Research article Available online www.ijsrr.org ISSN: 2279–0543

International Journal of Scientific Research and Reviews

Factors Influencing Dividend Decision: "A Study of Listed Companies in India"

Saima Qamar[1] and Zuhaib Ahmed Bazaz[2*]

[1]RS, Department of Business and Financial Studies, Uni. of Kashmir, Srinagar, 190006 (J&K) India
[2*]RS, Department of Commerce, Aligarh Muslim University, Aligarh, 202002 (U.P), India

ABSTRACT:

Dividend decision is considered one of the critical decision areas in the field of finance. The inconclusiveness of the theories on importance of dividend in determining firm's value has made it one of the most debatable topics for the researchers, thus resulting in intensive theoretical modeling and empirical investigation. In this paper, we attempt to identify the leading factors that determine the dividend behavior in the corporate finance and investigate the impact of firm specific characteristics such as Size, Growth, Control, Liquidity, Investments and Dividend tax etc. on dividend decision of Indian Companies, listed on National Stock Exchange (NSE) during the period 2006 to 2010. This study incorporates exploratory factor-analysis and regression analysis to analyze the data. We find positive association of dividends with current year earnings, past years earnings and pattern of past dividends. Regression results show the ability of the sample companies to pay dividends depends upon expected future earnings and pattern of past dividends.

KEYWORDS: Dividend, Dividend payout, Dividend rate, Dividend yield & Profits.

Corresponding Author-

Zuhaib ahmed bazaz

Research Scholar, Department of Commerce,
Aligarh Muslim University, Aligarh, 202002 (U.P), India
E-mail id.: *zuhaib.bazaz007@gmail.com*
Mobile No.: +917599393166

INTRODUCTION:

Corporate entities exist for one reason that is to maximize the shareowners' wealth. It is in view of this fact all financial actions are only aimed towards the shareowners' wealth maximization. Dividend decision which is believed to have a direct impact on shareowners' wealth maximization as such has remained an issue of interest in financial literature since joint stock companies came in existence. Right from the beginning, two pertinent questions about dividend decision have remained the focal point. First, does dividend decision has any bearing on the shareowners' wealth maximization? Second, what factors determines payout ratio. The impact of dividend decision on shareholders' value still remains an unresolved issue in financial literature. The opinion on this issue is divided one; however, in the long run the dividend decision is believed to have an impact on shareowners' wealth. Traditional position of dividend polices is attributed to Graham & Dodd[1], who claimed that the stock market places considerably more weight on dividend than on retained earnings. However Miller and Modigliani[2], contributed first influential work on dividends popularly known as (irrelevance theory), which states that in a perfect capital market with rational behavior and perfect certainty and with investment and borrowing decisions given, dividend policy has no effect on the value of the firm.

But on the other hand, Lintner[3] and Gordon[4] supported "Bird-in-the-hand" theory and argued that in the world of uncertainty and imperfect information, high dividend payment is associated with high firm value. Signaling and clientele-effect are example factors for the relevance of dividends to the value of the firm. There are several empirical studies (e.g. Kwan[5], Eades[6], Penman[7]; Baker, Farrelly & Edlman[8]) that suggest that dividends change, convey signals to the market about the future of the firm. Furthermore, "Clientele Effect Model", shows that investors preference towards dividend and capital gain create clienteles which force them to select a company whose dividend policy is aligned with their investment strategy. Similarly "tax-preference theory" posits that low dividend payout ratios lower the required rate of return and increase the market valuation of a firm's stocks. Because of the relative tax disadvantage of dividends compared to capital gains investors require a higher before-tax risk adjusted return on stocks with higher dividend yields (Brennan[9]). Several studies including have presented empirical evidence in support of the tax effect argument (Litzenberger & Ramaswamy[10]). The existing corporate theories support the relationship between ownership structure and dividend behavior due to "Agency problem" (Jensen and Meckling[11]). They provided an analysis regarding the impact of agency conflict among the managers and shareholders; they conclude that the percentage of equity controlled by insider ownership should influence the dividend policy. Easterbrook[12] & Jensen[13] contended that

dividend, provides indirect benefit of control where active monitoring of a firm's management by its shareholders is missing. Dividends can potentially mitigate this problem by curtailing the funds under manager's control and force management to the capital market more frequently for acquisition of funds, thus putting them under the strict scrutiny of funds suppliers in external capital market. Brealey and Myers[14] listed dividend issue as one of the top ten important unresolved issues in the field of advanced corporate finance. Black[15] argued that the harder we look at the dividends picture, the more it seems like a puzzle, with pieces that do not fit together. In fact dividend decision has its impact on shareholders' value as it has information value and more importantly in the long run it influences future growth of a company. Some companies pay dividends and some do not pay dividends. Scholars developed a number of theoretical models describing the factors that corporate managers should consider when setting dividend payout decisions which caused to be the center of debate in the financial literature. Lot is being written on the factors that determine dividend decision for example, (Collins[16], Gupta[17], Oza,[18] etc).

RELATED LITERATURE:

Despite numerous studies on dividend decision in developed and developing countries, the discussion on this issue is still continuing. As yet researchers do not have an acceptable explanation about the factors influencing the behavior of firm with regard to its dividend decision, (Ahmad & Attiya[19]). One of the first studies on dividend policy was done by "John Lintner" in 1956[20]; His primary goal was seeking a model based on a survey of U.S. managers for explaining the dividend. Ultimately, he listed about 15 factors and found significant effect of these factors on dividend payout of the firms. He argued that company set their dividend levels to avoid having to reverse dividend increases, and gradually increase dividends toward a target payout ratio when earnings increase. Mature companies that have stable profitability, usually paid a significant part of their profits; and payout of the companies that are in growth stage are less. Baker and Powell[21] surveyed the factors influencing the dividend decision of NYSE-listed firms. They found few changes over time in managers' views of the determinants of dividend decision. Their result show that the level of current and expected future earnings, the pattern or continuity of past dividends, and the concern about maintaining or increasing stock price are the factor that effect on payout decision by managers. Bhat and Pandey[22] studied managers' perception of dividend decision for a sample of 425 Indian Companies. Their study revealed that manager perceives current earnings as the most significant factor influencing their dividend decision followed by patterns of past dividends. Two other variables viz., increasing equity base and expected future earnings have been

found to have a significant influence on dividend decision. Narasimhan and Asha[23] discussed the impact of dividend tax on dividend policy of firms. They observed that the uniform tax rate of 10 percent on dividend as proposed by the Indian union budget 1997-1998, alters the demand of investors in favor of higher payouts rather than low payouts. Baker, Veit & Powell[24] investigated the views of chief financial officers (CFOs) of NASDAQ firms about the factors influencing dividend decision. Their study revealed that the pattern of past dividends, stability of earnings, level of current earnings, and level of expected future earnings are the most important factors. Amidu and Abor[25] investigated the determinants of dividend policy of firms operating in Ghana. The results of their study revealed positive relationship between profitability and dividend payout ratio, cash flows and corporate tax, thus confirmed that the more profitable firms pay more dividends. Furthermore they found negative relationship between payout ratio and risk, institutional holdings, growth and market to book value and concluded that when the firm's liquidity increases, the firms pay more dividends. Mohanty[26] analyzed the dividend behavior of more than 200 firms for a period of over 15 years. His study revealed that in most bonus issues cases, firms have either maintained the pre-bonus level or decreased it marginally thereby increases the payout to shareholders. Kanwer[27] tried to identify the factors that explain the dividend behavior of the firms registered with Karachi Stock Exchange using firm data for the period 1992-98. The results depicted positive effect of firm size on dividend payout but this relationship was not statistically significant. Further they stated that the higher net profit after tax of firms does not necessarily ensure higher dividend payments. Oza[18] identified current year's earnings, patterns of past dividends, availability of cash and expected future earnings as major determinants of dividend policy. While, factors like capital expenditure requirements, impact on share prices, achieving target payouts, restrictions imposed by lenders, bonus issue by the companies and industry practices are found to have less significant role in the matter of deciding on dividend payments. Ahmad & Attiya[19] investigated different factors determining dividend policy of listed firms of Pakistan. The results revealed a trend that Pakistani companies rely more on current earnings and past dividend to fix their dividend payment. Also determining factors of dividend payout showed that stable companies pay higher dividends. However Growth opportunity bears no significant impact on dividend policy while size of the firms found to be negatively correlated. Baker, Kent, Saadi, Dutta, & Gandhi[28] survey manager's view about dividend payout policy firms listed on the Toronto Stock Exchange. They confirmed that the levels of current and expected future earnings are the most important factors influencing dividend policy. Also they found

strong support for the signaling and life cycle explanations for paying dividends but bird-in-the-hand, tax-preference, clientele, agency-cost, and catering explanations generally were not support.

