CHAPTER VI

DIVIDEND PATTERN
After studying the trends obtaining in the appropriation of corporate earnings in the preceding Chapter, we shall now proceed to survey the pattern of dividend declared by the corporate units in India. By pattern of dividend is meant the size and shape of payout and the factors affecting the same. While analysing the number of dividend-declaring companies and their payout frequency, it has been found that about 90% of such companies paid dividend out of current earnings, leaving only 10% which disbursed dividend out of the past surplus. A good number of companies could not pay dividend despite profits in the current year, because of arrears of depreciation and past losses. In the present chapter attempts have been made to find out as to how far the dividend declared has been restricted to a reasonable return on capital or net worth and what influence has been exerted by the different factors viz. current year’s profit, depreciation, development reserves, accumulated surplus and lagged year dividend for a particular year.

Divisible profits are the reward for risk capital i.e. preference and equity share capital. Preference shares issued by most of the companies in India are always cumulative shares, on which dividend at fixed rate accrues from year to year, like interest on debentures. Paid-up value of such shares represents the interest of preference share-holders, whereas the interest of equity share-holders is reflected by equity-net worth, i.e., paid
up capital plus reserves and surplus. In terms of economic principles, earning per share should be more than the amount of interest at normal rate, on the paid-up value of preference shares and that in the case of equity shares, on the net worth value, so as to compensate for the additional risks assumed by the share-holders. However, the entire divisible profits are not distributed as dividends. Some portion is retained within the company so as to withstand economic adversities and to maintain stable dividends. Lime-wise in the years of insufficient earnings dividend disbursements may exceed the current earnings, provided this does not jeopardise the financial soundness of the company.

Recent increases in the rates of interest has affected the pattern of dividend. Fresh capital has to be offered something more than the interest on fixed deposits given by the scheduled banks so as to attract capital to the industries and that too in as secure manner as the deposits. Indian companies issue preference shares as a compulsory component of the new issue with higher rate of dividend say 9% - 11% and convert the old shares with lower dividend rates into those with higher rates. This policy appears to be the product of the pressure of maintaining steady rate of dividend on equity capital. The issue of equity shares leads to larger dividend disbursement throughout the life of the corporation, as it is difficult to redeem equity shares once these are issued. This attitude tends to increase the amount of the rate of preference dividend and make the same a more costly source of capital. Companies, enjoying sufficient
coverage of preference dividend is their earnings only, can afford these shares and those with uncertain and unstable earnings would not issue preference shares.

**Pattern of Preference Shares**: (Table No. 6.01)

Preference shares, though costlier than the debentures, are still preferred because the same are looked upon by the creditors as a measure of security and help in maintaining the capital gearing ratio. Management prefers the issue of these shares as the same do not interfere with the controlling power, while providing all the advantages of ordinary capital stock. Preference shares have a priority claim to dividend and repayment of capital over the equity shares. The rate of dividend is normally fixed at the time of issue and the same is generally smaller than that on equity shares. Though the payment of preference dividend does not constitute a fixed charge like interest on debentures, in a legal sense, yet it is considered to be so for all practical purposes. A company, which could not pay preference dividend regularly loses its credit. Management feels morally obliged to pay dividend on preference shares. Hence it can be said that the companies of small size and those belonging to uncertain and low profitability industries cannot afford to issue preference shares.

**Empirical Study**

As depicted vide Table No. 6.01 pointing out that in comparison to equity share capital, preference shares were quite meager in amount. Out of 75 companies included in this study, only 13
issued preference shares. More than 80% companies and cumulative preference shares of predetermined rates.

