

Models of Microcredit Delivery and Social Norm

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Models of microcredit delivery have evolved considerably in Bangladesh since their inception in the mid-1970s. An important feature of this evolution is the gradual dilution of the disciplinary devices as well as incentive mechanisms that the MFIs used to employ in order to ensure regular repayment. An interesting conundrum of the current scenario is that despite the dilution of the erstwhile regime, repayment performance remains as strong as ever. This paper tries to investigate this conundrum, using borrowers' own perception of the evolving system, solicited through specially designed household surveys. Our findings suggest that the repayment performance has remained high mainly as a result of the emergence of a social norm in which people have come to accept that loans are meant to be repaid. This is a complete reversal of the earlier perception that loans, especially government loans, did not have to be repaid because eventually such loans would be written off. It can be argued, however, that this metamorphosis of social norm is by no means serendipitous; rather it owes itself to the sustained use of the disciplinary as well as incentive devices employed by the MFIs over the years. It is precisely because of the sustained use of these devices over many years that poor people have gradually formed the habit of regular repayment; and once a sufficiently large number of people acquired this habit, the erstwhile social norm of non-repayment was quickly replaced by the norm of repayment. With the emergence of the new norm, many of the devices traditionally employed by the MFIs to ensure regular repayment are becoming increasingly redundant, having served their historical purpose.

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I. INTRODUCTION

Models of microcredit delivery have evolved considerably in Bangladesh since their inception in the mid-1970s. The way the Microfinance Institutions (MFIs) interact with the borrowers and the terms and conditions under which they offer loan have evolved through a process of learning by doing. This evolution has at least two dimensions. First, whereas at the beginning there was one predominant model, the so-called Grameen model, there now exists a plethora of models, with varying degrees of resemblance to the original Grameen model. Second, even the Grameen model itself has not remained unchanged – it too has evolved significantly. Around the turn of the present century, a vastly modified Grameen II emerged to replace the original version.¹

An important feature of this two-pronged evolution is that many of the devices that the MFIs used to employ—either as an incentive mechanism or as a disciplinary device—to ensure sustainable lending at an affordable cost, have gradually become diluted. These mechanisms include joint liability system, peer pressure, peer support, weekly repayments, dynamic incentive, etc. As we shall see, many of these mechanisms are no longer applied in Bangladesh with the rigour of the past. And yet, the performance of the MFI sector has not suffered – in particular, the exceptionally high rate of repayment has been sustained on the whole, even as the reach of microcredit has expanded manifold.² This leads to an important question: was the earlier regime unnecessary? And if it was necessary, how is it that repayment rates have not suffered despite the dilution of erstwhile practices?

This is the question we investigate in this paper. We argue that the system of incentives and discipline that was practised in the early days may well have been necessary. It was necessary in order to overcome the problems of moral hazard, adverse selection and enforcement that could have undermined the viability of lending to the poor, without any collateral. However, many years of implementing this system has culminated in a situation where the system has essentially made itself redundant. This has happened because by ensuring that the borrowers keep on repaying with discipline, the system has induced a change in

¹Dowla and Barua (2006: 248-253) provide a detailed account of the transformation of the Grameen Bank's lending modalities into what has come to be known as Grameen II.

²In 2015, the latest year for which information is available, loan recovery rate was 98.6 percent for the microcredit sector as a whole (CDF 2016, Table 1.1.6, p.4).

social norm, in which people now repay out of sheer habit. The notion that “loans ought to be repaid because it is the right thing to do” has become the social norm, replacing an old one in which evading repayment was more of a norm. That’s how the microcredit sector has retained its financial viability despite the dilution of many incentive and disciplinary devices.

This is still a hypothesis, of course, but, if true, it could have far-reaching implications. It could have a bearing, for example, on the debate on the mode of regulating the microcredit sector, because a regulatory regime that is appropriate for a society where borrowers would naturally tend to default unless either forced or induced to behave differently must be different from one that rests on the premise that non-default is the norm. The hypothesis, therefore, needs to be tested. And Bangladesh happens to be the only country in the world where it can be tested at the moment as no other country has as long a history of microcredit and as much diversity in the mode of its delivery as does Bangladesh.

The hypothesis is tested in this paper primarily with the help of survey data supplemented by discussion with borrowers, MFIs and other practitioners associated with microcredit. Data from two related surveys have been used. First, we have drawn upon the second round of the panel survey for the project on the *Dynamics of Poverty in Rural Bangladesh* carried out by the Institute of Microfinance (InM) in Dhaka.³ This survey was carried out in 2013 and covers 6,219 households drawn from all over rural Bangladesh through a stratified random sampling procedure.⁴ This sample is representative of the rural population as a whole and includes both households who took microcredit and those who did not. Some 60 per cent of the sample households were found to have taken microcredit at some stage in life. This subset of households constitutes what we call the ‘main sample’ of borrowers. Second, we have taken a sub-sample of 900 households from the “main sample,” again by using a stratified random sampling procedure, and re-surveyed them in 2015 to gather more in-depth information about their experience of and opinion about the microcredit delivery system in Bangladesh. This latter survey is called the *Social Norm Survey* and the sample is referred to as the “small sample.”

The rest of the paper is organised as follows. Section II discusses the theoretical underpinnings of some of the practices that have traditionally been

³The Institute has now been renamed as the Institute of Inclusive Finance and Development, but it still retains the acronym InM.

⁴For detailed methodology of the survey, see Chapter 1 of Osmani (2015). The survey was carried out under the guidance and direct supervision of the present author who was a Visiting Fellow at InM at the time, and was leading the study on the *Dynamics of Poverty in Rural Bangladesh*.

associated with the delivery of microcredit – either as an incentive mechanism or as a disciplinary device. Section III examines the manner in which many of these mechanisms and devices have been evolving over time. Section IV tries to explain the conundrum that repayment rates have remained exceedingly high in Bangladesh despite the relaxation of many of the incentive mechanisms and disciplinary devices. Finally, section V offers some concluding observations.

II. THE EARLY SYSTEM OF INCENTIVES AND DISCIPLINE

Microcredit, as is well-known, has emerged to fill a vacuum in the credit market – to find a sustainable means of lending to the poor who were considered unbankable by the formal credit market. There were in fact good reasons why the formal-sector banks took that view. Credit market is characterised by a high degree of informational asymmetry – borrowers know much more about their own credit-worthiness than the lenders can ever hope to find out in a cost-effective way. A couple of consequences of such informational asymmetry are adverse selection and moral hazard. In the context of credit market, adverse selection means that banks could end up mainly with borrowers who are not really credit-worthy. Moral hazard, on the other hand, implies that once loans are taken, borrowers may behave in ways that may enhance their own expected benefits but at the cost of the banks' profitability. For example, a borrower might want to undertake projects that involve high risk but also offer the prospect of high return, or he might not put in as much effort as he ought to, knowing that if the project fails, he would not be penalized because the lender will never know whether he was reckless, or lazy, or just plain unlucky (asymmetric information). If lending is collateral-free, an additional reason for risky behaviour could be that the borrower cannot be punished beyond the value of his project output, which would be negligible in any case if the project fails (limited liability).

Banks try to combat these inherent problems of credit market in multiple ways. Two of the most important measures they take for this purpose are (a) a thorough evaluation of loan proposals and (b) asking for collaterals that can be seized from the borrowers in case of default. Neither of the two measures is feasible, however, in the case of poor borrowers: the small amount of loans they would normally take will render the standard forms of loan appraisal cost-ineffective, and they have hardly any collateral to offer. Unsurprisingly, the poor have been considered unbankable by the formal-sector banks.

There was a time, long before microcredit came on to the stage, when loans were disbursed to the poor mainly by government agencies under various schemes, and more often than not those loans were written off for political reasons. Even in normal times, there was no rigorous method for ensuring loan

repayment. As a result, government agencies delivering credit to the poor almost invariably incurred losses year after year, only to be kept alive by a continuous injection of subsidies. More fundamentally, this experience with government-sponsored credit schemes had created the common perception that loans did not have to be repaid; loan default had become the social norm. This posed a serious problem for other prospective lenders – namely, the problem of enforcement, which means that borrowers may not be willing to repay the loan even when they have the means to do so (also known as the problem of *ex post* moral hazard or strategic default).

This is the environment in which microcredit emerged. Like other lenders, MFIs too had to confront the reality of asymmetric information and the consequent problems of adverse selection and moral hazard. They also had to confront the enforcement problem stemming from a culture of loan default, and had to find ways of dealing with it. But they also had to accept the reality that undertaking rigorous loan appraisal and asking for collateral were not feasible options while lending to the poor. One way or the other, however, these problems had to be avoided if lending to the poor were to be a sustainable proposition.

The genius of the pioneers of microcredit is that they managed to discover innovative ways of overcoming the age-old problems of asymmetric information and enforcement, accentuated by the culture of default. The terms and conditions that the MFIs imposed were part and parcel of that innovation. Some of these conditions acted as incentive mechanisms and some as disciplinary devices; but both were designed to minimise the occurrence of either moral hazard or adverse selection or the enforcement problem, and thereby ensure a high degree of loan repayment, which was essential for sustainable lending.

At the core of the delivery system developed by the MFIs was the practice of group formation. Borrowers were required to form small groups before applying for loan, with the condition that while each member could take loan individually and could use it for his/her own purpose, a kind of joint liability would work – in the sense that if any one member defaulted, others would be denied loan. The group-based system, coupled with joint liability, was potentially capable of offering an array of mechanisms for confronting the problems of asymmetric information and enforcement.