From the forgoing detailed review and analysis of literature, it is being observed that although Plethora of literature on different dimensions and aspects of corporate dividend decision is available, yet there persists strong contention regarding the factors influencing dividend decisions. Therefore, in this backdrop, an endeavor is made in this study to examine the impact of firm characteristics on corporate dividend decision of Indian companies by incorporating the proper framework of empirical models.

OBJECTIVES:

The present study aims to fulfill following research objectives.

i.) To identify various factors influencing dividend decision.

ii.) To determine the relation between firm characteristics and corporate dividend policies.

METHODOLOGY, MATERIAL & METHODS:

The present study investigates the influence of various determinants such as Size, Growth, Control, Liquidity, Investments and Dividend tax etc. on Dividend Decision of Indian Companies, listed on National Stock Exchange (NSE) during 2006- 2010, using the data published by the National Stock Exchange named as "National Stock Exchange Directory". We select S&P CNX Nifty Index as the true representative Index for studying Dividend Behavior in Indian firms. It is a well-diversified fifty stock index accounting for twenty two sectors of the Indian economy. In this study the population under study includes all widely held public limited companies whose shares are publicly traded through a stock exchange. The fifty stocks represents 09 different industry types such as - *Infrastructure, Construction & Engineering, Petroleum, Telecommunications, Banking & Finance, Transportation, Pharmaceuticals, Chemicals, Minerals & Natural Resources, Power and Diversified*. The other reason behind the selection of NSE (nifty50) is that Indian Stock Market is highly influenced by Nifty index. Researchers have tried to study the dividend payout practices of Nifty companies which are significant for deciding dividend policy of other Indian corporate. Moreover, we confine our analysis to NSE listed firms only because all the listed firms are required to follow the norms set by SEBI for announcing the financial accounts. The study is based on the secondary data (2006-2010) which has been collected from the official websites of the sample companies. Since the size of the universe was large, as such a reasonable and representative sample of the universe was taken for study. Keeping in view the true representative character, 50 Companies included in the Nifty have been taken as a sample for the study. These fifty

companies cover 19 sectors both public and private sectors and accounts for 63% of the trading volumes of the National Stock Exchange. The raw data collected were converted in to the ratios and classified according to the requirement of the study. Three dependent variables viz.; Dividend payout, Dividend Rate and Dividend Yield have been used to determine the factors that determines dividend decision. A Large number of factors are likely to have a bearing on dividend decision. The present study has tried to cover all the possible factors as such, 12 factors (Independent Variables) have been studied. These includes Current Year's Earnings After Tax (E_t), Past Year's Earnings After Tax (E_t-$_1$), Expected Future Earnings (E_t+$_1$), Cash Position (CP_t), Cash Flow During The Year (CF_t), Current Year's Tax Ratio (TR_t), Pattern of Past Dividends ($AVGDIV_t$-$_1$), Capital Expenditure For The Current Year (CEX_t), Pattern of Debt in Capital Structure (LD_t), Age of Companies (AGE_t), Size of Company (S_t) and Control of company (CC_t). To determine the major determinants of dividend decisions, Bi-variate statistics like Correlation co-efficient and Multivariate regression analysis have been used. Factor analysis was used to determine the important factors. Statistical test of significance were also used to determine statistically the significance of relationship between the dependent variable and independent variables. However the variables i.e. size of the company and age of the company is not taken into account as for as regression analysis and factor analysis is considered.

SUMMARY OF LEADING DETERMINANTS OF DIVIDEND POLICY:

Dependent Variables:

Dividend Payout: Dividend payout is the widely used proxy for dividend policy (See for example Al-Malkawi[29]; Ahmed & Attiya[19]). Dividend Payout ratio is calculated by dividing the total equity dividend of one accounting year by the total earnings of that particular year. The ratio is depicted as DP_t.

Dividend Rate: It is computed by dividing the total equity dividend of one accounting year by the face value of all the equity shares outstanding at the close of that year. A relatively high dividend rate indicates the perceived compulsion on the part of a company to make a high dividend payment for attracting much needed capital to finance its operations (Anupam & Gupta[30]). This variable is calculated as Equity dividend divided by Face value of all equity shares outstanding. This ratio is depicted as DR_t.

***Dividend Yield*:** Dividend yield is third dependent variable. It is calculated as dividend per share divided by Market price per share (Ahmed and Attiya[19]). Market price has been determined by taking average price of the share derived from the financial year high and low. This ratio is depicted as DY_t.

Independent Variables:

Current year earnings (E_t): The current earnings which is also known as profit after tax is representing the capacity of corporation to pay dividends and thus it has a positive relationship with dividends (Karam and Goyal, 2007[31]). This variable is measured by deducting cash and non cash expenses from profit after tax (PAT)

Past year earnings (E_{t-1}): Past year's earnings may have the effect of increasing the profitability of the present year that in turn will affect the dividend payment positively (Healy & Palepu[32]). This variable is also important in the sense that consistency in profitability is an indication of good and stable financial health of a company. Such a condition is generally essential for a company to distribute dividend on a stable basis (Anupam and Gupta[30]). This variable is calculated by deducting cash and non cash expenses of previous years from profit after taxes PAT of previous years.

Cash position of the company (CP_t): This variable is also important as dividend is to be paid ultimately in the form of cash. To increase liquidity firms might lower dividends payouts. Lower payout means firms will need less outside financing, since they are retaining cash internally to strengthen liquidity (John and Muthusamy[33]). This variable is obtained by adding cash in hand to cash at bank and the value of marketable securities at the close of the financial year.

Cash flow during the year (CF_t): Several studies suggest that cash flow and earnings convey different information and provide evidence supporting a strong link between cash flows and dividend payment e.g. Amidu and Abor[26]**.** However, Musa[34] provide evidence that cash flow has significant positive impact on dividend policy. It is measured by adding Depreciation of particular year to PAT.

Current year's tax ratio (TR_t): Taxation policy of the government may negatively affect the dividends distributed by the company. High corporate tax rates increase the total tax payments of the firm, reduces its net income which in turn, reduces its retained profit (Damodaran[35]). But at the same time higher tax payment means higher earnings. Higher earnings normally mean higher capacity to pay dividend given the liquidity position of the company (Anupam & Gupta[30]). In this way it is interesting to study the relationship between the current tax ratio and current dividend payment. This variable is measured as the ratio of the total tax payments to total profits before tax.

Capital expenditure for the current year (CEX_t): Capital expenditure in a company is negatively related to its dividend payments (Karam and Goyal[31]). If the company has to incur huge capital expenditure during the current year then it will have fewer amounts in hand to pay dividend. Decrease in the absolute

amount of dividend will lower the dividend payout, dividend rate and dividend yield (Anupam & Gupta, [30]). This variable is calculated by taking the difference between the net fixed assets of the two consecutive years.

Expected future earnings (E_{t+1}): Studies on signaling model of dividend payment suggest that dividend in one year indicates the future prospect of the concerned company. As such a high or moderate dividend signals better future prospects of the company. In this way, current year's dividend is related to future years' earnings (Hanna[36]). This variable is obtained by applying average growth rate for the past three years on the current year's earnings after tax.

