Discussion

Bank Heterogeneity and Financial Stability

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Summary

Motivation:

Is homogeneity of banks (more generally financial institutions) good for financial stability?

One answer: If all FIs diversify fully they will all fail together (Shafer (1994) and others)

But this doesn't imply heterogeneity is desirable

This paper develops an interesting benchmark model where heterogeneity is desirable in a wide range of circumstances

The model

- Standard three date timing
- All banks are identical ex ante at the initial date
- Investors place one unit of capital in the banks, using a deposit contract
- There are two types of risk
  - Aggregate risk
  - Idiosyncratic risk with zero mean across the system
- At the intermediate date the idiosyncratic risk leads to two types of banks: “strong” with good fundamentals and “weak” with bad ones

The model (cont.)

- There is a proportion of "sleepy" investors that stay in the bank no matter what with the remainder being "non-sleepy" and making a rational decision to withdraw based on the information – the proportion of sleepy ones is such that failure doesn't occur
- Standard global games approach as in Goldstein and Pauzner (2005) with investors receiving noisy signals and noise going to zero
- Banks must liquidate their investments to meet investors' deposit withdrawals at the intermediate date in a "fire-sale" market where the more that is sold the lower the price because the buyers are not as skilled as the sellers in managing the assets (Shleifer and Vishny (1992))

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The model (cont.)

- Non-sleepy investors take into account their estimate of the actions investors in both their own type of bank and in the other type leading to two types of strategic complementarity
  - *Within bank*
  - *Cross-bank*
- The interaction of the two can amplify their effects

Main Result

An increase in the difference between the fundamentals of the strong and weak bank corresponds to an increase in heterogeneity and in certain parameter regions can lead to a reduction in fragility and Pareto improvement in welfare

- This is a very important benchmark result for the effects of heterogeneity
- It holds in a fairly wide range of situations including the N-bank extension
- It has important policy implications for a number of areas such as ring-fencing and crisis resolution – both can be good if they increase bank heterogeneity

Comments and Suggestions for Future Work

- At the moment the banks are identical ex ante and ex post different – it would be interesting to see if it is possible to have an ex ante choice of type and see whether heterogeneity would be optimal
  - Is this efficient?
  - If not what policies are desirable?
- Fire sales assumptions are technological – alternative, which may be more applicable for some financial markets, is cash-in-the-market pricing with fixed liquidity from buyers
  - Would results be the same or are the convexity assumptions in the technological approach necessary?

Comments and Suggestions (cont.)

- Central banks play an important role in providing liquidity in financial markets particularly recently with QE and COVID-19 policies
  - Model is real – what would happen with printing of money by central banks to maintain asset prices?

- Model is very stylized in terms of meaning of heterogeneity
  - What can be said about types of heterogeneity we observe in financial systems in practice, e.g. hub (large banks) and spoke (small banks) systems like the US and large bank dominated systems like France and the UK?

Concluding Remarks

- Very important and interesting contribution that is well written and technically sound
- Part of growing literature showing how policy analysis concerning financial regulation should be done using global games
- I highly recommend it to you!