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Knowledge To Go

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U.S. Financial Regulation

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Outline

1. Why Financial Regulation?
2. U.S. Bank Regulation
   - The eight pillars of bank regulation
   - The 1980s U.S. Banking Crisis and FDIC Improvement Act of 1991
3. The Dodd-Frank Bill (2010)
4. Final Observations
1. WHY FINANCIAL REGULATION?
1. Why Regulation?

- The financial system is one of the most heavily regulated industries in our economy

Why?

- Financial contracts are based on future promises and are subject to many potential contractual failures
- Financial contractual failures may lead to systemic consequences i.e., financial crisis
1. Why Regulation?

- Traditional debate: Pigou vs. Coase

  - Pigou: Regulation is necessary to correct externalities
  - Coase: When transactions costs are low, private negotiations will solve the problem
Regulation: Modern approach

- There are costs and benefits of regulation
  1. Identify externality and/or contractual imperfection
  2. Clearly define social objective function
  3. Consider regulatory process and consequences of regulations
  4. Compare real world markets with real world regulations (not real world markets with idealized regulations)
Rationales for Financial Regulation (1)

1. Contractual problems due to info asymmetries
   - Coordination failures among disperse affected parties
   - Natural consequence of financial diversification
   - The following aspects of contractual relationships have a public good component
     - Agent monitoring
     - Enforcement costs
     - Renegotiation of incomplete contracts

2. Limited liability
   - Capital requirements if social costs are big
Rationales for Financial Regulation (2)

3. Not only efficiency but also equity considerations
   - Example: protection of small investors

4. Libertarian paternalism
   - Example: (Mandrian and Shea, 2001)
     - Workers are more likely to participate in a retirement plan when the default rule is that they are enrolled than when the default rule is that they are not enrolled
     - Even if there is no cost of changing the default
Major Financial Legislation in the U.S. (1)

Federal Reserve Act (1913)
Created the Federal Reserve System

Mcfadden Act of 1927
Effectively prohibited banks from branching across state lines
Put national and state banks on equal footing regarding branching

Banking Acts of 1933 (Glass-Steagall) and 1935
Created the FDIC
Separated commercial banking from the securities industry
Prohibited interest on checkable deposits and restricted such deposits to commercial banks
Put interest-rate ceilings on other deposits

FDIC index of regulations on banking http://www.fdic.gov/regulations/laws/index.html
Securities Act of 1933 and Securities Exchange Act of 1934

Required that investors receive financial information on securities offered for public sale

Prohibited misrepresentations and fraud in the sale of securities

Created the Securities and Exchange Commission (SEC)

Investment Company Act of 1940 and Investment Advisers Act of 1940

Regulated investment companies, including mutual funds

Regulated investment advisers
Bank Holding Company Act and Douglas Amendment (1956)
Clarified the status of bank holding companies (BHCs)
Gave the Federal Reserve regulatory responsibility for BHCs

Depository Institutions Deregulation and Monetary Control Act (DIDMCA) of 1980
Gave thrift institutions wider latitude in activities
Approved NOW and sweep accounts nationwide
Phased out interest-rate ceilings on deposits
Imposed uniform reserve requirements on depository institutions
Eliminated usury ceilings on loans
Increased deposit insurance to $100,000 per account
Major Financial Legislation in the U.S. (4)

**Depository Institutions Act of 1982 (Garn–St. Germain)**
- Gave the FDIC and the FSLIC emergency powers to merge banks and thrifts across state lines.
- Allowed depository institutions to offer money market deposit accounts (MMDAs).
- Granted thrifts wider latitude in commercial and consumer lending.

**Competitive Equality in Banking Act (CEBA) of 1987**
- Provided $10.8 billion to the FSLIC.
- Made provisions for regulatory forbearance in depressed areas.
Major Financial Legislation in the U.S. (5)

Financial Institutions Reform, Recovery, and Enforcement Act (FIRREA) of 1989

Provided funds to resolve S&L failures
Eliminated the FSLIC and the Federal Home Loan Bank Board
Created the Office of Thrift Supervision to regulate thrifts
Created the Resolution Trust Corporation to resolve insolvent thrifts
Raised deposit insurance premiums
Reimposed restrictions on S&L activities

Federal Deposit Insurance Corporation Improvement Act (FDICIA) of 1991

Recapitalized the FDIC
Limited brokered deposits and the too-big-to-fail policy
Set provisions for prompt corrective action
Instructed the FDIC to establish risk-based premiums
Increased examinations, capital requirements, and reporting requirements
Included the Foreign Bank Supervision Enhancement Act (FBSEA), which strengthened the Fed’s authority to supervise foreign banks
Gramm-Leach-Bliley Financial Services Modernization Act of 1999
Repealed Glass-Steagall and removed the separation of banking and securities industries

