Transaction Cost Reduction Models For Micro Finance Institutions

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Abstract

During the past ten years, the microfinance industry has established itself as a dynamic and fast-growing segment of the region’s financial markets. As a result, what once was a relatively obscure grassroots movement has become a topic of major importance in many national development strategies. In developing countries, the costs for supplying financial services for a Micro Finance Institution (MFI) are high in rural areas. Often, these costs cannot be adequately covered through interest charges because usury laws or traditions prevent charging high rate of interest to clients. Therefore, MFIs tend to reduce the quality and quantity of their services, which increases transaction costs for the clients. The article discuss several area specific collection models can be adopted in the MFI operational strategies to reduce transaction costs. Collection risks are to be considered while adopting suitable collection strategies and in optimum utilization of resources. The reduction in operational cost can be transferred to the clients by reducing the interest rate on loan products; thereby the financial services for poor households can contribute to the achievement of Millennium Development Goals.

Key words : Micro Credit, Micro Finance, Equated Installments, Self Help Groups, Federations, Collection Models.

Introduction

The term of Micro Credit refers to the provision of financial services to low-income clients. It involves credits and/or other financial products in small amounts to primarily economically vulnerable customers, often working in the informal sector, typically self-employed and who usually lack the necessary assets to guarantee their loans. However, some microfinance intermediaries have achieved financial sustainability by using techniques more adapted to micro-entrepreneurs, charging cost-recovering interest

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rates, creating new ways of taking guarantees, and thus obtaining high levels of repayment.

Microfinance is equally an economic development approach intended to benefit low-income groups. Micro credits include usually small loans for working capital, informal appraisal of borrowers and investments, secure saving products, and insurance and payment service.

There are five main types of institutions directly involved in microfinance viz. Governmental, Micro Finance Institutions, NGOs, Cooperative-type institutions and Informal lenders. Lending through group model is emphasized by these institutions, whereas the interest rate is charged heavily on the rural clients. The problem is due to cost of funds and additional cost involved in collection and recoveries.

It is high time that the financial institutions have to adopt area specific collection strategies by considering the risks involved and also optimum utilization of resources. By reducing the transaction cost, the institutions can reduce the interest rate on their loan products, thereby achieving the double bottom line objective of social and economic development of rural households through micro finance services.

Collection Models

1. Direct Collection Model (DCM)

After loan disbursement, MFIs are collecting their loan installments either on a daily, weekly or monthly basis for a particular tenure. MFIs are using the existing manpower for the collection of Equated Installments (EIs). Under this system the Field Officer (FO) of the MFI goes to field and collect the EIs from the Group/member. The collection point may be the village point or can be the outreach centre. Moreover if the MFI use the existing man power for collections, it will not be cost effective and also unproductive for the MFI’s business development. Under this model, the cost involved can be calculated as:

\[ T_c = \frac{(C_s+C_a+C_o)}{} \]
Where,

\begin{align*}
C &= \text{Cost} \\
Tc &= \text{Total Transaction cost for Collection per Group} \\
Cs &= \text{Average salary of Loan Officer per day} \\
Ca &= \text{Average cost of Travel Allowance per day} \\
Co &= \text{Average other charges like phone, refreshments etc. per day} \\
Gv &= \text{Average number of groups visited per day by a Loan Officer}
\end{align*}

The strength of Direct Collection Model is that the Field Officer will have direct contact with the group/members and there will be regularity in repayment. The loan customer will have Pavlov’s syndrome such that she will be tuned that on a particular day and at particular time the Field Officer will come for collection. Hence the customer will make arrangements for repayment of her equated installment. If the FO observes any problem with the loan customer the Field Officer can immediately provide credit counseling and achieve on-time repayment.

The main problem is the risk factor involved in the transit of cash from field to Bank. Also the financial discipline and commitment of the Field Officer is also a major risk. If the Field Officer involve in malpractices, then the Financial Institution will loose its credibility with their customers.

2. **Direct Repayment Model (DRM)**

In this model, the Group/Member can come to the Branch or MFI collection center for the remittance of their monthly Equated Installments. This model may not be a fair practice as most of the MFIs are taking the service charge during the disbursement in-order to cover the additional transaction cost. More over group/members locations may be far away from the MFI Branches. Hence the customer has to travel a long distance up and down that involves loss of time and resource for the customer. Further if a group/member comes to Branch for EI remittance, one full day will be wasted, and she will loose her livelihood. The Transaction Cost involved can be calculated as:
\[ Tc = Ca + Co + Oc \]

Where,
- \( C \) = Cost
- \( Tc \) = Total Transaction cost for the Group for repaying the monthly EMI
- \( Ca \) = Cost of Travel to the MFI branch
- \( Co \) = Other Charges
- \( Oc \) = Opportunity cost of the livelihood loss incurred by the leader or member for the day

Also there is a threat of transit risk involved and misappropriation of collected EI by the group leader also. Apart from this the MFI has to consider the unnecessary cost involved for the groups under this system. Further many MFIs are collecting service charges/processing fees, additional expense from the group and hence this practice will not achieve the double bottom line of social and economic development of the rural poor in micro finance services.

