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Exploring the Phenomenon of Debt Distress and Possible Solutions

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4.1. INTRODUCTION

The microfinance sector has been facing several challenges, particularly around debt distress and over-indebtedness, which are raising concerns among regulators and providers alike. Once envisioned as a tool for poverty alleviation and a bridge to formal finance, microfinance has become a permanent and significant fixture in the financial lives of many borrowers, especially those from low-income backgrounds. These concerns are not new. Before the pandemic, signs of overheating were observed in eastern India, and prior to that, there was a crisis in Andhra Pradesh.

This chapter explores the phenomenon of debt distress from two perspectives. Section 4.2 presents the supply-side view or the provider's perspective, which is familiar to most industry stakeholders. Therefore, this discussion has been kept short. Section 4.3 focuses on the demand-side view or the borrower's perspective, which is less well understood. Our primary contribution is to explain this perspective in detail. In section 4.4, we identify solution pathways and make our second key contribution, reframing the problem of debt distress as a cultural phenomenon rather than an economic or technocratic one. Overall, the chapter emphasises the realities of the sector that create a feedback loop, where lenders are incentivised to over-lend and borrowers to over-borrow, until crisis intervenes as a necessary and often tragic correction.

4.2. THE SUPPLY-SIDE PERSPECTIVE

In recent quarters, the microfinance sector has witnessed an increase in delinquencies. Non-performing assets (NPAs) increased by 26 basis points, from a post-COVID low of 0.9% in September 2023 to 1.16% in March 2024.[1] Further, the proactive increase in provisioning by providers[2] indicates they are expecting turbulence in loan repayments, acknowledging a decline in borrowers' ability to repay. The data for first quarter (Q1) of financial year (FY) 2025 paints a grim picture. During this period, both PAR 61–90[3] and PAR 91–179[4] increased by 30 basis points.[5] For some microfinance providers, like Fusion Microfinance Institution (MFI) and Evangelical Social Action Forum (ESAF) Small Finance Bank (SFB), Non Performing Assets (NPAs) increased by over 250 basis points and 185 basis points, respectively.

This rise in delinquency, especially in Q1 of FY 2025, is often explained by three factors — heatwaves, elections and promises of loan waivers. If we go back just five years, the same factors were also present. The summer of 2019 broke many records; it also had an ongoing election along with associated promises like loan waivers. However, Q1 of FY 2020 neither showed a decline in disbursement (rather it grew by 7.28% quarter on quarter [QoQ] in Q1 of FY 2020[6] compared to a decline of 36% in Q1 of FY 2025[7]) nor a dip in portfolio quality (NPAs *declined* from 0.45% to 0.4% QoQ in Q1 of FY 2020[8]). Thus, it is unlikely that heatwaves, elections and loan waivers completely explain the state of the industry. To understand this rise in delinquency, it will help to examine the growth strategy of the microfinance industry.

For MFIs, there are two levers of growth—an increase in the client base and a rise in the amount lent. The number of unique microfinance clients has increased by only 24.3% between July 2019 and March 2024. On the other hand, the industry's assets have doubled over the same period.[10] Over the past five years, the growth has predominantly been

in terms of higher disbursements. Often, industry participants construe higher disbursements as simply more loans per customer, which has made the average number of loans per customer a key indicator. What remains amiss in the narrative, however, is the possibility of larger loan amounts. The state of Tamil Nadu is a good candidate for exploring this phenomenon.

According to Sa-Dhan's *Quarterly Microfinance Report,* as of March 2024, the number of loan accounts in Tamil Nadu stood at 17.02 million compared to 17.2 million as of March 2022. Despite the decline in loan accounts, the average loan outstanding increased from 349.5 billion in March 2022 to 529.1 billion in March 2024. The state ranked second, among all states, in terms of the number of loan accounts, number of unique borrowers, amount of loan outstanding and amount of loan disbursements. Tamil Nadu has also emerged among the top 10 states based on average ticket size, reaching ₹53,555 as of March 2024—an 8% increase from the previous year. This is a significant jump, given that Tamil Nadu was not even among the top 10 states for this metric prior to March 2022. The situation is not so different in other states. Almost everywhere, the growth strategy has resulted in a higher loan burden per borrower, which is the necessary precursor to debt distress. This strategy of focusing on growing loans instead of the borrower base originates in supply-side realities.

It is a common practice for borrowers to borrow from one MFI to repay another, and then borrow from another to repay the second lender, and so on. Though such churning can be inferred from the credit reports, aggregate indicators, like the average number of loans outstanding, do not capture churning.[11] We discuss churning in greater detail in section 4.3. Still, the phenomenon results in a false sense of security for the providers, thus incentivising further growth of their asset book. Further, despite the best efforts of the industry, creditworthiness assessments remain notoriously unreliable. Assessing income, given most MFI borrowers tend to have informal employment, is an arduous task. Moreover, most financial services providers update the credit bureaus monthly, so capturing the true extent of formal-sector indebtedness (let alone the informal sector) is also difficult. Thus, even if a provider decides not to over-lend, they seldom have the tools to execute such a plan reliably.