Pattern of past dividends ($AVGDIV_{t-1}$): Pattern of past dividends has a very significant role in determining the current dividend (Lintner[3]). Companies generally strive to maintain an uninterrupted record of dividend payment and are generally reluctant to decrease dividend rate. They rather prefer a stable pattern of dividend policy. So increasing trend in past dividends leads a company to increase its dividend in the current year too Adaoglu[37]. However Musa[34] found negative relationship between previous dividend and dividend change. This variable is computed by taking the average of dividends for three years immediately preceding the current year.

Pattern of Debt in Capital structure/Leveraged debt (LD_i): Leverage is defined as total borrowings over total assets (Ghosh and Saibal[38]). Leverage is negatively related to dividends, this means that firms with low debt ratios are more able to distribute dividends. Moreover firms with lower debt in their capital structure and more collateralized assets, have better "financial slack". Hence, they are more able to distribute income to their shareholders. However, contrary to this it is also argued that there is a positive relationship between leverage and a firm's dividend policy. This argument is supported by the signaling theory of dividend policy. Dividends are significantly and negatively related to leverage, attesting to the fact that high debt is an important constraining factor for firms in paying dividends (Ghosh and Saibal[38]). More leveraged companies need cash to pay higher interest and the possibility that creditors limit the dividend company is allowed to pay in order to restrict their risk (Brockman and Unlu[39]).

Age of the Company (AGE_i): Age is defined as number of years since the incorporation of the firm. Mature firms are expected to be informational less opaque and therefore, rely less on internal funds for funding asset growth (Ghosh and Saibal[38]). Besides, age is also a proxy for firm reputation. If reputed firms pay higher dividends, this would entail a positive sign on the dependent variable.

Size of Company (St): Existing literature suggests that size may be inversely related to the probability of bankruptcy (Rajan and Zingales[40]). In particular, larger firms should have easier access to external capital markets and can borrow on better terms, because of limited resources the conflicts between creditors and shareholders are more severe for smaller than larger firms. Moreover, large firms tend to be more diversified and their cash flows are more regular and less volatile. Therefore, large firms should be more willing to pay out higher dividends. To measure firm size Log of Assets is considered and is expected to have positive relationship with dividend payout ratio (DPR).

Control (Institutional ownership): Agency theory hypothesizes a positive relationship between the degree of institutional ownership and dividend payments. (Jensen[13]; & Short, Zhang, & Keasey[41]). On the other hand, signaling theory expects a negative relationship between dividends and institutional ownership. Zeckhauser & Pound[42] argued that dividends and institutional ownership are alternative signaling devices. Control is measured by Proportion (%age) of Institutional ownership in a firm.

Hypotheses:

Following workable hypotheses have been developed on the basis of given literature.

H_1: Independent Variables are statistically significant in explaining Dividend Decision of the companies under the study.

H_2: An inverse relationship exists between Growth and Dividend payout ratio.

Specification of model:

This study incorporates panel regression model as it control for individual heterogeneity due to hidden factors and it also facilitates analysis of cross-sectional and time series data. Above mentioned independent variables have been taken together as factors influencing dividend decision and the model has been developed in order to analyze whether the independent variables have any influence or not on dependent variables. The model has been estimated using data of, sample covering 19 sectors both public and private sectors. The sample has been taken for the study during a period of 5 years from 2006 to 2010 based on multiple regression analysis. In multiple regression analysis, several independent variables are used to estimate a dependent variable. The multiple regression equation is as under:

$$Z = \alpha + \beta_1 X_2 + \beta_3 X_3 + \text{------} \beta_n X_n + \varepsilon \quad \text{_____} \ (i)$$

Where,

Z = Dependent variable.

α = the constant.

β = the coefficients.

ε = Error term.

In this study multiple regression analysis has been conducted in three Stages, which are as under:

Stage 1

In the first stage we attempt to evaluate whether the explanatory variables have significant influence on Dividend Payout. The multiple regression equation for the stage 1 will be as:

$$DP = \beta 0 + \beta 1 (E_t) + \beta 2 (E_{t-1}) + \beta 3 (CP_t) + \beta 4 (CF_t) + \beta 5 (TR_t) + \beta 6 (CEX_t) + \beta 7 (E_{t+1}) +$$

$$\beta 8 (AVGDIV_{t-1}) + \beta 9 (LD_t) + \beta 10 (Age_t) + \varepsilon \text{ ---------- } (ii)$$

Stage 2

In the second stage, we try examine whether the explanatory variables have significant impact on Dividend Yield. The multiple regression equation for the stage 2 will be as:

$$DY = \beta 0 + \beta 1 (E_t) + \beta 2 (E_{t-1}) + \beta 3 (CP_t) + \beta 4 (CF_t) + \beta 5 (TR_t) + \beta 6 (CEX_t) + \beta 7 (E_{t+1}) +$$

$$\beta 8 (AVGDIV_{t-1}) + \beta 9 (LD_t) + \beta 10 (Age_t) + \varepsilon \text{ ---------- } (iii)$$

Stage 3

In the third stage we whether the explanatory variables have significant influence on Dividend Yield. The multiple regression equation for the stage 2 will be as:

$$DR = \beta 0 + \beta 1 (E_t) + \beta 2 (E_{t-1}) + \beta 3 (CP_t) + \beta 4 (CF_t) + \beta 5 (TR_t) + \beta 6 (CEX_t) + \beta 7 (E_{t+1}) +$$

$$\beta 8 (AVGDIV_{t-1}) + \beta 9 (LD_t) + \beta 10 (Age_t) + \varepsilon \text{---- ---------- } (iv)$$

RESULTS AND DISCUSSION:

Trends in Dividend Payment and PAT:

The data about Average Dividend & Average Profit after Tax (PAT) which is presented in (Table 1**)** reveals that the sample average dividend paid by the sample companies during the period under study (2006-2010) has shown an increasing trend.

It was seen that the average dividend which was Rs 514.90 crores in 2006 has increased to Rs 917.22 crores in 2010, thus has registered almost two fold in the amount of dividends paid by the sample companies. This is indicative of the fact that the sample companies during the reference period has recorded better operating performance which also gets clear from the Average profit After-tax figures of the sample companies.

Table No. 1: Trends in Dividend Payment and PAT during 2006 -2010 (Total sample of 50 companies)

S.No.	Name of Industry	2006	2007	2008	2009	2010
1.	Infrastructure, Construction and Engineering	365.25	536.01	643.60	591.25	648.23
2.	Petroleum	2450.91	2684.87	2611.55	2661.80	2838.60
3.	Telecommunications	455.94	479.54	714.72	640.57	1031.90
4.	Banking and Finance	296.94	355.39	508.31	637.41	719.00
5.	Transportation	329.42	346.90	334.86	281.84	871.43
6.	Pharmaceuticals	153.25	166.39	109.00	136.38	179.89
7.	Chemicals, Minerals and Natural Resources	125.95	184.31	223.92	212.25	268.04
8.	Power	576.88	663.33	756.01	777.41	844.75
9.	Diversified	743.75	847.94	1052.68	1057.68	1542.47

It is also clear from the data that the Average Profit after Tax of the sample companies has also witnessed an increasing trend during the reference period. The Average Profit After Tax have increased from Rs 1725.98 crores in 2006 to Rs 3220.53 crores in 2010.One important inference can be drawn from the above discussion is that the dividends paid by the sample companies have increased over the period with the increase in profits Which means the sample companies have shared prosperity with the shareowners by increasing their payout ratios in line with the increase in profit after Taxes.

Industry –Wise Dividend Pattern:

The pattern of dividends during the reference period has also been studied industry-wise. However, a close scrutiny of the data presented in the (Table 2) reveals that maximum amount of dividend has been paid by Petroleum Industry throughout the reference period followed by Diversified, Power and Telecommunications respectively.

