DIVIDEND THEORIES, DETERMINANTS AND DIVIDEND POLICY OPTIONS
CHAPTER II

DIVIDEND THEORIES, DETERMINANTS AND DIVIDEND POLICY OPTIONS

Dividend being an important aspect of the investment activities has been very widely discussed, debated and researched upon. Hence any study on dividend requires an understanding of not only the theoretical foundation but the practices followed by companies. Hence an attempt is made in this chapter to briefly explain the past work in this area as well a review of the related studies.

The formulation of a sound dividend policy is a significant financial decision. It is necessary that a dividend policy be evolved giving due consideration to many factors, chief among them being legal considerations internal requirements and shareholders requirements. The formulation of such a policy is very significant among management decisions because as discussed earlier, to an extent, it forms the basis of financing decision which in turn decides and is decided by the investment decisions.

Every company follows some kind of dividend policy. The dividend policy of a company is to fix the portion of the net earnings to be retained and that to be distributed among the shareholders. While determining a dividend policy, the decision makers should keep in mind, two points. First, the policy should give some consideration to
the interests of each of the groups comprising of shareholders with varying individual interests. Secondly, the dividend policy once established should be continued as long as it does not interfere with the efficient financial functioning of the company.

SIGNIFICANCE OF DIVIDEND POLICY

Dividend policy substantially affects the financial structure of a corporation, the flow of funds, liquidity, share prices and the investor satisfaction with regard to the return on his investment. It helps in achieving the main financial objective of a company namely maximisation of its value. If the value of a company is a function of its dividend payout ratio, the dividend policy would directly affect its market value. A shareholder’s wealth includes not only the market price of his shares but also his current rate of dividend. Market price of a company’s shares is determined by the capitalisation of future dividends at a particular capitalisation rate. This rate is typically dependent on the industry within which a company operates and the estimated uncertainty of the dividend rate.

“Dividend Policy, as intimately related to retained earnings, refers to a policy concerning the quantum of profits to be distributed as dividend. This is probably one among the most important area of decision making for a finance manager. Action taken by the management in this area affects growth rate of the company. An
erroneous dividend policy may land the company in financial predicament and capital structure of the company may turn out unbalanced. Progress of the company may be hamstrung owing to dearth of resources which may result in fall in earnings per share. Stock market is very likely to react to this development and share prices may tend to sag leading to decline in the total value of the company."

If strict dividend policy was formulated so as to retain larger share of earnings, plentitude of resources could be made available to the company for its growth and modernisation purposes. This will give rise to additional business earnings. In view of the improved earnings position and financial health of the enterprise, the value of shares will increase and a capital gain will result. Thus, in the absence of dividend, shareholders are rewarded with capital gains in lieu of dividend income. That may be the reason why even though growing companies have paid little or no dividends they have experienced a steady rise in the market price of their shares. There may be a chance of raising the level of the market price of the shares of the company by raising the dividend rate. In other words, retained earnings provide returns in the long run while dividends do so in the short run. The reverse holds true if liberal dividend policy is followed so as to pay out

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higher dividends to shareholders. Consequently, the stockholders’
dividend earnings will increase but the possibility of capital gains is
reduced. Investors desirous of immediate income will value greatly
shares with high dividend. This is so, not only to obtain a share in
income but also because when dividends are paid the stock market may
respond positively to this development and value of shares may
increase.

It is thus evident that, in the views of the investors, in retention of
earnings lie capital gains. Distribution of income, on the other hand,
increases current earnings.

Owing to varying notions and attitudes due to differences in
respect of age, tax bracket, security, income related preferences and
such responsibilities, while some shareholders are primarily concerned
with the short run or regular returns, while others think in terms of
long-run returns and still others seek a portfolio which balances their
expectations over time.

The result is that dividend decision materially affects the
stockholders’ wealth. In this chapter an attempt in made to discuss the
determinants of the dividend policy of a company and also the
dividend policy options which are available to the companies in
general.
TYPES OF DIVIDEND POLICIES

The following policy options are broad enough into which would fall any specific policy adopted or followed by any company.

STABILITY OF DIVIDENDS

Stability of dividends means regularity in paying some dividend annually. The amount of dividend may or may not fluctuate from year to year and may or may not be related with earnings.

"Stability or regularity of dividends is considered as a desirable policy of the management of most companies. Shareholders also generally favour this policy and value stable dividends higher than the fluctuating ones. All other things being the same, stable dividends have a positive impact on the market price of the share. There are a number of companies which have records of paying dividend for a long unbroken period". 5

Stable dividends may take many forms important among them being:

A. CONSTANT RUPEE DIVIDEND PER SHARE

As the name suggests this policy entails paying out a certain amount of dividend consistently over a period of time. The dividend may not bear any relationship to the actual earnings of the company.

This policy does not imply that the dividend per share will never

be increased. When the company reaches new levels of earnings and expects to maintain such increased earnings, the annual dividend per share may be increased. A number of companies follow the policy of paying a fixed amount per share as dividend every year, irrespective of the fluctuations in the earnings.

This policy is followed when earnings are stable. On the other hand if the earnings of a company is widely fluctuating, it might be difficult to follow such a policy. Under such circumstances it is essential for a company which wants to follow this policy, to build up surpluses in years of higher than average earnings in order to maintain dividends in years of below average earnings.

The dividend policy of paying a constant amount of dividend treats common shareholders somewhat like preference shareholders without giving any consideration to investment opportunities within the company and the opportunities available to shareholders outside. Increase or decrease in market values may even be of little concern of these investors and this condition tends to produce a steady long-run demand that automatically stabilize that market value of the share’. This policy is generally preferred by those persons who depend upon the dividend income to meet their living as well as by institutional investors most of which would prefer steady dividends.
Regularity of dividends is significant for an investor who wishes to purchase shares in a company. The confidence of investors is increased by taking a look at the past dividend behaviour of companies. A regular dividend establishes the company's position in the stock market. It provides the company an opportunity for taking decisions about the future of the company with regard to its expansion programmes. It also infuses strength and confidence in the minds of creditors because of the stable value which makes it easier for the company to raise loans from outsiders.

