AN ANALYSIS OF FACTORS FOR DIVIDEND PAYMENT – STUDY OF NIFTY

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Abstract

Dividend decision is considered one of the critical decision areas in the field of finance. Dividend Policy is the set of guidelines a company uses to decide how much of its earnings it will pay out to its shareholders. Dividend Policy refers to the explicit or implicit decision of the Board of Directors regarding the amount of residual earnings (past or present) that should be distributed to the shareholders of the corporation. In this review, 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 NIFTY. This study incorporates exploratory factor analysis and regression analysis to analyze the data. It is found that the sample companies during the period of study have shown an increasing trend in dividend paid continuously. Average profit After Tax of the sample companies had also shown an increasing trend. The correlation analysis reveals that dividend rate is consistently and positively correlated with the expected future earnings and Ownership by promoters and is negatively correlated with current earnings, past year earnings, pattern of past dividends, and Cash position of the company, cash flow, size and ownership of non-promoters. The regression analysis reveals that Cash flow and Ownership (non-promoters) have been statistically insignificant. Rest of the variables Current Year's Earnings After Tax, Past Year's Earnings After Tax, Expected Future Earnings , Cash Position , Cash Flow During The Year , Pattern of Past Dividends , Size of Company and Ownership (promoters) are significant.

Key words: Dividend, correlation analysis , regression analysis

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1. INTRODUCTION

Dividend policy has assumed great significance since the inception of the Joint stock Companies as a form of business organization. In financial management there are three major decisions viz. Investment decisions, financing decisions and dividend decisions. Out of the three, the dividend decisions are considered to be the most tedious and difficult.Dividend is the amount of the profit which is distributed amongst the equity shareholders of a company. The companies do not distribute whole of the profits as dividend, but, they keep some amount of the profit within the company and this amount is known as retained earnings. The management of the company has to decide how much amount is to be distributed amongst the shareholders as dividend and how much portion has to be kept as retained earnings . The ultimate goal of the management of the company is not the profit maximization, but the wealth maximization of the shareholders of the company. This objective of wealth maximization can be achieved by maximizing the value of the company which is reflected in the share prices of the company quoted on the stock exchanges.

1.1 **Types of Dividend Policies:**

1.1.1 Residual Dividend Policy - In case of residual dividend policy the companies first meet the capital expenditure out of the cash inflows, if any amount is left after meeting the capital expenditure that is available for distribution as dividends. This left over amount is known as residual and hence the name Residual Dividend Policy

1.1.2 Managed Dividend Policy - In case of Managed Dividend Policy, the management of the company feels that dividend policy of the company influences the share prices of the company which ultimately leads to the maximization of the wealth of the shareholders. But, there is no data which suggests that there is any kind of direct association between the amount of the dividend and the share prices of the company".

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, dividend rate and dividend yield.

The impact of dividend decision on shareholder's 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 shareowner's wealth.

Traditional position of dividend polices is attributed to Graham & Dodd, who claimed that the stock market places considerably more weight on dividend than on retained earnings. However Miller and Modigliani, 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 and Gordon 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, Eades, Penman; Baker, Farrelly&Edlman) 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). Several studies including have presented empirical evidence in support of the tax effect argument (Litzenberger&Ramaswamy).

The existing corporate theories support the relationship between ownership structure and dividend behavior due to "Agency problem" (Jensen and Meckling). 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 & Jensen 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 listed dividend issue as one of the top ten important unresolved issues in the field of advanced corporate finance. Black 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, Gupta, Oza, etc).

"A Large number of factors are likely to have a bearing on dividend decision. study has tried to cover all the possible factors as such, 8 factors (Independent Variables) have been studied. These includes Current Year's Earnings After Tax (Et), Past Year's Earnings After Tax (Et-1), Expected Future Earnings (Et+1), Cash Position (CPt), Cash Flow During The Year (CFt), Pattern of Past Dividends (AVGDIVt-1), Size of Company (St) and Control of company (CCt). 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.

2. LITERATURE REVIEW

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 2009).
John Lintner (1956) One of the first studies on dividend policy was done by "John Lintner" in 1956 . 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 (2000) 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. Narasimhan and Asha (July 1997) 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 (2001) 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 (2006-7) 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(1999) 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 (2003) 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 (2005) 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 (2009) 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 (2007) 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 .