In the case of small companies only 5 out of 26 issued preference shares amounting to Rs. 0.013 crores (1986) to 0.019 crores (1989), which worked out between 0.6% (1985) and 0.5% (1990) of the paid-up capital. The rate of dividend prescribed on such shares varied between 6.7 (1985) and 69.2% (1987). Out of 24 medium companies included in this study only 2 tapped Rs. 0.006 crores (1985) to 0.030 crores (1988) by issue of preference shares, which amounted between 0.16% (1985) and 0.01% (1990) of their paid-up capital. Rate of dividend varied between 33.3% (1988) and 116.7% (1987). Large companies led the small and medium companies in respect of preference shares. Out of 25 companies of large size, as many as 6 issued preference shares worth Rs. 0.162 crores (1985) which amounted to 1.23% of total paid-up capital. The rate of dividend varied between 10.6% (1985) and 16.9% (1988). Taking all the companies together, it is found that the preference shares constituted between 0.95% (1985) and 0.20% (1990) of their paid-up capital. Industry-wise analysis of the number of companies which issued preference shares reveals that the same was 1 out of 25 in Pharmaceutical nil out of 20 in Food and nil out 30 in Tea. Industry-wise study of the amount of preference shares indicated that the Food topped the list with preference shares worth Rs. 0.058 crores (1990) of the paid-up capital and was followed by Pharma Rs. 0.011 crores (1990) and Tea Rs. 0.005 crores (1990).
Pattern of Equity Dividend

This is the most vulnerable part of our study. Payment of steady dividend is the motivating factor of the corporate business and the key point which attracts the attention of all who are directly or indirectly related to this sector. The rates and quantum of equity dividend are construed to be the reflection of financial performance of the corporations. The size and shape of equity dividend can be studied in relation to paid-up capital, equity net worth, average market price of shares, normal rate of interest on long-term borrowings and amount of net profits. However, the behaviour of market price of shares does not correctly reflect the relationship between the dividend and the net worth. Market price is influenced by a variety of factors and considerations. It is practically not possible to quantify all these considerations. Besides, the market is made of different kinds of investors possessing different objectives. Retained earnings and increase in net worth value have no significant effect on share prices in India. Majority of investors attach great importance to dividend income rather than the price of shares. Companies with steady payouts are expected to maintain gradual rise in dividend rates. Macro analysis of dividend pattern based on MarketYield value of capital stock could not be carried out for want of authentic price index of stocks of utilised companies. We have computed equity payout ratios on the basis of paid-up capital, net worth and divisible profits vide Table No. 6.03 to 6.07. With a view to presenting the realistic picture of the dividend pattern, these ratios have been worked out in respect of dividend-declaring companies only.
The quantum of dividend and its bases like paid-up capital, net worth and divisible profits vary each year because of the varying number of such companies. Our comments on different dividend ratios are as follows:

1. **Dividend Paid-up Capital Ratio**: (Table No. 6.03 & 6.04)

   This ratio fluctuated from 13.36% (1985) to 20.93% (1990) in small companies, 19.22% (1986) to 31.37% (1990) in medium companies and 22.76% (1986) to 35.20% (1990) in large companies. The trends in ratio of all the companies were in conformity with those of large companies. The ratio was the highest in the large companies because of lower layout frequency. But in large and medium companies, the dividend was increasing throughout the period 1985-1990. The six year average was the highest at 27.07% in large companies, followed by 24.11% in medium companies and 16.57% in small companies, followed by 24.11% in medium companies and 16.57% in small companies, whereas the overall average rate worked out to 26.15% which was slightly lower than that in large companies and was higher by 9.58 and 2.04% than that in small and medium companies respectively. It can be pointed out that the small companies were quite rational in paying higher average rate because of unstable or less regular payouts.

average rate was the highest at 38.49 in Tea and was followed by 25.21% in Food and 19.42% in Pharmaceutical.

2. **Dividend : Equity Net Worth Ratio**: (Table No. 6.05 & 6.06)

This ratio travelled between 3.9% (1985) and 6.8% (1990) in small companies, 6.9% (1986) and 9.3% (1989) in medium companies, 5.6% (1987) and 11.1% (1990) in large companies and 6.2% (1988) and 9.7% (1990) in all the companies. The six year average was the highest in medium companies at 7.7% and was followed by large companies 7.3% and small companies with the lowest rate of 5.8%. The same for all the companies worked out to 7.2%. The trends were in tune with those in dividend paid-up capital ratio.