Companies opting to pay a regular dividend should be careful to maintain it every year. If the rate goes down, the danger of a fall in the value of company's stock in the market would sometimes be imminent. This would result if a high dividend is declared such that the company may not be able to maintain the same rate in the forthcoming years. It may be due to the fact that dividends have an information value and a fall in dividend might be perceived as lesser future efficiency on the part of the company.

B. CONSTANT PERCENTAGE OF NET EARNINGS OR CONSTANT PAYOUT

Some companies follow a policy of constant payout i.e., distributing a certain percentage of net earnings constantly every year in which case the amount of dividend will fluctuate directly in
proportion to the earnings. This policy may be supported by managements because the dividends in such a case are related to the company’s earnings. If the company incurs losses no dividends may be paid regardless of the desires of shareholders. Internal financing through retained earnings is automatic when this policy is followed. At any given payout, the amount of dividends and the additions to retained earnings increase with increasing earnings and decrease with decreasing earnings. One of the most appealing features of this policy to some is its conservatism and its guarantee against over or under payment. It does not allow a management to pay dividends if profits are not earned in the current year and may desist a management to decide forego dividend if profits are earned.

C. SMALL CONSTANT RUPEE DIVIDEND PER SHARE PLUS EXTRA DIVIDEND

Under the constant dividend per share policy the amount of dividend is set at a level so as to maintain regularity and this policy could be usually adopted by such companies characterized by stable earnings. Companies with fluctuating earnings which could not adopt such a policy could go in for a policy to pay a minimum dividend per share giving due regard to its earnings with a step-up feature during times when earnings permit so. The amount of regular dividend is fixed to reduce the possibility of ever missing a dividend payment. By
designating the higher dividend paid in periods of prosperity as extra dividend, an attempt is made to prevent the investors from perceiving that the increase in dividend represents permanent increase in the dividend amount. This type of policy enables a company to pay constant amount of dividend regularly and allows in that aggregate deal an element of flexibility in supplementing the income of shareholders only when the company’s earnings are higher than the usual, without committing itself to make such larger payments as a regular part of the future dividend.

This would be suitable for a company which would like to have a policy of giving both regular incomes to its shareholders plus extra dividends whenever the company is able to do well with regard to earnings. An extra dividend in the form of interim dividend is a good policy because the interim dividend is not an expectation of the investor and when he receives it he is rather optimistic about the future of the company without expecting more than the stable regular income. Extra income need not be declared annually but only when the company makes higher earning. This gives the advantage to the investor to share in the extra profits of the company without a commitment for continuous annual extra payments.

A company might follow any one of the above discussed policies, or it might also decide against any stability in dividends. This
of course, could be done only if the various determinants discussed here under, are completely controllable and/or determinable by the company. This situation is possible when the share holding pattern is such that the number of shareholders are very limited, referred to as closely held companies and also those shares which are not regularly traded in the market implying that changes in the market values is immaterial. On the other hand, a company which has total absence of control over the determinants also might be forced by circumstances not to go in for stability in dividends. In both these cases dividend would be paid by such companies only based on such factors which would be dominating like, for example, availability of cash, profits, etc.

Mention may also be made of liberal dividend or conservative dividend policies which can be considered as variations of such a policy.

**THEORIES ON DIVIDEND POLICIES**

Basically the established theories relate to what extent dividend decisions are relevant in meeting the financial objectives of the company involved. While two of the theories say that dividend decisions are relevant one refutes this saying that this decision is irrelevant. Walter and Gordon belong to the former school of thought while the Modigliani-Miller theorem (MM theory) formulated by
Franco Modigliani and Merton Miller forms the latter school of thought. Actual practices might fall into any one of the above theories.

**WALTER MODEL**

According to James E. Walter the essence of dividend policy is, if the company is confident of generating more than market returns then only if it retains higher profits and pay less as dividends (or pay no dividends at all) the market value would increase, as the shareholders can expect (higher share prices based on) higher ROI of the company. However, if the company is not confident of generating more than market returns, market value would increase only if it pays out more dividends (or 100% dividends). This is due to two reasons. One, the shareholders prefer early receipt of cash (liquidity preference theory) and second, the shareholders can invest this cash to generate more returns (since market returns are expected to be higher than returns generated by the company). Over the years, various studies have been attempted to establish the relationship between dividends and stock prices.

Assumptions underlying the above model are, the company is a going concern with perpetual life span. The only means of finance is retained earnings i.e., no other alternative source of financing. The cost of capital and return on investment are constant throughout the life of the company.
The model considers internal rate of return (IRR), market capitalisation rate (Kc) and dividend payout ratio in determination of share prices. However, it ignores various other factors determining the share prices. It fails to appropriately calculate prices of companies that resort to external sources of finance. Further, the assumption of constant cost of capital and constant return are unrealistic. If the internal rate of return from retained earnings (ROI) is higher than the market capitalization rate, the value of ordinary shares would be high even if the dividends are low. However, if the ROI of the business is lower than what market expects, the value of shares would be low. In such cases, the shareholders would expect a higher dividend. If ROI is greater than Kc, market value would be high even if dividends are low. In spite of the impracticality of the assumptions, Walter model explains why market prices of shares of growth companies are high even if dividend payout is low. It also explains why the market prices of shares of certain companies which pay higher dividend and retain low profits are high.

**GORDON'S MODEL**

Myron J. Gordon of the University of Toronto theorized that firms with a rate of return greater than the cost of capital should have a higher retention ratio and those firms which have a rate of return less than the cost of capital should have a lower retention ratio. The market
value would be maximised only on adopting these policies. The dividend policy of the firms which have a rate of return equal to the cost of capital however will not have any impact on its share value. Incidentally this is the point of difference between Walter and this model.

Gordon's model assumes that the investors are rational and risk averse, prefer certain returns to uncertain returns and therefore put a premium to the certain returns and discount the uncertain returns. Thus, the investors would prefer current dividends and avoid risk. Retained earnings involve risk and so the investors discount the future dividends. This risk will also affect the stock value of the firm.