Table No. 2: Average Dividend Paid during 2006-2010---Industry-wise (Rs in Crore)

YEAR	Average dividend (Rs cr.)	%Change over the previous year	Std. deviation of dividend (Rs cr.)	AVG.PAT Rs cr)	%Change over the previous year	Std. deviation of dividend (Rs cr.)
2006	514.90	--	950.023	1725.98	--	2417.98
2007	598.87	16.30	988.23	2278.26	32.00	2795.22
2008	700.61	16.98	1070.30	2800.93	22.94	3635.58
2009	705.88	0.75	1059.24	2933.76	4.74	3342.70
2010	917.22	29.94	1249.73	3220.53	9.77	3513.44

The least amount of dividend during the reference period has been paid by Pharmaceutical Industry and Chemicals, Minerals and Natural Resources Industry. The other fact that becomes clear is that all the sample industries have witnessed an upward-trend in the amount of dividend paid during the period under study which confirms the earlier finding that the sample companies have recorded an improvement in their operating performance which these companies have shared with their shareowners by increasing the amount of dividend paid.

Dividend Payout Ratio Pattern:

Dividend payout ratio relates 'dividend paid to the capacity to pay dividends', which is determined by profits. Dividend payout Ratio (DPR) is calculated by dividing the amount of dividend per share with earnings per share of each company in each financial year. It is observed that dividend payout ratio across all industries have shown a fluctuating trend during the reference period. It can be seen from the (Table 3) that the maximum dividend payout ratio was 37.35 percent in case of Petroleum industry followed by Diversified, Transportation, Chemicals, Minerals & Natural Resources and Telecommunications respectively. The lowest payout ratio was 19.11 percent in case of Pharmaceuticals industry.

Table No. 3: "Industry-wise Average Dividend Payout Ratio during 2006-2010"

S.No.	Name of Industry	2006	2007	2008	2009	2010
1.	Infrastructure, Construction and Engineering	18.30	28.52	21.88	20.75	25.93
2.	Petroleum	37.35	36.61	27.54	36.16	35.09
3.	Telecommunications	29.86	20.47	28.75	20.50	28.42
4.	Banking & Finance	21.95	22.20	20.71	22.18	24.56
5.	Transportation	29.47	27.44	27.98	30.47	40.80
6.	Pharmaceuticals	37.29	25.15	14.21	15.31	19.11
7.	Chemicals, Minerals & Natural Resources	28.49	31.07	21.34	25.38	33.70
8.	Power	22.66	22.11	23.14	21.58	22.44
9.	Diversified	33.46	30.22	36.15	28.55	38.47

Correlation of Dividend Payout with the independent variables:

The Pearson's correlation coefficients between dividend payout and selected independent variables have been presented in (Table 4). Perusal of the data contained in the referred table reveals that dividend payout is consistently and positively correlated with the current year earnings after tax, previous year earnings after tax, pattern of past dividends and age of companies. While as dividend payout is consistently and negatively correlated throughout the study period with Expected future

earnings, cash position and the size of the company. It can also be seen from the referred table that there also exists negative relationship between the dividend payout and cash flows during the year, Tax ratio, capital expenditure, leverage and control but not consistently i.e. throughout the period. It becomes clear from the referred table that there exists consistently, positively and statistically significant relationship between dividend payout and the pattern of past dividends only at 1% to 5% levels of significance.

Table No. 4: Pearson correlation co-efficient between 'Dividend Payout' and Selected Independent Variables

YEAR Independent variables	2006	2007	2008	2009	2010
Et	0.114 (0.432)	0.012 (0.933)	0.022 (0.879)	0.032 (0.827)	-0.019 (0.897)
Et-1	0.108 (0.453)	0.079 (0.586)	0.093 (0.523)	0.060 (0.679)	0.001 (0.997)
Et+1	-0.020 (0.888)	-0.002 (0.989)	-0.030 (0.834)	-0.251 (0.079)	-0.205 (0.152)
CPt	-0.113 (0.435)	-0.078 (0.588)	-0.064 (0.659)	-0.056 (0.697)	-0.099 (0.496)
CFt	-0.095 (0.511)	-0.034 (0.816)	0.051 (0.725)	-0.010 (0.943)	-0.091 (0.531)
TRt	-0.100 (0.490)	-0.106 (0.465)	-0.103 (0.478)	0.091 (0.530)	0.056 (0.699)
AVGDIVt-1	0.354* (0.012)	0.294* (0.038)	0.323* (0.022)	0.391** (0.005)	0.242 (0.091)
CEXt	-0.104 (0.470)	-0.281* (0.048)	0.157 (0.275)	-0.198 (0.169)	-0.104 (0.471)
LDt	-0.154 (0.286)	0.074 (0.609)	-0.104 (0.473)	-0.039 (0.789)	-0.162 (0.261)
AGEt	0.133 (0.356)	0.165 (0.252)	0.111 (0.442)	0.222 (0.120)	0.134 (0.355)
SIZE	-0.086 (0.553)	-0.075 (0.605)	-0.043 (0.765)	-0.030 (0.838)	-0.104 (0.472)
CONTROL ***i) Promoter***	-0.121 (0.404)	0.144 (0.317)	0.015 (0.918)	-0.097 (0.501)	0.005 (0.974)
ii)Non-Promoter	0.121 (0.404)	-0.144 (0.317)	-0.015 (0.918)	0.097 (0.501)	-0.005 (0.975)

Figures in the bracket indicate the exact level of significance (p --- values)
**Correlation is significant at the 0.01 level (2- tailed). *Correlation is significant at the 0.05 level (2- tailed).

The relationship between dividend payout and capital expenditure has also been found negatively and statistically significant at 5 %level of significance. What can be concluded from the above discussion is that there exists consistently positive correlation with some factors and consistently negative correlation with other factors but the dividend payout is consistently, positively and statistically significantly related only with pattern of past dividends which means that the only pattern of past dividends has a meaningful relationship with the dividend payout. Conversely, it means that the

relationship between dividend payout and all other factors except capital expenditure is not meaningful in the sense that these factors cannot be considered as the determinants of dividend policy. The capital expenditure has a significant relationship with dividend payout only during one year, and thus lacks consistency in the relationship. As such this factor also cannot be considered determinant of dividend policy.

Correlation of Dividend Rate with the independent variables:

Dividend rate the another dependent variable whose relationship with the selected independent variables has been studied. For this purpose Pearson's correlation coefficients were obtained which has been presented in (Table 5).

Table No. 5: Pearson correlation co-efficient between Dividend Rate and Selected Independent Variables

YEAR Independent variables	2006	2007	2008	2009	2010
Et	0.130 (0.367)	0.050 (0.730)	0.068 (0.639)	0.104 (0.473)	0.017 (0.909)
Et-1	0.079 (0.585)	0.066 (0.651)	0.079 (0.583)	0.064 (0.658)	-0.021 (0.884)
Et+1	0.563** (0.000)	0.558** (0.000)	0.540** (0.000)	-0.095 (0.514)	-0.074 (0.609)
CPt	-0.109 (0.451)	-0.107 (0.460)	-0.100 (0.490)	-0.024 (0.868)	-0.055 (0.704)
CFt	-0.091 (0.532)	-0.122 (0.400)	-0.061 (0.675)	-0.005 (0.970)	-0.061 (0.674)
TRt	-0.069 (0.633)	-0.126 (0.382)	-0.180 (0.210)	-0.123 (0.396)	-0.105 (0.469)
AVGDIVt-1	0.187 (0.193)	0.141 (0.330)	0.157 (0.277)	0.172 (0.232)	0.045 (0.758)
CEXt	-0.069 (0.633)	-0.157 (0.275)	-0.003 (0.983)	-0.110 (0.447)	-0.062 (0.669)
LDt	-0.235 (0.101)	-0.243 (0.089)	-0.205 (0.154)	-0.125 (0.388)	-0.109 (0.450)
AGEt	0.030 (0.837)	0.147 (0.308)	0.072 (0.617)	0.097 (0.502)	-0.004 (0.980)
SIZE	-0.115 (0.427)	-0.132 (0.359)	-0.098 (0.498)	-0.038 (0.793)	-0.070 (0.628)
CONTROL					
i) Promoter	0.055 (0.704)	0.079 (0.587)	0.043 (0.765)	0.028 (0.847)	0.032 (0.827)
ii)Non-Promoter	-0.055 (0.704)	-0.079 (0.587)	-0.043 (0.765)	-0.028 (0.847)	-0.033 (0.820)

