Crowding out and banking crises
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Disclaimer: The analysis and conclusions are those of the author and do not reflect the views of the Board of Governors of the Federal Reserve.

Paper in one slide

- Bond and loan issuance for governments and non-financial corporations in 66 countries (31 advanced, 35 developing) from 1991-2017

- During domestic banking crises:
  - Domestic bank lending contracts + government domestic bond issuance increases which reduces funds available for firms (crowding out) = Firms lose access to domestic credit
    - Firms with access to foreign credit markets switch
    - Uses an instrumental variable approach for government issuance: amount of gov't debt maturing during the crisis

- Other findings:
  - Crowding out is unique to banking crises: positive effect in non-crisis times
  - More developed markets mitigate but does not eliminate crowding out effect in crisis periods

Comments

- Contribution:
  - Previous literature has shown that
    - When banking conditions deteriorate, firms that issue new debt are more likely to do so via bonds (Becker and Ivashina, 2014; Cortina, Didier and Schmukler, 2021)
    - Government issuance crowds out firm issuance (Graham, Leary and Roberts, 2014; Demirci, Huang and Sialm, 2019; Akkoyan, Ersahin and James, 2023)
  - **Key insight:** crowding out does not occur in normal times, only during periods of banking stress – acts as a counterforce to firms' ability to switch

- My comments:
  - Economic downturns vs banking crises
  - Some empirical considerations
  - Two things to consider adding to the paper

Comment #1: Economic downturns vs banking crises

- What happens to expected issuance?

	Economic downturn	Banking crisis
Firms' demand for capital	↓	
Banks' supply of loans	↓	
Expected effect on quantity of new loans	Depends	
Investors' supply of bond capital	↓	
Expected effect on quantity of new bonds	Depends	

Time series of share of bonds vs loans outstanding

Comments

- U.S. (Crouzet, 2021)

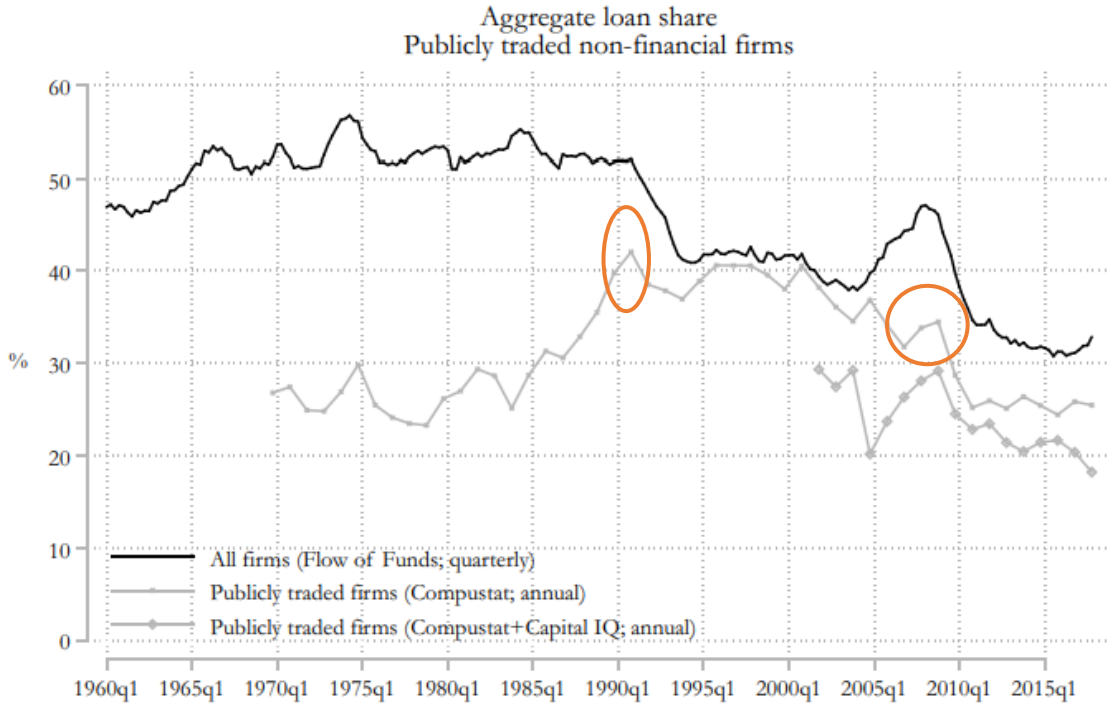

Fig. 3 Total loans as a share of total debt among public firms. For Compustat, loans are defined as the sum of notes payable (`np`) and other long-term debt (`dlto`). The Compustat sample is restricted to the non-financial (NF) sector. For Compustat+Capital IQ, loans are defined as the share of bank loans as a percentage of total debt reported in Capital IQ, multiplied by total debt in Compustat, defined as sum of Compustat `dlc` and `dltt`. See Fig. 1 for definition of data items for the Flow of Funds data. In all three time series, the denominator of the share is the book value of total debt

- Euro area (Darmouni and Papoutsi, 2022)

