Macroprudential Regulation: Discussion
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50th Annual
Conference on Bank Structure and Competition
Federal Reserve Bank of Chicago
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• 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 high 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

• 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