Do Firms Have A Preference Order While Repaying Lenders? Relationship vs Transaction Banking

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Motivation

Objective of the study

- Repayment order of Secured Relationship Lenders vs Secured Transaction Lenders

Literature Review

- Relationship banker knows more about the the firm than a transaction banker, so possibilities of default should be lower (Boot (2000), Bharath et. al. (2011), Bolton et. al. (2016))
- However, Relationship Banking can also create soft-budget-constraint problem, causing higher defaults (Hu and Varas (2021))

Research Gap

When a firm has borrowed from a relationship lender and a transaction lender, and it is in distress, and let's say it has enough to repay one out of the two lenders. In such a case, Firm's repayment behaviour towards the two types of lenders is unclear.

Relationship

Three Definitions

1. Frequency of interaction
   - Measure: Number of Loans $\Longrightarrow$ frequency of information collection
   - *Boot (2000)*
2. Depth of Relationship
   - Measure: Loan Amount $\Longrightarrow$ firm borrows more
   - *Agarwal, Chomsisengphet, Liu, Song, and Souleles (2018)*
3. Physical proximity
   - Measure: Distance between Headquarters $\Longrightarrow$ proxy for ease of monitoring
   - *Agarwal and Hauswald (2010), Beck, Ongena, and Endeniz Yuncu (2019)*

My Definition

Among the lenders of a firm, a lender with above median relationship strength for all the three criteria (median values calculated within-firm-year) is called a **Relationship Lender** for that firm.

Institutional Setting

Location: India

Events:

- 2008: Global Financial Crisis $\implies$ RBI Response: Regulatory Forbearance
- 2015: End of Forbearance + Asset Quality Review
- 2015-19: Massive Defaults Unearthed

Regulatory Forbearance (2008-14):

Loan accounts are allowed to retain their asset classification upon restructuring

Who faces more default?

Relationship vs Transaction Banking

Consider a two-period model:

1. $t = 0$: Regulatory Forbearance (2008-14)
2. $t = 1$: Vigilant/Strict Regulator (2015-19)

Strict regulator would force the banks to disclose the true quality of their loan books *(Agarwal, Lucca, Seru, and Trebbi (2014))*

Difference in differences:

$$Default_{flt} = \beta_0 + \beta_1 Relationship_{fl} + \beta_2 Relationhsip_{fl} * Post_t + \gamma_{ft} + \delta_l + \varepsilon_{flt}$$

Firm x Time and Lender Fixed effects allow for within-firm across lender comparison

Summary Result

Default: Non-repayment of dues for 90 days

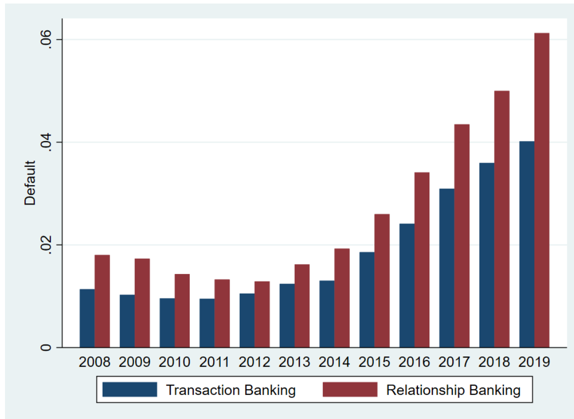

Figure: *Firms are 50% more likely to default on Relationship Lenders (3%) compared to Transaction Lenders (2%)*

Data and Results

Data

- Secured corporate loans data collected from the website of the Ministry of Corporate Affairs, Government of India
- Approximately 25,000 firms and 376 lenders between 2008 and 2019
- The loans dataset is merged with defaults data obtained from a credit bureau (TransUnion CIBIL).

Results

- Difference-in-differences analysis with *Firm x Time* and *Lender fixed effects* while considering 2015 as the year of intervention.
- I find that firms have a *1.76 percentage points higher increase in default rate for relationship lenders* from the pre-period to the post-period, compared to the rise for transaction lenders.
- This rise in default rate is *72 percent of the pre-period default rate* on transaction lenders, making it economically meaningful.

Robustness Tests

1. Alternate Measures
   - Relationship Definition: 75 percentile instead of Median
   - Instrumental Variable: Distance
   - Endogenous relationship formation during forbearance: Subsample from pre-forbearance
2. Outstanding Loan Amount
   - Control in regression
   - Subsample of firms which only have similar outstanding loans for both lender types
3. Idiosyncratic Lender Shocks
   - Negative Bank Lending Shock (Amiti(2011))
   - Other Lender Shocks: Lender x Time fixed effects
4. Placebo Tests
   - Random allocation of firm-lender pairs to relationship
   - 2011 as year of intervention
   - Well-capitalized vs Under-capitalized Banks
5. Heterogeneous Effects
   - Wilful vs Non-wilful
   - Distressed vs Healthy Firms

Impact on Banks

1. Do Relationship banks help firms in repaying loans from other lenders?
   - *Help* : Relationship lender makes a new loan to the firm or restructures an existing one, while the firm pays off a running loan from a transaction lender simultaneously
   - I find that YES! Relationship lenders do help firms.
2. Investment outcomes of these firms
   - Help receiving firms invest in risky investments
3. Profitability outcomes of Banks
   - Banks who face more defaults suffer higher losses
   - These banks reduce lending; even to healthy firms

Conclusion and Further Analysis

Things ToDo:

1. Control for other Loan Terms
2. Check do firms feel less threatened by relationship lenders

Concluding Remarks:

1. Firms have a preference order while repaying lenders
2. Relationship lenders fall lower in that preference order
    - Firms are more likely to default on relationship lenders than transaction lenders
3. Relationship banking can create a soft-budget constraint
    - By helping firms in distress
    - These firms are likely to invest in high risk projects
    - Such firms expect continuation of lending from relationship lenders and prioritize transaction lenders in debt repayment