# Non-bank Lending during Financial Crises

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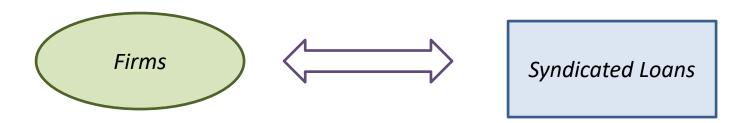
Comments by Sergio L. Schmukler

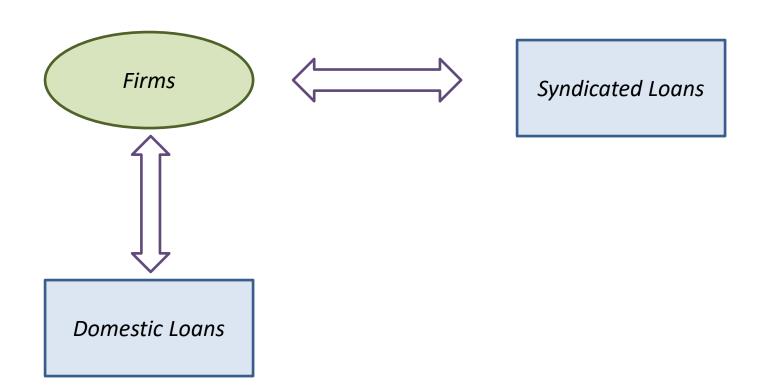
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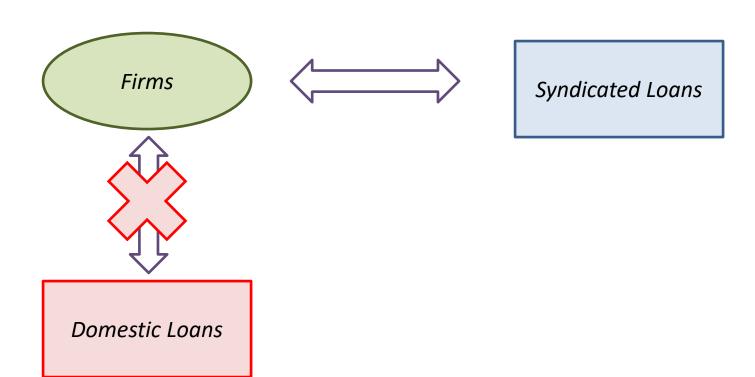


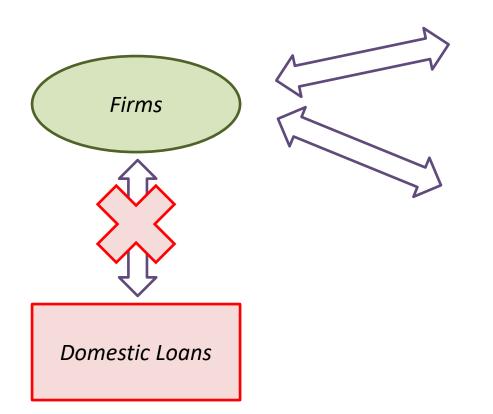
#### Introduction

- Very nice paper
  - Carefully done
  - Several interesting findings
  - Opens many questions for further research, here or elsewhere
- General comments
  - Focus on the description of main analysis early on
  - Focus on generating additional results around the main findings
  - Less speculation on identification of supply/demand, channels
- More detailed comments
  - 1. Punchline of the paper
  - 2. Interpretation of the results
  - 3. Ideas for additional work/clarifications









Syndicated Loans by Banks

Syndicated Loans by Non Banks

$$\begin{split} \log(credit)_{i,b,t} &= \beta_1 crisis\ exposure_{i,c,t-1} + \beta_2 non\ bank_l + \\ \beta_3 crisis\ exposure_{i,c,t-1} \times non\ bank_l + \phi_{l,b} + \psi_{l,t} + \tau_{b,t} + \varepsilon_{l,b,t} \end{split}$$

$$crisis\ exposure_{i,c,t} = \frac{loan\ volume_{l,c,t} \times banking\ crisis_{c,t}}{loan\ volume_{l,t}}$$

