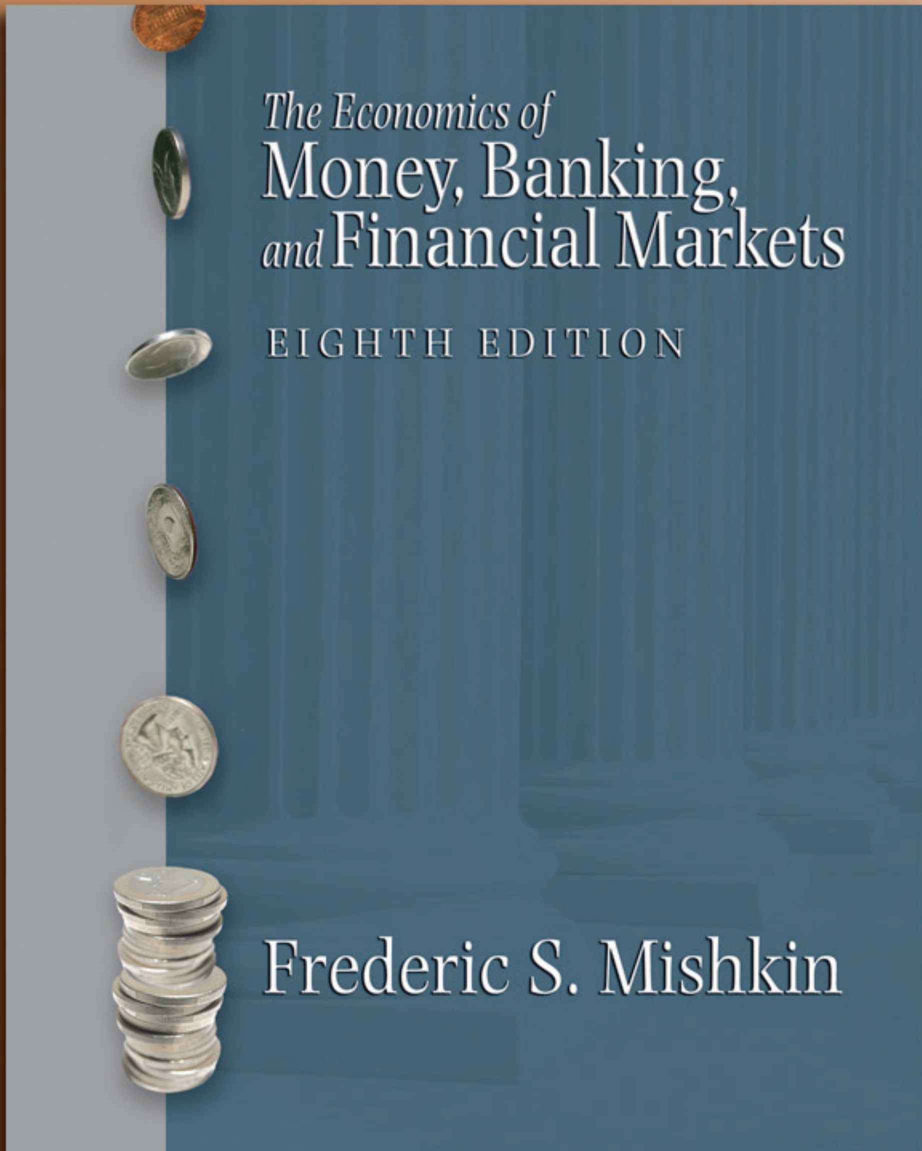

Chapter 11

Economic Analysis of Banking Regulation

Asymmetric Information and Bank Regulation

- Government safety net: Deposit insurance and the FDIC
  - Short circuits bank failures and contagion effect
  - Payoff method
  - Purchase and assumption method
- Moral Hazard
  - Depositors do not impose discipline of marketplace
  - Banks have an incentive to take on greater risk
- Adverse Selection
  - Risk-lovers find banking attractive
  - Depositors have little reason to monitor bank

Too Big to Fail

- Government provides guarantees of repayment to large uninsured creditors of the largest banks even when they are not entitled to this guarantee
- Uses the purchase and assumption method
- Increases moral hazard incentives for big banks

Financial Consolidation

- Larger and more complex banking organizations challenge regulation
  - Increased “too big to fail” problem
  - Extends safety net to new activities, increasing incentives for risk taking in these areas

Restrictions on Asset Holding and Bank Capital Requirements

- Attempts to restrict banks from too much risk taking
  - Promote diversification
  - Prohibit holdings of common stock
  - Set capital requirements
    - Minimum leverage ratio
    - Basel Accord: risk-based capital requirements
    - Regulatory arbitrage

