Credit Markets in Developing Countries:

Introduction

1. Introduction

- Credit markets link savers to investors.
- What is so special about credit markets?
  - Matches talents and skills with resources.
  - Helps in formation of skills.
    - Otherwise, your economic outcome is determined by how much wealth you start out with, not by your innate talent.
- So credit markets are important for individuals and economies to rich their full potential.
  - Otherwise there will be poverty traps.

- Another way of looking at this: a "class" system can emerge due to credit market imperfections.
  - See Eswaran, Mukesh and Ashok Kotwal (1989), “Why Are Capitalists The Bosses?”, *Economic Journal*, 162-176.
  - It is a form of an entry barrier; so there could be other factors, such as legal or social restrictions (discrimination).
- Why are the credit markets particularly likely to be imperfect?
  - The acts of buying and paying up are separated in time.
  - When the repayment time comes people may be
    - unable to repay,
    - unwilling to repay.
  - Taking people to court is costly.
  - Also, there is *limited liability* – legal limits to how much you can punish.

- Anticipating this, lenders are more careful than other sellers. They
  - screen borrowers (corresponds to *adverse selection*),
  - monitor borrowers (corresponds to *moral hazard*),
  - threaten to cut out future loans (corresponds to *enforcement* or *commitment problems*),
  - obtain collateral (like a “hostage”).
- Implications: Credit markets don’t function as the textbook model implies.

2. Stylized Facts

- High interest rates in less developed countries (see Banerjee, 2003): rural areas 52%, urban areas 28-68%. Compare to US rates: 6-14% during 1980-2000.
  - Cannot be explained by default (explains at most 7-23% of level of the interest rates).
- Presence of informal sector.
  - Timberg and Aiyar (1984): informal lenders supply 20-30% of capital needs of small scale firms in urban/semi-urban areas in India.
  - Dasgupta (1989): In rural areas professional moneylenders provide 45% of credit.
- A wide range of interest rates prevailing in the same area with no apparent arbitrage.
  - Siamwalla et al (1993): study of rural credit markets in Thailand; found informal sector annual interest rate to be 60% whereas formal sector rate ranged from 12-14%.

- Credit Rationing: Borrowers are able to borrow only up to a limit for a given interest rate, and are not given a larger loan even if they are willing to offer a higher interest rate.
  - The very poor are unable to borrow at any interest rate.
  - Evans and Jovanovic (1989) found that even in the US entrepreneurs on average are limited to a capital stock no more than one and one-half times their wealth when starting a new venture, and the very poor are unable to borrow at any interest rate.
  - This is not consistent with standard supply-demand model of credit market with interest rates adjusting to clear the market.

- One explanation: monopoly in the rural credit market.
  - Can explain different interest rates (price discrimination).
  - However, why charge so high interest rates since that kills loan demand?
  - What is the informal sector doing?
  - Also, public sector banks are present so monopoly power is restricted.
- More convincing answer: transactions costs creates natural entry barriers.
  - See Aleem (1990) for evidence from Pakistan.
  - In their study of Vietnamese firms McMillan and Woodruff (1999) report:

    " ... trade credit tends to be offered when (a) it is difficult for the customer to find an alternative supplier; (b) the supplier has information about the customer's reliability through either prior investigation or experience in dealing with it; and (c) the supplier belongs to a network of similar firms, this business network providing both information about customers' reliability and a means of sanctioning customers who renege on deals. Social networks, based on family ties, also support relational contracting, although the evidence for their efficacy is weaker than for business networks."

Micro-level Evidence: The Debt Recovery Tribunals in India (Visaria, 2009)

- In India a bank trying to recover a secured non-performing loan must obtain a court order allowing the sale of collateral so that it can recover its dues.
  - Delays are a part of life in the Indian legal system.
    - In 1997 there were 3.2 million civil cases pending in district level courts of which 34% were pending for more than 3 years.
    - 40% of the asset liquidation cases had been pending for more than eight years.
- In 1993 the government introduced DRTs that designed a streamlined procedure aimed at speeding up the process by which the bank liquidates borrower's collateral.
  - According to Visaria, if a case was filed in the court, summons would be issued on average after 431 days; whereas after the DRT, it was 56 days, which is significant at the 1% level.
- Debt Recovery Tribunals reduced delinquency for the average loan by 28%.
  - New loans sanctioned after DRTs have interest rates that are lower by 7-15%.

Cross-country Evidence (Djankov, McLiesh, and Shleifer, 2007)

- Why do some countries have much bigger capital market than others?

- This paper studies 129 countries over a 25 year period and finds that legal rights of lenders (ability to force repayment, grab collateral) is positively correlated with the ratio of private credit to GDP.
  - Changes in this measure are associated with an increase in the ratio of private credit to GDP.

- We first study formal models of the borrower-lender relationship subject to the following problems:
  - **Moral Hazard:** The action of borrower that affects repayment prospects cannot be costlessly observed.
  - **Enforcement:** Borrower can default even when he is able to repay.
  - **Adverse Selection:** Borrower knows more about his type than the lender does.

3. References

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