First, it provided a convenient method for avoiding adverse selection in an environment of asymmetric information. The mechanism involved in this case was that of peer selection. Since villagers living close together would know each other pretty well, they would be able to identify less credit-worthy individuals at little or no cost and would deliberately exclude them at the stage of group formation in order to ensure their own eligibility for loans, thus averting the

problem of adverse selection. In the theoretical literature, the idea of “assortative matching” has been invoked to draw out this implication of group-based lending with joint liability. It has been shown that under plausible conditions the system will induce borrowers to form groups only with those who are of the same type in terms of riskiness and other aspects of credit-worthiness (Ghatak 1999, 2000). An important precondition for this mechanism to work is that the potential borrowers should possess enough social capital in the form of inside knowledge about each other. The densely populated rural society of Bangladesh, in which families in the same village are often inter-linked with each other in multiple ways, through kinship, marriage, and economic transactions, offers an ideal scenario for this precondition to hold.

Second, the group-based system with joint liability should also help avoid the problem of both *ex ante* moral hazard (embodied, for example, in the choice of highly risky projects, or inadequate effort) and *ex post* moral hazard i.e. enforcement problem stemming from strategic default. The central mechanism in this case is peer pressure. The idea is that in order to avoid the joint liability penalty, members of a group would exert pressure on each other so that no one engages in behaviour that involves moral hazard, of either kind (Stiglitz 1990, Besley and Coate 1995). The theoretical literature recognises that the existence of joint liability will not necessarily lead to the exertion of peer pressure, especially if the act of monitoring each other turns out to be a costly affair (Besley and Coate 1995, Madajewicz 2011). The expectation, however, is that if the group size is kept small and the members of a group are drawn from a closely-knit social network, the cost of monitoring would be small enough to make peer pressure work. The existence of social capital, which, as argued above, creates a favourable environment for the mechanism of peer selection to work, should also allow the mechanism of peer pressure to function well with minimal monitoring cost.

Third, in contrast to the mechanisms of peer selection and peer pressure, which rely on some kind of adversarial relationship among the borrowers, there is another aspect of group lending that assumes fundamentally co-operative behaviour that is supposed to make the microcredit model viable. This aspect refers to the enforcement problem that arises when some borrowers might fail to repay, not out of wilful or strategic default, but because of a genuine failure in their income flow to match their commitment to repay. In this case, the groups can play a mutually supportive role, whereby members help each other out in hard times. This peer support aspect of group lending has been emphasized by theories dealing with enforcement problem in an environment of asymmetric information (e.g., Rashid and Townsend 1992). In these theories, group lending

is viewed as a mechanism for strengthening the bonds of mutual insurance among the borrowers.

Informal mutual insurance mechanisms of one kind or another have existed in traditional societies for centuries. Recently, these mechanisms have come under intense theoretical and empirical scrutiny. There is by now quite a strong body of empirical evidence which shows that, just like the informal credit market, the informal insurance mechanisms too do not work very well, and for much the same reasons: viz., informational asymmetries and enforcement problems.⁵ In the face of systemic shocks, which afflict a large swathe of the population at the same time, mutual insurance is not expected to work in any case. But even in the case of idiosyncratic shocks, where the scope for mutual insurance is evidently high, the optimal amount of insurance is not generally provided. The reason lies in the problem of free riding that is created by asymmetry of information and limitations of enforcement mechanisms that existed even in traditional societies.

Group lending based on joint liability can improve upon this situation by giving borrowers an incentive to offer insurance to the peers who need it. Group members would provide insurance to each other knowing that offering support to the peers who have fallen into hard times would entitle themselves to receive support from the peers when they are themselves in trouble. The result would be a simultaneous improvement in the insurance market and in the credit market. Indeed, improvement on the insurance front would be the reason for improvement on the credit front, making it possible to ensure smooth repayment despite occasional hardships of some members. The group lending system is thus supposed to enhance the viability of microcredit through the peer support mechanism. Once again, social capital has an important role to play here. A pre-existing condition of social capital in which members are deeply familiar with each other's circumstances and are sympathetically predisposed to each other can be of great help in enabling the peer support mechanism to function well.

Fourth, yet another feature of microcredit that has recently come under theoretical spotlight is the system of frequent repayment in small instalments. The system of weekly repayments has been almost a ubiquitous feature of microcredit delivery models in Bangladesh and elsewhere. Although monthly and even longer repayment periods are becoming more common these days, frequent repayment in small amounts still remains a distinguishing feature of microcredit as compared with other sources of lending. Theorists have argued that this

⁵See, *inter alia*, the collection of papers in Dercon (2005), and the survey article by Fafchamps (2011).

institution has served to mitigate the enforcement problem by enabling poor people to save enough to repay at regular intervals. This line of argument is based on the premise that poor people find it particularly difficult to save. One reason for this difficulty lies in the absence of appropriate savings instruments, which is especially true in rural areas. But there is also a more fundamental, psychological, reason. Recent advances in behavioural economics have shown that people may find it difficult to save because of what has come to be known as present-biased preferences. This simply means that, even though people might want to save because they value future consumption highly, they may still fail to do so as they give in to the temptation to consume more at present (Banerjee and Mullainathan 2010). This tension between what people would rationally like to do and what they actually end up doing is sometimes depicted as a conflict between a patient “future self” and an impatient “present self.”⁶

An implication of present-biased preferences is that people would find it hard to save unless a way is found to commit them to saving – an idea that has been christened as “commitment savings.” In reality, instruments of “commitment savings” are quite rare. From this perspective, microcredit can be seen as filling a gap in the financial market by providing a device for making “commitment savings” through the institution of frequent repayment. Having borrowed from a microcredit lender, a borrower is committed to make frequent repayments in small amounts, usually every week. The commitment to repay and the small amount they are required to save at a time together enable poor borrowers to overcome the temptation to consume too much at present than they would rationally like to do.⁷ The founding father of microcredit, Professor Yunus, had no doubt that this was precisely what the feature of weekly repayment was meant to achieve: “Borrowers find this incremental process easier than having to accumulate money to pay a lump sum...” because it is “...hard to take a huge wad of bills out of one’s pocket and pay the lender. There is enormous temptation from one’s family to use that money to meet immediate consumption needs.” (Yunus 2003: 114.) The practice of frequent repayment in small amounts can thus be seen as a highly effective disciplinary device that enhances the viability of microcredit by ensuring smooth repayment.

Fifth, most MFIs offer a system of dynamic incentive to avert the possibility of non-repayment that can arise due to both *ex ante* and *ex post* moral hazard. The incentive consists in the condition that a borrower would be entitled to

⁶Laibson (1997) has captured this tension formally as a system of inter-temporal preferences that exhibits “hyperbolic” time discounting instead of linear discounting as assumed in standard models of inter-temporal choice.

⁷For evidence on this claim, see Bauer, Chytilova and Morduch 2012).

receive loans in the future – perhaps on a bigger scale – only if they repay the previous loans in time. If the loan transaction were a one-shot affair, the lender would find it hard to ensure repayment, especially when a culture of default prevails. However, if we allow for repeated transactions, the lender can then threaten not to offer loans in the future in case the borrower defaults. If this threat is credible and the borrower values the availability of future loan sufficiently, it may be possible to devise a credit contract that induces the borrower not to default.⁸

One potential problem is that the threat may not work because the borrower might have access to other lenders to fall back upon if the first lender cuts her off. While this possibility cannot be denied, access to other lenders will not necessarily render the threat from the first lender completely toothless. After all, if a borrower defaults to one lender, her reputation would be sullied, which may make her access to other lenders more difficult – in particular, she may have to accept more onerous terms and conditions than she would have otherwise received. Default may thus have a real cost for the borrower, even if she has access to other lenders.

It is this cost of default that could make denial of future loan a credible threat. There remains a deeper problem, however, which may render the threat useless even if the borrower does not have access to other lenders. This has to do with a point first made by Bulow and Rogoff (1989) writing in the context of sovereign lending, but it has serious implications for all models involving denial of future credit. They show that if the borrower can save at the same rate as the lender, then credit denial is useless as a means of ensuring loan repayment. The reason is simple: rather than repay one dollar today to obtain a future loan, the borrower would rather just save the dollar and effectively self-finance the promised future loan. This argument implies that if the threat of denial of future credit has to have any deterrence power, some other conditions must be satisfied. A couple of such conditions sound plausible. The borrower's credit needs may increase over time, in which case recycling the defaulted loan will not suffice. Alternatively (or additionally), the borrower could find it hard to save and may find borrowing easier than saving because of time-inconsistent preferences, discussed above.

Sixth, the MFIs generally require the borrowers to attend weekly meetings in which loan officers collect loans in a publicly transparent manner. The impact of

⁸See Chowdhury (2005, 2007) for theoretical exploration of how this incentive system works.

this condition on the viability of microcredit is two-fold. On the one hand, it helps reduce the transaction cost of lending in a system that is inherently laden with a high transaction cost because of the lenders' commitment to go to the borrowers instead of expecting the borrowers to come to them. No less importantly, it is expected to improve the rate of repayment by exposing the prospective defaulters to public shame. Anyone failing to repay loans would then have to endure the ignominy of being identified as a defaulter in a public forum. The prospect of such ignominy is expected to deter non-repayment on account of both *ex ante* and *ex post* moral hazard.

These, and other measures of discipline and incentive together constituted a model of loan delivery that for many years has successfully dealt with the problem of asymmetric information and enforcement even without the support of rigorous loan appraisal and tangible collateral. The success of the model is evident from the fact that poor borrowers have maintained an impressively high record of repayment year after year even as the reach of MFIs expanded rapidly.

Over time, however, most of the original conditions have been relaxed to varying degrees. Most MFIs are increasingly moving away from the idea of joint liability, and that includes the Grameen Bank itself, which first implemented the idea in a systematic manner. Individual loans, based on individual liability, are becoming increasingly common. The requirement of group meetings in which loans are repaid in public, has also been dispensed with in many cases. Even the discipline of weekly repayment is giving way to more flexible repayment schedules.