Figures in the bracket indicate the exact level of significance (p --- values)
**Correlation is significant at the 0.01 level (2- tailed)
*Correlation is significant at the 0.05 level (2- tailed)

Perusal of the data contained in the referred table reveals that the dividend rate is positively, consistently and significantly related only with one variable; namely Expected future earnings during the first three years i.e. from 2006-2008. During the last two years i.e. 2009 and 2010 the relationship is not statistically significant. During these two years, the relationship between dividend rate and expected future earnings is found negatively related. It also becomes clear that the relationships of dividend rate with other explanatory factors are found to be very weak and statistically insignificant. The relationship of dividend rate with current earnings, past year earnings, pattern of past dividends and age has been found consistently positive. While as the relationship of dividend rate with the explanatory factors like cash position, cash flow during the year, Tax ratio, Capital expenditure and leverage has been found consistently negative. The only inference that can be drawn from the above discussion is that only one explanatory factor namely Expected future earnings has a meaningful relationship with the dividend rate, however, during the first three years of the reference period meaning thereby that this factor only has been found to have influenced dividend payment of the sample companies. Conversely, it means that rest of the factors has not influenced the dividend payout of the sample companies. This finding is different from the earlier findings about the relationship between dividend payout and selected independent variables where it was found that pattern of past dividends only was found significantly correlated with the dependent variable i.e., dividend payout.

Correlation of Dividend Yield with the independent variables:

The relationship of selected independent variables with dividend yield has also been analyzed through Pearson's correlation coefficients, the details of which have been presented in (Table 6).The data about correlation coefficients presented in the referred table brings to forth that unlike the other two dependent variables, the dividend yield is found to be significantly correlated with four explanatory factors viz., pattern of past dividends, Age of the companies, current earnings and past years earnings although the dividend yield is significantly related with these explanatory factors but not consistently. With respect to current earnings, past years earnings and tax ratio the relationship with dividend yield is statistically significant during the first year of the reference period in case of Earning factor and with regard to tax ratio in the fourth year and for the remaining part of the reference period, the relationship is positively and consistently correlated but not significantly. Similarly the relationship between the dividend yield and age of the companies is not consistently significant. As can be seen from the data contained in the referred table that the relationship between age of the companies and dividend yield is

statistically significant for three years only viz., 2007, 2009 and 2010 and the relationship for the other two years is positive but not strong.

Table No. 6: Pearson correlation co-efficient between 'Dividend Yield' and Selected 'Independent Variables'

YEAR Independent variables	2006	2007	2008	2009	2010
Et	0.324* (0.022)	0.218 (0.128)	0.118 (0.413)	0.157 (0.277)	0.083 (0.568)
Et-1	0.372** (0.008)	0.252 (0.078)	0.215 (0.134)	0.155 (0.282)	0.030 (0.837)
Et+1	-0.074 (0.610)	-0.102 (0.482)	-0.057 (0.693)	-0.164 (0.254)	-0.185 (0.198)
CPt	0.096 (0.508)	-0.021 (0.886)	-0.045 (0.757)	0.164 (0.254)	-0.006 (0.969)
CFt	0.195 (0.175)	0.057 (0.696)	0.075 (0.605)	0.146 (0.312)	0.003 (0.984)
TRt	0.276 (0.053)	0.142 (0.326)	0.142 (0.327)	0.279* (0.050)	0.098 (0.498)
AVGDIVt-1	0.379** (0.007)	0.352* (0.012)	0.417** (0.003)	0.417** (0.003)	0.270 (0.058)
CEXt	-0.087 (0.547)	-0.257 (0.072)	0.156 (0.280)	-0.171 (0.236)	-0.104 (0.470)
LDt	-0.033 (0.818)	-0.141 (0.328)	-0.115 (0.426)	0.126 (0.384)	0.001 (0.994)
AGEt	0.270 (0.058)	0.329* (0.020)	0.243 (0.089)	0.392** (0.005)	0.309* (0.029)
SIZE	0.130 (0.368)	-0.004 (0.977)	-0.049 (0.734)	0.107 (0.459)	-0.015 (0.920)
CONTROL *i) Promoter*	-0.075 (0.604)	-0.060 (0.679)	-0.054 (0.708)	-0.012 (0.932)	-0.026 (0.858)
ii)Non-Promoter	0.075 (0.604)	0.060 (0.679)	0.054 (0.708)	0.012 (0.932)	0.026 (0.860)

Figures in the bracket indicate the exact level of significance (p --- values)
**Correlation is significant at the 0.01 level (2- tailed).
*Correlation is significant at the 0.05 level (2- tailed).

It can be seen from the above mentioned table that the relationship of dividend yield and pattern of past dividends is statistically significant but not for the entire reference period. The dividend yield has been found consistently, positively and significantly correlated with the pattern of past dividends during the first four years out of the five years of the reference period. With the rest of explanatory factor viz., Expected future earnings, cash position, cash flows during the year, capital expenditure and financial

leverage the relationship with dividend yield has been found either 'positive or negative', in some cases consistently and in some cases not throughout the reference period. Further it can be seen from the table that the relationship between the dividend yield and these explanatory factors are weak. What can be concluded from the above discussion is that although five explanatory factors have been found to have significant relationship with the independent variable i.e. dividend yield, yet with regard to only one factor namely pattern of past dividends the relationship has been found consistently significant for the first four years and with regard to age of the companies relationship has been found for three years but not consistently. As such it can be concluded that the pattern of past dividend has a meaningful relationship with dividend yield and the relationship of the age of the companies can also be concluded to be meaningful but to some extent only. Rest of the explanatory factors including those three factors whose relationship has been found significant for one year in each case, it can be safely concluded to have no influence on dividend yield. It is also worth mentioning that pattern of past dividends was also found to have significant relationship with another dependent variable namely dividend payout.

Table No. 7: Results of Factor Analysis using Extraction method Principal Component Analysis

Variables		**Year**				
		2006	**2007**	**2008**	**2009**	**2010**
	Initial	**Extraction**	**Extraction**	**Extraction**	**Extraction**	**Extraction**
ET	1.000	.982	.961	.903	.961	.942
ETM1	1.000	.939	.975	.979	.946	.957
ETP1	1.000	.250	.616	.478	.757	.595
CPt	1.000	.910	.912	.937	.925	.921
CFt	1.000	.895	.916	.877	.873	.912
TRt	1.000	.587	.658	.589	.443	.440
AVGD	1.000	.783	.865	.870	.788	.719
CEXt	1.000	.394	.671	.971	.670	.493
LDt	1.000	.745	.741	.839	.815	.766
AGEt	1.000	.524	.663	.450	.457	.480
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.506	.597	.505	.590	.634
Cronbach's Alpha		.724	.649	.681	.766	.759

Total Variance Explained

Component	**Year 2006 Initial Eigen values**			**Year 2007 Initial Eigen values**			**Year 2008 Initial Eigen values**			**Year 2009 Initial Eigen values**			**Year 2010 Initial Eigen values**		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.36	33.61	33.61	3.26	32.60	32.60	3.18	31.88	31.88	3.78	37.86	37.86	3.72	37.25	37.25
2	2.43	24.32	57.93	2.30	23.02	55.62	2.40	24.01	55.89	2.54	25.42	63.29	2.28	22.86	60.11
3	1.21	12.13	70.07	1.27	12.77	68.40	1.29	12.90	68.79	1.30	13.05	76.35	1.21	12.12	72.24
4				1.13	11.36	79.76	1.01	10.12	78.91						

Rotation Method: Varimax with Kaiser Normalization

Regression results:

Correlation coefficient only reveals whether there exists positive or negative relationship between the dependent variable and explanatory variable and also whether the relationship is statistically significant or insignificant. But the overall objective of the present study was to determine the factors that play a dominant role in respect of corporate dividend decision. To fulfill this objective multiple regression analysis has been used which clearly enables to delineate between the dominating and non-dominating explanatory factors. Multiple regression equations have been operated between each dependent variable and the independent variables at a time for each year under study. Statistical test of Significance at 1% and 5% level of significance by means of t-statistics has also been computed on the results thus obtained. The results of regression analysis have been presented for the three dependent variables separately in Table 8 to Table 10.

