2021 Financial Stability Conference
Planning for Surprises, Learning from Crises

Discussion by
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November 19, 2021
In a nutshell

• 3 nice papers
  – Cyber security
  – Carbon and climate change
  – Interconnectedness and risk

• 3 very diverse topics, ideas and datasets. It was a pleasure and very educative to read the papers.

• I'll try and focus on some big picture issues.
1. Cybersecurity

• Examines: small banks targeted by cyber attacks

• Finds: Deposit flight from small banks to large banks.
  – Heterogeneity: low social capital, low digital literacy, concentrated markets see more flight
  – CD rates at affected banks increase

• Hacked banks lower credit standards
  – Riskier mortgages originated, same total volume.
1. Cybersecurity

• Reading it was harder than it needed to be.
  – Cutting paper by 30-50% will probably increase impact. Maybe consolidate Implications in a separate section?

• Possible pitch for paper: ask why cybersecurity is special -- Is it loss of funds or loss of (highly private) data of bank customers?
  – Does the data view explain mortgage results? CD results?

• What are the real consequences of cyberattacks? If none, may further beef up loss of privacy interpretation of deposit flight.

• Mortgage results.
  – Riskier mortgages originated, same total volume but perhaps **quality** of volume is lower?
  – Ex-post defaults on originated mortgages?
2. Banking on Carbon

• Well executed paper.

• Exposition is somewhat difficult. Two experiments, two datasets, one paper means difficult reading. Especially when there is back and forth between the two within paper.

• But I don't have a fix as the experiments are a little different. I'd suggest making one (2011?) focal and the other one a robustness section.
2. Banking on Carbon

• I was curious about utilities. They are carbon emitters, look at their responses.

• Is maturity reduction driven by banks, by firms, or is it bilateral?

• What is the real effect of reducing maturity on firm outcomes? Nothing? If so, is it an (efficient?) bilateral response to the law?
  – The substitution to cash seems to have no real effects.

• Implications of - and motivation for - private versus public firm results?
  – Hard to not think of endogeneity of private status. I'd jote it. I don't think this paper can do much about it but I'd note it and cite the relevant literature.
  – Is the story that monopolies of banks over firms and regulators over banks matter, perhaps not beneficially?

• Shadow bank share increases. Are their preferences driving the results?
2. Banking on carbon

• Several take aways from the paper, all interesting. Do you want to sort them out.

• Firms alter their financial contracts with banks. These are \{bilaterally negotiated\} \{forced\}

• As a result, firms face \{increased\} \{similar\} costs of bank financing. These costs are \{temporary\} \{permanent\}

• The changes are not relevant for private firms, suggesting that \{competitive financial markets undo regulatory effects\} \{banks have oligopoly over private firms\}.  

3. Counterparty Choice

- Evidence on bank network formation.
  - On the extensive + intensive margin, banks increase connectedness to non-bank counterparties.
  - Riskier counterparties used for the most material exposures.

- Very interesting question and findings.
  - Risk taking occurs through choice of counterparty.
  - Excellent data -- FR Y-14Q, 2013-2020, covers pandemic period. The data are a first order contribution.
3. Counterparty Choice

- This is a paper about pairwise tie formation.

  - If it is a paper about the dynamics of tie formation that pushes the network to an unstable state, i.e., how tie formation creates instability -- great!

  - But should there then be a focus on separating the end product of the tie formation process from its dynamics?
3. Counterparty Choice

• End state network architecture matters.

  – Transmission of new shocks probably depends on the current network created by ties as opposed to how ties were formed.

  – Is the end product a sequence of closed or nearly closed clusters (communities)? Should one study transitions from state to state and figure why these happen?
3. Counterparty Choice

• Tie formation versus end-product of tie formation.

  – The mapping between the two may not be one to one. That is, we don't know what pairwise dynamics lead to what end-state. If the paper can say something, great.

  – Or, one can view the network as dynamically changing with no end point in mind. If so, what is the economic significance of the way ties develop?
3. Counterparty Choice

• The choice of tie formation is bilateral
  – So one has a high order dynamic programming problem where multiple parties choose each other and an equilibrium emerges.

  – Perhaps one can simplify this into 2 types of agents (bank and non-bank). Then examine the links between the two and their evolution.

  – Networks sometimes have unexpected end products. If A ties with riskier B, B also ties with less risky A. The implications for network fragility and risk taking are unclear.
3. Counterparty Choice

- Interpreting pairwise ties versus stock market correlation measures.
  - Wasn't quite sure what to make of it without an understanding of its quantitative effect.

- Overall, I suggest a mapping of the results to a structural or the implication of one.

- Either will likely increase the influence of this paper well beyond financial stability -- and finance.
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