And yet, the system of microcredit has not collapsed; on the contrary, its expansion continues unabated without any significant decline in repayment rates. The question that naturally arises is: what is keeping the spectres of adverse selection, moral hazard and enforcement problem at bay now that the very institutions that were supposed to keep them at bay are being dismantled one by one? The hypothesis that is being advanced in this paper to answer this question involves the idea of changing social norm. The hypothesis is that as a result of many years of strict discipline, the notion that loans must be repaid has been internalised by the people of rural Bangladesh—i.e., repayment of loans has become the social norm. We shall examine the validity of this hypothesis below, after reviewing the manner in which microcredit delivery mechanisms have been evolving in Bangladesh.

III. EVOLUTION OF MICROCREDIT DELIVERY MECHANISMS IN RURAL BANGLADESH

In this section, we examine in details the mechanisms through which microcredit delivery systems have tried to ensure good repayment performance in rural Bangladesh and how the prevalence of these mechanisms is changing over time.

Group Lending

For many years since the inception of microcredit, the requirement that borrowers should form groups, even as they take loans on individual account, was ubiquitous. In much of the theoretical literature on microcredit delivery models, the beneficial feature of group-based loans that is emphasized the most is the role of “peer pressure” in avoiding the problem of moral hazard that inevitably arises with collateral-free loans (e.g., Stiglitz 1990). Another strand of the literature emphasizes the role of “peer support”– the idea that group members would help each other out in bad times so that all can maintain a good repayment record (Rashid and Townsend 1992). Our enquiry shows, however, that while borrowers who prefer group loan do appreciate the importance of peer pressure and peer support to some extent, these are not the main reasons why they prefer it (Table I).

Only about 17 per cent of them mentioned peer pressure and 16 per cent mentioned peer support as the main reason for their preference for group loan. By contrast, as many as 36 per cent of them claimed that the spirit of collective action that is imbibed by the practice of working with a group is the main reason for their preference. Another 31 per cent mentioned that the feature they find most attractive is the exchange of knowledge and information that is made possible by the requirement to attend regular meetings. Thus, the social consequences of group-based lending rather than the economic incentives of peer pressure and peer support, emphasized so much in the theoretical literature, that seem to be the main attractive feature of this system from the perspective of borrowers themselves.

TABLE I
REASONS FOR PREFERRING GROUP-BASED LOAN

Reasons for preference	Percent	Cumulative
Peer pressure is helpful for repayment	17.0	17.0
Peer support is helpful for repayment	16.1	33.0
Regular meetings socially helpful	31.3	64.3
Collective activity socially helpful	35.6	99.9

Source: Author’s calculations from *InM Poverty Survey 2013* (main sample).

It has been well understood for some time that as far as economic incentive is concerned, group-based lending has both its advantages and disadvantages. For example, the theoretical literature has been fully cognizant of the fact that in trying to solve one kind of moral hazard problem (e.g., collateral-free loans may not be repaid in the presence of limited liability), group-based lending may engender another kind of moral hazard (e.g., a group member may try to free ride on other members hoping that she would be bailed out by others), and many a complex model has been built to reflect this tension between the two kinds of moral hazard.⁹ Our evidence shows that some borrowers are conscious of this tension too and would like to get out of the group-lending system for that reason. This is reflected in the growing preference among borrowers for individual loans. When asked which form of loan they would prefer to take, the majority of borrowers still expressed a preference for group loan (66 per cent), but remarkably one in three borrowers (34 per cent) preferred to have individual loan. As can be seen from Table II, concern about the pressures of joint liability and the possibility of free riding together account for 44 per cent of cases where borrowers expressed a preference for individual loan. The perceived indignity of attending open meetings under group-based lending accounts for another 31 per cent, and the need for big loans accounts for the rest.

TABLE II
REASONS FOR PREFERRING INDIVIDUAL LOAN

Reasons for preference	Percent	Cumulative
Do not like joint liability in group loan	35.6	35.6
Afraid of free riding in group loan	8.6	44.2
Open group meeting degrading	33.6	77.7
Need bigger loan	21.8	99.5
Others	0.5	100.0

Source: Author's calculations from *InM Poverty Survey 2013* (main sample).

The growing preference for individual loans is not yet fully reflected, however, in the practice of MFIs. Our survey data show that, as of 2013, only about 5 per cent of all MFI loans were given on the basis of individual liability. Thus, group-based lending still dominates, but one can clearly sense a wind of change blowing across the microcredit sector. The MFIs are understandably cautious in embracing this change, but the pressure of demand is bound to have its effect sooner or later. This process is likely to be hastened by the growing

⁹ See the discussion in Osmani and Mahmud (2017), especially chapters 4 and 5.

realisation, as will be demonstrated below, that the old ways of enforcing strict disciplines for repayment can be relaxed to a large extent without jeopardising repayment performance.

Group Cohesion

If the group lending system is to work in the way it is supposed to – by enabling borrowers to avoid adverse selection through screening at the stage of group formation and to avoid moral hazard through peer pressure and peer support once the group is formed – the composition of groups assumes great significance. If the group consists of a motley collection of individuals who have very little prior social interaction with each other, neither the screening process nor the practice of peer pressure and peer support is likely to be very effective. Some studies of microcredit in sparsely populated rural Africa have found that groups are often formed among people who are mostly strangers to begin with, but over time they become closer, thereby making group cohesion a consequence rather than a pre-condition of group lending.¹⁰ We expect things to be somewhat different in densely populated rural Bangladesh, where social networks are likely to be much more extensive; and hence it should be a lot easier to form groups with people from the same network.

We examined this matter by asking our sample households (from the smaller sample), who took group-based microcredit, about their relationship and interactions with their fellow group members. In this context, it should be borne in mind that broadly two kinds of groups operate in the microcredit sector of Bangladesh. Many MFIs, most notably the Grameen Bank, have a two-tier system. In the first instance, borrowers are asked to form small groups (typically of five people), which are meant to be the main sphere of interaction among the borrowers; and in the second tier these groups are coalesced into a larger body (variously called as *Kendra*, or *Samity*, etc.) which provides scope for another layer of interaction among a larger number of people. For other MFIs, the larger body of *Samity* is all there is – often consisting of 20-40 borrowers, and there is no smaller group. For the present purposes, we designate these two modes as ‘group’ and ‘*samity*’ respectively. We tried to gauge the level of social cohesion by making a distinction between these two modes since the degree of cohesion is likely to differ between them for obvious reasons.

In Tables III-V, we present some indicators of social cohesion for all members of a collective, and then separately for ‘group’ and “*samity*” respectively. These indicators are: (a) relationship of other members with our sample households, (b) how well our sample households knew their peers, (c)

¹⁰ See the evidence cited in Osmani and Mahmud (2017), chapter 6.

how much they trusted their peers, and (d) how deeply they socially interacted with each other—both at the time of group formation and at present. By a number of criteria, the degree of cohesion seems to be quite high.

Looking first at the collectives as a whole, nearly 80 per cent of members are either neighbours or relatives of our sample households; the households knew 76 per cent of their peers either very well or reasonably well before the group/*samity* was formed, and they trusted 72 per cent of the peers (Tables III and IV).

TABLE III
RELATIONSHIP WITH MEMBERS OF GROUP/*SAMITY*

(per cent)

Relationship	All	Group	Samity
Close relative	13.9	31.5	11.6
Colleagues at work	1.7	1.3	1.7
Neighbours	54.5	50.9	55.0
Same village resident	17.7	4.1	19.4
Another village resident	1.4	0.1	1.6
Total	100.0	100.0	100.0

Source: Author's calculations from *InM Social Norm Survey 2015* (small sample).

TABLE IV
HOW WELL THE MEMBER KNOWS OTHER MEMBERS OF GROUP/*SAMITY*

(per cent)

How well	All	Group	Samity
Very well	53.5	74.2	50.8
Reasonably well	23.2	15.8	24.1
Not very well	11.8	5.1	12.6
Not at all	11.7	4.9	12.5
Total	100.0	100.0	100.0

Source: Author's calculations from *InM Social Norm Survey 2015* (small sample).

A couple of other points are also worthy of note. First, both in terms of information and social interaction, the smaller 'group' is much more cohesive than the larger '*samity*', as one would expect. Secondly, the level of interaction seems to be higher at present than what it was at the time the collective was formed. It would, thus, appear that the very act of borrowing through group/*samity* serves to increase the degree of social interaction among the borrowers.

However, when it actually comes to social interaction, the picture is somewhat mixed. The sample households claimed to have interacted socially with only half of the peers before the collective was formed; just over a third financially helped each other in times of distress, and about a half helped each other out in other ways. Thus, the collectives that were formed at the beginning of the process of lending seem to have been sufficiently well-knit in terms of the peers' knowledge and information about each other, but much less so in terms of actual social interaction (Table V).

TABLE V
SOCIAL INTERACTION WITH MEMBERS OF GROUP/SAMITY

Indicator	All	Group	Samity
<i>(per cent)</i>			
Was she trustworthy?			
Yes	71.9	88.7	69.8
No	28.1	11.3	30.2
Did you mingle with her socially?			
Yes	50.7	68.6	48.5
No	49.3	31.4	51.5
Do you mingle with her socially now?			
Yes	63.0	79.6	60.9
No	37.0	20.4	39.1
Did you help each other financially?			
Yes	37.7	59.2	35.0
No	62.3	40.8	65.0
Do you help each other financially now?			
Yes	53.2	71.5	50.9
No	46.8	28.5	49.1
Did you help each other in other ways?			
Yes	49.3	68.0	46.9
No	50.7	32.0	53.1
Do you help each other in other ways now?			
Yes	63.3	75.3	61.8
No	36.7	24.7	38.3

Source: Author's calculations from *InM Social Norm Survey 2015* (small sample).

