

## Chapter 14.5

### Investing

---

---

---

---

---

---

---

---

### Investing

- An *investment* is a way of putting away money so that (hopefully) it will make more money.
- Consumer investments include collectibles such as diamonds, gold, antiques, or real estate, your own business, stocks, bonds, mutual funds, IRAs

---

---

---

---

---

---

---

---

### Stocks

- Buying stock in a corporation makes you a part owner. You then share in any profits the company makes, and your share of the profits is called a *dividend*.
- If the company prospers over time, you may at some point sell the stock at a profit. The profit you make by selling for more than you paid is called a *Capital Gain*.

---

---

---

---

---

---

---

---

## Capital Gain /Capital Loss

- Difference between the price you paid and the price you sold the stock.
- *Capital Gain* is selling stock at a profit.
- (You must pay taxes on a gain)
- *Capital Loss* is selling stock at a loss.
- (Can be deducted from your taxes as a loss)

---

---

---

---

---

---

---

---

## Return of Investment

- Net difference between what you receive (including your sale price and any dividends received) and what you paid (your purchase price plus any other expenses of buying and selling the stock.)

---

---

---

---

---

---

---

---

## Investing

- An *investment* is a way of putting away money so that (hopefully) it will make more money.
- Consumer investments include collectibles such as diamonds, gold, antiques, or real estate, your own business, stocks, bonds, mutual funds, IRAs

---

---

---

---

---

---

---

---

## Example 1

- Brenda bought 100 shares of stock in company A on January 15, 2002 paying \$30.00 per share. On Jan 15, 2003, she received a dividend of .50 per share and the stock price had risen to \$30.85 per share.
- A) Find Brenda's total cost for the stock.

---

---

---

---

---

---

---

---

## Example 1

- Brenda bought 100 shares of stock in company A on January 15, 2002 paying \$30.00 per share. On Jan 15, 2003, she received a dividend of .50 per share and the stock price had risen to \$30.85 per share.
- A) Find Brenda's total cost for the stock.
- $(\$30 \text{ per share}) \times (100 \text{ shares}) = \$3000$ .

---

---

---

---

---

---

---

---

## Dividend

- Brenda bought 100 shares of stock in company A on January 15, 2002 paying \$30.00 per share. On Jan 15, 2003, she received a dividend of .50 per share and the stock price had risen to \$30.85 per share.
- B) Find the total dividend amount.

---

---

---

---

---

---

---

---

## Dividend

- Brenda bought 100 shares of stock in company A on January 15, 2002 paying \$30.00 per share. On Jan 15, 2003, she received a dividend of .50 per share and the stock price had risen to \$30.85 per share.
- B) Find the total dividend amount
- $(\$0.50 \text{ per share}) \times (100 \text{ shares}) = \$50.00$

---

---

---

---

---

---

---

---

## Capital Gain

- Brenda bought 100 shares of stock in company A on January 15, 2002 paying \$30.00 per share. On Jan 15, 2003, she received a dividend of .50 per share and the stock price had risen to \$30.85 per share.
- C) Find Brenda's Capital gain if she sold the stock on Jan 15, 2003

---

---

---

---

---

---

---

---

## Capital Gain

- Brenda bought 100 shares of stock in company A on January 15, 2002 paying \$30.00 per share. On Jan 15, 2003, she received a dividend of .50 per share and the stock price had risen to \$30.85 per share.
- C) Find Brenda's Capital gain if she sold the stock on Jan 15, 2003
- Capital gain =  $(\text{change in price}) \times (\text{number})$   
 $= (\$30.85 - \$30.00) \times (100 \text{ shares}) = \$85$

---

---

---

---

---

---

---

---

## Total Return

- Brenda bought 100 shares of stock in company A on January 15, 2002 paying \$30.00 per share. On Jan 15, 2003, she received a dividend of .50 per share and the stock price had risen to \$30.85 per share.
- D) Find Brenda's total return for 1 year

---

---

---

---

---

---

---

---

## Total Return

- Brenda bought 100 shares of stock in company A on January 15, 2002 paying \$30.00 per share. On Jan 15, 2003, she received a dividend of .50 per share and the stock price had risen to \$30.85 per share.
- D) Brenda's Total Return
- Total Return=Dividends+Capital Gain
- \$135 = \$50. + \$85.

