Risk Incentives in an Interbank Network
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Summary of paper

- Endogenous formation of network of interbank exposures as response to fundamental maturity mismatch on balance sheet
- Risk-sharing vs. risk-shifting due to limited liability and network effects
- How do certain policies affect risk-sharing and risk-shifting?
  - Regulatory policy: leverage, risk weights, and reserve requirement
  - Intervention policy: CB’s lending facility, bailouts
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1. Comments on model

2. Comments on policy analysis
Modeling framework

- Two sources of liquidity: interbank lending ($l_{ij}$) and outside market ($v_i$) (networked markets)
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Market \(i\) competitive with representative bank \(i\) and concave technology \(f_i(v_i)\) ⇒ decreasing marginal returns on investing (increasing for borrowing)
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Other banks ($j \neq i$) can participate in market $i$ by lending to bank $i$ and paying convex cost of lending $\kappa_{ji}(l_{ji})$ (at end of $t = 1$)
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  ![Diagram of networked markets](image)

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- Assumption: one single price of interbank debt for each bank: \(r_{ij} = r_j = f'_j, \forall i\)

- Implications: \(r_i > r_j \Rightarrow l_{ij} = 0\), no reciprocal lending (hence no core-periphery structure), no borrower level price dispersion
Empirical interest rate dispersion

- Price dispersion at the borrower level in euro area unsecured overnight market (in basis points, left axis), Abbassi et al. (Buba WP, 2015)
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- Bilateral Nash bargaining about interest rate, e.g. Bech and Klee (JME, 2011)
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Policies under consideration

- Capital adequacy ratio and liquidity requirements (bad)
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- Expected bailouts and central bank lending facility (better)
- How does a mix of policies affect welfare/risk?
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- Expected bailouts and central bank lending facility (better)
- How does a mix of policies affect welfare/risk?
- Why not extend central bank analysis to IOER policy? Any room for negative renumeration of excess reserves in model? → implications for risk-taking?
More information on cross-sectional distribution of asset allocation (including interbank exposures) could be interesting → analyze asymmetric effects of certain policies!
Numerical analysis

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Estimation of parameters with SMM (Gofman, 2014) or indirect inference (Blasques et al., 2014)