Self Help Group Linkage Programme: A case-study

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Abstract

The case-study examines the group lending mechanism of a particular Microfinance Institution working in Haryana, India. The Microfinance Institution restricted the number of group members that could borrow simultaneously from it and allowed the internal lending amongst the group members. We found evidence of negative assortative matching in groups i. e. relatively wealthy individuals grouping with poorer individuals, with the wealthier members obtaining a higher proportion of the loans in the group.

Keywords: Group Lending, Microfinance, Savings
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1 Introduction

We document a variation of the simple group lending mechanism used by a Microfinance Institution (MfI) in the Indian state of Haryana. We look at the distinctive features of this group lending mechanism. The objective of the exercise is to understand how the particular group lending mechanism helps the MfI solve the information problems associated with lending to the poor.

The MfI in Haryana works under the guidelines of the Self Help Group (SHG) Linkage Programme, India's decade old national microfinance programme. The SHG Linkage Programme was designed to encourage MfIs to enter and fill the gaps in the rural financial markets across the country.

2 Background

2.1 Rural Banking in India

The nationalisation of India's fourteen major commercial banks in 1969 paved way for what came to be know as the social and development banking. The objective was to increase rural access to banking services and target credit at some specific activities and certain disadvantaged groups. The Reserve Bank of India (RBI) pursued these objectives by imposing ceilings on interest rates and setting specific targets for expansion of rural branches and sectoral allocation of credit.

In 1991, this policy was reversed after the Narsimhan Committee Report suggested "phasing out the directed credit programmes, deregulating the interest rates and revoking the branch licensing policy." (Narasimhan, 1991). It was felt that by encumbering the banking sector with social objectives, the state was restricting the banking sector from competing in the global economy.

India started the slow but steady process of dismantling its social and development banking policies. By some accounts, the policy had enjoyed some success since its inception in the late 1970s. “Between bank nationalization in 1969 and the onset of financial liberalization in 1990, bank branches were opened in over 30,000 rural locations which had no prior presence of commercial banks” and the “Indian rural branch expansion programme significantly lowered rural poverty.” (Burgess and Pande, 2004)

The 1990s saw a contracting rural banking network in line with the recommendation of the Narsimhan Committee Report. To compensate for this, there was a need to find a new method of disbursing credit to the rural poor, which would be compatible with the spirit of deregulation.

2.2 The Self Help Group Linkage Programme

The Self Help Group (SHG) Linkage Programme initiated by the National Bank of Agriculture and Rural Development (NABARD) emerged as a solution. The pre-existing rural banking network was incorporated in the programme. The programme adhered closely to the principle espoused by other microfinance programmes, namely making financial services available to the poor.

Since 1999, India has seen a phenomenal rise in the number of self help groups being formed and subsequently linked to the conventional banking network under this programme. There has been a ten fold increase between 1999 and 2004 in the number of groups that have been linked by the SHG programme. (Table 1)

Table 1: Growth of Self Help Group Linkage Programme in India

	Self Help Groups			Loans to Self Help Groups*		
Year	Number	Growth	Cumm.	Amount	Growth	Cumm.
1992-1999	32,995		32,995	570		570
1999-2000	81,780	148%	114,775	1360	138%	1,930
2000-2001	149,050	82%	263,825	2880	112%	4,810
2001-2002	197,653	33%	461,478	5450	89%	10,260
2002-2003	255,882	29%	717,360	10,220	87%	20,490
2003-2004	361,731	41%	1079,091	18,550	81%	39,040

Source: Government of India, Economic Survey, 2003-04

*Figures in Rs. million; £1.00 = Rs. 79;

3 The Fieldwork

The objective of the fieldwork was to analyse how the SHG group lending mechanism solves the information problems associated with providing financial services to the poor. With this objective in mind, we studied the group lending mechanism used by a particular MfI working under the guidelines of the SHG Linkage programme guidelines.

The fieldwork for this study took place in August 2004 in the *tehsil* of Hathin[1] in the Indian state of Haryana. We interviewed 54 members from 5 self help group in the area. These self help groups had been formed by Society of Promotion of Youth and Masses (SPYM), a New Delhi based MfI working in the area for the last eight years. In that period, they have formed 300 groups in the area and have a presence in all 84 villages of Hathin. SPYM works with women-only groups and so all our interviewees were women. The groups we interviewed were about 18 months old. We set out the precise group lending mechanism used by SPYM in detail below.