Industry-wise scrutiny of dividend net worth ratio reveals that the same varied between 5.2% (1985) and 6.7% (1989) in Pharmaceutical, 6.1% (1986) and 8.9% (1989) in Food and 5.7% (1988) and 11.8% (1985) Tea. Computing the average it is found that Tea enjoyed the highest rate of 8.2% and was followed by Food 7.03% and Pharmaceutical 6.1%.

3. **Dividend : Divisible Profit Ratio**: (Table No. 6.07 & 6.08)

Equity Dividend : Divisible profit ratio indicates the proportion of profits which was disbursed as dividend on equity capital. Companies with lower or insufficient amount of divisible profits paid a comparatively higher portion as equity dividend than those with regular and sufficient earnings. Size-wise analysis reveals that they fluctuated between 22.5% (1985) and 32.4% (1988) in small
companies, 31.3% (1987) and 42.4% (1988) in medium companies, 31.9% (1985) and 55% (1990) in large companies, 31.5% (1985) and 48.6% (1990) in all the companies. The average was the highest at 42.5% in large companies and was followed by medium companies with 37.5% and small companies with 29.1%. The overall average worked out to 39.8%.

Industry-wise analysis reveals that this ratio travelled from 30.1% (1985) to 41.05% (1988) in Pharmaceutical, 29.5% (1987) to 50.9% (1989) in Food and 32.1% (1985) to 54.6% (1989) in Tea.

The average of payout : profit ratio amounted to 35.7% in Pharmaceutical and was the lowest. The same was followed by Food 38.80% and Tea 45.01%.

The lower ratio of profit disbursed as equity dividend does not always mean that there was greater amount of earnings retained at the discretion of the Board of Directors. In many companies the percentage of dividend to divisible profit was lower because of higher proportion claimed by statutory provisions like development reserves. Higher ratio would have been caused by the payment of steady amount of dividends, even when the profits were falling.

Comparative Study of Different Payout Ratios

A comparative study of dividends and interest rates as depicted vide Table No. 6.09 reveals that in all these cases interest to liabilities ratio was the highest. It was thrice the average
rate of dividend. The same was more in all the companies
categorised size-wise and industry-wise.

Tea companies paid the highest average equity dividend of 38.49%.
Equity dividend : net worth ratio was about half of the dividend
paid-up capital ratio. Equity i.e. net worth in all the
companies was more than double of the paid-up capital. Provision
for development reserves has led to compulsory plough-back of
substantial amount from the current earnings resulting into a
continuous rise in the net worth.

Preference dividend ratio was lower than the interest rates,
which appears to be quite reasonable. The rate of interest on
liabilities varied between 40.9% to 65.3% in Pharmaceutical,
44.2% to 75% in Food and 34% to 67.5% in Tea. The same was the
lowest in large companies at 51% and the highest in medium
companies 59%. On an average the interest rate was half of the
equity dividend on paid-up capital. The interest on borrowings
was between 43% and 62% in all the industries. Size-wise
analysis shown that the interest was the highest at 59.40% in
medium companies. The same was less than 0.37 in small and 7.77
in large companies. Thus the trends obtaining in the different
rates of return complied with the basic principles of the
financial discipline. It can be concluded that all the dividend-
declaring companies maintained their payouts at a level quite
below the normal rate of interest and thus provided insufficient
margin for additional risks assumed by the equity and preference
share-holders.
Factors Affecting Dividend Patterns

