SECURITIES MARKETS

How Firms Issue Securities

- Primary market—market for new offerings; issuing firm receives funds from an issue
  - Prospectus—document filed with the SEC that describes a security issue; includes information about the types of securities to be issued, the size of the issue, and how the funds raised through the issue will be used.
  - Initial public offering (IPO)—firm transforms from a privately held company to a publicly held company; first issue of publicly held stock.
  - Underwriter—investment banking firm; purchases an issue of securities and resells it.
- Secondary market—resale market; market where already issued, outstanding securities are traded among investors; firm that originally issued the securities is not involved.
- Private placement—securities are sold to a small group of investors or institutions; issues with less than 2,000 shares of stock do not have to be registered with the SEC
- Shelf registration—firms can "pre-register" securities that can be issued over a two-year period.

***How Securities Are Traded*—**financial markets provide a "mechanism" by which borrowers (users of funds) and lenders (suppliers of funds) get together.

- Types of Markets
  - Direct search markets—no agent, or middleman is involved; investors seek out each other.
  - Brokered markets—brokers, or agents, offer services to help search for buyers and sellers.
  - Dealer markets—dealers buy and sell for their own accounts; dealers make markets in assets.
  - Auction markets—buyers and sellers get together at specific locations, perhaps electronically, to trade assets; prices are set by an auction process; the NYSE is an example of an auction market.
- Types of orders
  - Market Order—transact immediately at the best possible prevailing price
    - Bid price—dealer's purchase price
    - Ask price—dealer's selling price
    - Dealer's spread, or bid-ask price = Ask price – Bid price
  - Limit Order—restrict the price at which a transaction can be carried out
  - Stop Order—point (price) where a market order is initiated
    - Stop-loss order—a market order to sell is initiated if a stock's value falls below a specified price.

- Stop-buy order—a market order to buy is initiated if a stock's value rises above a specified price.
- Time order—time limits can be placed on orders
  - Day order—the order must be executed by the end of the day; if not, it is automatically canceled (killed)
  - Good 'til canceled (GTC)—the order remains outstanding until it is either executed or the investor cancels it.
- Margin Trading—borrow funds to purchase financial assets

$$\text{Actual margin} = \frac{\text{Investor's equity}}{\text{Market value of stock}} = \frac{[(\#\text{ shares}) \times \text{Price}] - (\text{Amount borrowed})}{(\#\text{ shares}) \times \text{Price}}$$

$$\text{Margin call price} = \frac{\text{Amount borrowed}}{(\#\text{ shares}) \times (1 - \text{Maintenance margin})}$$

<u>Example:</u> An investor wishes to buy 100 shares of IBM, which currently is trading at \$100. Assume the brokerage firm imposes a margin requirement equal to 60 percent, with a maintenance margin of 35 percent.

The market value of the purchase is \$10,000 = \$100 × 100; the investor must have \$6,000 = \$10,000 × 0.60 of funds to purchase 100 shares of IBM; Amount borrowed = \$4,000 = \$10,000 – \$6,000 = \$10,000 × 0.40.

A margin call will be issued if the price of IBM drops below \$61.54:

$$\text{Margin call price} = \frac{\$4{,}000}{100 \times (1 - 0.35)} = \$61.54$$

- Short Selling - borrow shares of stock (or other financial asset) from another investor and sell the shares with the promise to repay the shares in the future.

- Trading mechanisms—means by which orders are executed
  - Dealer markets—bid and quotes are provided by dealers who are used by brokers to execute orders
    - OTC market—the over-the-counter (OTC) market is a network of brokers and dealers who trade securities; prices are communicated electronically
    - NASDAQ—National Association of Security Dealers Automated Quotation system
      - Originally an electronic system that provided dealers' price quotes to brokers.
      - The NASDAQ stock market currently is a fairly sophisticated stock market that provides price quotes and facilitates trading in stocks that are "listed" on NASDAQ.
  - Electronic communication networks (ECNs)—electronic networks that facilitate direct

trading of stocks.

        - Matches buy orders with sells orders quickly and efficiently; matches at the best prevailing price.
        - Transaction cost is fairly low.
        - Speed—trades are executed quickly.
    - Specialist markets—specialists trade in stocks of particular companies or industries; that is, they specialize in stocks of specific types of companies; provide liquidity to the market by buying or selling stocks as necessary to maintain regular, well-ordered trading in the stocks in which they specialize.
    - Electronic trading has increase as technology has progressed; cost of trading has decreased as a result.

U.S. Stock Markets—largest and most efficient stock markets in the world

- New York Stock Exchange (NYSE)—largest U.S. stock exchange
    - Part of Intercontinental Exchange (ICE) since 2013; includes American Stock Exchange, Archipelago, Euronext, and other exchanges acquired during the past couple of decades.
    - Trading mechanisms have shifted from humans to electronics in recent years.
- NASDAQ—electronic trading; has specific requirements for stocks to be "listed."
- ECNs—automated trading system that quickly batches and matches large numbers of buy orders with sell orders;
    - Regulation NMS (National Market Structure)—requires trades to be executed at the best price available in all U.S. stock markets (called the trade-through rule).
    - Latency—the total time, from initiation to conclusion, it takes to complete an order.

New Trading Strategies—as technology advances and needs change, trading strategies change also.

- Algorithmic trading—using computer models to monitor market conditions and to initiate trades when the models indicate it is appropriate.
- High-frequency trading—algorithmic trading in which the computers make numerous trades in rapid succession to exploit opportunities to earn small profits; a large number of trades that earn small profits can add up to large overall earnings.
- Dark pools—electronic transactions in which little, if any information about trading participants is disclosed when trading large blocks of stock; blocks are large trades that consist of 10,000 or more shares of stock.
- Bond trading—many bonds, even those listed on the NYSE, are trade on NASDAQ.

Regulation of Securities Markets

- The Securities and Exchange Commission (SEC) is the primary regulator of U.S. stock exchanges and securities transactions.
    - Information disclosure

    - Fraudulent/manipulative activities
        - Wash Sales
        - Churning
        - Inside Trading
    - Monitoring
- Sarbanes-Oxley Act—2002
    - Independent oversight of financial statements/condition
    - CEO and CFO must "sign off" on financial reports
    - Board of directors must include outside, independent members