Financial Markets and Institutions 13th edition Madura Solutions Manual

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Chapter 1

Role of Financial Markets and Institutions

Outline

Role of Financial Markets
- Accommodating Corporate Finance Needs
- Accommodating Investment Needs

Securities Traded in Financial Markets
- Money Market Securities
- Capital Market Securities
- Derivative Securities
- Valuation of Securities
- Securities Regulations on Financial Disclosure
- International Financial Markets
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Role of Financial Institutions
- Role of Depository Institutions
- Role of Nondepository Financial Institutions
- Comparison of Roles among Financial Institutions
- Relative Importance of Financial Institutions
- Consolidation of Financial Institutions

Systemic Risk Among Financial Institutions

Key Concepts

1. Explain the role of financial intermediaries in transferring funds from surplus units to deficit units.

2. Introduce the types of financial markets available and their functions.

3. Introduce the various financial institutions that facilitate the flow of funds.

4. Provide a preview of the course outline. Emphasize the linkages between the various sections of the course.

POINT/COUNTER-POINT: Will Computer Technology Cause Financial Intermediaries to Become Extinct?

POINT: Yes. Financial intermediaries benefit from access to information. As information becomes more accessible, individuals will have the information they need before investing or borrowing funds. They will not need financial intermediaries to make their decisions.

COUNTER-POINT: No. Individuals rely not only on information, but also on expertise. Some financial intermediaries specialize in credit analysis so that they can make wise choices when offering loans. Surplus units will continue to provide funds to financial intermediaries rather than make direct loans, because they are not capable of credit analysis, even if more information about prospective borrowers is available. Some financial intermediaries no longer have physical buildings for customer service, but they still require agents who have the expertise to assess the creditworthiness of prospective borrowers.

WHO IS CORRECT? Use the Internet to learn more about this issue and then formulate your own opinion.

ANSWER: Computer technology may reduce the need for some types of financial intermediaries such as brokerage firms, because individuals can make transactions on their own (if they prefer to do so). However, loans will still require financial intermediaries because of the credit assessment that is needed.

Questions

1. **Surplus and Deficit Units.** Explain the meaning of surplus units and deficit units. Provide an example of each. Which types of financial institutions do you deal with? Explain whether you are acting as a surplus unit or a deficit unit in your relationship with each financial institution.

   ANSWER: Surplus units provide funds to the financial markets while deficit units obtain funds from the financial markets. Surplus units include households with savings, while deficit units include firms or government agencies that borrow funds.

   This exercise allows students to realize that they constantly interact with financial institutions, and that they often play the role of a deficit unit (on car loans, tuition loans, etc.).

2. **Types of Markets.** Distinguish between primary and secondary markets. Distinguish between money and capital markets.

   ANSWER: Primary markets are used for the issuance of new securities while secondary markets are used for the trading of existing securities.

   Money markets facilitate the trading of short-term (money market) instruments while capital markets facilitate the trading of long-term (capital market) instruments.

3. **Imperfect Markets.** Distinguish between perfect and imperfect security markets. Explain why the existence of imperfect markets creates a need for financial intermediaries.

   ANSWER: With perfect financial markets, all information about any securities for sale would be freely available to investors, information about surplus and deficit units would be freely available, and all securities could be unbundled into any size desired. In reality, markets are imperfect, so that surplus and deficit units do not have free access to information, and securities cannot be unbundled as desired.

   Financial intermediaries are needed to facilitate the exchange of funds between surplus and deficit units. They have the information to provide this service and can even repackage deposits to provide the amount of funds that borrowers desire.

4. **Efficient Markets.** Explain the meaning of efficient markets. Why might we expect markets to be efficient most of the time? In recent years, several securities firms have been guilty of using inside information when purchasing securities, thereby achieving returns well above the norm (even when accounting for risk). Does this suggest that the security markets are not efficient? Explain.

