Economic Analysis of Financial Regulation

This lecture provides an economic analysis of financial regulation.

Asymmetric Information as a Rationale for Financial Regulation

A. The government safety net

   1. Bank panics and the need for deposit insurance

      a. Prior to the FDIC (Federal Deposit Insurance Corporation) and deposit insurance, a bank failure meant that depositors had to wait until after a bank was liquidated before getting their deposits refunded.

      b. Without deposit insurance, depositors were less likely to put money in banks and were more likely to withdraw funds, especially when fears about the financial health of the bank spread (bank panic).

c. Before the FDIC started in 1934, bank panics were a common occurrence.

d. Currently, the FDIC guarantees that the first $250,000 of deposits will be paid off immediately if the bank fails. This insurance prevents bank panics, which substantially reduces the number of bank failures.

e. FDIC responds to an insolvent bank in one of two ways.

   i. The <u>payoff method</u> allows the bank to fail and then the FDIC immediately pays off the depositors up to the $250,000 limit. After liquidation, the remaining creditors (including deposits over $250,000) are paid their shares from the sale of the bank's assets.

   ii. The <u>purchase and assumption method</u> reorganizes the bank usually by finding a partner willing to merge with the bank and assume all of its liabilities.

2. Other forms of the government safety net
    a. The government can provide support to banks and other financial institutions that do not have deposit insurance. For example, the central bank or the department of treasury can lend directly to troubled institutions.
    b. The central bank and/or treasury can help manage the response to a failed non-bank financial institution just like the FDIC does for a failed bank.

B. Drawbacks of the government safety net

1. Moral hazard

   a. Banks with FDIC insurance have a greater incentive to take on additional risk than they otherwise would.

   b. Depositors will not discourage risky bank behavior by withdrawing funds because FDIC insurance will cover any losses.

2. Adverse selection

   a. Risk-loving entrepreneurs might find the financial industry attractive to do business because depositors have no incentive to monitor them, and FDIC insurance will cover any losses if the bank fails.

3. “Too big to fail”
    a. “Too big to fail” is an implicit guarantee by the government to repay uninsured creditors of large banks or financial institutions that, otherwise, if allowed to fail might precipitate a financial crisis.
        i. The FDIC handles these insolvent institutions using the purchase and assumption method.
        ii. Stockholders usually lose their investment and bank managers are usually fired.
    b. When deposits above $250,000 are insured, depositors have no incentive to monitor the bank.
    c. Giving de facto deposit insurance to nonbank financial institutions incentivizes them to engage in riskier activities (ex., Bear-Stearns, Lehman Brothers, and AIG all took on excessive risk prior to the 2008 crisis).

4. Financial consolidation
    a. Financial innovation and new legislation impacting financial institutions has led to a rapid pace of financial consolidation.
    b. Financial consolidation poses two challenges to financial regulation.
        i. Financial consolidation has increased the “to big to fail” problem.
        ii. Consolidation of banks with other financial institutions means that the government safety net may need to be extended to new activities.

Types of Financial Regulation

A. Restrictions on asset holdings

1. Even without deposit insurance, financial institutions have an incentive to take on too much risk because they keep all of the gains, while depositors share in the potential losses.
2. Government regulations both restrict banks from holding risky assets, such as common stock, and promote lending diversification to prevent banks from being too concentrated in a particular industry.
3. If these regulations are too burdensome, however, the efficiency of the financial system can be harmed.

B. Capital requirements

1. A bank with more equity is less likely to engage in risky behavior (it has more to lose) and has more of a cushion against a bad shock that would force it to write off loans.

