

Policy Paper

Multiple Borrowing by MFI Clients

Current Status and Implications for Future of Microfinance



Institute of Microfinance (InM)

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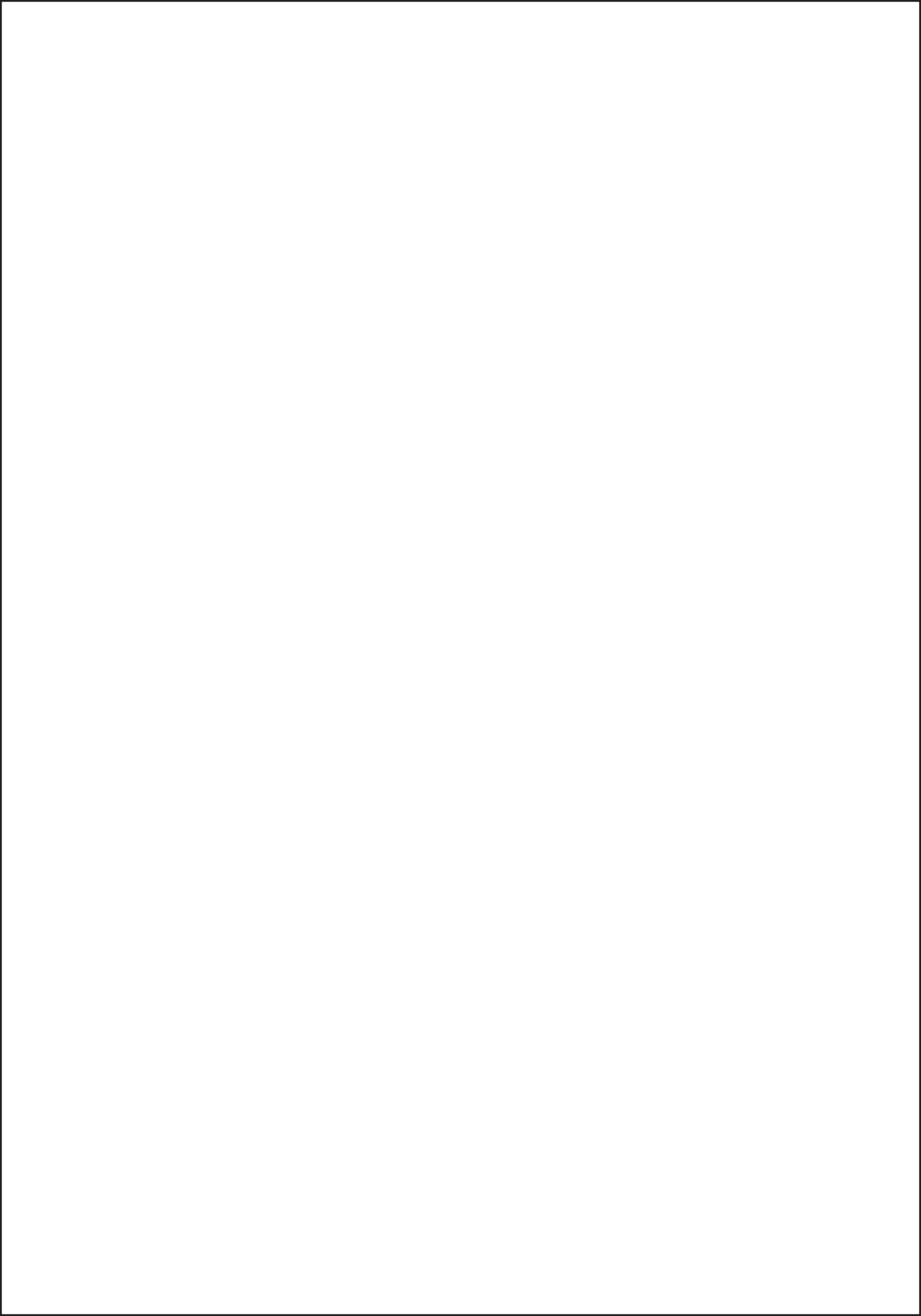
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Abstract

Borrowing simultaneously from multiple sources is widely prevalent in the microfinance sector. With the increasing percentage of multiple borrowers, policymakers are more concerned with the possible adverse impacts on the demand side. From the supply side, it may result from unethical competitive practices, reckless lending by fast growing microfinance institutions (MFIs) without suitable assessment of client's credit absorption capacities and at the end leading to over-indebtedness and defaults.

Considering the increasing concerns, this paper reviews the empirical evidence and attempts to find out the current status and implications for future of microfinance. It shows that borrowing from multiple sources may be caused by their strategy to maintain flow of resources for diverse purposes especially for expansion of business and a small percentage of borrowers use it for repayment purposes. Moreover, taking multiple loans are totally voluntary decisions of the clients. Although few studies demonstrate that multiple borrowing is essentially a sign of competition in credit market, it may have arisen from information asymmetry and concentration of MFI operations in accessible areas.

