

DIVIDEND DECISIONS

Dividend Decision – Third among the three Crucial decisions that the Corporate Finance Manager takes.

Other Two

- Investment Decision (Capital Budgeting)
- Financing Decision (Capital Structure Planning)

Central Issue – Decision on how much of the profits are to be retained for future investments and how much are to be distributed.

Also crucial – whether it would effect the value of the firm

The Basics of Dividend

1. Dividend Rate (DR)
2. Dividend Yield (DY)
3. Payout

Formulae:

1. $DR = (DPS / FV) \times 100$
2. $DY = (DPS / P_o) \times 100$
3. $Payout = (DPS / EPS) \times 100$

Where,

DPS = Dividend per Share; FV = Face Value per Share

P_o = Current Market Price; EPS = Earnings per Share

Note: Dividends paid quarterly or half yearly are referred to as Interim Dividend.

Dividend Decisions

- ✓ A Firm needs fresh funds to survive and grow.
- ✓ Usually, the most favored source of fund is retained earnings.
- ✓ By paying dividend, a firm sacrifices retained earnings as a source of fund.
- ✓ The proportion of earnings distributed – Payout Ratio
- ✓ The proportion of earnings retained - Retention Ratio
- ✓ The policy on dividends is concerned about deciding the Best Payout Ratio.

Dividend Policy Models

Model

Traditional View
Walters Model

Payout Recommended

High
Low for Prosperous Enterprise
High for Declining Enterprise
Not Relevant for Average Enterprise

Gordon's Growth
MM Approach
Radical View

Same as Walters Model
Not Relevant
Low

An Enterprise is Prosperous if : $r > K$

An Enterprise is Declining if : $r < K$

An Enterprise is Average if : $r = K$

Where, r = Rate of Return in Equity Funds, K = Cost of Equity

Walter's Model

Assumptions:

- The firm is an all equity firm
- The firm will use only retained earnings to finance its investments
- The rate of return on investment & cost of equity are constant
- All earnings are either distributed or retained.
- The Firm has an infinite life
- Earnings and dividends don't change.

Formula:

$$P_0 = \frac{D}{K_e} + \frac{(r/K_e)(E-D)}{K_e}$$

Where,

P_0 = Current Market Price
 D = Dividend per Share
 K_e = Cost of Equity
 r = Rate of Return
 E = Earnings per Share

Gordon's Model

Assumptions:

- The firm is an all equity firm
- The firm uses only retained earnings to finance its investments
- The rate of return on the firm's investment is constant
- The cost of equity is constant
- The firm has an infinite life

- f. The retention ratio is constant
- g. The growth rate is constant
- h. K_e is greater than growth rate where growth is the product of retention ratio and return on equity
- i. Taxes are absent

Formula: $P_0 = D_1 / (K_e - g)$

Where,

P_0 = Current market price;
 D_1 = DPS next year
 K_e = Cost of Equity;
 g = Growth rate in dividends

Graham & Dodd Model

3. Graham & Dodd Model:

- a. Investors assign more weights on dividends than on retained earnings
- b. Investors discount distant dividends (Capital Gains) at a higher rate than they discount nearby dividend.

Formula: $P = m \times (D + E/3)$

Where,

P = Market price per share
 m = Multiplier
 D = Dividend per share
 E = Earnings per share.

Lintner's Model

4. Lintner's Model:

Current year's dividend is dependent on –

- Current year's earnings, and
- Last year's dividend.

Thus, dividends are the weighted average of past earnings.

Formula:

$$D_1 = D_0 + \{ (EPS \times \text{Target Payout}) - D_0 \} \times AF$$

Where,

D_1 = Dividend in year 1,
 D_0 = Dividend in current year,
 EPS = Earnings per share,
 AF = Adjustment Factor.

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Modigliani and Miller (MM) Hypothesis

- Value of a firm depends solely on its earning ability and is not influenced by the manner in which its earnings are split between dividend and retained earnings.
This view is known as the “Dividend Irrelevance” Theorem.
- Dividend policy has no effect on the share price of the firm and is of no consequence.
- According to MM, timing of dividend payment is not relevant.