Most of these supply-side hurdles are well-documented through previous research and industry reports. Some of Dvara Research's past work has focused on bringing these realities of the sector to the forefront. However, attempting to understand debt distress from only one side of the market is like attempting to clap with one hand. In section 4.3, we therefore turn to the borrower's perspective.

4.3. THE DEMAND-SIDE PERSPECTIVE

In a number of papers (2013, 2012, 2011), Jessica Schicks points out that the supply-side perspective offers an incomplete picture of debt distress because it fails to disclose the struggles that borrowers endure even while they continue to repay their loans. That is, borrowers may experience distress, even if high repayment rates would suggest that microfinance is an enviable industry to enter. Indeed, taking high repayment rates as a signal that *all is good* might cause lenders to double down on credit disbursement, even to distressed borrowers, thereby further squeezing and impoverishing them, while driving not-yet distressed borrowers towards the edge of over-indebtedness. When, finally, repayment rates begin to systematically falter, because distressed borrowers are no longer able to bear the suffering that their desperate strategies to repay inflict upon them, then and only then the lender's perspective signals that something is wrong. By then, however, the condition of distressed borrowers might have driven them to take extreme measures, even suicide.

Schicks, therefore argues that the borrower's perspective on debt distress must adopt a customer-protection orientation. In taking this view, she reveals several aspects of how the microfinance industry functions to be much more ambiguous than they may appear at first glance. For instance, the belief that competition on the lending side would be enough to prevent debt distress is shown to be misplaced. Much depends on whether that competition is elevating the standards of credit assessment or worsening them, because both outcomes are possible under different enabling conditions of regulation and supervision.

Similarly, with regard to consumption loans, she writes:

> ***…. loans used for consumption purposes have been identified as a source of over-indebtedness as these loans do not provide debtors with returns for repayment (Vogelgesang, 2003). This argument, however, should be treated with caution: first, as money is fungible and a distinction rarely exists between household and micro-***

enterprise cash flows, many microloans are used for household purposes. Second, distinguishing between consumption and production loan use can be difficult, as in the example of educational expenses (Collins, 2008). Third, theory is gradually moving away from a micro-enterprise approach to a household finance approach. The latter considers the benefits of microfinance to be in short-term consumption smoothing and managing the risks of low and volatile incomes (Collins et al., 2009; Karlan & Zinman, 2009). Therefore, the use of finance for consumption can be both a cause of and protection from over-indebtedness (Schicks, 2013).

Schicks' work makes two other important contributions to our understanding of debt distress from a borrower's perspective.

First, she provides us with a meaningful definition of debt distress as experienced by the borrower. After considering several scholarly definitions that span the space of different binaries (e.g. quantitative-qualitative, objective-subjective, etc.), she settles on the work of scholars such as Guerin et al. (2009 and 2011) and Lusardi and Tufano (2009), which rely on self-reported data as better indicators of debt distress than external data such as arrears or debt-income ratios.[12] Further, she insists that a proper definition of debt distress should clearly specify what the borrower is to be protected from, which she concludes should be 'unduly high sacrifices' where 'unduly high' is taken to mean 'unacceptable to the borrower' and is therefore a judgment that, she suggests, is best left to borrowers themselves. This then suggests a sacrificed-based definition of debt distress that precludes strategic default or the deliberate accumulation of unsustainable amounts of debt. In other words, Schicks believes that her definition is able to tease out the borrower's intentions, insofar as debt distress is defined as a condition that the borrower does not intend for themselves.

Second, Schicks provides a number of reasons, also from a borrower's perspective, for the emergence of debt distress as defined above. All of these reasons share a common characteristic—they are all honest mistakes of some form or another, as when socio-demographic or economic pressures combined with the lack of perfect information as well as some deficiency of rational thinking, leads to borrowing that is later found to be too much, and yet repayment must continue so as to not be excluded from credit markets permanently, and this activates the spiral of ever more severe sacrifices.

