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DIVIDEND DECISION

Dividend decision is one of the most complex and significant financial decisions. Every financial manager is concerned with the problem of how should the total profits of the firm be allocated between cash dividend and retained earnings so that the objective of the financial management is achieved. As it is the most complex aspect of financial management, an attempt has been made to provide a theoretical background to this problem. The interest of the shareholders is considered as the guiding factor for handling this problem.

Rational investors invest in a company in order to maximise their own wealth, therefore, they would like to have the firm retain all profits if expected return to them as a result of reinvestment of profits is more than what they can earn for themselves. Thus financial manager is justified in retaining earnings only if the rate of return earned on the withheld profits would be as high as or higher than that which could be earned on the funds if invested elsewhere by the shareholders. It means the amount of earnings retained should be determined by comparing internal rate of return (r) with the cost of capital (k), a rate of return generally available to investors in comparable shares. If the firm has investment opportunities promising $r > k$, profit retention becomes desirable. In such a situation, each rupee retained contributes to the wealth of shareholders something more than that which they can contribute themselves had the dividends been paid and reinvested by them. If $r = k$, they are indifferent between dividend payment and retention because funds distributed as dividends could also be invested by them in the market at the rate equal to r. Retention policy affects their interest, in such a situation, in no way and, therefore, market value of their shares must remain unchanged.* If $r < k$, profit retention becomes detrimental to the interest of shareholders because firm is investing their

*Here it is assumed that there are no transaction costs involved in purchasing shares in the market and that there is no tax differential between cash dividend and capital gain.

money less profitably. Accordingly, if there are sufficient opportunities for profitable expansion, all of current profits should be retained in the business. On the other hand, if there are no such opportunities, all the profits should be distributed to the shareholders in the form of cash dividends.

The apportionment of profits between cash dividends and retentions on the basis of above reasoning brings us to the conclusion that dividends paid would be simply a residual fluctuating with the level of investment demand, and would be that portion of current profits which could not be profitably reinvested. It means shareholders attach no importance to the amount of dividends actually received (whether less or more), they see the amount of earnings and how effectively the firm intends to utilise these earnings. This is so because the efficiency and effectiveness with which retentions are employed affects the wealth of shareholders through a change in share value. They consider retention of earnings by the firm as desirable only when they are convinced that the firm will invest it more profitably than they themselves can. Hence dividend decisions are of relevance to the shareholders but dividends as such are irrelevant for them.

The aforesaid discussion reveals that the wealth of shareholders increases by retention when $r > k$; but Merton H. Miller & Franco Modigliani[7] argue that in the above case increase in shareholders wealth is not because of retention rather because of profitability of investment. According to them, this wealth could also be increased if instead of retention external financing is employed. On the basis of this argument, they prove that under certain conditions, dividend decisions are totally irrelevant and have no influence on the wealth of shareholders whatsoever. Shareholders' interest remains unaffected whether whole of the profits are distributed or retained. Their contention is that the value of the firm is determined by the earning power on the assets of the firm and that the allocation of profits between dividends and retentions does not affect this value. They demonstrate that under the following assumptions their proposition holds good.

i) There are perfect capital markets in which all investors behave rationally. Information is available to all at no cost and there exist no transaction or floatation costs.

ii) A world of perfect certainty and no Taxes.

iii) There is a fixed investment policy in which rate of return exceeds the cost of capital.

They say if, under the above conditions, dividends are paid ; to the extent of dividend payment external financing will be needed to undertake a given investment policy. Issue of shares as a means of external financing will result into an increase in the number of shares outstanding. The earning power of the firm, capitalization rate, total assets etc., remaining constant, the value per share will come down. Thus what the investor gains in cash will be offset by a decrease in share value. Total wealth of shareholders remains unaffected. Reflection of earnings into cash dividends or capital appreciation depends upon the dividend policy. But it is of no significance because under the assumed conditions, investor is said to be indifferent between cash dividends and capital gains. Hence, dividend decision is irrelevant. The following example clarifies its effects.

