

The Credit-worthiness of a borrower and the selection process in Micro-finance: A case study from the urban slums of India

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from the urban slums of India¹

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Abstract: This paper examines whether urban Micro-Finance Institutions (MFIs) consider proxy/ hidden collateral in the absence of physical as well as social collateral to judge the creditworthiness of a borrower. Micro-finance institutes operating in urban slums adopt an individual lending mechanism in several cases since borrowers are not willing to bear joint liability due to the acute problem of migration. Therefore, such urban MFIs that offer individual loans become extra-cautious to minimise default risk. To be specific, we study whether an MFI considers ownership of a 10ftx10ft room in a slum as a hidden selection criterion in a loan programme. Room ownership, on the one hand, indicates stability in a particular location, but on the other hand, it infers income generation capability of an aspirant borrower. We use a primary survey database collected from an NGO, Navnirman Samaj Vikas Kendra that provides micro credit in four slums of north Mumbai in India. We find that the probability of getting selected in a micro credit programme becomes significantly higher if a loan applicant owns a room in a slum compared to one who lives in a rented room. MFIs appear to be more concerned about shielding themselves from default than fulfilling the broad goal of maximising social welfare by reaching the poorest of the poor. We present our study with the caveat that the results may not be generalizable, since they are based on a case study.

Key words: Micro-finance; Credit-worthiness; Financial Sustainability; Urban slums

Jel classification: D78; G20; G21

1. Introduction

Micro-finance as an alternate loan mechanism has gained wide attention over the past few decades following the huge success of the Grameen Bank in Bangladesh (Yunus, 1998). In 2006, Mohammad Yunus and Grameen Bank received the Nobel Peace Prize for their key role in reducing world poverty. The distinguishing feature of micro-finance is that it is a collateral-free loan. It becomes an easy loan option for poor people who are otherwise forced to remain out of the formal credit market due to lack of collateral. In other words, micro-finance as a means of instrumental freedom (Cabraal, Russell and Singh, 2006) brings the freedom of access to credit to poor people who do not possess physical collateral. Therefore, it can be used as an effective means of poverty reduction.

However, from the point of view of the sustainability of the micro-finance agencies, adverse selection becomes crucial. Peer monitoring under a group-lending mechanism as social collateral (Ghatak 2000) may solve this problem along with the problem of moral hazard (Hoff and Stiglitz 1990). Unfortunately, group lending does not always act as a fool-proof mechanism, because it has the following problems: clients dislike the pressure triggered by group liability, bad clients may there ride (Besley and Coate, 1995) off good clients, resulting in high default rates, and it becomes costly for clients who may have to repay the loan for their peers. In this context, Chowdhury (2005) and Gine and Karlan (2006) have pointed out that institutional enforcement, if it works properly, can be sufficient to recover loans in the absence of group liability. Individual lending, which is the common alternative to group lending, tends to have higher performance (Kono, 2006). In addition, individual liability also results in the higher growth and outreach of micro-finance agencies. In the recent past, some international micro-lenders, such as Bank Rakayat Indonesia and the Association for Social Advancement (ASA) in Bangladesh rapidly expanded by adopting

individual liability loans. Another prominent micro-finance provider, Bancosol Bolivia, also transformed a huge chunk of group liability shares into individual loans. Thus, the individual loan mechanism is a popular choice for micro-credit providers.

For aspirant borrowers from the bottom strata of income in urban India, forming a group may not be a viable option, especially in urban slums where mobility is high. Therefore, MFIs that provide loans to individuals in urban areas have become extra-cautious to maintain their sustainability in the absence of physical collateral. Micro-finance agencies target the richer section of the poor, often to maintain sustainability, but this bypasses the vulnerable group that has the highest need. Such guarded behaviour by the agencies takes its toll on the goal of maximisation of social welfare. However, sustainability is neither a necessary nor sufficient condition for social optimality, because, in reality, sustainable organisations tend to attain the highest level of social welfare (Navajas *et al.* 2000). Therefore, we can argue that sustainability may not be the end-objective of MFIs; rather, it is a means to achieve improved welfare (Rhyne 1998). It is debatable whether MFIs prioritise their interest in survival or fulfil the broad social objective of poverty reduction. Or, is there a way to achieve both objectives?

