What is the P/E ratio?

The P/E(price/earnings ratio) is the most popular measure used in stock analysis. It helps you compare stocks even though they have different prices.

How is P/E calculated? You calculate the P/E by taking the stock price and dividing it by the company's earnings per share (EPS).

P/E = Stock Price / EPS

Example:

Microsoft $27.12/$2.69 = $10.08
(investors are paying 10 times earnings for Microsoft stock)

Google: $546.68/$27.72 = $19.72
(investors are paying almost 20 times earnings for Google stock)

What does P/E tell you?

The P/E looks at the relationship between the stock price and the company's earnings and it gives you an idea of what the market is willing to pay for the company's earnings.

The higher the P/E the more the market is willing to pay for the company's earnings. Some investors interpret a high P/E as an overpriced stock. It can also indicate that the market has high hopes for this stock's future earnings and the expectation of significant future earnings growth has bid up the stock price now.

Beware: "Hype" for a stock has caused people to buy the stock for a much higher P/E than they normally would. This is called a bubble. (ex. Dot.com bubble in the 1990's and the real estate bubble which popped in 2008.).

A low P/E may indicate a "vote of no confidence" by the market or it could mean that the stock is a sleeper and has been overlooked by the market. Known as value stocks, many investors made their fortunes spotting these "diamonds in the rough" before the rest of the market discovered their true worth. Warren Buffet is an example of a Value Investor.

What is the "right" P/E?

There is no correct answer to this question, because part of the answer depends on your willingness to pay for future earnings. The more you are willing to pay, which means you believe the company has good long term prospects over and above its current position, the higher the "right" P/E is for that particular stock in your decision-making process. Another investor may not see the same value and think your "right" P/E is all wrong.

A few reasons a stock might have a high P/E ratio are:

- The market expects the earnings to rise rapidly in the future. For example a gold mining company which has just begun to mine may not have made any money yet but next quarter it will most likely find the gold and make a lot of money. The same applies to pharmaceutical companies - often a large amount of their revenue comes from their best few patented products, so when a promising new product is approved, investors may buy up the stock.
- Hype for the stock has caused people to buy the stock for a higher price than they normally would. This is called a bubble. One of the most important uses for the P/E metric is to decide whether a stock is undergoing a bubble or an anti-bubble by comparing its P/E to other similar companies. Historically, bubbles have been followed by crashes. As such, prudent investors try to stay out of them.
- The company has some sort of business advantage which seems to ensure that it will continue making money for a long time with very little risk. Thus investors are willing to buy the stock even at a high price for the peace of mind that they will not lose their money.
- A large amount of money has been inserted into the stock market, out of proportion with the growth of companies across the same time period. Since there are only a limited amount of stocks to buy, supply and demand dictate that the prices of stocks must go up. This factor can make comparing P/E ratios over time difficult.

Likewise, a specific stock may have a temporarily high price when, for whatever reason, there has been high demand for it. This demand may have nothing to do with the company itself, but may rather relate to, for example

Stock Market Calculations:

1. How much money would you have earned if you bought 100 shares of Dunkin Brands in July when they went public at $19 per share and sold it at $24 per share last week? Is a real profit or a paper profit? Why?

Cost to purchase stock = (Purchase price) x (# shares purchased)

Proceeds from sale of stock = (Sales price) x (# of shares sold)

Profit/(Loss) = Proceeds – Cost

2. You purchased 1000 shares of Nike at $50 per share. You are thinking of selling your position. The current price of Nike is $88.50 per share. How much will you make if you sell? Is this a real or a paper profit? Why?

Cost to purchase stock = (Purchase price) x (# shares purchased)

Proceeds from sale of stock = (Sales price) x (# of shares sold)

Profit or (Loss) = Proceeds – Cost

3. Assume you purchased the 1000 shares of Nike at $95. How much would your profit/(loss) be if you sell it at the current price of $88.50

Cost to purchase stock = (Purchase price) x (# shares purchased)

Proceeds from sale of stock = (Sales price) x (# of shares sold)

Profit or (Loss) = Proceeds – Cost

4. Broker Commissions: When you buy and sell stock you must pay a fee or "commission" to have your trade Fees vary based on the type of broker you use but the Stock Market Game assumes a commission of 2% based on the dollar value of your trade.

   Example: On your purchase of Dunkin Brands stock above, what was the commission you paid?

   (Stock Price) x (#shares) x (commission rate) =

   On your sale of Dunkin Brands at $24 per share, what was the commission you paid?

   What was your profit you made on Dunkin Brands after (NET OF) commission?