There is much to commend in Schicks' pioneering work and much of Dvara Research's work on debt distress, as we shall soon see, is inspired by it. Yet, in operationalising Schicks' definition of debt distress, it becomes impossible to escape the self-referential nature of her definition. For if an unduly high sacrifice is whatever the borrower thinks it to be, then one cannot logically insist that the borrower is not intending their condition of debt distress. Thus, some objective standard is needed as to which self-reported sacrifices should be deemed severe and which ones not.[13] Once that is in place, Schicks' definition provides a truly independent measure of debt distress from those that the lender's side typically focus on.[14]

There is another problem with Schicks' work and this has to do with the reasons she offers for the emergence of debt distress. Since the borrower's intentions are thought to be non-incriminating, it would appear that the policymaker who is concerned about debt distress has no recourse except to insist that the lender carry the burden of ensuring that borrowers are not making unduly high sacrifices to repay their debts. Yet, it may be argued that borrowers have a responsibility as well. We take up this question for brief consideration later in this section, and more fully in section 4.4, where we discuss possible pathways for minimising debt distress.[15]

With the above conceptual discussion in place, we proceed to examine the contemporary evidence for debt distress in India from a borrower's perspective. At the lowest resolution, we have the Centre for Monitoring the Indian Economy (CMIE)'s Consumer Pyramids Household Survey (CPHS) dataset, which collects data on a panel of about 170,000 households thrice a year and goes back to 2014. This data offers a low-resolution picture since it does not burrow down to the level of self-reported sacrifices. Therefore, it does not allow us to measure debt distress according to Schicks' criterion. Nevertheless, we may get a sense of prevailing distress by asking what proportion of households in the dataset admitted to borrowing in order to repay previous borrowings. This action, called churning of loans, is a reasonable indicator that the household is finding it difficult to make regular repayments on its existing loans. Between January 2021 and September 2023,[16] this number increased from 11% to 17%.

Among those who were borrowing to repay in September 2023, about 65% were borrowing from

self help groups (SHGs) while about 15% were borrowing from relatives and friends. In other words, the 6-percentage point increase in the proportion of households churning loans does not appear to implicate the microfinance industry as primary facilitators of the churning. Indeed, September 2023 data shows that only 3% of households borrowing from MFIs were borrowing to repay previous borrowings. Nevertheless, the increase in the proportion of households churning loans may well implicate microcredit as the *reason* for churning since a much higher proportion of households in the higher income quintiles[17] were churning loans (for e.g. 16% in quintile 3 and 28% in quintile 4, as opposed to 4% in quintile 1 and 8% in quintile 2, as of September 2023), and it is the higher quintiles that are more extensively served by microfinance. In fact, the proportion of households that were borrowing to repay increased in every quintile between January 2021 and September 2023, with the largest percentage point increases occurring for quintiles 4 (9 percentage points) and 5 (11 percentage points).[18] It is also the case that higher-income quintiles are more likely to have SHG borrowings.

In recent months, some commentary on the incidence of debt distress has appeared on social media websites such as LinkedIn. Much of this commentary also focuses on low-resolution measures of debt distress that do not capture the borrower's perspective.[19] We therefore refrain from citing these data here. Instead, we turn to two pieces of work that specifically focus on sacrifices that borrowers had to or have to make to repay their debts.

The first of these is Guerin *et al.* (2024) which reports the results of a study conducted under the auspices of the French Institute of Pondicherry (IFP) between 2020 and 2022 among select households across three villages in the three adjacent districts of Villupuram, Kallakurichi and Cuddalore of Tamil Nadu. The study consisted of two parts—a qualitative longitudinal component involving repeated interviews with 55 households and a one-time quantitative survey covering more than 400 households.

For the IFP sample, average debt outstanding per household was ₹217,000 (approximately, ₹43,400 per household member, assuming a household of size 5). This amounted to an average debt-to-income ratio of 179%, reaching as high as 211% for some borrower segments. As the authors describe, Covid-19 exacerbated indebtedness and caused households to undertake various strategies that included sacrifices:

> ***While most households were already heavily indebted before the lockdown, nearly a third (32%) had no choice but to go further into debt and/or pledge assets (41%) to cope with falling incomes and repayment pressures. Other coping mechanisms included using ration shops, which most households used (82%), saving (66%), reducing non-food expenses (32%), asking neighbours for help (25%), eating less (22%), collecting wild vege¬tables (17%), receiving remittances (13%), or sharing food or employment (7%) (Guerin et al., 2024).***

At the end of the first lockdown (June 2020), 21.6% of the sample had faced significant food insecurity, in the form of smaller meals (18.8%), fewer meals (15.1%) and lack of variety (22.4%). 11.6% reported going to sleep hungry, while 8% reported a whole day and night without food. The authors argue persuasively that much of the blame for food insecurity can be laid at the doors of debt distress, thereby directly validating the Schicks method of measuring distress; provided we can agree that a coping strategy that creates food insecurity represents, in an objective sense, an unacceptable sacrifice, while the numbers who undertook such strategies represent the scale of such sacrifices. Indeed, the authors of the report describe food insecurity among their sample during Covid-19 as being 'severe'.