---

---

---

---

---

---

---

---

## Percentage Return

- Brenda bought 100 shares of stock in company A on January 15, 2002 paying \$30.00 per share. On Jan 15, 2003, she received a dividend of .50 per share and the stock price had risen to \$30.85 per share.
- E) Find the percentage return.

---

---

---

---

---

---

---

---

## Percentage Return

- Brenda bought 100 shares of stock in company A on January 15, 2002 paying \$30.00 per share. On Jan 15, 2003, she received a dividend of .50 per share and the stock price had risen to \$30.85 per share.
- E) Find the percentage return.
- Percentage return =  $\frac{\text{Total return}}{\text{Total cost}} \times 100\%$   
=  $\frac{\$135}{\$3000} \times 100\% = 4.5\%$

---

---

---

---

---

---

---

---

---

---

## Stock Exchange

- An institution that determines the price of a stock determined by the law of supply and demand.
- In the US, the oldest and largest exchange is the New York stock Exchange (NYSE) established in 1792 and located on Wall Street in New York City.

---

---

---

---

---

---

---

---

---

---

## Stockbrokers

- The public does not go directly to the exchange to buy and sell stock. We buy through stockbrokers who have access (called a seat on the exchange). Stockbrokers charge a fee for buying or selling stock.

---

---

---

---

---

---

---

---

---

---

## Finding Prices

- Current stock prices are listed in daily newspapers or by consulting an on line computer service.

---

---

---

---

---

---

---

---

---

---

## Dow Jones

- The Dow Jones Industrial Average is a popular measure of general stock prices. It is a composite of 30 stocks from various sectors of the economy, which are changed occasionally to keep the list reflective of the overall economy.

---

---

---

---

---

---

---

---

---

---

## A Bull Market

- A significant time of increasing prices.
- Stock price trends have historically been upwards, with lots of variation in that pattern.
- A strong bull market began in August 82, the Dow tripled over 3 years until October 19, 1987 (known as black Monday) when the Dow lost 22.6% of its value in a single day.

---

---

---

---

---

---

---

---

---

---

## A Bear Market

- An extended period of decreasing prices.
- After the 1987 slump, the bull market regained strength through the 90's, until another bear market set in 2000. The Dow continued to decrease for 3 years in a row, a very rare occurrence historically.

---

---

---

---

---

---

---

---

## Stock Tables

- The headings at the tops of the columns indicate the meanings of the numbers across the row.
- To find the information you need, find the stock you are interested in, read across the row to determine the year to date %change, yearly high-low, dividend, yield, volume, closing price and net change for that day.

---

---

---

---

---

---

---

---

## Year to date % Change

- For example; half way down the first column is a pharmaceutical drug, ALPharma.(with stock symbol AAOL)
- The number -28.2 shows that the share value of Alpharma has decreased by 28.2% so far this calendar year.
- The next two numbers show that \$32.47 is the highest price, and \$13.75 is the lowest price it has been all year.

---

---

---

---

---

---

---

---

## Dividend

- Money paid by a company to owners of its stock. Dividends generally go up when a company is doing well and down when business is bad.
- For example, reading Alpharma(A ALO), the dividend is .18, showing that the company is currently paying an annual dividend of \$.18 per share of stock.

---

---

---

---

---

---

---

---

## Current yield

- The dividend per share represents a percentage of the current purchase price of the stock.
- The .18 dividend per share represents .9% of the current purchase price of the stock.

---

---

---

---

---

---

---

---

## Price to Earnings Ratio Volume per 100

- The purchase price per share divided by the earnings per share. PE in the table
- The next number across the row shows the number of shares sold that day in hundreds.
- The table shows that  $4863 \times 100 = 48630$  shares were sold that day

---

---

---

---

---

---

---

---

## Close

- The next number shows that the stock closed for that day at \$18.98 per share.
- So, the final trade in Alparma's stock, prior to the closing of the market at 4 PM Eastern time was executed at that price.

---

---

---

---

---

---

---

---

## Net Change

- The final number indicates the change from the closing price of the previous day.
- Alparma was up 1.29 higher than the day before.