Joint Liability

The idea of joint liability has been inextricably linked with the idea of microcredit ever since the pioneering theoretical work of Stiglitz (1990) and

Varian (1990). In their work, as in much of the theoretical work that has since been done, joint liability is modelled as a condition that the peers are required to pay up in place of the defaulting borrower. In practice, however, joint liability in this form has rarely existed in Bangladesh. Officially, peers were never obliged to pay up on behalf of the defaulters. In reality, however, MFIs might have put informal pressure on the peers to collect money from the prospective defaulter, and in the extreme case to even pay up from their own funds. A more common practice was that the MFIs would deny, or threaten to deny, loans to other members, if one of the members were to default. Even this is changing; and increasingly joint liability takes a much looser form in which the MFIs either cajole or coerce the peers to bring the defaulting member into line instead of denying loans to them or penalising them in any other way.

The changing character of the joint liability system is evident from our findings. We asked the group/*samity* borrowers among our sample households to report on three types of actions by the MFIs that could be interpreted as invoking the joint liability system when one of their peers either defaulted or were about to default. These three possible MFI actions are: (a) enforcing joint liability by putting pressure on the peers to obtain the instalment one way or the other, (2) threatening to withhold loans to peers unless default was prevented, and (3) actually cutting off loans to peers in case default happened. For each of these actions, we asked the respondents three questions: (a) in their own experience, how important the practice was when they first entered the microcredit market, (b) how important the practice is at present, and (c) how, in their view, the prevalence of the practice has changed over time. The answers tell an interesting story.

About 41 per cent of the respondents reported that when they first joined the microcredit market, MFIs would frequently put pressure on the peers to ensure that the instalment is paid up one way or the other, and another 31 per cent said that the MFIs would behave in this way fairly regularly (Table VI). However, less than two per cent of the respondents think that the MFIs indulge in this practice frequently at present (although, according to 30 per cent of them, MFIs still do so fairly regularly). In the opinion of about two-thirds of the respondents, the practice has declined in importance over time (Table VII).

Similarly, the practice of MFIs threatening to cut off loans to the peers was frequent in the past in the opinion of half the respondents, but only 4 per cent thinks the practice is still frequent today (Table VI). In the opinion of 75 per cent of respondents, the prevalence of the practice has declined over time (Table VII). A very similar picture is found about the practice of actually cutting off loans to the peers, not just threatening to do so.

TABLE VI
APPLICATION OF JOINT LIABILITY PRESSURE

(per cent)

MFI Action	Before	Now
MFI enforces joint liability		
Frequently	41.1	1.6
Fairly regularly	30.7	29.8
Seldom	11.9	30.8
Never	16.3	37.8
MFI threatens other members to cut off loans		
Frequently	51.3	4.1
Fairly regularly	30.7	23.6
Seldom	13.3	38.8
Never	4.8	33.6
MFI cuts off loans to other members		
Frequently	46.9	4.2
Fairly regularly	22.3	7.1
Seldom	14.1	19.1
Never	16.7	69.6

Source: Author's calculations from *InM Social Norm Survey 2015* (small sample).

Note: 'Before' refers to the time when the respondent joined the microcredit group of which she is currently a member.

TABLE VII
OPINION ABOUT CHANGE OVER TIME IN JOINT LIABILITY PRESSURE

(per cent)

MFI Action	Per cent
MFI enforces joint liability	
Increased	2.8
Same as before	32.0
Decreased	65.2
MFI threatens other members to cut off loans	
Increased	2.8
Same as before	21.2
Decreased	76.0
MFI cuts off loans to other members	
Increased	1.4
Same as before	24.4
Decreased	74.2

Source: Author's calculations from *InM Social Norm Survey 2015* (small sample).

Peer Pressure

Peer pressure is presumed to be one of the principal mechanisms through which the group lending system is supposed to work. We tried to gather several types of information to gauge the prevalence of this practice and how it might have changed over time.

First, we asked the group borrowers in our main sample of households whether they themselves or any of their group/*samity* members were ever subjected to peer pressure when they had difficulties in paying an instalment. Only 16 per cent of them said that they were, while 23 per cent said other members of their group/*samity* were at one time or another subjected to such pressure.

They were further asked whether it ever so happened that but for peer pressure they might not have paid an instalment. Only 9 per cent said it did. Thus, the role of peer pressure in ensuring high repayment in the microcredit sector does not seem to be very big. One must acknowledge, however, that the actual influence of peer pressure might be bigger than what these figures suggest, since the very prospect of peer pressure may have dissuaded some borrowers from indulging in moral hazard in the first place.

Second, we asked the group borrowers in our smaller sample to recall the history of the incidents in which their group/*samity* members had come close to defaulting and whether any peer pressure was applied on them in those incidents. According to their response, peer pressure was indeed applied in almost half of the cases (Table VIII).

TABLE VIII
DID OTHER MEMBERS OF GROUP/SAMITY FACE PEER PRESSURE?

(per cent)

	Ever	Recently	Earlier
Yes	48.9	47.0	61.0
No	51.1	53.0	39.1

Source: Author's calculations from *InM Social Norm Survey 2015* (small sample).

It is interesting to observe, however, a contrast between earlier incidents and the more recent ones (those occurring within the last three years). In as many as 70 per cent of the recent cases, the members in trouble were eventually able to repay, but in the case of earlier incidents just over a third of the members were able to do so. This contrast suggests that there might be forces other than peer

pressure that are responsible for more recent success. We shall discuss in section IV what those other forces might be.

Third, we asked the respondents in the smaller sample to give their opinion about the importance of peer pressure both in the past and at present and how its prevalence might be changing over time. According to 47 per cent of the respondents, peer pressure was applied frequently in the past (when they first joined the microcredit sector); but only 6 per cent think it is still applied frequently (Table IX). In fact, over a third of the respondents believe that currently it is not applied at all and another one-third believe that it is applied very infrequently. Thus, according to more than two-thirds of respondents, the prevalence of peer pressure is quite negligible at present.

TABLE IX
INTENSITY OF USE OF PEER PRESSURE

(per cent)

Intensity	Before	Now
Frequently	46.9	6.4
Fairly regularly	24.9	21.1
Seldom	12.2	36.7
Never	16.0	35.8

Source: Author's calculations from *InM Social Norm Survey 2015* (small sample).

There also remains the question of how effective peer pressure is in practice even to the extent that it exists. We do not have a direct measure of effectiveness, but recall that when we asked group borrowers in our larger sample whether they would have failed to pay the instalment in the absence of peer pressure in times of distress, only 9 per cent answered that they would have. An indirect idea about the potential power of peer pressure can be obtained by looking at the causes of distress. We asked our smaller sample why their members got into trouble in the first place that called for peer pressure; the answers they gave are reported in Table X.

It is instructive to note that in as many as 40 per cent of cases, repayment problem arose for health-related reasons – either greater need for meeting medical emergencies or loss of income due to illness. When to this we add the cases of loss of income for various other reasons, it turns out that in almost 70 per cent of cases repayment problem arose for reasons beyond the control of the borrowers. It should not be surprising, then, that peer pressure failed to make much headway under such circumstances.

TABLE X
REASONS FOR REPAYMENT PROBLEM

Reasons	Per cent	Cumulative
Lower income due to illness	21.9	21.9
Medical emergency	18.5	40.4
Lower income due to accident	10.0	50.4
Lower income due to calamity	7.5	57.9
Lost income due to job loss	6.2	64.1
Difficulty in managing overlapping loans	5.9	70.0
Compulsion to repay old loans	5.4	75.4
Wedding expenses	4.7	80.1
Housing repair	4.0	84.1
Emergency business needs	2.1	86.2
Lost assets due to calamity	1.8	88.0
Other social ceremonies	1.6	89.6
Loss of income due to departure of earner	1.2	90.8
Lower remittance income	1.0	91.8
Loss of income due to death in the family	0.9	92.7
Others	7.3	100.0

Source: Author's calculations from *InM Social Norm Survey 2015* (small sample).

Peer Support

When repayment problem arises mainly due to reasons beyond the borrowers' control, peer support rather than peer pressure has a potentially bigger role to play. But, in reality, how important is it? Somewhat surprisingly, peer support does not seem to do much better than peer pressure. When group borrowers in the larger sample were asked whether they ever received peer support in times of distress, only 15 per cent said they did (it was 16 per cent in the case of peer pressure). And when they were asked whether other members of their group/*samity* ever received peer support, only 11 per cent answered in the positive (as against 24 per cent in the case of peer pressure).

The matter was further investigated by asking respondents in the smaller sample to recollect the incidents in which members of their group/*samity* had fallen into repayment problems. They reported that peer support was provided in only about a third of such incidents (as against 47 per cent in the case of peer pressure).

Finally, we asked the respondents to give their opinion on how important peer support was in practice and how that importance has changed over time. Only about 14 per cent thought peer support was “very important” in the past when they first joined the microcredit sector; and just 12 per cent of them think it is still very important today (Table XI). As many as 58 per cent think the importance of peer support (or rather the relative lack of it) has remained the same over the years, while a quarter believe its importance has declined further (Figure 1).