Regression Results taking Dividend Payout as the dependent variable:

In (Table 8) regression results have shown low R^2 values in all the years of study. In fact, the range is as low as 25% to 43.8%. This low R^2 value signifies that dividend payment is poorly explained by the explanatory variables taken under study. It is seen that the impact of current earnings (E_t) has been positive in the year 2008 and negative in the year 2006, 07, 09 and 2010.

This impact is statistically insignificant. The impact of past year's earning (E_{t-1}) has been negative throughout the study period except in the year 2006. In case of expected future earning (E_{t+1}) the impact has not been unidirectional (either positive or negative).This impact is also not significant. In case of cash position (CP_t) the impact is positive and not significant throughout the period under study. From the regression results the impact of cash flow (CF_t) is negative throughout the study barring one year 2008. This impact is also not significant. Clear and significant result is not found in case of impact of tax ratio (TR_t), capital expenditure (CEX_t) and financial leverage (LD_t). In case of pattern of past dividends ($AVGDIV_{t-1}$) positive and significant impact has been found throughout the study. In case of age of the companies positive and non-significant impact has been found. The constant factor is also found to be positive and significant at 1% level in all the years of study. Since there exists positive and significant association only between pattern of past dividends and dividend payout and rest of the variables have disclosed insignificant relationship, as such, only the pattern of past dividends is a major determinant of dividend payout. Regression results have shown that all other variables do not influence the dividend payment behavior of the sample companies.

Table No. 8: Results of Multiple Regressions during 2006 to 2010 (Dependent Variable: DP)

Explanatory Variables		DIVIDEND PAYOUT				
		2006 (R^2 = 35.0%)	**2007 (R^2 = 37.6%)**	**2008 (R^2 =29.3%)**	**2009 (R^2 =43.8%)**	**2010 (R^2 = 25.0%)**
Et	**Coeff. (t-value)**	-0.010336 (-1.55)	-0.001083 (-0.21)	0.002865 (0.69)	-0.003894 (-1.60)	-0.002978 (-0.75)
Et-1	**Coeff. (t-value)**	0.002224 (0.44)	-0.003711 (-0.55)	-0.009924 (-1.36)	-0.000087 (-0.04)	-0.000493 (-0.11)
Et+1	**Coeff. (t-value)**	0.0000495 (0.19)	0.0000354 (0.26)	0.0000109 (0.09)	-0.0007755 (-1.89)	-0.0006033 (-1.37)
CPt	**Coeff.(t-value)**	0.0001366 (0.55)	0.0001446 (0.66)	0.0000258 (0.13)	0.0000787 (0.76)	0.0001662 (1.00)
CFt	**Coeff. (t-value)**	-0.000418 (-0.35)	-0.0008875 (-1.11)	0.0000956 (0.15)	-0.0000570 (-0.17)	-0.0004307 (-0.68)
TRt	**Coeff. (t-value)**	-0.2773 (-1.11)	-0.1900 (-1.00)	-0.3120 (-0.99)	-0.1182 (-0.68)	-0.0357 (-0.10)
AVGDIV t-1	**Coeff. (t-value)**	0.03573** (3.40)	0.023447** (3.36)	0.023864** (2.74)	0.016578** (4.12)	0.015210* (2.65)
CEXt	**Coeff. (t-value)**	0.001032 (0.89)	-0.0007453 (-0.76)	-0.000590 (-0.21)	0.0011625 (1.83)	0.0004587 (0.77)
LDt	**Coeff. (t-value)**	-0.3307 (-0.39)	0.8715 (1.41)	-0.703 (-0.45)	-0.3082 (-0.35)	-1.261 (-0.97)
AGEt	**Coeff. (t-value)**	0.1321 (1.28)	0.09033 (1.08)	0.0632 (0.59)	0.02185 (0.29)	0.0457 (0.41)
Constant	**Coeff. (t-value)**	29.664** (4.75)	26.295** (3.84)	32.149** (3.88)	27.745** (5.14)	31.64** (3.02)

Figures in the bracket indicate the exact level of significance (p --- values)
**Correlation is significant at the 0.01 level (2- tailed). *Correlation is significant at the 0.05 level (2- tailed).

Thus it can be concluded that the ability of the sample companies to pay dividends depends on the history of past dividends which in other words means that the companies have tried to maintain stability in dividend payments by paying dividends regularly regardless of other firm characteristics like earnings, cash flows, capital expenditure etc.

Regression results taking dividend rate as the dependent variable:

In (Table 9) regression results have shown low R^2 values in all the years of study. In fact, the range is as low as 6.4% to 50.6%. This low R^2 value signifies that dividend yield is poorly explained by the explanatory variables taken under study. From the regression analysis it is seen that the impact of current earnings after tax (E_t) has been negative in the year 2006 then positive throughout the study. This impact is statistically insignificant (except in the year 2008).The impact of previous year's earnings (E_t-$_1$) has been negative throughout the study however statistically significant in one year only. In case of expected future earnings (E_t+$_1$), it has not been unidirectional (either positive or negative) but the impact is statistically significant in the years 2006, 07, 08 and insignificant in the year 2009 and 2010. In case of cash position (CP_t) the impact is negative in the year 2006 then positive throughout the study. In case of cash flow (CF_t), the impact is positive in the year 2006 and negative throughout the study.

In case of tax ratio (TR_t), positive impact has been seen in the year 2006 to 2008 then negative in the year 2009 and 2010. The impact of pattern of past dividends ($AVGDIV_t$-$_1$) has been positive throughout the study. The result in this case is statistically significant in the year 2007 at 5% and 1% in the year 2008. Clear and significant results have not been found in case of capital expenditure (CEX_t) and age of the companies. Regarding financial leverage (LD_t) the result is generally negative but not significant. The constant factor is also found to be positive in all the years of study and significant at 5% level in 2006, 2008 and 2009. What can be concluded from the above is that only two explanatory viz., expected future earnings and pattern of past dividends can be regarded as major determinants of dividend rate as their regression results have been found statistically significant between 1% to 5% level of significance during the first three years. This in other words means that the ability of the sample companies to pay dividend depends upon expected future earnings and pattern of past dividends. On the basis of this finding it can be said that the companies expecting growth in future earnings are paying more dividends. Besides the companies having the history of past dividends are paying dividends in future as well so as to ensure stability in dividend paying behavior perhaps due to the information value of dividend payments. The other inference that can be based on this finding is that the companies having the history of paying dividends regularly are likely to pay dividends in future regardless of other things viz., cash position, capital expenditure, current year earnings after tax, tax ratio etc. Regression results in case of current earnings, past year's earnings and cash position have been found statistically significant but for one year only in each case, as such these explanatory factors cannot be regarded as important determinants of dividend rate. The regression coefficients of all other factors have been found

statistically insignificant thus these can be regarded to have either least or no influence on dividend payment behavior of sample companies. It is interesting to note here that incase of dividend payout only one explanatory factor viz., pattern of past dividends was found as major determinant of behavior but with regard to this dependent variable i.e. dividend rate, in addition to pattern of past dividends, expected future earnings has also been found to have influenced the dividend payment

Table No. 9: Results of Multiple Regressions during 2006 to 2010 (Dependent Variable: DR)