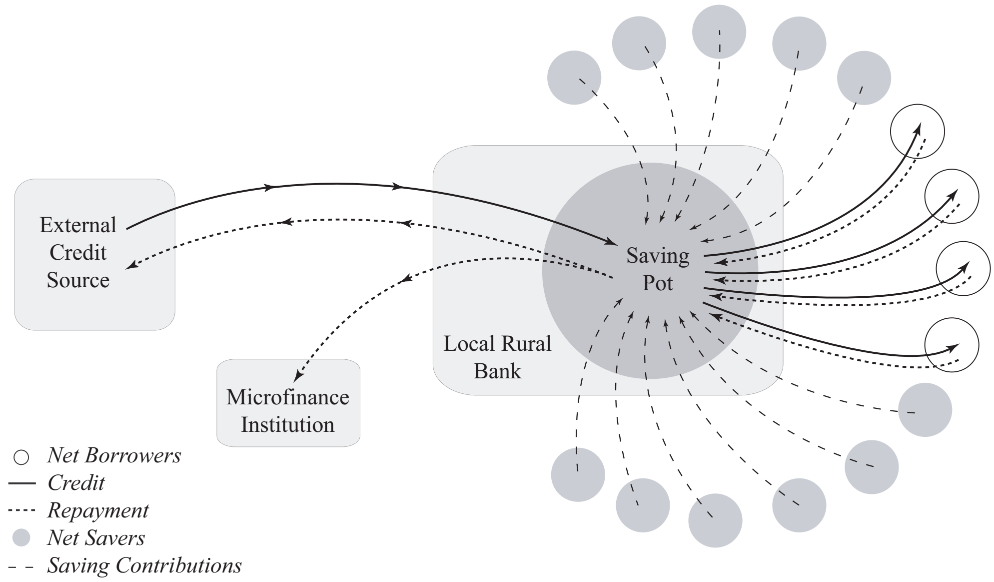

Figure 1: Flow of Funds

3.1 The Group Lending Mechanism

In accordance with the SHG Linkage Programme guidelines, the MfI encourages individuals to form a group of 15 to 20 members. Once the group is formed, the members contribute a fixed amount every month to the group's saving pot. The group opens an account in the local rural bank and the contributions to the saving pot are deposited each month in this account.

The guidelines suggest that there is moratorium on borrowing from the saving pot for the first five months during which the saving pot is allowed to accumulate. After this period, the members petition the group for loans and the group decides who gets to borrow first from the saving pot. Since the borrower is borrowing from the members of the group, we will henceforth refer to this kind of loan as the internal loan and interest rate charged on the loan as the internal interest rate. The loan has to be fully repayed back in 10 installments over a 10 month period. The interest earned on the internal loan is shared equally amongst the group members.

Two months after the first internal loan, the group can lend its savings to a second borrower from the group. For each loan, the members petition the group and the group as a whole decides who gets the loan. The group is encouraged to keep detailed accounts of the savings contributions and the loan repayments each month. These accounts, in conjunction with the group's bank account activity, starts the process of creating a credit history for the group.

If the group is able to enforce timely repayment on the first two internal loans, the MfI arranges an external loan for the group from either one of the numerous subsidised government lending programmes or a public bank. We refer to the interest rate charged on the external loan as the external interest rate.

The external loan is made to the group as a whole. The group then allocates it to a borrower in the group. Each subsequent external loan is approved on the basis of the group's repayment history on the internal and external loans. Like the internal loan, the external loan has to be fully repayed in 10 installments over a 10 month period. Though, for a external loan, a direct debit is setup for repayment of the loan at the time the loan is disbursed. Every month, the rural bank automatically deducts the installments on all outstanding external loans from the group's account. It is the responsibility of the group to ensure that the borrowers deposit their installment in the group's account. If the borrowers fail to do so, the group's saving pot get depleted.

