WHAT IS RISK

A Bet Anyone?

- A third party will flip a coin
  - heads, I pay you $1,000
  - tails, you pay me $1,000
- Anyone want to play?

Risk Aversion

- Most people would reject this bet
- Why?
- Most people are ***risk averse***
  - dislike bad things happening to them
  - But more specifically, dislike bad things *more than* they like <u>comparable</u> good things
  - That is,
    - the pain of losing $1,000 > pleasure from winning $1,000

RISK

- **When you think of the word "risk" which of the following words comes to mind first?**
- Loss
- Uncertainty
- Opportunity
- Thrill

RISK TOLERANCE

- **You are on a TV game show and can choose one of the following. Which would you take?**
- $1,000 in cash
- A 50% chance at winning $5,000
- A 25% chance at winning $10,000
- A 5% chance at winning $100,000

- How do you think risk applies to investing?
- Low risk = Low return
- High Risk = High return

- What does this mean?
- How does it apply to investing?

TYPES OF RISK

- Conservative Risk:
  - Means taking limited risk on secure stocks and fixed income investments. (i.e. Utility stock, such as xcel energy)
- Moderate Risk:
  - Growth stocks – stocks that grow faster and higher (value and price) than stocks of other companies with similar sales and earnings. (Oracle)
- Speculative Risk:
  - Stocks that carry major risks on investments with unpredictable results, but the potential to earn very high returns. (VMWare or tech stock with recent IPO)

STOCK RISK VOCAB

- Beta Number:
  - A calculation that helps measure the level of risk in investing in a stock.
  - A measure of a stock's volatility, shows how a particular stock's price moves in relation to the market as a whole.

17.01 -0.06 ⬇ -0.35%

as of 04:05 PM EST on 11/15/2007 in USD (NYSE Delay: 20 mins.)

Day Low	16.90	52-Wk Low	16.90
Day High	17.31	52-Wk High	23.15
Volume	23.14 M	Prev. Close	17.07
30-Day Avg. Vol.	22.93 M	Today's Open	16.95
Market Cap.	61.48 B	Dividend	0.25
Shares Out.	3.61 B	Dividend Yield	1.45
Revenue	44.22 B	Beta	1.93
Earnings	6.55 B	P/E Ratio (TTM)	13.83
EPS (TTM)	1.23	P/E Ratio (Fwd.)	15.68

More Details

- P/E Ratio (Price / Earnings ratio): the ratio of the stock's price per share to its earnings per share.

- **Valuation Risk**
- The danger of investing in companies that appear overvalued is that there is normally little room for error. The business may indeed be wonderful, but if it experiences a significant sales decline in one quarter or does not open new locations as rapidly as it originally projected, the stock will decline significantly. This is a throw-back to our basic principle that an investor should never ask "Is company ABC a good investment"; instead, he should ask, "Is company ABC a good investment *at this price*."

Things to think about

- Financial risk – how much money can you afford to risk losing?
- Market risk – what is the “volatility” of stock price? (If a stock valued at $100 at the beginning of the year goes up and down by 5% each month, will it be worth more or less within 4 months?)
- Liquidity risk – how quickly could you covert to cash?
- Inflation risk – will inflation rise faster than return on this investment?

Scenarios

- Investment #1:
  - Watching the news, you learn about a new drug that supposedly makes children smarter. You've never heard of the drug manufacturer, but you decide to invest in this company. Why wouldn't we want out children smarter? If you have no other information and plan to invest in this drug company, what kind of risk are you taking? Explain?

Investment #1

- This is a speculative stock because there are not guarantees that the drug will work but it has the potential for high returns.
- Financial risk: high
- Market risk: high
- Liquidity risk: low
- Inflation risk: medium
- Reward: high

Investment 2

- McKittrick Electric announces it is creating an all-electric car that can also be run on bacon oil, but it hasn't come out yet. Based on the news, its stock price has increased 20% in one month. If you buy the stock now, what type of risk are you taking?

Investment #2

- This is still a speculative stock because the car hasn’t been built yet but has the potential if it does work and can compete with gasoline fueled automobiles.
- Financial risk: high
- Market risk: high
- Liquidity risk: low
- Inflation risk: medium
- Reward: high

Investment #3

- Jax Company provides gas and electric to your area. The stock pays an annual dividend of $4 per share per year. You own 200 shares, so the company pays you a yearly dividend of $800. This is a fixed income stock. What type of risk are you taking by investing in Jax Company?

Investment #3

- This is a conservative stock because it pays a regular dividend as a fixed income stock.
- Financial risk: low
- Market risk: low
- Liquidity risk: low
- Inflation risk: medium
- Reward: low

- **Investment Risk #1: Business Risk**
- Business risk is, perhaps, the most familiar and easily understood. It is the potential for loss of value through competition, mismanagement, and financial insolvency. There are a number of industries that are predisposed to higher levels of business risk (think airlines, railroads, steel, etc).
- The biggest defense against business risk is the presence of franchise value. Companies that possess franchise value are able to raise prices to adjust for increased labor, taxes or material costs. The stocks and bonds of commodity-type businesses do not have this luxury and normally decline significantly when the economic environment turns south.
- **Investment Risk #2: Valuation Risk**
- Recently, I found a company I absolutely love (said company will remain nameless). The margins are excellent, growth is stellar, there is little or no debt on the balance sheet and the brand is expanding into a number of new markets. However, the business is trading at a price that is so far in excess of it's current and average earnings, I cannot possibly justify purchasing the stock.
- Why? I'm not concerned about business risk. Instead, I am concerned about valuation risk. In order to justify the purchase of the stock at this sky-high price, I have to be absolutely certain that the future growth prospects will increase my earnings yield to a more attractive level than all of the other investments at my disposal.
- The danger of investing in companies that appear overvalued is that there is normally little room for error. The business may indeed be wonderful, but if it experiences a significant sales decline in one quarter or does not open new locations as rapidly as it originally projected, the stock will decline significantly. This is a throw-back to our basic principle that an investor should never ask "Is company ABC a good investment"; instead, he should ask, "Is company ABC a good investment *at this price*."
- **Investment Risk #3: Force of Sale Risk**
- You've done everything right and found an excellent company that is selling far below what it is really worth, buying a good number of shares. It's January, and you plan on using the stock to pay your April tax bill.
- By putting yourself in this position, you have bet on *when* your stock is going to appreciate. This is a financially fatal mistake. In the stock market, you can be relatively certain of *what* will happen, but not *when*. You have turned your basic advantage (the luxury of holding permanently and ignoring market quotations), into a disadvantage.
- Consider the following: If you had purchased shares of great companies such as Coca-Cola, Berkshire Hathaway, Gillette and Washington Post at a decent price in 1987 yet had to sell the stock sometime later in the year, you would have been devastated by the crash that occurred in October. Your investment analysis may have been absolutely correct but because you imposed a time limit, you opened yourself up to a tremendous amount of risk.
- Being forced to sell your investments is really something known as liquidity risk, which is important enough I wrote a separate article about it to help you understand why it poses such a threat to your net worth.

Money for Sale!

- In this envelope is a piece of U.S. currency
  - $1, $2, $5, $10, $20, $50, or $100
- I will sell to highest bidder at absolute auction
  - I keep winner's cash, winner keeps mine
  - Winner opens envelope & reveals contents to us all