FINANCIAL ENVIRONMENT: MARKETS, INSTITUTIONS, AND INVESTMENT BANKING (CHAPTER 3)

- Financial Markets—systems/mechanisms where those who have excess funds (investors/lenders) are brought together with those who need funds (borrowers).

- Importance of Financial Markets
  - Flow of Funds—generally individuals (1) borrow money when they begin their careers to purchase such high-ticket items as houses and cars, (2) save/invest money during their careers, especially during their peak earnings periods, and (3) draw on their savings/investments to support themselves when they retire.
  - Funds are transferred from lenders to borrows via three processes:
    - Direct transfer—financial institutions are not used; funds a loaned directly to borrowers.
    - Investment banker—an organization that specializes in issuing stocks and bonds; serves as an agent that gets borrowers (corporations and governments) and lenders (investors) together; gets paid a commission/fee for services rendered.
    - Financial intermediary—a firm that issues its own securities (savings accounts, money market accounts, certificates of deposit, and so forth) to get funds from savers, and then lends the funds to borrowers; earns the difference between the rate that is charged on the loans and the rate that is paid to attract funds. Today, many financial intermediaries offer a variety of services, including taking deposits, lending funds to individuals and businesses, and other financial services, such as investments and related services.
  - Market Efficiency—when efficient, the financial markets increase an economy's standard of living
    - Economic efficiency—funds are allocated to their best use at the lowest cost (interest).
    - Informational efficiency—market prices/values adjust quickly when new information becomes available in the financial markets.
      - Weak-form efficiency—market prices only reflect information contained in past prices and past price movements
      - Semistrong-form efficiency—market prices reflect all publicly available information, including information contained in past price movements, firms' current financial statements, recent announcements, and so forth.
      - Strong-form efficiency—market prices reflect all information, both publicly available information and private information

- Types of Finance Markets
  - Money markets versus capital markets—securities with original maturities equal to one year or less are traded in the money markets, whereas securities with original maturities greater than one year are traded in the capital markets.
  - Debt markets versus equity markets—loans are traded in debt markets, whereas stocks are traded in equity markets. Debt associated with real estate is traded in mortgage markets, whereas such consumer debt as automobile loans, loans for appliances and education, and so forth is traded in consumer credit markets.

- Primary markets versus secondary markets—new issues of stocks and bonds are sold in the primary markets, whereas previously issued (outstanding) securities are traded in the secondary markets.
- Derivatives Markets—markets where options, futures, swaps, and other "derivative" financial instruments are traded; derivatives are securities whose values are determined ("derived") from the values of other assets.

Financial markets can be local, regional, national, or global, depending on the coverage of the securities traded and the nature of the participants in the markets.

- Stock Markets—market in which equity (stock) is traded
  - Types of Market Activities
    - Secondary market—trading outstanding securities—that is, securities that were issued some time earlier
    - Primary market—publicly-owned companies issue stock to raise new funds for investments in assets
    - Initial public offering (IPO)—privately-held firms "go public" by selling stock to the general public for the first time.
  - Physical Stock Exchanges—organized physical stock exchanges are physical locations where stocks are traded; the New York Stock Exchange (NYSE) is the largest organized exchange; generally only those who are exchange members can trade on organized exchanges. Many stock exchanges have converted from organizations that have mutual not-for-profit ownership to for-profit stock ownership, which is called demutualization
    - Exchange membership—each member category has a different trading responsibility
      - Trading floor brokers—agents who buy and sell securities for investors; house brokers are employed by brokerage firms, whereas independent brokers freelance their services to various brokerage firms
      - Designated market makers (DMMs)—formerly known as specialists—"market makers" who bring buyers and sellers together by adjusting the prices of securities; when there are too many buyers, specialists will increase the price of securities, and vice versa
      - Supplemental liquidity providers (SLPs)—primarily deal with high-volume trades; maintain liquidity when large trades occur; ensure high-volume transactions take place at the best available prices
    - Listing requirements—each exchange has certain minimum financial requirements for a firm's stock to be listed for trading; generally large national exchanges have more stringent listing requirements
  - The Over-the-Counter (OTC) Market and the NASDAQ
    - OTC—a network of brokers and dealers around the country that are linked electronically
    - The NASDAQ (National Association of Security Dealers Automated Quotation system) evolved from the OTC, and has become a very organized investment network
    - Electronic communications networks (ECNs)—systems that transfer information to facilitate securities transactions; buy and sell orders are automatically matched for a large number of orders

- Competition Among Stock Markets—competition is very fierce among various stock markets
    - Dual listing—a stock that is eligible to be traded on multiple exchanges
    - "Trade-through rule"—when a stock is traded in more than one market, investors should have information about the prices in the various markets such that transactions are made at the best possible prices

- Regulation of Securities Markets—the Securities and Exchange Commission (SEC) is responsible for regulating stock markets; regulations have been passed to help ensure that security prices are not manipulated.