The intensity of multiple borrowing may not have as big an impact as the policymakers thought but certainly, the situation needs to be examined keenly as the poor borrowers will be in the most vulnerable situation in case of major covariate risks and economic recession. Analysing various research papers the study has found that there is no evidence of growing indebtedness for the overlapping households. Multiple borrowing itself is not a problem. Poor borrowers always try to allocate and reallocate their credit to cope with diverse shocks. Some studies reported equal or better repayment records of the multiple borrowers than the single borrowing households. They are in a better position in terms of positive net worth which rejects the notion of growing indebtedness and defaults. Despite largely positive impacts, Microcredit Regulatory Authority (MRA) needs direct the MFIs in operating cost-benefit analysis with good risk management, screening, staff monitoring and informal information sharing about multiple borrowing. In addition, MRA should also consider establishing a Credit Rating Agency in order to minimise potential risks of the institutions.

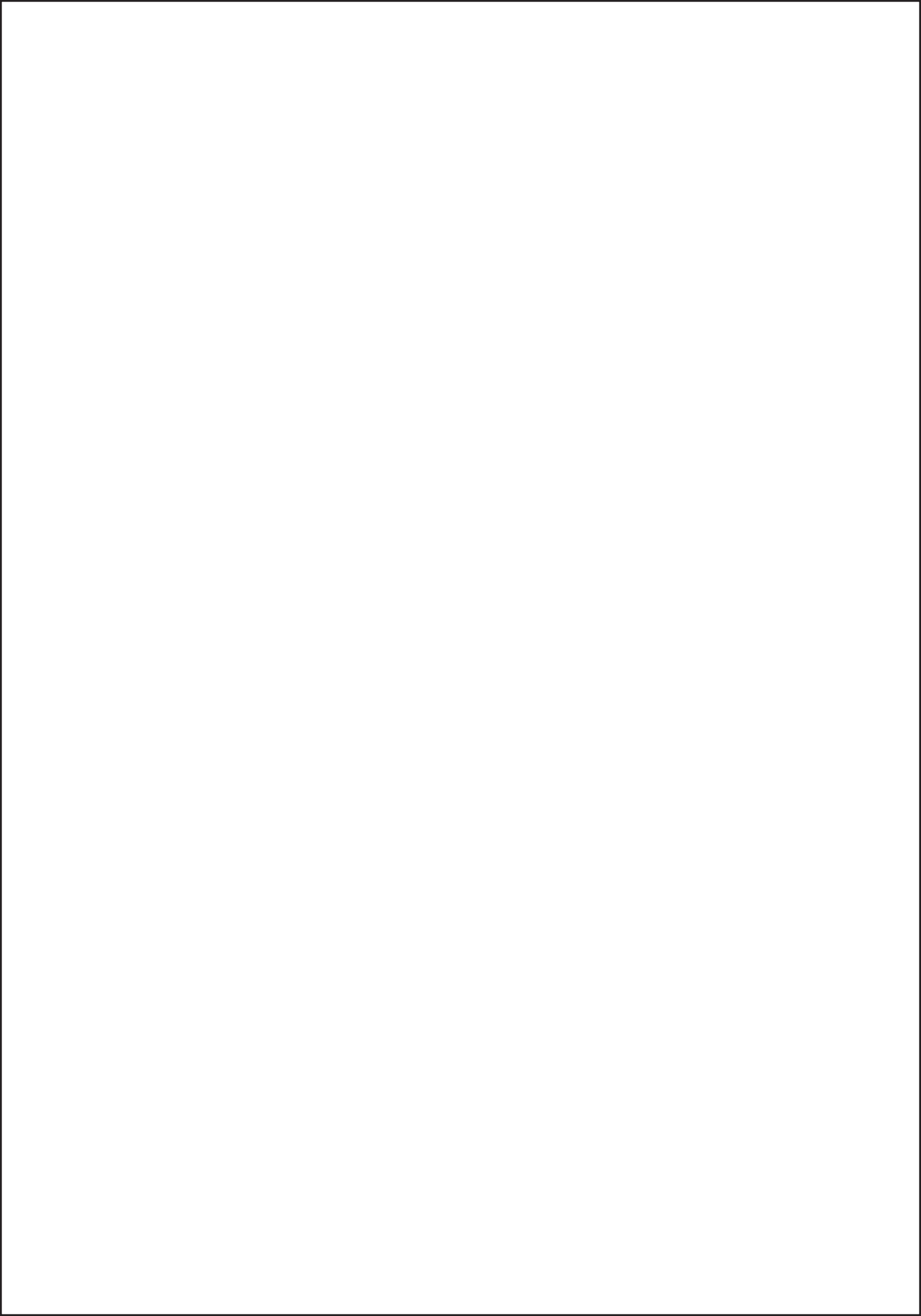


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List of Acronyms

A	ATT	Average Treatment Effect on the Treated
B	BRAC	Building Resources Across Communities
C	CGAP	Consultative Group to Assist the Poor
D	DiD	Difference-in-Differences
E	Etc.	Etcetera
G	GB	Grameen Bank
I	InM	Institute of Microfinance
M	MFIs	Microfinance Institutions
	MIS	Management Information System
	MRA	Microcredit Regulatory Authority
N	NGO	Non-Governmental Organisation
P	PSM	Propensity Score Matching
U	USA	United States of America
V	VO	Village Organisations

Introduction and Background

Rapid expansion and diversification of microcredit/microfinance programmes have been accompanied by borrowing of the same individual from multiple microfinance institutions (MFIs). This phenomenon of multiple borrowing is sometimes referred to as overlapping. According to CGAP, multiple borrowing means that an individual client or household borrowing from more than one Microfinance Institution (MFI) for the same or similar purpose. The term was first used very broadly to describe similar service provided by more than one NGO within a given geographical area. In recent times, the term is used to indicate multiple microfinance memberships at the level of individual or household. Any household with more than one membership is termed as 'household overlapping', and any individual member having memberships with more than one institute is defined as 'membership overlapping'.

The overlapping phenomenon has raised some concerns and controversy. It is sometimes asserted that the poor households of the villages are in a situation that can be characterised as borrowing from Paul to pay Peter. Some fear that this vicious cycle is actually accentuated by competition of MFIs for providing credit and their charging high interest rates leading to worsening indebtedness, something similar to highly indebted credit card holders or home owners in recent years in USA.

