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Bank Specialness and Regulations

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Banks vs. Markets

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Financial institutions are subject to special regulations. This begs the question: *Why?*

The first answer is that Commercial Banks have access to federally insured deposits. Since taxpayers ultimately underwrite this insurance, and this insurance can create a moral hazard, there's a natural role for government regulation.

The recent financial crisis highlights the central role of Investment Banks in the economy, and the federal government "bailed out" investment banks through the crisis. The size of these institutions ("too big to fail") and their (incumbent) reliance on federal support create the role for government regulation.

Banks vs. Markets -2.

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At a deeper level, the existence of deposit insurance itself, and the notion of "too big to fail" beg the question of What's special about banks?

In this lecture, we want to explore this question, and within this context understand the current regulatory environment.

What's Special?

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The financial economics literature provides two distinct (though not mutually exclusive) possible answers:

- ▶ Banks provide a risk pooling solution to liquidity risks that markets cannot solve (Diamond and Dybvig).
- Banks play a unique role in information processing about and monitoring borrowers (Diamond).

The reason markets cannot solve the risk pooling problem is that liquidity shocks are not observed (so insurance contracts won't work).

Markets have a hard time solving the hidden actions problem solved by bank monitoring because of the free-rider problem.

Bank Runs

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The Regulatory Framework Regulatory Capital Bank Specialness The fact that a bank has demand deposits that it uses to fund loans creates a bank run problem.

In the Diamond and Dybvig model, a bank run can happen out of the blue (multiple equilibrium). This is very important – you don't need uncertainty about the quality of a bank's balance sheet for a bank run.

In the Diamond setting (and more broadly), concerns (valid or not) about the quality of the bank's assets can cause a bank run.

In both settings a bank run would have deleterious effects on the economy–destroying wealth. Thus it makes sense for society to solve the bank runs problem. This is the role of federal deposit insurance.

Deposit Insurance: Moral Hazard

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The Regulatory Framework Regulatory Capital Bank Specialness While deposit insurance can solve the bank runs problem (and indeed has in the US, since the FDIC was created in 1933), it creates a new problem: excessive risk taking by banks.

By shifting the risk of loss from depositors to the FDIC, depositors no longer have an incentive to worry about the quality of bank loans. Bank managers might be incentivized to take on too much risk, especially since depositors are tolerant of this risk.

The usual solution to a moral hazard problem with insurance is a deductible. The analog of this in the banking context is the limit on the size of an insured deposit (now \$250,000). Large depositors would still worry about the quality of the bank's assets.

Deposit Insurance : Moral Hazard –2.

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The Savings and Loan Crisis of 1985 – 1991 is a textbook case of excessive risk-taking enabled by deposit insurance.

This is the backdrop for bank regulation. If you want FDIC insurance, you have to subject yourself to its regulatory oversight. Since we have never seen a bank hand in its charter and give up FDIC insurance, this seems to be a fair trade-off.

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The Basel framework (Bank for International Settlements) addresses the problems in the 2007-?? financial crisis. So the Basel Committee's assessment of this crisis is important. It asserts that banks had too much leverage, insufficient liquidity, and "could not cope with the reintermediation of large off-balance sheet exposures that had built up in the shadow banking system," (That is the repo, or wholesale funding markets).

- Quantity and Quality of Regulatory Capital.
- ► Maximum leverage ratio protect against model risk and measurement error.

Tier I Capital

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Common Equity must be at least 4.5% of risk-weighted assets at all times.

Tier I Capital must be at least 6% of risk-weighted assets at all times.

Total Capital (Tier I plus Tier II) must be at least 8% of risk-weighted assets at all times.

(Think of Tier I capital as equity and Tier II capital as long-term subordinated debentures.)

Counterparty Credit Exposure

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Off balance sheet positions and repo transactions often create counterparty risks. A big part of the 2007 financial crisis was the contraction of the repo markets. Basel III suggests appropriate minimum haircuts for assets of different ratings(!) and imposing a capital charge to back these exposures.

The "Old Days"

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Evidence that banks are special provided by Chris James' event study of companies raising new debt capital. Those announcing a new bank loan experienced an increase in their stock price, whereas those announcing other new debt had no stock price reaction. So, why does getting a new bank loan make my company's stock more valuable?

Answer: Banks are special – they do something that markets can't.

Now: Loan Sales

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But now many bank loans are securitized and sold in the market. Does this mean the end of bank specialness?

This is the question addressed by Gande and Saunders, who find a positive stock market reaction to initial loan sales. They infer from this that a bank's sale of a company's loans shows the market that the borrower has access to market-level credit, which is a positive thing.

Loan Sales: The Dark Side

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Berndt and Gupta come to a different conclusion.

They find that "borrowers whose loans are sold in the secondary market underperform their peers by about 9% per year (risk-adjusted) over the three-year period following the initial sale of their loans. Therefore, either banks are originating and selling loans of lower quality borrowers based on unobservable private information (adverse selection), and/or loan sales lead to diminished bank monitoring that affects borrowers negatively (moral hazard)."