Explanatory Variables		**DIVIDEND RATE**				
		2006 (R^2 = 41.9%)	**2007 (R^2 = 50.6 %)**	**2008 (R^2 = 48.0 %)**	**2009 (R^2 = 16.7%)**	**2010 (R^2 = 6.4%)**
Et	**Coeff.**	-0.06785	0.00890	0.11230*	0.08359	0.1601
	(t-value)	(-0.70)	(0.13)	(2.18)	(1.44)	(0.90)
Et-1	**Coeff.**	-0.00635	-0.06199	-0.25138**	-0.05586	-0.1562
	(t-value)	(-0.09)	(-0.71)	(-2.76)	(-1.05)	(-0.77)
Et+1	**Coeff.**	0.016170**	0.008614**	0.007627**	-0.014187	-0.00925
	(t-value)	(4.19)	(4.85)	(4.97)	(-1.45)	(-0.47)
CPt	**Coeff.**	-0.001685	0.005683*	0.001585	0.001643	0.004777
	(t-value)	(-0.47)	(2.01)	(0.66)	(0.66)	(0.65)
CFt	**Coeff.**	0.01307	-0.01878	-0.000802	-0.005505	-0.01446
	(t-value)	(0.76)	(-1.82)	(-0.10)	(-0.71)	(-0.52)
TRt	**Coeff.**	2.237	0.926	1.492	-4.407	-2.47
	(t-value)	(0.62)	(0.38)	(0.38)	(-1.07)	(-0.16)
AVGDIV t-1	**Coeff.**	0.2241	0.21896*	0.3418**	0.03883	0.0851
	(t-value)	(1.47)	(2.43)	(3.14)	(0.40)	(0.33)
CEXt	**Coeff.**	0.00439	-0.01380	-0.01972	0.00017	-0.00901
	(t-value)	(0.26)	(-1.08)	(-0.56)	(0.01)	(-0.34)
LDt	**Coeff.**	-19.43	-14.028	-31.82	-19.02	-45.16
	(t-value)	(-1.57)	(-1.76)	(-1.64)	(-0.91)	(-45.16)
AGEt	**Coeff.**	-0.562	0.854	0.873	-0.136	-1.622
	(t-value)	(-0.37)	(0.79)	(0.65)	(-0.08)	(-0.32)
Constant	**Coeff.**	198.32*	152.73	207.2*	312.6*	470.9
	(t-value)	(2.19)	(1.73)	(2.01)	(2.43)	(1.01)

Figures in the bracket indicate the exact level of significance (p --- values).
**Correlation is significant at the 0.01 level (2- tailed).
*Correlation is significant at the 0.05 level (2- tailed).

Regression Results taking Dividend Yield as the dependent variable:

From the regression analysis results presented in (Table 10) R^2 value is not high in all the years of study. In fact the range is as low as 29.5% to 44.0%.

Table No. 10: Results of Multiple Regressions during 2006 to 2010 (Dependent Variable: DY)

Explanatory Variables		DIVIDEND YIELD				
		2006 (R^2 = 29.5%)	**2007 (R^2 = 35.0%)**	**2008 (R^2 = 30.0%)**	**2009 (R^2 = 44.0 %)**	**2010 (R^2 = 31.0%)**
Et	**Coeff.**	-0.0002218	0.0005128	0.0000531	-0.0002572	0.0003708
	(t-value)	(-0.52)	(1.40)	(0.23)	(-1.16)	(1.56)
Et-1	**Coeff.**	0.0002858	-0.0007062	-0.0002938	0.0000836	-0.0005745*
	(t-value)	(0.89)	(-1.46)	(-0.73)	(0.41)	(-2.10)
Et+1	**Coeff.**	-0.00000827	-0.00000811	-0.00000063	-0.00004380	-0.00001625
	(t-value)	(-0.49)	(-0.83)	(-0.09)	(-1.17)	(-0.61)
CPt	**Coeff.**	-0.00000451	0.00001708	0.00000381	0.00001532	0.00001173
	(t-value)	(-0.29)	(1.10)	(0.36)	(1.62)	(1.18)
CFt	**Coeff.**	0.00003515	-0.00005599	-0.00000256	-0.00003462	-0.00003460
	(t-value)	(0.46)	(-0.98)	(-0.07)	(-1.16)	(-0.92)
TRt	**Coeff.**	0.01605	0.01552	0.00668	0.01254	0.02394
	(t-value)	(1.00)	(1.14)	(0.38)	(0.79)	(1.14)
AVGDIV t-1	**Coeff.**	0.0004198	0.0010762*	0.0010242*	0.0010742**	0.0008590*
	(t-value)	(0.63)	(2.17)	(2.14)	(2.93)	(2.50)
CEXt	**Coeff. (t-value)**	-0.00003786	-0.00014291*	-0.0000066	0.00004634	0.00001604
		(-0.51)	(-2.03)	(-0.04)	(0.80)	(0.45)
LDt	**Coeff.**	-0.03360	-0.03652	-0.07143	-0.04078	-0.04752
	(t-value)	(-0.62)	(-0.83)	(-0.83)	(-0.51)	(-0.61)
AGEt	**Coeff.**	0.006223	0.010270	0.006264	0.008040	0.008925
	(t-value)	(0.94)	(1.73)	(1.06)	(1.17)	(1.32)
Constant	**Coeff.**	1.0088*	0.6027	0.9982*	0.9697	0.5779
	(t-value)	(2.53)	(1.24)	(2.19)	(1.97)	(0.92)

Figures in the bracket indicate the exact level of significance (p --- values).
**Correlation is significant at the 0.01 level (2- tailed).
*Correlation is significant at the 0.05 level (2- tailed).

This low R^2 values signifies that dividend yield is poorly explained by the explanatory variables taken under study. It can be seen that the impact of current earnings (E_t) and past years earnings (E_t-$_1$) has not been unidirectional but is either positive or negative. The impact is statistically insignificant throughout the study period barring one year 2010 in case of E_t -$_1$. In case of expected future earnings (E_t+$_1$) the impact has been negative and non-significant throughout the reference period. From the regression results it can also be seen that the impact of cash position (CP_t) is positive and non-significant throughout the period barring the year 2006. With regard to other factors viz., tax ratio, financial leverage and age of the companies, the regression results also disclose insignificant relationship with the dependent variable namely dividend yield as can be observed from the data presented in the above referred table. As becomes clear from the table that there exists positive and consistent association between the dividend yield and the pattern of past dividends ($AVGDIV_t$-$_1$) for the last four years of the reference period and in case of capital expenditure (CEX_t) the association is statistically significant for one year only and for the rest of the period it is insignificant and low association. The constant factor is also found to be positive in all the years but is statistically significant at 5% level of significance in 2006 and 2008 only.

It is concluded that only one explanatory factor viz., pattern of past dividends ($AVGDIV_t$-$_1$) shows consistently, statistically significant association with the dependent variable there by meaning that this factor alone can be considered major determinant of dividend behavior of sample companies. Since the rest of the factors show insignificant association as such can be regarded to have no influence on dividend behavior of the sample companies. The pattern of past dividends has also been found to have statistically significant association with the other two dependent variables viz., dividend payout and dividend rate. The Pearson's correlation coefficients have also shown significant relationship of the dividend yield with the pattern of past dividends, thus confirms the results of regression analysis. Pearson's correlation coefficients have also revealed significant relationship of dividend yield with the age of the companies though not consistently but the extent of this relationship has not been confirmed by multiple regression analysis. The results of this study are in agreement with the previous studies e.g., on the topic. In future study, sample size should be increased and different sets of explanatory variables may be used for dependent variables, especially for dividend payout**.**

CONCLUSION:

It is found that the sample companies during the period of study have shown an increasing trend continuously. Average profit After Tax of the sample companies had also shown an increasing trend. It has been found that out of the 9 industries the maximum amount of dividend has been paid by petroleum industry followed by Diversified, Power and least by Pharmaceuticals, Chemicals, minerals & Natural Resources industry. A fluctuating trend in all the industries have been found with respect to dividend payout ratio, with the maximum by the petroleum industry and the least by the Pharmaceuticals industry. The correlation analysis between reveals that dividend payout is consistently and positively correlated with the current year earnings after tax and previous year earnings after tax and is negatively correlated with expected future earnings, cash position, cash flows, Tax ratio, leverage, control and the size of the company. A positive and significant correlation is found between dividend payout and the pattern of past dividends at both 1% and 5% level of significance and a negatively significant correlation with capital expenditure. The relationship of Dividend rate as a dependent variable with current earnings, past year earnings, pattern of past dividends and age of companies has been found consistently positive but not statistically significant and that with cash position, cash flow during the year, Tax ratio, capital expenditure and leverage has been found consistently negative. The findings are in conformity with earlier studies like Rozeff [43] and Collins, Sacena & Wansley[16]. The study has also revealed that dividend yield is positively and significantly correlated with pattern of past dividends, age of the companies, current and previous year's earnings after tax and the rest of the explanatory variables have shown either fluctuation throughout the study period. Pattern of past dividends (AVGDIVt-1) has a statistically significant contribution in predicting dividend payout, dividend rate and dividend yield. Next, it was demonstrated that dividend rate is more or less explained by a good number of interdependent variables used in the study. But the explanatory power of these variables comes down considerably in the matter of their relation with dividend payout or dividend yield. The results also appear to be consistent with the findings of other empirical studies like (Anupam & Gupta[30]).