The second piece of work is an extensive field study conducted by Dvara Research during the summer of 2024 among more than 1,100 customers of a large non-bank financial company (NBFC) in the states of Tamil Nadu and Odisha. The states were chosen due to the greater presence of the NBFC in these locations. To increase geographical spread, sampling was conducted from three districts in each state (Ariyalur, Pudukottai and Thanjavur in Tamil Nadu, and Jajpur, Dhenkanal and Bhadrak in Odisha). A total of 1,142 interviews were conducted, of which 482 were conducted over the telephone and 642 were conducted in person. Alongside questions about income, assets and outstanding loans, interviewees were also asked about how they perceived their debt burden, what coping strategies they were employing for repayment, what shocks they had experienced and how they viewed their financial wellbeing. Researchers allowed interviewees to choose from 8 different coping strategies—depleting savings, working more than usual, postponing planned expenses, skipping

festival celebrations, pulling children out of school, foregoing medical expenses, selling or pawning assets and borrowing to repay. Of these, the first four were classified as 'mild' coping strategies while the last four were classified as 'severe' coping strategies. Interviewees were also asked to report the frequency at which they adopt these coping strategies.

Before we present the results, it is worth noting that the features of the Dvara Research study allow one to construct a picture of distress that includes the Schicks definition and also goes beyond it. To understand how, consider that the label 'coping strategies' is preferred over 'repayment strategies' since the interviewees were not presented with the most obvious option for debt repayment, which would be to repay out of an income stream. This omission was deliberate so as to include only those repayment strategies that would signal some level of distress. Yet, this level of distress may not satisfy an objective standard of requiring unacceptable sacrifices. For instance, it is possible to regard none of the mild coping strategies as amounting to an unacceptable sacrifice—unless, of course, one asks the borrower, which Schicks would recommend. However, asking the borrower's opinion would land us in a quandary because, as stated earlier, it is no longer possible to then cleanly separate out those situations of debt distress that are truly unintentional. Thus, it is possible that the borrower knew, at the time of taking a loan that repaying it would mean working more hours than usual. Then, the coping strategy of working more hours than usual is really a repayment strategy and there is no distress as such to be coped with.

The above discussion implies that the intentionality or non-intentionality of a particular instance of repayment difficulty can only be arbitrated in one of two ways—either through an objective definition of which coping strategies amount to unacceptable sacrifices, or through the notion or conceptual device of radical uncertainty that intervenes decisively in any intended plans to repay, after the loan is taken.[20] We assume that these are mutually exclusive conceptual pathways, even if in practice they may both be implicated in any particular instance of repayment difficulty. Given this conceptual partitioning, only in the latter case of radical uncertainty can the borrower be absolved, at least conceptually, of their own responsibility for debt distress. In the former case, the borrower may still be reasonably expected to bear a part of the blame, even when the coping strategy amounts to an unacceptable sacrifice. This distinction matters when we are required to imagine solutions for the problem of debt distress. We will return to this point in section 4.4.

For now, we set aside this issue and presume that no objective standard exists as to what an unacceptable sacrifice could be. Nevertheless, it is still possible to categorise and differentiate coping strategies into mild and severe, as if an objective ranking of severity does exist, insofar as pulling one's children out of school can be objectively regarded as more severe than depleting one's savings. The survey results indicate that 72% of the respondents adopted only mild coping strategies, 18% adopted both mild and severe coping strategies, and 10% adopted only severe coping strategies. The debt-service ratios (debt-to-disposable income ratio, henceforth DSR) of these three groups were 66%, 69% and 128%, respectively, indicating that the DSR may well be a good correlate of debt distress. Further, many of those who adopted severe coping strategies did so quite frequently. For instance, 54% of the respondents who reported foregoing medical expenses characterise it as a strategy that they adopted very often or frequently. The same number for those borrowing to repay was 41%.

The DSR also correlated strongly with self-reported perceptions of indebtedness (on a rising numerical scale of 1–5). Yet, the questions related to financial wellbeing revealed that subjective states are not a very reliable indicator of distress, if distress is to mean a condition that extracts an unacceptable sacrifice. Thus, despite the fact that every household used at least one coping strategy during the study period, 53% of in-person respondents and 42% of telephonic respondents answered 'No' to (or disagreed with) the statement 'I am unable to enjoy life because I worry too much about money'. 85% of telephonic respondents answered 'Yes' to (or agreed with) the statement 'I will be able to achieve financial goals in life'. Certainly, very general questions about life satisfaction failed to elicit signals of distress. Out of 103 respondents with a DSR greater than 1, a full 79 reported feeling somewhat (72) or completely (7) satisfied with their lives.

Overall, the Dvara Research study makes it possible to define debt distress in a variety of different ways like self-reported level of indebtedness, low consumption, borrowing to repay, self-perceived burden from loans, self-reported repayment struggles, anticipation of future repayment difficulties, or adoption of coping strategies. It also points to the importance of collecting information on the kinds of shocks that borrowers have endured or are attempting to endure, since that may shed light on the question of whether a particular instance of

repayment difficulty was or is entirely unintentional. While only a few of the results of the study are presented above, we hope that the reader is able to appreciate why such a multi-pronged approach to distress measurement is necessary to obtain a comprehensive, albeit complicated, picture of over-indebtedness from the borrower's perspective.