Sarbanes-Oxley Act of 2002
Created Public Company Accounting Oversight Board (PCAOB)
Prohibited certain conflicts of interest
Required certification by CEO and CFO of financial statements and independence of audit committee
Federal Deposit Insurance Reform Act of 2005
Merged the Bank Insurance Fund and the Savings Association Insurance Fund
Increased deposit insurance on individual retirement accounts to $250,000 per account
Authorized FDIC to revise its system of risk-based premiums

Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010
Creates Consumer Financial Protection Bureau to regulate mortgages and other financial products
Routine derivatives required to be cleared through central clearinghouses and exchanges
New government resolution authority to allow government takeovers of financial holding companies
Creates Financial Stability Oversight Council to regulate systemically important financial institutions
Bans banks from proprietary trading and owning large percentage of hedge funds
Regulatory agencies: historical record

- Federal Reserve created in 1913 to address liquidity problems experienced in panic of 1907
- FDIC born in 1933 to prevent bank runs in early 30s
- SEC created in 1934 to prevent stock market manipulations prevalent in the 20s
- Office of Thrift Supervision created in 1989 after savings and loans crisis of late 80s
- 2010 Dodd-Frank Act was the result of 2008 financial crisis

[However, Commodities Futures Trading Commission created in 1974 (not after crisis) after lobbying from Chicago exchanges to protect their autonomy from New York]
2. BANK REGULATION
2. Bank Regulation

Eight categories of bank regulation

1) Deposit Insurance (FDIC)
2) Bank Capital Requirements
3) Prompt Corrective Action
4) Financial Supervision
5) Assessment of Risk Management
6) Disclosure Requirements
7) Consumer Protection
8) Restrictions on Competition
1) Deposit Insurance (FDIC)

- Before FDIC insurance, bank failures implied that:
  - Depositors lost money
  - Depositors had to wait until the bank was liquidated to receive any funds

- Inability of depositors to assess the quality of a bank’s assets can lead to panics
  - If depositors fear that some banks may fail, their best policy is to withdraw all deposits, leading to a bank run, even for “good” banks

- Further, failure of one bank can lead to the failure of others (contagion effect): Systemic effects
1) Deposit Insurance (FDIC)

- Before FDIC: Major panics in 1819, 1837, 1857, 1873, 1884, 1893, 1907, and 1930–1933

- By providing a safety net, depositors will not flee the banking system at the first sign of trouble
  - Between 1934 and 1981, fewer than 15 banks failed each year
  - In 1933 there was 4,000 bank failures

- Government Safety Net:
  - Deposit Insurance and the FDIC

- The FDIC handles failed banks in one of two ways:
  1. The *payoff method*, where the bank is permitted to fail
  2. The *purchase and assumption method*, where the bank is folded into another banking organization
FIGURE 18.1 Bank Failures in the United States, 1934–2009

1) Deposit Insurance (FDIC)

- Up to the 1960s, only 6 countries had explicit deposit insurance. By the 1990s, the number topped 70.

- Did the spread of deposit insurance improve the performance of the financial system and prevent crises?
  - Explicit government insurance is associated with less bank sector stability and higher bank crises.
  - Appears to retard financial development.
  - But this appears to be only for countries with ineffective laws, regulation, and high corruption.
Banking Crisis Throughout the World

Figure 18.2 Banking Crises Throughout the World Since 1970

1) Deposit Insurance (FDIC)

- **FDIC insurance creates **moral hazard**: banks may take on greater risk than they otherwise would
  - Deposit insurance reduces “market discipline” from depositors

- **FDIC insurance creates **adverse selection
  - Those who can abuse the insurance are mostly likely to find banks attractive

- **FDIC insurance may exacerbate the “Too Big to Fail” problem:**
  - If regulators are reluctant to let big banks fail (because of the potential impact on the entire system--)
  - The moral hazard problem increases for big banks
  - Consolidation has created many “large” banks, exasperating the too-big-to-fail problem
    - Banks now engage in more than just banking, which may inadvertently extend FDIC to such activities as underwriting
Example: Continental Illinois

- In 1984, Continental Illinois became the largest ever bank failure in U.S. history
- A run on the bank led to its seizure by the FDIC
- Continental Illinois largest ever bank to fail until the failure of Washington Mutual in 2008 (seven times larger than the failure of Continental Illinois)

- When Continental Illinois failed, all deposits were insured, as were bond holders. This means even creditors are not interested in a bank’s health!
2) Bank Capital Requirements

- Banks are required to hold a certain level of capital (book equity) that depends on the type of assets that the bank holds.

- Details of bank capital requirements:
  - **Leverage ratio** must exceed 5% to avoid restrictions.
  - Capital must exceed 8% of the banks' risk-weighted assets and off-balance sheet activities (details follow).
  - New capital requirements are forthcoming to address problems (such as Off-Balance Sheet items) with risk-weighted assets.