REFERENCES:

1. Graham H.P. and Dodd D. "Security Analysis". 3rd edition. McGraw-Hill; 1951,
2. Miller M.H. and F. Modigliani. Dividend policy, growth and the valuation of shares. The Journal of Business. October 1961; 34 (4): 411-433.

3. Lintner John. Dividends, earning, leverage, stock price, and the supply of capital to corporations. Review of Economics and Statistics. August 1962; 44: 243 – 269
4. Gordon M. J. Optimal investment and financial policy. Journal of Finance. May 1963; 18: 264 – 272.
5. Kwan C. Efficient market tests of the informational content of dividend announcements: critique and extension. Journal of Financial and Quantitative Analysis. June 1981; 16: 193-206.
6. Eades K. M. Empirical evidence on dividends as a signal of firm value. Journal of Financial and Quantitative Analysis. November 1982; 17 (4): 471-500.
7. Penman S. H. The predictive content of earnings forecasts and dividends. Journal of Finance. September 1983; 38: 1181-1199.
8. Baker H. K., G. E.Farrelly and R. B. Edelman. A survey of management views on dividend policy. Financial Management. Autumn 1985; 14 (3): 78-84.
9. Brennan, Michael j. Taxes, market valuation and financial policy. National Tax Journal. 1970; 23: 417- 429.
10. Litzenberger R. H. & Ramaswamy K. The effect of personal taxes and dividends on capital asset prices: Theory and empirical evidence. Journal of Financial Economics. June 1979; 7(2): 63-196.
11. Jensen C. Micheal and W. H. Meckling. Theory of firm: Managerial behavior, agency cost and capital structure, Journal of Financial Economics. 1976; 3: 305-360.
12. Easterbrook and H. Frank. Two agency-cost explanations of dividends. American Economic Review. September 1984; 74: 650- 659.
13. Jensen M. Agency Cost of free cash flow, corporate finance, and takeovers. American Economic Review Studies and Proceeding. 1986; 76: 323-329.
14. Brealey R. and S. Myers. “Principles of corporate finance”. 7th edition, McGraw-Hill: New York; 2003.
15. Black F. The dividend puzzle. Journal of Portfolio Management. Winter 1976; 2(2): 5-8.
16. Collins, M.C., A. K. Sacena and J. W. Wansley. The role of insiders and dividend policy: A comparison of regulated and unregulated firms. Journal of Finance Strategic. December 1996; 9: 1-9.
17. Gupta A. Dividend policy in MNC-owned Indian subsidiaries (A Post-1994 Study with reference to selected companies. Indian Accounting Review. 1999; 3 (1).

18. Oza H. S. Dividend Decision: A managerial approach: [A study of selected enterprises]. Executive Chartered Secretary. November 2005; 40-46.
19. Ahmed H. and J. Attiya. Dynamics and determinants of dividend policy in Pakistan: Evidence from Karachi stock exchange non financial firms. International Journal of Finance and Economics. 2009; (25): 148-171.
20. Lintner J. Distribution of income of corporations among dividends, retained earnings, and taxes. American Economic Review. 1956; 46: 97-113.
21. Baker H., & Powell G. Determinants of corporate dividend policy: a survey of NYSE firms. Financial Practices & Education. Spring/Summer 2000; 29-40.
22. Bhat R. and Pandey I.M. Dividend decision: A study of managers' perception. Decision. 1994; 21: 67-86.
23. Narasimhan M.S. and C. Asha. Implications of dividend tax on corporate financial policies", The ICFAI Journal of Applied Finance. July 1997; 3(2): 11-28.
24. Baker H., Veit E., & Powell G. Factors influencing dividend policy decisions of NASDAQ firms. The Financial Review. 2001; 36(3): 19-37.
25. Amidu M. and Abor J. Determinants of dividend payout ratios in Ghana. The Journal of Risk. Finance. 2006; 7: 136-145.
26. Mohanty P. Dividend and bonus policies of the Indian companies. Vikalpa; 1999 24 (4): 35-42.
27. Kanwer, A. The determinants of corporate dividend policies in Pakistan. Foundation for Business and Economic Research. 2003; 1-8.
28. Baker H. Kent., Samir Saadi., Shantanu Dutta., & Devinder Gandhi. The perception of dividends by Canadian managers: New Survey Evidence. International Journal of Managerial Finance. 2007; 3 (1): 70–91.
29. Al-Malkawi H. A. N., Determinants of dividend policy in Jordan, An application of tobit Model. Journal of Economic and Administrative Sciences. 2007; 23(2): 44-70.
30. Anupam P. and Gupta A. Dividend history and determinants in selected Indian companies: A study during 1993-'94 to 2004-'05: Australasian Accounting Business and Finance Journal. 2009; 3 (4). 45-83.
31. Karam P. & Goyal P. Leading determinants of dividend policy: A case study of the Indian banking Industry. Decision. 2007; 34(2). 87-112.

32. Healy P. M. and K. G. Palepu. Earnings Information Conveyed by Dividend Initiations and Omissions. Journal of Financial Economics. September 1988; 21(2): 149-175.

33. John F. S. and K. Muthusamy, Leverage, growth and profitability as determinants of dividend payout ratio: Evidence from Indian paper industry. Asian Journal of Business Management Studies. 2010; 1(1): 26-30.

34. Musa I. The dividend policy of firms quoted on the Nigerian stock exchange: An empirical analysis. African Journal of Business Management. 2009; 3(10): 555-566.

35. Damodaran A. "Corporate finance". John Wiley and Sons, (Asia) Pvt. Ltd: Singapore: 2000.

36. Hanna. K. Dynamic dividend behavior of finish firms and dividend decision under dual income taxation. Pellervo Economic Research. PTT Publications. Helsinki: 2010; 1-298

37. Adaoglu C. Instability in the dividend policy of the Istanbul stock exchange (ISE) Corporations: Evidence from an Emerging Market. Emerging Markets Review. 2000; 1: 252-270.

38. Ghosh and Saibal. "The dividend strategy of Indian companies: An empirical assessment". 2010. March 2011 / 06:13. Munich Personal RePEc Archive June. MPRA Paper No. 29567. posted 13. Online at http://mpra.ub.uni-muenchen.de/29567/

39. Brockman P.,and E. Unlu. Dividend policy, creditor rights and the agency costs of debt. Journal of Financial Economics. 2009; 92: 276-99.

40. Rajan., Raghuram G., and L. Zingales. What do we know about capital structure? Some evidence from international data. Journal of Finance. 1995; 50: 1421-1460.

41. Short H., Zhang H. and Keasey K. The link between dividend policy and institutional ownership", Journal of Corporate Finance. 2002; 8: 105–122.

42. Zeckhauser R.J. and J. Pound. Are large shareholders effective monitors? An investigation of share ownership and corporate performance. University of Chicago Press. 1990; 149 – 180.

43. Rozeff M. S. Growth, beta and agency costs as determinants of dividend payout ratios, The Journal of Financial Research. 1982; 5: 249-259.