutions to fill gaps in serviceability through design of new products that are useful to the household context.

Concurrent to the questioning around the WHY for the theme, participants were required to explore "HOW" to execute on the theme. Below we summarise a list of ways the HOW was answered by providers:

1. There is a need to capture high quality personal information about the household, including occupation details, income patterns, risks to health and from the occupations, age profile of members of the household, household cashflow information and household credit history. Such data needs to be captured / organised in a structured format under heads such as income and expenditure to get a full picture of the household's cashflows.
    a. One important and long-term priority, while not directly related to microcredit operations, is the need to digitise income records for informal sector occupations through digital transaction platforms.
2. Acknowledging the trade-off between the costs of collecting such data and the level of quality of such data needed to make meaningful assessments, the participants talked about the need for proxies such as for the following:
    a. Proxies for understanding the extent of the household's existing legal obligations. Questions considered in this regard were whether to include other members of the household as co-borrowers (a practice already observed by many microcredit providers), and whether lenders should report such loans in the name of co-borrowers to the credit bureaus. This also meant that lenders must also, for assessing debt serviceability of the household, consider credit bureau information on all adult members in the household.
    b. Proxies for income and expense profiles for various occupation type and geography combinations. This is required to overcome overstating or understating of numbers by customers and to have realistic numbers that reflect underlying local economic realities. While not a direct outcome of interest for the provider, conversations of household cashflows with more than one member of the household (the woman borrower in this case) helps to get customers thinking about their cashflows in a structured manner.
3. There is a need for high quality monitoring of loans after the loan disbursement in order to ensure that the loan is used for the said purposes. This however would become difficult to monitor when the loan gets used for multiple purposes.
4. There is a need for ways to ensure that overall indebtedness of the household does not increase beyond what the household is capable of servicing. This can happen when members in the household, including the borrowers, take on more loans than what they can currently service and such an event while out of the control of the current lender, can have material negative consequences for loan serviceability. While such a problem is not unique to microcredit, fragmented regulations around avoiding indebtedness will need to be corrected to prevent such situations.

Section V: HOW MIGHT WE design and deliver products that fill Serviceability Gaps for Specific Household DSC Types

The second session centred around the creation of solutions by participants and used an HCD tool called HOW MIGHT WE. The question posed to groups at the beginning of this session was ***"HOW MIGHT WE design products that fill serviceability gaps for specific household types?",*** and groups were required to answer this question for one among the four household categories given below:

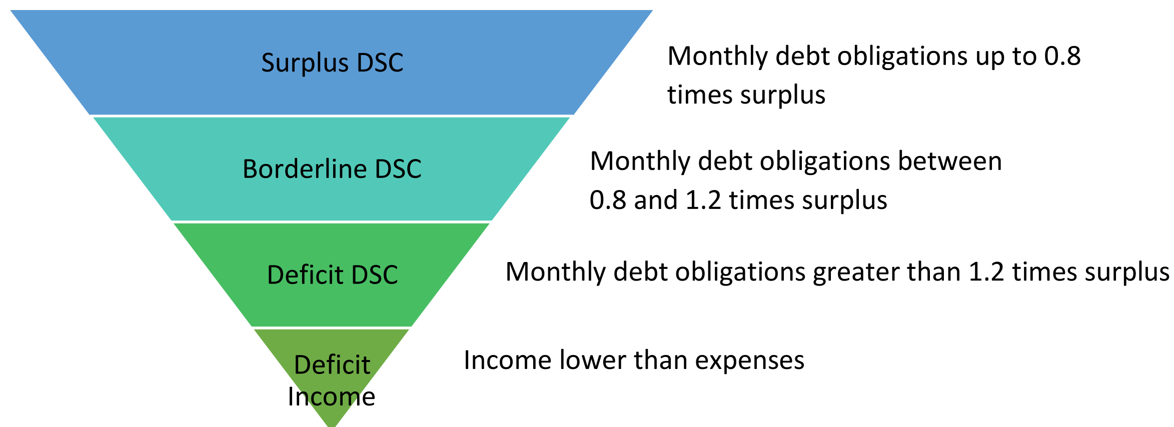

Figure 3 - Household segmentation along debt servicing capacity

While the four household categories were available for analysis, teams chose Borderline DSC and Deficit DSC households to propose solutions for. Therefore, the question to be answered was "HOW MIGHT WE design products that fill serviceability gap for specific household types such as for households with borderline repayment capacity?".