- Banks may engage in regulatory arbitrage, where for a given category, they seek assets that are the riskiest.
### Example: Calculating Capital Requirements

**First National Bank**

<table>
<thead>
<tr>
<th>Assets</th>
<th>Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reserves $3 m</td>
<td>Checkable deposits $20 m</td>
</tr>
<tr>
<td>Treasury securities $10 m</td>
<td>Nontransactions deposits $60 m</td>
</tr>
<tr>
<td>Government agency securities $7 m</td>
<td>Borrowings $11 m</td>
</tr>
<tr>
<td>Municipal bonds $10 m</td>
<td>Loan loss reserves $2 m</td>
</tr>
<tr>
<td>Residential mortgages $10 m</td>
<td>Bank capital $7 m</td>
</tr>
<tr>
<td>Real estate loans $20 m</td>
<td></td>
</tr>
<tr>
<td>C&amp;I loans $35 m</td>
<td></td>
</tr>
<tr>
<td>Fixed assets $5 m</td>
<td></td>
</tr>
</tbody>
</table>

- **Leverage Ratio** = Capital/Assets = $7m/$100m = 7%
- **Bank is well capitalized**
Example: Calculating Capital Requirements

- Core Capital Requirement
  \[ 4\% \times \text{risk-adjusted assets} = 4\% \times \$91.4m = \$3.66m < \$7m \text{ of core capital} \]

- Total Capital Requirement
  \[ 8\% \times \text{risk-adjusted assets} = 8\% \times \$91.4m = \$7.31m < \$9m \text{ of total capital} \]
  \[ = \$7m \text{ of core} + \$2m \text{ of loan loss reserves} \]
3) Prompt Corrective Action

- An undercapitalized bank is more likely to fail and more likely to engage in risky activities.

- The FDIC Improvement Act of 1991 requires the FDIC to act quickly to avoid losses to the FDIC.

Example:
- “Well capitalized” banks are permitted some underwriting risk.
- However “undercapitalized banks” must:
  - submit a capital restoration plan.
  - restrict asset growth.
  - seek regulatory approval to open new branches or develop new lines of business.
The Basel Accord

- In June 1999, the Basel Committee proposed several reforms to the original Basel Accord, with the following components:
  - Linking capital requirements to actual risk for large, international banks
  - Steps to strengthen the supervisory process
  - Increased market discipline mechanisms
- The new system appears to be quite complex, and implementation has been delayed by years.
- Only the largest U.S. banks subject to Basel 2
- Other U.S. banks will follow a simplified standard
Does the Basel Accord works?

- The 2008 financial crisis revealed problems of the accord
  1. Didn’t require enough capital to weather the financial crisis
  2. Relied on credit ratings for weights
  3. Procyclical credit standards restrict credit exactly when it is needed
  4. Doesn’t address liquidity problems

- Basel III is on its way!
Basel III is on its way!

- Originally scheduled to be introduced from 2013 until 2015
  - However implementation extended to 2019

- Basel I and Basel II focus primarily on the level of bank loss reserves that banks are required to hold

- Basel III focuses primarily on the risk of a bank run
  - Requires differing levels of reserves for different forms of bank deposits and other borrowings

- Basel III rules does not supersede Basel I and Basel II but rather works alongside them
4) Financial Supervision

Chartering and Examination

Examinations assign a CAMEL rating to a bank, which can be used to justify *cease and desist orders* for risky activities.

Periodic reporting (call reports) and frequent (sometimes unannounced) examinations allow regulators to address risky / questionable practices in a prompt fashion.

If examiners aren’t happy, bank can be declared a “problem bank” and subject to more frequent examinations.
5) Assessment of Risk Management

- Four elements of risk management and control:
  1. Quality of board and senior management oversight
  2. Adequacy of policies limiting risk activity
  3. Quality of risk measurement and monitoring
  4. Adequacy of internal controls to prevent fraud

- U.S. regulators have also adopted similar guidelines for dealing with interest-rate risk

- Particularly important is the implementation of stress testing, or VAR calculations, to measure potential losses
6) Disclosure Requirements

- Better information reduces both moral hazard and adverse selection problems

- Sarbanes-Oxley increased requirements for accurate accounting statements, created the Public Company Accounting Oversight Board, and put limits on conflicts of interest

- Mark-to-market accounting may help, if asset values can be determined
7) Consumer Protection

- Standardized interest rates (APR)

- Prevent discrimination, e.g., Community Reinvestment Act (CRA) to help avoid *redlining* particular areas

- The 2008 crisis revealed further need for consumer protection
  - Consumers took out loans where they clearly didn’t understand the terms
8) Restrictions on Competition