   ANSWER: If markets are efficient then prices of securities available in these markets properly reflect all information. We should expect markets to be efficient because if they weren't, investors would capitalize on the discrepancy between what prices are and what they should be. This action would force market prices to represent the appropriate prices as perceived by the market.

   Efficiency is often defined with regard to publicly available information. In this case, markets can be efficient, but investors with inside information could possibly outperform the market on a consistent basis. A stronger version of efficiency would hypothesize that even access to inside information will not consistently outperform the market.

5. **Securities Laws.** What was the purpose of the Securities Act of 1933? What was the purpose of the Securities Exchange Act of 1934? Do these laws prevent investors from making poor investment decisions? Explain.

   ANSWER: The Securities Act of 1933 was intended to assure complete disclosure of relevant financial information on publicly offered securities and prevent fraudulent practices when selling these securities. The Securities Exchange Act of 1934 extended the disclosure requirements to secondary market issues. It also declared a variety of deceptive practices illegal but does not prevent poor investments.

6. **International Expansion.** Discuss why many financial institutions have expanded internationally in recent years. What advantages can be obtained through an international merger of financial institutions?

   ANSWER: Many financial institutions have expanded internationally to capitalize on their expertise. Commercial banks, insurance companies, and securities firms have expanded through international mergers. An international merger between financial institutions enables the merged company to offer the services of both entities to its entire customer base.

7. **Stock Valuation.** What type of information do investors rely on in order to determine the proper value of stocks?

   ANSWER: Since the valuation of a stock at a future point in time is uncertain, so is the selling price of a stock at a future point in time. Investors often rely on financial statements by firms in order to assess how stock prices might change in the future. In particular, investors rely on accounting reports of a firm's revenue, expenses, and earnings as a basis for estimating its future cash flows. Firms with publicly traded stock are required to disclose financial information and financial statements.

8. **Securities Firms.** What are the functions of securities firms? Many securities firms employ brokers and dealers. Distinguish between the functions of a broker and those of a dealer and explain how each type of professional is compensated.

   ANSWER: Securities firms provide a variety of functions (such as underwriting and brokerage) that either enhances a borrower's ability to borrow funds or an investor's ability to invest funds.

   Brokers are commonly compensated with commissions on trades, while dealers are compensated on their positions in particular securities. Some dealers also provide brokerage services.

9. **Mis-valuation of Marijuana Stocks.** Explain why some stocks in the marijuana industry were mis-valued when several states legalized the recreational use of marijuana.

   ANSWER: Recently, as several states legalized the recreational use of marijuana, some companies with very little experience in any business related to marijuana announced that they were positioned to capitalize on the expected growth in this market. Many investors wanted to benefit from this potential growth and quickly purchased the stocks of companies in the industry. However, some investors did not carefully check the business plan, operations, or financial condition of these companies. Consequently, the strong demand by investors for stocks of marijuana companies without much experience caused their stock prices to increase dramatically, only to crash upon a closer review.

10. **Marketability.** Commercial banks use some funds to purchase securities and other funds to make loans. Why are the securities more marketable than the loans in the secondary market?

    ANSWER: Securities are more standardized than loans and therefore can be more easily sold in the secondary market. The excessive documentation on commercial loans limits a bank's ability to sell loans in the secondary market.

11. **Depository Institutions.** Explain the primary use of funds for commercial banks versus savings institutions.

    ANSWER: Savings institutions have traditionally concentrated in mortgage lending, while commercial banks have concentrated in commercial lending. Savings institutions are now allowed to diversify their asset portfolio to a greater degree and will likely increase their concentration in commercial loans (but not to the same degree as commercial banks).

12. **Credit Unions.** With regard to the profit motive, how are credit unions different from other financial institutions?

    ANSWER: Credit unions are non-profit financial institutions.

13. **Nondepository Institutions.** Compare the main sources and uses of funds for finance companies, insurance companies, and pension funds.