The literature on micro-finance puts the focus on social collateral used under group loans in the absence of physical collateral (Besley and Coate, 1995; Brau and Wooller, 2004; Goldmark, 2001; Woolcock, 2001). However, none of the papers to the best of our knowledge discuss the possible use of proxy/ hidden collateral by MFIs offering individual loans. Proxy collateral can help to evaluate the creditworthiness of a borrower. Proxy/hidden collateral may be defined as an indicator of income generating capability and ability to pay by the borrower. MFIs like traditional credit institutions would not keep such collateral.

This is particularly relevant in urban slums where the problem of migration is high. Borrowers may migrate, leaving the rest of the group liable for repayment. An MFI may consider ownership of a fixed asset such as a 10ft x10ft room in a slum as substitute collateral. Such collateral may not play the same role as in private lending since MFIs do not confiscate collateral. So, what role does it play? First, ownership of a room signals the stability of a person in a particular location, which is a major concern in urban slums as pointed out in the literature as well (Patole and Ruthven, 2001; Ruthven, 2001). A borrower who owns a room is less likely to default by running away than a borrower who lives in a rented room. Second, it may hint at the income-generating capability of a borrower which, in turn, may reduce the probability of default. In short, it indicates the creditworthiness of a debtor in terms of ability and willingness to pay.

This paper examines whether MFIs use proxy collateral to select borrowers using a case study from urban slums in Mumbai, India. The study is important to understand the priorities of MFIs functioning in urban areas \mathcal{F} whether it is sustainability or outreach among the poor or both.

We organise the paper in the following manner: We discuss about data in section 2 while section 3 deals with empirical methodology. Section 4 contains results and discussion. Section 5 concludes.

2. Data

The study is based on primary data collected from Navnirman Samaj Vikas Kendra (NSVK), an NGO that provides micro-finance services to slum dwellers in the northern part of Mumbai in India. The city of Mumbai was selected because Greater Mumbai has the largest proportion (49%) of slum population among million-plus Ocities (Census of India, 2001). The NSVK was chosen since it is one of the few urban MFIs that attained financial sustainability within its first few years. This is a cross-sectional study based on data from 2002-2003 with a sample size of 694.

2.1. Data Collection

The data was collected in two phases, between October 2003 and February 2004. Information was collected on socio-economic characteristics, loan details and loan rejection from the files of loan applicants maintained by the NSVK at their branch offices in the slums. We have covered three slums served by the NSVK - New Collector ***** Compound and Akashwani in Malad (West) and Charcop in Kandivili (West). We also conducted semistructured interviews with the borrowers, aspiring borrowers and staff s of NSVK to crosscheck the information collected from the files.

2.2. Background of the NSVK

The NSVK, which was established in 1996, is one of the few NGOs that operate in the urban slums of north Mumbai. It runs the loan programme under the name of Income Generating Programme (IGP) along with programmes on the spread of education, tuberculosis control, family development, and human resource development.

The NSVK is part of the Uplift Mumbai movement funded by a French donor agency, Interaid. Seven NGOs participated in this programme, of which three conceived the microfinance programme. All these institutions started an income generation programme (IGP) in 1999-2000, but the NSVK is the only one that became financially self-sufficient with respect to IGP in 2001-02. The NGO started its loan programme in two slums, New Collectors compound and Akashwani in Malad (West) in 1999-2000, and then expanded its services to the slums of Charcop in Kandivili (West) in 2000-01 and further to Apapada, also in Kandivili (West), in 2002-03. Over three years, they have served approximately 1,500 borrowers. The target group mainly consists of poor people from minority religion.

