

FIN-511 Chapter 8

- Major Topics:
- Valuation & Rates of Return
 - Required Rate of Return
 - Valuation
 - Common Stock Value
 - Earnings Model
 - Free Cash Flow Model
 - Preferred Stock

Valuation

- Book Value
 - Price of an asset minus accumulated depreciation
- Market Value
 - Price of an asset determined in the market
- Intrinsic Value
 - Present value of the expected cash flows from an asset
- To determine intrinsic value, must know:
 - Timing and size of the cash flows
 - Discount rate or required rate of return

Models for Valuation

- Required Return: CAPM

$$E(R_j) = R_F + \beta_j [E(R_M) - R_F]$$
- Common Stock Valuation

Constant Growth Dividend Discount Model

$$V_{CS} = D_1 / (k_{CS} - g) = D_0 (1+g) / (k_{CS} - g)$$
- Preferred Stock Valuation

$$V_p = D / k_p$$

Equity Valuation – Earnings Model

Segment the value based on two values:

- Value of the stock if the firm doesn't reinvest earnings (all paid out as dividends)

$$V = \frac{EPS}{k}$$

- Value of present value of growth opportunities (PVGO)

$$PVGO = \frac{RE \left(\frac{R}{k} - 1 \right)}{k - g}$$

- Total – No growth + PVGO

$$V = \frac{EPS}{k} + \frac{RE \left(\frac{R}{k} - 1 \right)}{k - g}$$

Equity Valuation – Free Cash Flow Model

- Compute Net Operating Profit After Tax (NOPAT)

$$NOPAT = EBIT(1 - TaxRate)$$
- Compute Operating Cash Flow

$$Oper\ CF = NOPAT + Depreciation$$
- Compute Free Cash Flow

$$Free\ Cash\ Flow = OperatingCF - Change\ in\ Operating\ Cap$$
- Value of the Firm

$$Value\ of\ the\ Firm = \frac{Free\ Cash\ Flow}{(k - g)} + Nonoperating\ Assets$$
- Value of Equity

$$Value\ of\ Equity = Value\ of\ Firm - Mkt\ Value\ of\ Debt$$
- Per Share Value of the Firm

$$Per\ Share\ Value = \frac{Value\ of\ Equity}{Shares\ Outsdg}$$

Other Functions

- To fill a column (or row) use
- Edit, Fill, Series
- This will fill numbers and dates

- **Assignment:**

- Do all of the work in the chapter, final result should look like Exhibits 8-2, 4, 6, 7, & 8 including the graphs on all of these. Include completed spreadsheets with all financial functions.
- Format exactly like in the text.
- Remember Columns/Rows/Gridlines
- Each person will turn in one set of information: print out of spreadsheet and print out of cell formulas
- Work is individual.
- Due at the beginning of class