TABLE XI
OPINION ABOUT THE IMPORTANCE OF PEER SUPPORT

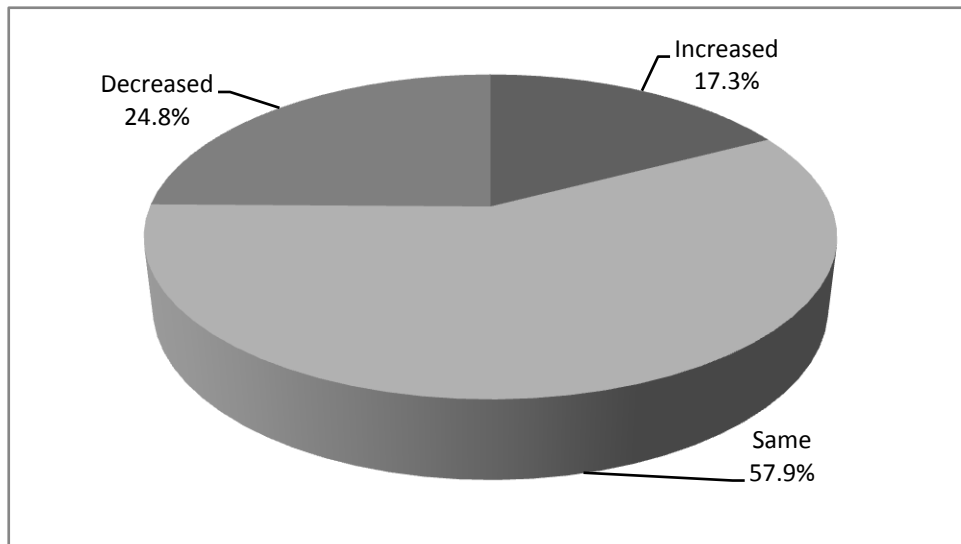
Importance	Before	Now
Very important	14.4	12.3
Fairly important	38.1	31.8
Mildly important	18.1	18.1
Not important at all	29.3	37.8

(per cent)

Source: Author’s calculations from *InM Social Norm Survey 2015* (small sample).

Note: ‘Before’ refers to the time when the respondent joined the microcredit group of which she is currently a member.

Figure 1: Opinion about Change in the Importance of Peer Support



Source: Author’s calculations from *InM Social Norm Survey 2015* (small sample).

Weekly Instalments

Along with group-based lending, the system of weekly instalments has also been a long-standing feature of the microcredit delivery models in Bangladesh. This too has been changing, however, with instalment of longer duration becoming increasingly common, although the weekly system still remains the predominant form. As many as 92 per cent of borrowers were still making weekly repayments as of 2013, with monthly instalment coming a distant second at just 5 per cent, followed by one-time repayment at about 2 per cent (Table XII). There is evidence, however, that the demand for monthly instalment, in particular, is growing quite strongly. While the majority of borrowers still prefer weekly instalment (60 per cent), some 34 per cent would like to opt for monthly instalment if they had the opportunity to do so (Table XIII). Thus, as in the case of individual lending, demand for loan products with monthly repayment far exceeds current supply.

TABLE XII
DISTRIBUTION OF INSTALMENTS TYPES: ACTUAL AND PREFERRED

(per cent)

Instalment Types	Actual	Preferred
Weekly	91.9	59.9
Monthly	5.1	34.1
One-time	1.9	2.1
Annual	0.3	1.3
Fortnightly	0.2	1.3
Others	0.6	1.4

Source: Author's calculations from *InM Poverty Survey 2013* (main sample).

It is interesting to examine the reasons behind the differential preference for alternative instalment systems. Those who prefer the weekly system do so for two main reasons. The most important reason, as suggested in section II, has to do with the well-known problem of temptation that makes it difficult for poor people to save. Of those who prefer the weekly system, 72 per cent cited the problem of temptation – namely, that they would find it hard to save in small amounts over a period of time if the instalment period were longer. Most of the rest – some 26 per cent – felt that the weekly system suited them fine since they had a regular daily or weekly flow of income to match the demand for weekly repayment (Table XIII).

TABLE XIII
REASONS FOR PREFERRING WEEKLY INSTALMENTS

Reasons for preference	Percent	Cumulative
Too tempting to hold money for long	72.3	72.3
Have regular daily/weekly income	26.4	98.8
Others	1.2	100.0

Source: Author's calculations from *InM Poverty Survey 2013* (main sample).

Looking at the other side, i.e. those who do not like the weekly repayment system, we find that there are a variety of reasons—both economic and non-economic, but the latter dominates (Table XIV). As many as 58 per cent of them claim that the main reason they do not like the weekly system is the sheer psychological pain of trying to put together a pot of money to give away every week. No sooner than one instalment has been paid, they have to start thinking about the next, and then the next; the psychological stress of this continuous pressure is unbearable for many. The next most important reason (24 per cent) is the absence of a regular flow of income to match the demand for weekly repayment.

TABLE XIV
REASONS FOR PREFERRING MONTHLY INSTALMENTS

Reasons for preference	Percent	Cumulative
Lack of regular daily/weekly income	23.6	23.6
Lack of capacity to repay	14.1	37.6
Too painful to arrange money every week	57.8	95.5
Cannot attend regular meetings	3.9	99.4
Others	0.6	100.0

Source: Author's calculations from *InM Poverty Survey 2013* (main sample)

IV. THE CONUNDRUM

The preceding discussion shows that many of the mechanisms that are theoretically considered important for ensuring good repayment in the microcredit sector – namely, joint liability, peer pressure and peer support—no longer play a huge role in Bangladesh. Whatever importance they may have had in the early days, it is diminishing over time. The mechanism of weekly repayment is still going strong, but its importance is also declining – especially, in the preference system of borrowers even if it is not yet fully reflected in the

practice of MFIs. Even the practice of group lending, which lay at the core of microcredit delivery models, has begun to be eroded, albeit very slowly, by the emergence of individual lending. And yet, the microcredit sector in Bangladesh has not only been able to maintain its impressive record of repayment but is also flourishing at an unprecedented pace. What is the secret of this success?

In order to investigate this conundrum, we asked the borrowers what they felt about the importance of several other possible mechanisms that might be playing an important role in keeping the repayment rates high. Some of these mechanisms are marginally discussed in the theoretical literature (for example, dynamic incentive) while others are better known mainly to the practitioners (for example, pro-active roles played by the MFIs themselves). The findings are quite revealing.

MFI Pressure

In the theoretical models of microcredit delivery, MFIs play a singularly benign role. All they have to do is to oversee the formation of groups by potential borrowers. Through the screening process at the stage of group formation and by applying peer pressure and peer support after the group has been formed, the borrowers themselves are supposed to ensure that the potential of default is all but eliminated. As a result, in these models, MFIs can afford to adopt a hands-off policy.

The practitioners of microcredit know, however, that this is far from the reality. In practice, MFIs do play a more active role, using both the stick and the carrot. For example, instead of relying solely on peer pressure and peer support, they often apply direct pressure on the potential defaulter. Moreover, instead of hoping that peer pressure and peer support will automatically come into play, they often instigate, hassle and pressurize other group members to bring the offending member into line. As we shall discuss later, the behaviour of MFIs has been changing; in particular, they use less stick and more carrot these days – such as allowing potential defaulters to make deferred payments. But one way or the other, the pro-active role played by the MFIs cannot be underestimated.

A particular manifestation of MFI pressure is the threat to expel the offending members from microcredit groups. As many as 55 per cent of our sample households report that MFIs used this weapon frequently in the past, but less than 4 per cent think it is still practised frequently today (Table XV). Nearly 79 per cent believe that the use of this threat mechanism has declined over time (Figure 2).

TABLE XV
INTENSITY OF USE OF THREAT OF EXPULSION

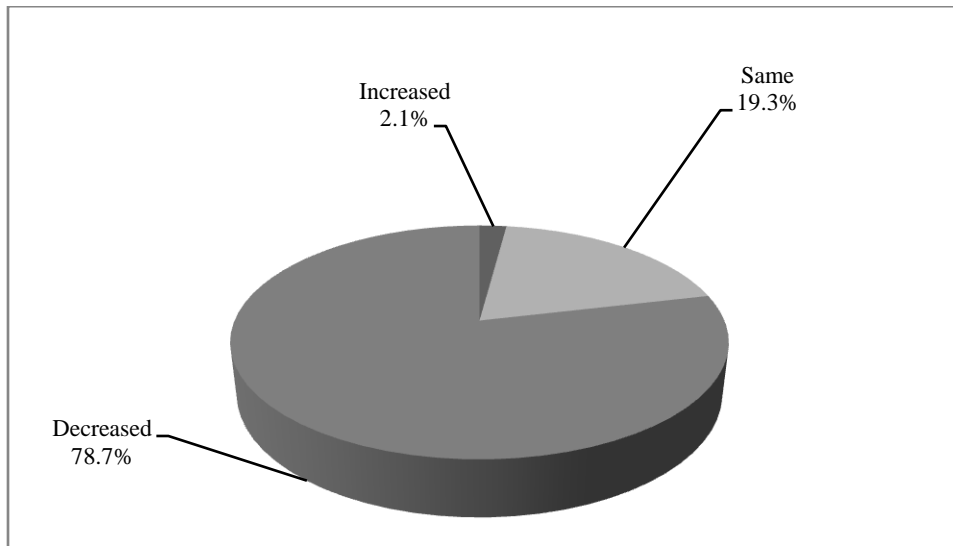
(per cent)

Intensity	Before	Now
Frequently	54.5	3.6
Fairly regularly	28.7	31.3
Seldom	8.0	44.9
Never	8.8	20.3

Source: Author's calculations from *InM Social Norm Survey 2015* (small sample).

Note: 'Before' refers to the time when the respondent joined the microcredit group of which she is currently a member.

Figure 2: Opinion about Change in the Intensity of Use of Threat of Expulsion



Source: Author's calculations from *InM Social Norm Survey 2015* (small sample).

Yet another manifestation of MFI pressure can be found in the stories often told in the popular media that MFIs officials take away whatever meagre assets the offending borrowers have, or at least threaten to do so. That there is some truth to these stories is evident from the fact that as many as 44 per cent of our respondents claim that this practice was frequent in the past. But it is important to note that only less than 1 per cent still thinks the practice still exists (Table XVI). Around 75 per cent believe that the use of this abominable practice has declined with the passage of time (Figure 3).