The ideas generated in this session fall into three broad themes, namely process-based solutions, product-based solutions, and miscellaneous solutions that were a set of solutions outside of these two broad categories. Within these themes there were various sub-themes that were also observed. These themes are discussed below:

Theme A: Process-based solutions

These solutions revolve around making changes, whether minor or major, to the business processes of microcredit institutions while keeping the design of the product unchanged. These fall into the following buckets:

1. Household Data Driven processes for point-of-sale credit assessments of borrowers:

A more efficient data collection process that captures granular data, was a key theme that emerged, given that large swathes of existing data on customers is self-reported. Participants noted that high quality personal information, as well as information about the cashflows in the household, both income and expenses, could go a long way in building a more reliable cashflow analysis process for assessing credit worthiness before every disbursement. However, a process that increases the time and resource allocation for data capture will increase cost of operations considerably, both in terms of the calibre of staff and the time spent per borrower for such data capture. The alternative considered was to use a combination of self-reported information and data proxies that can provide a reasonable picture of household realities. These proxies can be both of the following:

- Proxies for income and earnings cycles, expenditure, needs, future plans and goals of members of the household

- Subjective data that can serve as proxies, such as the number of children below 18 in the family, whether the shop of the borrower was painted recently, the location of the shop with respect to business activity and density of enterprises in the local economy, and so on

Such higher quality data could in turn lead to the development of distress scores, and customers could be segmented better according to inherent volatilities in their incomes and targeted with better designed products.

2. A more comprehensive and nuanced approach to debt serviceability assessments

One idea floated was to devise an internal scorecard for the organisation to drive risk-based pricing and design of offerings. Taking this a step further, the organisation can build distress indicators that can differentiate between households facing illiquidity from households facing insolvency (for instance by measuring expenditure sacrifices as a ratio of repayment or human capital investment expenditures). In addition to point-of-sale assessments, regular interactions between borrowers and staff for repayment collection or otherwise, are good opportunities to update income data of borrowers if material changes become known to the staff. This will help to offer debt restructuring if a household is known to face or is likely to face financial stress.

3. Borrower household segmentation

There were two strands of ideas around segmentation of households, one pertained to segmentation based on abilities of the households to make repayments for the microcredit loan product and the other was on categorisation along debt servicing capacity (as covered in Figure 3). The latter was left uncontested by the participants. This was therefore considered a minimum requirement in terms of benchmarking households along their debt servicing capacity, with the floor being the deficit DSC households. Lending to deficit DSC households (and below) was considered irresponsible on the part of the provider and is to be avoided. An additional element to such segmentation was a suggestion on segmenting borrowers based on the source of the deficit DSC.

4. Flexibility in repayment structures for households under the JLG product

The solutions with regard to flexible repayments were creative and numerous. They included but were not limited to the implementation of repayment holidays, as well as repayment credits, where households receive credits for full repayments on time, and can use them to skip repayments down the line. Ancillary to the repayment structures, some groups suggested the implementation of top-up loans, and also lines of credit to help smooth over sudden shocks. This latter theme had many ideas as given below:

a. EMI “credits”, i.e., borrower can pay an amount greater than their EMI at no additional cost
b. A repayment holiday in the form of freedom to skip an instalment as chosen by the borrower, or skip-repayment coupons (akin to mobile recharge coupons) for a small service fee levied
c. Households can signal new business investment for a slight increase in pricing of loan in return for one holiday of their choice determined at Point of Sale
d. Household can choose flexibility in when they want to repay one or two of the instalments (50 EWI/12 EMI) in exchange for accepting slightly higher cost to service their loan
e. Providing a term loan combined with an overdraft facility of up to 10% of the term loan

f. A line of credit / overdraft that can be accessed in times of high expected/predictable cash flow constraints
g. Facility for short term (1 week or 1 month) top-up loan to households to tide over cash flow mismatches
h. Borrower-segmentation based moratoriums
i. Portfolio insurance that will pay for 1 repayment holiday of the household's choice in return for a small fee for the flexibility
j. Features of flexibility can be made accessible to households where more than one member opts in to co-sign the loan documentation (co-borrowers)