EFFECTS OF DIVIDEND POLICY ON THE FIRM (SHAREHOLDERS)

A. *Position in the beginning of the year*

		X Ltd.	*Y Ltd.*
1.	Expected profits	Rs. 1,00,000	Rs. 1,00,000
2.	Earning yield	10%	10%
3.	Capital raised	Rs. 10,00,000	Rs. 10,00,000
4.	No. of shares	1,00,000	1,00,000
5.	Price per share	Rs. 10	Rs. 10

B. *Position at the end of the year*

i) Before Div. Declaration

6.	Profit earned	Rs. 1,00,000	Rs. 1,00,000
7.	Capital at the end	Rs. 11,00,000	Rs. 11,00,000
8.	No. of shares	1,00,000	1,00,000
9.	Price per share	Rs. 11	Rs. 11

ii) After Div. Payment & Financing

10.	Dividend paid	Rs. 1,00,000	—
11.	Sale of shares @ Rs. 10	Rs. 1,00,000	—
12.	Total finance	Rs. 11,00,000	Rs. 11,00,000
13.	Expected profits	Rs. 11,000	Rs. 11,000
14.	Earning yield	10%	10%
15.	Total value of the firm	Rs. 11,00,000	Rs. 11,00.000
16.	No. of shares	1,10,000	1,00,000
17.	Price per share	Rs. 10	Rs. 11

There are two companies X Ltd. and Y Ltd. identical in all respects operating under the assumptions of M M Model. Each company is expected to earn a profit of Rs. 1,00,000 by making a capital investment of Rs. 10,00,000. Earning yield is 10%. Both the companies raised a capital of Rs. 10,00,000 by issue of 1,00,000 shares @ Rs. 10 each. This is disclosed by Sec. A of Table—1.

During the year, both the companies earned profit of Rs.1,00,000. This results into an increase in the value of the firm to Rs. 11,00,000. Both the companies require Rs. 1,00,000 to invest in their respective project which ensure earnings of 10%. Now the two companies are considering different policies : X Ltd. wants to pay dividend of Rs. 1,00,000 and finance its project by issue of new shares to existing shareholders. Dividend payment of rupee one per share causes the share price of X Ltd. to come down to Rs. 10. After dividend payment, X Ltd. issues 10,000 shares pari passu to existing shareholders at the rate of Rs. 10 each and realises Rs. 1,00,000 for undertaking the new project. On the other hand, Y Ltd. retains the whole of the profits and reinvests them.

After payment of dividends and new financing, resources available at the disposal of both the companies for implementing policy are the same. Therefore, their expected future income will also be the same. In our example, capitalization of expected earnings of Rs. 1,10,000 at the rate of 10% (market rate of return) in both the companies put their value at Rs. 11,00,000 each. However, the price of a shares in two companies differ owing to different number of shares outstanding. The number of shares outstanding at the end of the year (after dividend and financing decision) are 1,10,000 in case of X Ltd. and 1,00,000 in Y Ltd. Consequently, the price of a shares of X Ltd. is Rs. 10/- (i.e. Rs. 11,00,000/1,10,000) and that of Y Ltd. Rs. 11/- (i.e. Rs. 11,00,000/1,00,000). It clearly implies that dividend policy exercises no influence on the value of the firm.

Now let us see the impact of Dividend Policy on the wealth of shareholders by extending the previous example. For analysis, take the case of two shareholders, one owing 1,000 shares of X Ltd. and another that of Y Ltd. Since the price of a share of each company at the end of the year (before dividend declaration) is Rs. 11/- the worth of their respective shares would be Rs. 11,000.

As already presumed, Y Ltd. does not declare the dividend and reinvests the retentions at market rate of return (k). Therefore, discounted value of its shares will remain at the same figure of Rs. 11. The wealth of Y Ltd's shareholder at the end of the year (after dividend and financing decision) would be Rs. 11,000 (1000×11). On the other hand, payment of dividend by X Ltd. reduces the share value by one rupee. Thus shareholder of X Ltd. receives dividend of Rs. 1000 (rupees one per share) from the company and at the same time pays Rs. 1000 to it for purchase of 100 shares offered at the rate of Rs. 10/-. In other words, shareholder purchases shares from the company with dividend money. Now he is the owner of 1100 shares (1000+100) or Rs. 11,000 (1,100×10) worth of shares. The wealth of the shareholders represented by shares is the same at the end of the year (after implementation of different dividend policies) in both the cases with the only difference that one holds lower number of shares (1000 shares) with higher value (Rs. 11) and the other larger number of shares (1100 shares) with lower value (Rs. 10). Thus the effect of dividend decision on investment policy may be avoided by selling equity shares to the existing shareholders. Even if new shares are sold to investors other than existing shareholders, the irrelevance of dividend decisions would hold good. It has been shown in the following paragraph.