2.3. Loan process

The loan programme offered by the NSVK became quite popular among slum residents even in the presence of two other credit sources: informal money lenders from South India, who are popularly known as *madrasi* money lenders, and banks. While the first option was exorbitant³, the formal bank, Bank of India, in that locality was not willing to offer small loans because of the high transaction costs and low recovery rates. This supports the findings in the literature (Besley, 1994; Matin, Hulme and Rutherford, 2002; Morduch, 2000). The rate of interest charged by the NSVK is 36% per annum. It is also mandatory for borrowers to maintain a savings account of 25% of the sanctioned loan with the NSVK, on which they get an interest rate of 5%. The principal along with the interest can be withdrawn when the loan is repaid, or the account may be retained with the agency in the case of repeated loans. Therefore, the lending institution in this particular case takes a risk of 75% per loan. The NSVK provides loans mainly for the purpose of new business creation or business expansion, and not for the purpose of consumption or emergency. The maximum loan amount is Rs. 3,500 in the case of a new loan.

³ Informal moneylenders charge 160% rate of interest per annum.

At the beginning, staff from the NSVK used to go door-to-door to promote the IGP programme. Later, people came to know about the loan programme by word of mouth. Aspiring borrowers used to be invited to the orientation meeting in the nearest branch office of NSVK where they were given the terms and conditions of the micro-finance programmes. The NSVK also provides skill development training to participants. Slum dwellers, who accept the terms and conditions, fill up the loan application form, stating the amount of the loan required and its purpose. At this stage, staff from the MFI visit the house of the loan applicant and collect socio-economic information on the size of the family, religion, marital status, level of education, income, occupation, family planning methods used, ownership of fixed assets, etc. The lending agency also asks the family members of the prospective borrower whether they are aware of his/her potential participation in the loan programme. This question is mainly asked of the family members of women and young members (aged 18-25). The loan application along with the socio-economic information is scrutinised by the loan co-ordinator. Next, the borrower has to provide proof of identity, such as a ration card or voter guarantors who live in same area.

It is evident that the NSVK has tried to adopt a multi-stage screening mechanism to judge the creditworthiness of the borrower. However, it is not clear from the interview process whether they consider room ownership as substitute collateral. We attempt to answer this question through an econometric analysis.

2.4. Screening mechanism of the NSVK

The NSVK has adopted precautionary measures at different stages of the loan process to safeguard against default. First, the NSVK prefers to hire its staff from people who live near the office. In fact, 75% of the staff belongs to the same community, which helps in the

screening process. On the one hand, borrowers are comfortable interacting with people from their community. At the same time, it helps screen applicants, since NSVK staffs have access to information about the loan applicants. To avoid subjectivity in the selection process, the NSVK follows a pyramidal structure in decision making.

On the ground, there are field workers (termed as toollectors the are branch office. In the next layer, there is one branch manager in each of the four branches. Above them, there are two loan-co-ordinators in two areas, Malad and Kandivili. The CEO of the organisation is at the top. Final decisions about the selection of the borrowers are usually taken by the loan-co-ordinators, while field staff and branch managers also give their opinion. If there is any discrepancy in the selection process, it is sorted out by the CEO.

As a second precautionary measure, borrowers have to bring two guarantors on the day of loan disbursement. If the borrower runs away, at least the NSVK can go after the guarantors. Usually, the NSVK does not seize the physical assets of the borrower in case of loan default. Third, and most importantly, borrowers are required to maintain a savings account with the NSVK that should be 25% of the loan amount.

2.5 Loan rejections

NSVK did not maintain records of loan rejections in the initial years of operation. They have started to maintain such records from 2001-02, and have rejected a significant proportion of loan applications from then (Table 1).

| Year | Accepted | Rejected | Total |
|---------|----------|----------|-------|
| 1999-00 | 73 | NA | 73 |
| 2000-01 | 348 | NA | 348 |
| 2001-02 | 521 | 20 | 541 |
| 2002-03 | 594 | 100 | 694 |

Table 1: Summary of loan applications

The proportion of rejections increased from 4% in 2001-02 to 14% in 2002-03, which indicates improvement in the quality of enforcement by the lending agency. In 2002-03, the NSVK has mentioned the reason for the loan rejection in the applicant ***** file. The important reasons are given in Table 2. It is striking to note that 42% of the applications were rejected because they are **t**ion-reliable ***** We use the 2002-03 data in our study since the NSVK started maintaining files for rejected applicants as well from this year.