Gordon explained this preference for the current income with the bird in hand argument. Since a bird in hand is better than two in the bush, the investors would prefer the income that they earn currently to the income in future which may or may not be available. Thus, the investors would prefer to pay a higher price for the stocks which earn them current dividend income and would discount those stocks which either postpone/reduce the current income. The discounting will differ depending on the retention rate (percentage of retained earnings) and the time.
MM THEORY

Using the process of arbitrage, Miller and Modigliani have explained the irrelevance of the dividend policy in determining the value of the stock. The process of arbitrage balances completely by offsetting two transactions which are entered into simultaneously. Arbitrage can be applied to the Investment function of the firm. As mentioned earlier, firms have two options for utilizing its after tax profits; to retain the earnings and plough back for investment purposes and/or distribute the earnings as cash dividends.

If the firm selects the second option and declares dividend, then it will have to raise capital for financing its investment decisions by selling new shares. Here, the arbitrage process will neutralize the increase in the share value due to the cash dividends by the issue of additional shares. This makes share value of the firm being determined more on the future earnings of the firm, than on its dividend policy. Thus, if there are two firms having similar risk and return profiles the market value of the shares will be similar in spite of different pay-out ratios.

However this model is based on the following critical assumptions:

1. The first assumption is the existence of a perfect market in which all investors are rational. In perfect market condition there is easy access to information and the flotation and the transaction costs
do not exist. The securities are infinitely divisible and hence no single investor is big enough to influence the share price.

2. Secondly, it is assumed that there are no taxes, implying that there are no differential tax rates for the dividend income and the capital gains.

3. The third assumption is a constant investment policy of the firm, which will not change the risk complexion not the rate of return even in cases where the investments are funded by the retained earnings.

4. Finally, it was also assumed that the investors are able to forecast the future earnings, the dividends and the share value of the firm with certainty.

The MM model has been subject to criticisms due to the impracticality of the assumptions.

Thus, according to the MM Model, the market value of the share is not affected by the dividend policy.

FACTORS DETERMINING DIVIDEND POLICY

Consciously or otherwise a company generally establishes a policy with respect to the payment of dividend. Having discussed the various dividend policy options it would be relevant to consider the factors involved in formulating a dividend policy. The company’s decision regarding the amount of earnings to be distributed as dividend depends on a number of factors, chief among which are the following.
LEGAL REQUIREMENTS

The dividend policy of the company has to be evolved within the legal framework and restrictions. The directors are not legally compelled to declare dividend. Section 205 of the Companies Act, 1956 which lays down the source from which dividend can be paid, gives room for payment of dividend out of past profits and/or from current profits or out of monies provided by the Central/State government. Thus by law, a company is allowed to declare a dividend even in a year when the profits are inadequate or when there is absence of profits. However, in a year when there are meager profits, while one company may skip the payment of dividend, another company may seek to use the alternatives offered by the law. In declaration of dividends a distinction would have to be made as between “Profits available for distribution” and “Profits available for dividend”. While the former refers to the maximum profits which can be legally distributed as dividend, the latter denotes profits which the directors recommend for distribution. Even when there are no profits in the commercial sense, yet there can be divisible profits. There is, legally no prohibition against profits from sale of fixed assets from being distributed as dividend subject to certain conditions. Whether such a course of action is prudent or not is altogether a different matter, while one company may decide in favour of distributing dividends out of such profits another company may prefer not do so.
Once a company decides to declare a dividend it is required to transfer a certain percentage of its profit to reserves, which amount depends on the rate of dividend. Even after transferring profit to reserves and declaring dividends, still there may be a balance of profit. Whether this residue is to remain in the profit and loss account itself or any higher percentage of profit is to be transferred to reserves depends largely on the practical considerations and policy of the management.

In a particular year, when there is absence of profit or inadequacy of profit and the profits of earlier years are more freely available for distribution, then the earlier years' profits will have to be transferred to reserves. Because in the latter case, it would be declaration of dividend out of reserves and the provisions of section 205 A(3) of the Company's Act 1956 are applicable to the company concerned which is bound by such restrictions and conditions laid down in the companies rules.6

The above regulations have been made with an intention to protect the interests of the creditors and shareholders themselves. The creditors interest are protected from the company returning the capital to shareholders in deference to priority of creditors which would be the case when dividends are declared in the absence of adequate profits. The long run interest of the shareholders are taken care of, whereby the

company is restrained from squandering away profits as dividends resulting in intimidation of growth and paucity of funds.

**CONTRACTUAL REQUIREMENTS**

Payment of dividends involves a cash outflow. When this is considered undesirable by creditors from the point of view of their interest, companies may be forced to restrict the dividends, whereby the earnings are reinvested within the company, mainly because reinvestment leads to a lower debt-equity ratio and thus increasing owners' stake, thereby enhancing the cushion for the lenders. Restrictions on the payment of dividends may be imposed on company through suitable clauses at the time of entering into a loan agreement, or under the terms of issue of debentures, or preference share agreement or a lease contract. Such restrictions may cause the company to restrict the payment of cash dividends, unless a certain level of earnings had been achieved or to limit the amount of dividend paid to a certain amount or percentage of earnings. The restriction on dividends may take three forms. In the first place, companies may be prohibited from paying dividends in excess of a certain percentage. Alternatively, a ceiling in terms of the maximum amount of profits that may be used for dividend payment may be laid down the net profits, or absolute amount of such profits can be paid as dividend. The dividends may also be restricted by insisting upon a minimum of earnings to be retained.
Therefore, contractual constraints on dividend payments are important consideration. The payment of cash dividend in violation of such a restriction would amount to an act of default in the case of loan and the entire principal would become due and payable. In view of the severity of the penalty, the dividend will have to be kept within the covenants committed under the relevant agreements.

LIQUIDITY

The liquidity position of a company is yet another consideration in dividend decisions. As dividends represent a cash outflow, the greater the cash position and overall liquidity of a company the greater is its ability to pay a dividend. A company that is growing and profitable may not be liquid if its funds are locked up in fixed assets and permanent current assets. Since the management usually desires to maintain some liquidity cushion to give it flexibility and protection against uncertainty with regard to cash needs, it may be reluctant to jeopardize this position in order to pay a large dividend. The liquidity of the company is strongly influenced by its investment and financing decisions. The investment decision determines the rate of asset expansion and the need for funds and the financing decisions determines the way in which this need will be financed. The short term funds need of companies which have to retire past loans as their maturity year is approaching or preference shares are to be redeemed
would be higher. Such companies may not like to borrow at exorbitant rates because of the increased financial risk especially if their financial leverage is already very high. Hence, if the liquidity position is comfortable the company would adopt a liberal dividend policy.