---

---

---

---

---

---

---

---

## Special Features in Stock Listings

- Boldface print indicates a 5% change
- An underlined row indicates an especially high volume of trading for that day.
- A "pf" indicates a preferred stock, a special category of stock issued in addition to their "common" stock. Advantages are attractive yields, stable dividend income and tax advantages for corporate investors.
- The symbol ^ represents a high, v represents low.

---

---

---

---

---

---

---

---

## Commission

– A broker's fee for handling a transaction. Rates are competitive and vary considerably among brokers.

- **Full Service Brokers**, offer research, professional opinions, and other services. Their services tend to be high.
- **Discount Brokers**; merely buy and sell stock for their clients, no services.

---

---

---

---

---

---

---

---

## Commissions

- Commissions are normally based on some percentage of the value of the purchase or sale, depending on the sale.
  - **Round lots are multiples of 100**
  - **Odd Lots are portions of an order fewer than 100 shares**
    - On an odd lot, you may be charged an odd lot differential.

---

---

---

---

---

---

---

---

## Limit Order

- The broker is instructed to execute a buy or sell if and when a stock reaches a predesignated price.
- An extra fee may be added for this service.

---

---

---

---

---

---

---

---

## Commission Structure

- Fees depend on principal amount and the difference between a broker assisted or an automated trade.
- See table, page 837
- The Securities and Exchange Commission
- SEC is a federal agency that regulates stock markets and imposes a SEC fee. This fee is 3.01cents per \$1000.00

---

---

---

---

---

---

---

---

## SEC Fee

- To find the SEC fee for a sale of \$1600., first divide \$1600 by \$1000, then multiply by 3.01
- $\$1600/1000 \times 3.01 = 4.816$  cents
- Round up to obtain an SEC fee of 5 cents.

---

---

---

---

---

---

---

---

## Bonds

- A bond is essentially a case where you *lend* money to the company instead of buying stock, in return for receiving an agreed upon rate of interest for the use of your money.
- The bond is issued with a stated life span, after which the bond matures and the principal or face value is paid back to you.
- Over time, the company pays you a fixed rate of interest.

---

---

---

---

---

---

---

---

## Bonds

- A bond holder has no stake in company profits, but is certain to receive timely interest payments.
- The potential return is less, but so is the risk of loss.
- If a company is unable to pay both bond interest and stock dividends, the bondholder must be paid first.

---

---

---

---

---

---

---

---

## Bonds

- Historically, the overall rate of return over most time periods has been greater for stocks than for bonds. However bonds are “safer” so retired investors who spend on a steady stream of income prefer them.
- Many investors balance their portfolios to include both stocks and bonds.

---

---

---

---

---

---

---

---

## Mutual Funds

- A pool of money collected by an investment company invested in many stocks, bonds, or money markets.

---

---

---

---

---

---

---

---

## Mutual funds/ Advantages

- 1. **Simplicity.** Let someone else do the work.
- 2. **Diversification.** Easier to own interest in many different stocks
- 3. **Access to new issues.** Individual investors find it difficult to get into these.
- 4. **Economies of Scale,** no small expenses
- 5. **Professional Management**
- 6. **Indexing**

---

---

---

---

---

---

---

---

## Disadvantages

- 1. Impact of One time charges and recurring fees; sales charges, management fees and expenses can be difficult to identify.
- 2. Hidden Cost of Brokerage; paid in addition to the expense ratio.
- 3. Some Hidden Risks of fund Ownership; the absence of sales fees may be offset by higher management fees.

---

---

---

---

---

---

---

---

## Net Asset Value

- Net asset of a Mutual Fund:  $NAV = \frac{A-L}{N}$
- A = total fund assets
- L=total fund liability
- N=number of shares outstanding

---

---

---

---

---

---

---

---

## Annual Rate of Return

- The most important measure of performance of an investment. It depend on the time period involved; daily, seven day, monthly, month to date, quarterly, quarter to date, annual, year to date, 2 year, 3 year, 5 year, 10 year, 20 year, and since inception(since the fund was begun).

---

---

---

---

---

---

---

---

## Evaluating Returns

- It is complicated to evaluate and compare different investments, but it is important to compare different performances on an equal basis.
- The table on page 843 summarizes the various types of investments based on average cases.

---

---

---

---

---

---

---

---