The rules of the SHG Linkage Programme explicitly forbid the MfI from engaging in financial intermediation. The group's saving has to be deposited in the local rural bank and any external loan has to be transacted exclusively through the local rural bank. The MfI's remuneration for forming the groups and linking it to the external sources of credit is tied to repayment of the external loans. Part of the interest payment on the external loan made by the borrower goes to the MfI.

3.2 The Group Contract

The MfI proposes the following three elements of the group contract at the time of group formation.

1. The amount each group member is required to save each month

2. The length of the repayment period for the internal and external loans

3. The internal interest rate charged on the internal loans

The group is formed if the group members agree to these three elements of the group contract as proposed by the MfI. The MfI has no control on external interest rate as it is determined by the external source of credit, i.e. the public bank or government in the case of a subsidised lending programme.

3.3 Terms of the Loan

In each of the 10 monthly installments, a borrower is required to repay back one tenth of the principal along with the interest accrued on the principal owed hitherto. For a loan amount of L, the installment due in month t would be $\left[\frac{1}{10} + \frac{10-(t-1)}{10} \cdot \frac{r}{12}\right] L$ where r is the yearly interest rate charged on the loan.

The interest rate varies according to the source of the credit. In our study, we found that the groups were able to obtain external loans at 18% per cent per annum. The group's internal funds were lent out to its members at 24% per annum.

On an external loan of Rs. 10,000 (£ 125.00),[2] the first month's installment would be Rs. 1,150 (£ 14.375). Each subsequent installment would be Rs. 15 (18.75 pence) less, till the loan is paid off in the tenth month. On an internal loan of same amount, the first month's installment would be Rs. 1,200 (£ 15.00) and each subsequent installment would be Rs. 20 (25 pence) less, till the loan is paid off in the tenth month.

The group member's monthly contribution to the saving pot varied from group to group. In our sample this varied from Rs. 200 (£ 2.50) to Rs. 100 (£ 1.25). To put these amounts in context, the poorest group members in our sample were agricultural labourers, whose daily wage was approximately Rs. 100.

The primary sources of external credit were the Rashtriya Mahila Kosh (RMK), the National Minorities Development Finance Corporation (NMDFC) and the the public banks. Part of the interest payment on the external loans was retained by the MfI. Depending on the source of the loan, the MfI's margin on the external loans varied between 6% and 10%.

3.4 Saver's Premium

It is notable that the interest rate charged on the internal loans was considerably higher than the interest rates charged on external loans. This is in line with the findings in Chavan and Ramakumar (2005). They find that the internal interest rate is always higher than external interest for the SHG groups across India. Studies like Harper (1998), Harper (2002), Gaiha (2001), Puhazhendi and Satyasai (2000) and Puhazhendi and Badatya (2002), which have looked at the SHG group across India, have come to a similar conclusion.

Whilst analysing the internal structure of a cooperative, where members of the cooperative borrow both internally and externally, Banerjee et al.

(1994) shows that a premium needs to be paid on the internally borrowed funds. The premium ensures that the net saver's have an incentive to participate in the cooperative. It compensates the net savers for monitoring the net borrowers and bearing the liability for the net borrowers failure to repay.

3.5 Potential Investment Projects

In the interviews, most of the group members said that they had joined the group with the objective of buying a buffalo. There are a number of privately owned dairies in the area which source their milk from the villages in Hathin. Consequently, investing in a buffalo was perceived to be a safe investment as there was a well established market for its produce.

A buffalo could cost anywhere between Rs. 5,000 to Rs. 15,000. The more expensive the buffalo, the more milk it produced per day. The milk could be sold to the local dairy at anywhere between Rs. 4 to Rs. 6 per litre. All the group members that reported borrowing for investment purposes, claimed to have bought a buffalo.

3.6 Borrower's Stake in the Project

Lets take a typical example of a borrower taking an external loan of Rs. 10,000 to buy a buffalo of that amount. At 18% per annum, the borrower is required to repay Rs. 1150 after the first month. Given a buffalo's typical milk production, which the borrower sells at Rs. 5 per litre, the borrower can expect to have a surplus of Rs. 30 per day. The borrower would have a shortfall of Rs. 400 in the first month and a shortfall of Rs. 265 in the tenth month. Thus, the borrower cannot expect to repay the loan just using the proceeds from the investment project.