- The Investment Banking Process—investment bankers specialize in helping corporations, governments, and other organizations issue stocks and bonds to raise capital
  - Raising Capital: Stage I Decisions—(1) How much does the firm need? (2) What type(s) of securities should be used to raise the funds? (3) Should the firm require investment bankers to bid on the issue, or should the firm negotiate with one investment banker? (4) Which investment banker will be given/awarded the issue?
  - Raising Capital: Stage II Decisions—(1) Re-evaluate the initial decisions. (2) Decide whether the issue will be an underwritten arrangement or a best efforts arrangement. In an underwritten arrangement, the investment banker purchases the issue from the firm and then resells it to investors; the difference between the purchase and selling prices represents the investment banker's gross profit. In a best efforts arrangement, the investment banker puts forth a "best effort" to sell the securities and is paid a commission for the amount that is sold; unsold securities are returned to the issuing company. (3) Determine the cost of issuing the securities—that is, determine the flotation costs associated with issuing the securities. (4) Set the offering price for the securities.
  - Flotation costs—the costs associated with issuing stocks and bonds; to determine the total amount that must be issued so that the firm nets ("walks away with") a specific amount, use the following equation:

$$\text{Amount of issue} = \frac{NP + OC}{(1 - F)}$$

NP = net proceeds from the issue, which represents that amount that the firm wants to "walk away with" after paying flotation costs; OC = other issuing costs, such as legal fees, printing costs, and so forth; F = percent flotation costs that must be paid to the investment banker on the total amount issued stated as a decimal.

Example: Suppose a firm needs $900,000 to pay bills, which it plans to raise by issuing new common stock. The firm's investment banker charges flotation costs equal to 5 percent of the total issue, and the firm expects to incur $50,000 additional costs associated with the issue, including legal fees, printing expenses, and social media costs. To receive $900,000 after paying all costs associated with the stock issue, the firm must issue $1,000,000 of new stock:

$$\begin{matrix}\text{Amount} \\ \text{of issue}\end{matrix} = \frac{\$900{,}000 + \$50{,}000}{(1-0.05)} = \frac{\$950{,}000}{0.95} = \$1{,}000{,}000$$

If the firm issues $1,000,000 of new stock, it will receive $900,000 after paying all flotation costs:

Net proceeds = $1,000,000 - $1,000,000(0.05) - $50,000 = $900,000

- <u>Selling Procedures</u>
  - Registration statement—gives financial, legal and technical information about the issue and the issuer
  - Underwriting syndicate—the investment banker can spread risks by enlisting investment firms and other investment bankers to help sell the issue
  - Shelf registration—securities are registered with the SEC for sale at a later date; held on the "shelf" until the firm needs to raise funds
  - Maintenance of a secondary market—it is important that the investment banker support the price of the issue immediately after its issue to ensure that the price does not fluctuate too wildly

- <u>International Financial Markets</u>—trading activity in the United States accounts for 40 – 45 percent of worldwide trading
  - Euroland—countries that comprise the European Monetary Unit (EMU); has become huge competition to U.S. financial markets
  - Financial markets in most developed countries operate similarly; U.S. markets generally are more heavily regulated than are foreign financial markets

- <u>Financial Intermediaries and Their Roles in Financial Markets</u>
  - Financial intermediaries facilitate the transfer of funds from lenders to borrowers.
  - Benefits associated with financial intermediaries include:
    - Reduced cost of borrowing—economies of scale help to reduce interest rates
    - Risk/diversification—loans are spread out over number of borrowers and wide geographical areas, which reduces default risks
    - Funds divisibility/pooling—by collecting deposits from numerous sources, intermediaries can package loans of various types and sizes
    - Financial flexibility—intermediaries offer a variety of types of loans
    - Related services—intermediaries offer more than just loans; some offer checking services, trust operations, and so forth.

- <u>Types of Financial Intermediaries</u>
  - Commercial banks—historically provided services to commerce (i.e., businesses).
  - Credit unions—cooperative associations in which members have a common bond, such as the same type of employment or religion; traditionally have serviced consumer needs, such as automobile financing.

- Savings and loans (thrifts) —traditionally served individual savers and residential real estate borrowers.
- Mutual funds—investment companies that collect (pool) funds from savers and reinvest the funds in financial assets, such as stocks and bonds; money market mutual funds are comprised of short-term investments only
- Whole life insurance companies—whole life insurance includes a (small) savings function; invest in long-term securities; some offer tax-deferred savings plans.
- Pension funds—retirement plans; invest in long-term securities.

- <u>Financial Organizations in Other Parts of the World</u>—compared to the United States, financial institutions in other countries are much larger with many more branches; in most other countries there are few, but very large financial organizations that service the entire population; past regulation has restricted the ability of U.S. financial organizations from branching freely and from becoming extremely large; deregulation during the past few decades has helped U.S. financial institutions to become more competitive internationally; U.S. financial institutions are more heavily regulated than their foreign counterparts.

- <u>Chapter 3 Summary Questions</u>—You should answer these questions as a summary for the chapter and to help you study for the exam.
  - What is a financial market? What are some of the different types of financial markets?
  - What is a financial intermediary?
  - How do financial intermediaries help improve our standard of living?
  - What is an investment banking organization? What does an investment bank do?
  - How do financial markets in other countries differ from those in the United States?