Group lending and mitigation of adverse selection in microfinance

Finance

Maurya (2011) perfectly summarised the concepts of adverse selection and group lending. In essence, microfinance works on a joint liability model and the traditional theories of credit lending state that rural credit markets are imperfectly competitive and acquiring information about borrower types on who is risky and who is safe is not costless. This market imperfection leads to high interest rates and drives out safe borrowers from the credit market.

In economic literature, this problem is considered as adverse selection problem and the joint liability model tries to solve the problem of adverse selection through group lending (Maurya, 2011). Group lending generally denotes a credit advancing model where individuals who do not have collateral form a group based on joint liability to access loans. It is widely regarded as one of the most important institutional innovations in development policy in the last quarter century (Morduch, 1999).

The most understanding feature of group lending is joint liability. Joint liability to a group obligation that if one member of the group defaults on their loan all the other group members will contribute jointly to cover the defaulted amount. As a result the whole group is jointly liable for the pool of loans granted to each member of the group. Any member in default will spread the default to other group members regardless of them being personally in default or not.

Recently many developments institutions have tried to use group lending to give loans to the poor and achieve the following: Avoid the use of collateral as it would be replaced by joint liability. pass off the screening, monitoring and enforcement of loans to the peers Reduce fixed transaction costs associated with issuing out very small loans The adverse selection problem

occurs when lenders cannot distinguish inherently risky borrowers from safer borrowers. If lenders could distinguish by risk type, they could charge different interest rates to different types of borrowers.

But with poor information, options are limited. The problem to lenders is that they cannot gather sufficient information at reasonable costs to determine the riskiness of the borrowers. As such to insulate themselves against losses of issuing loans at low interest to very risk borrowers they charge a high blanket interest rates for all loans. Adverse selection may lead to credit rationing as it induces lenders to charge everyone high interest rates to compensate for the possibility of having very risky borrowers in the customer population. (Morduch 2010).

If the economy is consisting of safe and risky borrowers, only risk borrowers would remain in the market. Since safe borrowers regard themselves relatively safe debtors they will require a loans at low interest rates which is in tandem with their riskiness. Risky borrowers on the other hand know they are risky and would tolerate high interest rate as it perfectly relates their riskiness. As such when MFIs charge a high blanket interest rate to avoid a mismatch in risk and return safe borrowers withdrawal from the market as they perceive the rate to be too high for their riskiness.

Only risk borrowers would then be left in the market and all loan advances would be mad to risk borrowers – a situation that the MFI would be trying to avoid in the first place. So due to lack of information charging high interest rates to avoid risky borrowers would actually eliminate safe borrowers and attract risky borrowers – thus adverse selection. In principle, group lending with jointresponsibilitycan mitigate this inefficiency (Armendariz and

Morduch, 2010). Group lending mechanisms provide incentives to the borrowers to monitor each other to assess the creditworthiness of each member.

Aghion (1999) showed theoretically how peer monitoring alone, with random formation of groups can help overcome adverse selection problems when monitoring is costly for lending institutions. Strong social networks have lower monitoring cost, which results in more credit being extended. Social networkingprovides a group of people who are well acquainted with each other and have a mutual trust in the economic viability and creditworthiness of each other. Poor borrowers cannot provide collateral to lending institutions and even when it is available, legal obstacles often prevent repossessing collateral when borrowers default. Ghatak, 1999). Ghatak (1999) have argued that group lending can solve this problem by taking advantage of information villagers have of each other's type which is unavailable to the lender. Assortive matching can be discussed under two assumption:

1. When borrowers cannot distinguish the type of the other borrower – private information case;
2. When borrowers can distinguish the other borrower's type.

(Aghion and Gollier, 2000) Under the private information case, borrowers cannot distinguish if the other is of their own type – safe or risky.

As such borrowers will form groups based on randomly selection cemented by their need for a loan. In such instances the group will be formed of both risky and safe borrowers. Due to joint liability safe borrowers can therefore repay defaulted loans on behalf of risky borrowers and in turn joint liability

will reduce the interest rates which attract safe borrowers back into the market. Rates under such group lending will be reduced due to a frequent and stable rate of repayment. (Aghion and Gollier, 2000).

Sometimes referred as negative assertive matching, this ensures that the proportion of safe borrowers in the group will generate returns high enough to cover for their defaulting partners. In turn safe borrowers will impose tough social sanctions on the risky borrowers so that they do not default deliberately. This implies that the lender can pass risk from risky borrowers to safe borrowers and thus reduce the overall riskiness of the group. Additionally, auditing costs, monitoring costs and information gathering costs will be avoided.

This enables the lender to reduce their lending rate significantly and still break even. As a result safe borrowers will be lured back into the market through negative assertive matching. In instances where peers have information about the type of the other borrower, safe borrowers will only group together and avoid risky borrowers in their group as this disadvantage them through joint liability. Risky borrowers on the other hand are excluded from safe groups so they will join together and form their own risky group – which won't be so risky considering the benefit of joint liability.

Since can positively assort themselves between safe and risky groups, the lending institution can charge differential rates between these groups depending on the overall riskiness of the group. Groups can be requested to provide information about their members if they want credit. This both reduce costs of information gathering and help the lender determine what class the group can be categorised into – safe or risky. Through use of

assertive matching a differentiation previously inhibited due to information unavailability can be made and differential rates be charged to different types of borrowers.

The level of gravity of social sanctions imposed by each member in the group helps increase the credibility of the group. As a result the higher the extend of social sanctions in a group the lower the groups risk of default and thus lower rates can be charged to retain safe borrowers. However, assertive cannot be able to completely solve the problem of adverse selection. For example in a group the better performer who is always covering for others defaults can deliberately default on his loan to distress the group and the whole group might default.

This is amplified in negative assertive matching where a group may be highly dependent on the performance of one member. In conclusion, assertive matching can lower interest rates and circumvent credit market inefficiencies even in the case where borrowers are imperfectly informed about each other's type (Aghion and Gollier, 2000).

References:

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