    ANSWER: Finance companies sell securities to obtain funds, while insurance companies receive insurance premiums and pension funds receive employee/employer contributions. Finance companies use funds to provide direct loans to consumers and businesses. Insurance companies and pension funds purchase securities.

14. **Mutual Funds.** What is the function of a mutual fund? Why are mutual funds popular among investors? How does a money market mutual fund differ from a stock or bond mutual fund?

    ANSWER: A mutual fund sells shares to investors, pools the funds, and invests the funds in a portfolio of securities. Mutual funds are popular because they can help individuals diversify while using professional expertise to make investment decisions.

    A money market mutual fund invests in money market securities, whereas other mutual funds normally invest in stocks or bonds.

15. **Secondary Market for Debt Securities.** Why is it important for long-term debt securities to have an active secondary market?

    ANSWER: An active secondary market is especially desirable for debt securities that have a long-term maturity, because it allows investors flexibility to sell them at any time prior to maturity. Many investors would not even consider investing in long-term debt securities if they were forced to hold these securities until maturity.

Advanced Questions

16. **Comparing Financial Institutions.** Classify the types of financial institutions mentioned in this chapter as either depository or nondepository. Explain the general difference between depository and nondepository institutions as sources of funds. It is often stated that all types of financial institutions have begun to offer services that were previously offered only by certain types. Consequently, many financial institutions are becoming more similar. Nevertheless, performance levels still differ significantly among types of financial institutions. Why?

    ANSWER: Depository institutions include commercial banks, savings and loan associations, and credit unions. These institutions differ from nondepository institutions in that they accept deposits. Nondepository institutions include finance companies, insurance companies, pension funds, mutual funds, and money market funds.

    Even though financial institutions are becoming more similar, they often differ distinctly from each other in terms of sources and uses of funds. Therefore, their performance levels differ as well.

17. **Financial Intermediation.** Look in a recent business periodical for news about a recent financial

transaction that involves two financial institutions. For this transaction, determine the following:

a. How will each institution's balance sheet be affected?
b. Will either institution receive immediate income from the transaction?
c. Who is the ultimate user of funds?
d. Who is the ultimate source of funds?

ANSWER: This exercise will force students to understand how the balance sheet and income statement of a financial institution are affected by various transactions. When a financial institution simply acts as an intermediary, income (fees or commissions) is earned, but the institution's asset portfolio is not significantly affected.

18. **Role of Accounting in Financial Markets.** Integrate the roles of accounting, regulations, and financial market participation. That is, explain how financial market participants rely on accounting, and why regulatory oversight of the accounting process is necessary.

ANSWER: Financial market participants rely on financial information that is provided by firms. The financial statements of firms must be audited to ensure that they accurately represent the financial condition of the firm. However, the accounting standards are loose, so financial market participants can benefit from strong accounting skills that may allow them to more properly interpret financial statements.

19. **Factors That Influence Liquidity.** Which factors influence a security's liquidity?

ANSWER: Debt securities with shorter maturities are more liquid. Debt securities and stocks with a more active secondary market are more liquid.

20. **Impact of Credit Crisis on Institutions.** Explain why mortgage defaults during the credit crisis in 2008 and 2009adversely affected financial institutions that did not originate the mortgages. What role did these institutions play in financing the mortgages?

ANSWER: Some financial institutions participated by issuing mortgage-backed securities that represented mortgages originated by mortgage companies. Mortgage-backed securities performed poorly during the credit crisis in 2008 because of the high default rate on mortgages. Some financial institutions that held a large amount of mortgage-backed securities suffered major losses at this time.

21. **Impact of Fraudulent Financial Reporting on Market Liquidity** Explain why financial markets may be less liquid if companies are not forced to provide accurate financial reports.

ANSWER: If companies are allowed to engage in fraudulent financial reporting by exaggerating earnings or hiding debt, this could cause investors to overpay when purchasing securities issued by those companies. If investors recognize that they cannot trust financial disclosure by companies, they may be unwilling to participate in financial markets. The lack of trust can cause markets to be less liquid, because of very limited investor participation.