Bank (Prudential) Supervision: Chartering and Examination

- Chartering (screening of proposals to open new banks) to prevent adverse selection
- Examinations (scheduled and unscheduled) to monitor capital requirements and restrictions on asset holding to prevent moral hazard
  - Capital adequacy
  - Asset quality
  - Management
  - Earnings
  - Liquidity
  - Sensitivity to market risk
- Filing periodic ‘call reports’

Assessment of Risk Management

- Greater emphasis on evaluating soundness of management processes for controlling risk
- Trading Activities Manual of 1994 for risk management rating based on
    - Quality of oversight provided
    - Adequacy of policies and limits
    - Quality of the risk measurement and monitoring systems
    - Adequacy of internal controls
- Interest-rate risk limits
    - Internal policies and procedures
    - Internal management and monitoring
    - Implementation of stress testing and Value-at risk (VAR)

Disclosure Requirements

- Requirements to adhere to standard accounting principles and to disclose wide range of information
- Eurocurrency Standing Committee of the G-10 Central Banks also recommends estimates of financial risk generated by the firm’s internal monitoring system be adapted for public disclosure

Consumer Protection

- Truth-in-lending mandated under the Consumer Protection Act of 1969
- Fair Credit Billing Act of 1974
- Equal Credit Opportunity Act of 1974, extended in 1976
- Community Reinvestment Act

Restrictions on Competition

- Justified by moral hazard incentives to take on more risk as competition decreases profitability
  - Branching restrictions (eliminated in 1994)
  - Glass-Steagall Act (repeated in 1999)
- Disadvantages
  - Higher consumer charges
  - Decreased efficiency

TABLE 1 Major Banking Legislation in the United States in the Twentieth Century

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 Act 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

(continued)

TABLE 1 Major Banking Legislation in the United States in the Twentieth Century *(continued)*

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

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

(continued)

TABLE 1 Major Banking Legislation in the United States in the Twentieth Century *(continued)*

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

Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994

Overturned prohibition of interstate banking
Allowed branching across state lines

Gramm-Leach-Bliley Financial Services Modernization Act of 1999

Repealed Glass-Steagall and removed the separation of banking and securities industries

International Banking Regulation

- Similar to U.S.
  - Chartered and supervised
  - Deposit insurance
  - Capital requirement
- Particular problems
  - Easy to shift operations from one country to another
  - Unclear jurisdiction lines

Regulation

- Applies to a moving target
  - Calls for resources and expertise
- Details are important
- Political pressures

