Discussion
“Shock Propagation and Banking Structure”
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Overview

▶ Empirical analysis on banks behavior in terms of liquidity provision in distressed period.
  ▶ Determinants of loans provision by banks to distressed firms?

▶ Main line of argument:
  ▶ Banks’ incentive to provide liquidity is affected by the spillover effect of a negative shock on the industry in which banks operate loan business.
  ▶ Rationale: Banks’ motive of internalizing negative externalities.
    ▶ Banks have an interest to extend loans to the firm in distressed industry in which they are present in order to minimize vicious cycle:
      ▶ Initial shock on an industry $\Rightarrow$ propagation $\Rightarrow$ negative feedback on that industry $\Rightarrow$ $\downarrow$ the profitability of their loan portfolio
Empirical strategy

- **Hypothesis:**
  1. Banks’ with higher concentration of loans in a given industry may have higher incentives to internalize negative externalities on that industry in time of distress.
    - These banks may tend to extend loans to that industry more than banks with lower concentration of loans.
  2. One should observe a similar pattern for liquidity provision to the firms linked with distressed industrial sector as customers or suppliers.

- **Baseline model**

\[
\text{loan volume (or number)}_{ijt} = \beta_1 \times \text{market share}_{ijt-2} \times \text{Industry distress}_{it-1} \\
+ \beta_2 \times \text{market share}_{ijt-2} + ... 
\]

- Expect \( \beta_1 \) to be (+).

- **Data:** All syndicated loans completed between 1990-2013 in the U.S., matched into bank-holding company level.
Main findings and contribution

1. Banks with higher market share in a given industry are more likely to grant loans to that industry in time of stress.
   ▶ in terms of loan volume and of number of loans.

2. High-market-share lenders tend to be inclined to extend new loans to distressed industries’ customers and suppliers in time of stress.
   ▶ to minimize negative effect in the supply chain of the industry in question

▶ suggest that
   ▶ high-lending market-share banks play better role in liquidity provision in time of stress
Main findings and contribution

1. Banks with higher market share in a given industry are more likely to grant loans to that industry in time of stress.
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2. High-market-share lenders tend to be inclined to extend new loans to distressed industries’ customers and suppliers in time of stress.
   ▶ to minimize negative effect in the supply chain of the industry in question

3. Firms in the industry with highly concentrated loan-outstanding experienced less liquidation or default and outperform the firms in the industry with lower concentrated loan outstanding

▶ suggest that
   ▶ high-lending market-share banks play better role in liquidity provision in time of stress

▶ concentrated loan market structure has a positive effect on real economy
Discussion

1. Measure of liquidity provision (bank lending)
   - Issue related with syndicated loan

2. Loan portfolio rebalancing

3. Macro effect of bank’s behavior

4. Minor comments and questions
1. Measure of bank lending

- Measure of bank lending:
  - Total amount of syndicated loans for which a bank serves as lead arranger.
  - Is this a relevant approximation?

- 3 sources of bias
  1. Syndicated loans are only a fraction of overall loan portfolio of a bank
     - and they are special compared to traditional loans
  2. Lead arranger’s stake is a portion of total syndicated loan
     - Possible overestimation
  3. Banks hold stakes of syndicated loan as a simple participant as well as lead arranger’s stake
     - This part is not taken into consideration in the analysis

- To show that the measure is representative or that the above bias do not play a role against authors’ argument.
1.a. Lead arranger’s stake vs. Total amount of loan

- Total amount of syndicated loan overestimates loan volumes held by a lead-arranger bank.
  - Lead arranger’s stake is a portion of total amount of loan.

- In terms of capacity of liquidity provision
  1. quite comprehensive measure
  2. An empirical test in this paper suggests that main result is driven by the syndicated loan with relatively high portion of lead arranger’s stake.
     - measured by # of participants in a loan assuming that few participants in a loan may mean large share of lead arranger’s stake.

- In terms of exposure to an industry
  - Whether overestimated or not depends on loan recourse clause
1.b. Syndicated loans vs. Traditional loans

- Increase in loan volume or substitution for traditional loans?
  - If syndicated loan comes from substitution for existing traditional loans without (or with few) changing total volume of loans?
    - No (or few) impact of liquidity provision to the firms

- There are reasons for banks to prefer syndicated loans to traditional loans especially in distressed time
  1. Informational asymmetry between lead arranger and other syndicates at the originating stage (Mora 2015)
    - Credit risk transfer of loan portfolio (to syndicate members or secondary market buyers hence)
  2. Marketability higher than traditional loans.
    - Liquidity management on the asset side (higher liquidity of loans relying on syndicated loans)

- To check total loan volume and the share of syndicated loans over total loans.
2. Loan portfolio rebalancing

- Rebalancing loan portfolio into less affected or unaffected industries in the case of shock in an industry.
  - Relevant but seemingly underdeveloped in this paper.

- It may be the source of overestimating the effect emphasized in this paper
  - especially when simultaneous shock in several industries including the industry in question

- Increase in loans in the industry with distress can be due to
  - liquidity provision to the sector in distress (internalizing the externalities on that sector)
  - loan portfolio rebalancing from the sector with more severe shock

- This problem would be an issue if there are a lot of simultaneous distress in the sample.
3. Macro effects of Banks’ behavior

- Economic consequences of bank’s behavior of internalizing negative externalities: This paper shows that
  - Industries with a high credit concentration experience fewer liquidation and bankruptcies following industry distress
  - Their surviving stocks outperform those in distressed industries with a low credit concentration.

- Combining this with the result on banks’ behavior suggest a positive impact on the economy

- Interesting and contradictory with the existing literature
  - Zombie lending, collective moral hazard, gambling for resurrection
  - This result may deserves more attention and deeper discussion.
3. Macro effects of Banks’ behavior (cont’d)

- Further analysis to confirm the positive link:
  - The current empirical analysis: focus on banks market share through the time dimension taking industry- and bank- fixed effect into account.
  - It would be interesting to add the analysis of direct cross sectional effect:
    - Whether internalizing externalities is more likely in the industries with higher loan market concentration than in the industries with lower concentration?
Further questions and (minor) comments

1. The types of syndicated loan include credit line and letter of credit as well as term loan.
   - Credit line: pre-commitment by bank and expected to be drawn by firms in liquidity needs (distressed time)
   - Loan increase is passive for this segment. (Their proportion?)

2. How about changes in loan-to-asset ratio as an alternative dependent variable instead of changes in absolute volume of loans?

3. Control characteristics of banks by such as size, capitalization ratio, profitability?

4. Episodic example of increase in bank lending to customers and suppliers of distressed industries:
   - Very interesting story from the academic point of view but how it can work in practice?