AN ANALYSIS OF CORPORATE GOVERNANCE AND THE DETERMINANTS OF DIVIDEND POLICIES OF INFORMATION TECHNOLOGY COMPANIES IN INDIA

Marxia Oli. Sigo* and Dr. M. Selvam**

Abstract

The dividend is one form of profit sharing by a firm. Business Enterprises declare the dividends to reward the sacrifices of equity shareholders. Dividend is used as a tool to reduce the agency cost associated with the capital funds. Many factors affect the dividend policies of enterprises in India. The present study attempts to examine the dividend policies of Information Technology Companies, listed in the Bombay Stock Exchange (BSE), during the study period. The Multiple Regression Model was used to analyze the determinants of dividend policy. The results of the study found that both the factors of Corporate Governance (CG) and Firm Characteristics did affect the dividend policies of corporate enterprises. Firm Size and Profitability are other two factors which enabled the firms to declare and pay the dividends.

Keywords: Board Independence, Corporate Governance, Dividend per Share, Earnings per Share, Firm Characteristics, Information Technology, Market Capitalization.

---

* M.Phil (Management) Scholar, Department of Commerce and Financial Studies, Bharathidasan University, Tiruchirappalli – 620 024, Tamilnadu, India. marxsigo1@gmail.com

** Professor and Head, Department of Commerce and Financial Studies, Bharathidasan University, Tiruchirappalli – 620 024, Tamilnadu, India. drmselvam@yahoo.co.in

1. INTRODUCTION

Business Enterprises address the ultimate objective of maximizing the wealth of stakeholders in the long run. The dividend is one form of rewarding the equity shareholders. A portion of the annual accounting profit of a business enterprise is normally declared and paid as dividend to the equity shareholders. The dividend is disbursed normally in the form of cash dividend, special dividend, bonus share, stock split, buyback of shares and dividend warrants. The dividend decision of a firm is influenced by various factors such as the size of firm, profitability which differ across time and industry. The dividend payout is considered as the means to reduce the agency cost and it can also be used to reduce the cash flow that the managers can use at their discretion.

Lintner (1956) argued that there exists relationship between present earnings and history of past dividends among the corporate enterprises of developed economies. Firms strive hard to achieve a stable dividend policy in spite of several difficulties and challenges. Miller and Modigliani (1961) felt that the dividend policy is irrelevant in measuring the current valuation of equity shares in the presence of irrational assumptions like market perfections, zero transaction costs, perfect certainty and indifferent behavior of investors. Miller and Scholes (1982) emphasized that in the present scenario, the dividend decision is influenced more by the tax rates on dividends than capital gains and market imperfections.

The payment of dividends is directly related to the accounting profits. The dividend payout of a company has significant impact on the financing and investment decisions of the firm. Factors of Corporate Governance (CG) factors and Firm Characteristics influence the

2

rate of dividend of business concerns. This study proposes to analyze the impact of governance factors and organizational characteristics on the dividend policy of **IT Companies** in India.

2. REVIEW OF LITERATURE

An extensive review of literature is done in the area of determinants of dividend policy, in order to improve the level of understanding. The following review is based on varied sources which include the research articles published in reputed professional journals and textbooks.

La Porta Rafael, Lopez de Silanes Florencio, Shleifer Andrei and Vishny Robert (2000) pointed out that the legal system dominated the ownership structure of corporate enterprises. The companies, with widely dispersed shareholdings, earned high rate of Return on Investments (ROI). The study found that the Agency Cost could be mitigated by the professionalized institutional structure and management of business enterprises. According to **Klaus Gugler and Burcin B Yurtoglu (2003),** an increase in dividend decreases funds at the discretion of the controlling shareholder which in turn increases the market value of the firm, whereas decrease in dividend potentially implied more severe rent extraction and expropriation of small shareholders. **Thirumalvalavan P and Sunitha K (2006)** postulated that dividend is used as a mechanism for financial signaling to all the stakeholders regarding the stability and growth prospects of the firm. **Ramasamy V and Selvam M (2007)** outlined the risk - return analysis of equity investments and the existing relationship between dividends per share and the determinants of dividend factors like book value, earnings per share and the firm growth. **Chakrobarti R, Magginson W and Yadav P (2008)** delineated the existence of concentration of ownership due to predominance of the family business groups and the significance of Clause 49 of the listing agreements of the Securities and Exchange Board of India (SEBI). **Kanwal Anil**

and Sujata Kapoor (2008) found that the firm's profits and liquidity were positively related while corporate tax rates were negatively associated with the dividend payout. Amitabh Gupta (2010) emphasized the significant influence of leverage and liquidity factors on the dividend decisions of business enterprises which differs across time and industry. Franklin S John and Muthusamy K (2010) pointed out that there was negative relationship between the Earnings per Share, P/E ratio, Leverage and Dividend Payout. Anurag Pahuja (2011) found a positive relationship between the corporate governance practices and board effectiveness of the business enterprises. Badar Khalid Al Shabibi and Ramesh G (2011) asserted that greater the number of independent directors on the board, higher the dividend paid to the shareholders, which supports the agency cost theory.