Some initial estimates show that during the past five years, both household and membership overlapping rates doubled indicating intense competition among the MFIs inaccessible areas. Competition has brought with it a number of positives, but it has led to concerns about unethical competitive practices, reckless lending by fast growing MFIs without suitable assessment of client's credit absorption capacities and multiple memberships leading to over-indebtedness and defaults. There are thus sector-wide concerns about unethical staff and client poaching, violation of the 'code of conduct' and reckless lending by fast growing MFIs leading to multiple borrowing.

A central concern is that multiple borrowing leads to increasing indebtedness of borrowing poor households. So a legitimate question to ask is whether borrowers taking loans from several MFIs end up with increasing indebtedness? Indebtedness itself is not bad, unless the degree of indebtedness is such that it puts a financial burden on the borrowing client. In other words, over indebtedness would be a concern and it occurs when borrowers owe so much that their loan have made them worse off than they would have been without the loans.

There are thus some specific areas of concern of policymakers about multiple borrowing and these concerns can be described as follows:

1. At a given time, clients take loan from more than one MFI—in some cases up to 7 MFIs. Without assessing client's absorption capacity, loans are misdirected, i.e. not used for the productive/income generating purposes stated in the loan application data.
2. In order to expand the business arena, MFIs either inadequately check or ignore client borrowing

habits. Multiple borrowings springing from such a situation adversely affect the quality of the loan portfolio as clients put themselves at a higher default risk.

3. As the proportion of debt rises, borrowers move towards informal sources (friends, relatives, money lenders etc) for further credit, further aggravating the debt trap. In some cases, borrowers commit suicide because of intolerable financial pressure and mental depression. In such a situation actual impact of microfinance sector become extremely questionable.

4. The portfolio at risk of MFI increases because of non-repayments and delayed repayments. If the situation moves beyond acceptance level, lenders will rethink their future investments, and it will make it difficult for borrowers to access credit.

To avert a possible major crisis for MFIs, coordinated efforts and a well-rounded understanding of the situation is required. These will in the long run, enable MFIs to continue to meet the credit needs of the poor people efficiently in a sustainable manner.

Nature and Extent of Multiple Memberships and Borrowing

What is the evidence on the rate of multiple borrowing? Different sources seem to indicate that currently the rate would vary between 40-60% in Bangladesh.

Household Surveys by InM

Pathrail Union is one of the old areas where microfinance made headway when Professor M. Yunus replicated his Grameen Bank model in this union in late seventies. InM conducted a study based on a household survey in the area. The critical questions that were addressed in this study are: what is the extent of microfinance? Why do multiple memberships exist? What are its deterrents? Do multiple memberships reflect growing indebtedness? What is the impact of multiple memberships at the household level? The data set contained household characteristics, sources, purpose and extent of borrowing, use of funds, assets and liabilities of all 4496 microfinance participating households.