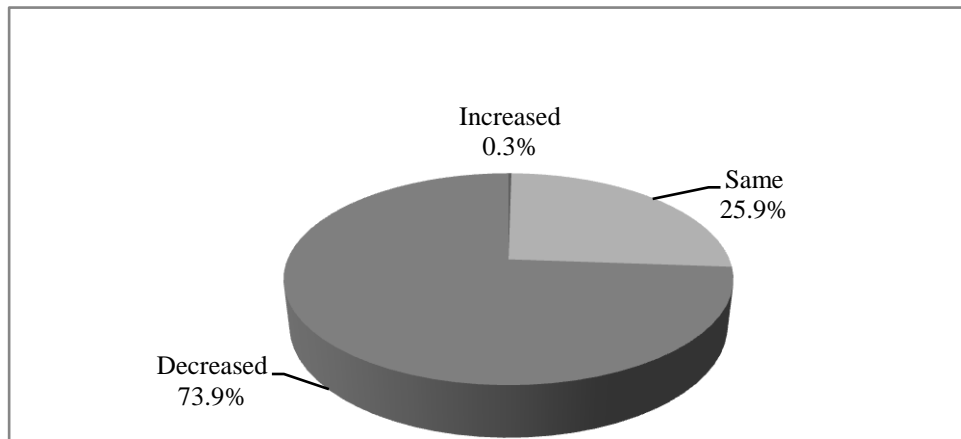
TABLE XVI
INTENSITY OF USE OF CONFISCATION OF ASSETS

Intensity	(per cent)	
	Before	Now
Frequently	43.6	0.5
Fairly regularly	25.8	11.2
Seldom	10.7	25.6
Never	20.0	62.7

Source: Author's calculations from *InM Social Norm Survey 2015* (small sample).

Note: 'Before' refers to the time when the respondent joined the microcredit group of which she is currently a member.

Figure 3: Opinion about Change in the Intensity of Use of Confiscation of Assets



Source: Author's calculations from *InM Social Norm Survey 2015* (small sample).

Regardless of the precise manifestation of MFI pressure, a common perception is that MFIs deal harshly—or rather misbehave, to put it bluntly—with clients who seem to be wavering over instalment payment. In order to gauge the basis of this perception, we asked the borrowers whether their MFIs ever misbehaved with them, one way or the other, when they failed to pay some instalment. About a third of them answered in the positive. MFIs, of course, largely deny the allegation of misbehaviour and argue instead that they try their best to help the borrowers in trouble, by offering them various leeways—for example, by giving them the option of deferred payments. When asked about this, nearly two-thirds of the respondents said the MFI really did so.

In any case, whatever the popular perception is about MFI misbehaviour, we wanted to know from the respondents themselves what they thought about it. Their responses clearly suggest that there is an element of truth in the allegation of misbehaviour, but this was mostly in the past. Thus, whereas as many as 56 per cent of the respondents believe MFIs used to misbehave with offending members frequently in the past, only 7 per cent think they still do so (Table XVII). Nearly 79 per cent of them feel that the prevalence of misbehaviour by MFIs has declined over the years (Figure 4).

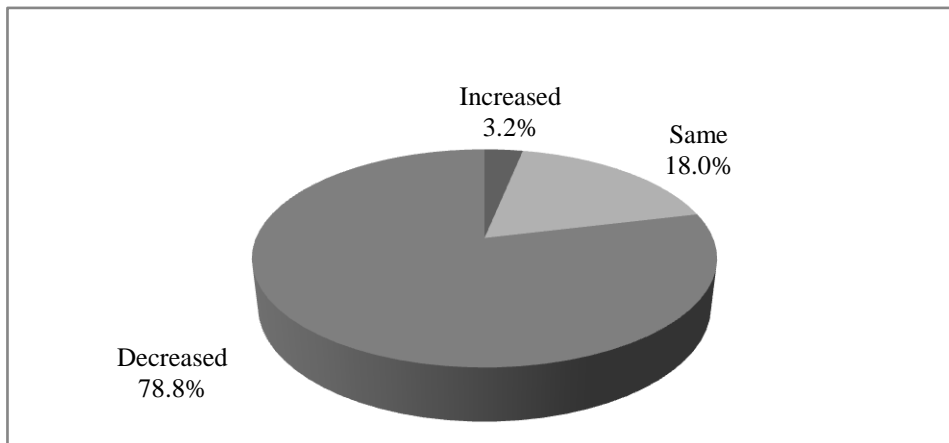
TABLE XVII
INTENSITY OF MISBEHAVIOUR BY MFIS

Intensity	(per cent)	
	Before	Now
Frequently	56.1	6.6
Fairly regularly	30.3	33.1
Seldom	9.8	46.9
Never	3.8	13.4

Source: Author's calculations from *InM Social Norm Survey 2015* (small sample).

Note: 'Before' refers to the time when the respondent joined the microcredit group of which she is currently a member.

Figure 4: Opinion about Change in MFI Misbehaviour



Source: Author's calculations from *InM Social Norm Survey 2015* (small sample).

We also asked the respondents whether the fear of harassment by MFIs was a 'very important' mechanism behind their success in preventing default and

keeping the repayment rate high. Some 66 per cent thought this was indeed so in the past, but only 21 per cent thought it was still a “very important” factor at the present time (Table XVIII). Just over two-thirds of them reckon the importance of this factor as a contributor to high repayment has gone down over time (Figure 5).

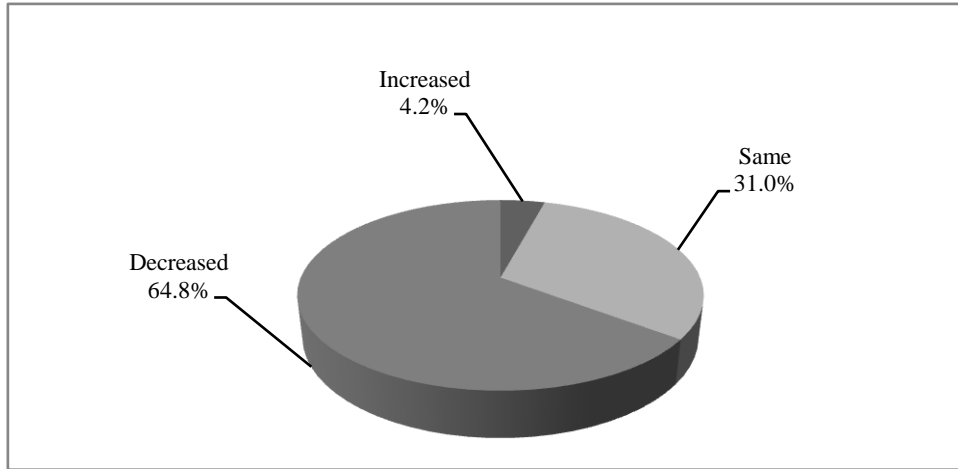
TABLE XVIII
OPINION ABOUT THE IMPORTANCE OF THE FEAR OF HARASSMENT BY MFIS
(per cent)

Importance	Before	Now
Very important	66.1	20.9
Fairly important	19.1	33.0
Mildly important	9.2	33.1
Not important at all	5.6	13.0

Source: Author’s calculations from *InM Social Norm Survey 2015* (small sample).

Note: ‘Before’ refers to the time when the respondent joined the microcredit group of which she is currently a member.

Figure 5: Opinion about Change in the Importance of Fear of Harassment by MFIs



Source: Author’s calculations from *InM Social Norm Survey 2015* (small sample).

Dynamic Incentive

MFIs often use dynamic incentive to induce borrowers to repay in time viz., by making it clear that timely repayment of loan will enable a borrower to borrow yet again, possibly a higher amount, while default will result in denial or

at least withholding of future loans. If microcredit borrowers are genuinely credit-constrained, as they are presumed to be, they should consider this closing of the door to future loans with serious concern and hence desist from defaulting. Almost 70 per cent of our sample borrowers believe that this incentive mechanism played a very important role in the past, but only about 29 per cent think that it continues to remain very important at present (Table XIX). Some 57 per cent believe the importance of this mechanism has declined over the years (Figure 6).

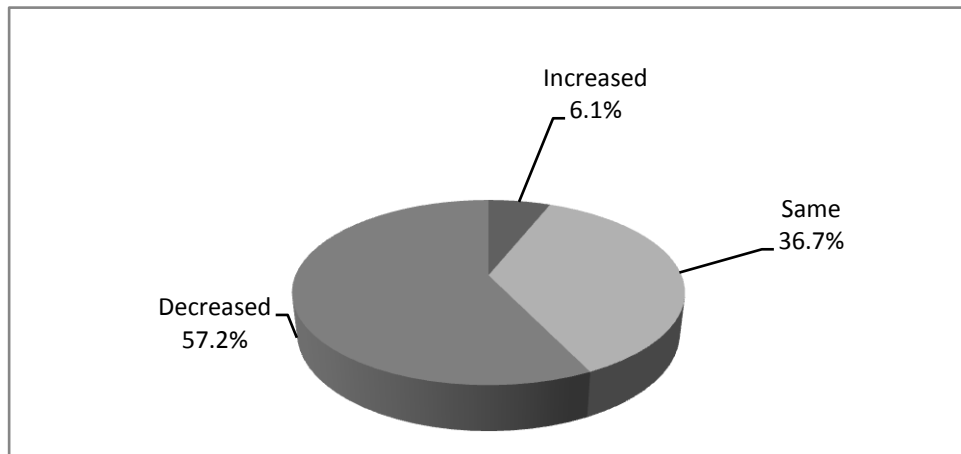
TABLE XIX
OPINION ABOUT THE IMPORTANCE OF DYNAMIC INCENTIVE

Importance	(per cent)	
	Before	Now
Very important	69.3	28.9
Fairly important	19.2	34.9
Mildly important	7.8	27.9
Not important at all	3.7	8.3

Source: Author's calculations from *InM Social Norm Survey 2015* (small sample).