There is a variety of factors which determine the behaviour of equity dividend. No single factor, in particular, can be taken as the prime regulator of payouts. Dividend decisions culminate out balancing forces of many business and managerial considerations. Among them, adequacy of divisible profits, liquidity position, financial strength as measured by accumulated surplus, stability and future prospects of a company, tax considerations, statutory provisions and restrictions imposed by debt-contracts, normal rate of interest, dividend declared by competing concern, desire to maintain steady dividend, age and size of company and type of management are some of the important dividend determinants. It is very difficult to measure the individual as well as the combined effect of all these factors on the dividend pattern of a company. Each of these factors exerts a varying influence on different companies and in one company at different times. Management has to reconcile the conflicting forces while recommending the rate and the quantum of dividend. Generally speaking, maximisation of share-holder's economic welfare has come to be accepted as the guiding principle for payout policies. The corporation should not use any part of its resources in paying dividend, so long as it has opportunity for making a more profitable use of the same. This approach is compatible with the view-point of protecting the interests of employees, consumers, creditors and society at large, specially in present are of increasing social responsibilities of our industrial undertakings. The basic rationale behind this objective is that industries should ensure the most efficient use
of the society's economic resources rather than paying fantastic dividends. This approach of judging the relative attractiveness of paying out profits or retaining the same in the enterprise is based on the principle of marginal profitability and is a crucial factor determining the payout pattern. Here the rates of return, available within the business and outside, have to be compared and the decision to pay dividend be taken accordingly.

Prof. Walter James R. has presented a model* which is based on marginal principle and is as follows:

provisions for amortization, development rebate, tax liability and the like. Huge funds ploughed back compulsorily by way of depreciation and development rebate reserves lower down the marginal profitability of the funds and encourage the management to undertake less remunerative projects. The question of retaining divisible profits may often become a secondary one, in view of the strong tendency to pay steady dividends.

Statistical Studies

In fact, all the aforesaid factors including the marginal theory influence the dividend pattern, through the profit-producing capacity of a company i.e., quantum of divisible profits and can be grouped two predominant factors:

a. Size of divisible profits and
b. Desire to maintain steady dividends.

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The size of divisible profit is affected by almost all the variables (determinants) as discussed in the 2nd chapter of this study. The fulfillment of desire to pay steady rates of dividends too depends primarily upon the size of profit after tax, accumulated surplus and liquidity. Statistical models and techniques have been framed and applied to assess the relative influence of different variables on dividend policies of the corporations in countries like U.K. and U.S.A by a good number of authorities. The studies of dividend behaviour by Debrovolsky (1951), Linter (1956) and Darling (1957) are the pioneering workers. We present below in brief the varies dividend theories.

DIVIDEND THEORIES

**M M Theory**

According to the MM approach, the dividend policy of firm has no effect on the value of the firm. Modigliani and Miller provide the proof in support of their argument in the following manner:

**Step 1**

The market price of a share at the beginning of the period is equal to the present value of dividends paid at the end of the period, plus the market price of the share at the end of the period. Symbolically

$$P_0 = \frac{1}{1 + K_e} (D_1 + P_1)$$  \hspace{1cm} (11.1)

where $P_0 = \text{Prevailing market price of a share}$

$K_e = \text{Cost of equity capital}$

$D_1 = \text{Dividend to be received at the end of period one}$

$P_1 = \text{Market price of a share at the end of period one}$
Step 2

assuming no external financing, total capitalised value of the firm would simply be the number of shares \( n \) times the price of each share \( P_0 \). Thus, we have

\[ \frac{nP_0}{(1 + K)} = \frac{1}{(1 + K)} \left( nD_1 + nP_1 \right) \]  
(11.2)

Step 3

If the firm's internal sources of financing its investment opportunities fall short of the funds required, and \( n \) is the number of new shares issued at the end of year 1 at \( P_1 \), Eq. 11.2 can be written as

\[ \frac{nP_1}{(1 + K)} = \frac{1}{(1 + K)} \left[ nD_1 + (n + n)P_1 - nP_1 \right] \]  
(11.3)

where \( n \) = Number of shares outstanding at the beginning of the period

\( n \) = Change in the number of shares outstanding during the period

Equation 11.3 implies that the total value of the firm is the capitalised value of the dividends to be received during the period, plus the value of the number of shares outstanding at the end of the period, considering any newly issued shares, less the value of the newly issued shares. Thus, in effect, Eq. 11.3 is equivalent to Eq. 11.2.