4.4. POTENTIAL SOLUTION PATHWAYS

We will explore two possible solution pathways for addressing the phenomenon of debt distress. The first one will follow a conventional mode of thinking in so far as this pathway is quite popular in the policy discourse and among regulators and lenders. Even if conventional, this mode of thinking will allow us to showcase two pieces of Dvara Research's work that are quite new and therefore will be of natural interest to the reader. The other pathway requires a paradigm shift in our thinking itself and we will spend the better part of this section focusing on this second pathway.

4.4.1. The Conventional Approach

The problem framing here follows a familiar approach, considering three possible stages of the lending journey at which a solution to debt distress could be implemented. First is the credit-assessment stage, where the solution concept would seek to exclude borrowers who are either already distressed or at risk of becoming distressed if granted another loan. Second is the credit-use stage, after the loan has been disbursed, where the solution would focus on monitoring credit markets at various levels of detail to identify instances of debt distress. And third is the distress-alleviation stage, which involves addressing borrowers who have been identified as distressed, with the solution aiming to devise ways and means to alleviate their distress.

We may note that the first stage is of special (though not unique) interest to lenders. The second phase is of special (though not unique) interest to the regulators and supervisors. The third phase is of special (though not unique) interest to the insolvency authority, if there is one. As such, each of these stages has attracted special attention from the relevant stakeholder and has occasioned the publication of thought pieces, position papers, policy guidelines, etc. which the reader will most likely be quite familiar with already. For instance, it will not be news to the reader to hear that DSR is considered by lenders to be something of a gold standard in assessing credit repayment capacity, except in cases of new-to-credit customers where alternative credit scoring techniques are becoming increasingly popular. Similarly, it is well known that India's Insolvency and Bankruptcy Code has a significant, albeit not yet notified, part dealing with the resolution of personal insolvency. We will, therefore, not dwell on these aspects in this chapter, except to note that none of the existing literature that takes this conventional approach really adopts a borrower's perspective as outlined in the previous section.

Against this background, Dvara Research is attempting to make a unique contribution to the second stage of the lending journey by developing a debt distress detection tool that uses machine learning methods to predict distress on the basis of repayments data. The tool is joint work between Dvara Research and Indian Institute of Technology (IIT) Madras' Robert Bosch Centre for Data Science and Artificial Intelligence (RBCDSAI). This work is yet to be published, but we can report that it promises to be quite effective in identifying debt distress in the sense of borrowers facing repayment difficulties and employing severe coping strategies and it does this by studying administrative data (i.e., data collected in the course of normal business by lenders, or data that sits with credit bureaus), even if this data does not contain explicit information about coping strategies. In other words, the Dvara Research-IIT Madras tool is able to predict something that is not directly observed (i.e., debt distress) using information that is directly observed (i.e., repayments data). It is expected that once this tool is ready, not only lenders but also credit bureaus, self-regulatory organisations and even the regulators can benefit from its use, although it is worth remembering that because this is a machine learning tool it will need to be retrained from time to time so as to maintain a high standard of performance accuracy.

A second piece of work by Dvara Research that also contributes to the monitoring stage of the lending journey is now published and consists of a comprehensive framework for monitoring credit markets at various levels of resolution (Dvara Research, 2021). The framework articulates a long list of indicators classified into three types—market-level indicators, provider- or lender-level indicators and borrower-level indicators. Some of the information required to create these indicators is already being collected by the regulator, but not all of it, and the Dvara Research framework therefore lays out a plan for progressively bringing more and more information on-stream so that the full list of

indicators can be tracked on a regular basis by the regulator. The promise of the framework is that the full list of indicators will provide the regulator with a comprehensive picture of incipient distress across the length and breadth of the country, along with a host of other metrics that speak to the state of credit inclusion in India.

4.4.2. A New Paradigm

Any new paradigm deserves its own full chapter, but given space limitations, here we will try to sketch the broad contours and leave the rest for future writing. Our basic premise is that the search for solutions to the problem of debt distress may benefit from a reframing of debt distress as a cultural phenomenon rather than an economic or technocratic one. In order to make this argument, we first articulate what we mean, in generic terms, by the phrase 'cultural phenomenon'. Then, we show how solutions for policy problems can be imagined within a cultural frame. Finally, we show how the problem of debt distress can be put inside the frame for potential solutioning.

Culture[21] is any symbolic logic of meaning making shared by a group of people. Obvious examples are language, the arts, literature and religious beliefs. Less obvious examples are the mathematical methods of mainstream economics (which bind all who practice such methods in a common understanding of how to represent the world around them), or the tendency among certain sections of society to 'cancel' representatives of other sections from the public sphere (which again binds all who practice 'cancel culture' in a common understanding of what is appropriate behaviour or speech in the public sphere and what is not).