To continue with the same example, shareholder of X Ltd. will receive Rs. 1,000 as dividend. The price of a share after dividend decision comes down to Rs. 10 as shown by Sec. B (17) of Table 1. Since he is the owner of 1,000 shares, his wealth will consist of a cash of Rs. 1000 and shares of Rs. 10,000 totalling to Rs. 11,000. On the other hand, shareholder of Y Ltd. has shares worth Rs. 11,000. It means wealth of shareholders by a dividend decision remains unaffected but the components of their wealth may change. The wealth of one shareholder is increased because of cash dividend and that of another due to capital appreciation. Under M M assumptions the investor is indifferent between cash dividend and capital gain. It is so because if shareholder of Y Ltd. wants a cash of Rs. 1,000, he may sell 91 shares out of his holdings and realise Rs. 1,001. Thereafter his wealth will be represented by a cash of Rs. 1,001 and shares of Rs. 9,999, the same as that of X Ltd's shareholder. On the other hand, if shareholder of X Ltd. wants to be in the position

Y Ltd's shareholder, he may acquire it by purchasing shares worth Rs. 1,000 with dividend money.

The above example is illustrated by assuming that new equity is employed as a means of external financing. MM maintain that it does not make any difference to their irrelevance proposition even if external financing involves debt because the real cost of debt, under the assumptions taken, would be the same as real cost of equity.

For convenience, it is presumed in the previous example that r=k. MM arguments also hold true when internal rate of return is greater than earning yield (k). Where new investment promises r>k, if profits are distributed, shareholders can invest the funds only at the lower market rate, but the firm will pay the same lower rate on new external funds received. As a result the amount of profit accruing to the old shareholders will increase and this increase in profit will exactly offset the loss sustained because of lower return earned on outside investment.

Thus it is inferred from the well contended theory of MM that dividend decision does not deserve any importance as it has no effect on the wealth of shareholders and is, therefore, totally irrelevant. Now we intend to analyse the situation by removing MM assumptions and bringing their model closer to actual conditions in which future is not certain, markets are not perfect, transaction/floatation costs and taxes do exists.

MM argue that the implementation of investment policy remains unaffected by dividend decision because the loss of funds due to dividend payment could be made good by external financing. But we know that in real conditions retained earnings are preferable to new equity financing because of various reasons which are explained below :

(*i*) Funds from retained earnings are immediately available to the business. There is no problem of negotiation with suppliers of capital. They only await the decision of the firm to use them. This source of finance is of great significance when the firm has good investment opportunity at its disposal and there is temporary reluctance in the market

to purchase its shares. Further there is no dilution of control in case of retentions whereas the same exists when shares are sold. Thus retained earnings are considerably more convenient and avoid dilution of control.

(*ii*) Second factor which favours the retention of earnings is found in the cost involved in floating the shares in the capital market. Retained earnings do not involve any funds-raising cost whereas this cost do exists in the form of underwriting fees and other issuance expenses when shares are floated.

(*iii*) Decline in the market value of shares because of new equity issues favour the retention as opposed to external financing. Lintner contends that the equilibrium prices of a share of stock will decline as the firm sells additional stock to replace dividends[4]. Shares sold at bargain prices reduce the value of existing shares. To continue with the old example, if share price is reduced because of offerings, the firm will have to sell more shares to replace dividends, consequently the price per share will come down after dividend and financing decision.

(*iv*) Retention may be preferred by shareholders when they want to postpone their tax liability. If an investor gets current income as cash dividend, he will have to pay tax on the same and when his capital appreciates it will be subject to tax only when he realises it in the form of capital gain. Thus an investor can postpone tax payment for an indefinite period if he so desires. This benefit accrues to him even when there is no tax differential between cash dividend and capital gain. His preference for retention enhances when tax on cash dividend is higher than that on capital gain. Under this situation, shareholders' tax payments are reduced as well as delayed. It means if tax on capital gain is less than that on cash dividend and the firm has profitable investment opportunities, the value of the firm's shares will be increased. Thus a company closely held by a few tax payers in high tax brackets is likely to pay relatively low dividend.

(*v*) Management may also prefer retention when its shareholders have to reinvest the cash dividend distributed. It is so because retention avoids transaction cost for purchase shares and inconvenience which the shareholders face while reinvesting the dividends.

The above reasons clearly show that the management and shareholders have a favour for retained earnings as a source of funds in contrast to new equity financing. But we are aware that, in real world, the cost of retained earnings is considered to be relatively high and, therefore, from the point of view of maximising shareholders' wealth, funds should be raised through debts and preference shares. However, a company cannot satisfy all its financial requirements through cheaper debt and preference capital. An appropriate balance must be maintained among various sources of finance in such a way that average cost of capital is minimised. To achieve this balance, investment opportunities must be financed in party by equity capital. However, on account of above reasons, there is a strong pressure for use of retained earnings than new equity issues.

