
UNIT 15 MANAGEMENT OF EARNINGS

Objectives

Objectives of this Unit are to:

- discuss the dividend theories, their assumptions and criticism.
- throw light on practical issues of dividend policy.

Structure

- 15.1 Introduction
- 15.2 Dividend Theories
- 15.3 Walter's Model
- 15.4 Gordon's Model
- 15.5 Modigliani-Miller Hypothesis
- 15.6 Procedure of Paying Dividends
- 15.7 Types of Dividends
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15.1 INTRODUCTION

Success of an enterprise rests not only on optimal utilization of funds but also on efficient management of income produced by business operations. Distribution of fair amount of dividend to shareholders, provision for sufficient reserves to finance future expansion programmes of the enterprise and to absorb the shock of business vicissitudes and provision of sufficient resources for retiring old bonds and redeeming other debts call for effective management of income. Efficacious management of income strengthens the financial position of the enterprise and enables the firm to withstand seasonal fluctuation and business oscillations, helps in enlisting the support of the shareholders in future and finally facilitates in procuring resources from different avenues of capital market.

As such dividend policy is the most important single area of decision making by the management for a finance manager. Action taking in this area affects growth rate of a firm and so also its value, nevertheless opinions of the financial wizards, as evidenced from their theories, are not unanimous in this regard.

15.2 DIVIDEND THEORIES

Dividend theories can broadly be classified into two groups:

- a) theories which consider divided policy as of no relevance, and
- b) which consider divided policy as a relevant variable to enhance shareholder's wealth. They are briefly discussed below.

15.3 WALTERS MODEL

Professor James E. Walter emphasizes that dividend policy is a critical factor affecting the firm's value. According to him, dividend policy hinges on firm's internal rate of return (r) and the cost of capital (k). His model is based on the following assumptions:

1. The firm finances new investments through retained earnings, without opting for new debt or equity.
2. The firm's internal rate of return, and cost of capital, are constant.
3. 100 per cent of earnings are either distributed as dividends or reinvested internally.
4. Initial earnings and dividends remain constant forever. The values of earnings per share (EPS) and dividends per share (D) may be changed to determine results, but any given values of EPS, and the D assumed to remain constant forever in determining a given value.
5. The firm has a very long infinite life.

The following is the Walter's formula to determine the market price (P) per share:

$$\frac{D + (EPS - D) \frac{r}{K}}{K}$$

The above formula can also be written as:

$$\frac{D}{K} + \frac{(EPS - D) r}{K^2}$$

The above equation gives the sum of the present value of future stream of dividends (D/K), and capital gains resulted by reinvestment of retained earnings ($EPS - D$) at the firm's internal rate of return (r). The discount value is equal to the firm's cost of capital (K). The effect of dividend policy on the firm's share value is explained in the following illustration 1 using Walter's model. The basic data and computations are given in table 15.1 based on Walter's formula:

Table 15.1: Dividend Policy and the Value of Share

BASIC DATA

| Growth Firm ($r > k$) | Normal Firm ($r = k$) | Declining Firm ($r < k$) |
|----------------------------|----------------------------|-------------------------------|
| R = 16% | R = 10% | R = 8% |
| K = 10% | K = 10% | K = 10% |
| EPS = Rs. 10 | EPS = Rs. 10 | EPS = Rs. 10 |

When pay out ratio = 0%

| | | |
|---------------------------------------|----------------------------------|-----------------------------------|
| D = Rs. 0 | D = Rs. 0 | D = Rs. 0 |
| $P = \frac{0 + (.16/.10)(10.0)}{.10}$ | $\frac{0 + (10/.10)(10.0)}{.10}$ | $\frac{0 + (.08/.10)(10.0)}{.10}$ |
| = Rs. 160 | = Rs. 100 | = Rs. 80 |

When pay out ratio = 30%

| | | |
|---------------------------------------|----------------------------------|-----------------------------------|
| D = Rs. 3 | D = Rs. 3 | D = Rs. 3 |
| $P = \frac{3 + (.16/.10)(10-3)}{.10}$ | $\frac{3 + (10/.10)(10-3)}{.10}$ | $\frac{3 + (.08/.10)(10-3)}{.10}$ |
| = Rs. 142 | = Rs. 100 | = Rs. 86 |