Bhat & Pandey (1994) studied the Managers' Perception of the Dividend Decisions. For this purpose a sample of 425 Indian companies was taken for the period 1986-97 to 1990-91. Their study showed that on an average profit making companies have distributed about 33% of their earnings as dividend. Narsimhan&Vijaylakshmi (2002) studied the impact of ownership structure on the amount of dividend. The study showed that promoters' holding had no impact on the dividend payout . Y. Suba Reddy (2002) in his study on Dividend Policy of Indian Corporate Firms have found that for the period 1990-2201, number of firms paying dividend has shown an uptrend till 1995 and subsequently has fallen significantly. The analysis has shown that only the few firms have consistently paid the same level of dividends. Amitabh Gupta and CharuBanga (2010) in their study on The Determinants of Corporate Dividend Policy have concluded that five important variables have an impact on the dividend decisions of the firm. These five factors are leverage, liquidity, profitability, ownership structure and growth. The study also concluded that leverage and liquidity had a strong relationship with dividend rates of the Indian companies.

Chawla and Chadha (2014) in their study A Comparative analysis of dividend payouts trends of Indian telecom and steel industries have concluded that telecom industry is more consistent in paying dividends as compared to the steel industries, but steel companies have paid higher average dividends than the telecom companies. Galai, D., &Wiener(2007) , says that the dividend policy impacts the values of debt and equity. The recent financial crisis has emphasized the fact that excessive dividends can lead to financial distress and there is a strong need to set qualitative and quantitative restrictions on the dividends taking into account the potential conflict with debt holders. The model that we develop allows a quantitative setting of these restrictions and gives an important tool to justify (or not) dividend payments opposed by some of the debt holders. We show the implications of our approach compared to the implications of the Signaling Approach .

Nitta, K (2006) in his paper says that ahead of the new Corporation Law that takes effect in 2006, companies are busily studying rational defense strategies to prepare against the anticipated increase in hostile takeovers. While dividend policy is often discussed in connection with takeover defenses,1 in this paper we examine dividend policy at a more fundamental level to see how it can enhance shareholder value.2 However, difficulties arise in trying to link dividend policy directly to shareholder value. First, in measuring shareholder value, suppose we simply use the share price. Despite the clarity, standard theory would lead us to only one conclusion—that dividend policy has no effect on share price—leaving little room to discuss why dividend policy matters. Thus to better understand the implications Under the new Company Law, dividends are separated from earnings appropriation, and distributions no longer need be made annually at fiscal yearend. Moreover, the distribution limit will change from earnings available for dividends (haito-kanorieki) to a distributable amount (joyokin no bunpaikanogaku) that essentially refers to the retained earnings account. Practically, however, the changes are not significant enough to affect our dividend policy discussion. 2 Since the interests of shareholders may sometimes conflict with other stakeholders, shareholder value may not completely fit with the broader concept of corporate value. However, we simplify the discussion by assuming that corporate value is approximately equivalent to shareholder value. of dividend policy, in this paper we shift the focus to the message concealed in management's choice of dividend policy. The stock market is constantly digesting information on corporate management and reflecting it in the share price. If new information is concealed in management's announcement of a change in dividend policy, the share price is likely to respond accordingly. Understanding these messages is a key consideration in determining the appropriate dividend policy

Pani, U. (1996-2006) in his paper : Dividend Policy and Stock Price Behavior in Indian Corporate Sector says that this paper attempts to explore the possible links between dividend policy and stock price behavior in Indian corporate sector. A sample of 500 listed companies from BSE are examined for the years 1996-2006.Dividend policy has always been a source of controversy despite years of theoretical and empirical research both in developed countries and emerging economies. The present paper features a panel data approach to analyze the relationship between dividend-retention ratio and stock-price behavior while controlling the variables like size and long-term debt-equity ratio of the firm. The sample is taken across six different industries namely electricity, food and beverage, mining, non-metallic, textile and service sector. The results are based on the fixed-effect model, as these perform statistically better than random effects and pooled OLS model. Results of the fixed-effect models indicate that dividend-retention ratio along with size and debt equity ratio plays a significant role in explaining variations in stock returns. The fixed effect models show the presence of firm level effect in explaining the possible links between dividend policy and stock price behavior of the firm. In another words it exhibits the possibility of "clientele effect" effect in case of some industries. Therefore the model helps to understand the intricacies of dividend policy and stock-return behavior in Indian corporate sector for the same period. Although the results are not robust enough as in the case of developed markets but shades some more interesting facets to the existing corporate finance literature on dividend policy in India .

