

DIVIDEND POLICY

Dividends are part of earnings which are paid to the ST for their investments in the company.

Factors to consider when making Dividend policy

1. Availability of the investment opportunities

Companies with several investment opportunities yielding positive NPV are likely to pay less dividend.

2. Profitability and liquidity of the company

The ability of the company to pay dividend can be determined by the ability to generate stable profit and cashflows in future.

3 Industrial Norms

A company may adopt the dividend policy which is similar to the industry where its operating.

4 Capital structure decisions

Where the company wants to achieve a given capital structure e.g. where the gearing is too high, the company may pay less dividend and retain more.

5. Restrictions by debt holders

They are terms and conditions of the loan agreement which may restrict the company from paying dividend unless the earnings of the company exceeds a given limit.

6. Expectation of the shareholders

Shareholders with high income will prefer the capital gains instead of dividend income; therefore they will expect the company not to pay or pay less / higher dividend and vice versa.

7. Access to the Capital Market

A company which can easily access the Capital market can afford to pay more dividend and retain less.

8. Inflation

During periods of high inflation, in order to maintain and preserve the purchasing power of the company, the company will distribute less as dividend and retain more for the risk of inflation.

9. Nature and tax position of the company

A company which is highly taxed will have less profit available for distribution as dividend.

10. Legal requirement

This is subdivided into 3:

- (a) Net profit rule → It states that, dividend can only be paid out of company's profit.
- (b) Insolvency rule → It states that company cannot pay dividend if it is insolvent i.e. its total asset is less than liabilities.

- (e) Capital impairment rule \rightarrow this rule prohibits payment of dividend from the capital. This is where the company can sell its asset inorder to pay the dividends
 \rightarrow This will be equivalent to liquidating the company which is against going concern concept of accounting

DIVIDENDS POLICIES:

1. Constant dividend payout Ratio

Under this policy, the company will pay a fixed proportion of its earnings available to ordinary shareholders as dividends.

2. Constant / Fixed dividend per share

This is where the company will pay a fixed amount of dividend irrespective of company's earnings.

3. Regular plus extra / low constant DPS plus bonus or surplus

This is where the DPS is set at a very low level and paid each period. However extra or bonus dividend will be paid during periods of high earnings.

4. Residue dividend policy

This is where dividends are paid out of the earnings left after all viable investment opportunities have been financed. Therefore in this case, the company will pay dividend only if there are no profitable project to invest in.

Illustration 1

The management of JM Ltd is in the process of evaluating the company's dividend policy. The following information is provided.

1. The company paid Sh 1.2 m as dividend in the last financial year.
2. The PAT for the last financial year was Sh 3.6 m.
3. The company has not issued any preference shares.
4. The earnings growth rate has been constant at 10% p.a for the past 10 years.
5. The expected PAT for the current financial year is Sh 4.8 m.
6. The company anticipates investment opportunities of Sh 1.4 M in the current financial year.
7. The capital structure of the company consists of 60% equity & 40% debt.

Required

Determine the optimal total dividend for the current financial year if the company wishes to adopt the following independent dividend policy.

- a) Pure residual policy.
- b) Constant dividend payout ratio policy.
- c) Stable predictive dividend policy applying growth rate equivalent to earnings growth rate.
- d) Regular plus extra dividend policy. The regular dividend will be based on long term growth rate of earnings while extra dividend will be based on residual income.

Solution:

i) Pure residual policy

$$\begin{aligned} \text{Amount of profit available} &= 4.8 \text{ m.} \\ \text{less: Amount of viable project } 60\% \times 1.4 &= (0.84) \\ \text{Maximum dividend to pay} &= 3.96 \end{aligned}$$

ii) Dividend payout ratio policy

$$DPA = \frac{\text{total dividend paid}}{\text{total Earnings}} = \frac{1.2}{3.6} = 0.33 \approx \frac{1}{3}$$

$$\text{maximum dividend } \frac{1}{3} \times 4.8 = 1.6 \text{ m}$$

iii) Stable predictive dividend on growth rate

$$D_1 = D_0(1+g) \\ 1.2(1+0.1) = 1.32 \text{ m}$$

iv) Dividend plus extra

$$\text{Regular} = 1.2(1+0.1) = 1.32 \\ \text{extra}$$

$$\begin{aligned} \text{Available profit} &= 4.8 \\ \text{less: regular dividend} &= (1.32) \\ \text{less: investment opportunity } (60\% \times 1.4) &= (0.84) \\ \text{extra dividend} &= 2.64 \text{ m} \end{aligned}$$

$$\text{Maximum dividend} = 1.32 + 2.64 = 3.96 \text{ m}$$

Other Models of Dividend Policy.

