# Market prices, valuation principle, net present value, interest rates, and bonds

ASSIGN BUSTER

People invest in common stocks because they aspire to earn a good return on their investment. The components of a stock’s realized return are dividends paid and the appreciation in value of the common stock. For example an investor purchased a lot of 100 stocks priced at $50 each. After a year the investor decides to cash out. During that time the investor received two dividend payments of $0. 75 per share. The total amount the person received in dividends is ($0. 75*2*100) $150. The price of the stock raised to $52 a stock. The stock realized return of the investor is 7%. When a person decides to invest in the stock market the investor has to be willing to accept risk. Risk can be defined as the possibility that the actual return on an investment will be different than the expected return (Thefreedictionary, 2011). There are two types of risks: systematic and unsystematic risk. Systematic risk refers to risk that affects the entire marketplace, while unsystematic risk is risk that is related to a specific industry. Investors have to accept systematic risk because it cannot be manage by the investor. Unsystematic risk can be managed by the investor. For instance if the investor has a stock from an industry that faces major risks the investor can sell off that stock to eliminated the unsystematic risk. The expected return of a portfolio is the weighted average of the expected returns of the individual stocks in the portfolio. One would think based on that logic that the portfolio risk would be equal to the sum of the risk of the individual securities, but it is not. Typically the portfolio risk is smaller than the weighted average of the stock’s variances. Sometimes the risks of different stocks in a portfolio moved in opposite direction which canceled each other out forming a riskless portfolio. The measure of the degree of the relationship between the variables is called the correlation coefficient (Besley & Brigham, 2000). The

beta coefficient measures how sensitive a stock is to stock fluctuations. It measures the extent to which the returns on a given stock move with the stock market (Besley, et al, 2003). One of the most common applications for the beta coefficient is in the capital asset pricing model (CAPM). The beta coefficient is a number. When the beta coefficient is 1. 0 it means that the stock is of average risk. If for instance the beta coefficient was 2. 0 it would mean that the stock is twice as risky as the average stock. Due to the fact that company's asset or capital projects may be financed by the of debt or equity a model was develop to calculated the cost of capital taking into consideration the balance of equity and debt. The model is called WACC. The WACC model measures the average cost of the sources of financing weighed by the respective use in the given situation (Investopedia, 2011). There are different assumptions made by WACC to value a project. Three assumptions are taxes, constant proportion of debt in its capital structure, and frequency of debt rebalancing (Stanton, 2005). References Besley, S., Brigham, E. (2000). Essentials of Managerial Finance (12th ed.). Forth Worth: The Dryden Press. Investopedia. com (2011). Weighted Average Cost of Capital – WACC. Retrieved May 29, 2011 from http://www. investopedia. com/terms/w/wacc. asp Stanton, R. , Seasholes, M. (2005). The Assumptions and Math Behind Wacc and Avp Calculations. Retrieved May 29, 2011 from http://papers. ssrn. com/sol3/papers. cfm? abstract_id= 837384&http://search. babylon. com/? q= WACC+assumptions&babsrc= HP_ss&s= web&as= 0 Thefreedictionary. com (2011). Risk. Retrieved May 28, 2011 from http://financial-dictionary. thefreedictionary. com/risk