3. RESEARCH METHODOLOGY

In the present study, we have selectedS&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 (2010-2014) 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. Dividend payout will be used to determine the factors that determines dividend decision. A Large number of factors are likely to have a bearing on dividend decision. study has tried to cover all the possible factors as such, 8 factors (Independent Variables) have been studied. These includes Current Year's Earnings After Tax (Et), Past Year's Earnings After Tax (Et-1), Expected Future Earnings (Et+1), Cash Position (CPt), Cash Flow During The Year (CFt), Pattern of Past Dividends (AVGDIVt-1), Size of Company (St) and Control of company (CCt). 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 .

3.1 Data Collection Method: Secondary Data through PROWESS data source of CMIE.

3.2 Scope of The Study : The scope of the study is limited to 50 companies which are a part of the CNX Nifty. The study covers a period of seven year i.e. 2010-14.

3.3 Time Period: 2010 to 2014.

3.4 Objectives of Study

1. To study the trend of dividend paid by various companies CNX NIFTY.

2. To identify various factors influencing dividend decision
3. To determine the relation between firm characteristics and corporate dividend policies.

3.5.Description of Variables:

3.5.1 Dependent Variable:

Dividend Rate: This variable is calculated as Equity dividend divided by Face value of all equity shares outstanding. This ratio is depicted as DRt.

3.5.2 Independent Variables:

Current year earnings (Et) : The current earnings which is also known as profit after tax is measured by deducting cash and non cash expenses from profit after tax (PAT)

Past year earnings (Et-1): 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 (CPt): This variable is also important as dividend is to be paid ultimately in the form of cash. 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 (CFt): It is measured by adding Depreciation of particular year to PAT.

Expected future earnings (Et+1): 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 (AVGDIVt-1): This variable is computed by taking the average of dividends for three years immediately proceeding the current year.

Size of Company (St): To measure firm size Log of Assets is considered and is expected to have positive relationship with dividend payout ratio (DPR)

Control (Institutional ownership): Control is measured by Proportion (%age) of Institutional ownership in a firm.

3.6 Hypotheses:

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

H1: There is no relationship between the dependent and independent variables

H2: There is no impact of the independent variables on the dependent variable.

3.7 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 2010 to 2014 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:

$Z = \alpha + \beta 1\ X2 + \beta 3X3$ +------ $\beta nXn + \varepsilon$ ———————— (i)

Where,

Z = Dependent variable.

α = the constant.

β = the coefficients.

ε = Error term.

In this study multiple regression analysis has been as under:

The multiple regression equation will be :

$DR = \beta 0 + \beta 1\ (E\ t) + \beta 2\ (E\ t\text{-}1) + \beta 3\ (CP\ t) + \beta 4\ (CF\ t) + \beta 5\ (TR\ t) + \beta 6\ (CEX\ t) + \beta 7\ (E\ t\text{+}1) + \beta 8\ (AVGDIV\ t\text{-}1) + \beta 9\ (LD\ t) + \beta 10\ (Age\ t)) + \varepsilon$---- ------------- (iv)

4. DATA ANALYSIS

4.1 Trends in Dividend Payment and PAT

The data about Average Dividend & Average Profit after Tax (PAT) which is presented in Table reveals that the sample average dividend paid by the sample companies during the period under study (2010-2014) has shown an increasing trend.It was seen that the average dividend which was Rs 2930.427 million in 2010 has increased to Rs. 3521.164 million in 2014, thus has registered almost two fold in the amount of dividends paid by the sample companies.

The standard deviation of dividend has also undergone an increase from Rs. 2738.7725 million to Rs. 5801.035 million 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 1

YEAR	Average dividend (Rs million.)	%Change over the previous year	Std. deviation of dividend (Rs million.)	AVG.PAT (Rs million)	%Change over the previous year	Std. deviation of dividend (Rs million
2010	2930.427	-	2738.7725	8524.732	-	11854.487
2011	2862.382	2.32	2483.347	9249.522	8.5	11529.491
2012	2662.193	6.99	2884.438	9020.926	2.47	11698.540
2013	2960.993	11.22	3226.434	9465.568	4.9	12644.660
2014	3521.164	18.91	5801.035	9564.258	1.04	13362.348

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 Rs8524.732 million in 2010 to Rs9564.258 million in 2014 with standard deviation varying from Rs. 11854.487 million to Rs. 13362.348 million .

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.