1. James Walter Model of dividend.

This is a model of share valuation which supports the view that dividend policy of the company affects the value of the share. Based on this assumption, Walter

Assumptions of Walter model

1. The company is all equity financed.
2. The company uses retained earnings to finance future investments.
3. Return on Investment (ROI) remains constant.
4. The company will exist to infinity i.e. it's a going concern.

Based on this assumptions, Walter came up with a model of valuing the share as follows

$$P_0 = \frac{D + (E - D) \times K}{K} \quad \text{where } P_0 - \text{Price per share}$$

D - DPS

E - EPS

K - Cost of Capital.

R - Rate of return on investments

Illustration I

You are provided with the following information from the books of JM Ltd.

- i) The rate of return on investment is 20%
- ii) Cost of Capital is 15%
- iii) Earnings per Share is sh 4
- iv) Dividend per Share is sh 2.5

Required

using James Walker model, determine the value of the share

Solution:

$$P_0 = \frac{D + (E - D) \times k}{k} = \frac{2.5 + (4 - 2.5) \frac{0.2}{0.15}}{0.15} = \text{sh } \underline{\underline{30}}$$

May 2017 Q 2 a (ii)

$$DPS = 60 \times 15 = 9$$

$$P_0 = \frac{9 + (15 - 9) \frac{0.16}{0.12}}{0.12} = \text{sh } \underline{\underline{141.67}}$$

2. Lintner Model

According to this model, the dividend to be paid takes into account the current dividend, the adjustment rate and previous period dividend. Therefore according to this model the dividend per share to be paid is expressed as follows.

$$\text{DPS to be paid} = \left[\text{Current DPS} \times \text{Adjustment rate} \right] + \left[\text{Previous DPS} \times (1 - \text{Adjustment rate}) \right]$$

Dec 2013 Q 4 a

$$(3 \times 0.6) 0.7 + [1.2 \times 1 - 0.7] = 1.62.$$

May 2016 Q 2 b

$$\text{DPS current period} \quad 0.6 \times 6 = 3.6$$

$$= (3.6 \times 0.7) + (2.4 \times 0.3) = \\ = \underline{\underline{3.24}}$$

Terminologies

Home made dividend

It refers to the ability of the shareholders to liquidate or sell part of the shares and realize cash inflows which will substitute the dividend income. Under this policy, dividend is irrelevant in determining the value of the company.

2. Best Effort offering

This is a system used by investment banks where they agree to sell as many securities as they can at an established price. They have no responsibility for the securities not sold.

3 Pre-emptive right

Under this model, the existing shareholders have the right to preserve their proportionate ownership in the company.

4. Green shoe provision

Under this provision the shareholders has an option of buying additional shares at the initial offer price after several weeks from the due time of right issue.

THEORIES OF DIVIDENDS POLICY

These theories attempts to explain whether payment or non-payment of dividends affects the value of the company. They include:

1. Agency theory.
2. Bird in hand theory
3. Signaling theory.
4. clientele theory.
5. MM dividend Irrelevant theory.

1. Agency Theory

The agency problem between SIT and MGT can be solved through the payment of high dividends.

2 Bird in hand theory

This theory was developed by Myron Gordon and John Lintner. It is based on certainty of the income derived from the shares in form of dividend and capital gain.

The theory is summarized as follows:

- i) Investors are risk averse i.e. they fear risks and hence they prefer assured income.
- ii) Dividend income is immediate and more certain while capital gain will be received in future & therefore it's highly uncertain.
- iii) Given that investors prefers assured income they will prefer dividend income to the capital gain.

Therefore a company that pays high dividend will have high value and vice versa!