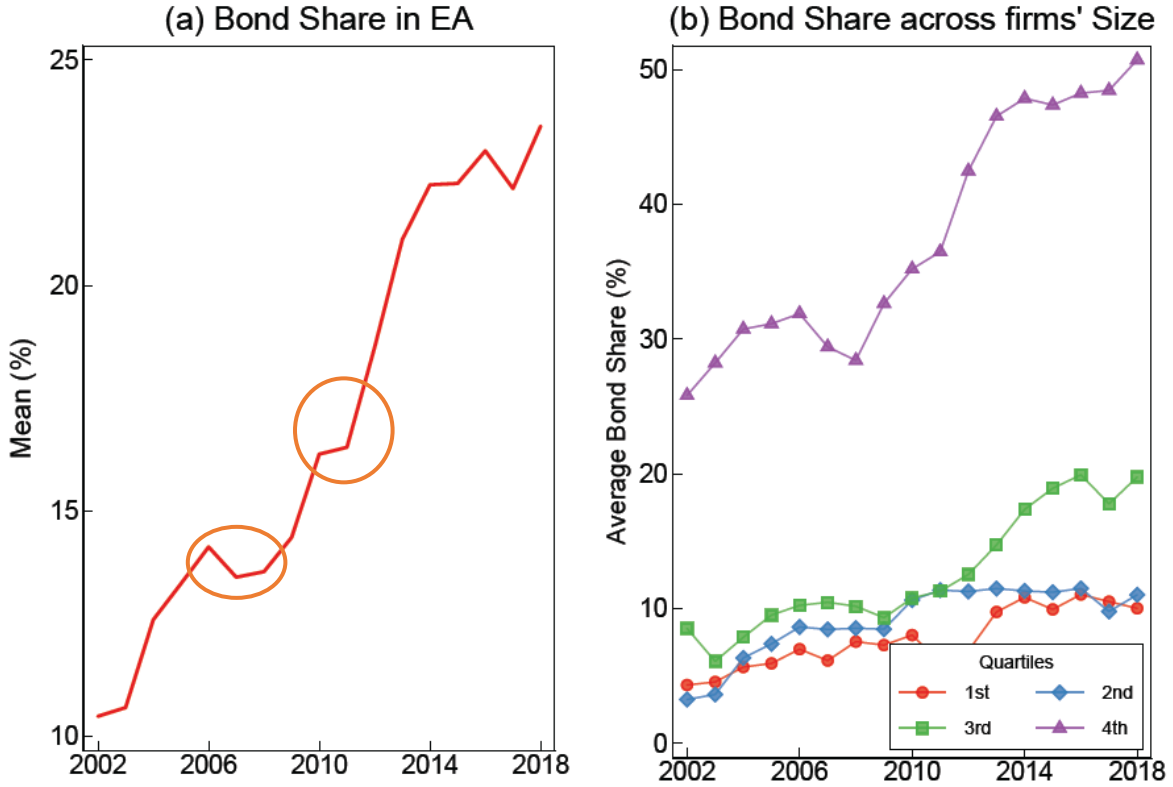

Figure 2 – Bond Share in EA

What explains the time series?

Comments

- During economic downturns, loan share increases. How?
  - New credit is more likely to come from loans than bonds X Not according to literature
  - Firms that exit the sample (go bankrupt, are acquired) have more bonds than loans Is it enough?
  - Firms let bonds expire and/or draw on revolving credit facilities Maybe
- None of these clearly explain the aggregate pattern, especially compared to the firm-level evidence

Comment #1: Economic downturns vs banking crises

Comments

	Economic downturn	Banking crisis
Firms' demand for capital	↓	--
Banks' supply of loans	↓	↓
Expected effect on quantity of new loans	Depends	↓
Investors' supply of bond capital	↓	--
Expected effect on quantity of new bonds	Depends	-- ceteris paribus
		↑ given loans
		↓ given crowding out

- I recommend focusing on periods of banking stress without an economic downturn
  - Cleaner supply vs demand, and allows you to explore your story
  - GFC: assuming all countries experience this crisis, I think inclusion of year-quarter FE means that you are already ignoring GFC

Comment #2: Some empirical considerations

- Does issuance data differentiate between term loans vs revolvers?
  - Sample should only include term loans, since they are comparable to bonds (revolvers are not)

- Selection into issuance:
  - Sample includes only firm-quarters with either bond or loan issuance
  - Induces sample selection issues:
    - Only certain firms CAN issue bonds (larger firms, higher need for capital)
    - Firms that receive a loan during a banking crisis – and don't need to issue a bond – are potentially special
  - At least acknowledge

- Are banking crises exogenous?
  - A discussion is warranted

Comment #3: Two things to consider adding to the paper

- **Real effects:** What happens to firms who are unable to issue bonds during banking crises because of government crowding out?
  - Investment declines?
  - Firm less likely to survive after x many years?

- **Channel exploration:** Finding that government issuance has a positive effect on corporate issuance in non-banking crises:
  - Does this government develop the domestic bond market?
  - If so, it provides extra help for corporations in future banking crises?

Other minor comments

Comments

- Empirical section: unclear if all 137,814 bonds and 256,819 loans are included the sample or only the ones you match to Worldscope
  - Furthermore, no discussion on matching process / match rates
- Caution on Dealscan data: easy to mix up amendments vs new issuance
  - I use a filter that “league table credit” is non-missing
- I’d like to see the first stage for your instrumental variable regression
- Foreign loans are identified as those where the nationality of at least one lead lender is different than the firm’s nationality. Is there evidence that these loans are placed with banks/investors in foreign countries?

Overall

- I enjoyed reading the paper and learned a lot
- I recommend focusing and expanding on the key insight of the paper
- Thank you for the opportunity to discuss!