Dividend Decision - I

Walter Model

Dividend Policy

- **The dividend policy of a firm determines what proportion of earnings is to be paid to the shareholders by way of dividends.**

- **And, what proportion is to be retained by the firm for reinvestment purposes.**

- Since the principal objective of financial management is to maximise the market value of shares, the main question is:

- What is the relationship between dividend policy and market price of equity shares?

Dividend Models

- There are two schools of thought, one, which says dividend and investment policy are inter-related and they have bearings on the firm's market value.
- It includes mainly Walter Model, Gordon Model and traditional model.
- Second, which assumes that the dividend policy is irrelevant and it does not affect the market value of the firm.
- This includes Modigilani and Miller Model.

Basic terms

- Earning per share (EPS) = PAT/No. of paid-up equity shares
- Dividend per share (DPS) = Dividend / No. of paid-up equity shares
- Dividend pay out ratio (DPR) = DPS/EPS
- Retained earnings per share = EPS – DPS
- Earnings per share

  = Dividend per share + Retained earnings per share

Walter Model

- James Walter (1963) gave a share valuation model which is based on the postulation that dividend decision and value of share are interdependent.
- It is based on the following assumptions:
- The firm has only equity share capital means a firm has only one source of capital i.e. equity share capital.
- It utilises retained earnings (only) to finance its future investments.
- The rate of return on investments is constant.
- The firm has an infinite life.

Walter Model

$$P = \frac{D + (E - D)\frac{r}{k}}{k}$$

where
P = the price per equity share,
D = the dividend per share,
E = the earnings per share,
(E - D) = the retained earnings per share,
r = the rate of return on investments, and
k = the cost of equity.

$$P = \frac{D}{k} + \frac{(E - D)\frac{r}{k}}{k}$$

- In the above case, the first component is the present value of an infinite stream of dividends (take the clue from the chapter of cost of capital); and
- The second component is the present value of an infinite streams of returns from retained earnings.

- So, as per this model, the value of a share is the present value of dividend and returns from the retained earnings of its entire life

An Illustration

Rate of Return	r=25%	r=20%	r=15%
Cost of equity	k=20%	k=20%	k=20%
EPS	E=Rs. 10	E=Rs. 10	E=Rs. 10
If D = 0	**62.5**	**50**	**37.5**
if D = 5	**= [5+(10-5)*(0.25/0.20)]/0.20 = 56.25**	**= [5+(10-5)*(0.20/0.20)]/0.20= 50**	**= [5+(10-5)*(0.15/0.20)]/0.20= 43.75**
if D = 10	**50**	**50**	**50**
	r>k	**r=k**	**r<k**

Main findings

- When r > k, the market value of a share increases as the dividend payout ratio decreases.
- When r = k, the market value of a share does not change with the change in the dividend payout ratio.
- When r < k, the market value of share increases as the dividend payout ratio increases.
- Thus, according to the Walter model, it comes out that the ideal dividend payout ratio in different scenario is:

- When r > k is nil.
- When r = k is indifferent.
- When r < k is 100 percent.

For any additional query
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