

1. FINANCIAL SECURITIES AND MARKETS

Goal: After reading this chapter, you should understand the basic concepts of investments and financial markets.

1.1 Financial Securities

Human beings have a tendency to save something during their prime earning years for the future, when they would like to retire with some measure of financial security. People also save for unexpected emergencies and for big expenses such as the children's education. They like to see their financial assets grow with time as a hedge against inflation. Therefore, individuals invest their money in financial assets such as [stocks](#) and [bonds](#). A set of assets held together forms a [portfolio](#). A person may hold a portfolio that includes other assets, such as real estate and rare books, but at the moment, we will restrict ourselves to portfolios of stocks, bonds, and [options](#).

Corporations need [capital](#) to do their business. They raise the capital by selling stocks and bonds, which are really certificates of ownership and indebtedness, respectively. The investors buy them so that they may earn a reasonable return on their investment. When you buy the stock of a corporation, you become part owner of the firm. When the assets of the firm increase in value, the value of the stock of the firm also rises correspondingly. The stockholders of firms with extraordinary growth can indeed earn very handsome return on their investments.

Frequently the corporations have to borrow money and they can do so by issuing bonds. Bondholders simply lend the money to the firm and receive a certain rate of [interest](#) on their investment. A bond with a 7% [coupon](#) will continue to pay only 7% interest no matter how profitable or large the company may become. In other words, the bondholders do not participate in the growth of a company.

[Mutual funds](#) collect money from a large number of investors and invest it as a single pool of cash. They are constantly under the watchful eye of the [Securities and Exchange Commission](#). The total assets of a mutual fund can run into hundreds of millions, or even billions, of dollars. They may invest this money in hundreds of different stocks. This enables small investors with two or three thousand dollars to invest in a well-managed and well-diversified portfolio of assets.

There are two types of mutual funds: [open-end](#) or [closed-end](#). The managers of open-end mutual funds continually issue new shares as they receive more money from the investors. The investors can also sell their shares back to the mutual fund at their net asset value. PIMCO Funds Total Return Fund Institutional Shares ([PTTRX](#)) is the largest open-end fund. In June 2011, its total net assets were \$142.46 billion. A closed-end mutual fund has a fixed number of shares. The shareholders of these funds must sell their shares to other investors when they want to cash out. An example of a closed-end mutual fund is Adams Express ([ADX](#)). The pension funds are under prudent management so that

they generate steady income for the retirees. The insurance companies receive huge amounts of money as premiums on the insurance policies issued by them. They invest this pile of cash in safe, long-term investments. These portfolios are designed to provide the expected cash outflows.

A bank receives money from the depositors, and lends it out to individuals, or small businesses. A bank is therefore holding a portfolio of loans. The quality of this portfolio will deteriorate if the borrowers start defaulting on their loans.

1.2 Financial Markets

The New York Stock Exchange is the largest stock market. There are many other stock exchanges around the world. An individual investor who wants to buy a stock gets in touch with a stockbroker who relays the buy order to the appropriate stock exchange. There are floor traders and specialists on the floor of the stock exchange who are representing actual buyers and sellers of securities.

New York Stock Exchange

The [NYSE](#) has a long and fascinating history. The New York Stock Exchange traces its origins back more than 200 years, to the signing of the Buttonwood Agreement by 24 New York City stockbrokers and merchants in 1792. Centuries of growth and innovation later, the NYSE remains the world's foremost securities marketplace. Over the years, its commitment to issuers and investors has been unwavering, and its persistent application of the latest technology has allowed it to maintain a level of market quality and service that is unparalleled.

The Evolution of NASDAQ

In 1971, [NASDAQ](#) started its operations as a new type of electronic marketplace. It is a network of computers on which the buyers and sellers can get quotations, and execute orders. Here is a brief history of this market.

1961 Congress authorizes the Security and Exchange Commission (SEC) to conduct a study of fragmentation in the over-the-counter market. The SEC proposes automation as a possible solution and charges the NASD with its implementation.

1971 On February 8, NASDAQ begins trading.

1984 Small Order Execution SystemSM (SOESSM) becomes ready for use to execute small orders automatically against the best quotations-making greater volume and efficiency in trading possible.

