Finance

College of Business at Illinois

Macroprudential Regulation: Discussion

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Alvarez and Barlevy

- Extension of balance-sheet contagion model of Acemoglu, Ozdaglar, and Tahbaz-Salehi to include
  - Moral Hazard
  - Information Disclosure

- AB: The Model

- Begin with banks with debt contracts structured in a ring, so that a failure in one bank can bring down a sequence of creditor banks.

- AB: The Model

- Allow banks to gain additional (debt) financing for valuable projects, but subject to the possibility of diversion of funds.
- Presence of sufficient equity value deters diversion; thus banks with insufficient equity cannot borrow.

- AB: The Model

- Thus ring structure can lead to a social cost, as banks which fall due to contagion lack needed equity to back investment

- AB: Disclosure

- Suppose banks have information about own initial shock, but, initially no information about the shocks of counterparties (and therefore no information about ultimate solvency)
- Is it socially valuable/incentive compatible to disclose this information?

- AB: Disclosure

- Timing:
- Information gained
- Disclosure decision announced
- Funds raised
- Disclosure made

- AB: Non disclosure equilibrium

- For example, parameter values such that:
  - Without disclosure, required return to investors destroys incentives of banks.
  - But individual disclosure inadequate to provide sufficient assurance to investors, because of equity dependence on counterparty’s solvency.
- Mandatory disclosure valuable for positive externality to creditors

- Ono, Uchida, Udell, and Uesugi

- The relation between loan-to-value ratio and loan risk.
- On the macroprudential level this is coming full circle (Reg T: margin requirements)

- OUUU: Background

- Much recent focus on study of LTV caps has been on loans for housing
- This paper: Japanese business loans
- Advantage: separation of “pricing channel” from “risk channel.”

- OUUU: Results

- Univariate:
  - Loans rise pre bubble period, rise dramatically during the bubble period; crash and then revive in the lead up to the financial crisis.
  - Land values follow the same pattern, but with no revival.
  - Thus, post bubble, steady rise in LTV. But the big decline (50%) occurs in the period before the bubble. During the bubble only 20% decline.

- OUUU: Results

- Multivariate: Do low LTV firms have better subsequent performance?
- Answer: some indication of better performance by <u>high</u> LTV firms 1990-4 (just at end of bubble period) but not otherwise.

- OUUU: Reaction

- Questions LTV as policy variable
- But also raises question of heterogeneity of sample.

- Bonaldi, Hortaçsu, Kastl

- Breathtakingly ambitious: theory, econometric technique, policy relevance
- Set of qualified reviewers = {}

- BHK: Step by Step

- Bids in each ECB Refinancing Operations

- Estimates of individual banks’ willingness-to-pay for repo loans at that instant

  – Assume homogeneity of behavior within Tier 1 quartiles.
  – Strategic behavior determines banks’ bids (step function)

- BHK: Step by Step

- Willingness to pay varies over time, correlated among banks,
- Willingness to pay compared with EURIBOR indicates a bank's individual financial condition

- BHK: Step by Step

- Individual banks' willingness-to-pay at each auction

- Spillovers between bank willingness-to-pay
  - Controlling for common factors (most importantly, EONIA) attribute spillovers to debt contracts between banks or fire-sale spillovers due to commonality of holdings
  - Econometric technique preferentially pushes many coefficients to zero (forcing a sparse network of spillovers) and forcing correlated willingness-to-pay in or out together

- BHK: Step by Step

- Spillovers between banks' willingness-to-pay

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- Estimates of centrality of banks in directed network: "systemicness" (influence of bank on others) and "vulnerability" (dependence of bank on others)
  - Measures weight direct and indirect effects, naturally interpreted as a long-run spillover

- BHK: Results

- Can build networks and look at inter- and intra-national implications
- A subset of banks clearly affect other banks
  - not clear what the indirect effects add—the claims that this is important are opaque.
- Vulnerability predicts bailouts

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