The basic unit of analysis when one is thinking of culture is the cultural trait,[22] which is a belief or behaviour or practice that is observable at either the individual level or the group level. All the examples cited above—a language, an art form, a literary genre, a religious belief, a certain method of academic inquiry—are cultural traits. Cultural traits can range from deeply embedded habits and practices, such as those prescribed by any of the world's ancient religions, to transient and fleeting ones such as fads and fashions. Thus, a cultural trait may have come down the ages from our ancestors, or it may have gained popularity recently because some well-known actor or cricketer publicly adopted and advocated it. In either case, the trait would have been transmitted through social learning, i.e., emulation and imitation of behaviour. The technical term for this kind of transmission is that it is phenotypical, as opposed to genetic.

Another important point to note is that the transmission of cultural traits is adaptive, in the sense that which traits get transmitted versus which ones do not have to do with which traits appear to favour greater survival or reproduction possibilities. Genetic transmission is also adaptive but genetic adaptation occurs very very slowly. Cultural transmission can occur much faster and different cultural traits can appear and disappear in a particular age cohort several times during a single lifetime. In particular, cultural traits that are transmitted via monetary exchange (for example, we see someone rich and famous spending their wealth in a certain way and we wish to emulate it) spread easily, but also disappear easily. This is precisely what advertising thrives on. On the other hand, cultural traits like religious practices or social structures, that have survived centuries of adaptive churn, are extremely difficult to shift. For example, think of the cultural practice of choosing auspicious dates from a lunar calendar for Hindu weddings—this is a centuries-old practice, if not millennia-old, and therefore highly resistant to change. Precisely because cultural transmission is adaptive in an evolutionary sense, understanding the history of a cultural trait is therefore a precondition for understanding the properties of the trait, including whether it can be shifted or not and with how much difficulty.

There are broadly two modes of dealing with culture as far as policymaking and policy research go. The first is to be wilfully culture-blind, which is to treat culture as a given, and not just as a given but also as a black box. That is, this mode does not really bother to understand how culture is influencing economic outcomes. Much of financial inclusion policymaking, we would argue, is of this kind. We can even go further. Much of public policy writ large is culture-blind, which is also why much of public policy writ commits several fundamental errors of judgment—for e.g., mistaking the particular for the universal, or mistaking monetary value for actual value, or mistaking explanatory power of a theory for predictive power of a theory. Adding culture consciously to the analytical toolbox corrects all these errors. Cultural context is what makes the particular 'particular'. Cultural logics of meaning can exceed monetary value. And finally, cultural differences between a specific time and space and another are what introduce conceptual distance between explanation and prediction.

A second approach to incorporating culture into policy and research is to study the cultural origins of the proximate behaviour one is seeking to understand and shift. One can then parse cultural traits into those which one should indeed take as given (say, because they have survived many decades, if not centuries, of adaptive churn) and those which one can hope to shift (say, because they are relatively more recent in historical origin). This last category holds the greatest promise for policy and research (and also for product design) because the shift can be expected to happen at the group level and not only at the individual level. That is, the problem of scale is partly solved by the design of the intervention itself and it is not a problem to be solved *after* a highly localised and individual-centred intervention is found to be successful.

Cultural evolutionary behavioural public policy (CEBPP)[24] is an emerging science of how such shifts in cultural traits may be encouraged to happen. The interventions typically must have three properties—they must be efficient, endogenous and legitimate. Muthukrishna writes:

> ***An intervention can be efficient by targeting only a subset of the population, and endogenous, because the goal is to trigger spillovers where most change happens beyond the campaign. This efficiency and endogeneity create legitimacy. Smaller, targeted campaigns are less like cultural assault from outsiders through persuasion or choice architecture and more like empowering a subset of individuals whose values spread through conformity (Muthukrishna, 2019).***

Thus, the subset for whom the intervention needs to happen, has to be chosen with great care and understanding of both the trait and its transmission dynamics. Once that subset's behaviour shifts, then one relies on endogenous cultural transmission beyond the site of intervention for scaling to occur. Note that this suggests that the logic of cultural intervention is quite a bit different from the logic of behavioural or literacy or any of the kinds of interventions that the method of randomised control trials focus on. From the very start, a cultural intervention is targeted at a very specific group whose change in behaviour can be expected to be copied via imitation and emulation. So the point is *not* to randomise.