Assuming that the borrower is able to earn 24% (the internal interest rate) on her savings at all points in time, the borrower would require to have savings of at least Rs. 3008.71 to start with in order to stick to the repayment schedule of the loan. Thus, shortening the repayment period forces the borrower to use her savings to repay the loan. To make repayments on time, the borrowers require sufficient initial savings to start with. That is, unless they plan on defaulting on their installments.

4 Solving the Information Problems

This section discusses the way in which the SHG group lending mechanism solves the information problems associated with lending to the poor.

4.1 Enforcing Joint Liability

The SHG mechanism is able to impose full and immediate joint liability on the group members. If a particular borrower fails to repay on time, the group members and in particular the members that do not have any outstanding loans, are penalised, fully and immediately. At any given point in time, the non-borrowers effectively cover for the late payment by the borrowers in the group. The MfI is thus able to impose joint liability by restricting the number of members that can borrow at point in time in the group.

In conventional groups, where all members borrow simultaneously, imposing joint liability on the group members is not trivial. It has been argued that the MfI imposes joint liability by threatening to barr the group's and its individual member's access to future credit in response to an individual member's delinquency. Ghatak and Guinnane (1999, pg. 214) illustrate this with an example from the Grameen Bank. "All borrowers accept the threat that if their group does not fully repay its loans, then all members are cut off from future credit from this lender."

SPYM's accounts showed that 97% of the groups had made timely repayment. In the 3% of case, there were delays in repayment but no default. There has never been any reported instance of a late payment in the 5 groups we studied.

4.2 Active Screening

The MfI assigns a Community Development Officer (CDO) to each group. The CDO attends the weekly meetings of the group and clarifies any doubts the group members may have. Attending the weekly meeting gives the CDO an opportunity to observe how the group functions. For an outside observer, observing the weekly group meeting can convey important information about the group's social cohesion and it's ability to administer itself. This and other relevant information collated by the CDO helps the MfI assess the group's ability to enforce timely repayments on external loans.

Hoff and Stiglitz (1990) classify this kind of screening as *active screening* as it "entails lenders (a) expending resources in actively screening applicants (groups) ... and (b) limiting the range of their lending activity to members of a particular kinship group, residents of a given region or individuals with whom they trade." This kind of screening is distinct from the *passive screening* mechanism which works though the design of contracts (interest rate, loan size and extent of joint liability) and encourages the borrowers or groups to self select.

Given that the MfI is not the financial intermediary, it does not have full control on the terms of contract it offers the groups. The external interest rate is set either by the government lending agencies like the RMK and NMFDC at the national level or by the respective public banks. Consequently, the MfI is constrained in its ability to screen the groups passively and relies more on active screening.

I was able to observe the MfI's cost associated with active screening. I frequently accompanied the CDOs in their visits to group meetings. The CDO would observe the weekly meeting, interrupting only to clarify rules regarding accounting and saving. The CDOs tended to address the meeting at the end, to impress upon the group that their access to future credit hinges on their ability to efficiently self govern.

As Hoff and Stiglitz (1990) suggests in (b) above, the MfI, by tying-in the groups with a mandatory saving scheme, encourages the formation of the group on which it intends to concentrate its future lending activity.

It is well documented that the MfI, as an outsider, has a disadvantage in terms of cost of acquiring local information, as compared to the various participants in the local informal markets. With the SHG mechanism, the MfI is able to economise on the resources expended in screening actively. The CDO is able to gather information about the group and its members merely by attending successive weekly meetings and examining the accounts maintained by the group. Consequently, the SHG mechanism allows the MfI to acquire information about the group inexpensively and allows the groups to exhibit their ability to administer themselves as a financial entity before any funds are lent to them.

4.3 Peer Monitoring and Auditing

The SHG mechanism is able to induce peer monitoring by restricting the number of borrowers that borrow simultaneously in the group.

4.3.1 Sequential Lending

There is a moratorium on lending for approximately the first five months. Once the lending starts, credit is allocated sequentially within the group and the group decides the sequence in which the borrowers get credit.