When pay out ratio = 50%

| | | |
|---------------------------------------|----------------------------------|-----------------------------------|
| D = Rs. 5 | D = Rs. 5 | D = Rs. 5 |
| $P = \frac{5 + (.16/.10)(10-5)}{.10}$ | $\frac{5 + (10/.10)(10-5)}{.10}$ | $\frac{5 + (.08/.10)(10-5)}{.10}$ |
| = Rs. 130 | = Rs. 100 | = Rs. 90 |

When pay out ratio = 80%

| | | |
|---------------------------------------|----------------------------------|-----------------------------------|
| D = Rs. 8 | D = Rs. 8 | D = Rs. 8 |
| $P = \frac{8 + (.16/.10)(10-8)}{.10}$ | $\frac{8 + (10/.10)(10-8)}{.10}$ | $\frac{8 + (.08/.10)(10-8)}{.10}$ |
| = Rs. 112 | = Rs. 100 | = Rs. 96 |

When pay out ratio = 100%

| | | |
|---|------------------------------------|-------------------------------------|
| D = Rs. 10 | D = Rs. 10 | D = Rs. 10 |
| $P = \frac{10 + (.16/.10)(10-10)}{.10}$ | $\frac{10 + (10/.10)(10-10)}{.10}$ | $\frac{10 + (.08/.10)(10-10)}{.10}$ |
| = Rs. 100 | = Rs. 100 | = Rs. 100 |

Thus, Walter's model brings out that dividend policy does help maximize shareholder's value, if used properly depending on its internal rate of return, and cost of capital. So the dividend policy differs depending on whether the firm falls into the category of growth firm, normal firm, or declining firm. The optimum dividend policy for these firms is as follows.

Growth Firms: Growth firms have very good investment opportunities with returns greater than their respective cost of capital. It can be observed from the table 15.1 that firm's value will be maximized when then firms reinvest 100 percent of earnings, choosing a zero dividend policy 1, to maximize the share value.

Normal Firms: Over a period of time firms may not find unlimited investment opportunities with returns higher than their cost of capital. They may have investments with returns equal to cost of capital. As a result, it can be note from Table 15.1 that the share value remains constant, despite varying pay out ratios. These firms can be indifferent to any dividend payout ratio, as there is no optimum policy.

Declining Firms: These firms may not have investment alternatives giving returns atleast equal to the cost of capital. Such firms can at best declare 100 dividend payout to enhance shareholders' value, because they can reinvest them at a higher rate than the return available to the firm. The data in Table 15.1 too supports this proposition.

Criticism of Walter's Model: Though Walter's model has been successful in highlighting the role of firms return and cost of capital in determining the dividend policy, the model has been criticised for its following un-realistic assumptions.

No External Financing: Walter's model is mixing both dividend policy and investment policy by assuming that investment opportunities will be financed only with retained earnings, without resorting to either debt or new equity. With these restrictions the firm's dividend policy, and investment policy will be sub optimal.

Constant Rate of Return: Walter's Model assumes a constant rate of return, which is real life may not hold good. Because, firms choose from among the most profitable to less profitable projects, as long as their respective rate of return is more than or equal to the firm's cost of capital.

Constant Opportunity Cost of Capital: Another assumption of Walter's model, which may not hold good is constant opportunity cost of capital. However the firm's cost of capital changes with its risk, the Macro Economic Changes in the economy. Further, the present value of the firm's income changes inversely with its cost of capital. By assuming the discount rate as constant, Walter's modal ignores the effect of risk on the firm's value.

15.4 GORDON'S MODEL

Myron Gordon developed a popular Model relating dividend policy and the firm's value, based on the following assumptions:

- The firm has only equity capital, and no debt.
- Only retained earnings will be used for financing expansion. This assumption mixes dividend and investment policy, similar to Walter's model.
- Firm's internal rate of return is constant, which is not correct in practice.
- Firm's discount rate is constant. Even this assumption is also incorrect, as is the case with Walter's model.
- The firm and its stream of earnings are perpetual.
- The corporate taxes are nil.
- The retention ratio, once decided, remains constant, leading to a constant growth rate of earnings.
- The discount rate is higher than growth rate.

According to the Gordon's model, the market value of a firm's share will be equal to the present value of future stream of dividends payable for that share. Accordingly, the value of share can be obtained by the following equation:

$$P_0 = \frac{D_1}{K - g}$$

The above equation can also be expressed as:

$$P_0 = \frac{EPS(I - b)}{K - br}$$

The second equation highlights the relationship of earnings, dividends policy, internal rate of return, and the firm cost of equity (which is also cost of capital in the absence of debt) in deciding the value of the share.