- Branching restrictions, which reduced competition between banks

- Separation of banking and securities industries: Glass-Steagall. In other words, preventing nonbanks from competing with banks (repealed in 1999)

- Can lead to higher fees and less innovation
Two examples of interest

1. The 1980s S&L Banking Crisis
2. Electronic Banking and Financial Regulation
The 1980s S&L Banking Crisis

- **Why?**
  1. Decreasing profitability: banks take risk to keep profits up
  2. Financial innovation creates more opportunities for risk taking
  3. Innovation of brokered deposits enables circumvention of $100,000 insurance limit

- **Result:** Failures ↑ and risky loans ↑
FDIC Improvement Act of 1991

- After the widespread failure of thrift institutions in the late 1980s, the Bush administration proposed a set of legislation to overhaul the supervision and insurance for the thrift industry

- FSLIC was dissolved and the FDIC assumed responsibility for insuring thrift institutions

- To address the new needs of the FDIC, the Improvement Act of 1991 was passed
FDIC Improvement Act of 1991

- FDIC recapitalized with loans, ability to borrow from the Treasury, and higher premiums to member banks

- Reduce scope of deposit insurance and too-big-to-fail
  - Eliminate deposit insurance entirely
  - Lower limits on deposit insurance
  - Eliminate too-big-to-fail
  - Coinsurance
FDIC Improvement Act of 1991

- Prompt corrective action provisions
- Risk-based premiums
- Annual examinations and stricter reporting
- Enhances Fed powers to regulate international banking
- FDICIA also instructed the FDIC to develop risk-based insurance premiums
Electronic Banking and Regulation

- Electronic banking has created new issues in regulation, particularly security and privacy.

- Electronic banking creates the need to assess the technical skills of banks to handle transactions securely and safely (e.g., electronic signatures).

- Privacy issues
  - There are laws protecting consumers from the sharing of information.
  - This regulation is likely to evolve over time.
Dodd-Frank Bill (July 2010)

- Most comprehensive financial reform legislation since the Great Depression

- Stated aims:
  - To promote the financial stability of the United States by improving accountability and transparency in the financial system,
  - to end "too big to fail",
  - to protect the American taxpayer by ending bailouts,
  - to protect consumers from abusive financial services practices, and for other purposes
Five different categories of regulation

1. Financial stability
2. Consolidation of financial supervision
3. Increasing transparency of derivatives
4. Consumer protection reform
5. New tools for financial crises
(1) Financial stability

- Creation of two new agencies
  1. Financial Stability Oversight Council
     - Monitor markets for asset price bubbles and the buildup of systemic risk
     - Develop liquidity requirements
     - Assist in the orderly liquidation of troubled financial firms
  2. Office of Financial Research
     - Provides administrative, technical, budget analysis and support services to the Council
(2) Consolidation of financial supervision

- Consolidation of agencies
- Elimination of national thrift charter
- Streamline banking regulation and reduce competition and overlaps between different regulators
(3) Increase transparency of derivatives

- Title VII provides a comprehensive framework for OTC swaps markets regulation
  1. Standardized derivative products to be traded on exchanges and cleared through clearing houses
  2. Higher capital requirements for custom products
  3. Bans banks from some of their derivatives dealing operations
  4. Imposes capital and margin requirements on firms dealing in derivatives and forces them to disclose more information about their activities
(4) Consumer protection reform

- Consumer Financial Protection Bureau
- Examine and enforce regulations for businesses engaged in issuing residential mortgage products, as well as for issuers of other financial products marketed to poor people
  - Provide information to consumers to understand the terms of their agreements with financial companies
  - Restrict unfair, deceptive, or abusive acts or practices
  - Take consumer complaints
  - Promote financial education
(5) New tools for financial crises

- New resolution authority
  - Orderly liquidation authority

- U.S. government granted authority for financial firms who pose a risk to the overall financial system
  - Include insurance companies and non-bank financial companies not covered elsewhere

- Some procedures for FDIC to liquidate companies are revised orderly liquidation of other financial institutions
4. FINAL OBSERVATIONS
Final observations (1)

- Financial regulation is a complex matter
- Need to clearly identify the objectives and where the impediments to reach those objectives are
  - Price stability
  - Financial-system stability
  - Protecting investors and borrowers against fraud and abuses
- Likely to have trade-offs among objectives and conflicts among agencies
Final observations (2)

- A healthy skeptical view would compare realistic markets with realistic regulations
  - Asymmetries of information and contractual imperfections are likely to create market imperfections & room for regulation
  - The nature of the legislative process and the unintended consequences of the regulations are likely to lead to imperfect regulations

- Dodd-Frank 2010 is a major effort to address major concerns on, among other things, financial stability
- For it, the jury is still out!
Useful bibliography


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