22. **Impact of a Country's Laws on Its Market Liquidity** Describe how a country's laws can influence the degree of its financial market liquidity.

ANSWER: The financial markets are much more developed in some countries than in others, and they also vary in terms of their liquidity. Each country has its own laws regarding shareholder rights. Investors may be more willing to participate in their local country's financial markets if they have the right to take civil action against a local firm that engaged in fraudulent financial disclosure. Each country also has its own level of enforcement of securities laws. Investors may be more willing to participate in their local country's financial markets if they believe that their local government enforces the securities laws that are imposed in that country.

23. **Global Financial Market Regulations.** Assume that countries A and B are of similar size, that they have similar economies, and that the government debt levels of both countries are within reasonable limits. Assume that the regulations in country A require complete disclosure of financial reporting by issuers of debt in that country, whereas regulations in country B do not require much disclosure of financial reporting. Explain why the government of country A is able to issue debt at a lower cost than the government of country B.

ANSWER: Investors are more willing to invest in debt securities issued by the government of country A because there is more transparent information that would suggest country A can cover its payments owed on its debt. If the government of Country B does not disclose its financial information, investors cannot assess the financial condition and ability of the government to cover its payments owed on its debt. Thus, they are less willing to invest in debt securities issued by country B, so country B will have to offer a higher yield to entice investors.

24. **Influence of Financial Markets** Some countries do not have well established markets for debt securities or equity securities. Why do you think this can limit the development of the country, business expansion, and growth in national income in these countries?

ANSWER: Businesses rely on financial markets to expand. If they cannot issue debt or equity securities, they cannot obtain funding to expand. Local investors who have money to invest will likely invest their money in other countries if the financial markets are not developed in their home market. Thus, they will essentially help other countries grow instead of helping their own country grow.

25. **Impact of Systemic Risk** Different types of financial institutions commonly interact. Specifically, they may provide loans to each other, and take opposite positions on many different types of financial agreements, whereby one will owe the other based on a specific financial outcome. Explain why these kinds of relationships cause concerns about systemic risk.

ANSWER: When financial institutions interact through transactions, the failure of one financial institution can cause financial problems for others. As one financial institution fails, it defaults on payments owed on financial agreements with other financial institutions. Those institutions may have been relying on those payments to cover other obligations to another set of financial institutions. Thus, many financial institutions might be unable to cover their obligations, and this spreads fear that the financial system might collapse.

26. **Uncertainty Surrounding Stock Price** Assume that your publicly traded company attempts to be completely transparent about its financial condition, and provides thorough information about its debt, sales, and earnings every quarter. Explain why there still may be much uncertainty surrounding your company's stock price.

ANSWER: The value of a company is based on the present value its future cash flows. Investors may attempt to use financial statements to predict future cash flows. But even when investors are presented with information value your company's stock, they may interpret the information in different ways. They commonly derive different interpretations of the same information, which leads to different valuations of the firm, reflects uncertainty surrounding the firm's stock price.

27. **Financial Institution's Roles as Intermediaries** Explain how each type of financial institution serves as a financial intermediary.

ANSWER: Deposits from surplus units are transformed by depository institutions into loans for deficit units. Purchases of securities (commercial paper) issued by finance companies that are transformed into finance company loans for deficit units. Purchases of shares issued by mutual funds are used to purchase debt and equity securities of deficit units.

Because insurance companies and pension funds purchase massive amounts of stocks and bonds, they finance much of the expenditures made by large deficit units, such as corporations and government agencies.

28. **Systemic Risk During a Financial Crisis** Explain why financial institutions are highly exposed to systemic risk during a financial crisis.