It is inferred from the review of related research articles that most of the studies empirically support that factors of Corporate Governance and Firm Characteristics are the two main parameters which influence the dividend policies of corporate enterprises in spite of the existence of different policy frameworks across the economies.

3. STATEMENT OF THE PROBLEM

The Risk – Return Analysis influences the effectiveness of an investment decision. The ever increasing level of competition among the corporate enterprises warrants better management and optimum utilization of physical, financial resources and human capital. The absence of stable dividend policies, proper financial discipline and transparent Corporate Governance (CG) practices in the corporate enterprises has irked the equity investors' long term expectations of their investments. The corporate failures and financial bankruptcies, both at the national and international arena, like the falling of Enron, WorldCom and Lehman Brothers in the U.S.A and the Global Trust Bank Limited, Satyam Computers Limited in India were the

4

outcomes of Corporate Mis-governance. The occurrence of corporate failures and financial bankruptcies affected the growth of companies. These corporate entities even eroded the equity investments of their shareholders. According to the investing public, the dividend declaration is an indication that the business enterprise functions well. This phenomenon necessitated the Researcher to undertake a research study to identify the existing inter-linkages between the corporate governance factors, firm characteristics and dividend policies of the listed business enterprises. Against this background, the present study entitled, '**An Analysis of Corporate Governance and the determinants of Dividend Policies of Information Technology Companies in India**' was undertaken.

4. NEED OF THE STUDY

The study of dividend determinants of corporate enterprises is helpful for the equity investors to take well informed investment decisions. It will be useful for the corporate enterprises to become more equitable, fair and transparent in terms of Accounting, Auditing and Reporting Practices in sync with the Global Standards. It is beneficial for the corporate enterprises to enhance the financial integrity of their organizations and to protect the interests of all stakeholders including creditors, customers, and investors, regulating bodies, the suppliers and the economy as a whole.

5. OBJECTIVES OF THE STUDY

The main objective of this study was to find out the factors influencing dividend policies and to examine the existing inter-relationships between the factors of Corporate Governance (CG), Firm Characteristics and the Dividend Policies of the sample IT Companies in India.

6. HYPOTHESES OF THE STUDY

The present study aims at testing the following hypotheses.

i) There is no significant relationship between the Corporate Governance factors (namely, the **Board Size, Board Independence, and Audit Types**) and the Dividend Policies of the sample IT firms.

ii) There is no significant relationship between the **Firm Characteristics (Firm Size, Firm Profitability, Debt-Equity Ratio, Firm's Growth, Firm Risk, and Tangibility of Assets**) and Dividend Policies of the sample IT firms.

7. METHODOLOGY OF THE STUDY

7.1 SAMPLE SELECTION

The sample population for this study included all the ten companies listed in the **BSE Information Technology (IT) Index**, on the Bombay Stock Exchange (BSE) Limited. For the purpose of this study, all the ten (10) IT companies were selected as on 17-09-2012. They are as follows:

1) Core Projects & Technologies Limited, 2) Financial Technologies (India) Limited, 3) HCL Technologies Limited, 4) Hexaware Technologies Limited, 5) Infosys Limited, 6) Mphasis Limited, 7) Oracle Financial Services Software Limited, 8) Tata Consultancy Services Limited, 9) Tech Mahindra Limited and 10) Wipro Limited.

7.2 STATISTICAL TOOLS USED FOR ANALYSIS

In order to examine the relationships between the factors of Corporate Governance (CG), Firm Characteristics and the Dividend Policy, both Dependent and Independent Variables were

identified. Accordingly the Dependent Variable of this study is Dividend per Share (DPS), while the Independent Variables are grouped into two as detailed below:

Corporate Governance Factors: Board Size, Board Independence and Audit Type.

Firm Characteristics: Firm Size, Profitability, Debt – Equity Ratio, Firm Growth, Firm Risk, Industry Type and Assets Tangibility.

The Statistical Tools used in this study are as follows:

a) Descriptive Statistics (Maximum, Minimum, Mean and Standard Deviation)

b) Correlation (Correlation Value)

c) Multicolinearity Analysis (Multicolinearity Occurrence and Occurrence %) and

d) Multiple Regression (Co-efficient, t – Statistics and Significance (P – value)).