With that conceptual background in place, let us now ask how does all of this matter for debt distress? A proper understanding of cultural traits can help us think of a 'credit culture' on both sides of the market. On the lender's side, any single lender cares little about the actual exposure of borrowers that it is lending to, and this spreads among the entire group of lenders through imitation so that it becomes a cultural trait on the supply side. On the borrower's side, any single borrower cares little about how much debt it is churning, and this spreads among the entire group of borrowers through imitation so that it becomes a cultural trait on the demand side. Both of these behaviours may have been adaptively appropriate at a certain stage of maturity of the credit cycle or the credit market, but in time, these behaviours can become maladaptive—insofar as they produce a situation with high levels of debt distress and potential failure of loan books en masse.

We note the following features of the credit cultures on the two sides of the credit market. On the lender's side, the culture is brought on by a tension of forces that lenders experience—the demand from the regulator of a healthy loan book and the demand from investors of growth. But that is not the complete picture. On the borrower's side, the culture is brought on by a tension of forces that borrowers experience—the necessity of repaying lest they become excluded from the market and the social pressures that typically give rise to conspicuous forms of consumption (that we might also call social consumption). But that too is not the complete picture. The reason that the picture is incomplete on each side is that on each side, it misses the reinforcing loop from the other side's culture. Once this is accounted for, then we see that the culture on each side feeds into and amplifies the culture on the other side, because the cultural trait of churning is enabled and accentuated by the cultural trait of inadequate credit assessment and vice versa. Indeed, not only do borrowers and lenders exhibit their respective cultural traits as described, but in some respects, they are compelled to do so because the credit culture on each side can also be given the interpretation of a 'social dilemma', where no one actor on each side has an incentive to deviate from the culture without causing damage to themselves, and yet on each side the group as a whole compromises its longevity in the market. This explains why it is appropriate to term these traits as maladaptive—they reduce group fitness, understood as survival probability of the group (lenders as one group, borrowers as another), over time.

Another way to appreciate our notion of a credit culture is to consider that when a lender takes on a new borrower despite knowing that the

borrower may be churning, then the lender does not internalise the externality that it is imposing on other lenders, since other lenders are also impacted by its decision to take on such a borrower. If it were to internalise the externality, then the lender would be unable to grow. As long as the perverse credit culture persists, the lender is incentivised to continue exhibiting the cultural trait. A similar argument may be made for the borrower's side, where there is an externality imposed by each borrower on other borrowers when the borrowing is for conspicuous consumption, thus necessitating churning at some point for the borrower and imposing a compulsion of churning on other borrowers. In each case, social pressure is the operative principle in action. That the cultural traits have economic implications (as the language of externalities makes clear) should not be surprising, but it is important to understand that the economic framing is incomplete, insofar as economic outcomes are downstream from culture.[26]

These kinds of social dilemmas are very difficult to solve using regulatory approaches which tinker with observable or measurable economic indicators. CEBPP, on the other hand, holds out some promise for solving them, because it goes beyond proximate behaviours to the ultimate or deeper causes of the problem. In accordance with the principles laid out earlier in this section, Dvara Research is working on developing an intervention that will seek to reduce the incidence of the cultural trait of loan churning. This, of course, presupposes that not only the lender but rather the borrower also bears some responsibility for the phenomenon of debt distress. It is our contention that this responsibility goes beyond the gaining of financial literacy or the elimination of cognitive biases—as some scholars, like Schicks, have proposed, and which amount to proximate framings of the problem—and consists instead of wilfully deviating from a cultural trait that may have been brought on by the advent of microfinance, and is therefore historically not too dated to be rigid and immutable. The reason for insisting on a definition of debt distress in the previous section that opens some room for the borrower to bear responsibility now becomes clear. It also opens both conceptual as well as practical space for a suitable solution on the borrower's side of the market.

We end this section on the hopeful note that Dvara Research's work will yield a meaningful pathway for reducing the phenomenon of debt distress, that has hitherto not been imagined and that is therefore fundamentally new, requiring a paradigm shift in one's thinking about the problem.

4.5. CONCLUSION

In this chapter, we have laid out, in some detail, a definition of debt distress from the borrower's perspective. This has allowed us to view the problem through a cultural lens, and opened the space for suggesting a cultural intervention on the borrower's side that might reduce the incidence of debt distress going forward. These are both novel contributions to the policy discourse on debt distress, and we hope that they will stimulate much discussion and debate among our readers.