3. **Banking Model (BM)**

Under the current SHG methodology, each SHG has to open a bank account in the nearest Bank Branches. The SHGs has to do all the financial transactions through the Bank only. So the SHGs can avail cheques from the Bank and do the repayment transaction. The MFI can utilise the existing banking structure for Equated Installment collections. The MFI can open a current account in a Bank for each district/branch units. During the loan disbursement, the SHG leaders can give Post Dated Cheques to the MFI and every month the SHG has to repay their Installments in their bank account itself. The MFI can present the cheque in its bank account and do the collection. The transaction cost involved is:

\[
\frac{[Tc \times Oc] + Cb + Co}{Nc}
\]

Where,
- \( Tc \) = Total Transaction cost for collection per Group
- \( Td \) = Total EMI demand for the month
- \( Oc \) = Opportunity cost of Capital
- \( Ti \) = Average time taken for collection from the date of payment by the Group to the bank by the MFI
\[Cb = \text{Cost of cheque collection (Bank Charges)}\]
\[Nc = \text{Number of cheques presented by the MFI to the bank for collection}\]

The strengths of the Banking Model are:

- Easy for the beneficiaries in remitting the Equated Installment as banks are closer to their vicinity
- Deployment of manpower is less in collection process by the MFI
- No mishandling of cash by the group/member and Field Officer
- Cash transit risks can be avoided
- Rural women made aware of the usage of cheque system
- Effective monitoring of repayment schedule
- As collection work is reduced for the field assistants, they can spend more time in mending the groups to be potential customers
- Cheques will also serve as a risk mitigant in case of default

4. Collection Account Model (CAM)

In the Banking Model there is every possibility for time delay in the collection process and also element of cheque bounce is also possible due to signature difference, insufficient funds in the group account, late payments, etc. This will be a hindering factor for upcoming MFIs for doing fresh disbursements and also to repay to the donors as there will be a mis-match in fund flow. In some cases banks are very reluctant to give cheques to the self help groups. In such situation, the MFIs can open a collection account in a Bank near to the branch and give instructions to all the groups/members to deposit their monthly equated Installment directly to the MFIs current account.

The MFI can give a standing instruction to the particular collection bank branch to transfer the funds to MFIs main account on a fortnight basis. During the fortnight/month end the MFI can collect bank statement and the MFI can do the reconciliation work and trace the unpaid customer. The Transaction Cost involved is:

\[
\frac{\left[\frac{(Td \times Oc)}{365 \times Ti} + Cb + Co\right]}{Nc}
\]

Where
\(Tc = \text{Total Transaction cost for collection per Group}\)
\(Td = \text{Total Demand for the month}\)
\(Oc = \text{Opportunity cost of capital}\)
\[ T_c = \frac{[(T_d \times O_c) / 365 \times T_i] + C_b + C_o + C_i}{N_c} \]

Where
- \( T_c \) = Total Transaction Cost for Collection per Group
- \( T_d \) = Total demand for the month
- \( O_c \) = Opportunity cost of capital
- \( T_i \) = Average time taken for collection from the date of payment by the Group to the bank by the MFI
- \( C_b \) = Cost of Fund Transfer to the main account (bank charges)
- \( C_i \) = Incentive pay out to the business link
- \( N_c \) = Number cheques presented to the bank for collection

The problems in this model are:
- Difficulty in getting cheques for the business link from their respective banks
- Risk involved in money transit
- Ability of the business link to work in unity and coordination
- Capacity of the business link to handle huge amount
- Lack of common collection point
- Need Intensive trainings
- Chances of group conflicts
- Lack of minimum cash handling infrastructures, etc.
- Caste and creed differences
In this method MFI can think of using the existing SHG federations as a collection intermediary. The federation can collect the Equated Installments from the groups and remit the same in their Bank Account. MFI can withdraw the Equated Installment amount from federation bank account using the cheques provided by the federation. The Transaction Cost involved is:

\[
Tc = \frac{[(Td \times Oc) / 365 \times Ti] + Cb + Co + Ci}{Nc}
\]

Where,
- \(Tc\) = Total Transaction cost for collection per Group
- \(Td\) = Total demand for the month
- \(Oc\) = Opportunity cost of capital
- \(Ti\) = Average time taken for collection from the date of payment by the Group to the bank by the MFI
- \(Cb\) = Cost of fund transfer to the main account (bank charges)
- \(Co\) = Other charges (if any)
- \(Ci\) = Incentive pay out to the Federation
- \(Nc\) = Number cheques presented to the bank for collection

Under this method of involving Federations as collection intermediary seems to be a better option because of the following reasons.

