

DIVIDEND – A CRUCIAL AREA OF FINANCIAL MANAGEMENT

The subject matter of financial management has been changing at a rapid rate. In olden days, the scope of financial management was limited to the raising of funds, whenever needed, and no significance used to be attached to the day-to-day financial management decision-making and problem solving. The emphasis then shifted to the wise utilization of funds as a development. And today, the financial manager is not in a passive role of a scorekeeper of the accounting information and arranging funds, whenever directed to do so. Rather, he occupies a key position in top management and plays a dynamic role in solving the complex management problems. Financial management stresses the analytical approach for solving the financial problems which bases itself in step-by-step understanding and analysis of a problem.

Dividend decision of a firm is a crucial area of financial management. The important aspect of dividend policy is to determine whether the earnings should be retained or to be distributed to the shareholders. Here arise conflicts. The shareholder expects dividend which will maximize his wealth. In contrast, the firm's view may be to retain such earnings as they are the most significant internal source of raising funds. The objective in choosing a dividend policy should be to maximize the value of the firm to its shareholders since the dividend policy affects the value of the firm and its cost of capital.

Everything has exceptions (Even an exception has exceptions). Modigliani and Miller's (hereinafter referred as M-M) hypothesis differs from that of the other models like that of Gordon's and Walter's. According to M-M, the dividend policy of a firm is irrelevant as it does not affect the wealth of the shareholders (An exception to other models). They argue that the value of the firm depends on the firm's earnings which result from its investment policy. Thus the split of earnings between dividend and retained earnings is of no significance in determining the value of the firm when investment decision of the firm is given. Let us take up M-M hypothesis for discussion as they are the only opposition of a general model.

M-M's hypothesis of irrelevance is based on some assumptions (Exception to an exception) which include perfect capital markets, non existence of taxes or same rate of tax for capital gains and dividend, fixed investment policy and non existence of risk of uncertainty (we will consider the assumption even if it is impracticable). Their concept can be explained by simple formulae. Forget about the exam where "cut and paste" or "copy and paste" would have happened. Do not worry even if you had left the topic in choice. Let us learn lively the basic idea behind the formula that might help you crack other formulas.

We know that the rate of return is the ratio of earnings to purchase price. The rate of return for a share held for one year may be calculated as follows:

$$\text{Rate of return} = \frac{\text{Dividends} + \text{Capital gains (or loss)}}{\text{Purchase price}} = \frac{D_1 + (P_1 - P_0)}{P_0}$$

Where D_1 is dividend at time 1, P_1 is the market price at time 1 and P_0 is the purchase price. According to M-M, rate of return (r) should be equal for all shares. If it is not so, the low-return yielding shares will be sold by investors who will purchase the high-return yielding shares. This will reduce the price of low-return shares in turn increasing the price of high return shares.

Since $r=k$ in the assumed world of certainty and perfect market, let us continue with the basic formula as under:

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

Multiply on both sides of the above equation by the number of shares outstanding, n , to obtain the following:

$$n P_0 = \frac{n (D_1 + P_1)}{(1 + K)}$$

If the firm sells 'm' number of new shares at time 1 at a price of P_1 , the value of the firm at time 0 will be as follows:

$$\begin{aligned} n P_0 &= \frac{n (D_1 + P_1) + mP_1 - mP_1}{(1 + K)} \quad (\text{Adding and subtracting 'mP1' will not affect the equation}) \\ &= \frac{nD_1 + nP_1 + mP_1 - mP_1}{(1 + K)} \\ &= \frac{nD_1 + (n + m) P_1 - mP_1}{(1 + K)} \quad \dots\dots\dots(1) \end{aligned}$$

The investment programmes of a firm, in a given period of time, can be financed either by retained earnings or the issuance of new shares or both. Thus the amount of new shares issued will be:

$$mP_1 = I_1 - (X_1 - nD_1) = I_1 - X_1 + nD_1$$

Where I_1 represents the total amount of investment during first period and X_1 is the total net profit of the firm during first period. Substituting the above in (1), we get,

$$\begin{aligned} n P_0 &= \frac{nD_1 + (n + m)P_1 - (I_1 - X_1 + nD_1)}{(1 + K)} \\ &= \frac{\cancel{nD_1} + (n + m)P_1 - I_1 + X_1 - \cancel{nD_1}}{(1 + K)} \\ &= \frac{(n + m)P_1 - I_1 + X_1}{(1 + K)} \end{aligned}$$

And that's it. We have come to an end. A firm retains its earnings if the internal rate of return is higher than the cost of equity. It can also raise funds for investment externally if it pays dividend out of its earnings. Thus when the firm pays dividends, its advantage is offset by external financing. Also share value declines if dividends are paid. Therefore in the situation where $r = k$, the PV of share after dividend and external financing is equal to the PV of share before dividend, making the shareholder indifferent between payment of dividend and retention of earnings.

While evolving a dividend policy, the management of the firm must strike a balance between two most important aspects – Long term financing and wealth maximization.

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