

Financial Crisis and Financial Regulation

Economics 301: Money and Banking

Goals and Learning Outcomes

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- 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

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- Read Hubbard and O'Brien, Chapter 12.

Liquidity Crisis

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- **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.

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Bank Crises

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- **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.

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Government Intervention

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- **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.

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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

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- 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.

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