Lessons of the Global Financial Crisis for Risk Management

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Introduction

- Regulatory arbitrage and “risk management” arbitrage are facts of life
- Innovations may try to take advantage of models or rules of thumb

Overview

- Overview of Fragilities of the System
- Seven Deadly Sins of Risk Management
  - "Checklist"
- Repent Ye Sinners – Reforms for both risk managers and for the regulators

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

Thou Shall Not…

- 1) Let accounting/compensation rules obscure the economics and the risks
  - Important to educate boards and senior management
  - Important to ensure that incentive/rewards systems do not rely on "false profits of accounting"
  - E.g., despite what the accounting rules may say for provisioning, asset prices can go down as well as up
    - Pro vs Counter – cyclical policies

Thou Shall Not…

- 2) Deny that correlation rises in a crisis
  - Geographic diversification can disappear in a crisis (for housing as well as other assets and activities)
    - Around US
    - Across countries
    - Across assets

Thou Shall…

- 3) Search for hidden exposures to common risks
  - Don’t focus only on activities (underwriting/originating in mortgages, investing in them, and funders or counterparties investing in them) or asset classes (many had a common factor in housing)
  - Multiple exposures across activities
  - Common risk factors is the key
  - Enterprise wide risk management

Thou Shall Not…

- 4) Focus on only your own Liquidity Risk Management, but also the risks that your funders face
  - MMMFs
  - Be thy brother’s keeper (or at least keep an eye on him)
  - Interconnectedness

Thou Shall Not…

- 5) Seek false protection from "Toxic contracts" that can seem to provide insurance against on-off risks but induce correlation/interconnectedness in crisis
  - When does the counterparty have to post collateral, either when they don't have it or the collateral is lower value
  - "Limits to Arbitrage"
  - Death spiral

Thou Shall Not…

- 6) Succumb to the curse of market liquidity
  - False sense of security, no need to do due diligence if you can always dump into a liquid market
  - Investment in info, contracts, and alternatives
    - Fragility of market infrastructure
  - Liquid markets can dry up suddenly
    - “Sudden stop” literature

Thou Shall Not…

- 7) Permit financial innovation to build in tail risks that are difficult to model or that effectively manipulate the models
  - Financial innovation will try to take advantage of the risk models you are using
  - You set VAR and they will find an instrument +.01
  - Also will try to structure instruments in a way that will be hard to assess the tail risk
  - Always the case that new instruments have less info, less experience, less certainty of how the market will work

Repent Ye Sinners: How to Reform

- Independent and respected risk function
- Direct communication with the most senior management and this must be known within and outside the firm
- Assess risks across the entire set of activities and investments of the firm
- Assess risks of counterparties and market infrastructure so that hedges don't disappear just when you need them
- Combine highest tech with well-grounded common sense experience

Repent Ye Sinners: How to Reform

- Move OTC credit derivatives on to centrally cleared platforms
- Reduce uncertainty of bankruptcy/resolution/contract enforcement to reduce likelihood of funding runs
- Improve monitoring of liquidity risks
- Use capital requirements so that they do not encourage "toxic contracts"

LIBOR-OIS Spread