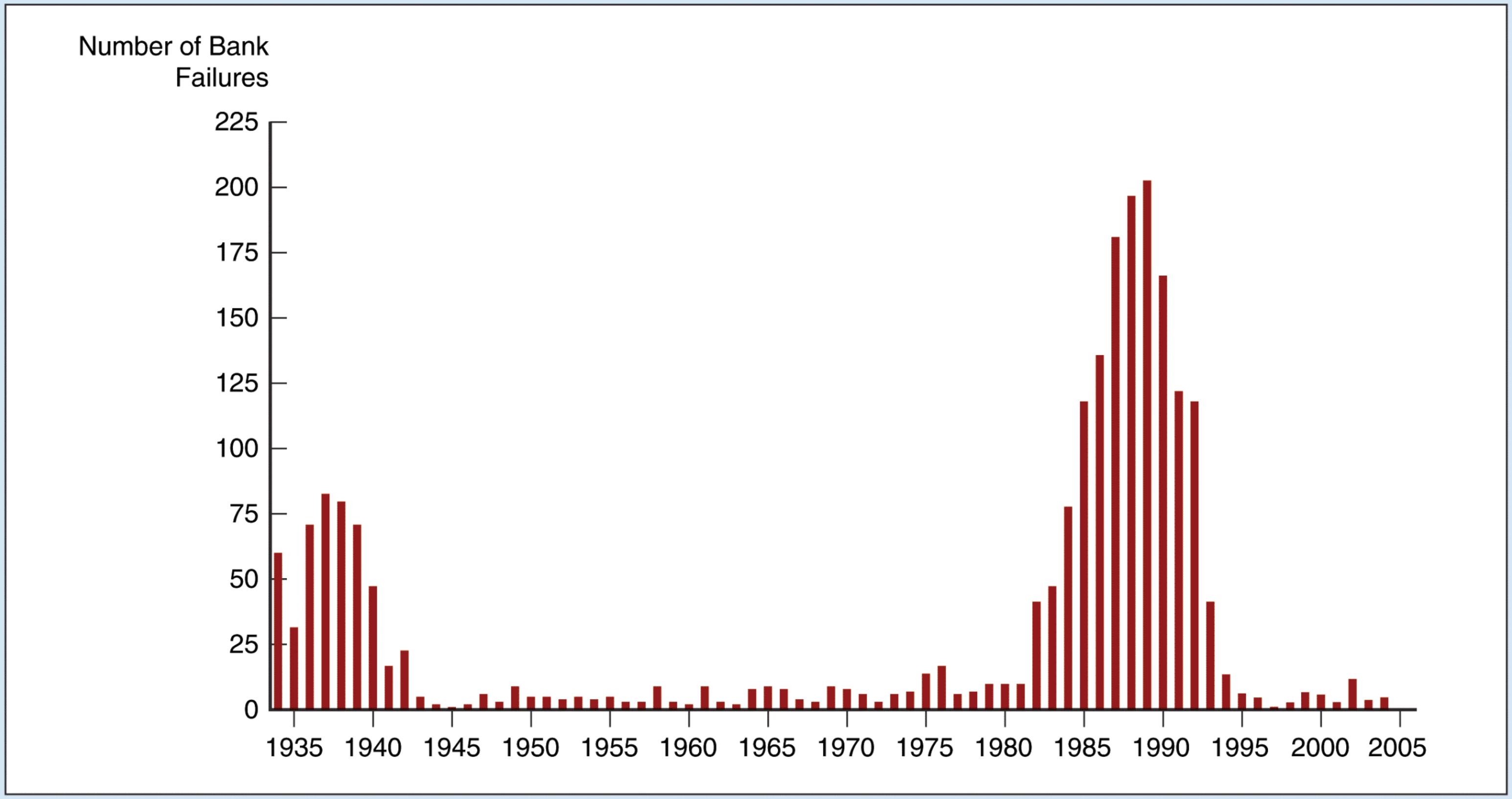

FIGURE 1 **Bank Failures in the United States, 1934–2005**

Source: www.fdic.gov/bank/historical/bank/index.html.

1980s S&L and Banking Crisis

- Financial innovation and new financial instruments increasing risk taking
- Increased deposit insurance led to increased moral hazard
- Deregulation
  - Depository Institutions Deregulation and Monetary Control Act of 1980
  - Depository Institutions Act of 1982

1980s S&L and Banking Crisis (cont'd)

- Managers did not have expertise in managing risk
- Rapid growth in new lending, real estate in particular
- Activities expanded in scope; regulators at FSLIC did not have expertise or resources
- High interest rates and recession increased incentives for moral hazard

1980s S&L and Banking Crisis: Later Stages

- Regulatory forbearance by FSLIC
  - Insufficient funds to close insolvent S&Ls
  - Established to encourage growth
  - Did not want to admit agency was in trouble
- Zombie S&Ls taking on high risk projects and attracting business from healthy S&Ls
- Competitive Equality in Banking Act of 1987
  - Inadequate funding
  - Continued forbearance

Principal-Agent Problem for Regulators and Politicians

- Agents for voters-taxpayers
- Regulators
  - Wish to escape blame (bureaucratic gambling)
  - Want to protect careers
  - Passage of legislation to deregulate
  - Shortage of funds and staff
- Politicians
  - Lobbied by S&L interests
  - Necessity of campaign contributions for expensive political races

The Financial Institutions Reform, Recovery, and Enforcement Act of 1989

- Regulatory apparatus restructured
  - Federal Home Loan Bank Board relegated to the OTS
  - FSLIC given to the FDIC
  - RTC established to manage and resolve insolvent thrifts
- Cost of the bailout approximately $150 billion
- Re-restricted asset choices

The Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (cont'd)

- Increased core-capital leverage requirements
- Imposed same risk-based capital standards as those on commercial banks
- Enhanced enforcement powers of regulators
- Did not focus on underlying moral hazard and adverse selection problems

Federal Deposit Insurance Corporation Improvement Act of 1991

- Recapitalize the Bank Insurance Fund
  - Increase ability to borrow from the Treasury
  - Higher deposit insurance premiums until the loans could be paid back and reserves of 1.25% of insured deposits maintained
- Reform the deposit insurance and regulatory system to minimize taxpayer losses
  - Too-big-to-fail policy substantially limited
  - Prompt corrective action provisions
  - Risk-based insurance premiums

TABLE 2 The Cost of Rescuing Banks in Several Countries

Date	Country	Cost as a Percentage of GDP
1980–1982	Argentina	55
1997–2002	Indonesia	55
1990s–ongoing	China	47
1996–2000	Jamaica	44
1981–1983	Chile	42
1997–2002	Thailand	35
1993–1994	Macedonia	32
2000–ongoing	Turkey	31
1977–1983	Israel	30
1997–2002	South Korea	28
1988–1991	Cote d'Ivoire	25
1991–ongoing	Japan	24
1994–1995	Venezuela	22
1998–2001	Ecuador	20
1994–2000	Mexico	19

(continued)

TABLE 2 The Cost of Rescuing Banks in Several Countries *(continued)*

Date	Country	Cost as a Percentage of GDP
1997–2001	Malaysia	16
1992–1994	Slovenia	15
1998–ongoing	Philippines	13
1994–1999	Brazil	13
1995–2000	Paraguay	13
1989–1991	Czech Republic	12
1997–1998	Taiwan	12
1991–1994	Finland	11
1989–1990	Jordan	10
1991–1995	Hungary	10
1990–1993	Norway	8
1991–1994	Sweden	4
1988–1991	United States	3

Source: Gerard Caprio, Daniela Klingebiel, Luc Laeven, and Guillermo Noguera, *Banking Crises Database* (updated October 2003), http://www1.worldbank.org/finance/html/database_sfd.html.