7.3 SOURCES OF DATA

The present study was mainly based on secondary data. The required information related to all variables was sourced from the CMIE – Prowess Corporate Database. The other required information was collected from the Annual Reports of the sample IT Companies, textbooks, professional journals and websites.

7.4 STUDY PERIOD

The present study is an attempt to analyze the determinants of Dividend Policies of IT Companies in India for five consecutive financial years ranging from 01-04-2007 to 31-03-2012.

7.5 LIMITATIONS OF THE STUDY

While carrying out this study, the Researcher found the following limitations.

i) This study was limited only to IT Companies which are listed in the BSE IT Index.

ii) The present study was confined only to the IT Companies which declared dividend

7

during the study period.

iii) This study period was limited only to five financial years.

iv) The required data for analysis were collected only from secondary sources (Annual Reports and Websites).

8. THE ANALYSIS OF THE DETERMINANTS OF DIVIDEND POLICIES

For the purpose of this study, the analysis of the determinants of dividend policies for sample IT firms was made as follows:

a) Analysis of the determinants of dividend policies using Descriptive Statistics

b) Analysis of the determinants of dividend policies using Correlation Values

c) Analysis of the determinants of dividend policies using Multicolinearity Occurrence and

d) Analysis of the determinants of dividend policies using Multiple Regression

    i) The analysis of the Corporate Governance Factors and

    ii) The analysis of the Firm Characteristics.

8.a) Analysis of the Determinants of Dividend Policies of IT Companies using Descriptive Statistics

Table - 8.1 illustrates the results of Descriptive Statistics for the Determinants of Dividend Policies of sample IT Companies in India during the study period from 01-04-2007 to 31-03-2012. The analysis of the Dependent Variable (Dividend) shows that Dividend per Share (DPS) of the sample IT firms (as an average) earned a minimum value of Rs. 0.52 while its maximum value was Rs. 25.75; the mean value of DPS was Rs. 8.299 and its value of standard deviation was Rs. 7.763 for all sample firms under study. The analysis of an Independent Variable (Board Size) reveals the fact that there was a maximum of 16 Directors and Minimum of 9 Directors during the study period. It is interesting to note that the number of

8

Table - 8.1: **The Results of the Descriptive Statistics for the Determinants of Dividend Policies of Information Technology Companies in India from 01-04-2007 to 31-12-2012**

Sl. No.	Variables	Description of Variables	Number of Firms	Minimum	Maximum	Mean	Standard Deviation
	Dependent Variable						
	Dividend	Dividend per Share (%)	10	0.52	25.75	8.299	7.763
	Independent Variables						
A	**Corporate Governance Factors**						
1	Board Size	Number of Board Directors	10	8.6	15.8	12.1	2.503
2	Board Independence	Non Executive Directors / Total Directors (%)	10	63.28	94.51	79.091	9.467
3	Audit Type	DH&S/ E&Y/ KPMG/ PWC	10	0	1	0.3	0.483
B	**Firm Characteristics**						
4	Firm Size	Turnover (Rs. in Cr)	10	413.64	26377.26	9171.291	10769.055
		Market Capitalization (Rs. in Cr)	10	1522.47	149007.2	42757.86	57178.523
		Number of Employees	10	1098	122076.6	47123.54	47417.588
		Total Assets (Rs. in Cr)	10	1013.09	29863.28	10594.56	11219.872
5	Profitability	Return on Capital Employed (%)	10	13.1	46.72	32.856	11.825
		Return on Shareholders' Funds (%)	10	12.37	39.18	23.886	7.989
		Return on Total Assets (%)	10	0.69	64.06	13.27	21.330
		Earnings per Share (Rs.)	10	4.6	104.08	43.574	33.005
6	Debt - Equity Ratio	Debt / Equity	10	0	1.29	0.421	0.369
7	Firm Growth	Price to Book Value	10	1.85	7.85	4.116	1.751
8	Firm Risk	Beta	10	0.49	1.32	0.863	0.280
9	Tangibility of Assets	Total Fixed Assets / Total Assets (%)	10	4.77	23	11.967	5.072

Source: CMIE Prowess and the Annual Reports of the sample Information Technology Companies; Calculations are made by using SPSS (Version 14)

