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

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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, strongly 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.)