4.2 Correlation of Dividend Rate with the independent variables

Dividend rate is a 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 2.

Table 2

	Dividend rate	Present Year Earning (PAT)	Past Year earning	Expected Future Earning	Pattern of Past dividend	Cash flow	Cash position	size	Ownership (promoters)	Ownership (non promoters)
Dividend drate	1.0000									
Present Year Earning	-0.0018	1.0000								
Past Year earning	-0.0448	0.9259	1.0000							
ExpectedFuture Earning	0.0093	0.9191	0.8709	1.0000						
Pattern of Past dividend	-0.0744	0.7773	0.8613	0.7408	1.0000					
Cash flow	-0.0031	0.1274	0.1827	0.0896	0.0900	1.0000				
Cash Position	-0.0910	0.3032	0.3680	0.2984	0.3340	0.5051	1.0000			
Size	-0.0755	0.4732	0.5164	0.4590	0.4980	0.4883	0.8623	1.0000		

Ownership (promoter)	0.1651	0.1063	0.0885	0.1189	0.0461	0.1339	0.1337	0.1010	1.0000	
Ownership (non promoter)	-0.0084	-0.3154	-0.3596	-0.3091	-0.4502	-0.0772	-0.1887	-0.2404	-0.3755	1.0000

Perusal of the data contained in the referred table reveals that the dividend rate is positively, consistently and significantly related only with two variables which are expected future earnings and Ownership by promoters. For the rest of the independent variables , the relationship between dividend rate and them 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 , Cash position of the company ,cash flow ,size and ownership of non promoters has been found to be consistently negative that is an increase in dividend rate would lead to a decrease in the value of the other variables negatively related variables mentioned and vice versa . While as the relationship of dividend rate with the explanatory factors like expected future earnings and Ownership by promoters has been found consistently positive so increase in the dividend rate would lead to an increase in the expected future year earnings and ownership by promoters and vice versa . The only inference that can be drawn from the above discussion is that only two explanatory factor namely Expected future earnings and ownership of promoters has a meaningful relationship with the dividend rate, however, during the five 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 rate of the sample companies .

4.3 Correlation among independent variables

4.3.1 Present Year Earning (PAT) and other variables:

The data contained in the referred table reveals that the Present year earning is positively, consistently and significantly related to all the other variables namely Past Year earning , Expected Future earnings , Pattern of Past dividend , Cash flow , Cash position , size and Ownership (promoters) except just one variable Ownership (non-promoters) . This means that an increase in Present year earnings would lead to an increase in Past Year earning , Expected Future earnings , Pattern of Past dividend , Cash flow , Cash position , size and Ownership (promoters) and vice versa and an increase in Present year earnings would lead to a decrease in Ownership by non promoters and vice versa .

4.3.2 Past Yearearning and other variables :

The data contained in the referred table reveals that the Past year earning is positively, consistently and significantly related to all the other variables namely Present Year earning , Expected Future earnings , Pattern of Past dividend , Cash flow , Cash position , size and Ownership (promoters) except just one variable Ownership (non promoters) . This means that an increase in Past year earnings would lead to an increase in Expected Future earnings , Pattern of Past dividend , Cash flow , Cash position , size and Ownership (promoters) and vice versa and an increase in Past year earnings would lead to a decrease in Ownership by non promoters and vice versa .

4.3.3 Expected future earnings" and other variables :

The data contained in the referred table reveals that the Expected Future earnings is positively, consistently and significantly related to all the other variables namely Present Year earning , Past year earning , Pattern of Past dividend , Cash flow , Cash position , size and Ownership (promoters) except just one variable Ownership (non promoters) . This means that an increase in Expected Future earnings would lead to an increase in Pattern of Past dividend , Cash flow , Cash position , size and Ownership (promoters) and vice versa and an increase in Expected Future earnings would lead to a decrease in Ownership by non promoters and vice versa .

4.3.4 Pattern of Past dividend and other variables :

The data contained in the referred table reveals that the Pattern of Past dividend is positively, consistently and significantly related to all the other variables namely Present Year earning , Past year earning , Expected future earnings , Cash flow , Cash position , size and Ownership (promoters) except just one variable Ownership (non promoters) .