9

Non - Executive Directors (NEDs) in the Board (the high powered policy decision making body of every business enterprise) was more than 50% of the total directors in most of the sample firms under study and its mean value was 79.09%. It is significant that higher percentage of Independent Directors in the Board adds value to the independence and autonomy of the Board. It is to be noted that out of the 10 firms, only three companies were audited by one of the big four audit firms, namely, Deloitte Haskins and Sells. It is learnt from the above Table that the highest value of the turnover among the sample firms was Rs. 26377.26 crores, whereas the lowest value was Rs. 413.64 crores. The Market Capitalization of all firms was at Rs. 149007.2 crores (Maximum) and Rs. 1522.47 crores (Minimum) among the sample IT Companies. It is to be noted that the mean value and the value of the standard deviation regarding Market Capitalization was recorded as Rs. 42757.86 crores and Rs. 57178.52 crores respectively. The total number of employees in the sample firms had ranged from 1098 to 122076 for all the sample firms under study. According to the analysis of the above Table, the value of total assets for all the sample firms varied between Rs.1013.09 crores and Rs. 29863.28 crores. The mean value of the assets of sample firms was valued at Rs. 10594.56 crores during the study period. Regarding the profitability measures, it is to be noted that the Return on Capital Employed (ROCE) of the sample firms was high and low with values of 46.72% and 13.1% respectively. The value of Return on Shareholders' Fund (ROSHF) was ranging between 12.37% and 39.18% for all the sample firms during the study period. The Return on Total Assets (ROTA) was the highest at 64.06% whereas the lowest was 0.69%, the mean value of ROTA was recorded as 13.27% and the value of the standard deviation was 21.33%. It is to be noted that Rs. 104.08 was the highest Earnings per Share (EPS) for all the firms while the lowest was reported as Rs. 4.6, its mean value was Rs. 43.574 and the value of standard deviation was arrived at Rs. 33.005. The

10

analysis of the above Table signifies that the value for Debt - Equity Ratio was ranging between 0 and 1.29 times for all the sample firms under study. The firm growth was measured by a metric, namely Price to Book Value (PTBV). The value of PTBV was the highest at 7.85 times while the lowest was reported as 1.85 times for all the sample firms during the study period. The Firm Risk Value (Beta) was the lowest with 0.49 times and the highest with 1.32 times, the mean value of Beta was 0.863 times and the value deviated from the mean was reported as 0.280 times. The value of the Tangible Assets over the Total Assets of all the sample firms under study was the highest at 23% and the lowest was 4.77% and its mean and standard deviation values were 11.96% and 5.07% respectively.

From the above analysis, it is clearly evident that the Dependent Variable, namely, Dividend per Share (DPS) was influenced by both the factors of Corporate Governance and Firm Characteristics. The Dividend Payout was positively influenced by the firm size measures, namely, Market Capitalization and Total Assets for all the sample firms under study. The profitability measures like Return on Capital Employed (ROCE), Return on Total Assets (ROTA) and Earnings per Share (EPS) had also positively influenced to a greater extent. It denotes the fact that firms with a relatively higher Market Capitalization, Total Assets, ROCE, ROTA and EPS were normally delighted to reward their equity shareholders by declaring a higher rate of dividend than their counterparts. The Dividend Policy was negatively influenced by Independent Variables, namely, firm's Debt - Equity Ratio and firm's Risk (Beta) for the sample Information Technology Companies under study. The above Table also signifies that among the sample Information Technology firms whose Debt - Equity Ratio and firm's Risk (Beta) were higher, declared only a lower rate of dividends than their counterparts. It is because

11

the proportion of debt funds of such firms was more than their equity capital component and the risk factor towards the earning potentials was relatively higher than their counterparts.

8.b) The Analysis of Determinants of Dividend Policies of IT Companies using Correlation

Table - 8.2 exhibits the interrelationships between the Dependent Variable, namely Dividend per Share (DPS) and a host of Independent Variables which determined the Dividend Policies for IT Companies in India during the period from 01-04-2007 to 31-03-2012. As stated earlier, there are 9 independent variables and one dependent variable (DPS). The analysis of the above Table clearly reveals the fact that out of 9 independent variables, only 4 variables (Board Size, Firm Size, Profitability and Firm Growth) recorded positive correlation with the dependent variable (Dividend per Share). It is worth noting that among the independent variables, one of the firm size measures, namely, Market Capitalization registered the highest degree of positive correlation with the DPS and the value of correlation was 0.818 for the sample IT Companies under study. It was followed by the firm growth metric, namely, Price to Book Value (PTBV), which displayed significant positive correlation value of 0.738 with the Dividend per Share. It is learnt from the analysis of the above Table that the firm size measures, namely Turnover, Total Assets and the Number of Employees also exercised positive correlation with the DPS and correlation values were 0.692, 0.658 and 0.657 respectively. It is noted that among the profitability measures, the Return on Shareholders' Funds (ROSHF) recorded positive correlation with a value of 0.644, followed by another metric of firm profitability, namely, Earnings per Share (EPS) with a value of 0.601. One of the factors of Corporate Governance, namely, the Board Size enjoyed a positive correlation value of 0.385 with the Dividend per Share. Firm profitability measures, namely, Returns on Capital Employed (ROCE) and Return on Total Assets (ROTA) registered positive correlation with values of 0.276 and 0.110