The results of Pathrail study shows that overlapping is quite extensive. Around 59% of the households had multiple memberships (household overlapping), of them around 33% had single overlapping and the rest had more than one overlapping. Around 31% of the individual members had multiple memberships (membership overlapping). Around 40% of the borrowers take a second loan within the period of one year. As for the reasons for such overlapping, it appears that it is due to demand for larger amount of loans which are used mostly for productive purposes. Overlapping households remain better off, which is evident from the positive net worth and positive incremental change in assets. Net savings of the multiple borrowers increase which rejects the notion of growing indebtedness. According to this study, traditional concerns about overlapping are probably not fully justified.

Later on a national survey was carried out in 2009 selecting 4,143 random households from 38 villages of selected 17 Upazilas of 12 districts representing 6 divisions. That survey gives the trend in individual membership by overlapping household memberships over the past ten years (Table 1). By the end of 2009, individual membership overlapping was estimated at 31.02%.

Table 1: Trend in Individual Membership Overlapping, 2000-2009 (%)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Growth of Overlapping Rate
N	924	1082	1301	1485	1715	2125	2526	3039	3646	4078	
Individual Overlapping Rate	8.58	10.81	13.16	14.77	17.4	19.97	22.76	25.07	27.86	31.02	15.35

Source: B. Khalily and R. Faridi (2011)

In addition to individual membership overlapping, one can see the overlap of household membership. During the past decade, household overlapping increased rapidly. It was around 14% in 2000 and increased by over 3 times to 42.5% in 2009 (Table 2).

Table 2: Trend in Household Membership Overlapping, 2000-2009 (%)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Growth of Overlapping Rate
N	924	1082	1301	1485	1715	2125	2526	3039	3646	4078	
Multiple Memberships	13.27	15.14	17.27	19.96	23.05	26.4	29.91	33.92	37.77	42.51	13.81
3-year annual average growth rate of multiple memberships	14.82%			13.91%			11.95%				

Source: B. Khalily and R. Faridi (2011)

Other Data Sources and Analyses

A general study by CGAP on Bangladesh records the following observations:

- a) Unavailability of systematic data hampers gaining a comprehensive picture on the causes of repayment irregularity of microfinance borrowers in Bangladesh. Though most MFIs in Bangladesh do not feel that ‘multiple borrowing’ has led to delinquency, but they also feel that if not managed, there could be a negative impact in the long term. Experience from the field implies that multiple borrowing is adversely effecting the repayment by weakening traditional

repayment incentives and collection of irregular repayment is more difficult now than before due to MFI proliferation.

- b) MFI clients move on to multiple loans either for managing their repayment regularity or for larger credit needs for investment purposes. Though it fails to be sustainable for most clients and such attempts to move on to larger scale investments fail.
- c) There is evidence that consequences of over-lending and over-borrowing is strongly felt by both the MFIs and the clients. Sometimes MFIs become careful about progressive lending and have loan ceilings, which may actually cause default due to client dissatisfaction and inability of clients to manage cross-financing.
- d) Informal information regarding household's MFI debt obligation that field workers have are often incomplete sometimes even incorrect, and known only after the lending decision has been made. The study sought that more formalised and cooperative efforts are required for effective information sharing among MFIs.
- e) According to most field staff, up-to-date information about borrower's debt obligations could be a useful loan assessment tool though it would be difficult. Maintaining up-to-date database would need to be updated almost every day and existing computerisation level of most MFI field operations are not enough to support the function. Besides, it would be challenging to track the changing household units and to get information if the targets are preset.
- f) Large national MFIs and some district level MFIs offer much larger first time and more progressive loans as well as quicker repeat loans compared to smaller MFIs. On the other hand, smaller MFIs operating in a small region often employ locals as field staff and are in a better position in terms of better information about debt obligations.

Another study in Bangladesh, Chaudhury and Matin (2002), focused on the loan-taking behaviour of BRAC members who had multiple NGO memberships. It could be understood that this gave an underestimation of the extent of multiple memberships, as a household can be obtaining loans from multiple NGOs even if each of the NGO members borrows from only one NGO. Keeping this in mind, the study collected information on NGO membership of other household members of the BRAC client's household from an area with a high prevalence of membership overlap. The study found 27 NGO-MFIs operating in the study villages located in Tangail district which is known as the home of 'microfinance entrepreneurship'.

The study collected NGO participation and loan related information for the last three years from all the members of 240 households who are all current BRAC members, belonged to the BRAC's Village Organisations (VO) containing on average 30 adult female members. By examining the credit passbooks of the members, the study has classified the loan repayment status of the borrowers (belonging to both BRAC only and overlapping households) into three groups: regular, irregular and

defaulter. Regular borrowers are those who have paid the full amount of their installments within the scheduled time for all their loan installments except one or two. Irregular borrowers are those who have been regular in repaying a major portion of the loan installments but have not been able to repay 10% to 25% of the installments. Defaulting borrowers are those who have stopped repaying altogether.