ANSWER: Systemic risk exists because financial institutions invest their funds in similar types of securities and therefore have similar exposure to large declines in the prices of these securities. For example, in the credit crisis of 2008 and 2009, mortgage defaults affected financial institutions in several ways. First, many financial institutions that originated mortgages shortly before the crisis sold them to other financial institutions (i.e., commercial banks, savings institutions, mutual funds, insurance companies, securities firms, and pension funds). Therefore, even financial institutions that were not involved in the mortgage origination process experienced large losses because they purchased the mortgages originated by other financial institutions.

Second, many other financial institutions that invested in mortgage-backed securities received lower payments as mortgage defaults occurred. Third, some financial institutions (especially securities firms) relied heavily on short-term debt to finance their operations and used their holdings of mortgage-backed securities as collateral. But when the prices of mortgage-backed securities plummeted, they could not issue new short-term debt to pay off the principal on maturing debt.

Fourth, as mortgage defaults increased, there was an excess of unoccupied housing. There was no need for construction of new homes, so construction companies laid off many employees. The economy weakened and prices of many equity securities declined by more than 40 percent. Thus most financial institutions that invested heavily in equities experienced large losses on their investments during the credit crisis.

Fifth, financial institutions commonly engage in various loan and guarantee arrangements that causes one financial institution to rely on others for payment. Thus, the bankruptcy of one large financial institution can cause defaults on payments to several other financial institutions, which might reduce their ability to cover their respective obligations to other financial institutions. This can result in bankruptcy for many financial institutions.

CRITICAL THINKING QUESTION

Impact of a Financial Crisis on Market Liquidity During a financial crisis, liquidity in financial markets declines dramatically, and many surplus units no longer participate in financial markets. Nevertheless, if the markets are efficient, securities prices should decline due to existing economic conditions, which should make these securities appealing to potential investors. Yet, many investors typically are no longer willing to participate in the financial markets under these conditions. Write a short essay that explains the logic behind why participants may temporarily disappear during a financial crisis even though security prices are low, causing illiquidity in financial markets.

ANSWER: Even if the market prices reflect existing conditions, a crisis can cause fear that prices will decline substantially. While this might allow the possibility for large profits from pronounced changes in the prices of securities, many market participants may be uncomfortable in a market in which they could lose 30% or more of their investment in a short period of time.

Market illiquidity complicates market conditions, but there is usually another event that occurs first that causes market illiquidity. For example, the defaults on many mortgages in 2008 triggered fear among market participants about the possible continuation of defaults in all debt markets, the likelihood of a weaker economy, and the possible weakness in equity prices. Consequently, the fear encouraged many market participants to discontinue serving as surplus units until economic conditions improved.

Interpreting Financial News

"Interpreting Financial News" tests your ability to comprehend common statements made by Wall Street analysts and portfolio managers who participate in the financial markets. Interpret the following:

a. "The price of Apple stock will not be affected by the announcement that its earnings have increased as expected."

   The earnings level was anticipated by investors, so that Apple's stock price already reflected this anticipation.

b. "The lending operations at Bank of America should benefit from strong economic growth."

   High economic growth encourages expansion by firms which results in a strong demand for loans provided by Bank of America.

c. "The brokerage and underwriting performance at Goldman Sachs should benefit from strong economic growth."

   High economic growth may result in a large volume of stock transactions in which Goldman Sachs may serve as a broker. Also, Goldman Sachs underwrites new securities that are issued when firms raise funds to support expansion; firms are more willing to issue new securities to expand during periods of high economic growth.

Managing in Financial Markets

As a financial manager of a large firm, you plan to borrow $70 million over the next year.

a. What are the more likely alternatives for you to borrow $70 million?

   You could attempt to borrow $70 million from commercial banks, savings institutions, or finance companies in the form of commercial loans. Alternatively, you may issue debt securities.

b. Assuming that you decide to issue debt securities, describe the types of financial institutions that may purchase these securities.