12

Table - 8.2: The Results of the Correlation Values between the Dependent Variable and Independent Variables - The Determinants of Dividend Policies of IT Companies in India from 01-04-2007 to 31-03- 2012

Sl. No.	Variables	Description of Variables	Number of Firms	Correlation
	Dependent Variable			
	Dividend	Dividend per Share (%)	10	
	Independent Variables			
A	**Corporate Governance Factors**			
1	Board Size	Number of Board Directors	10	0.385
2	Board Independence	Non Executive Directors / Total Directors (%)	10	-0.273
3	Audit Type	DH&S/ E&Y/ KPMG/ PWC	10	-0.070
B	**Firm Characteristics**			
4	Firm Size	Turnover (Rs. in Cr)	10	0.692
		Market Capitalization (Rs. in Cr)	10	0.818
		Number of Employees	10	0.657
		Total Assets (Rs. in Cr)	10	0.658
5	Profitability	Return on Capital Employed (%)	10	0.276
		Return on Shareholders' Funds (%)	10	0.644
		Return on Total Assets (%)	10	0.110
		Earnings per Share (Rs.)	10	0.601
6	Debt - Equity Ratio	Debt / Equity	10	-0.631
7	Firm Growth	Price to Book Value	10	0.738
8	Firm Risk	Beta	10	-0.571
9	Tangibility of Assets	Total Fixed Assets / Total Assets (%)	10	-0.028

Source: CMIE Prowess and Annual Reports of the sample Information Technology Companies; Calculations are made by using SPSS (Version 14).

respectively with the DPS. On the contrary, among the independent variables, there were only 5 variables which recorded negative correlation with the lone dependent variable, namely, the Dividend per Share. The Debt – Equity Ratio enjoyed a higher degree of negative correlation with a value of -0.631, with the DPS. It was followed by a measure of Firm Risk namely, Beta which expressed a negative correlation value of -0.571. The Corporate Governance (CG) factors, namely Board Independence, Audit Type and one of the Firm Characteristics, namely, Tangibility of Assets recorded negative correlation with the Dividend per Share and their correlation values were -0.273, -0.070 and -0.028 respectively.

From the above analysis, it is observed that both the Corporate Governance factors and the Firm Characteristics had exercised significant influence on the Dividend Policy of sample IT Companies under study. Firm Size, Profitability and Growth Measures established positive correlation with the Dividend per Share. Sample Information Technology Firms, with higher Market Capitalization, Growth Rate, Turnover, Total Assets, Return on Shareholders' Funds and Earning per Share had declared relatively a higher rate of dividend to their shareholders than their counterparts. On the contrary, the firm's Debt – Equity Ratio and firm's Risk (Beta) exercised a negative correlation with the Dividend per Share for the sample IT Firms under study. In other words, firms with relatively higher Debt – Equity Ratio and firm's Risk (Beta), had declared relatively a lower rate of dividends than their counterparts since their cost of financial resources was relatively higher than their counterparts.

8.c) Analysis of the Determinants of Dividend Policies of IT Companies using Multicolinearity

Table – 8.3 shows that the results of multicolinearity analysis of the determinants of dividend policy of Information Technology Companies in India from 01-04-2007 to 31-03-2012

14

Table - 8.3: The Results of the Multicolinearity Occurrences for the Determinants of Dividend Policies of IT Companies in India from 01-04-2007 to 31-03-2012