Step 4

If the firm were to finance all investment proposals, the total amount of new shares issued would be given by Eq. 11.4 as under:
where \( nP_1 = \text{Amount obtained from the sale of new shares to finance capital budget} \)

\( I = \text{Total amount requirement of capital budget} \)

\( E = \text{Earnings of the firm during the period} \)

\( nD_1 = \text{Total dividends paid} \)

\( E - nD_1 = \text{Retained earnings} \)

Equation 11.4 simply states that whatever investment needs (I) are not financed by retained earnings, must be financed through the sale of additional equity shares.

**Step 5**

If we substitute Eq. 11.4 in Eq. 11.3, we derive Eq. 11.5 as:

\[
nP_1 = \frac{1}{1 + K} [nD_1 + (n + n) P_1 - (I - E + nD_1)]
\]

Solving Eq. 11.5, we have

\[
nP_o = \frac{nD_1 + (n + n)P_1 - I + E - nD_1}{(1 + K)}
\]

Thus,

\[
nP_o = \frac{(n + n)P_1 - I + E}{(1 + K)}
\]

**Step 6 Conclusion:**

Since dividends (D) are not found in Eq. 11.6, Modigliani and Miller conclude that dividends do not count, and the **dividend policy has no effect on the share price.**
WALTER'S MODEL

According to Walter, the dividend policy of a firm is relevant to its value. The value of the firm, as measured by the market price of the share, is equal to

\[
P = \frac{r}{K_e} D + \frac{E - D}{K_e} \frac{r}{K_e} \tag{11.7}
\]

where
- \( P \) = Prevailing market price of a share
- \( D \) = Dividend per share
- \( E \) = Earnings per share
- \( K_e \) = Equity capitalisation rate
- \( r \) = Rate of return on the firm's investment

GORDON'S MODEL

According to Gordon's Model, the value of the share is given by Eq. 11.8 as under.

\[
P = \frac{E(1-b)}{K_e - br} \tag{11.8}
\]

where
- \( b \) = Retention ratio
- \((1 - b)\) = Dividend payout ratio
- \(br = g\) = Growth rate in \( r \), i.e. rate of return on investment of an all-equity firm.

This approach also supports the view that the dividend policy of a firm is relevant to its valuation.

DOBROVOLSKY MODEL

Mr. S.P. Dobrovolsky of New York, vide his research project entitled "corporate Income Retention", observed that retention
did not begin until a certain minimum level of net income, approximately 5% of net worth, had been attained. Below that level dividends were paid in excess of current earnings, i.e. there was dissaving rather than retention of income. The average corporate propensity to save varied with the level of net income and retained earnings and it was found that a change of 1% in the rate of net income/net worth was associated with the change in the same direction to the extent of 0.81% approximately in the retained earnings. Thus there was a strong tendency to pay dividend at minimum rate irrespective of the amount of earnings.

Dobrovolsky's observations were mainly based on John Timbergen's test. According to Timbergen, dividend 'D' is the function of the following 3 variables:

i. current corporate net income (Y)
ii. corporate net income in the preceding year (Y -1)
iii. Corporate surplus at the end of the preceding year (S -1)

\[
D = Y + Y -1 + S -1
\]

It can be said that the corporate net income in the preceding year has no bearing on current year's dividend. Likewise the total surplus at the end of the preceding year indicates the maximum amount of revenue accumulated out of divisible profits.

