Interconnectedness, Fragility and the Financial Crisis: “Too Big/Interconnected to Fail” and Moral Hazard

Randall S. Kroszner
Norman R. Bobins Professor of Economics
The University of Chicago
Booth School of Business

Outline

- Financial System and Growth
- Fragilities of the Financial System
- “Too Big to Fail” as a subset of
  “Too Interconnected to Fail”
- Moral Hazard
  - Sources
  - Can we put the genie back in the bottle?
- Importance of Making Markets More Robust to Mitigate Moral Hazard

Financial System and Growth

- Numerous studies, using both US and international data, strong suggest that deep financial market development is a driver of long-run economic growth
  - Is there a trade-off between higher average economic growth and higher volatility?

Fragilities of the Financial System

- Why is the potential for instability greater for financial services than in non-financials?
  - *Leverage:* Financial institutions typically have much higher leverage than non-financials
  - *Liquidity:* Financial institutions generally have a larger "maturity mismatch," funding longer-term assets with shorter-term liabilities

Interconnectedness and the Crisis

- Increasing layers of financial intermediation -- greater interconnectedness – so information about funders, counterparties, and customers needed to judge soundness of an institution
  - Is this due to
    - More efficient allocation/dispersion of risk?
    - Regulatory arbitrage?
- Thus, "Too Big to Fail" is really a subset of "Too Interconnected to Fail"

Interlinkages, Liquidity and Leverage

- With a marketwide liquidity shock, both asset and liability side of balance sheet face stress
  - Unplanned asset expansions hence unplanned increase in leverage
    - Inability to securitize/sell so stay on balance sheet
    - Taking on "off balance sheet" assets on balance sheet
  - Funding "runs"
    - Deposit insurance largely prevented depositor runs
    - But inability to obtain even secured financing

Funding and Counterparty Fragility

- Fragmented structured leading to high reliance on short-term external funding
  - Legacy of Glass-Steagall; rise of MMMFs
  - Unprecedented freezing of even secured funding markets
- Interconnectedness through counterparty and funding chains
  - Legal uncertainty about bankruptcy resolution and contract enforcement
  - In illiquid market, broken hedges can't be repaired so exposure explodes

Moral Hazard

- Moral Hazard arises anytime you think you can get away with taking a risk without having to pay the full consequences of the downside
- The Moral Hazard (MH) problem thus is associated not just with potential for bail-outs
  - Any insurance contract
  - Any limited liability system
    - Highly levered firms have more incentive to "shoot for the moon" so a high MH potential
    - Double-liability pre-FDIC and clawbacks

Moral Hazard

- Concerns about the potential for a "cascade" can lead policy makers to intervene
- Crucial to make policy makers feel comfortable that an institution/market can fail without cascading through the intermediation chain
  - Otherwise market participants will not find it credible

Moral Hazard

- How much is Moral Hazard (limited liability vs bailout potential) a driver of the fragilities of the crisis?
  - Bear Stearns?
  - Leverage and reliance on *short-term* funding?
  - "Cliff effects" in the tranches of mortgage-back securities?
  - Uncertainties in contract enforcement in stress?
- So how tightly should policy-makers hands be tied?
  - Panic of 1907

MH and the Robustness of Markets

- Crucial to understand fragilities of market infrastructure that can exacerbate interconnectedness and MH problems
- Important to give policymakers and, hence, market participants sufficient comfort that key institutions can fail without causing the system to collapse
  - Understanding tools/limits of Fed policy
- Making markets more robust to enhance that comfort (e.g., resolution regime, contract enforcement, central clearing of OTC derivatives, etc.)