Table 2: Reasons for rejection

| Reason | % |
|--|-------|
| Not reliable | 42.12 |
| Fake address | 4.42 |
| Husband not willing (in the case of women) | 5.02 |
| No guarantors | 34 |
| Did not submit proof of self- | |
| identification | 3.82 |
| Others | 10.62 |
| Total | 100 |

2.6 Summary Statistics

In this section, we provide an overview of the socio-economic characteristics of the loan applicants. The sample size is 694 of which 100 loan applicants were rejected.

The majority of slum dwellers (45%) in the areas under study are migrants from different states of north India, of which 50% are from rural Uttar Pradesh while a significant proportion come from the southern (13%) and eastern (13%) states. People from rural Maharashtra also live in these slums. The target group is male (76%), unlike other MFIs where the prime objective is women empowerment through micro finance (Alam and Nizamuddin 2012; Pitt, Khandker and Cartwright 2006; Ravi, Shetty and Mayya 2012). Several families come from a minority community that does not allow women family members to take part in such activities. To be specific, 64% loan aspirants are from the Muslim community, whereas 35% are Hindu. The education variable as an important component of income-generating capability is divided into four categories: illiterate (29%), primary (11%), secondary (48%) and post-secondary (12%). On average, the educational level is five years (Table 3).

Descriptive statistics for the variables of interest are given in Table 3. The average age of loan applicants are 34 years, and the youngest applicant is 18 years old. Approximate family size is five. On average, loan applicants have lived in the slum for 12 years. Seven per cent of them have been in the slum for less than one year while years of residence vary from 1-5 years for 25% of the total number of aspirant borrowers.

| Table 3: | Summary | statistics |
|----------|---------|------------|
|----------|---------|------------|

| Variable | No of Obs. | Mean | Std. Dev. |
|--------------------|------------|---------|-----------|
| Age | 629 | 33.78 | 8.98 |
| Family size | 630 | 4.98 | 2.14 |
| Years of education | 629 | 5.25 | 4.19 |
| Years of residence | 628 | 11.55 | 8.59 |
| Income (per | | | |
| month) | 629 | 4046.78 | 2240.59 |

The majority of loan applicants are semi-skilled workers in the unorganised sector. We grouped them into five major categories: tailors and *Zari* workers, small-scale traders, autorickshaw drivers, repair workers and others. Repair workers primarily repair stoves, electrical goods, furniture and other hardware, while the tothers ocategory includes employment in the services sector, photography, decoration, ownership of a small beauty parlour, domestic help, provider of small-scale car rental services, etc.

Among these categories, auto-rickshaw drivers are the richest, earning Rs. 5,239 per month at current prices, while the average monthly income of tailors and *Zari* workers, retail traders and repair workers are Rs. 3,712, Rs. 4,011 and Rs. 4,441, respectively. The average monthly income of a borrower is Rs. 4,046 in current prices in 2002-03 (Table 3), which is lower than the average per capita income of Mumbai (Rs. 4,568).

Interestingly, 60% of the people in these slums live in rented rooms, signifying that they do not have fixed asset which is our main variable of interest. Their average monthly income is also significantly lower than the average monthly income of loan applicants who live in their own room. The first group earns Rs. 3,884 per month, whereas the second group room income is Rs. 4,293 per month. In 2002-03, the average per capita income in Mumbai was Rs. 54,821 per annum (Economic Survey of Maharashtra, 2002-03), which is around Rs. 4,568 a month. Therefore, it is clear that both categories earn less than the average city-income. Nevertheless, room owners belong to the upper layer of the poor.

