

AFF 210 Tip Sheet

Financial Management: Theory and Practice (2016), Third Canadian Edition, Brigham, Ehrhardt, Gessaroli, Nason, Nelson Education

Key concepts for Valuations

- When calculating questions related to payments, need to know these items
 - PMT = the payment amount or interest amount at each period
 - PV = the present value of the loan/bond
 - FV = the future value of the loan (0) or bond (the face value)
 - N = the number of payments
 - I = interest rate
- Stock Valuation
 - Constant Dividend (Zero Growth)
 - $P_0 = \text{Dividend} / \text{Discount rate}$
 - Constant Dividend Growth
 - $P_0 = \text{Dividend}_1 / (\text{Discount rate} - \text{Growth rate})$
 - Supernormal Growth
 - $P_0 = \sum_{t=1}^x \frac{D_t}{(1+r)^t} + \frac{D_{x+1}}{(1+r)^x}$
 - $D_x = D_{x-1} \times (1+\text{rate})$
- Bond Valuation
 - $PV = PV \text{ of coupons} + PV \text{ face value}$
 - When valuing the bond, the market rate is used to discount, and the coupon rate is used to determine the payment
- Inverse relationship between bond prices and the interest rate:
 - if market interest rate > the coupon rate, bonds sell for **less than its face value**; at a **discount**.
 - if market interest rate = the coupon rate, bonds sell for **exactly the par value**; at **PAR**.
 - If market interest rate < the coupon rate, bonds sell for **more than its face value**; at a **premium**.
- To value an investment there are several investment criteria that are used to determine if an investment is a good or bad option
 - NPV (the most dominant one)
 - Internal rate of return
 - Modified rate of return
 - Profitability index
 - Payback and Discounted payback methods

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- NPV the most dominant one helps
 - Determine if an asset should be purchased
 - To determine if a new product line should be launched
 - These capital budgeting tools are used to determine the success of a business over a long period
- The APR is the interest rate expressed in terms of annual rate
- Whereas, EAR is when the annual rate is compounded
 - $EAR = (1 + APR/m)^m - 1$

- The beta is the sensitivity of a stock's return to the return of the market
- The portfolio beta is the weighted average of the betas of the stocks in the portfolio
- What beta means
 - Beta of less than 1 means the stock has less systematic risk than the overall market
 - Beta of 1 means the stock has the same systematic risk as the overall market
 - Beta of greater than 1 means the stock has more systematic risk than the overall market