1990 SelectNet[®], an online screen negotiation and execution service debuts, enhancing opportunities for finding and executing transactions at the best prices at greater volume than allowed by SOES.

1994 Nasdaq surpasses the New York Stock Exchange in annual share volume.

1997 Final phase for implementation of Order Handling Rules.

1998 In conjunction with The Stock Exchange of Hong Kong, Nasdaq announced a partnership to provide investors worldwide with information about their respective markets on a new, joint Internet Web service.

1999 Nasdaq becomes the largest stock market in the U.S. by dollar volume and repeatedly breaks share and dollar volume records. In June, Nasdaq signed an agreement in Tokyo with Softbank Corporation, jointly capitalizing a new company-Nasdaq JapanSM. This proved to be the first leg in NASDAQ's global strategy to link Asian markets with European and American markets.

2000 NASD membership votes overwhelmingly to restructure the organization. The restructuring spins off NASDAQ into a shareholder-owned, for-profit company. NASDAQ completes the first phase of its restructuring. NASDAQ formally opened the new MarketSite in the heart of New York's Times Square. NASDAQ continued to be the engine for capital formation and job creation. Between 1997 and 2000, it brought 1,649 companies public, and in the process raised \$316.5 billion and added hundreds of thousands of jobs to the American economy. NASDAQ continues to build capacity for the trading volumes of tomorrow, with a capacity to trade 6 billion shares a day, a ten-fold increase since 1997.

2001 SuperMontageSM proposal approved by SEC. Phase II of NASD's private placement is completed. (Source: NASDAQ)

2008 NYSE Euronext acquires American Stock Exchange.

2009 It changes its name to NYSE Amex Equities.

The principal overseas stock exchanges are at London, Tokyo, Frankfurt, and Hong Kong. Most of the emerging countries have their own stock exchanges.

1.3 Sources of information

At present, the principal source of financial information is the Internet. One can find an enormous amount of information on it. The following are some of the more useful sites:

<http://www.google.com/>

<http://www.marketwatch.com/>

<http://finance.yahoo.com/>

The traditional sources of financial information are in the print media. They are

[The Wall Street Journal](#)

[The New York Times](#)

[The Financial Times](#)

Moody's

Standard and Poor's

1.4 Exercise

This is an exercise to get acquainted with current financial data. Please look up the following either on the Internet or in a recent edition of the *Journal*:

1. The price of one share of IBM stock.
2. The P/E ratio of ExxonMobil, and its ticker symbol.
3. The dividend yield of Boeing stock.
4. The yield to maturity of longest maturity US government bonds.
5. Recent closing Dow Jones Industrial Average.
6. A stock that reached a new high recently.
7. Daily trading volume of Chevron stock.
8. The 52-week high and low of Citigroup
9. The value of S&P500 index.
10. The percentage change in S&P500 index during the past 12 months.
11. Name of a stock that has given a stock dividend recently.
12. Name of a stock that has increased its dividend recently.
13. The change in the Tokyo Nikkei index during the last 12 months.
14. The rate for call money.
15. The futures price of gold, delivery after one year.
16. The highest and the lowest value of the Japanese yen, relative to the dollar, during the last 12 months.
17. The name of a corporation that has issued convertible bonds.
18. The name of a corporation that has zero coupon bonds outstanding.
19. The name of a stock that was issued during the last 12 months.
20. The price of a barrel of crude oil.
21. The price of a Boeing put option, its exercise price, and its expiration month.
22. The price of an AT&T 8.35s25 bond.
23. The price of an AT&T call option that expires in several years, its exercise price, and the time to maturity.
24. The price of an IBM call option, near month, just in the money.
25. The price of an S&P100 call option, its time to maturity, and exercise price.
26. The spot price of gold.
27. The price per share of Fidelity Magellan Fund.
28. The price per share of Liberty All Star Equity Fund, and the discount from its net asset value.
29. The price per share of Korea Fund, and its premium (discount) over net asset value.
30. The return on the 3-month Treasury bills.
31. The spot price of gold at present, and a year ago.
32. The spot price of lead, per lb.
33. The stock with the highest trading volume on NYSE, on NASDAQ, and on AMEX.
34. The value of a British pound in dollars.
35. The trading volume on the NYSE.
36. The prime rate in USA, in Canada, in Germany, in Japan.
37. Federal Reserve discount rate.