For a robustness check, whether room owners belong to the richer section of the poor, we cross-checked borrowers' income profile across different occupational categories (Table 4). We found that aspirant borrowers owning a room in a slum earn more than those who live in rented rooms across all occupations. In addition, the income difference is significant for each group, except auto-rickshaw drivers. It confirms that ownership of a room in a slum can be

considered as an indicator of income-generating capabilities, which, in turn, increases the creditworthiness of the borrower.

| Occupation | Does not own room | Owns a room | Income difference |
|--------------------------|----------------------|----------------|----------------------|
| | | | (t-test) |
| Tailors and Zari workers | 3430 | 3840 | Sig |
| Retail traders | 3725 | 4365 | Sig |
| Auto-rickshaw drivers | 5291 | 5317 | Insig |
| Repair workers | 3404 | 4290 | Sig |
| Others | 3157 | 4687 | Sig |

Table 4: Income comparison across different occupations

Note: Average monthly income in Rs. is reported here.

3. Methodology

The analysis was designed to examine the selection criterion used by the MFI and identify whether room ownership (as proxy collateral) was one of the criterion used to assess creditworthiness.

We used a Probit model (Woolridge, 2003) to analyse whether room ownership has any impact on the probability of being selected in the loan programme. The Probit model can be derived from the underlying latent variable model.

Let y* be an observed or latent variable, which may be determined by:

2 *= 22 + 22 + 2, 2 = 122 *> 02......212

The function in 1[.] is termed the indicator function, which takes the value 1 if $y^*>0$ and y is zero if y^* **5**.

We assume that e is independent of x and follows the normal distribution with mean zero and variance $\langle \xi \rangle$. e is also symmetrically distributed about zero, indicating:

1-G(-Z)=G(z) for all real numbers z.

From Equation (1) and the above assumptions, we can derive the response probability for y:

$$P(y = 1|x) = P(y^*>0|x) = P[e > -(\Pi + x \Pi x] = 1 \ddagger G[-\Pi + x \Pi] = G(\Pi + x \Pi \land \land \land (2))$$

Our principal objective is to estimate the effect of xj on the response probability

P (y=1|x). The dependent variable considers whether or not a loan applicant receives a loan from NSVK. Usually we follow Maximum Likelihood Estimation (MLE) method to estimate the Probit model.

The log likelihood function is given by;

$$222 \,\mathfrak{P} = \Sigma_{\mathbb{Z}} \mathfrak{A} \frac{(1-222)^{2}}{\mathbb{Z}^{\mathbb{Z}}} + \mathfrak{Z}_{\mathbb{Z}} \ln \frac{222-22^{2}}{\mathbb{Z}^{\mathbb{Z}}} \dots \dots \dots \mathbb{Z}_{\mathbb{Z}} \mathbb{Z}$$

In the Probit model, the direction of effect of x_j on $E(y^*|x) = f(x + x)f(x)$ and on E(y|x) = P(y = 1|x) = G(f(x + x)f(x)) is always the same. However, y^* , the latent variable, has hardly any well-defined unit of measurement. Therefore, the magnitude of f(x) is not very useful. We used marginal effects instead to interpret the coefficients of the Probit model, which is given in Equation 4.

$$\frac{2 \frac{2}{2} \frac{2}{2}$$

The marginal effect depends on all the values of other regressors and regression co-efficients. Here 🛛 🖾 🖓 is the standard normal probability density function. As mentioned before, y takes the value 1 if an applicant is accepted in the loan programme and takes the value zero if he is rejected. Our main variables of interest consist of:

- Ownership of a 10ft x10ft room in any of the four slums. It is also a binary variable that takes the value 1 if someone has his own room in a slum and zero otherwise.
- Years of residence. It was hypothesised that the probability of being selected in the micro-finance programme is higher if someone resides in a slum for a longer period of time. This is a continuous variable that ranges from one month to 20 years.
- Monthly income of the borrower at constant prices, deflated at 1999-00 prices. We expect a positive sign for this co-efficient, which implies that an MFI may be more inclined to include borrowers with higher incomes in the loan programme than people with lower incomes.

We were also interested in examining the interactions between these variables. It was hypothesised that the sign of the coefficient would be negative, implying that there is not much significance of room ownership if someone has high income as well as long years of residence in the slum.

When running the Probit model, we controlled for slum of residence, age, gender, family size, religion, education and occupation. Slum of residence is a categorical variable that consists of three slums: Akashwani (reference group), New Collectors Compound, and Charcop. The gender variable considered male as the reference point. There were three religious groups: Hindu (base dummy), Muslim and other. The education variable had four groups: illiterate (benchmark), primary, secondary and post-secondary. The occupation variable was grouped into retail traders (reference), tailors and *Zari* workers, auto-rickshaw drivers, repair workers and others.