3 Signaling theory

This theory suggested that, the payment of high dividend will signal that the management expects high profits in the future to maintain their high dividend payment - This will lead to increase in the value of the company.

4. Clientelle theory

This theory was developed by Richard Petef who argued that different group of shareholders have different preference of dividend depending on their levels of income from other sources. The theory is summarized as follows:

- i) If a group of S/H has high income from other sources they will prefer low or no dividend in order to avoid the additional tax burden. They will then shift to the company which is paying low or no dividend but promising higher capital gains in the future - and vice versa for S/H with low income from other sources.
- ii) As S/H moves from one company to another looking for company which pays dividend of their choice, the market price per share will change due to the demand and supply forces.

MM dividend Irrelevance Theory

The theory was developed by Modigliani and Miller who argued that the company's dividend policy does not affect the value of the company.

The theory operated under the following assumptions:

1. There are no transaction cost associated with flotation of shares
2. There is no corporate and personal taxes on dividends
3. The company investment policy is independent of its dividend policy.
4. There is no uncertainty in the market hence all the investors use the same discounting rate.
5. The capital markets are efficient and perfect

Based on this assumptions, the dividend irrelevance model can be provided as follows:

Variables used:

D_1 → DPS at the end of year 1 / expected dividend

P_0 → Current MPS

P_1 → Expected MPS at the end of year 1

$P_1 - P_0 \Rightarrow$ Capital gains

Total Returns = Dividend income + Capital gains $\Rightarrow D_1 + (P_1 - P_0)$

$$\% \text{ returns} = \frac{D_1 + (P_1 - P_0)}{P_0} \times 100\% \Rightarrow R = \frac{D_1 + P_1 - P_0}{P_0}$$

Reaching P_0 the subject

$$R P_0 = D_1 + P_1 - P_0$$

$$R P_0 + P_0 = D_1 + P_1$$

$$P_0 (R + 1) = D_1 + P_1$$

$$P_0 = \frac{D_1 + P_1}{R + 1}$$

New Capital to be raised = Investment required - Retained profit

$$M P_1 = I - (X - N D_1)$$

$$M P_1 = I - X + N D_1$$

$$N P_0 = P_1 \left(\frac{M}{M P_1} + 1 \right) - I + X \quad M = \frac{M P_1}{P_1}$$

where: $N P_0$ = Value of firm Company
 R = Return.

R = Cost of Capital / Required rate of return.

N = Current no. of old shares

M = New shares to be issued.

I = Investment required / Initial Capital

X = Expected profit at end of year 1

$M P_1 \rightarrow$ New Capital to be raised

$N D_1$ = Total dividend at end of year 1

May 2014 Q3

Value of the firm $250,000 \times 120 = 30M$

If no dividend is paid

$$D_1 = 0$$

$$P_0 = \frac{D_1 + P_1}{1+r} \Rightarrow 120 = \frac{0 + P_1}{1+0.1} \Rightarrow 120(1+0.1) = P_1 \\ P_1 = \underline{\underline{132}}$$

$$MPI = I + ND_1 - X$$

$$MPI = 6 + 0 - 3 = 3m.$$

$$M = \frac{3000,000}{132} = 22,727 \text{ where } M_1 = \frac{MPI}{P_1}$$

$$NPV = \frac{P_1(N+m) - I + X}{1+r} = \frac{132(250,000 + 22,727) - 6m + 3m}{1+0.1}$$

$$NPV = \underline{\underline{30m}}$$

If dividend is paid:

$$D_1 = 10 \times 0.5 = 5$$

$$P_0 = \frac{D_1 + P_1}{1+r} \Rightarrow 120 = \frac{5 + P_1}{1+0.1} \Rightarrow 120(1+0.1) = 5 + P_1 \\ 132 = 5 + P_1 \\ P_1 = 127$$

$$MPI = I + ND_1 - X$$

$$MPI = 6 + (250,000 \times 5) - 3 = 4.25m$$

$$M = \frac{MPI}{P_1} = \frac{4.25m}{127} = 33,465$$

$$NPV = \frac{P_1(N+m) - I + X}{1+r} = \frac{127(250,000 + 33,465) - 6m + 3m}{1+0.1}$$

$$NPV = \underline{\underline{30m}}.$$