The study addressed some key questions to get a lucid picture of the status of multiple borrowing in the microfinance sector. In what ways are the overlapping households different? What are the factors driving a household's decision to take the 'overlap strategy'? Is overlapping a response to distress or to an opportunity? Is repayment performance affected by overlapping? These are important questions for a wide microfinance audience, and they have implications for programme strategy and policy (Chaudhury and Matin, 2002).

Table 3 shows the differences in average values for a number of variables between BRAC-only and multiple MFI households. The last column shows the results of a difference in means test. The BRAC-only category comprises more landless, lower average landownership, more chronically deficit (though not less surplus) households compared to the multiple borrowing households, though the differences are weakly significant. That is, the study found no significant differences in the socio-economic profile between the two groups. This similarity in the socio-economic profile is interesting as it suggests that a diverse group of households adopt the multiple membership strategy and no obvious constraint, as far as socio-economic factors are concerned, can be seen. However, the BRAC-only households are significantly in a better position in terms of their loan repayment performance.

Table 3: Differences in Means between BRAC-Only and Multiple MFI Households

Variables	BRAC-Only HHs	Overlapping HHs	T-value
SOCIO-ECONOMIC PROFILE			
Land owned per HH (decimals)	43.7	50.6	
% of landless HHs	12%	7%	
% of chronically deficit HHs	10%	8%	
% of surplus HHs	50%	48%	
DEMOGRAPHIC INFORMATION			
Number of adult females per HH	.80	1.54	3.37
% of female headed HHs	15%	10%	
Dependency ratio (No. of HH members of working age (15–50years)/HH size)	.53	0.49	1.09
LOAN-RELATED INFORMATION			
Total loan amount per HH in the last 3 years	Tk. 11822	Tk. 35960	4.46
% of HHs with regular loan repayment	87%	70%	2.29

Source: Chaudhury and Matin (2002)

A number of other studies (Zeller and Sharma, 1997; Matin, 2000; Chaudhury and Matin, 2002) have however, shown that multiple memberships of households to different MFIs are associated with lower repayment rates.

The extent of multiple borrowing in India could be viewed from a comparatively recent study by Mukherjee (2010). The study presents that an estimated 10.28% of all the clients in the study sample are multiple borrowers. The key finding of this study is that multiple borrowers have a lower arrears rate than their single borrowing peers in the same branches and lower than the rate of the overall sample. A majority of the multiple borrowers said they used the second loan for investment purposes and none reported repayment difficulties.

Compared to the overall arrears rate, all the MFIs (except one urban MFI) have better repayment rates in more competitive branch locations than otherwise. While this does not mean that competition improves repayment, it appears that MFIs, by and large, are managing risk well in the face of competition at this point. There is no strong evidence to support the perception in the sector that new fast growing MFIs use larger (than current) loan size as a client attraction tool disregarding the Grameen model's traditional practice of gradually increasing loans in each cycle. Fast growing MFIs have the best repayment rates and the highest percentage of multiple borrowers.

Gathering more credit was a voluntary decision by the clients and none of the multiple borrowers had been poached by an MFI. Another study operated by 'Microfinance Insights' in India, presents that interviewees with borrowers and their repayment performance confirms the unanimous desire for larger loan sizes; it appears that credit rationing is occurring. Each individual MFI is offering less credit to multiple borrowers than what she/he wants and is able to repay.

The group behaviour gives some cause for concern. The microfinance clients in a centre are a collective body, which is particularly prone to large-scale defaults or late payments in the event of an adverse economic shock or recession. A study in Bolivia, found that business cycle downturns exacerbate repayment deterioration and it is important to have a good risk management strategy in place.

Causes of Multiple Borrowing

Major Hypotheses

From the client perspective, multiple borrowing may take place because:

- a) For supporting growth or a small business, client's may require larger loans than that offered by a single microfinance providers,
- b) One MFI's product ranges may not complete the client's credit need. Some MFIs may only

specialised in some products (some may specialised in micro-crop loans, while others may in micro-insurance),

- c) Clients may need supplementary microloans to cope with any adverse shocks or for consumption in crisis period,
- d) Diverse interest rates across the sectors may encourage clients to go to a second microfinance provider,
- e) In case of default, the client can take out a second loan for the repayment purposes or simply start over after the first microfinance provider refuses to advance another loan due to an imperfect credit history. (This only occurs in the presence of information asymmetry about client indebtedness).

