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.
Frequency of interaction

- Measure: Number of Loans $\rightarrow$ frequency of information collection
- Boot (2000)

Depth of Relationship

- Measure: Loan Amount $\rightarrow$ firm borrows more
- Agarwal, Chomsisengphet, Liu, Song, and Souleles (2018)

Physical proximity

- Measure: Distance between Headquarters $\rightarrow$ 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:

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

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