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** I bid, Page No. 20
which can be paid out as dividend and only theoretically it is rarely available for disbursement of cash dividends. A good portion of revenue surplus is earmarked for redemption of debt and used for writing off capital losses and meeting statutory obligations. Provisions for development rebate substantially reduce the divisible profits. Hence in the Indian context, divisible profits in relation to equity dividend should be the residual profits which remain after preference dividend and development reserves. The actual application of Dobrovolsky model in the corporate sector in India cannot be tested because of statutory set aside of the substantial amount of current earnings towards development reserves. However, with a view to visualising the impact of change in profitability ratio i.e. net profit after preference dividend, the net worth ratio upon equity payout can be studied with the help of correlation coefficient of the two. We have worked out correlation coefficient of the same which comes to 0.09 of all the companies under study. Excepting companies in Tea industry in all other companies, categorised on the basis of size and kind of industry, correlation coefficient of net income, equity net worth and equity dividend, equity net worth was positive, which shows that the increase in net income, net worth ratio, increased the payout on equity capital. Correlation coefficient was insignificant in large companies. This reveals that these companies did not increase their payouts despite the increase in net income ratio, i.e., their payout policies were more or less constant. The correlation coefficient was significant i.e., more than 0.5 in Tea and Pharmaceutical. While in Food, it was 0.4. Thus the significant degree of
correlation reflects that those companies changed their payouts in tune with changes in profitability.

**John Linter : Fixed Payout Approach**

Prof. John Linter, after analysing balance sheets and interviews, found that corporate financial policy is dividend-oriented and companies pursue a relatively stable dividend policy by paying a fixed proportion of their divisible earnings. Companies generally seek to maintain a target amount of dividend with different rates of speed. He put forth the following formula for empirical test.

\[ D_t = C(D_t - D_{t-1}) + a \]

where

- \( D_t \) = Expected dividend which the company would have paid in the current year if the dividend were based on its fixed target.
- \( D_t \) = Target dividend i.e. \( \text{rpt} \cdot \text{Percentage of current profits} \).
- \( D_{t-1} \) = Lagged dividend
- \( a \) = constant
- \( D = a + b \text{rpt} + dD - 1 + x \)
- \( x \) = Discrepancy between the observed change \( D_t \) and that expected.

Thus Prof. Linter found that the current year’s profit and lagged dividend are the predominant factors determining the rate of dividend for current year.*

*John Linter Distribution of Income of corporation among dividend retained earnings and taxes – American economic review papers and proceedings XLVI May 56, Page 97-113.
Darling Model

Mr. P.G. Darling observed that dividend is related to the flow of current profit (P). But the management prefers to capitalise a substantial portion of current profits and follow a policy of stabilisation rather than making full adjustments to the extent of rise or fall in the profits. This reluctance or inertia factor is viewed as a tendency to cling to past profits (P -1) in determining current dividend. He framed the following equation explaining the dividend behaviour:

\[ D = a + a^2p + a^3p - 1 + a^4A + a^5S + X(S) \]

where,

- \( a \) = constant
- \( a^2p \) = relative influence of current year profit
- \( a^3p - 1 \) = relative influence of lagged year profit
- \( a^4A \) = Amortization
- \( a^5S \) = changes in sales
- \( X(S) \) = error

Darling included variables like amortization (A) on the ground that the inflow of funds affects dividend as high value of A relative to 'P' will diminish uncertainty as to whether a new higher level of dividend can be maintained as change in the level of sale determines the working capital. He mentioned index of liquidity (L) as a factor, but did not study the same as it was unobservable.*

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Critical Appraisal of Timbergen, Linter and Darling

Minute study of the models proposed and statistically tested by these experts fall in conformity to each other. Current earnings is common in all the models. Timbergen and Darling presumed profit for the preceding year as one of the determinants of dividend. But we feel that the same had no considerable bearing on dividend. Inclusion of $S - 1$ (total surplus at the end of the preceding year) in Timbergen model appears to be logically correct and indicates the accumulated surplus out of divisible profits and other gains which can be paid out as dividend to the share-holders. But, practically speaking, the same is rarely available in cash. A greater proportion of surplus is earmarked for various statutory requirements like development reserves and contractual obligations like redemptions of debentures and other capital losses. It is never considered as a factor directly determining the rate and quantum of dividend.