- Low cost involved in the collection system
- MFI can retain the cheque system
- Risk factors can be avoided
- Getting cheques for the federation is not at all a problem as it is a registered body
- As many of the NGOs/MFIs are thinking means and ways to strengthen their federations, introduction of this system will strengthen the NGO and Federation involvement in loan management and monitoring which will be a productive approach in MFI’s business expansion
- Convenience for the group to repay their equated installments
- In this system the field officers will get upgraded from the collection work to the supervisory work

Before considering the Federation Model which is more area specific, the Federation should fulfill the following criteria.

- The optimum SHGs within a Federation should be between 5-15
- The Federation should be homogenous in nature
- The SHG Federation should have a legal identity
• The Federation should constitute a General Body with all the SHG members as members of the General Body (with 150 to 300 members)
• The General Body should meet once in a year to review the performance of Federation and to plan for future programs
• The General Body should elect a Executive Body with 5 to 15 members
• The Executive Body should meet once in three months to review, plan and monitor the Federation performances
• The Executive Body should have a term
• The Federation should have a bank a/c.
• They should sign a MoU with MFI as Business Partners
• They should have minimum infrastructures (rented room, part time staff, minimum office equipments, etc.)

7. Smart Cards Model (SCM)

Information Technology can be used in collection mechanisms. Smart Cards can be provided to each customer and they can use the same for paying their equated Installments. Using this technology, the loan officers can attend three to five village-level meetings a day instead of two, allowing them to increase their client access. Computerization of transactions can also help to minimize errors, provide management with more up-to-date information, and enhanced transparency.

Time spent in meetings and on keeping manual collection sheets and passbooks can be slashed if smart cards are used. Each client will be provided a smart card. The Field Officer can go to meetings with a palm-pilot sized hand-held computer (HHC). In the meeting each client’s card will be inserted in the terminal and her savings and loan transactions will be automatically recorded and updated. At day’s end the loan officer will upload the data from the HHC to the MFI computer. Meanwhile, a read-only HHC is left in the village so that members can check their account information. The Transaction Cost involved is:

\[ Tc = \frac{(Cs + Ca + Co + Cm)}{Gv} \]

Where,
\( C = \text{Cost} \)
\( Tc = \text{Total Transaction cost for Collection for Group} \)
Cs = Average salary of Loan Officer per day  
Ca = Average cost of Travel Allowance per day  
Co = Average other charges like phone, refreshments etc. per day  
Cm = Average cost of maintenance of HHC  
Gv = Average number of groups visited per day by a Loan Officer

The main problem is the risk factor involved in the transit of cash from field to Bank.

8. Post Office Model (POM)

Post offices could be used to offer cash handling services and money transfer services to microfinance institutions, particularly those based in rural areas. In countries where rural finance institutions have been established to extend loans for rural activities, strategic partnerships can be formed with post offices with the underlying objectives to bring together deposits, lending and recovery functions and to use the convenience of post offices to maximize service delivery points. Most of the studies reveal that the mean distance from the house holds to the nearest post office is very minimum when compared with MFI branch distance. Hence the MFIs can very well utilize the post office for loan collections. Recently post offices in India has stared opening savings account and issuing cheques for SHGs and hence the MFIs can utilize this facility to the maximum extent and reduce the cost.

The MFI can open a current account in a bank branch in their district/branch units. During the loan disbursement, the SHG leaders can give Post Dated Cheques to the MFI and every month the SHG has to repay their Installments in their Postal account itself. The MFI can present the cheque in its bank account and do the collection. The transaction cost involved is:

\[
Tc = \frac{[(Td \times Oc) / 365 \times Ti] + Cb + Co}{Nc}
\]

Where,

\( Tc \) = Total Transaction cost for collection per Group  
\( Td \) = Total demand for the month  
\( Oc \) = Opportunity cost of Capital
Conclusion:

For a MFI, transaction cost is one of the crucial factor/bottleneck to increase the profits and to have a long-term sustainability. It is high time that MFIs have to investigate, interrogate and initiate area specific collection approaches by considering the cost and developing the MFI business outreach. By reducing the transaction cost, the institutions can reduce the interest rate on their loan products, thereby achieving the double bottom line objective of social and economic development of rural households through micro finance services.