

Stefan Klonner and Ashok Rai
Adverse Selection in Credit
Markets: Evidence from a
Policy Experiment

Discussant: Antoinette Schoar, MIT

Overview

- Interesting paper and new data about an unusual form of financing in developed countries, but widely used in many developing countries
- Specific features:
 - Participants can bid for the “pot” each period
 - Liquidity provision between the participants
 - Participants are borrowers and savers at same time
 - Provides flexibility in the decision to borrow, almost like an overdraft facility
 - But exposure to correlated risks

Findings

- After the policy shock (interest rate cap):
 - Individual default rates of early bidders go down; default rates of later bidders go up
 - Flattening of default profiles
 - Price of winning bids go down, and go down more for early bidders
 - No change in the likelihood of a cosigner on the winning bid of an early (late) borrower afterwards

Competing Interpretations of Results

- Adverse selection: riskier borrowers are willing to pay higher interest rates
- Reduction of winners curse: “dumb” bidders are prevented from overextending themselves
- Moral hazard: reduction of risk shifting
- Composition of the pool of participants. Privately versus publicly observed riskiness of borrowers
- Aggregate shocks: Indian economy was changing during the 1990s and access to finance in formal sector started to increase

Definition of Adverse Selection

- Traditional definition: I would argue there is adverse selection *after* the policy change
 - Before: Borrowers with high investment opportunities (or consumption needs) bid early and pay high interest rate, patient borrowers bid late. Self-selection by type into different classes of cost of capital
 - After: Borrowers pool at 30%
- Suggestive evidence:
 - Overall profitability of ROSCAs has gone down
 - Participation went down as well

Impact of Outside Financing

- ROSCA's are not the only source of capital for borrowers. After the shock borrowers might be forced to rely more on outside sources
 - Reduction in the liquidity provision of ROSCAs
- People who do not win the ROSCA in the period they would have needed the money might go to a money lender to finance their capital needs
 - The money lender charges an even higher interest rate than the ROSCA
 - People might try to win pot in a later period to pay money lender. So default rates could go up in later period *because* people were forced to borrow at very high interest rate

Impact of Outside Financing

- Alternatively, people might turn into savers, and use outside sources of financing if they are unable to bid in the ROSCA early on
- Then we would not observe the defaults within the ROSCA, since they default on money lender or bank
 - Requires either strict mental accounting
 - Or requires the ability to default on different sources of capital separately, which is not unreasonable in the context of India
- Can you get information on other financing sources of the borrowers? Or information on the business activities?

Composition of Participants

- ROSCA organizers try to match people by their liquidity profiles
- Prior to the change: Match people who intend to use the ROSCA as a savings vehicle with those who want to borrow and invest in their business.
- After the interest rate cap the interest of savers in ROSCAs might have gone down
 - Now the ROSCA sponsor has to match people who have early borrowing needs to people with later borrowing needs.
 - However all of these are borrowers, so the flattening of default rates reflects to flattening of the underlying default risks

Use of Cosigners

- Paper finds no change in the likelihood of having cosigners after the interest rate cap saw imposed
 - Interpreted as a sign that there is no shift in the composition of the underlying risk of participants
- Alternative interpretation:
 - Firm might not understand the impact for participants risk yet, since the data after the change come from only two years after the change
 - Firm might be slow to respond since the change requires a reduction in collateral requirements

Ideas for Tighter Specification

- Additional information on participant types:
 - Data on the outside financing sources of borrowers?
 - Information about the type of business of participants? Or the intention why they participate in ROSCA?
- Information about bidding behavior
 - Did people bid in an early round but did not get it?
 - Do you have more detailed information about the bidding process?
- Look at the distance from the 30% cap prior to the regulatory change, e.g. look at types of ROSCAs, denominations, locations? Those that are further away should be more affected.

Sample Selection

- High duration ROSCAs seem to behave different from low duration ones (Table 1)
 - High duration ROSCAs: do not show a large drop in bids at 30% in early rounds after the shock, but a moderate increase in later rounds. Effects seem relatively small
 - Low duration ROSCAs: show large increase in bids at 30% after the shock, but almost no increase in later rounds.
 - How does this translate into default rate profiles?
- Low duration ROSCAs not included in the analysis
 - Explore difference in default rates between ROSCA's of different duration?
 - What happens to the analysis if you include them?

Empirical Specification

- Identification relies on before-after estimator, since later bidders are not a true control group for early bidders
 - Can you find ROSCAs that were not affected by the cap (informal ROSCAs as the control)
 - Differences in the availability of outside finance
- Table 4: When controlling for loan terms and cosigners need to interact with the after dummy to control for the changing use of these tools when the policy change was implemented.