From the MFIs' perspective, there are quite a number of potential reasons for multiple borrowing to happen:

- MFIs' aggressive growth plans force poaching the existing clients of other MFIs as the members have proved their credit history and they have fair knowledge of joint liability group norms and credit discipline;
- Clients do not reveal their borrowings/membership with other providers (and also MFIs do not share the information with other MFIs);
- Loan sizes are based on cycle rather than cash flow;
- Different members from the same family or household take loans;
- Borrowers avail multiple loans by taking advantage of multiple spellings/names on multiple identity cards;
- Front line staff want to reach their monthly targets and thus ignore multiple borrowing.

Empirical Findings

The latest research study entitled “Multiple Memberships (Overlapping) in Microcredit Markets of Bangladesh (2011)” by M. A. Baqui Khalily and Rushad Faridi gives some important findings regarding the status of multiple borrowing in Bangladesh. The report shows that multiple borrowing/overlapping has been mounting over time. Individual overlapping rate was 31% in 2009, and the household overlapping rate was around 43%. It was high in the Dhaka and Barishal division. They found that borrowings from multiple MFIs had occurred because of up scaling of enterprises, client's lumpy expenditures, incidence of shocks, repayment of previous loans, and leasing-in of land. To

meet lumpy expenditures households failed to repay previous loans. The main cause of multiple borrowing was demand for enterprise financing.

A study in India, Krishnaswamy (2007), provides some interesting insights. The study analysed a new panel data set containing management information systems (MIS) data of over 500,000 client loan and repayment records from seven MFIs in one of the states in India that is home to a highly competitive MF sector. The study finds that overall average multiple borrowing is about 11% and the study concludes that the microfinance sector in India is evolving in a manner similar to ones in many competitive countries in the world. Another study Sa-Dhan (2006) as cited in Krishnaswamy (2007) reported that among the overlapping MFI and SHG clients in Andhra Pradesh (AP), India, majority of them (over 70%) used additional loans to meet the credit gap in their present requirements and not for new purposes, 25% because of easy availability, while the remainder was for paying old loans. Interviews with clients showed that over 75% of multiple borrowers did not feel that additional borrowings had affected their repayment or productive capacity.

A comparatively recent research study by Burki (2010) in Pakistan shows that many borrowers feel the need to take multiple loans to meet their increasing business and consumption expenditures. 23 % of the borrowers surveyed admitted the need to borrow from multiple sources because the current loan size from any one microfinance provider did not meet their business needs. Furthermore, many borrowers felt the need for patching loans due to the declining purchasing power of the average microcredit and the rising cost of living, thus, admitting the need for multiple loans.

The literatures in other countries reveal that the decision of the households to borrow from multiple sources may be caused by their strategy to maintain flow of resources for diverse purposes especially for expansion of business. Often, flexibility in loan contract may induce borrowing households to borrow from multiple sources. However, some households may be forced to go for multiple borrowing for meeting lumpy expenditures for marriage ceremony, payment of dowry, cost of medical treatment and so on. Moreover, few studies demonstrate that multiple borrowing is essentially a sign of competition in credit market. It may have arisen from information asymmetry and concentration of MFI operations in accessible areas where new entrant MFIs will have less information gathering cost.

Impact of Multiple Borrowing

Major Hypotheses

The current concerns of multiple borrowing have emerged because of the two opposing thoughts. On the one hand, households may need multiple sources of credit and may be perfectly able to manage their finances. On the other hand, multiple loans may reflect cycle of debt and households may be unable to service their debt. As a result, multiple borrowing may lead to rising levels of delinquency and default.

In order to smooth cash flows, when borrowers resort to multiple borrowings, they may be bearing a sizeable burden. This may incorporate: transaction and opportunity costs, time spent in different group meetings, pressure of meeting multiple loan payment schedules, increased risk of inability to pay, rising unstable joint liability agreements, over indebtedness and finally the risk of defaulting. Some examples shows that female borrowers move away forever from their home due to inability to repay their multiple loans. Moreover, sometimes to repay the multiple loans, poor borrowers may compel to go to the illegal loan sharks at extortionate interest rate and may become landless. The biggest hurdle to microfinance immersed from the examples of suicide by the indebted borrowers in India.

The available literature provides numerous hypotheses. Multiple borrowing may reflect not only default behaviour of the borrower but also external factors like adverse shocks, lenders' competitive behaviour and the behaviour of borrowers like negligent attitude towards repayment of loans in time. However, the scenario reflects less financial discipline (David Bartocha, 2010).