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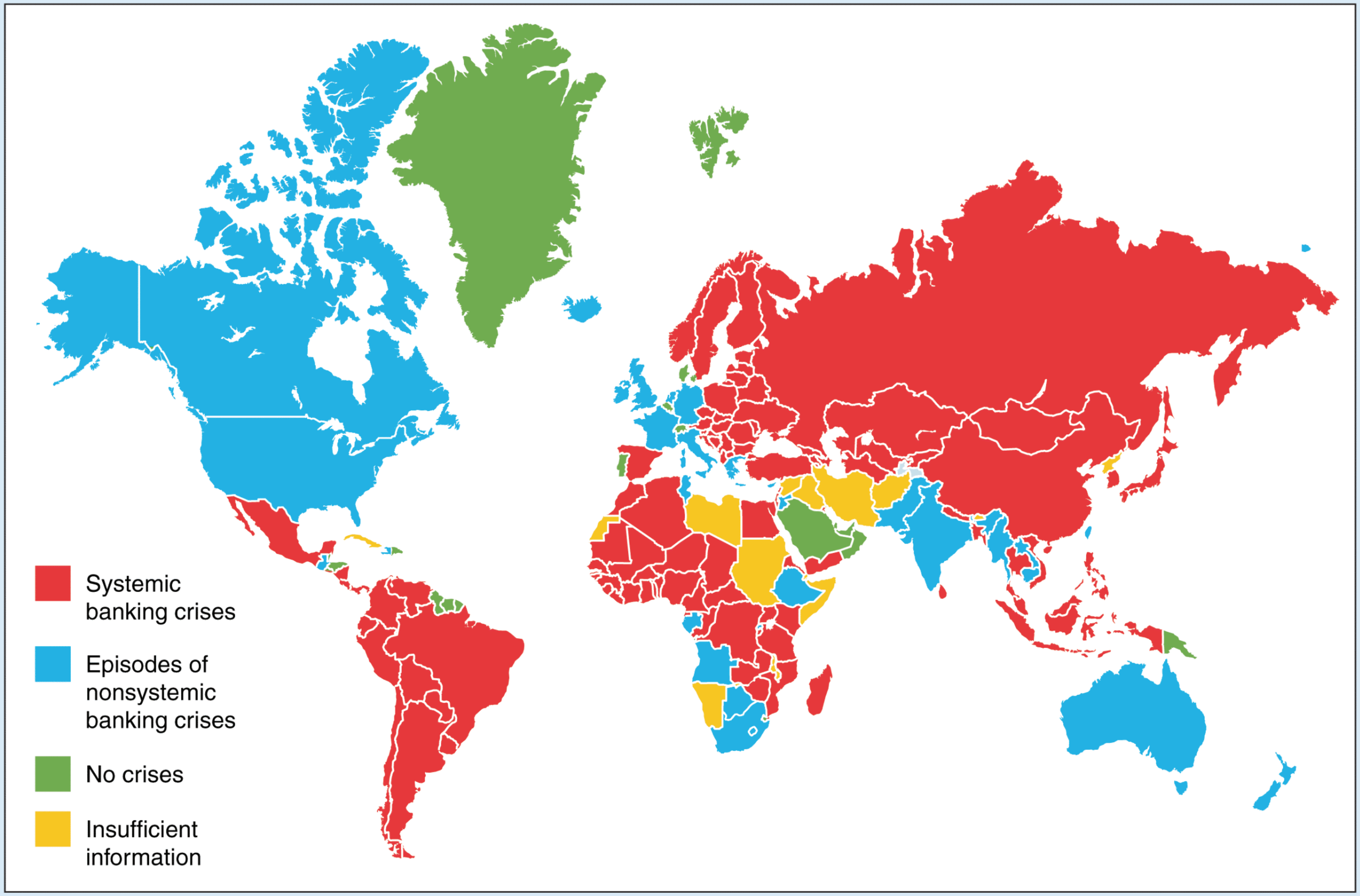

FIGURE 2 **Banking Crises Throughout the World Since 1970**

Source: Gerard Caprio and Daniela Klingebiel, "Episodes of Systemic and Borderline Financial Crises" mimeo., World Bank, October 1999.

Deja Vu

- It is the existence of a government safety net that increases moral hazard incentives for excessive risk taking on the part of banks