Commitment in Debt Financing: The Role of Creditor Dispersion

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This paper

- I test an important idea in finance:
  When firms have many creditors, this complicated debt structure can help to raise funding in debt markets
- How? Mechanism highlighted by theorists (e.g., Bolton & Scharfstein, JPE '96; Diamond, JF '04):
  Dispersed creditors face coordination problems that make defaults and renegotiations costly or difficult
  ⇒ Firms can have stronger incentives to repay their debt and avoid contract violations in the first place
  ⇒ Creditors will become more willing to lend money to these firms

Q. How relevant in practice is this theoretical insight?
What are the implications of this idea for the design of bankruptcy/reorganization law (e.g., Chapter 11)?

- Key contributions: I provide evidence that
  1. This role of creditor dispersion as a commitment device is relevant and important in practice
  2. Legal arrangements designed to facilitate creditor coordination, a main goal of reorganization law in many countries, can actually limit the ability of many firms to borrow

Why is this important?

1. Dispersed creditors and their coordination problems are commonly viewed as inefficient as they increase the cost of financial distress
   ⇒ This idea suggests that these ex-post costs can have important ex-ante benefits by allowing firms to commit to repay their debt and borrow more!
2. A typical goal of reorganization law is to facilitate creditor coordination and reduce the cost of financial distress
   ⇒ This idea suggests that reforms designed to achieve this goal can also limit firms' ability to commit and borrow using creditor dispersion!

Empirical setting

- I label these adverse effects of reforms as the commitment channel
  ⇒ The main goal of my analysis is to isolate the economic importance of this channel
- To do so, one needs to analyze a reform that only facilitates creditor coordination, unlike most bankruptcy laws and reforms
  ⇒ As such a unique natural experiment, I use a reform introducing a voting rule into out-of-court corporate debt restructurings in Korea
- Without this voting rule (prior to the reform), dissenting creditors could not be compelled to participate in a restructuring plan
  ⇒ This absence of voting rule can lead to significant creditor coordination problems
  However, under this voting rule, a plan of restructuring approved by 75% of creditors becomes binding even to dissenting creditors
  ⇒ A classical solution to creditor coordination problems in both theory and practice
- Other advantages of this empirical setting:
  1. The availability of audited financial data on small, private firms
     ⇒ Allows me to precisely measure creditor dispersion and borrowing in a broad sample of firms
  2. South Korea has strong creditor protection by courts relative to many other countries (Djankov et al., JPE '08)
     ⇒ Allows me to examine if these effects are still important even in a legal system with strong creditor protection, where theory predicts commitment problems should be less severe

Identification strategy

- I contrast the effects of this reform between firms with high and low exposure to the commitment channel
  ⇒ Presents a theoretical framework predicting which firms should rely more on creditor dispersion as a commitment device, and thus, be more affected by the commitment channel

Theoretical framework

1. The commitment channel should have stronger effects on firms with high value of commitment (e.g., borrowers with irreplaceable human capital)
   ⇒ As these factors are hard to observe, I introduce a revealed preference approach that uses creditor dispersion prior to the reform as an indirect measure of the value of commitment
2. Creditor dispersion works as a double-edged sword: on the one hand, it benefits firms by establishing a commitment to avoid strategic defaults; on the other hand, it also makes restructurings costlier even when defaults are due to adverse liquidity shocks beyond firms' control (liquidity defaults)
   ⇒ As firms with low liquidity default risk have limited exposure to this cost of dispersed creditors, these firms should rely more on creditor dispersion as a commitment device

Empirical results

- Guided by this framework, I analyze if the reform has significant differential effects for firms with (i) high creditor dispersion and (ii) low liquidity default risk (a triple interaction term)
- Key findings:
  1. After the reform, firms with high exposure to the commitment channel experience a decrease in their borrowing
     ⇒ $\downarrow$ 1.6 pp $\approx$ 40-80 percent of the effect of 1 s.d. change in size, profitability, or tangibility, suggesting its economic significance
  2. These firms rely less on creditor dispersion following the reform
     ⇒ Consistent with a reduction in the effectiveness of creditor dispersion as a commitment device
  3. These effects are concentrated among firms lacking easy-to-liquidate assets
     ⇒ This finding supports the view that these lowered liquidation values limit courts' ability to protect creditors, and thus, create a need for additional commitment mechanisms, such as creditor dispersion