Single Period Dividend Discount Model

Single Period Dividend Discount Model

- The Single Period Dividend Discount Model is not as popular as the Gordon Growth Model but it is useful as a check on the intrinsic value of a stock

Single Period Dividend Discount Model

- The model assumes that the investor wishes to hold the share for just one year - a single period

Single Period Dividend Discount Model

- As there is just one period, the cash flows to be measured are very simple
  - The future dividend
  - The sale price of the stock when it is sold
- Of course these need to be discounted back to the Present value

Single Period Dividend Discount Model

- The formula is shown here
- V0 = Current fair value of the stock - which we will compare to the market price
- D_1 = Dividend payment in one years time
- P_1= Stock price in one years time
- r = Estimated cost of capital (discount rate)

- $V_0 = (D_1 / (1=r))+ (P_1 / (1+r))$

Single Period Dividend Discount Model

- Of course the period can be any length in time but there is only one period;
  - One month
  - One quarter
  - One year
- The discount rate needs to be adjusted to reflect the time horizon

- $V_0 = (D_1 / (1=r)) + (P_1 / (1+r))$

Single Period Dividend Discount Model

- Lets work a simple example; we want to solve for V_0
- Market Price = 100
- V_0 = ?
- D1 = 5
- P1 = 110
- r = 10%

- $V_0 = (D_1 / (1=r)) + (P_1 / (1+r))$
- 1

Single Period Dividend Discount Model

- This is very simplistic but suggests if the market price is $100, then the instrinsic value of the stock is $104.54 and therefore the stock is undervalued.

- $V_0 = (D_1/(1=r))+(P_1/(1+r))$
- V0 =(5/(1+0.1)+(110/(1+0.1)
- V0 = 4.54 + 100 = 104.54

Single Period Dividend Discount Model

- The other advantage of understanding the Single Period Dividend Discount Model is that it makes it very easy to understand the Multi Period Dividend Discount Model which we shall look at next

Single Period Dividend Discount Model