The influence of dividend policy on the value of share and therefore on the firm's value can be understood by observing the following illustration, in which the implication of dividend policy for growth, normal, and declining firms, is explained. The results in the illustration can be explained as: (a) If the firm's internal rate of return is less than its discount rate, retaining earnings is not useful for the shareholder's value maximization. Because, by retaining earnings in the firm to invest at a lower rate of return, the shareholders are denied the opportunity to invest at higher or at least at rates equal to the discount rate. In such situation, the 100 percent pay out will maximize the share holder's wealth. The promoters can even think of partial or full dis-investment, if the firm's discount rate is less than the prevailing rate of return in the market, to boost the shareholder's wealth. It can be seen that for normal firms whose discount rate is equal to their internal rates of return, the dividend policy is of no significance, as each firm's value remains the same irrespective of any pay out ratio adopted. The growth firms do well by retaining maximum portion of their earnings to increase the shareholders' value, because the opportunities available to the shareholders are less attractive when compared to those available to the growth firm's.

The conclusions drawn by Gordon's Model are akin to those of Walter's Model, essentially due to the similar assumptions made by both of them. However, Gordon adds that uncertainty increases with futurity. When dividend policy is considered in this context, the discount rate cannot be assumed to be constant. Due to uncertainty, the investors may be willing to pay higher price for the share that pays higher early dividends, other things remaining constant. Therefore, Gordon concludes that dividend policy does effect the firm's value. Then even those firms having the rate of return equal to their respective discount rates cannot be indifferent to the dividend policy. The investors prefer dividend to capital gains because dividends are easier to predict, less risky, and do not involve timing decisions.

Illustration: In the following 15.2 the implications of dividend policy are shown under Gordon's Model for Growth, normal, and declining firms.

Table 15.2: Dividend Policy and the Value of Share

| Growth Firm (r > k) | Normal Firm (r = k) | Declining Firm (r < k) |
|-----------------------------------|--------------------------------|--------------------------------------|
| r = .16 | r = .12 | r = .09 |
| k = .12 | k = .12 | k = .12 |
| EPS = Rs.12 | EPS = Rs.12 | EPS = Rs.12 |

Pay-out ratio (1-b) = 30%, Retention Ratio, b=70%

$$G = br = (.7)(.16) = .112$$

$$Po = \frac{12(1-.7)}{.12-.112}$$

$$= \text{Rs. } 450$$

$$G = br = (.7)(.12) = .084$$

$$Po = \frac{12(1-.7)}{.12-.084}$$

$$= \text{Rs. } 100$$

$$G = br = (.7)(.09) = .063$$

$$Po = \frac{12(1-.7)}{.12-.063}$$

$$= \text{Rs. } 63$$

Pay-out ratio = 60%, and Retention Ratio = 40%

$$G=br=(.4)(.16)=.064$$

$$G=br=(.4)(.12)=.012$$

$$G=br=(.4)(.12)=.036$$

$$P_o = \frac{12(1-.4)}{.12-.046}$$

$$P_o = \frac{12(1-.4)}{.12-.048}$$

$$P_o = \frac{12(1-.4)}{.12-.036}$$

$$= \text{Rs. } 129$$

$$= \text{Rs. } 100$$

$$= \text{Rs. } 86$$

Pay-out ratio = 90%, and Retention Ratio = 10%

$$G=br=(.1)(.16)=.016$$

$$G=br=(.1)(.12)=.012$$

$$G=br=(.1)(.09)=.009$$

$$P_o = \frac{12(1-.1)}{.12-.016}$$

$$P_o = \frac{12(1-.1)}{.12-.012}$$

$$P_o = \frac{12(1-.1)}{.12-.009}$$

$$= \text{Rs. } 104$$

$$= 10.8 = \text{Rs. } 100$$

$$= 10.8 = \text{Rs. } 97$$

15.5 MODIGLIANI – MILLER HYPOTHESIS

Modigliani and Miller (M–M) proposed an interesting model which concludes that dividend policy does not affect the firm's value. The firm's value, according to them, hinges only on its earnings which result from its investment policy. Given the investment policy, decision of retention and pay-out, they hold, will not affect the firm's value. M-M's model is based on the following assumption:

- The capital markets are perfect, investors behave rationally, information is available freely, and transaction and floatation costs do not exist.
- Either taxes do not exist, or they are same on both dividend income and capital gains so that investors do not prefer one over other.
- The firm has a fixed investment policy.
- The risk, will not increase with futurity. The investors can forecast future prices and dividends with certainty, and one discount rate is appropriate for all securities and all time periods.