Financial institutions such as mutual funds, pension funds, and insurance companies commonly purchase debt securities that are issued by firms. Other financial institutions such as commercial banks and savings institutions may also purchase debt securities.

c. How do individuals indirectly provide the financing for your firm when they maintain deposits at depository institutions, invest in mutual funds, purchase insurance policies, or invest in pensions?

Individuals provide funds to financial institutions in the form of bank deposits, investment in mutual funds, purchases of insurance policies, or investment in pensions. The financial institutions may channel the funds toward the purchase of debt securities (and even equity securities) that were issued by large corporations, such as the one where you work.

Flow of Funds Exercise

Roles of Financial Markets and Institutions

This continuing exercise focuses on the interactions of a single manufacturing firm (Carson Company) in the financial markets. It illustrates how financial markets and institutions are integrated and facilitate the flow of funds in the business and financial environment. At the end of every chapter, this exercise provides a list of questions about Carson Company that require the application of concepts learned within the chapter, as related to the flow of funds.

Carson Company is a large manufacturing firm in California that was created 20 years ago by the Carson family. It was initially financed with an equity investment by the Carson family and ten other individuals. Over time, Carson Company has obtained substantial loans from finance companies and commercial banks. The interest rates on those loans are tied to market interest rates and are adjusted every six months. Thus, Carson's cost of obtaining funds is sensitive to interest rate movements.

The company has a credit line with a bank in case it suddenly needs to obtain funds for a temporary period. It has purchased Treasury securities that it could sell if it experiences any liquidity problems.

Carson Company has assets valued at approximately $50 million and generates sales of nearly $100 million per year. Some of its growth is attributed to its acquisitions of other firms. Because it expects the economy to be strong in the future, Carson plans to grow by expanding its business and making more acquisitions. It expects that it will need substantial long-term financing and plans to borrow additional funds either through obtaining loans or by issuing bonds. It is also considering the issuance of stock to raise funds in the next year. Carson closely monitors conditions in financial markets that could affect its cash inflows and cash outflows and thereby affect its value.

a. In what way is Carson a surplus unit?

Carson invests in Treasury securities and therefore is providing funds to the Treasury, the issuer of those securities.

b. In what way is Carson a deficit unit?

Carson has borrowed funds from financial institutions.

c. How might finance companies facilitate Carson's expansion?

Finance companies can provide loans to Carson so that Carson can expand its operations.

d. How might commercial banks facilitate Carson's expansion?

Commercial banks can provide loans to Carson so that Carson can expand its operations.

e. Why might Carson have limited access to additional debt financing during its growth phase?

Carson may have already borrowed up to its capacity. Financial institutions may be unwilling to lend more funds to Carson if it has too much debt.

f. How might securities firms facilitate Carson's expansion?

First, securities firms could advise Carson on its acquisitions. In addition, they could underwrite a stock offering or a bond offering by Carson.

g. How might Carson use the primary market to facilitate its expansion?

It could issue new stock or bonds to obtain funds.

h. How might it use the secondary market?

It could sell its holdings of Treasury securities in the secondary market.

i. If financial markets were perfect, how might this factor have allowed Carson to avoid financial institutions?

It would have been able to obtain loans directly from surplus units. It would have been able to assess potential targets for acquisitions without the advice of investment securities firms. It would be able to engage in a new issuance of stock or bonds without the help of a securities firm.

j. The loans that Carson has obtained from commercial banks stipulate that Carson must receive the banks' approval before pursuing any large projects. What is the purpose of this condition? Does this condition benefit the owners of the company?

The purpose is to prevent Carson from using the funds in a manner that would be very risky, as Carson may default on its loans if it takes excessive risk when using the funds to expand its business. The owners of the firm may prefer to take more risk than the lenders will allow, because the owners would benefit directly from risky ventures that generate large returns. Conversely, the lenders simply hope to receive the repayments on the loan that they provided, and do not receive a share in the profits. They would prefer that the funds be used in a conservative manner so that Carson will definitely generate sufficient cash flows to repay the loan.