Modelling Contagion in a Core-Periphery Financial Network

Motivation

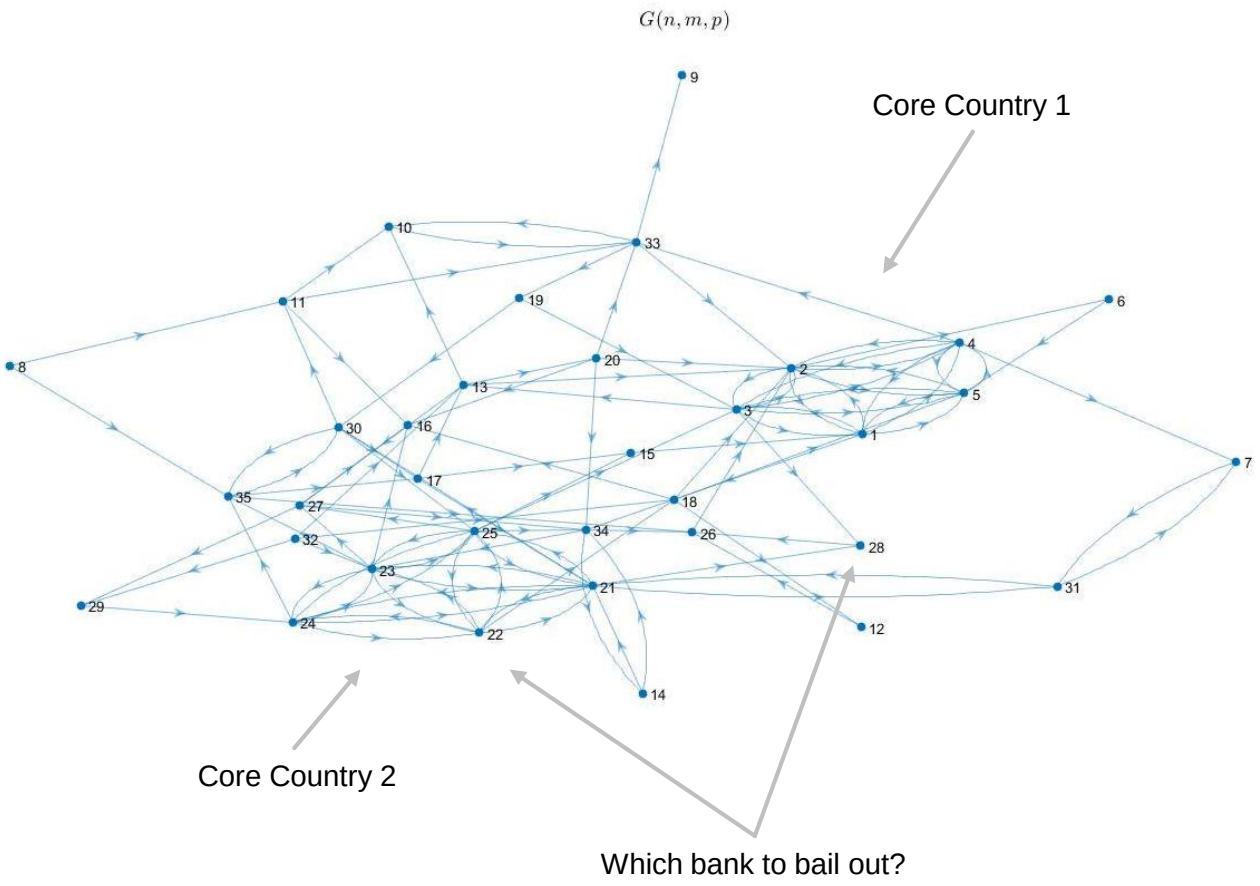
interconnectedness of financial intermediaries regarding interbank lending after Lehman collapse

Approach

- Random Graph Model (Erdős and Rényi, 1959) with core-periphery structure (i.e. Georg, 2014)
- Assuming a stylized interbank lending market (Gai, 2010)
  - Incoming link: interbank claim, A_i^{IB}
  - Outgoing link: interbank liability, L_i^{IB}
- How does contagion spread by simulating a random default?

Research Questions

- Impact of higher capital buffers on the frequency of contagion
- Impact of bail-outs on the extent of contagion



References

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