When the above assumptions operate in capital market, the rate of return will be equal to the discount rate which are same for all shares in the long term. Consequently, the price of each share must adjust so that the rate of return, based on dividends and capital gains, on each share will be equal to its discount rate, which have to be identical for all shares. M-M believed that the equality would take place through the process of switching from low yield shares to high yield shares. According to this model, the rate of return for one period can be computed as follows:

$$R = \frac{D_1 + (P_1 - P_0)}{P_0}$$

Similarly, the value of share can be calculated as:

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

The value of the firm can be obtained by multiplying both sides of the above equation with number of shares outstanding:

$$V = N_{po} = \frac{n(D1 + P1)}{(1+k)}$$

M–M model does not make a restrictive assumption of financing new investments only with retained earnings like Walter's and Gordon's models for the issuance of new shares. Firms can pay dividends and raise funds by issuing new shares to take up investments, allowing the flexibility of financing new investments with retained earnings, or new equity capital, or both. Using the following equation M–M show that the value of the firm will be unaffected by its dividend policy:

$$\begin{aligned} N_{po} &= \frac{n D1 + (n + m) P1 - mP1}{1+k} \\ &= \frac{n D1 + (n + m) P1 - (I1 - X1 + nD1)}{1+k} \\ &= \frac{(n + m) (P1 - I1 + X2)}{1+k} \end{aligned}$$

Where:

N = Number of shares outstanding

M = Number of new shares to be sold by the firm at time 1 at price P1

I1 = Total amount of investment during time period 1.

X1 = Total net profit of the firm during time period 1.

The M–M hypothesis is explained in the following illustration. It can be observed that the firm has the flexibility of paying dividend and raising funds by issuing new equity shares. When the firm is paying dividend its share value will be adjusted by the market to the extent of dividend amount, and the firm has to issue more number of shares to finance its investments. However the value of the firm remains same irrespective of the dividend policy.

Illustration 3: Vikas WSP LTD has 10 lakh outstanding shares, with the market price of Rs. 50 each. The firm is planning to pay Rs. 4 or dividend per share. The discount rate is 12 percent. What will be the price of its share at the end of the year if(a) dividend is not paid and (b) dividend is paid as above? Vikas is expecting to earn a net profit Rs. 60,00,000 in the current year, and has investment opportunities of Rs. 1,50,00,000 during the period. Decide how many new shares should be issued. Also find out the value of the firm. Answer the above question using M–M model.

Price of the share at the end of the current year can be determined with following equation:

$$P_o = \frac{D1 + P1}{1+k}$$

$$^2 P1 = P_o (1+K) - D1$$

The value of Vikas share when dividend is not paid.

$$= P1 = 50 (1+.12) - 0 = Rs.56$$

Vikas share value when dividend is paid:

$$= P_1 = 50 (1+.12) - 4 = \text{Rs. } 52.$$

Number of new shares to be issued to finance new investments:

When dividend is not paid:

$$MP_1 = I - (X - Nd_1)$$

$$\text{Rs. } 56 \text{ m} = \text{Rs. } 1,50,000 - (60,00,000 - 0)$$

$$\text{Rs. } 56 \text{ m} = \text{Rs. } 90,00,000$$

$$M = 1,60,714$$

When dividend is paid:

$$\text{Rs. } 52 \text{ m} = I - (X - nD_1)$$

$$\text{Rs. } 52 \text{ m} = \text{Rs. } 1,50,00,000 - (60,00,000 - 40,00,000)$$

$$\text{Rs. } 52 \text{ m} = \text{Rs. } 1,30,00,000$$

$$M = 2,50,000$$

Value of the firm:

$$N_{po} = \frac{0 + (10,00,000 + 16074) 56 - (56 \times 160714)}{1 + .12}$$

$$= \frac{5,60,000}{1.12} = \text{Rs. } 5,00,00,000$$

When dividend is paid:

$$= \frac{5,60,00,000}{1.12} = \text{Rs. } 5,00,00,000$$

M-M further state that the firm need not have only equity capital to hold their model true. They conclude that their hypothesis of dividend irrelevance holds good even if the firm raises debt capital instead of equity capital. For this, they put forth their indifference hypothesis with reference to leverage.

