Financial Crisis and Financial Regulation

Economics 301: Money and Banking

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1.1 Goals

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.

1.2 Reading

Reading

- Read Hubbard and O'Brien, Chapter 12.

2 Types of Bank Crises

2.1 Liquidity Crisis

Liquidity Crisis

- **Liquidity risk:** banks assets are illiquid, banks liabilities are liquid.
- **Liquidity crisis:**
  - A liquidity crisis implies banks have an a-priori *positive net worth*.

  - When banks are called on to pay their liabilities, but they do not have enough liquid assets on hand, and credit constrained markets prevent borrowing at affordable interest rates.
  - In order to pay liabilities, illiquid assets must be sold at low prices, or borrowing is necessary at high interest rates.
  - Conducting these immediate transactions causes *net worth to fall below zero.*

- **Insolvency crisis:** when banks have a *negative net worth.* Even if their assets were liquid, they would not be able to meet their obligations.

2.2 Bank Crisis

Bank Crises

- **Bank run:** when there is widespread loss in confidence in a bank, and depositors suddenly and simultaneously withdraw enough funds to force the bank to close.
- **Contagion:** when panic spreads from one bank or 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.

3 Government Intervention

3.1 Lender Of Last Resort

Government Intervention

- **Lender-of-last-resort:** The Federal Reserve Bank (and 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.

3.2 Too Big To Fail

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.

4 Banking and the Macroeconomy

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.
  - Lower levels of capital stock means production possibilities are lower.