Figure 1: Non-bank lending across time and space

(a) Bank and non-bank lending over time

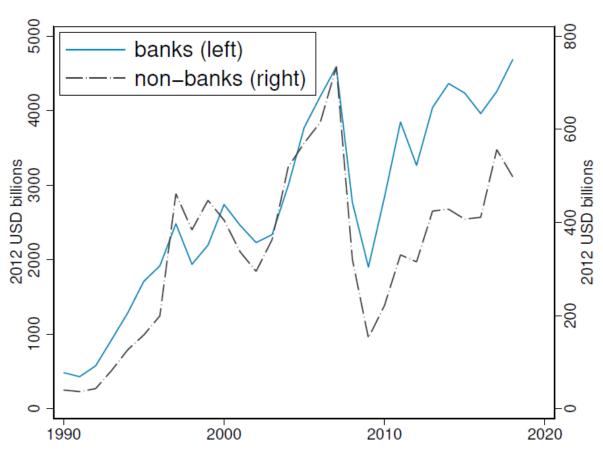
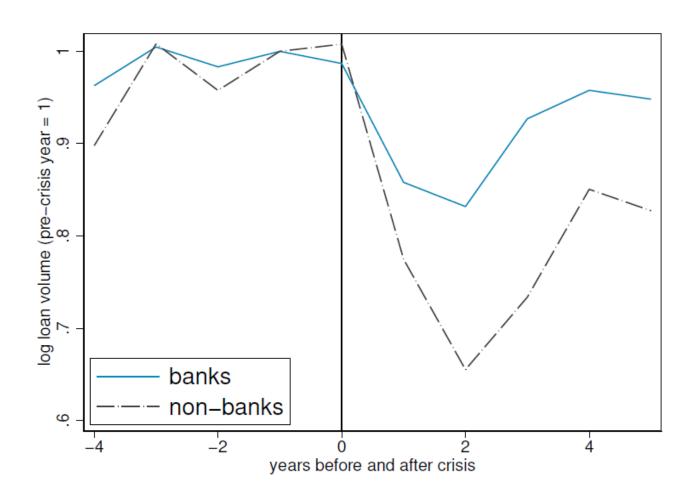
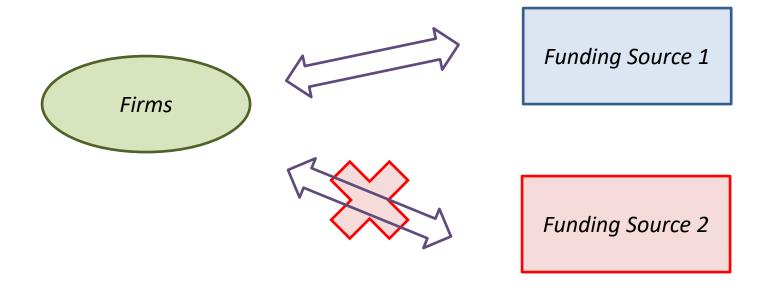