Research elsewhere would indicate some hypotheses about the likely impacts of multiple borrowing. Aghion and Morduch (2005) stated that there is no well known study that robustly shows any strong impacts of microfinance programmes on overlapping (Armendáriz de Aghion and Morduch, 2005, p. 199-230) and that defaulting of loan is a cause of multiple borrowing. The authors claimed that, Bolivia had suffered from overlapping problems because of intense competition among MFIs in the 1990s coupled with economic crisis, microfinance borrowers and MFIs had suffered heavily during 1998-2001. Another study depicts a slightly different feature of multiple borrowing. Vogelgesang (2003) also found that Bolivia had suffered from overlapping problems coupled with economic crisis during 1996-2000. The quality of portfolios held by MFIs deteriorated. Microfinance and consumer credit faced social upheaval and protests by borrowers who sought debt forgiveness. But the study ascertains that over-indebtedness of the borrowers was not created because of high competition or higher supply of loan. Currently, Bolivia has been trying to mitigate overlapping problems by introducing an effective credit information system (a credit bureau). Another study Gonzalez (2008), based on the over-indebtedness episode (1997-2001) of the Bolivian financial sector, reported that over indebtedness may result from the opportunistic behaviour of lenders or borrowers, unexpected adverse systemic shocks, or limitations of the lending technologies in forecasting ordinary repayment capacity and does not imply that over indebtedness in Bolivia was caused by multiple borrowing by MFI clients. Alpizar and Gonzalez-Vega as cited in Gonzalez (2008) mentioned that most microfinance borrowers need to get loans from more than one MFI at the same time which could be a sign of under indebtedness with each single lender and, therefore, of credit rationing.

Krishnaswamy (2007) examined the degree of multiple borrowing between MFI clients in a competitive state in India. A higher percentage of multiple borrowers said that gathering more credit was completely their voluntary decision and they used the second loan for investment purposes. The study also found equal or better repayment records of the multiple borrowers than that of single borrowers. The results of this study would point to no significant negative impact of multiple borrowing.

Impact of multiple borrowing on loan default is also ambiguous. The evidence are mixed. Impact of competition or multiple borrowing on indebtedness is on the whole not significantly positive. The intensity of multiple borrowing may not have as big as an impact we expect but certainly the situation will be a major concern for everyone when the poor households will be subject to major covariate risks and economic recession as experienced by the multiple borrowers as found in Bolivia and Mexico during their recent past economic recession.

Empirical Findings

Research so far in Bangladesh on the impact of multiple borrowing is limited and the findings are mixed. The picture emerging from BRAC’s sample survey gives clearly a picture of increasing burden and repayment problems for the poor borrowers from multiple sources. The result of BRAC study shows that multiple memberships and chronic deficit status of the household adversely affects the regularity with which it is able to manage the loan installments. One can see this more clearly if a base case is constructed where the household is not chronic deficit and multiple-member and compare it with alternative cases. The probability of regular repayment decreases as one includes chronic deficit and multiple NGO membership status (Table 4).

It appears that the poorer households face more difficulty in regularly managing the large installments of the loans they take on from multiple NGOs. To take a closer look at this difficulty, in BRAC survey asked about the difficulties faced in managing repayment and what adverse effect it had had. The pattern emerging shows that chronic deficit households adopt more ‘hard options’ in managing the high levels of loan installments: none of the chronic deficit households reported ‘no difficulties’ when asked about loan repayment difficulties. This is in sharp contrast to other poverty groups. Reduction in consumption was the predominant response of deficit households to managing loan repayment difficulties, but surplus households facing repayment difficulties do not use this strategy at all. The same was true for ‘increased borrowing’ as a response strategy to addressing repayment difficulties.

Table 4: Changes in Probability of Regular Repayments

Cases	Probability of paying on time	Change from base
Base Case	.89	-
HH not chronic deficit but multiple membered	.70	-21%
HH chronic deficit but not multiple membered	.69	-22%
HH both chronic deficit and multiple membered	.39	-56%

Source: Chaudhury and Matin (2002)

The analysis of Chaudhury and Matin (2002) household survey data indicate various trends and the differences across poverty groups, which can now be summarised as:

- Chronic deficit households participate and borrow from NGO-MFIs to the same degree as other poverty groups.

- They repay less regularly than other poverty groups.
- Poorer households need to use ‘hard options’ much more to manage their repayments generally, and during lean periods in particular.
- They face more difficulties in repaying, and manage it through reducing consumption and further borrowing.

To get a comprehensible picture, InM and PKSf jointly conducted a census on all the villages of Pathrail in 2007. The study implies that overlapping is quite rampant – around 40% of the borrowers take a second loan within the period of one year. It is caused by higher demand for loans which are used mostly for productive purposes. Default in previous year leads to overlapping, the probability of which has been found to be low. Overlapping households remain better-off, which is evident from positive net worth and positive incremental change in assets. Net savings of the multiple borrowers increase which rejects the notion of growing indebtedness. There can be serious adverse impact of multiple borrowing on sustainability of MFIs. Other things remaining the same, individuals borrowing from more than one MFI are likely to default more than individuals borrowing from just one MFI. So one expected impact of extensive overlapping borrowing is that it may lead to insolvency of some MFIs lack power or leverage over other to realise its due loans.