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ENDNOTES

i Microfinance Industry Network (Aug, 2024), Micrometer Q1 FY 2024-25.

ii India Ratings and Research (Aug, 2024), Microfinance: MFI Borrowers Hit a Speed Bump; Course Correction Likely in Next One-to-Two Quarter.s

iii PAR 61-90 depicts the portfolio at risk (i.e., amount outstanding) that has not been repaid for over 60 days but less than 90 days.

iv PAR 91-179 depicts the portfolio at risk (i.e., amount outstanding) that has not been repaid for over 90 days but less than 180 days.

v Microfinance Industry Network (Aug, 2024), Micrometer Q1 FY 2024-25.

vi SIDBI (Aug, 2024), Microfinance Pulse Report (Volume XX).

vii Microfinance Industry Network (Aug, 2024), Micrometer Q1 FY 2024-25.

viii SIDBI (Aug, 2024), Microfinance Pulse Report (Volume XX).

ix SIDBI (Aug, 2024), Microfinance Pulse Report (Volume XX).

x SIDBI (Aug, 2024), Microfinance Pulse Report (Volume XX).

xi When a household borrows from one MFI to repay another MFI, it simultaneously creates a new loan and extinguishes another loan. For example, a borrower may borrow ₹50,000 to repay an outstanding of ₹30,000. So, the number of loan for the borrower remains virtually constant, since the credit bureau records are often updated monthly, and as long as the churning happens within the span of a month, the new loan does not lead to an increase in the number of loans for the borrower. However, indebtedness increases.

xii Guerin et al. (2009a, b) study India, while Lusardo and Tufano (2009) study the US. For the utility of self-reported measures in other contexts, see Gathergood and Guttman-Kenney (2016) who study the UK and Cifuentes and Martinez (2020) who study Chile. For how lender-side data fails to accurately predict debt distress in the UK, see Guttman-Kenney and Hunt (2017).

xiii Here, 'objective' does not mean context-independent or time-invariant – it just means a standard or measure that does not require for its validation the borrower's opinion about a particular coping strategy's acceptability.

xiv To be fair, Schicks (for example, in her 2013 paper) does offer an example of what she considers to be an unacceptable sacrifice, but then she reverts (in the same paper) to asserting the autonomy of the borrower in adjudicating this critical issue.

xv Once again, to be fair, Schicks (2013) does refer to literacy training for borrowers as one of many possible fixes, but she fails to elaborate on how such interventions might be scaled, and instead focuses much of her discussion of solutions on the lender's side of the problem. In section 4.4, we provide a slightly different framing of the problem on the borrower's side and this allows us to directly and explicitly address the issue of scaled interventions on the borrower's side.

xvi Complete data is available till September 2023 at the time of writing. Therefore, we stop our analysis at that date for the CMIE dataset.

xvii Households with average monthly income less than ₹12,855 are in quintile-1. The range for quintile-2 is ₹12,855 to ₹17,285. Quintile-3 spans average monthly income of ₹17,285 to ₹22,375. The range for quintile-4 is ₹22,375 to ₹30,103. Finally, households in quintile-5 have average monthly income greater than ₹30,103.

xviii We note that the maximum annual income among quintile-4 households in September 2023 was ₹3.6 lakhs

approximately, not much higher than the RBI's threshold of ₹3 lakhs as the annual income that would qualify a household for microfinance. The median annual income among quintile-5 households was ₹5 lakhs approximately.

xix See Agarwal (August 2024) for a typical example, in which debt distress is construed as any overstepping of the RBI's strictures, past as well as present, that mostly calibrate to quantitative thresholds that lenders can or should mark to.

xx Here, two clarifications are perhaps necessary. First, 'objective' here is used in the same sense as earlier in this ssection, as clarified in an earlier endnote. Second, 'radical uncertainty' here is taken to mean, simply, unanticipated large shocks–although it can also mean a much broader class of uncertainties that cannot be described using probabilistic language.

xxi There is a vast academic literature on culture from across disciplines. Here, we mostly rely on the anthropological definition of culture as articulated, for example, in Clifford Geertz's classic work, The Interpretation of Cultures (1973). For more recent treatments of culture, we rely on the work of scholars such as Joseph Henrich, Michael Muthukrishna, and Tim Waring. A good reference in this regard is Muthukrishna's recently published A Theory of Everyone (2023).

xxii Much of our conceptual discussion of cultural traits is informed by Muthukrishna's book, and many of his papers (2023, 2021a, 2021b, 2019).

xxiii See Efferson et al. (2019) and Waring et al. (2015) for examples.

xxiv Schimmelpfennig and Muthukrishna (2023) and Muthukrishna (2019) are key references.

xxv The classic text on social consumption is Thorstein Veblen's Theory of the Leisure Class (1899). Veblen's ideas were further developed by James Dusenberry as the 'demonstration effect' in Income, Saving and the Theory of Consumer Behaviour (1949). The importance of this phenomenon for microfinance customers is well explored in Guerin and Kumar (2019), Guerin (2014), Schicks (2013) and Guerin et al. (2011). The Guerin et al. (2024) study cited earlier reports that the majority of borrowings by the study's sample households were for 'social reproduction' purposes, such as ceremonies (accounting for 45% of borrowings) and social obligations such as receiving guests and helping others (accounting for another 28.6%).

xxvi Recent work by economists attests to this claim. See, for example, Squires (2024), Ghosh et al. (2023), Schulz (2022), Ashraf and Bandiera (2018) and Ashraf et al. (2014).