Systemic Risk: What is it?

Are Insurance Firms Systemically Important?

Viral V Acharya

(NYU-Stern, CEPR and NBER)
What is “systemic risk”? 

- **Micro-prudential view: Contagion**
  - Failure of an entity leads to distress or failures of others

- **Too-big-to-fail institutions**
  - Regulate TBTF better

- **The Dodd-Frank Act is primarily the “micro-prudential view”**

- **Systemically Important Financial Institutions (SIFIs)**
  - Regulate SIFIs better
What is “systemic risk”? 

- Macro-prudential view: (Diamond-Dybvig + Shleifer-Vishny)
  - Common factor exposures
  - Runs

- Several entities fail together as
  - Short-term creditors demand immediacy
  - Against long-term assets
  - But the system has limited capacity (capital?) to provide immediacy

- The micro-prudential and macro-prudential views are not necessarily mutually exclusive
Two views lead to different reforms

I. Micro-prudential view:
- Design “top-down” bankruptcy procedure for failing SIFI
- Example: Dodd-Frank Act, contingent capital, bail-in

II. Macro-prudential view:
- Design “bottom-up” resolution at market-level for systemically important assets & liabilities (SIALs)
- Example: Derivatives/Repo clearinghouses, LOLR
Systemic risk need NOT be about SIFIs

- There have indeed been runs on SIFIs in the past

- But a number of runs in the 2007-09 crisis were also runs on relatively smaller shadow banks (such as hedge funds, conduits and SIVs and money-market funds)

- Failures of collection of smaller lenders has historically led to significant crises such as S&L crisis in the United States and the current Spanish woes due to *Cajas*
ABCP “run” (Acharya, Schnabl and Suarez)
BNP Paribas announces that it cannot value mortgage assets in some money funds (Aug 9, 2007)
ABCP “run” (Acharya, Schnabl and Suarez)
Immediacy: a source of systemic risk

- Prior to fiat money, there was often a shortage of money
  - Solution: Commercial bank clearinghouses
  - Suspend conversion of immediacy, adopt joint liability

- Problem: If there isn’t adequate capital with joint liability providers, runs may not get stemmed
  - In extremis, bank runs can morph into sovereign crisis (Ireland)

- Modern-day runs: Resolution difficulties stem from inability to suspend conversion of immediacy
  - LOLR takes on significant asset risk while providing immediacy
  - Safe-harbor provisions may require systemic exception
What about contagion?

- Macro-prudential view: Contagion can amplify problems provided rest of the system cannot
  - Withstand the distress or failures of others, e.g., because it is under-capitalized too due to a common shock (AIG FP failure)
  - Re-intermediate the liquidated assets of distressed firms (Lehman)

- Contagion can arise without inter-connections
  - Information contagion
    - Learning about common assets (Great Depression “runs”)
    - Learning about regulatory policy (Greece, Cyprus interventions)
  - Flow of funds or re-intermediation contagion
    - Insurance firms withdraw from bonds inducing LC runs on banks
    - Corporations draw down money-market deposits affecting banks...
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NYU Stern Systemic Risk Rankings at

http://vlab.stern.nyu.edu/
SRISK: Capital shortfall in case of 40% market correction
MES: %Loss of market value in case of 2% market correction
LVG: $(\text{Book Liabilities} + \text{Mkt Equity}) / \text{Mkt Equity}$
SRISK: Capital shortfall in case of 40% market correction
MES: %Loss of market value in case of 2% market correction
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Open questions (for Insurance Firms!)

- Why did market values of insurance firms collapse so much in Fall of 2008?
- Why are downside risk or beta estimates of insurance firms as high as those of banks and bank holding companies?
- Why were insurance firms owning banks, making guaranteed financial products, selling CDS, etc.?
Open questions (for Insurance Firms!)

- If insurance firm liabilities are more stable, won’t they take advantage of that and keep less equity on balance-sheet a priori?

- When market value of insurance firms collapse, won’t that affect their corporate bond market purchases and potentially also result in fire sales, policy lapses, etc.?

- Won’t lack of corporate bond market access cause firms to draw down bank lines of credit causing “bank runs”?