**GROWTH PROSPECTS**

Another set of factors that can influence dividend policy relates to the growth prospects. A company’s need to plan for financing its expansion/modernization programmes, coupled with the availability of external funds and its associated cost to meet the required investable funds, would have a significant bearing on the company’s dividend policy.

The company’s financial requirements are directly related to its investment needs. If a company has untapped investment opportunities, which it would like to exploit, such companies designated as “growth” companies, are constantly in need of funds. Their financial requirements may be characterized as large and immediate. Retention of earnings in such circumstances is more convenient and less costly than going in for a new issue of equity or raising loans. Moreover retention of earnings provides the base upon which the company can borrow additional funds if need arises in the future. Therefore, it provides flexibility in the company’s capital structure, i.e., it makes room by creating additional debt capacity. The importance of creation
of debt raising potentials for a growing company is overwhelming. Such companies would prefer a low pay out.

On the other hand, if a company has little or no growth opportunities, it will probably prefer low retention rates and relatively high dividend payout. This is so for two vital reasons. The shareholders can reinvest earnings at a higher rate than the company itself and secondly in many instances, the need for funds may be largely to replace or modernize assets and may not be required immediately. The nature of the company's needs therefore is an important factor in determining the dividend policy. In other words, need for funds would favour a higher retention and in the absence of such need distribution of profit more liberally would be resorted to.

EARNINGS STABILITY

The stability of a company's earnings stream also has a significant bearing on its dividend decision. Generally, the more stable the company's income stream, the more stable and higher could be its dividend payout. This is because such companies are confident enough of maintaining a higher dividend payout consistently. Public utility companies are classic examples of companies that have a relatively stable earnings which would muster debt funds at a relatively lower cost because of a smaller total risk (business and financial) would be in a position to adopt a liberal dividend policy. This is unlike the
experience of companies which, though growing, suffer from fluctuating earnings.

**INFORMATION**

The finance manager should remember that dividends have information value. When a shareholder receives stable dividend this information about their shares are considered by the investors as the management’s perception of the future of the company. It is also able to influence a large number of investors to continue to retain their investment in that particular share.

Withholding the payment of dividend will raise the required rate of return of the investor and therefore, depress the market price of the shares. In such circumstances unless the increase in earnings is such that it can offset an unfavourable effect of the increase in required rate, market price might be difficult to achieve.

**CONTROL**

Dividend policy may also be strongly influenced by management objectives. Sometimes management employs dividend policy as an effective instrument its position of command and control. The management in order to retain control of the company in its own hands may be reluctant to pay substantial dividends and would prefer a smaller dividend payout. This will particularly hold good for companies which require funds, to finance profitable investment
opportunities when an outside group is seeking to gain control of the company. Added to this, if a controlling group of shareholders either cannot of does not wish to take up new equity shares of the company, its only source of funds will be retained earnings. In such circumstances, by an issue of additional shares for financing investment opportunities, the management may have a fear that it may lose its existing control. On the other hand, if the management is securely in control either because it possesses a substantial holding because the shares are widely held and the company has a good image, it can afford to have a high dividend payout. This is because the company can easily raise additional funds owing to its reputation if it requires funds later, without substantially losing control over the management.

OWNERS' CONSIDERATIONS

While all the above relate to internal and external consideration of the company in question, there are number of owner related considerations in the sense, the shareholders' points of view which also will have to be taken into account.

OWNER'S OPPORTUNITIES

The investment opportunities available to members of the company and the likely return there from is an important consideration. The company should not retain funds if the return likely to be earned
by it would be less than the one which could be earned by the investors themselves from investing their resources elsewhere. Under such conditions the policy of retention would obviously be detrimental to the interests of the shareholders. Since it would not be possible to ascertain the alternative investment opportunities of each of its shareholders or the alternative investment opportunity rate, the company should try to determine the rate of return obtainable from external investments. If it is found that the owners have better opportunities outside, the company should opt for a higher dividend payout. If the company’s investment opportunities yield a higher rate than that which is likely to be obtained from similar external investment, a low dividend payout would be beneficial. Therefore, in formulating dividend policy, the evaluation of the external investment opportunities of owners is very important.

**TAXABILITY**

The tax payable by shareholders on the dividend distributed by the company could be an important owner related constraint to be considered by the company. If dividend income could be exempted from payment of tax, shareholders would prefer dividends. Otherwise they may prefer higher retention, to be declared later as bonus share. This is because, according to section 205(3) of the Companies Act, 1956 no dividend shall be payable except in cash. However, the
Income-Tax Act defines the term dividend so as to include any distribution of property or rights having monetary value. But under section 2 (22) of the Income Tax Act (which treats certain distributions as dividend though they may not be regarded as dividend under the Companies Act) issue of bonus shares to equity shareholders is not treated as dividend. Therefore liberal dividend policy would become unattractive from the point of view of the shareholders/investors in high income bracket. Thus a company which considers the taxability of its shareholders, may not declare liberal dividend though there may be huge profits, but may alternatively retain if for issuing bonus shares later. However tax laws keep changing both with reference to the income and gains part and with regard to tax rates and the current status will have to be considered. This may not be important as a long term factor.

CAPITAL MARKET CONSIDERATIONS

The factor that can strongly affect dividend policy is the extent to which the company has access to the capital market. A company said to have easy access to capital market if it is financially strong and can raise the needed amount of finance through issue of a desired security without any difficulty at any desired time. In such a case the company can follow a liberal dividend policy. If the company has only limited access to capital market it would have to adopt low dividend
payout mainly because, such companies are likely to rely more heavily on retained earnings as a source of financing their investments.