Flexibility in repayment here fell into two broad buckets, one where the repayment schedule itself was drawn up (prior to loan disbursement) to ensure it matched with expected cashflows of the household, and two, where the fixed repayment schedule (equated monthly or weekly instalments) had one or more individual repayments left flexible for the borrower to decide how to repay. The latter is applicable to borrowers whose households face transient difficulties in making one or more repayments due to seasonal or unique cash flow volatility.

5. Supporting households to manage their cash flow shocks better through built-in protections

Cash flow shocks can have material impact on the ability to repay their loans as originally envisaged. Therefore, this theme focused on protecting these cash flows from shocks through the selling of insurance against the value of income-earning assets such as human capital, medical exigencies, livestock insurance, insurance against fire and theft for the shop and inventories, crop insurance, and other forms of insurance tailor-made to specific occupation types. Once one level of protection is in place, the lender can then consider flexibility in loan repayments for those events that do not get covered under such insurance contracts. For term loans, life insurance and critical illness cover were considered as important.

6. Supporting households to manage periods of surplus cashflows through savings instruments linked to the microcredit loan

Household cashflows have both peaks and troughs, and discussions focussed overwhelmingly on the troughs for households with borderline DSC. However, there were smaller sets of ideas around what providers can do to help households manage their peak cash flows. These ranged from offering liquid savings products that can be used to shore up extra cash in a safe place, physically away from the household. Recurring deposits were acknowledged by participants to be unsuitable for investment products for households with irregular income flows. Another idea was to consider requiring borderline DSC households to engage in a 'forced/ commitment' savings product for a specific period of time after which the household becomes eligible for the loan. This is based on the premise that the buffer built by the savings can be used to tide over periods of cashflow stress for the household. Products that would help households save at times of surplus, and then tap into those savings during times of deficit, would help households manage their own repayments without relying on special repayment features.

7. Other process-level improvements that participants came up with include:
    a. Creating fund/trust for restricting interest rate
    b. Processes that require lenders to alert credit bureaus about borderline DSC households for existing loans
    c. Processes that effectively prevent cross-selling of unsuitable products

d. Processes that optimize groups composition by combining borderline DSC borrowers with surplus DSC borrowers by providing an option to borrowers to opt-out of self-selection of JLG group members
e. Offer shorter duration loan

Theme B: Product-Based Solution

Product design-based solutions primarily revolved around combining pre-existing products to create new, more robust products. One of the solutions was to combine a standard JLG loan with an overdraft facility. Another included combining the borrowing of a loan with the saving of a savings account. Additional ideas are listed below:

a. Refinance of existing high cost and/or tenure mismatched loans with lower cost cash-flow matched loans
b. Lending based on setting a comprehensive and flexible borrowing limit for the household from which the household can borrow as required
c. Debt consolidation product
d. Hybrid risk-sharing product that has a loan and equity component, with the equity comprising of about 20% of total loan

Theme C: Miscellaneous Solutions

These include services for the customers, either provided by microcredit institutions or by third party providers, such as

a. Debt counselling services for debt restructuring, debt consolidation and for improving credit scores of household members
b. Broking business for swapping of existing loans
c. Business consulting and mentorship services for households interested in setting up new or expanding existing businesses, that also track periodic assessment of progress

Section VI: Conclusion

This Workshop brought together CEOs and members of the senior management of a set of microfinance institutions, and representatives from MFIN, the self-regulatory organisation of the microfinance industry, and us researchers who are working in debt affordability and suitability in microfinance. Showcasing evidence of households over-indebted with unaffordable levels of loans, including in a large part by microfinance loans, was used as a precursor to having active discussions among the participants on how to operationalise suitability in microcredit. The infusion of context through existing policy across jurisdictions, as well as routes through which the assessments could be conducted, further aided the participants' understanding of a possible way forward. The solutions and ideas that the Workshop threw up are therefore a good first-step in addressing the issue of suitability assessments, as well as in setting the tone for future discussions on the same.