Therefore, so long as the firm has investment proposals having a rate of return more than cost of capital, it should use retained profits and the amount of senior securities, the increase in equity base will support to finance these proposals. If all such opportunities are exhausted, balanced profits should be distributed as cash dividends. Where the amount required for profitable investment opportunities exceeds the amount of retained earnings plus the senior securities it will support, the excess will be financed with the combination of new equity and senior securities issue.[9]

In real world, external financing, does not exactly offsets the benefits of retained earnings and, therefore, retentions are desirable for maximising shareholders' wealth. However, retained earnings provide income to the shareholders in the form of capital gain as opposed to cash dividend. If cash dividends are unimportant for shareholders, retentions will be made in accordance with the investment and financing decisions of the firm. On the contrary, if they have a preference (whether rational or irrational) for cash dividend, their desire should be honoured while drafting a dividend policy. There are number of arguments which indicate shareholder's

preference for cash dividend as against capital gain. These are explained below for further analysis.

(*i*) Future is uncertain. Under uncertainly, investors are guided by the dictum, "a bird in hand is worth two in the bush". It seems natural to suppose that under real conditions, there may well be cases in which, given the investments that management has in mind, the shareholders would prefer the certainty of an immediate cash payment to the problematic future gains that might be obtained from entrusting these funds to the management. Accordingly, investors feel satisfied with lower current income in the form of cash dividend as against higher future income about which they are not certain. They want early resolution of uncertainty and are willing to pay price for it. In other words, investors use a higher value of K if they expect the firm to use retained earnings, and use a lower value of K if they expect it to pay dividend and use external financing.

(*ii*) There are certain investors who have preference for current income in terms of cash because they want to use it for consumption purposes. They live on the income received in the form of dividends. It may be argued that these investors could also realise cash by sale of shares to the extent of capital gain. But they do not consider it good because they do not want to dip into their capital. It causes a lot of inconvenience to the investors as they are asked to go to the capital market for realising their income. Fluctuation in prices makes it difficult for shareholders and discourage them to enter the capital market. Further if despite these problems, they decide to enter the capital market for selling a portion of their holdings, they are required to incur costs such as brokerage fees. On the other hand, no such problem arises and they incur no cost when cash dividend is paid. Hence an obvious favour for cash dividends.

(*iii*) Tax laws give different treatment to capital gains and cash dividends for computing taxable income of the investors. Where tax liability of the investor is less on account of receipt of income in the form of cash dividend, he will

prefer current income in form of cash dividend. For example a small investor in India may like to have cash dividend because his income from investments to the extent of Rs. 3,000 is exempt from tax and at the same time is saved from a lot of botheration involved in sale of securities.

(*iv*) Cash dividend gives the shareholder a choice as to which company uses his funds without having to sell his shares and incurring transaction costs. In this case shareholder re-invests the dividends in the shares of a company only when he is satisfied with its functioning. Further raising funds through capital market puts a company subject to market discipline which ensures, to a certain degree, profitable investments of resources. Shareholders may be justifiably suspicious of companies which retain an exceptionally high proportion of earnings and thus decline to submit to the financial secrutiny and discipline involved in raising external equity.[6] It is at least partly for this reason some investors assign several times more weight to dividends than to retained earnings.

(*v*) With the intention of reducing their risk, some investors want to diversify their portfolios in different companies. Therefore, they prefer to have cash dividend so that the funds may be invested in other companies rather than have the profits continually retained and reinvested in the same firm.

Under the circumstances explained above in favour of cash dividends, the investors would be willing to pay a higher price for a share that offers the greater current dividend, all other things held constant. The above arguments clearly indicate that only a portion of the market has preference for cash dividend as opposed to capital gain.

To conclude, it may be said that some investors have the preference for cash dividend while others have that for capital gain. Thus there is a need for Dividend Policy that fit the investment preference for a variety of investors. However, it may be mentioned that attempt of all firms to cater to the dividend and investment preferences of an average shareholder may prove to be costly. For example, a firm that combines dividend payment with right issue

incurs costs in the form of underwriting fees and other issuance expenses, and causes some of the shareholders to pay unnecessary taxes. Further it would not be desirable for all companies to pay 100% of their profits, as dividends or for all companies to retain 100% of their profits. It may be suggested that companies should determine their long-term policies keeping in view expansion program, expected income and nature of the concern. It would be desirable if this policy is based on the principle of dlvidend stability as it conveys the message about prospective future earnings of the concern and the dividend which the company is expected to declare. The policy so framed in accordance with the requirements of the company should be consistently followed. This may also help those who partly (or wholly) depend upon cash dividend as a source of their current income. A Dividend Policy based upon long-term company's needs (and the principle of stability) would result into different target payout ratios for different companies. As a consequence, each investor would be in a position to invest in a company of his choice. However, if at any point of time, the company feels that the number of investors preferring its payout policy are not enough, it may adjust its payout ratio in the eight of any preference that investors have for cash dividends.

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