4. Results and Discussion

The results of the Probit model are given in Table 5 where the co-efficients of the variables of interest are reported. We have reported results under three specifications. Model 1 is the simplest model, which considers the room ownership dummy. Model 2 takes into account the room ownership dummy along with years of residence and the interaction term between room-ownership dummy and years of residence. Model 3 is the full-blown model that considers the room ownership dummy, years of residence, monthly income of the loan applicant and the interaction term among room-ownership, years of residence and monthly income. The number of observations in each model is 526.

| | Model 1 | Model2 | Model 3 |
|----------------------------|---------------------|---------------------|---------------------|
| Room ownership (R) | <mark>0.36**</mark> | <mark>1.26*</mark> | <mark>0.81*</mark> |
| | (0.17) | (0.29) | (0.22) |
| Years of residence (YrRes) | | <mark>0.08*</mark> | <mark>0.07*</mark> |
| | | (0.02) | (0.01) |
| Monthly income (Y) | | | <mark>0.02*</mark> |
| | | | (0.01) |
| R*YrRes | | <mark>-0.09*</mark> | |
| | | (0.02) | |
| R*YrRes*Y | | | <mark>-0.01*</mark> |
| | | | (0.02) |
| No of observations | 526 | 526 | 526 |
| Log likelihood | 154.41 | 139.74 | 137.12 |
| Lrchi2 | 172.59 | 201.56 | 206.79 |
| Prob>chi2 | 0.00 | 0.00 | 0.00 |
| Pseudo R2 | 0.35 | 0.42 | 0.43 |

 Table 5: Results of Probit Model

Note: Standard errors are in parentheses. *: p<0.01, **: p<0.05. We control for age, location, gender, religion, education and occupation under each of the three specifications.

The log-likelihood ratio chi square is statistically significant in the three models, which implies that the models as a whole are statistically significant. As expected, the value of the log-likelihood ratio chi square improves from Model 1 (172.59) to Model 3 (206.79), indicating the better predictive power of Model 3 over Model 2 as well as Model 2 over Model 1.

We also tested the overall statistical significance of the main variables of interest \mathcal{F} room ownership dummy, years of residence in a slum and monthly income of a loan applicant \mathcal{F} across the three models (Table 6) using chi2 test. The same set of control variables was used in this model as well.

| | Model 1 | Model 2 | Model 3 |
|--------------------|---------|---------|---------|
| | Chi2 | Chi2 | Chi2 |
| Room ownership | 4.27 | 18.79 | 12.76 |
| | (0.04) | (0.00) | (0.00) |
| Years of residence | | 23.21 | 19.26 |
| | | (0.00) | (0.00) |
| Monthly income | | | 14.11 |
| | | | (0.00) |

Table 6: Overall effect of main variables of interest

Note: prob>chi2 is reported in parentheses.

It is clear that the overall effects of the main variables are statistically significant. Since it is difficult to interpret the co-efficients from the Probit model, we estimated the marginal effects using the delta method (Table 7). Model 1 is the simplest model where we analysed the impact of room-ownership on the probability of selection, controlling for location of slum, age, gender, religion, education and occupation. We found that the probability of being selected in a loan programme increases by 0.06 if an applicant is a room owner than if the applicant lives in a rented room. In Model 2, we included years of residence in addition to room ownership and interaction between years of residence and room ownership dummy. Here, we hypothesised that if someone lived for a long time in a slum, then whether or not he owns a room becomes less important because long years of residence indicates the stability of a person in a particular location. Therefore, the sign of the coefficient was expected to be

negative. In line with our hypotheses, we found that if a loan applicant resides in a slum for a longer period, the probability of being selected in the micro-finance programme increased by 0.01, while room ownership also leads to a higher probability of selection by 0.13 compared to tenants. The interaction term between years of residence and room ownership is negative and significant, in line our hypothesis.