At the most, surplus lying in general reserves, profits and loss appropriation account and dividend equalisation fund may be presumed to be available for payouts. In the case of well-established companies, one can find sufficient amount of accumulated reserves. During the period of ten years covered by this study, corporate surplus available with 50 companies kept continuously rising because of the development reserves in almost all types of companies excepting in the small ones.

Darling takes into consideration the lagged retained earnings $(R - 1)$ i.e., revenue surplus set aside out of the preceding year's profits. This appears to be more reasonable on the ground
of liquidity than the total surplus \((S - 1)\). However, in the macro analysis like the present one, \((R - 1)\) does not matter much. *Almost all the well-established companies, which declared dividend regularly, did so out of the current year’s earnings.* Further, it is not necessary that the earnings retained at the end of the preceding year were available in liquid form till the current year. Liquidity, though an important factor is difficult to be statistically tested and not studied by any of the above authors. In the present study companies selected for dividend analysis enjoyed a substantial margin of current assets over current liabilities. Net worth was two times of the paid-up capital. In practice, liquidity at the end of the current year does not serve any purpose. It is the liquidity available of the time of actual disbursements which has to be considered by the Board of Directors. Change in sale \((S)\) does not stand the test of reasoning. It never influences dividend directly, but through the net profits.

Amortization \((A)\) influences the dividend behaviour indirectly through divisible profits. It results into increase in the working capital till the replacement of fixed assets and thereby reduces propensity to retain earnings to the extent to which provision for depreciation exceeds current capital expenditure. Both these functions of depreciation create countervening effects on dividend. No strong case is made out for the inclusion of amortization as an independent factor in the dividend model.
Application of Linter's Model in India

In view of foregoing comments, Linter's model appears to be superior to all other models. But in the Indian context, we have attempted the same with the changed connotation of net income (P). The two explanatory variables are:

i. Net residual earnings which remain after providing for development rebate reserves and preference dividend which can be disbursed as equity dividend and

ii. Lagged dividend i.e., dividend with one year lag. Thus the use of residual profits in place of net income after tax appears to be more appropriate and realistic.

Companies take full advantage of development rebate and provide for preference dividend before recommending any dividend on equity capital. In all the types of companies the dividend model based on these two independent variables, proved to be close fit to the actual dividend behaviour with the least possible error.

The model explaining the relative influence of the aforesaid two variables on the dividend behaviour of the corporate units in India reads as follows:

\[ D = a^1 + a^2pe + a^3D - 1 + x \]

where,

- \( D \) = estimated dividend
- \( a \) = constant
- \( a^{pe} \) = relative influence of residual profits available for equity dividend, i.e., divisible profits development rebate and preference dividend.
\[ a^{3D} - 1 = \text{relative influence of the dividend for lagged year} \]
\[ x = \text{error i.e., difference between actual and estimated dividend.} \]

**FINDINGS**

Deeper analysis reveals that the variables, residual profits (\( P_\alpha \)) has greater influence on dividend pattern which explains that the companies were prompt to revise their dividend rates with change in residual earnings, while in companies belonging to Pharmaceutical and Tea the influence exerted by lagged dividend was greater than the residual profits of the current year, which indicates that the dividends of these companies were more or less stabilised because of the tendency to pay the steady dividend. Categorising the companies on the basis of size, we find that in all the 3 types of companies (small, medium and large) correlation coefficient between the current year's dividend and the lagged year's dividend was greater than that between dividends and residual profits.

The relative influence of both these variables makes a comparison of actual and estimated dividends of the companies classified on the basis of size and kind of industries. Difference between the actual and the estimated dividend represents the error caused by either of the factors not included in the model or the abnormal conditions obtaining in the corporations in particular. Error to the extent of 10% to 75% may be taken as a standard or normal one and that exceeding this limit might have been caused by the peculiar features of different corporate units and the factors lying outside the scope of the dividend model.