Figure 2: Loan volume during a crisis

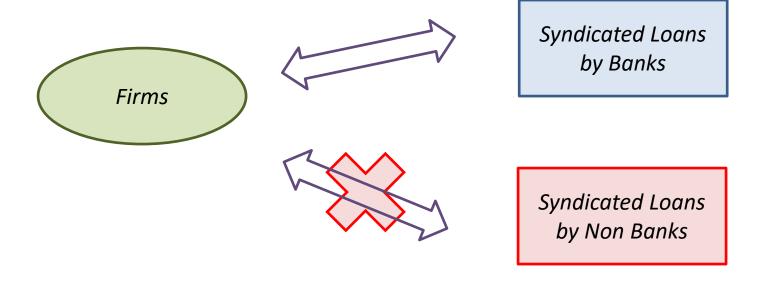


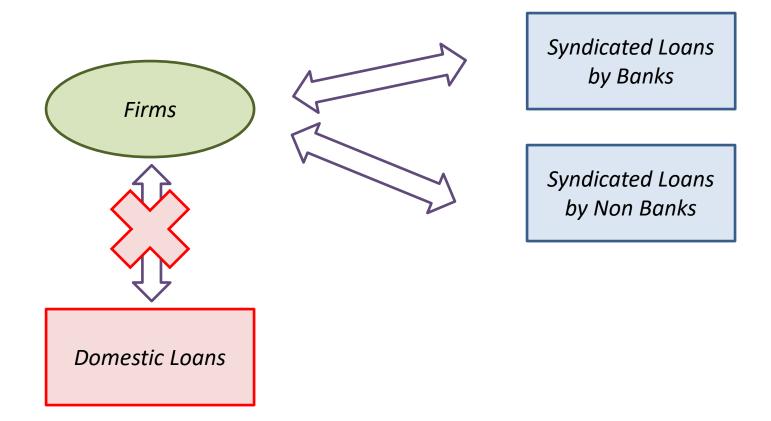
- Framework different from that in other papers
  - Shock to supply side of funds



Higher demand expected from funding source 1

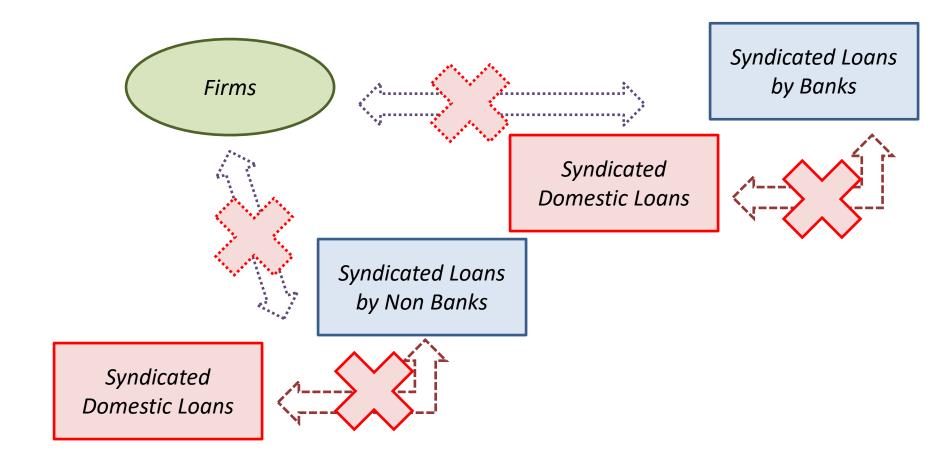
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Higher demand expected to substitute lending by domestic banks

- Given expected higher demand by firms, lower credit by syndicated banks consistent with:
  - 1. Lower demand by firms, especially risky firms paying high rates
    - High uncertainty for firms during crises
    - Hard to know from transaction data, especially in this set up
    - Loan applications and responses can help identify demand and supply \*
  - 2. Syndicated intermediaries less willing to lend (more risk averse?)
    - Particularly true for non-bank syndicated intermediaries
    - Lending rates can help identify willingness to lend, especially if spreads differ by intermediaries?
  - 3. Break up in relation with local banks, if they are syndicates too
    - Composition of syndicates can help ✓



- Lower credit by syndicated banks can mean:
  - 1. Lower demand by firms, especially risky firms paying high rates
    - Higher demand expected to substitute lending by domestic banks
    - Loan applications and responses can help identify demand and supply \*
  - 2. Syndicated intermediaries less willing to lend
    - Particularly true for non-bank syndicated intermediaries
    - Lending rates can help identify willingness to lend, especially if spreads differ by intermediaries?
  - 3. Break up in relation with local banks, if they are syndicates too
    - Composition of syndicates can help ✓
- Paper strongly suggests 2, but without more evidence, hard to tell