Sl. No.	Variables	Description of Variables	Number of Firms	Multi colinearity Occurrence	Multicolinearity With (%)
	Dependent Variable				
	Dividend	Dividend per Share (%)	10	No	
	Independent Variables				
A	**Corporate Governance Factors**				
1	Board Size	Number of Board Directors	10	Yes	Return on Capital Employed (.8)
2	Board Independence	Non Executive Directors / Total Directors (%)	10	No	
3	Audit Type	DH&S/ E&Y/ KPMG/ PWC	10	No	
B	**Firm Characteristics**				
4	Firm Size	Turnover (Rs. in Cr)	10	Yes	Employees (.98), Assets (.97), Market Capitalization (.96) and Growth - Price to Book Value (.89)
		Market Capitalization (Rs. in Cr)	10	Yes	Turnover (.96), Employees (.93), Growth (.92), Assets (.91) and Return on Shareholders' Funds (.71)
		Number of Employees	10	Yes	Turnover (.98), Assets (.95), Market Capitalization (.93), Growth (.9) and Return on Shareholders' Funds (.75)
		Total Assets (Rs. in Cr)	10	Yes	Turnover (.97), Employees (.94), Market Capitalization (.91) and Growth (.8)
5	Profitability	Return on Capital Employed (%)	10	Yes	Number of Directors (.8)
		Return on Shareholders' Funds (%)	10	Yes	Growth (.85), Employees (.75) and Market Capitalization (.71)
		Return on Total Assets (%)	10	No	
		Earnings per Share (Rs.)	10	No	
6	Debt - Equity Ratio	Debt / Equity	10	No	
7	Firm Growth	Price to Book Value	10	Yes	Market Capitalization (.93), Employees (.9), Turnover (.89), Return on Shareholders' Funds (.85) and Total Assets (.8)
8	Firm Risk	Beta	10	Yes	Employees (-.8), Market Capitalization (-.74), Turnover (-.73), Growth (-.72) and Return on Capital Employed (-.71)
9	Tangibility of Assets	Total Fixed Assets / Total Assets (%)	10	No	

Source: CMIE Prowess and the Annual Reports of the sample Information Technology Companies; Calculations are made by using SPSS (Version 14).

The above Table establishes the occurrence of multicolinearity among the independent variables of the determinants of dividend Policy for IT companies in India. It is to be noted that when the value of correlation between any two Independent Variables exceeded 70 %, it is termed '**Multicolinearity**'. It is learnt that among the 9 independent variables taken for this study, only 5 variables, namely, Board Size, Firm Size, Firm Profitability, Firm's Growth and Firm Risk experienced the incidence of multicolinearity with each other in the case of sample Firms under study. Out of the 3 Corporate Governance measures, only one metric namely, Number of Directors alone experienced multicolinearity incidence with a measure of the Firm's Profitability, namely, Return on Capital Employed (ROCE) by 80%. It is noted that all the Firm Size measures, namely Turnover, Market Capitalization, Number of Employees and the Total Assets recorded multicolinearity with each other and the incidence was between 91% and 98%. It is observed that, a metric of Firm's Growth namely, the Price to Book Value (PTBV) recorded an incidence of multicolinearity with all the measures of Firm Size, namely, Market Capitalization, Total number of Employees, Turnover and Total Assets. Their percentage of incidence was 92%, 90%, 89% and 80% respectively. The Price to Book Value also established multicolinearity with one of the measures of Profitability, namely, the Return on Shareholders' Funds (ROSHF) by 84%. On the contrary, the Firm's Risk (Beta) recorded an incidence of negative values of multicolinearity with the measures of Firm Size, Firm Growth and Firm Profitability and their values were ranging between 71% and 79%.

From the above analysis, it is found that there was a higher degree of correlation among the 5 independent variables (out of the 9 Independent Variables under study) of dividend determinants, namely, Board Size, Firm Size, Firm Profitability, Firm Growth and Firm Risk of the sample IT Companies during the study period. The remaining 4 independent variables,

16

namely, Board Independence , Audit Type, Debt – Equity Ratio and the Tangibility of Assets did not had experience any incidence of multicolinearity with the other independent variables in the study.

8.d) The Analysis of Determinants of Dividend Policies of IT Companies using Multiple Regression

Table – **8.4** reveals the results of Multiple Regression for the Determinants of Dividend Policy of IT Companies in India during the study period from 01-04-2007 to 31-03-2012. From the analysis of the above Table, it is observed that among the 9 Independent Variables, a firm size metric, namely, the Market Capitalization recorded the highest positive co-efficient value at a higher degree (1%) of significance (t – value was 4.029; p – value was 0.0037). This indicates the fact that higher the market capitalization of the sample firm, higher would be the rate of dividend payout. The analysis of Earnings per Share (EPS), which recorded positive co-efficient value at 10% significance level (t – value = 1.938; p – value = 0.093), reveals the fact that firms which earned a higher value of EPS, normally declared a higher rate of dividend than their counterparts.

It is worth noting that the regression was tested at 10% significance level for two tails. The Multiple Regression was used to test the Corporate Governance Factors and Firm Characteristics.

A) The Analysis of Corporate Governance Factors

As noted earlier, the Corporate Governance (CG) Factors cover Board Size, Board Independence and Audit Type.