4.3.5 Cash flow and other variables :

The data contained in the referred table reveals that the Cash flow is positively, consistently and significantly related to all the other variables namely Present Year earning , Past year earning , Pattern of Past dividend , Expected Future earnings, Cash position , size and Ownership (promoters) except just one variable Ownership (non promoters) . This means that an increase in Cash flow would lead to an increase in Pattern of Past dividend , Expected Future earnings , Cash position , size and Ownership (promoters) and vice versa and an increase cash flow would lead to a decrease in Ownership by non promoters and vice versa .

4.3.6Cash position and other variables :

The data contained in the referred table reveals that the Cash position is positively, consistently and significantly related to all the other variables namely Present Year earning , Past year earning , Pattern of Past dividend , Expected Future earnings, Cash flow , size and Ownership (promoters) except just one variable Ownership (non promoters) .

4.3.7 Size and other variables :

The data contained in the referred table reveals that the Size is positively, consistently and significantly related to all the other variables namely Present Year earning , Past year earning , Pattern of Past dividend , Expected Future earnings, Cash flow , Cash position and Ownership (promoters) except just one variable Ownership (non promoters) . This means that an increase in Size would lead to an increase in Pattern of Past dividend , Expected Future earnings , Cash position , cash flow and Ownership (promoters) and vice versa and an increase size would lead to a decrease in Ownership by non promoters and vice versa .

4.3.8 Ownership (promoters) and other variables :

The data contained in the referred table reveals that the Ownership (promoters) is positively, consistently and significantly related to all the other variables namely Present Year earning , Past year earning , Pattern of Past dividend , Expected Future earnings, Cash flow , Cash position and Size except just one variable Ownership (non promoters) . This means that an increase in Ownership (promoters) would lead to an increase in Pattern of Past dividend , Expected Future earnings , Cash position , cash flow and Size and vice versa and an increase Ownership (promoters) would lead to a decrease in Ownership by non promoters and vice versa .

4.3.9 Ownership (non promoters) and other variables :

The data contained in the referred table reveals that the Ownership (non promoters) is negatively related to all the other variables namely Present Year earning , Past year earning , Pattern of Past dividend , Expected Future earnings, Cash flow , Cash position, Size and Ownership (promoters) . This means that an increase in Ownership (non promoters) would lead to an decrease in Pattern of Past dividend , Expected Future earnings , Cash position , cash flow, Ownership (promoters) and Size and vice versa .

4.4 Regression results taking dividend rate as the dependent variable:

Dependent Variable: DIVIDEND_RATE

Method: Least Squares

Date: 03/15/16 Time: 16:13

Sample (adjusted): 1 245

Included observations: 207 after adjustments

Table 3

Variable	Coefficient	Std. Error	t-Statistic	Prob.
PRESENT_YEAR_EARNING	36.47938	34.34323	1.062200	0.0289
CASH_FLOW	4.15E-05	0.000107	0.386811	0.0699
EXPECTED_FUTURE_EARNING	0.001075	0.000859	1.251945	0.0212
OWNERSHIP_NON_PROMOTERS	0.093656	0.390477	0.239849	0.0810
OWNERSHIP_PROMOTERS	0.794076	0.361505	2.196582	0.0292
PAST_YEAR_EARNING	-0.000663	0.001242	-0.533631	0.0542
PATTERN_PAST_DIV	-0.002326	0.004780	-0.486658	0.0270

SIZE	-1.53E-05	1.48E-05	-1.028524	0.0305

R-squared	0.046681	Mean dependent var	80.64106
Adjusted R-squared	0.013147	S.D. dependent var	79.14461
S.E. of regression	78.62263	Akaike info criterion	11.60508
Sum squared resid	1230122.	Schwarz criterion	11.73388
Log likelihood	-1193.125	Hannan-Quinn criter.	11.65716
F-statistic	1.392053	Durbin-Watson stat	0.732771
Prob(F-statistic)	0.210410		