- Hard to generalize about non banks from syndicated loans
  - Need for more complete markets
- Non-bank/corporate bond lending increases during crises
  - Switch from syndicated loans to bonds
  - Switch from domestic to international markets during banking crises
  - Perhaps non banks participating more in corporate bonds than syndicated loans

#### Composition of Debt Issuance over Time, Corporate Bonds and Syndicated Loans

Syndicated Loans ↓ : Bonds ↑

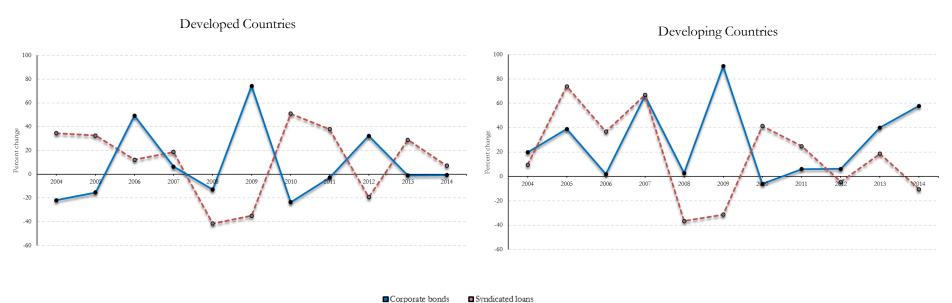
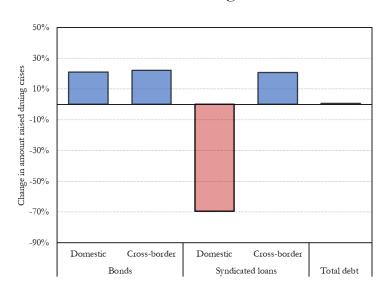


Figure 1. Changes in Debt Issuance Amounts during Crises



# 20% O% -80% Domestic Cross-border Domestic Cross-border Bonds Syndicated loans Total debt

#### Domestic Banking Crises



*Note*: The chart shows changes in issuance amounts in each market and in total debt during the 2008-09 global financial crisis and domestic banking crises for firms from advanced and emerging economies. *Source*: Cortina et al., (2021).

#### 3. Ideas for additional work/clarifications

- Exploit information on syndicates during crises
  - Lender composition in loans granted (e.g., cross-border vs. domestic banks and non banks, other connections)
  - Spreads
  - Changes in firm composition during crises
- Exploit further information on crises
  - Domestic vs. international crises
  - GFC
  - Beginning of crises? Full duration?
  - Crisis exposure  $crisis \ exposure_{i,c,t} = \frac{loan \ volume_{l,t} \times banking \ crisis_{c,t}}{loan \ volume_{l,t}}$ 
    - Why needed? Variations to this measure

#### 3. Ideas for additional work/clarifications

- Identification of effects
  - "same firm borrowing from banks and non-bank lenders in a given year ... using only the within variation of each lender-borrower combination"
  - How often is lending occurring? Syndicated loans are sporadic
  - Identification coming from just few observations?
- More on extensive vs. intensive margin
  - log (credit) vs.log (1 + credit)
  - How many zeros in extensive margin?
    - From 360k to 1.2M observations
  - Separate fully extensive vs. intensive margin
    - Estimate extensive margin separately, with probability
    - Estimate log (1 + *credit*) non-linearly, with Tobit

#### 3. Ideas for additional work/clarifications

- Clarifications
  - Number of countries given Compustat data
    - Non-U.S. data?
    - Split data for loans and real effects?
  - Instead of new lending, emphasize gross (as opposed to net) lending
  - Policy implications could focus not only on crises, also expansions

Thank you!