All group members that do not have outstanding loans have incentives to monitor the present borrower(s). Their saving is jeopardised if the current borrower(s) do not repay on time or default. Further, for the borrowers waiting for credit in the near future, the incentive to monitor and audit are even stronger. They would like to ensure that they get a chance to borrow.

In our study we found that at any given point in time there are always group members that have no loans outstanding. (See Table 2) With joint liability, the threat of losing their accumulated savings gives the peers incentives to monitor the borrower. It ensures that the loaned funds are used judiciously and the repayments are made on time.

Table 2: Number of Group Members with Outstanding Loans

Month	Group 1	Group 2	Group 3	Group 4	Group 5
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	1
4	0	0	1	0	3
5	0	1	1	0	5
6	1	1	1	0	5
7	1	1	1	3	5
8	2	2	1	3	5
9	2	5	1	4	5
10	2	5	1	5	5
11	3	6	3	5	5
12	4	7	5	5	5
13	7	8	5	6	5
14	9	8	4	6	4
15	9	8	4	8	3
16	10	7	4	8	4
17	9	8	6	8	4
18	10	9	6	7	5
Total Membership	16	17	17	17	16

At any given point in time, these incentives are sharper for a non-borrower

i as compared to a member j who has an outstanding loan. j has comparatively less to lose if another borrower defaults and the group collapses. By strategically defaulting, j may lose access to future credit but also escapes the current repayment obligations. Conversely, i would loose part of her saving as well as access to future credit. Thus, the non-borrower member i has sharper incentives to monitor and audit her peers than the borrower j.

Restricting the number of simultaneous borrowers in the group induces a greater amount of aggregate monitoring in the group. The tight repayment schedule implies that the borrowers require sufficient cash wealth to be able to borrow in the first place. Consequently, only members of the groups that have sufficient cash wealth can petition the group to borrow. Table 4.3.1 shows us that after 18 months almost a third of each group has not yet borrowed.

Table 3: No. of Non-borrowing Members in the Group
(after 18 months of group formation)

Group	Members	
	Total	Not Borrowed Yet
Group 1	16	5
Group 2	17	7
Group 3	17	7
Group 4	17	7
Group 5	16	6

Restricting the number of simultaneous borrowers creates a intra-group demand for credit. Consequently, this gives the relatively well off[3] incentive to group with the poor in an effort to reduce the demand for credit within the group. Table 4 gives us an idea of the extent of income heterogeneity in the groups.

Table 5 shows us that the wealthy members in each group receive disproportionate amounts of loans in each group. The only exception is group 5

Table 4: Income Heterogeneity in the Group
(*after 18 months of group formation*)

Group	Wealthiest Member's Income†	Poorest Member's Income†
Group 1	Rs. 36,000	Rs. 15,000
Group 2	Rs. 72,000	Rs. 18,000
Group 3	Rs. 110,000	Rs. 10,000
Group 4	Rs. 60,000	Rs. 10,000
Group 5*	Rs. 76,000	Rs. 24,000

†Annual income in Rupees where £1 = Rs. 80

where the richest two members of the group had already borrowed extensively from another group.[4]

Table 5: Wealthy Member's Borrowing as a Proportion of Total Borrowing
(*after 18 months of group formation*)

Group	Borrowing			
	Total†	2 Wealthiest Member's Proportion	4 Wealthiest Member's Proportion	6 Wealthiest Member's Proportion
Group 1	107,800	43.56%	52.50%	54.29%
Group 2	99,000	13.64%	21.72%	44.45%
Group 3	135,500	52.03%	59.41%	66.79%
Group 4	28,000	27.94%	38.23%	44.70%
Group 5*	65,000	1.73%	32.03%	49.35%

† in Rupees where £1 = Rs. 80
* Group 5's wealthy members had borrowed extensively from another older group.

5 Conclusions

The objective of this exercise was to examine the group lending mechanism used by the SHG Linkage Programme. We were also able to analyse how the SHG mechanism solves the information problems associated with lending to the poor. We examined how implementing full and immediate joint liability and restricting the number of simultaneous borrowers in a group enhances the SHG mechanism's ability to screen the group and give the group members incentive to peer monitor. Along with giving the poor access to credit, the mechanism also allows the poor to obtain a premium on their savings.

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