In evaluating its financial requirements the company should consider not only its ability to raise funds but also the cost and convenience involved and the promptness with which finance can be obtained. In general, the large and mature have greater relative easiness of new sources for raising funds than small and new. For this reason, alone, the availability of external funds to the growing company may not be sufficient to finance a large number of acceptable investment projects. Therefore, large retentions are necessary for such companies.

Many companies today look upon financial institutions which are large investors of funds in securities market. In order that the companies can remain on the "eligible" list of these institutions they may have to declare a minimum dividend. It is because, in general as already observed, most of the financial institutions are prohibited by their charter from investing in companies which pay no dividends, to become eligible the companies should have paid dividends, to become eligible the companies should have paid dividends at a certain minimum rate for at least some specified number of years. Since such institutions are major purchasers of corporate securities, their requirements should also have to be satisfied. Hence a consister
dividend declaration would be resorted to, if the company looks upon such financial institution for investment in their share capital.

INFLATION

"Inflation is another factor which affects the company's dividend. With rising prices, Funds generated from depreciation may be inadequate to replace obsolete equipment. These companies have to relay upon retained earnings as a source of funds to make up the short fall. This aspect becomes all the more important if the assets are to be replaced in the near future. Their dividend payout tends to be low during period of inflation".7

To sum up, in determining a dividend payout, the typical company will analyse a number of factors most of which were as described above. These factors largely dictate the boundaries within which a dividend payment decision can be taken. When a company pays a dividend in excess of its residual funds, it implies that the management i.e. the board of directors believes that the payment is likely to have a favourable effect on shareholders' wealth. However, very little is available for clear generalizations from the empirical evidence. The lack of firm footing for predicting the long-run effect of a specific dividend policy on valuation makes the dividend decision

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more difficult in many ways than either that of investment or financing decisions. Considerations discussed above allow a company to determine an appropriate dividend strategy. An active dividend policy involves an act of faith, because it demands that a portion of the cumulative dividends ultimately be replaced with common-stock financing. Such a strategy is undertaken in a confused area, but one in which most academics have difficulty believing shareholder wealth will be enhanced".  

The above discussion gives an account of established theoretical determinants. In effect, these determinants can be broadly categorised as the companies’ operations related, the company management’s dispositions, legal aspects, shareholders’ requirements and market aspects. Among the above factors the management’s disposition, shareholders’ requirements and market expectations are considered either highly individualistic or behavioural oriented and hence may not be amenable for measurement for statistical analysis. As stated earlier the companies’ operation related factors based on financial information alone are being considered as factors for the present analysis. Such factors are identified, appropriate measures of each of the factors are selected which forms the identified variables and are subject to statistical analysis.

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The companies' operational aspects may be categorised as profit related, financial structure or capital structure related and liquidity related.

**PROFITABILITY**

Profitability of any company is reflected in the profits earned with reference to various bases like sales, capital, etc. The measures with reference to profits are gross profit ratio, net profit ratio, earnings per share (EPS), return on capital employed (ROCE), return on net worth (RONW) and return on net working capital (RONWC). Each measure signifies specific aspect or quality of profit.

**CAPITAL STRUCTURE**

The proportion of debt and equity in the total capital of the company which forms the capital structure has important implications in terms of contractual and legal obligations and also usage of leverage. Hence they are considered important factors and measures relating to these factors are taken as the debt equity ratio, degree of financial leverage (DFL), interest coverage ratio and reserves to share capital ratio.

**LIQUIDITY**

Liquidity is availability of cash and is a vital requirement for dividend payment. The current ratio is widely used as a measure of liquidity. Cash balance and cash flows are also useful indicators of liquidity.
GROWTH

Growing companies need extra funds to be invested in expansion and other related projects. As was mentioned earlier, retained earnings would be considered an important source of funds and hence lower dividend payout. Growth can be measured in terms of rate of growth in fixed assets, growth in sales or profits, etc.

The above factors are theoretically expected to have an impact on dividend determination and have been established based on long standing research works but have been found as applicable or not based on time or specific conditions or both.

REVIEW OF LITERATURE

Many studies have been made to establish the fact that some kind of dividend policy is generally adopted by most companies. For the sake of convenience and comprehension, the studies have been categorised under various heads.

STABILITY IN DIVIDENDS

John Linter's (1956) study, which is considered a pioneering one and to date remains to be refuted, support the viewpoint that companies pursue a stable dividend policy. In other words, companies while taking decisions on the payment of dividend, bear in mind the dividend amount paid in the previous years. There is a resistance on the part of companies to reduce dividends below the amount paid in previous years. Actually most companies seem to favour a policy of establishing a non-
decreasing dividend per share stream over time, but companies seem to be specially careful not to raise dividends per share above a level than can safely be sustained in the future. This cautious "Creep up" of dividend per share results in a stable dividend per share pattern during fluctuating earnings per share periods and a raising "step-function" pattern of dividend per share during increasing earning per share periods. Dividends are "Sticky" in the sense that they are slow to change and lag behind shifts in earnings by one or more periods. Most companies, in addition to maintaining a stable rupee amount of dividend also have target payout ratios (Long run dividend payout ratio) which they aim at.9

Fama and Babiak (1968) re-evaluated Linter's model. Their results supported Linter's view that managers prefer paying a stable dividend and are reluctant to increase dividends to a level that the firm cannot sustain. They found that changes in a firm's per share dividend are largely a function of the firm's target dividend payout ratio, current or lagged earnings, and the last period's dividend. They concluded that Linter's basic model performed well relative to alternative specifications.10

Bond and Mougoue (1991) conducted empirical tests to see if the target dividend payout rates and the speed of adjustment implied in

Lintner's (1956) behavioral model accurately characterized firms' dividend policies. They concluded that the partial-adjustment model does not reflect the unique dividend policies of individual firms.\textsuperscript{11}

Baker and Powell (2000) analyse from their 1998 survey of NYSE-listed firms that little change occurred in dividend determinants between 1993 and 1998. That is, the factors described by Lintner (1956) still explain dividend behavior. Baker and Powell also observed that some industry-based differences in dividend determination declined between 1993 and 1998.\textsuperscript{12}