Note: 'Before' refers to the time when the respondent joined the microcredit group of which she is currently a member.

Figure 6: Opinion about Change in the Importance of Dynamic Incentive



Source: Author's calculations from *InM Social Norm Survey 2015* (small sample).

So far, we have yet to resolve the conundrum referred to at the beginning of this section. If the role of theoretically celebrated mechanisms such as joint liability, peer pressure and peer support has declined over time, so has the role of

less discussed mechanisms such as MFI pressure and dynamic incentive. How has then the microcredit sector been able to maintain exceptionally high rates of repayment? The emergence of some new mechanisms provides a partial clue.

Loan Rescheduling

Increasingly, MFIs are finding innovative ways of rescheduling loans when they have good reasons to believe that that repayment problem has arisen not due to moral hazard but because of genuine distress. Only 4 per cent of the respondents thought that this mechanism was used “frequently” in the past but 24 per cent believe this is so now (Table XX). As many as 43 per cent of them believed that the importance of this mechanism, unlike all other mechanisms discussed above, has increased over time (Figure 7).

TABLE XX
INTENSITY OF USE OF LOAN RESCHEDULING BY MFIS

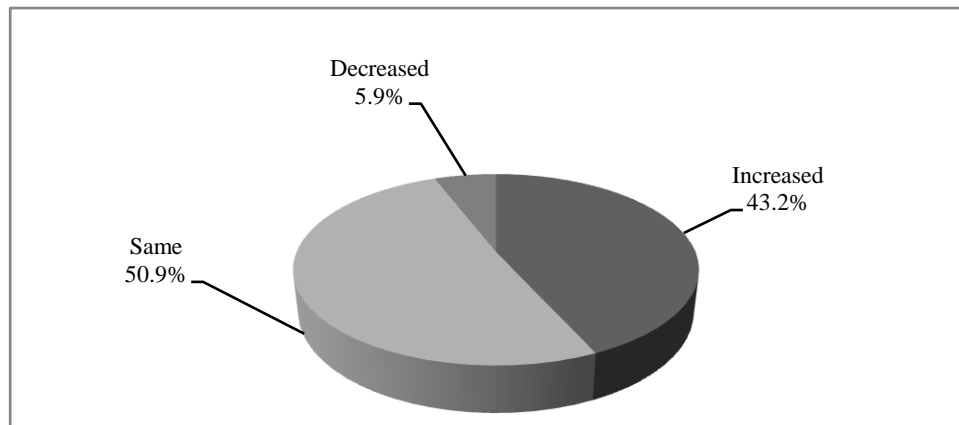
Intensity	Before	Now
Frequently	3.9	23.8
Fairly regularly	18.0	22.3
Seldom	22.3	13.3
Never	55.7	40.6

(per cent)

Source: Author’s calculations from *InM Social Norm Survey 2015* (small sample).

Note: ‘Before’ refers to the time when the respondent joined the microcredit group of which she is currently a member.

Figure 7: Opinion about Change in the Importance of Loan Rescheduling



Source: Author’s calculations from *InM Social Norm Survey 2015* (small sample).

Complementary Financial Products

MFIs are increasingly using complementary financial products such as savings and insurance to help overcome the repayment problems faced by members under distress. Only 8 per cent of the respondents said that this mechanism was used ‘frequently’ in the past, but as many as 42 per cent believe that this is so at present (Table XXI). Some 62 per cent reckon that the importance of this mechanism has increased over the years (Figure 8).

TABLE XXI
INTENSITY OF USE OF COMPLEMENTARY PRODUCTS BY MFIS

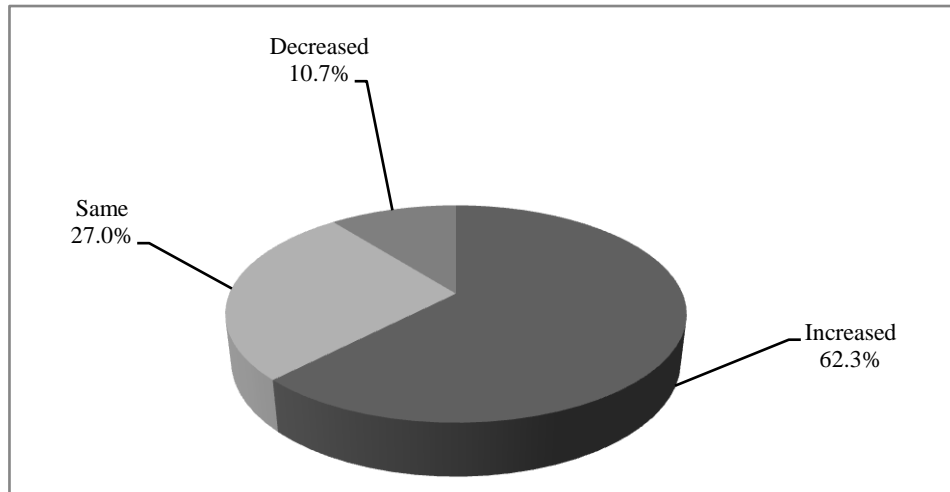
(per cent)

Intensity	Before	Now
Frequently	8.1	42.3
Fairly regularly	42.2	42.1
Seldom	32.0	12.5
Never	17.7	3.1

Source: Author’s calculations from *InM Social Norm Survey 2015* (small sample).

Note: ‘Before’ refers to the time when the respondent joined the microcredit group of which she is currently a member.

Figure 8: Opinion about Change in the Intensity of Use of Complementary Products by MFIS



Source: Author’s calculations from *InM Social Norm Survey 2015* (small sample).

Social Stigma and Habit Formation

While innovative measures such as loan re-scheduling (in times of genuine distress) and provision of complementary products have no doubt helped,¹¹ perhaps the single most important reason why repayment has remained high despite the dilution of many erstwhile measures is more sociological than economic or financial in nature. Borrowers increasingly feel that defaulting on loans would entail a social stigma they are unable to bear. The importance of this factor was brought home to us repeatedly by the MFI officials in our discussions with them in the course of our field work. They felt that education is playing an important underlying role here. The sense of stigma is becoming more acute as the society is becoming more educated. Especially as children are going to school in increasingly large numbers, parents feel that their loss of face to their own children (as they in turn lose face to other children in the school) would be unbearable in case they were stigmatized as loan defaulters. The rising importance of social stigma is confirmed by the opinions of our respondents as well. According to 46 per cent of them, social stigma associated with default was “very important” in the past, whereas about 56 per cent think that it is ‘very important’ today (Table XXII).

The respondents were also asked whether they felt that the culture of non-default was becoming ever more ingrained in the social psyche – not just with regard to microcredit but with regard to all types of loans. Almost 99 per cent thought that it was. We also asked them whether the practice of microcredit had contributed to this broader cultural change. As many as 78 per cent thought that this was indeed the case. We then asked them precisely how microcredit had contributed to this change. Their answers are reported in Table XXIII.

The highest degree of importance was attached to the role of habit formation; as many as 58 per cent of respondents felt that this was the most important way in which microcredit had contributed towards improving the culture of loan repayment. The second in importance was creation of a social psyche in which defaulting had come to be associated with social stigma. Making people able to appreciate the incentive for future loans (dynamic incentive) also played a role.

¹¹ One could perhaps argue that general improvement in living standards may have also helped, by enhancing the borrower’s capacity to repay, but in our survey only 14 per cent of the respondents thought this was the most important reason why high repayment performance has sustained. The relative unimportance of this factor is not at all surprising in view of the perennial problem of non-performing loans in the formal banking sector, where the capacity to repay is unlikely to be a binding constraint in most cases.

TABLE XXII
**OPINION ABOUT THE IMPORTANCE OF SOCIAL STIGMA
 IN CASE OF DEFAULT**

(per cent)

Importance	Before	Now
Very important	46.2	56.7
Fairly important	31.4	20.4
Mildly important	18.6	15.3
Not important at all	3.8	7.6

Note: ‘Before’ refers to the time when the respondent joined the microcredit group of which she is currently a member.

Source: Author’s calculations from *InM Social Norm Survey 2015* (small sample).

TABLE XXIII
IMPROVEMENT IN THE CULTURE OF LOAN REPAYMENT

	Per cent	Cumulative
Has loan repayment culture generally improved?		
Yes	98.8	98.8
No	1.2	100.0
Has microcredit contributed to the improvement?		
Yes	78.1	78.1
No	21.9	100.0
If yes, what’s the main reason?		
Habit formation induced by microcredit	58.2	58.2
Accentuation of social stigma from default	22.3	80.6
Creating incentive for future loan	19.3	99.9
Others	0.1	100.0

Source: Author’s calculations from *InM Social Norm Survey 2015* (small sample).

The importance of habit formation needs further elaboration. For many years, MFIs have employed a variety of mechanisms to ensure regular repayment. As we have seen, the importance of many of these mechanisms has declined over the years. However, the reason they have declined in importance is not that they were not effective but that they had served their purpose – namely, inculcating a

habit of repayment among the borrowers. People have to come to accept that loans are meant to be repaid – completely reversing the erstwhile perception that formal sector loans, especially government loans, did not have to be repaid because eventually such loans would be written off. Once the habit of repayment has been formed, the tools needed to ensure repayment – partly through sticks, partly through carrot – were no longer needed, at least not to the same extent as before.

Once habit begins to form, it can become self-reinforcing, spreading out to ever larger proportion of borrowers. A synergy between habit formation, on the one hand and accentuation of social stigma associated with default, on the other, can play a powerful role in broadening the reach of the culture of repayment. The way this synergy works can perhaps be best explained by drawing upon the theory of how social norms are formed.

