Financial Crisis and Financial Regulation

Economics 301: Money and Banking

Goals and Learning Outcomes

- Goals:
  - Learn the difference between liquidity crises and solvency crises.
  - Learn about how/why a crisis can spread to other banks.
  - Learn about government interventions to mitigate and prevent banking crises.
  - Learn about the macroeconomic implications for banking crises.
- Learning Outcomes:
  - LO1: Understand and appreciate the importance of financial markets for the overall functioning of the economy.

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Reading

- Read Hubbard and O'Brien, Chapter 12.

Liquidity Crisis

- **Liquidity risk:** banks assets are illiquid, banks liabilities are liquid.
- **Liquidity crisis:**
  - A liquidity crisis implies banks start with a *positive net worth*.
  - Banks may called on to pay their liabilities, without enough liquid assets on hand, and credit constrained markets prevent borrowing at affordable interest rates.
  - To pay liabilities, borrow at high interest rates or sell illiquid assets at low prices.
  - These transactions cause *net worth to fall below zero*.
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Bank Crises

- **Bank run:** widespread loss in confidence in bank(s), depositors suddenly and simultaneously withdraw large amounts of funds.
- **Contagion:** when panic spreads from one financial institution to another
  - A problem may begin with an insolvent bank or institution, depositors rightly withdraw funds and lenders to these institutions rightly restrict lending.
  - If depositors or lenders cannot distinguish between healthy financial institutions and insolvent ones, panic may spread to other banks, causing a liquidity crisis.
- **Bank panic:** when many banks simultaneously experience bank runs.
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Government Intervention

- **Lender-of-last-resort:** The Federal Reserve Bank (as most central banks) acts as a last-resort lender to banks and financial institutions.
  - Lender-of-last-resort loans provide liquidity to otherwise liquidity constrained banks.
  - The simple presence of a lender-of-last-resort (even if not used) reduces chances of bank runs and contagion.
  - Lending to solvent, but illiquid banks is not a "bail out." It does not lead to moral hazard.
- **Federal Deposit of Insurance Corporation (FDIC)**: Federal government agency established by Congress in 1934 to insure deposits in commercial banks.
  - FDIC insures $250,000 per depositor, per bank.

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Troubled Asset Relief Program (TARP)

- Congressional order signed by George W. Bush on October 3, 2008
- Intended to provide *liquidity* to financial institutions
- Gave U.S. Treasury authority to purchase $700 billion in "troubled assets"
- Eventually changed to $475 billion, $431 billion in actual purchases
- Treasury made money! Sold last of these assets on December 19, 2014, total profit = $24 billion

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Federal Reserve Large Scale Asset Purchase (LSAP)

- Late 2008 - 2014, Fed made large purchases of long-term securities
- Included government bonds and securities guaranteed by Freddie Mac and Fannie Mae
- Brought down return on safe long-term bonds
- Increased demand for other long-term securities, adding liquidity
- Included $1.25 trillion purchases of MBS (Jan 5, 2009 - March 31)
- The Fed is still earning (lots!) of interest on these securities

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Too Big To Fail: Systemic Risk

- **Systemic risk:** risk that an economic or financial market event will trigger a loss of economic value or a loss in confidence to a substantial part of the entire financial system.
- A given financial institution is deemed **too-big-to-fail** if its liabilities are connected to a large number of financial institutions. A failure of the one firm will result in a loss of the value of assets held by many financial institutions.
- There may be cause to bail out insolvent, too-big-to-fail institutions. Tax payers will still be at a loss, but systemic problems are mitigated.
- Presence of too-big-to-fail firms along with a bail-out precedence causes moral hazard.

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Banking Crises and the Macroeconomy

- When the financial system fails to function, it fails to get funds from individual savers to businesses to use for investment in capital.
- A decrease in investment decreases total output / total spending in the short-run.
  - GDP = C + I + G + X - M
  - When sales of final goods and services are lower than expected, production decreases and workers are laid off.
  - Lower income for workers leads to lower consumption (standard expenditure multiplier effect).
- A sustained decrease in investment leads to lower long-run economic growth:
  - A decrease in investment leads to a lower level of aggregate capital stock in the future.
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