2. Bank capital requirements take two forms.

   a. The leverage ratio (LR):

      Leverage ratio = bank equity/total assets

      i. A bank with a leverage ratio above 5% is considered well capitalized, while a bank with a leverage ratio below 3% triggers more regulatory oversight.

b. The <u>Basel Accord</u> is a risk-based measure of capital requirements that takes into account that off-balance-sheet activities can contribute to risk.

   i. Banks should maintain an equity to risk-weighted assets ratio of at least 8%.

   ii. Risk-weighted assets (RWA)

RWA = 0.0*R&GS + 0.2*B + 0.5* MB&RM + 1.0*L

R&GS = Reserves and government securities
B = Claims on banks in OCED countries
MB&RM = Municipal bonds and residential mortgages
L = Loans to consumers and firms

   iii. A similar weighted measure is used to evaluate off-balance-sheet activities.

C. Promote corrective action

1. Two problems arise when a financial institution’s capital falls to low levels.

   a. The bank is more likely to fail.

   b. The bank’s equity owners have less to lose, so they are more likely to engage in risky behavior (the moral hazard problem is worse).

2. FDIC is required to intervene early and aggressively when a bank’s capital falls to low levels.

3. Banks are classified into five groups based on their equity.
    a. Group 1: “Well capitalized” banks significantly exceed the minimum capital requirement and are allowed privileges such as the ability to underwrite some securities.
    b. Group 2: “Adequately capitalized” banks meet capital requirements.
    c. Group 3: “Undercapitalized” banks fail to meet capital requirements.
    d. Group 4: “Significantly undercapitalized” banks.
    e. Group 5: “Critically undercapitalized” banks.
    f. Groups 4 & 5 banks have their asset growth restricted, must submit capital restoration plans, and must seek regulatory approval to open new branches or new lines of business.

D. Financial supervision: chartering and examination

1. To open a commercial bank, a charter must be obtained from either the Comptroller of the Currency (for a national bank) or a state banking authority (for a state bank).

2. Once chartered, the bank must file periodic reports on their assets, liabilities, income, dividends, ownership, foreign exchange operations, and other details.

3. The bank is subject to examinations (sometimes unannounced) at least once a year by the Comptroller of the Currency, the Federal Reserve, or the FDIC depending on its charter and Fed membership.

4. The bank examiners can force the bank to sell risky assets, write off a bank loan (and reduce its equity accordingly), and/or declare a bank to be a “problem bank” needing more frequent examinations.

E. Assessment of risk management

1. Bank examiners also evaluate the bank manager’s actions to control risk especially since banks are involved in off-balance-sheet activities that expose the bank to some risk.

2. Four elements of sound risk management

   a. Good oversight by the board of directors and senior management.

   b. A strong set of policies and limits for all activities that present significant risks.

   c. Good risk management and monitoring systems.

   d. Internal controls to prevent fraud or unauthorized activities by employees.

3. Bank regulators recently have focused on having banks develop strategies to limit their interest-rate risk.

F. Disclosure requirements

1. Disclosure requirements compel financial firms to adhere to standard accounting principles and disclose a wide range of information about the firm’s portfolio.
2. The Securities and Exchange Commission (SEC) imposes disclosure requirements on any publicly-traded company.
3. Increased disclosure requirements reduce the incentive to engage in risky activities and allow investors to make informed decisions.

G. Consumer protection

1. Consumer protection regulations are meant to protect consumers in financial dealings.
2. These regulations do many things including providing consumers with information, so they understand the terms of their loans, and requiring banks not to discriminate.

H. Restrictions on competition

1. Restrictions on competition in the banking industry improve the financial health of banks and decrease the incentives to engage in risky behavior.

2. Two forms of restrictions on banking competition previously used in the U.S. (no longer in existence).

   a. Restrictions on branch banking.

   b. Nonbanks were prevented from engaging in banking businesses.

3. Disadvantages of restrictions on competition in the banking industry

   a. Consumers pay higher bank charges.

   b. Banking institutions are less efficient.

I. Financial regulation and supervision is difficult for a few reasons

   1. Financial institutions are always trying to find loopholes to avoid regulations, so regulators must constantly update their regulations.
   2. Subtle differences in regulation details can generate unintended consequences (“the devil is in the details”).
   3. Regulated businesses often lobby politicians for a more favorable regulatory environment.