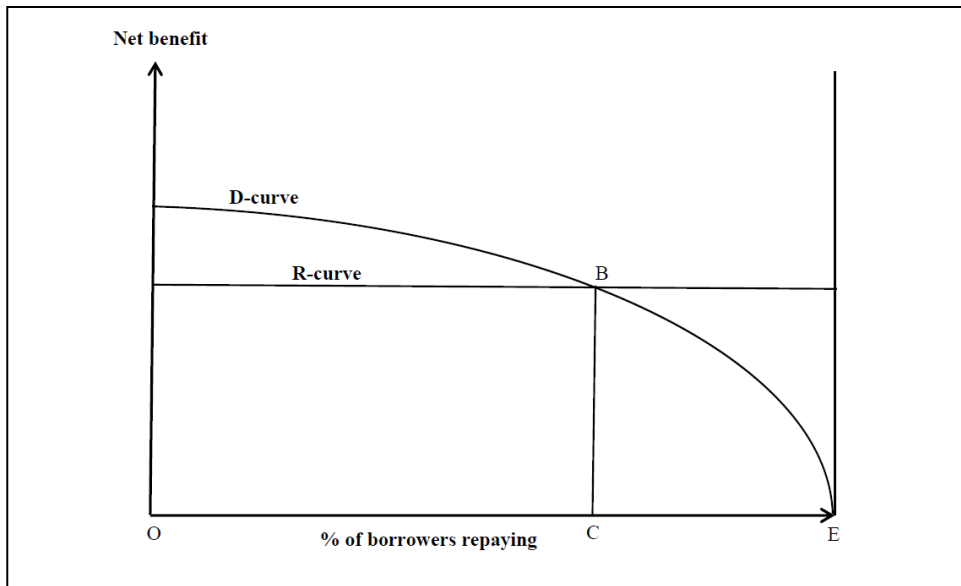
One approach towards explicating such a theory is to employ the notion of frequency-dependent equilibrium, in which one person's expected gain from a certain type of behaviour depends on the percentage of people who can be expected to behave in the same way. A convenient way of explaining this type of behavioural complementarity is to use a graphical device, known as the Schelling diagram, which was originally developed by Schelling (1973) and elaborated by Andvig (1991) and Bardhan and Udry (1999: 231-2), among others. In Figure 9, we present an adaptation of the Schelling diagram, in which an individual borrower faces a binary choice – of either to repay or to default. The choice will depend on the borrower's evaluation of the relative pay-offs i.e., the expected net benefits, of adopting the two strategies. A fundamental premise of this approach is that an individual's evaluation of net benefits, and hence her decision as to whether to repay or to default, would depend on the proportion of borrowers who are expected to repay. In Figure 9, we represent net benefit (π) on the vertical axis and the proportion of borrowers, who are expected to repay (ρ), on the horizontal axis. Thus, at the origin O no one repays ($\rho=0$) and at the end point E everyone repays ($\rho=1$).

Net benefits of the two strategies, as functions of the proportion of borrowers who are expected to repay (ρ), are shown by the two schedules R-curve and D-curve, representing the strategies to repay and to default respectively. Net benefit from the strategy to repay has two components. On the benefit side, there is the value of “doing the right thing,” whose monetary equivalent is denoted by T; and on the cost side, there is the amount of loan to be repaid, denoted by L (includes both principal and interest). We may thus denote the net benefit from the strategy to repay as $\pi(R) = T - L$. For simplicity, we assume that the value of “doing the right thing” (T) does not depend on the proportion of people who expected to

repay (ρ)¹², and of course L does not depend on it either. Therefore, $\pi(R)$ can be taken to be a constant i.e., the R-curve is horizontal, as drawn in Figure 9.

The net benefit from the strategy to default also has two components. On the benefit side, there is the amount of money saved by not repaying (L); and on the other hand, there is a psychological cost – namely, the sense of guilt and/or social stigma associated with being branded as a defaulter, the monetary equivalent of which is denoted by S . We posit that S is an increasing function of ρ , i.e., as more and more people begin to repay, the psychological cost of guilt and stigma stemming from default goes up. The net benefit from default can then be denoted as $\pi(D) = L - S(\rho)$. Clearly, $\pi(D)$ is a decreasing function of ρ , i.e. the net benefit from defaulting goes down as the proportion of repayers goes up. The D-curve would thus slope downward from left to right, as drawn in Figure 9.

Figure 9: Emergence of the Norm of Repayment



¹² One way of justifying this assumption is to argue that repaying in an environment, where one can possibly get away by not repaying, requires someone to attach a deontological value to the act of repaying a loan, regardless of the context and the consequences. It is this non-contextual and non-consequentialist nature of the value of simply “doing the right thing” that makes it plausible to assume that this value is independent of what others are doing.

At the beginning, when very few people are expected to repay, the social stigma associated with default would be very low (“everyone defaults; so, what’s wrong if I do”). Correspondingly, the net benefit from default would be very high; we assume that it would be high enough to exceed the net benefit from repaying in the region close to the origin.¹³ That is, the D-curve will start from a higher point on the vertical axis compared to the R-curve.

Given these assumptions about the shapes of the two curves, it is clear that they will have to intersect at some point, say, B. To the left of B, everyone would tend to default since the net benefit from default is higher than the benefit from repayment. The opposite is true to the right of B, where everyone will tend to repay. There are thus two possible equilibria – one of them is at the origin, where everyone is a defaulter, and the other one is at the end point E, where everyone repays.¹⁴

Which of the two equilibria will actually prevail will depend upon the value of ρ , i.e. the proportion of borrowers who are expected to repay. The critical value here is C, corresponding to the point of intersection B. When very few people have acquired the habit of repayment so that the value of ρ is less than C, the all-default equilibrium will prevail. However, as the proportion of repayers passes the critical value C – which may be called the repayment threshold – the all-repayment equilibrium (E) will prevail.

It is arguable that the threshold level C has been crossed in the microcredit sector of Bangladesh. The relatively long history of microcredit in this country and the very large expansion of its reach over the years have together ensured that enough people have got into the habit of loan repayment to enable our microcredit sector to cross the threshold. And once the threshold has been crossed, MFIs do not have to continue to employ the sticks and carrots they have historically employed in order to ensure regular repayment. People now repay simply because they have internalized the culture of repayment.

V. CONCLUDING OBSERVATIONS

The present paper was concerned with an apparent conundrum observed in the microcredit sector of Bangladesh: the rate of repayment has remained exceptionally high despite the fact that over the years the MFIs have relaxed many of the disciplinary and incentive devices they have traditionally employed to ensure regular repayment. The paper first documented the fact that the rigour

¹³ This assumption seems plausible because otherwise there will not be any reason for anyone to default ever, which is clearly not realistic.

¹⁴ There is also a third equilibrium—at B, but it is not stable.

with which MFIs apply the combination of ‘sticks and carrots’ has indeed become diluted over time. Our evidence shows that devices such as group lending, joint liability, peer pressure, peer support, weekly instalments and direct MFI pressure have all become less prevalent and less rigorous than they used to be. The paper then offered an explanation of why the repayment rate has remained stubbornly high despite this dilution of the rigour with which repayment used to be enforced. The explanation rests on the idea of changing social norm.

There was a time in rural Bangladesh, not long ago, when defaulting on loans was the norm – a norm that was inculcated in the social psyche by decades of experience with government loans that were written off for political reasons. When microcredit emerged in rural Bangladesh, one of the problems it faced was how to overcome this culture of default – the so-called enforcement problem. In addition, it also had to face the problems of moral hazard and adverse selection that were inherent in the credit market owing to asymmetric information – problems that were further compounded by limited liability enjoyed by the borrowers because of collateral-free lending. It is a testament to the genius of the pioneers of microcredit that they hit upon a system of disciplinary and incentive devices that was effective enough to ensure regular repayment, thus making for a viable institution for lending to the poor.¹⁵

Once the discipline of regular repayment became ingrained in the psyche of the majority of borrowers, the old social norm of wilful default gradually gave way by a new social norm in which default came to be associated with social stigma in a way that was never true in our society before. In this new social environment, MFIs no longer had to stick to the early regime of rigorous discipline in order to ensure loan repayment; and they did not want to do so either, because strict discipline had the unintended consequence of restricting the expansion of microcredit. Unshackled from the rigours of the early model, MFIs could now experiment with various methods of attracting new borrowers by relaxing the old rules one by one.

And this explains quite a few phenomena discussed in this paper. First, it explains why the prevalence of disciplinary and incentive devices such as joint liability, peer pressure, peer support and MFI pressure is diminishing over time. Second, norm-based behaviour can also explain why it is becoming increasingly possible to replace the weekly instalment system by instalments of longer

¹⁵ The viability of lending has also ensured sustained benefits for the borrowers. For a careful review of the accumulating evidence on how microcredit has helped the rural poor of Bangladesh, see Mahmud and Osmani (2017 chapter 7).

duration. The whole logic of weekly repayment was that temptation would prevent poor people from accumulating enough funds if larger instalments had to be made less frequently. But once the norm of repayment becomes culturally ingrained, this can help overcome the power of temptation, making it possible to switch over to monthly or even longer instalment periods without jeopardizing the prospect of repayment. Finally, one can see why the practice of individual liability loan has slowly begun to emerge despite the fact that it is not subject to the disciplining devices that characterise the group lending system. Once repayment becomes a culturally accepted norm, individual loan becomes no more subject to moral hazard than group loan. In fact, individual loan can then become even the preferred option as it avoids the moral hazard that group lending itself generates by creating the scope for free riding.

Thus, nearly all the features of the evolving pattern of microcredit delivery models that we observe in Bangladesh can be explained by the emergence of a new social norm, which says that loans are meant to be repaid. It can be argued that the emergence of this norm is by no means serendipitous; rather it owes itself to the sustained use of the disciplinary as well as incentive devices employed by the MFIs over the years in order to ensure regular loan repayment. Once the norm has emerged, however, most of those devices are becoming increasingly redundant, having served their historical purpose.

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