The above conclusions are based on several restrictive assumptions of M.M. model. The dividend policy may effect the value of a share if those assumptions are relaxed and the market imperfections are considered, as discussed below:

Tax Differential: M-M made a simplistic assumption of no taxes or same rate on both dividends and capital gains but the reality is far from the assumption. In most of the countries both of them are taxed albeit at different rates. Normally dividends are clubbed with ordinary income for tax purpose which is taxed at a higher rate when compared to the capital gains. However, in India the dividend income is tax free in the hands of investors from the financial year 1998-1999. The companies pay a special tax of 10 percent of the profits distributed which is similar to tax deduction at source. The current long-term capital gains tax rate is 20 percent. From the tax point of view the shareholders prefer the dividends. Therefore investors may prefer shares with high dividend pay out, to maximize their wealth.

Floatation Costs: M–M assume that the cost of retained earnings and external financing are same. But in reality, the process of raising fresh capital from the capital market involves significant expenses in terms of floatation costs which may be in the range of 6 to 10 percent of capital raised. Thus, the higher cost of external financing, makes the retention of earnings a favourable option. However, companies tend to maintain dividend payments, despite changing earnings, as a policy, unless the earnings change by a significant proportion.

Transaction and Monitoring Costs: M–M model assume that transaction costs do not exist. They also assume that the shareholders can sell a small portion of their shares in lieu of dividend, when they are indifferent between dividend and capital gains. But reality is far from that assumption. The shareholders have to pay brokerage and often incidental costs to sell their shares. As a percentage, the transaction costs vary inversely with the sale value of shares i.e., higher the value of shares sold lower the percentage of transaction costs and vice versa.

Existence of Perfect Capital Market: M–M assume that there exists a perfect capital market where information is freely available and future share prices are known with certainty. In practice, companies do not share complete information with shareholders. The process of monitoring the company and the manager's performance involves significant costs and also leads to uncertainty in future share prices. Therefore, timing of selling the share to encash the capital gains in lieu of dividend income becomes difficult. As a result, shareholders may prefer dividend income to capital gains.

To disseminate information to the share holders about the future earnings a company can make statements to create a favourable impression. These statements attract greater attention if they are accompanied by dividend announcement. For example, if a firm's earnings are expected to grow in the future and if the firm does not announce increase in the dividend payment, shareholders may not attach enough importance to such views of growth in future earnings. Therefore, the share value may not reach realistic value.

Uncertainty And Preference for Dividend: M–M profess that the dividend policy continues to be irrelevant even under the conditions of uncertainty, because the share value of two firms with identical investment policies, business risk and future earnings cannot be different. These views are not convincing to many researchers. According to them, investors try to reduce uncertainty to some extent through dividends. Their views are akin to the bird-in-hand argument of Gordon who argues that the discount rate increases with uncertainty, suggesting the preference of shareholders for higher dividend payment. The preference for a steady stream of income in the form of dividends by a section of investors also strengthen this argument.

Diversification: Even under the conditions of certainty, the argument of same discount rate for all firms may not hold good because of investors' preference for a diversified portfolio of securities. To fulfil their desire share holders like the firm to distribute the earnings to invest in other firms. As such, the investors may use higher discount rate for firms with high retention ratios compared to firms which pay high dividends by accessing external financing to meet their requirements. Therefore, the value of the firm may increase if it pays higher dividends instead of retaining them.

15.6 PROCEDURE OF PAYING DIVIDENDS

The dividends can be declared only by the board of directors, which is subject to the ratification by the shareholders in the annual general meeting. Once declared the dividends become a current liability of the firm. They can be paid only out of profits (after providing depreciation) of the current or past years. The dividends are payable to those investors whose names appear in the shareholders list of the firm, on a particular date announced in advance for that purpose, which is normally called record date. The buyers can get the shares transferred in their name before the record date. Buyers get the dividend from the seller if the shares are bought “cum dividends”. If the shares are bought on “ex dividend” basis, the buyers should return the dividend, if they receive.