Hassan M. Shirvani and Barry J. Wilbratte (2000) analyse three alternative measures of ability to pay and found support for Linter's hypothesis that firms pursue a long-run target payout ratio and also that current earnings better explain long-run dividends than cash flows or stock prices. The evidence further indicates that corporations adjust dividends with a ratchet effect, raising them more readily than they lower them. More specifically, when dividends are below target levels, firms move toward equilibrium by increasing them, but when dividends are above target levels, firms approach equilibrium by restricting dividend increases as earnings rise.\textsuperscript{13}

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in their study draw several conclusions from their survey. Important among them are first, the results show that the major determinants of dividend payments today appear strikingly similar to Linter’s behavioral model developed during the mid-1950. In particular, respondents were highly concerned with dividend continuity. Second, the respondents seem to believe that dividend policy affects share value, as evidenced by the importance attached to dividend policy in maintaining or increasing stock price. Although the survey does not uncover the exact reasons for their belief in dividend relevance, it does provide evidence that the respondents are generally aware of signaling and clientele effects. Finally, the opinions of the respondents from the utilities differ markedly from those of the other two industries. The results suggest that managers of regulated firms have a somewhat different view of the world than managers operating in a competitive environment. Thus, it may be worthwhile to segregate regulated from non regulated firms when examining dividend policy. However one among the limiting factors is that views about dividend policy were obtained only from chief financial officers. Although CFOs' views should reflect the attitudes of top management more generally, CFOs are not the only individuals involved in dividend policy decisions. 14

DETERMINANTS OF DIVIDEND

McCabe's (1979) cross-section analysis of dividend payouts (dividends relative to sales as opposed to dividends relative to earnings) of U.S. firms from 1966 to 1973, includes variables intended to capture effects of investment opportunities, availability of funds and the firm's operating and financial leverage as reflected in beta. He also includes dummy variables for two digits SIC industries. He does not report the regression coefficients or the significance of the industry dummies, so one cannot discern whether his sample of 112 firms shows support for an industry effect.

Rozeff (1979) analyses dividend payout ratios for a cross-section of 1,000 unregulated U.S. firms from 1974 to 1980 with regard to firm-specific determinants. Casting the payout decision as a tradeoff between transaction costs and agency costs, his model includes variables intended to capture the effects of investment opportunities and earnings variability on dividend payout. In addition, it includes variables that serve as proxies for agency cost effects on dividend decisions. All the variables were found to be highly significant with the expected signs and the model accounts for nearly half of the variation in dividend payout ratios for his sample.

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Farrelly, Baker and Edelman (1986) surveyed 318 New York Stock Exchange firms that have what they described as "normal" dividend polices. Based on their analysis of responses from manufacturing, wholesale/retail and utility firms, they concluded that the major determinants of dividend payments are the anticipated level of future earnings and the pattern of past dividends. These factors are consistent with those identified by Linter (1956). Their results also revealed that managers believe that dividend policy affects share value and that managers are highly concerned with dividend continuity. In addition, their findings suggest that managers of utility companies view the dividend decision somewhat differently than manufacturing and wholesale/retail firms.17

Michael J. Brennan and Anjan V. Thakor (1990) developed a theory of choice among alternative procedures for distributing cash from corporations to shareholders. Despite the preferential tax treatment of capital gains for individual investors, it is shown that a majority of a firm's shareholders may support a dividend payment for small distributions. For larger distributions an open market stock repurchase is likely to be preferred by a majority of shareholders, and for the largest distributions tender offer repurchases dominate.18

PruPitt and Gitman (1991) asked the financial managers of the 1,000 large U.S. firms to describe the interplay among the investment, financing, and dividend decisions in their firms. The results suggest that the following factors are important influences on the amount of dividends paid: current and past years' profits, the year-to-year variability of earnings, the growth rate of earnings, and prior years' dividends.19

Mahapatra and Sahu (1993) analyze the determinants of dividend policy using the models developed by Linter (1956), Darling (1957) and Brittain (1966) for a sample of 90 companies for the period 1977-78 – 1988-89. They find that cash flow is a major determinant of dividend followed by net earnings. Further, their analysis shows that past dividend and not past earnings is a significant factor in influencing the dividend decision of firms.20

Mishra and Narender (1996) analyze the dividend policies of 39 state-owned enterprises (SOE) in India for the period 1984-85 to 1993-94. They found that earning per share (EPS) is a major factor in determining the dividend payout of SOEs.21

Narasiman and Asha (1997) discuss the impact of dividend tax on dividend policy of firms. They observe that the uniform tax rate of

10 percent on dividend as proposed by the Indian Union budget 1997-98 alters the demand of investors in favour of high payouts rather than low payouts as the capital gains are taxed at 20 percent in the said period.\textsuperscript{22}

Baker, Veit and Powell (2001) study the factors that have bearing on dividend policy decisions of corporate firms traded on the NASDAQ. The study, based on sample survey (1999) response of 188 firms out of a total of 630 firms that paid dividend in each quarter of calendar years 1996 and 1997, finds that the following four factors have a significant impact on the dividend decision; pattern of past dividends, stability of earnings, and the level of current and future expected earnings. The study also finds statistically significant differences in the importance that the managers attach to the dividend policy in different industries such as financial versus non financial firms.\textsuperscript{23}

Fama and French (2001) analyse the issue of lower dividends paid by corporate firms over the period 1973-1999 and the factors responsible for the decline. In particular they analyse whether the lower dividends were the effect of changing firm characteristics or lower propensity to pay on the part of firms. They observe that proportion of companies paying dividend has dropped from a peak of


66.5 percent in 1978 to 20.8 percent in 1999. They attribute this decline to the changing characteristics of firms: "The decline in the incidence of dividend payers is in part due to an increasing tilt of publicly traded firms toward the characteristic - small size, low earnings, and high growth - of firms that typically have never paid dividends".\textsuperscript{24}

Ramachandran (2001) analyses the variation in dividend yield for 21 emerging markets (including India) for the period 1992-99. His macroeconomic approach using country risk data, finds evidence for pecking order hypothesis – lower dividends are paid when higher growth is expected. The study also finds that political risk factors have no significant impact on dividend payments of firms in emerging markets.\textsuperscript{25}