1) Board Size

The results of multiple regression for the determinants of dividend policies of IT

17

Table - 8.4: The Results of the Multiple Regressions for the Determinants of Dividend Policies of IT Companies in India from 01-04-2007 to 31-03-2012

Sl. No.	Variables	Description of Variables	Coefficient	t-Statistics	Significance (P-Value)
	Dependent Variable				
	Dividend	Dividend per Share (%)			
	Independent Variables				
A	**Corporate Governance Factors**				
1	Board Size	Number of Board Directors	0.066	0.280	0.786
2	Board Independence	Non Executive Directors / Total Directors (%)	-0.187	-0.905	0.395
3	Audit Type	DH&S/ E&Y/ KPMG/ PWC	-0.174	-0.838	0.429
B	**Firm Characteristics**				
4	Firm Size	Turnover (Rs. in Cr)	-1.247	-1.975	0.088*
		Market Capitalization (Rs. in Cr)	0.818	4.029	0.003***
		Number of Employees	-0.771	-1.499	0.177
		Total Assets (Rs. in Cr)	-0.538	-1.093	0.310
5	Profitability	Return on Capital Employed (%)	0.009	0.039	0.969
		Return on Shareholders' Funds (%)	0.126	0.415	0.690
		Return on Total Assets (%)	0.334	1.804	0.114
		Earnings per Share (Rs.)	0.361	1.938	0.093*
6	Debt - Equity Ratio	Debt / Equity	-0.172	-0.618	0.555
7	Firm Growth	Price to Book Value	-0.157	-0.271	0.794
8	Firm Risk	Beta	0.081	0.251	0.808
9	Tangibility of Assets	Total Fixed Assets / Total Assets (%)	-0.143	-0.673	0.522
	Observations			50	
	R – Square			0.669	
	F – Test			16.238	

The significance levels are: * 10 %, ** 5% and *** 1%.

Source: CMIE Prowess and the Annual Reports of the sample Information Technology Companies; Calculations are made by using SPSS (Version 14)

Companies during the period from 01-04-2007 to 31-03-2012, as given in Table - 8.4, shows that the number of directors, in the respective organization's board, had no significant bearing on the Dividend Policies of sample IT Firms in India. Therefore, the null hypothesis (NH1), **"There is no significant relationship between the Board Size and Dividend Policy"**, is accepted. The p-value of it was 0.786.

2) Board Independence

The regression value of board independence implies that there is no significant relationship with the dividend payout, as the p-value was 0.395. Therefore, the null hypothesis (NH2), **"There is no significant relationship between the Board Independence and Dividend Policy"**, is accepted.

3) Audit Type

The Audit Types were not considered as significant factor influencing the dividend policies of the sample IT Firms since the value of p was 0.429. Hence the null hypothesis (NH3), **"There is no significant relationship between the Audit Types and Dividend Policy"**, is accepted.

B) The Analysis of Firm Characteristics

As stated earlier, the Firm Characteristics include Firm Size, Firm Profitability, Debt – Equity Ratio, Firm Growth, Firm Risk and Assets Tangibility.

4) Firm Size

Market Capitalization, one of the firm size measures, had a higher degree of significance with the Dividend per Share (DPS). The level of significance was 5% and the t - value was 4.02 and p - value was 0.003. Hence the null hypothesis (NH4), **"There is no relationship between**

19

the Firm Size and Dividend Policy" is rejected and the alternative hypothesis (Ha4), "**There exists a direct relationship between the Firm Size and Dividend Policy**" is accepted.

5) Firm Profitability

It is to be noted that among the firm's profitability measures, Earnings per Share (EPS) had positive and significant relationship with the dividend policies of the sample IT Firms. The degree of significance was 10% (p - value = 0.93 and t - value = 1.938). Hence the null hypothesis (NH5), "**There is no relationship between the Firm's Profitability and Dividend Policy**" is rejected and the alternative hypothesis (Ha5), "**There exists a direct relationship between the Firm's Profitability and Dividend Policy**", is accepted.

6) Debt – Equity Ratio

According to the results of Table – 8.4, the Debt-Equity Ratio did not have any significant relationship with the dividend policies of the sample IT Firms, as the t - value was 0.271 and the p - value was 0.555. Hence the null hypothesis (NH6), "**There is no direct relationship between Debt – Equity Ratio and Dividend Policy**", is accepted.

7) Firm Growth

The analysis of Firm's Growth shows that the Price to Book Value (PTBV) had no significant influence on the dividend policies of the sample IT Firms (t – value = - 0.271; p – value = 0.794). Hence the null hypothesis (NH7), "**There is no significant relationship between the Firm's Growth and Dividend Policy**", is accepted.