15.7 TYPES OF DIVIDENDS

Several types of dividends exist in practice. Companies usually pay ‘Regular cash dividends’. These may be paid once a year or more times in a year splitting the amount. In some western countries, it is common to pay dividends quarterly which is rare in India. Here the word regular does not convey any legal obligation of the company to compulsorily pay dividends. It only connotes that the companies can maintain similar payments in future also. For that purpose, dividends are set at such a level that a firm can pay even during the years of poor performance. In a particular year, if a company pays a higher dividend and it believes that such payment is not possible in future, it will declare the extra dividend as special dividend indicating that they are not liable to be repeated.

For example, Lakme Ltd., and Max India Ltd are distributing around 1000 percent as special dividends out of profits made by selling part of their businesses. Investors naturally, will not expect similar pay outs in future.

Companies may also choose stock dividends instead of cash dividend. It is not uncommon in West to popular the payment of regular stock dividends of around 5 percent. Such practice is not in India so far, though occasional stock dividends of higher percentage in the name of bonus shares are popular in India. Stock dividends are very similar to stock splits. They increase the number of shares, but will not bring fresh funds to the firm, and will reduce values per share. But a stock dividend leads to capitalization of reserves equal to the sum of new shares at par value. In case of a stock split the face value (par value) will be reduced to increase the number of shares. So, there will not be transfer of funds even in the books of accounts.

There are some other non cash dividends, corporate gifts, and discounts fall in this category. For example, Reliance Industries Ltd., has been offering discounts on its products, to the shareholders. In some countries companies encourages shareholders to reinvest their dividends continuously, by allowing some discount, on prevailing market price. By offering reinvestment opportunity to the shareholders, the company can fulfil both payment of dividends and issuing of new share for additional capital simultaneously. In the process the company can also save the floatation costs of issuing new shares.

15.8 FACTORS INFLUENCING THE DIVIDEND POLICY

A firm choosing a dividend policy will have to decide about the portion of earning to be distributed as dividends, and the portion to be retained either for liquidity needs or for investments. Various factors should be considered while finalizing the dividend policy. They are firm's expected rate of return on new investment opportunities, tax rates on dividends, and capital gains legal considerations, liquidity and debt servicing, control of management, shareholders expectations, access to the capital market, and the implications of following a particular dividend policy.

New Investments: If new investments are not available to the firm with attractive rates of return and it is not willing to retire the debt, firm may use the earnings to distribute as dividends. In a growing economy, if the firm finds good investment opportunities, it may use major portion or all earnings to finance the new projects. This can be found in case of new and fast growing companies with profitable ventures. They may do so after considering the relative costs and benefits of internal and external financing. At times, firms may retain earnings in liquid assets, even if profitable investments are not available currently, with the hope of investing in future. In real life, companies neither follow 100 percent retention nor 100 percent distribution of their earnings, whether projects with good returns are available or not.

Expectations of Shareholders: No doubt dividend decision is the prerogative of the company directors. However, they only represent the shareholders, who are the owners of the company, and they appoint the directors. Thus due importance will be given to the share holders' expectations with regard to dividends. Shareholders' preference for dividend or capital gains hinges on their economic status and tax rates applicable to dividends and capital gains. Share holders having sources of other regular income may not attach much weightage to regular dividend, compared to those who depend on dividends as regular income. Similarly, institutional investors who buy large blocks of stocks prefer regular dividend to meet their own dividend obligations.

In case of closely-held companies, it is easy to ascertain the expectations of the shareholders to adopt a dividend policy of their choice. But, in case of companies with large number of shareholders distributed across the country, it is hardly possible to gather their views on expected dividend policy. Under the circumstances, the directors may tend to meet the expectations of the dominant groups of the shareholders. The minority groups may switch over to other companies which meet their expectations. So, at times companies should formulate its dividend policies keeping the target groups of shareholders in mind.

Taxes: As explained in the dividend theories, the capital gains and dividend income are not treated as same for tax purpose in most countries. In many countries capital gains are treated favourable with a lower tax rate when compared to dividends. However the situation is reverse in India, since dividends are tax-free to the shareholders from 1998-99. Instead of the shareholders, the companies pay 10 percent tax on the distributed earnings, which is similar to uniform tax rate irrespective of the individual shareholder's tax slab. The current long-term capital gains tax rate is 20 percent. Therefore, investors may prefer shares with high dividend pay-out. Institutional investors are exempt from both capital gains tax, and tax on dividends.

Legal Restrictions on Paying Dividends: The companies have to follow certain legal norms while deciding the dividend payments. Some of the restrictions are: (a) The companies Act provides that dividend shall be paid only out of the current profits or past profits after providing for depreciation. But, the Central Government is empowered to allow any company to pay dividend for any financial year out of the profits of the company without providing for depreciation; (b) Lenders may put restrictions on dividend payment to protect their interests when the firm is experiencing liquidity or profitability problems.