Narsiman and Vijayalakshmi (2002) analyze the influence of ownership structure on dividend payout of 186 manufacturing firms. Regression analysis shows that promoters' holding as of September, 2001 has no influence on average dividend payout for the period 1997-2001.\textsuperscript{26}

Hardo Basuki (2007) in the findings of his study provides evidence that the majority of the sample companies he studied did not


change their dividend policy in accordance with the tax-based predictions following the 1997 abolition of tax credit on dividends. For such companies, other factors such as information release and signaling may have greater impacts on their dividend policies. Only a minority of the sample experienced a decline in their dividend payment. This evidence supports the hypothesis that the abolition of tax credit on dividends results in a decrease in aggregate dividend payment in order to satisfy a tax clientele.27

EARNINGS RELATED STUDIES

DeAngelo and Skinner (1992) analyse the relationship between dividends and losses and the information conveyed by dividend changes about the earnings performance. They examine the dividend behaviour of 167 NYSE firms with at least one annual loss during 1980-95 and those of 440 firms with no losses during the same period, where all the firms had a consistent track record of ten or more years of positive earnings and dividends. They find that 50.9% of 167 firms with at least one loss during 1980-95 reduced dividends, compared to 1% of 440 firms without losses. Their findings support signaling hypothesis in that dividend change improve the ability to predict future earnings performance.28

Kevin (1992) analyzes the dividend distribution pattern of 650 non-financial companies which closed their accounts between September 1983 and August 1984 and a net sales income of ten million rupees or more. He finds evidence for a sticky dividend policy and concludes that a change in profitability is of minor importance.\textsuperscript{29}

Bhat and Pandey (1994) studied the managers' perceptions of dividend decision for a sample of 425 Indian companies for the period 1986-87 to 1990-91. They find that on an average profit-making Indian companies have distributed about one-third of their net earnings and that the average dividend payout ratio is 43.6 percent. They also find that the average dividend payout ratio is 54 percent for the sample of both profit making and loss-making companies and the average dividend rate is in the range of 14.3 percent to 19.2 percent. They also observe variation in dividend policy of different industries. Further, an attempted survey of these 425 companies resulted in only 28 responses amenable for further analysis. Their analysis of the responses shows that managers perceive current earnings as the most significant factor influencing their dividend decision followed by patterns of past dividends. They also find two other variables, increasing equity base and expected future earnings to have significant influence. However, they find industry to have the least influence on the dividend, which has been contrary to the expectations\textsuperscript{30}.


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Benarzti, Michaely and Thaler (1997) analyse the issue of whether dividend changes signal the future or the past. For a sample of 7186 dividend announcements date by NYSE or AMEX firms during the period 1979-91, they find a lagged and contemporaneous relation between dividend changes and earnings. Their analysis also shows that in the two years following dividend increases, earnings changes are unrelated to the sign and magnitudes of dividend changes.31

Praveen Kumar and Bong-Soo Lee (2001) have developed an empirically tractable dynamic model of discrete dividend policy based on an inter-temporal coarse signaling framework in which dividend adjustments signal only substantial variations in the permanent earnings of the firm. Our theoretical framework relates the extent of dividend smoothing to the information content of dividends and also generates refutable predictions on the determinants of high or low smoothing by firms. It was shown that dividend smoothing is positively associated with factors that adversely impact the investor demand for the firm's shares. These factors include risk factors such as earnings variance, low liquidity, and high probability of bankruptcy, as well as the expected return on capital investment by the firm.32

Lee and Ryan (2002) analyze the dividend signaling-hypothesis and the issue of direction of causality between earnings and dividends – whether earnings cause dividends or vice versa. For a sample of 133 dividend initiations and 165 dividend omissions, they find that dividend payment is influenced by recent performance of earnings, and free cash flows. They also find evidence of positive earnings growth preceding dividend initiations (omissions).\textsuperscript{33}

**DIVIDEND POLICIES AND STOCK VALUE INFLUENCES**

Farrelly and Baker (1989) conducted a survey of institutional investors to learn what these investors consider important in a firm's dividend policy. Their findings show that these sophisticated investors believe dividend policy affects stock prices and dividend consistency is highly important.\textsuperscript{34}

Mustafa Kemal Yilmaz and Guzhan Gulay (2006) in their study relating to Istanbul Stock Exchange (ISE) examine the effects of cash dividend payments on stock returns and trading volumes in the stock market. It also investigates whether there is any difference in the investment behavior of investors with respect to the dividend payout ratio and size in the ISE from 1995 to 2003. Prices start to rise a few sessions before cash dividend payments, and on the ex-dividend day, they fall less than do dividend payments, finally decreasing in the sessions following the payment. Trading volume shows a considerable


upward shift before the payment date and, interestingly, is stable after. Thus, cash dividends influence prices and trading volumes in different ways before, at, and after payment, providing some profitable active trading strategy opportunities around the ex-dividend day. The findings support price-volume reaction discussions on the dividend payment date and the significant effect of cash dividends on the stock market.35

SIGNALING THEORY STUDIES

Harry DeAngelo, Linda DeAngelo and Douglas J. Skinner (1992) in their study found that managers of more than two-thirds of 145 NYSE firms responded to stalled earnings growth by increasing dividends, with most increases at least as large as the dividend increase in the peak earnings year. These dividend increases are difficult to reconcile with signaling models since (i) most firms' prior sustained earnings growth evaporated, and (ii) there is essentially no relation between favourable dividend signals and future earnings. The stock market recognized the reduced growth earnings, with average abnormal returns of -17.65 percent in the year of the initial earnings decline and -41.40 percent cumulated over that and the next three years. They state to have found some evidence that sample firms' dividend policies reflect behavioral biases that lead managers to send overly optimistic signals.36

Glen JD (1996) studies the dividend policy of firms in emerging markets. They find that firms in these markets have a target dividend payout rate, but less concerned with volatility in dividends over time. They also find that shareholders and government exert a great deal of influence on dividend policy and observe that dividends have little signaling content in these markets.\textsuperscript{37}

**OTHER RELATED STUDIES**

Bernsterin (1988) expresses concern over the decline in payout over a period of time in the US market. He observes that given the 'concocted' earnings estimates provided by firms, the low dividend payout increase investment risk and earnings risk for the investors. He asserts that "...try calculating the historical correlation between payout ratios in year $t$ and earnings growth over $t + 5$. The correlation coefficient is positive and statistically significant".\textsuperscript{38}

Frankfurter and Wood (1997) observed that firm dividend-payment patterns are a cultural phenomenon. They concluded that dividend policy cannot be modeled mathematically and uniformly for all firms at all times. Thus, Frankfurter and Wood advised researchers to study dividend policies more carefully as a cultural phenomenon rather than expending efforts in mathematical model building. Instead


of building models or developing theories about dividend policy, some researchers have attempted to study this "cultural phenomenon" by surveying corporate managers. Several studies attempted to identify factors that financial managers consider to be most important in determining their firm's dividend policies.  