8) Firm Risk

It is interesting to note that the Firm's Risk (Beta) had no significant relationship with the dividend payout of the sample IT Firms (t – value = 0.251; p – value = 0.808). Hence the null

hypothesis (NH8), **"There is no significant relationship between the Firm's Risk and Dividend Policy"**, is accepted.

9) Asset Structure

The analysis of Tangible Assets over the Total Assets of the sample firms, clearly shows that there was no significance with the dividend policies of such firms and asset structure (t – value = - 0.673; p – value = 0.522). Hence the null hypothesis (NH9), **"There is no significant relationship between the Tangibility of Assets and Dividend Policy"**, is accepted.

It is observed from the overall analysis of the above Table that the value of R- Square was relatively high (i.e., 0.669). This implies that all the 9 independent variables used in the study had influenced the Dividend per Share (DPS) by about 67%.

From the above analysis, it is noted that the Dividend Payout of the sample IT Companies was significantly influenced by certain measures of Firm Characteristics, namely, Firm Size (Market Capitalization) and Firm Profitability (Earnings per Share and Return on Total Assets). The Corporate Governance Factors had also influenced the dividend policies of those enterprises.

9. CONCLUSION

The present study brought out the determinants (Factors) of the dividend policy for sample IT Firms in India for the study period. Multiple Regressions analysis was used to find out the significant associations between the study variables, namely, Corporate Governance Factors and Firm Characteristics with the Dividend Policy. The present study indicates the existence of a higher degree of positive relationship between Market Capitalization, Earnings per Share with the Dividend Payout. The autonomy of the Board of Directors and the inclusion of more number

21

of Independent Directors in the board also positively influenced the Information Technology Companies to pay higher dividends to their equity shareholders for reducing the agency cost.

10. SCOPE OF FUTURE STUDY

Further research can be explored in this area of study to delineate other influencing factors of dividend determinants by means of deploying alternate methods for reducing the agency cost and to enhance the long - term stakeholder value ultimately.

REFERENCES

I) Research Articles:

Amitabh Gupta and Charu Banga, 2010, "The Determinants of Dividend Policy", *Decision*, 37(2); 63-77.

Badar Khalid Al Shabibi and Ramesh G, 2011, "An Empirical Study on the Determinants of Dividend Policy in the UK", *International Research Journal of Finance and Economics*, 80; 105-120.

Chakraborti R, Meggison W and Yadav P, 2008, "Corporate Governance in India", *Centre for Financial Research*, Working Paper No. 08-02; 1-25.

Franklin John S and Muthusamy K, 2010, "Leverage, Growth and Profitability as Determinants of Dividend Payout Ratio – Evidence from Indian Paper Industry", *Asian Journal of Business Management Studies*, 1(1); 26-30.

Kanwal Anil and Sujata Kapoor, 2008, "Determinants of Dividend Payout Ratios – A Study of Indian Information Technology Sector", *International Journal of Finance and Economics*, 15; 63-71.

Klaus Gugler and B Burcin Yurtoglu, 2003, "Corporate Governance and Dividend Payout Policy in Germany", *European Economic Review,* (47); 731-758.

La Porta Rafael, Lopez de Silanes Florencio, Shleifer Andrei and Vishny Robert, 2000, "Agency Problems and Dividend policies around the world", *Journal of Finance*, 55; 1-33.

Mehar Ayub, 2002, "Corporate Governance and Dividend Policy", *Munich Personal RePEc Archive*, Paper No. 619; 1-13.

Pitabas Mohanty, 1999, "Dividend and Bonus Policies of Indian Companies: An Analysis", *Vikalpa*, 24(4); 35-42.

Ramasamy V and Selvam M, 2007, "Behaviour and Determinants of Equity Share Prices in India with reference to Banking Industry", *Prestige Journal of Management and Research*, 11(1); 1-15.

Thirumalvalavan P and Sunitha K, 2006, "Signaling Effect of Dividend Announcements in India", 2006, *SMART Journal of Business Management Studies*, 2(1); 32-38.

II) Textbooks:

Fernando A. C, 2009, "Corporate Governance – Principles, Policies and Practices", *Dorling Kindersley (India) Pvt. Ltd.*, New Delhi.

Kothari C. R, 2008, "*Research Methodology*", *Vishwa Prakashan Publications*, Jaipur.

Pandey I.M, 2006, "*Financial Management*", *Vikas Publishing House*, Delhi.

Thomas Clarke, 2009, "*International Corporate Governance – A Comparative Approach*", *Routledge, Taylor & Francis Group*, Oxon, England.

III) Web Resources:

www.bseindia.com

www.cmie.com

www.core-edutech.com

www.ftindia.com

www.hcltech.com