Control: The existing management group normally tries to continue their control on the company. When a company pays dividend and raises new equity capital, the shareholding of the management group may come down as a percentage, unless they increase their share holding proportionately. If they are unwilling to increase their shareholding they may retain more earnings to finance the projects. Thus, the control aspiration will affect the dividend policy.

Access to Capital Market: In spite of policy to distribute high dividends and raise new capital to finance the new investments, companies may fail to do so, when the capital markets are in a highly depressed state. The firms may prune the dividend rate in such periods until they are able to access the capital market as per their expectations.

15.9 DIVIDEND STABILITY

Companies normally dislike to change their dividend policies too often. Even the share holders value stable dividends higher than fluctuating one. There are three forms of stable dividends. They are:

- ▣ Stable dividend per share or rate
- ▣ Stable dividend pay-out ratio, and
- ▣ Stable dividend per share plus extra dividend.

Stable Dividend per Share: Most companies prefer to pay a fixed amount per share as dividend per share, regardless of fluctuations in the earnings. The dividends follow a very slow but steady up ward or downward trend over a period of time. Relationship between earnings per share and dividend per share is noticeable in figure 15.1.

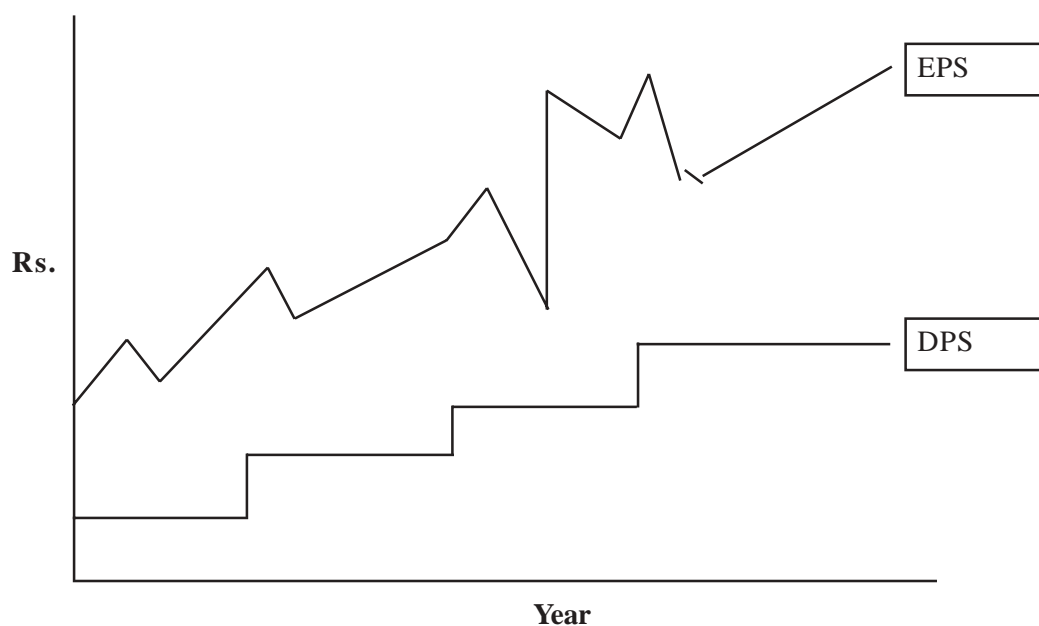


Figure 15.1: Relationship between EPS & DPS

It is easy to follow this policy when the earnings are stable. If they change wildly, companies find it difficult to maintain stable dividends. To smoothen the dividend payments companies dig into their reserves to pay the constant dividend in years of low earnings. Research indicates that companies paying stable dividends will be preferred by the investors.

Stable Pay Out: Some companies may follow the policy of paying a fixed portion of earnings as dividends. Then the dividends entirely depend on the current year earnings, and therefore dividend per share varies accordingly. In this policy internal financing is automatic and it removes the trouble of over or under payment of dividends. As a result the share values may change wildly. Companies seldom follow this policy.

Stable Dividend per Share plus extra Dividend: In this method the company pays a stable regular dividend, and also pays an extra dividend in years of high profits. Very few companies follow this method as policy.