Mohanty (1999) analyzes the dividend behaviour of more than 200 firms for a period of over 15 years. He finds that in most bonus issue case, firms have either maintained the dividends at pre-bonus level or only decreased it marginally there by increasing the payout to shareholders. The study also finds that firms that declared bonus during 1982-1991 showed higher returns to their shareholders compared to firms which did not issue bonus shares but maintained a steady dividend growth. He finds evidence for a reversal of this trend in the 1992-1996 periods. He attributes such a reversal in trend to the changed strategy of multi-national corporations (MNCs) and their reluctance to issue bonus shares.  

Abel Cadenillas, Fernando Zapatero and Sudipto Sarkar (2007) in their analysis state that the firm must decide the optimal dividend strategy, which consists of the optimal times and the optimal amounts to pay as dividends. Modeling this as a stochastic impulse control problem, they succeeded in finding an analytical solution. They also

find a formula for the expected time between dividend payments. A crucial and surprising economic result is that, as the dividend tax rate decreases, it is optimal for the shareholders to receive smaller but more frequent dividend payments. This results in a reduction of the probability of default of the firm. 41

Jean-Paul Décamps and Stéphane Villeneuve (2007) analyse the interaction between the dividend policy and the decision on investment in a growth opportunity, of a liquidity constrained firm. This lead to study a mixed singular control/optimal stopping problem for a diffusion that was solved quasi-explicitly by establishing a connection with an optimal stopping problem. Situations were characterized where it was optimal to postpone the distribution of dividends in order to invest at a subsequent date in the growth opportunity. It was shown that uncertainty and liquidity shocks have an ambiguous effect on the investment decision. 42

Pornsit Jiraporn and Yixi Ning’s (2007) study explores agency costs as a determinant of dividend policy. They examine how dividends are related to the strength of shareholder rights. The evidence reveals an inverse association between dividend payouts and shareholder rights, i.e., firms pay higher dividends when shareholder

rights are more suppressed. This evidence is consistent with the substitution hypothesis which contends that firms with weak shareholder rights need to establish a reputation for not exploiting shareholders. As a result, these firms pay dividends more generously than do firms with strong shareholder rights. In other words, dividends substitute for shareholder rights. Further, there is some evidence that regulation influences the association between dividends and shareholder rights. 43

Shankar and Gayathri (2006) in their study have made use of regression and partial correlation tools in assessing the impact of the variables on market value, by identifying data appropriately. This model has been applied in the present study since it was found to be an appropriate one. 44

Subba Reddy, Y (2007) in his study examines the dividend behavior of Indian corporate firms over the period 1990 – 2001 and attempts to explain the observed behavior with the help of trade-off theory, and signaling hypothesis. Analysis of dividend trends for a large sample of stocks traded on the NSE and BSE indicate that the percentage of companies paying dividends has declined from 60.5 percent in 1990 to 32.1 percent in 2001 and that only a few firms have consistently paid the same levels of dividends. Further, dividend-

paying companies are more profitable, large in size and growth doesn’t seem to deter Indian firms from paying higher dividends. Analysis of influence of changes in tax regime on dividend behavior shows that the tradeoff or tax-preference theory does not appear to hold true in the Indian context. Test of signaling hypothesis reinforces the earlier findings that dividend omissions have information content about future earnings. However, analysis of other non-extreme dividend events such as dividend reductions and non-reductions shows that current losses are an important determinant of dividend reductions for firms with established track record and that the incidence of dividend reduction is much more severe in the case of Indian firms compared to that of firms traded on the NYSE. Further, dividend changes appear to signal contemporaneous and lagged earnings performance rather than the future earnings performance.\textsuperscript{45}

\textbf{SUMMARY}

1. Most studies on dividend behavior have confirmed Linter’s model namely;

(i) “Creep up” of dividend per share results in a stable dividend per share pattern during fluctuating earnings per share periods and a raising “step-function” pattern of dividend per share during increasing earning per share periods.

\textsuperscript{45} Dr. Y. Subba Reddy. 2007. Asst. Professor, Institute for Financial Management and Research (IFMR), Chennai.
(ii) Firms aim at a target dividend payout rate, but less concerned with volatility in dividends over time.

(iii) Evidence for a sticky dividend policy is found and they conclude that a change in profitability is of minor importance.

2. Studies on determinants have found that factors that have important influences on the amount of dividends paid to be: current and past year's profits, represented as net earnings, EPS rates of return on varied bases, the year-to-year variability of earnings, the growth rate of earnings, prior years' dividends, expected higher growth and cash flow.

3. The response rate from companies in India to obtain responses in the form of opinions about dividend policies had been very poor.

4. Cash dividends influence prices and trading volumes in different ways before, at the time, and after payment.

5. Despite the preferential tax treatment of capital gains for individual investors, it was shown that a majority of a firm's share holders may support a dividend payment of small distributions.

6. Companies facing uncertainty and liquidity problems have an ambiguous effect on the investment decision, resulting in lower dividend payments.

7. Institutional investors believe that dividend policy affects stock prices and that dividend consistency is highly important.

9. Even though studies on managers’ opinion stated that future earnings is an important factor in deciding on any raise in dividends, other studies have found that the relationship between current dividend and future earnings, post-facto, shows a highly skewed picture.

10. In general under any category, it was seen that studies in India and on Indian companies had been very limited.