Considering the rising concerns about the impact of multiple borrowing in MFI sector, InM carried out a nationwide study. The study team (Khalily and Faridi, 2011) have used two estimation procedures. From the cross-section estimators for instance, propensity-score matching (PSM) estimation (Kernal estimate of the average treatment effects on the treated, ATT)⁵ they have found that on average, multiple borrowing households are better off in terms of income, net savings, food and non-food expenditure, as well as employment days compared to comparable single borrowing households (Table 5). The study also assessed the impact of multiple borrowing on indebtedness in terms of net worth⁶. A positive growing net worth implies that households are able to use the increased income for

Table 5: Kernel Estimate of ATT (in Taka) in 2009

Outcomes	Multiple borrower	Single borrower	Difference
Net Worth	129086	101748	27338
Income	88424	73859	14565
Net Savings	7903	5123	2780
Food Expenditure	1198.3	962.6	235.7
Non-Food Expenditure	37916.3	36588.8	1327.5
Employment Days	414	382	32

Source: B. Khalily and R. Faridi (2011)

⁵ Average Treatment Effect can be estimated using different estimation procedures. Kernel estimates are reported as Kernel estimation takes care of full distributional aspect of the estimator. It generates more robust estimation of the outcomes compared to other estimation procedures.

⁶ Net worth can be defined by net assets (e.g., total assets minus total liabilities).

repayment purposes and net savings e.g., indebtedness is not resulting from multiple borrowing. To get a more considerable result, from the panel data by using difference-in-differences (DiD)⁷ estimation, the study reported significant positive evidence on the impact of overlapping on savings over time.

According to Khalily and Faridi study (2011), multiple borrowing is not a major problem. Poor households always allocate and reallocate resources in response to different shocks. Households can get benefit from multiple memberships or borrowing is to minimise the degree of idiosyncratic or covariate shocks. One strategy is to accumulate large amount of savings to cope with shocks.

It is therefore important that the long-term viability of the microfinance industry depends on microfinance institutions' ability to develop a sustainable business model. Microfinance institutions, after all, are business ventures. They must be financially viable in the long run or they will eventually be forced to fold and go out of extreme. Regulatory agencies should have a role in curbing multiple borrowing leading to either indebtedness of borrowers or insolvency of MFIs. So a growing overlapping of MFI membership and borrowing will pose a special challenge for MRA.

Conclusion and Recommendations

Multiple borrowing may be caused by the nature of credit need and inherent terms and condition of microcredit. For example, if the credit is for agriculture crop and the size of the loan is limited because of the terms of microcredit programme, the borrowers may have to turn to several providers for loan.

Other reasons for multiple borrowing include:

- Default in repaying existing loans,
- Economic recession requiring additional loans by borrowing households,
- Overlapping jurisdiction of MFIs can by definition lead to overlapping. In Bangladesh, one survey, Zohir (2001) shows that 95% of the villages' survey actually overlapped in areas covered.

As for the future, certain steps may be taken to direct overlapping to a constructive and productive route.

- It is often argued that, Credit Bureau or Clearing Houses could be set up to avoid or minimise overlapping. For the removal of indebtedness, there is no strong evidence suggesting the need for a Credit Bureau to identify overlapping households at the current state. For

⁷ DiD estimate was derived based on conditional mean of the outcome variable. It was done in order to make the groups more comparable.

the better performance of MFIs and overall improvement, a cost-benefit analysis needs to be done along with good risk management, screening, staff monitoring and informal information sharing about multiple borrowing.

- MFI credit policies need to be adjusted in a manner that allows minimum of overlapping. For example, microcredit for agriculture needs to adjust to size and repayment provide in a manner that is suitable for agriculture.
- Some MFIs may need to strengthen their lending practices and re-engineer their internal staff's attitude to avoid lending to multiple-borrowers.
- Microcredit Regulatory Authority (MRA) needs to take some actions to minimise overlapping or direct this to a productive route.
- Donors can prevent MFIs overlapping to some extent by prioritising the funding for microfinance expansion to under-served markets.
- Information sharing between MFIs would help in minimising the overlapping in lending to microcredit to members of MFIs.

Most of the studies from the demand side reveal that multiple borrowing is not associated with the risk of default. In most of the cases, borrowers go for multiple loans for additional investment, and small percentage of borrowers use loans for repayment of previous loans. However, similar results may be derived from the supply side study. The critical question of such study would be, is intensity of overlapping positively associated with portfolio at risk of the microfinance institutions? An inconsistent result would show that MFIs with higher intensity of overlapping borrowers will have higher probability of increase in portfolio at risk. In such a situation, MFIs are likely to be non-viable. To cope with it, MFIs need to increase their loan loss reserves.

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