Development Economics

Credit issues – Microfinance

Morduch, Jonathan. 1999. "The Microfiance Promise." *Journal of Economic Literature*, 37 (4): 1569-1614. You can skip sections 4, 5, 6, and 7.

Ray, Debraj. 1998. *Development Economics* (pp 578-584).

- Objectives of today's lecture:

  To understand why microfinance has seen surprisingly high repayment rates despite the difficulties inherent in credit transactions in rural areas of developing countries.

- Past experiences:

  In the past, experiences of subsidized credits targeted to the rural poor through formal lenders (traditional banks) were nearly all disaster. Loan repayment rates were often well below 50%, which caused financial losses to formal lenders even under government subsidies. Naturally, such policy attempts (subsidized credits through formal lenders) are not sustainable.

  ⇒ Remember the characteristics of the rural financial institutions we learned the last time: ① It is difficult for lenders to identify risky/safer borrowers. Also, it is difficult for lenders to monitor borrowers' usage of the money: borrowers tend to invest in risky projects. ② Most rural farmers are poor and do not have assets that work as collateral. ③ Legal systems to honor and monitor credit transactions are absent or weak.

- Characteristics of microfinance lending:

  (Microfinance practices considered to be directly relevant to high repayment rates are marked with circle. ◯)

  1. It typically targets the poor.
  2. Clients (borrowers) are typically more women than men, sometimes predominantly women.
  3. It provides a small amount of a loan.
  4. Collateral is typically not required.
  5. It is characterized by *progressive lending* which means that a loan starts with a small amount and a loan amount increases as transactions accumulate. (*dynamic incentives* which mean that microfinance

institutions utilize borrowers' motivation to borrow again in the future and also that microfinance institutions reveal borrowers' creditworthiness by building credit histories by their own.)

6. It is characterized by a regular repayment schedule which means that repayments start immediately after loan receipt and repayments continue on the weekly or semi-weekly basis. (*regular monitoring* over borrowers by microfinance institutions, which makes it possible for *dynamic incentives* to operate. Also, this regular repayment schedule provides borrowers (often women) with opportunities to contact people outside of the households.)
7. It often requires a *group-lending contract* which means that a loan is provided to a group of individuals not a single individual. If one member of the group defaults on a loan, typically, all members in the group lose access to future loans. (This rule makes people careful about the selection of peers in a group-lending contract. This process would effectively reduce the probability that people with high default risks are selected as peers. *peer selection*).
8. The practice of group-lending gives borrowers the opportunities to check each other to make sure that other members do not engage in risky projects. This leads to lower probabilities of loan defaults. (*peer monitoring*).
9. Sometimes, voluntary savings are emphasized or recommended. Borrowers are encouraged to create a saving account so that they can gradually accumulate their savings.

- Theoretical Model (focusing on *peer monitoring* or equivalently *peer pressure*):
  1. Usual assumptions (for traditional lenders):
     i) A poor farmer has two projects (Project A and Project B).
     ii) Both projects need an initial investment of $2,500, which must be borrowed if the farmer engages in either project.
     iii) The revenue under Project A is $3,000 with probability 1.0, while the revenue under Project B is $5,000 with probability 0.5 and $0 with probability 0.5.
     iv) The interest rate on the loan is 10% per annum.
     v) The usual assumption of a weak legal system to honor credit transactions applies. The poor farmer has no assets, so he has limited liability.
     vi) The poor farmer is risk neutral (for simplicity).

vii) Strategic default is assumed away, so whenever the farmer has resources to pay back, he does so.

2. Additional assumptions (for microfinance institutions):
   i) A microfinance institution requires 4 guarantors in the sense that if the poor farmer defaults on the loan, the microfinance institution will never provide a loan not only to the poor farmer but also to the 4 guarantors as well (group-lending contract).
   ii) The 4 guarantors are also poor and have no assets that work as collateral.
   iii) The monetary value of social sanction the poor farmer receives when he defaults on the loan is given by m.
3. Model implication:

   If peer monitoring is tight and social sanction is large enough, a borrower with limited liability chooses a safer project under a group-lending contract.

- Conclusions:

  In the past, formal lenders made large financial losses in rural financial markets which are characterized by i) limited liability (on the part of borrowers) and ii) abundant incentives of intentional default (voluntary or strategic default), both of which are caused by the lack of collaterals and the absence of legal systems to monitor and honor credit transactions. Given that, high repayment rates enjoyed by microfinance institutions look very surprising at first glance. However, microfinance institutions are characterized by lending practices that reduce the incidence of loan default. Specifically, their lending scheme is designed to i) reveal the creditworthiness of borrowers and ii) induce borrowers to be risk conscious.

- YouTube video

Banking On The Poor – Bangladesh

http://www.youtube.com/watch?v=MrUQKuvsmvw

15 minutes 44 seconds

Globally on average, over 97% (source: FINCA website)

Source: Morduch (1999)

97~98%   Over 95%

TABLE 1
CHARACTERISTICS OF SELECTED LEADING MICROFINANCE PROGRAMS

Repayment rate	97~98%	Over 95%			
	Grameen Bank, Bangladesh	Banco-Sol, Bolivia	Bank Rakyat Indonesia *Unit Desa*	Badan Kredit Desa, Indonesia	FINCA Village banks
Membership	2.4 million	81,503	2 million borrowers; 16 million depositors	765,586	89,986
Average loan balance	$134	$909	$1007	$71	$191
Typical loan term	1 year	4–12 months	3–24 months	3 months	4 months
Percent female members	95%	61%	23%	—	95%
Mostly rural? Urban?	rural	urban	mostly rural	rural	mostly rural
Group-lending contracts?	yes	yes	no	no	no
Collateral required?	no	no	yes	no	no
Voluntary savings emphasized?	no	yes	yes	no	yes
Progressive lending?	yes	yes	yes	yes	yes
Regular repayment schedules	weekly	flexible	flexible	flexible	weekly
Target clients for lending	poor	largely non-poor	non-poor	poor	poor
Currently financially sustainable?	no	yes	yes	yes	no
Nominal interest rate on loans (per year)	20%	47.5–50.5%	32–43%	55%	36–48%
Annual consumer price inflation, 1996	2.7%	12.4%	8.0%	8.0%	—

Sources: Grameen Bank: through August 1998, www.grameen.com; loan size is from December 1996, calculated by author. BancoSol: through December 1998, from Jean Steege, ACCION International, personal communication. Interest rates include commission and are for loans denominated in bolivianos; base rates on dollar loans are 25–31%. BRI and BKD: through December 1994 (BKD) and December 1996 (BRI), from BRI annual data and Don Johnston, personal communication. BRI interest rates are effective rates. FINCA: through July 1998, www.villagebanking.org. Inflation rate: World Bank *World Development Indicators 1998*.