In Table 3 , regression results have shown low R^2 values in all the years of study. 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 Cash flow (CFt) and Ownership (non promoters) have been statistically insignificant . Rest of the variables Current Year's Earnings After Tax (Et), Past Year's Earnings After Tax (Et-1), Expected Future Earnings (Et+1), Cash Position (CPt), Cash Flow During The Year (CFt), Pattern of Past Dividends (AVGDIVt-1), Size of Company (St) and Ownership (promoters) are significant.The constant factor is also found to be positive in all the years of study and significant at 1% to 5% level . What can be concluded from the above is that only two explanatory viz., Cash flow (CFt) and Ownership (non promoters) can not be regarded as major determinants of dividend rate as their regression results have been found statistically insignificant between 1% to 5% level of significance and the other variables variables Current Year's Earnings After Tax (Et), Past Year's Earnings After Tax (Et-1), Expected Future Earnings (Et+1), Cash Position (CPt), Cash Flow During The Year (CFt), Pattern of Past Dividends (AVGDIVt-1), Size of Company (St) and Ownership (promoters) 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 . This in other words means that the ability of the sample companies to pay dividend depends upon Current Year's Earnings After Tax (Et), Past Year's Earnings After Tax (Et-1), Expected Future Earnings (Et+1), Cash Position (CPt), Cash Flow During The Year (CFt), Pattern of Past Dividends (AVGDIVt-1), Size of Company (St) and Ownership (promoters) and not depend upon Cash flow (CFt) and Ownership (non promoters). 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.Also an increase or decrese in size would increase or decrease the dividend rate. 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 flow and ownership (non promoters) .

5. FINDINGS OF THE STUDY

The data about Average Dividend & Average Profit after Tax (PAT) reveals that the sample average dividend paid by the sample companies during the period under study (2010-2014) has shown an increasing trend from Rs 2930.427 million in 2010 has increased to Rs. 3521.164 million in 2014. 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.

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.8524.732 million in 2010 to Rs.9564.258 million in 2014.An important inference that 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 .

The relationship of dividend rate with current earnings, past year earnings, pattern of past dividends , Cash position of the company ,cash flow ,size and ownership of non-promoters has been found to be consistently negative that is an increase in dividend rate would lead to a decrease in the value of the other variables negatively related variables mentioned and vice versa. While as the relationship of dividend rate with the explanatory factors like expected future earnings and Ownership by promoters has been found consistently positive so increase in the dividend rate would lead to an increase in the expected future year earnings and ownership by promoters and vice versa . The only inference that can be drawn from the above discussion is that only two explanatory factor namely Expected future earnings and ownership of promoters has a meaningful relationship with the dividend rate, however, during the five 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 rate of the sample companies .

From the regression analysis it is seen that the impact of Cash flow (CFt) and Ownership (non promoters) have been statistically insignificant . Rest of the variables Current Year's Earnings After Tax (Et), Past Year's Earnings After Tax (Et-1), Expected Future Earnings (Et+1), Cash Position (CPt), Cash Flow During The Year (CFt), Pattern of Past Dividends (AVGDIVt-1), Size of Company (St) and Ownership (promoters) are significant.The constant factor is also found to be positive in all the years of study and significant at 1% to 5% level . What can be concluded from the above is that the variables Current Year's Earnings After Tax (Et), Past Year's Earnings After Tax (Et-1), Expected Future Earnings (Et+1), Cash Position (CPt), Cash Flow During The Year (CFt), Pattern of Past Dividends (AVGDIVt-1), Size of Company (St) and Ownership (promoters) 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 while the other two explanatory viz., Cash flow (CFt) and Ownership (non promoters) cannot be regarded as major determinants of dividend rate as their regression results have been found statistically insignificant .

6. CONCLUSION AND SCOPE FOR FURTHER STUDY

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 rate, with the maximum by the petroleum industry and the least by the Pharmaceuticals industry.

The correlation analysis reveals that dividend rate is consistently and positively correlated with the expected future earnings and Ownership by promoters and is negatively correlated with current earnings, past year earnings, pattern of past dividends, Cash position of the company,cash flow ,size and ownership of non-promoters. The findings are in conformity with earlier studies like Rozeff (1982) and Collins, Sacena& Wansley16. It was also demonstrated that dividend rate is more or less explained by a good number of interdependent variables used in the study. The results also appear to be consistent with the findings of other empirical studies. The regression analysis reveals that Cash flow (CFt) and Ownership (non-promoters) have been statistically insignificant . Rest of the variables Current Year's Earnings After Tax (Et), Past Year's Earnings After Tax (Et-1), Expected Future Earnings (Et+1), Cash Position (CPt), Cash Flow During The Year (CFt), Pattern of Past Dividends (AVGDIVt-1), Size of Company (St) and Ownership (promoters) are significant.The constant factor is also found to be positive in all the years of study and significant at 1% to 5% level .

The factors taken under the present consideration are not exhaustive to provide a complete picture of dividend pattern of the companies. The qualitative factors should also be considered for making the decision about the dividend payment of the companies. Also the time period taken can be extended for doing the further study and to provide a broader view of the determinants of dividend policy.

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