Modigliani and Miller (MM) Hypothesis

Assumptions:

1. Perfect Capital Markets – Investors are rational & Information is freely available.
2. No Taxes & Flotation costs are nil.
3. Securities are divisible and no Investor can influence Market Prices.
4. Perfect certainty as to future investments and profits of the firm.

Modigliani and Miller (MM) Hypothesis

Formula:

$$nP_0 = \frac{\{(n + m) \times P_1\} - I_1 + X_1}{1 + K_e}$$

Where,

- P_0 = Current market price
 n = Present number of shares
 m = Additional shares issued at year-end market price to finance capital expenditure
 P_1 = Year end market price
 I_1 = Investment made at year-end with money being raised at year-end MP
 X_1 = Earnings in Year 1
 K_e = Cost of Equity

Approaches to Dividends

1. **Constant Dividend Model** – Under this model, a fixed **dividend rate** is paid each year irrespective of the earnings.
2. **Constant Payout Approach** – Under this model, the company adopts a fixed **payout ratio** year after year.

✓ This means that the ratio of dividends per share to earnings per share is constant.

3. Constant Dividend Plus – Under this approach, a fixed low dividend per share is always payable.

✓ An additional dividend per share in the form of either interim dividend or special dividend is then paid in years of good profits.

✓ In years of not so good profits, the extra or special dividend is not paid.

4. Residual Approach – Under this approach, dividends are paid out of profits after making provision for money required to meet upcoming capital expenditure commitments.

Option 1: Dividends would be the difference between profit after tax and capital expenditure.

Formula: Dividends = PAT – Capital Expenditure

Option 2: If the company does not want the capital structure to be altered, it would have to adopt this option.

✓ The capital expenditure would be financed in the ratio of the company's capital structure ratio.

Formula: Dividend = PAT – Capital Exp. funded out of Equity

Buy – back or Stock Repurchase

➤ There are two ways in which a Company can reward its shareholders.

One, it can pay dividends.

Two, it can buy back shares.

Buy-back of Shares: Repurchase of shares of the Company by the Company.

✓ This leads to reduction in the Share Capital of the Company.

✓ Buy-back is resorted to when a Company has large unutilized surplus cash.

✓ Since the cash is surplus, it is assumed that buy-back will not affect the future earnings of the Company.

Pricing of Buy-back: A Company should fix its buy-back price so that an Investor who does not accept the buy-back offer is not discriminated against in terms of his wealth with reference to an Investor who accepts the buy-back offer.

Formula:

Buy-back Price = $(S \times P_o) / (S - N)$

Where, S = Number of Share outstanding before buy-back

P_o = Current Market Price

N = Number of Shares bought back

Bonus Shares

Bonus Share: A bonus share (also known as Stock Dividend) involves the capitalization of reserves.

- The accountant transfers an amount from reserves to equity by allotting shares at par value.

Ex: 1 : 3 bonus means that for every 3 shares held for one share is issued free of cost.

- This affects the liability side of the Balance Sheet and leaves the asset side unchanged.

Liabilities	Rs. lakhs
Share Capital (150,000 shares of Rs. 10 each)	15
Reserves	<u>35</u>
Total	<u>50</u>

Post stock dividend share capital is increased by 50,000 shares of Rs. 10 each and reserves are reduced by an equivalent amount and the Balance Sheet looks as under

Liabilities	Rs. lakhs
Share Capital (200,000 shares of Rs. 10 each)	20
Reserves	<u>30</u>
Total	<u>50</u>

Formula: Post Bonus Price = $(S \times P_o) / (S + N)$

Where,
S = Number of Share outstanding before bonus issue
P_o = Current Market Price
N = Number of bonus shares issued

Stock Splits

Stock Splits: A Stock Split represents a reduction in the Face Value of Shares.

- It does the same function as a Bonus Share
- A Stock split is similar to a Bonus Share.
- A 2 : 1 split means 2 shares are issued in exchange of 1 share held.
- Neither the asset nor the liability side of the Balance Sheet undergoes a change except that the par value of the share & number of shares changes.

Reverse Splits

Reverse Splits: A Reverse Split is the opposite of Stock Split.

- It refers to consolidation of shares.

Ex: A Rs. 5 per share is increased to a face value of Rs. 15.

- Such a split is referred to as 1 : 3, since you get 1 share in lieu of every 3 held.
- A reverse split reduces the number of shares outstanding and increases the market price per share.

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