Residual Dividend Policy: Companies can finance their investments through funds from debt market, retained earnings, and equity capital. Once the company finalizes the investment and the target debt equity ratio, it will secure the debt funds accordingly. The equity component will comprise of retained earnings and new equity shares. In that components the management will decide on how much to meet from retained earnings and capital market by selling new shares. The earnings left over in the process will be distributed as dividends.

15.10 DECIDING THE DIVIDEND PAY OUT RATIO

Based on a survey of corporate managers John Linter emphasized the following points with reference to dividend policies:

- Firms pursue long-term target dividend pay out ratios.
- Managers do not attach much significance to dividend declarations, if they do not represent any change from the current dividend policy of the respective firms.
- Dividend changes indicate significant changes in the long-term earnings. However, dividends will be smoothened over a period of time. Temporary shifts in earning will not reflect in dividend payments.
- Managers dislike to reduce the dividends. So they tend to be overcautious in recommending dividend hikes.

Considering the above facts, Linter developed a simple model to explain the dividend payments. According to the model, if a firm decides on a target pay out ratio, the dividend in the next fiscal will be equal to a constant proportion of earnings per share (EPS).

$$\begin{aligned} D_1 &= \text{target dividend} \\ &= \text{target ratio} \times \text{EPS}_1 \end{aligned}$$

then, the change in dividend will be equal to

$$\begin{aligned} &= D_1 - D_0 = \text{target change} \\ &= \text{target ratio} \times \text{EPS}_1 - D_0 \end{aligned}$$

Any firm following a constant pay out ratio will be paying different amounts of dividends whenever earnings change. According to Linter, managers dislike

changing dividends, preferring, smooth progression instead. Therefore, dividend change as per Linter may conform to the following model:

$$(D_1 - D_0 = \text{adjustment rate}) (\text{target change}) \\ = \text{adjustment rate} (\text{target ratio} \times \text{EPS}_1 - D_0)$$

Through this model firms can slowly move towards their respective target pay outs instead of repeatedly changing dividends. This model suggests that dividend hinges on both current earnings and dividend of the previous year. Some of Indian studies also confirm the Linter's hypothesis.

15.11 SUMMARY

The annual earnings of firm can be paid as dividend or retained for investments increase the firm's value. The Walter's model suggests to take the dividend decision based on firms rate of return and its discount factor, with several restrictive assumptions. Gordon expresses similar moves, but indicates that risk increases with futurity, therefore giving more importance to dividends. M-M hypothesis indicates the irrelevance of dividend policy to enhance the firm's value.

In practice, firms have been found pursuing a stable dividend policy and they consider several factors before deciding on dividend payout rate.

15.12 SELF ASSESSMENT QUESTIONS

- ▣ What are the factors which influence management's decision to pay dividend of a certain amount?
- ▣ Discuss the implications of making dividends tax free.
- ▣ "If it is all very well saying that I can sell shares to cover cash needs, but that may mean selling at the bottom of the market. If the company pays a regular dividend, investors can avoid that risk" discuss.
- ▣ "Risky companies tend to have lower target pay out ratios and more gradual adjustment rates" do you agree? Give reasons.
- ▣ What are the different pay out methods? How do shareholders react to these methods?
- ▣ Distinguish between bonus shares and share split. What is their impact on earnings per share, dividends, and market price?
- ▣ Between 1971 and 1995 one could explain about two thirds of the variation in TEP Ltd's dividend changes by the following equation:

$$D_t - D_{t-2} = -0.90 + .54 (-34 \text{ EPS}_t - D_{t-1}), \text{ Discuss.}$$
- ▣ Do you agree with Walter's dividend model? Discuss its relevance and limitations.
- ▣ Examine the M.M's irrelevance hypothesis. Critically evaluate its assumptions.
- ▣ What is the informational content of dividends? Discuss its influence on share value.

15.13 FURTHER READINGS

Van Hore, James W. *Financial Management and Policy*, Printice Hall Inc, New Jersey. Schall, L.D., and Halley C.W., *Financial Management*. Mc Graw Hill Inc. New York.

Pandey I. M *Financial Management*. 7 ed, Vikas, New Delhi

Brealy R.A., and Stewart C. Myers. *Principles of Corporate Finance*, 4 ed, Tata Mc Graw Hill Ltd., New Delhi.

R M Srivastava, *Financial Management and Policy*, Himalaya Publishing House, Mumbai, 2003.