Chapter 2: Why Corporations Need Financial Markets & Institutions

3. "Over-the-counter" refers to trading that does not take place on a centralized exchange such as the New York Stock Exchange. Trading of securities on NASDAQ is over-the-counter, because NASDAQ is a network of security dealers linked by computers. Although some corporate bonds are traded on the New York Stock Exchange, most corporate bonds are traded over-the-counter, as are all U.S. Treasury securities. Foreign exchange trading is also over-the-counter.

4. *Money markets*, where short-term debt instruments are bought and sold.

   Foreign-exchange markets. Most trading takes place in over-the-counter transactions between the major international banks.

   Commodities markets for agricultural commodities, fuels (including crude oil and natural gas) and metals (such as gold, silver and platinum).

   Derivatives markets, where options and other derivative instruments are traded.

6. Buy shares in a mutual fund. Mutual funds pool savings from many individual investors and then invest in a diversified portfolio of securities. Each individual investor then owns a proportionate share of the mutual fund's portfolio.

13. The opportunity cost of capital is the expected rate of return offered by the best alternative investment opportunity. When the firm makes capital investments on behalf of the owners of the firm (i.e., the shareholders), it must consider the shareholders' other investment opportunities. The firm should not invest unless the expected return on investment at least equals the expected return the shareholders could obtain on their own by investing in the financial markets. The opportunity cost of capital for a safe investment is the rate of return that shareholders could earn if they invested in risk-free securities, for example in U. S. Treasuries.

14. a. False. Financing could flow through an intermediary, for example.

b. False. Investors can buy shares in a private corporation, for example.

c. True. Sale of insurance policies are the largest source of financing for insurance companies, which then invest a significant portion of the proceeds in corporate debt and equities.

d. False. There is no centralized FOREX exchange. Foreign exchange is traded over-the-counter.

e. False. The opportunity cost of capital is the expected rate of return that shareholders can obtain in the financial markets on investments with the same risk as the firm's capital investments.

f. False. The cost of capital is an *opportunity* cost determined by expected rates of return in financial markets. The opportunity cost of capital for risky investments is normally higher than the firm's borrowing rate.

15. a. Investor A buys shares in a mutual fund, which buys part of a new stock issue by a rapidly growing software company.

b. Investor B buys shares issued by the Bank of New York, which lends money to a regional department store chain.

c. Investor C buys part of a new stock issue by the Regional Life Insurance Company, which invests in corporate bonds issued by Neighborhood Refineries, Inc.

16. The key to the bank's ability to provide liquidity to depositors is the bank's ability to pool relatively small deposits from many investors into large, illiquid loans to corporate borrowers. A withdrawal by any one depositor can be satisfied from any of a number of sources, including new deposits, repayments of other loans made by the bank, bank reserves and the bank's debt and equity financing.

17. Liquidity is important because investors want to be able to convert their investments into cash quickly and easily when it becomes necessary or desirable to do so. Should personal circumstances or investment considerations lead an investor to conclude that it is desirable to sell a particular investment, the investor prefers to be able to sell the investment quickly and at a price that does not require a significant discount from market value. Liquidity is also important to mutual funds. When the mutual fund's shareholders want to redeem their

shares, the mutual fund is often forced to sell its securities. In order to maintain liquidity for its shareholders, the mutual fund requires liquid securities.

18. Mutual funds collect money from small investors and invest the money in corporate stocks or bonds, thus channeling savings from investors to corporations. The advantages of mutual funds for individuals are diversification, professional investment management and record keeping

22. a. Since the government guarantees the payoff for the investment, the opportunity cost of capital is the rate of return on U.S. Treasuries with one year to maturity (i.e., one-year Treasury bills).

    b. Since the average rate of return from an investment in carbon is expected to be about 20 percent, this is the opportunity cost of capital for the investment under consideration by Pollution Busters, Inc. Purchase of the additional sequesters is not a worthwhile capital investment because the expected rate of return is 15 percent (i.e., a $15,000 gain on a $100,000 investment), less than the opportunity cost of capital.