CHAPTER 7: STOCKS AND THEIR VALUATING

1. Stocks and The Stock Market

Primary market - is the place where new shares or bonds are issued. Hence primary market is also called as new issue market.

Initial public offering (IPO) - The first time the company sells share to public.

Secondary market - market in which already issued securities are traded by investors

Seasoned Issue - sale of new shares by a firm that has already been through an IPO.

Common Stock - ownership shares in a publicly held corporation.

Dividend - periodic cash distribution from the firm to the shareholders.

P/E Ratio - price per share divided by earnings per share.

2. Market Values, Book Values and Liquidation Values

Book Value - net worth of the firm according to the balance sheet.

Liquidation Value - net proceeds that would be realized by selling the firm's assets and paying of its creditors.

Market price is not the same as the book value or liquidation value, treats the firm as a going concern.

* Financial statement that uses the market value of all assets and liabilities.

3. Valuing Common Stocks

Expect Return - the percentage yield that an investor forecasts from a specific investment over a ser period time. Sometimes called the holding period return (HPR).

Div_1: dividend after 1st year

P_1: selling price

P_0: buying price

$$\textbf{Expected Return} = \mathbf{r} = \frac{\mathbf{Div_1 + P_1 - P_0}}{\mathbf{P_0}}$$

* The expected return comes in two parts, the dividend and the capital gain.

$$\textbf{Expect rate of return} = \textbf{expected dividend yield} + \textbf{expected capital gain}$$

$$= \frac{\mathbf{Div_1}}{\mathbf{P_0}} + \frac{\mathbf{P_1 - P_0}}{\mathbf{P_0}}$$

Dividend Discount Model – discounted cash flow model which states that today's stock price equals the present value of all expected future dividends.

DIV: expect a cash dividend over the next year

H: horizon date

P_0: present value of DIV_1, DIV_2…, DIVH

$$\mathbf{P_0} = \frac{\mathbf{DIV_1}}{\mathbf{1 + r}} + \frac{\mathbf{DIV_2}}{\mathbf{(1 + r)^2}} + \cdots + \frac{\mathbf{DIV_H + P_H}}{\mathbf{(1 + r)^H}}$$

4. Simplifying the Dividend Discount Model (DDM)

DDM with No Growth – if we forecast no growth, and plan to hold out stock indefinitely, we will then value the stock as a PERPETUITY.

EPS_1: earning per share

$$\textbf{Perpetuity} = \mathbf{P_0} = \frac{\mathbf{Div_1}}{\mathbf{r}} \textbf{ or } \frac{\mathbf{EPS_1}}{\mathbf{r}}$$

Constant Growth DDM – version of DDM in which dividends grow at a constant rate.

Div_1: dividend next year

g: growth rate

r: expected rate of return

$Div_1 = Div_0 \times (1 + g)$

$$\mathbf{P_0} = \frac{\mathbf{Div_1}}{\mathbf{r - g}}$$

* Valuing Common Stocks using P/E ratio

$$\mathbf{P/E} = \frac{\textbf{price per share}}{\textbf{earning per share (EPS)}}$$

5. Valuing Preferred Stocks

Preferred Stocks - stock that takes priority over common stock regarding dividends and liquidation of assets

$$\mathbf{PV = \frac{D}{r}}$$

6. Growth Stocks and Income Stocks

Payout ratio - fraction of earning paid out as dividends.
Plowback ratio - fraction of earning retained by the firm.

$$\mathbf{g = \text{sustainable growth rate} = \text{return on equity} \times \text{plowback ratio}}$$

Present value of growth opportunities (PVGO) - net present value of a firm's future investments.