| | Model 1 | Model2 | Model 3 |
|----------------------------|---------------------|--------------------|----------------------|
| Room ownership (R) | <mark>0.06**</mark> | <mark>0.13*</mark> | <mark>0.12*</mark> |
| | (0.03) | (0.04) | (0.03) |
| Years of residence (YrRes) | | 0.01* | 0.01* |
| | | (0.02) | (0.02) |
| Monthly income (Y) | | | <mark>0.04*</mark> |
| | | | (0.03) |
| R*YrRes | | -0.01* | |
| | | (0.03) | |
| R*YrRes*Y | | | <mark>-0.001*</mark> |
| | | | (0.002) |
| No of observations | 526 | 526 | 526 |

Table 7: Results of the Probit model - Marginal Effects

Model 3 is the complete model where we considered the monthly income of the loan applicant in addition to room ownership and years of residence. The most important inclusion in this model is the interaction among the room ownership dummy, years of residence and monthly income. The hypothesis for the interaction is the same as it was for Model 2, namely, if an applicant has a high income as well as long years of stay in a slum, whether or not he owns a room becomes less important for the lending agency. Therefore, here also, we anticipate the sign of the interaction term to be negative. In line with our hypothesis, the coefficient of the interaction term turned out to be negative and significant, although the magnitude is small (0.001). This implies that the gap between probability of being accepted

Note: Standard errors are in parentheses. *: p<0.01, **: p<0.05. Marginal effects were estimated using the delta-method

in the micro-credit programme between two groups (room-owners and tenants) decreases with long years of residence in the slum and high income. By controlling for the socioeconomic characteristics of the borrower, we found that room ownership increases the probability to be accepted in the loan programme by 0.12, whereas longer stay and higher income increase the probability by 0.01 and 0.04, respectively.

Therefore, we may infer from this study that in the absence of physical and social collateral, proxy collateral, such as room ownership, plays a significant role in judging the creditworthiness of a borrower in a micro-finance programme providing individual loan.

5. Conclusion

There is an on-going debate on whether MFIs are more concerned about financial sustainability over broad social responsibility of serving poor. If MFIs prioritise financial sustainability, they would choose to serve non-poor or richer poor instead of poorest of the poor. In this paper we attempt to understand it from the point of view of urban MFIs working in slums and providing individual loans. To be specific, this study examined whether proxy collateral in terms of ownership of a 10ftx10ft room in a slum plays a role in the selection process. Ownership of a room indicates income generating capability of a borrower resulting to ability to repay loan. It is crucial from the point of view of financial sustainability of MFI. We find, probability of getting a loan increases if a loan applicant lives in his own room instead of a rented room. Thus, we may conclude that urban MFIs prioritise financial sustainability over outreach.

This case study was conducted in the slums of one Indian city. Hence, the results may not be generalisable since they are based on a field study in a specific location and are not a nationally representative sample. Also, we were unable to collect data on loan rejection in the initial years of operation; as a result, it is unclear whether the organisation started considering proxy collateral from the beginning or from its third year of operation after facing loan defaults.

Despite these limitations, the study offers insights into the selection criteria of MFIs. The findings indicate that micro-finance agencies, especially MFIs that offer individual loans in urban slum areas, are extremely cautious in judging the creditworthiness of borrowers, even at the cost of sidestepping poor people since they do not get the advantage of peer monitoring. It appears that urban Indian MFIs are more concerned about financial sustainability than fulfilling the target of poverty alleviation. It supports the findings in the literature that there is a trade-off between the financial sustainability of MFIs and targeting the poor (Morduch, 2000; Navazas et al, 2000; Rhyne and Otero, 1994).

It is crucial to define ultimate goal of MFIs clearly to avoid such trade-off. If the final objective is poverty alleviation through micro-credit programmes, then, financial sustainability of MFI may be compromised. Government and donor agencies may play an important role here. If they strongly believe that micro-finance could be used as a poverty alleviation tool effectively, they should provide enough funding to the MFIs including informal ones. As a result, MFIs would be able to stop worrying about financial self-sufficiency and concentrate solely on targeting.

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