



Profitability and Dividend Payment in Selected Companies of Information Technology Industry in India- An Analysis

Dr. L.Krishna Veni¹,

Professor, Area Chair, Social Sciences

Siva Sivani Institute of Management, Secunderabad-5000100, India

Ms.R.Manvitha²

,Senior Student, PGDM

Siva Sivani Institute of Management, Secunderabad-5000100, India

ABSTRACT

This study aims to examine the relationship between profitability and dividend for selected five IT companies in India during the period 2012 to 2016. Descriptive as well as inferential statistical tools have been used to draw the meaningful inferences. The major findings of the study concludes that in terms of Earning Per Share(EPS), Infosys has registered highest average, whereas Wipro has shown lowest average during the period 2012 to 2016 among the selected five IT companies. It is evident that the EPS, Dividend Per Share (DPS) and Dividend Pay-out Ratio (DPR) of five selected IT companies have been highly fluctuating during the study period. ANOVA Test results concluded that the null hypotheses, 'Average EPS earned across five selected IT Companies is uniform', 'Average DPS paid among five selected IT Companies is uniform' and the 'Average DPR among the selected IT Companies is uniform' have been rejected and alternative hypotheses have been accepted. Further, it is found that there is positive correlation between EPS and DPS coefficient value which is almost 1 in case of WIPRO and HCL and conclude that the hypothesis 'EPS and DPS vary together' holds good. Thus it can be proposed that the investors can look at the shares in TCS, Infosys and Hindustan Computers Limited (HCL) since they have established the significant relationship between profitability and dividend payment.

Keywords: IT Industry , Earning Per Share, Dividend Per Share, Dividend Pay-out Ratio, Average, ANOVA, Correlation Coefficient.

Introduction

India's IT Services industry was born in Mumbai in 1967 with the establishment of the Tata Group in partnership with Burroughs The first software export zone, SEEPZ , the precursor to the modern-day IT park was established in Mumbai in 1973. More than 80 percent of the country's software exports were from SEEPZ in the 1980s. In the era of LPG, India is the second-largest exporter of IT and it dominated the Indian industry and recorded a major share of the industry's total revenue. Atal Bihari Vajpayee (Prime Minister from 1998–2004) government focused on the development of information technology among its top five priorities and formed the Indian National Task and Software Development.

The Indian IT market currently focuses on providing low-cost solutions in the services business of global IT. The other prominent trend is that IT jobs, once confined to Bangalore are slowly starting to experience a geographical diffusion into other cities like Chennai, Hyderabad and Pune. According to Google estimates, the Indian community of developers will be the largest in the world by 2018. In IT industry, the major companies are TCS, Infosys, Wipro, HCL Tech, Tech Mahindra, Oracle, L&T InfoTech, Mphasi S, Hexaware Tech, Mindtree etc.

Earnings per share (EPS) manipulation might be the oldest profession, but there is a relatively easy way for investors to protect themselves. This study will show how to evaluate the quality of

any kind of EPS, and find out what it's telling about a stock. High-quality EPS means that the number is a relatively true representation of what the company actually earned (i.e. cash generated).

Review of Literature

This study provides a brief picture regarding various studies made so far to assess the relationship between profitability and dividend payment in different companies of the world and in different industries of India by different researchers from time to time.

Gugler (2003) estimated the relationship between dividends, the ownership and control structure of the firm for a panel of Austrian firms from 1991 to 1999 and established that state-controlled firms engage in dividend smoothing, while family-controlled firms do not.

Anand (2004) examined the factors considered by 81 CFOs in formulate divided policy to identify the determinants of dividend policy of Indian companies. This study concluded that Indian companies use dividend policy as a signaling mechanism to convey information about their prospects, therefore, affecting their market value.

Hu and Liu (2005) evaluated the cash dividend payment in Chinese listed companies and concluded that there was the existence of direct relationship between current earnings and dividend payout, but at the same time it summed up that the debt to total asset ratio was inversely proportional to the DPR.

Das (2006) established that the company had a strategy of pursuing conservative policy from 1989 to 2005 in his study. Further, he tried to find out whether any close association exists among the variables like DPS, EPS and capital employed by the way of using correlation technique and vindicated that coefficient of correlation between DPS, EPS and Capital employed was high.

Kent and Dutta (2007) in their study exposed that the dividend paying firms are significantly larger in terms of earning profit, cash flows, and growth opportunities.

Bhayani (2008) has examined the influence of earnings and lagged dividend on dividend policy of companies listed on the BSE. He found that the current year's earnings is the foremost factor affecting the dividend behavior of a firm and concludes that Indian companies follow a stable cash dividend policy.

Azfa and Mirza (2010) investigated the ownership structure and cash flows as determinants of corporate dividend policy in Pakistan on 100 companies listed at Karachi Stock Exchange during the period 2005-2007, by using Ordinary Least Square (OLS) method. This study established that the managerial and individual ownership, cash flow sensitivity, size and leverage are negative effect and operating cash-flow and profitability are positively related to cash dividend.

Anupam Mehta(2012) empirically examined the determinants of dividend pay-out for all firms in UAE in the areas of real estate, energy sector, construction sector, telecom sector, health care and industrial sectors for a period of 5 years i.e., from 2005 to 2009. This study analyses a range of determinants of dividend policy like Profitability, Risk, Liquidity, Size and Leverage of the firm. This study concluded that the profitability and size are the most important determinants of dividend pay-out decisions by UAE firms.

Al- Gharaibeh et. al., (2013) conducted a study by selecting 35 Jordanian corporations listed on the Amman Stock Exchange during the period 2005-2010, using full adjustment and partial adjustment model. The results of this study conclude that the institutional ownership of a company is more it make the shareholder more in power and it increase the value of the firm because the shareholder uses their influence and did not allow a company to invest in low return projects.

Marxia Oli Sigo and M.Selvam (2013) expressed that 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. This 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 results conclude that both the factors of corporate Governance (CG) and firm characteristics did affect the dividend policies of corporate enterprises. Moreover, it is clear that

the firm size and profitability are other two factors which facilitated the firms to declare and pay the dividends.

Biswajit Prasad Chhatoi (2015) made an attempt to measure the relationship between profitability and dividend payment in select Indian iron & steel industry during the period 2004 to 2012. This study takes the data like; EPS, DPS, and Payout Ratio of selected companies from the annual reports over the period. The results conclude that the dividend decision is greatly influenced by profitability of the firm.

Souvik Banerjee (2016) exposed that the determinants of dividend distribution are one of the hotly debated topics in corporate finance. In this paper, top 4 Information Technology (IT) companies in India are analyzed over a period of five financial years. From the findings of the study, it is evident that three factors namely Leverage, PE Ratio, and Return on Equity are found to be statistically significant, as far as dividend distribution decisions are concerned. This is a significant addition to the theory on determinants of dividend distribution, especially in the Indian context.

Krishna Veni (2017) made an attempt to examine the relationship between profitability and dividend payment in five selected cement companies of India by taking EPS, DPS and Dividend Pay-out ratio into consideration during the period 2007 to 2016. This study concludes that Shree Cement has shown the maximum average EPS and DPS among the selected industries. Yet, Dalmia Bharat has recorded highest mean value of DPR among the selected companies. The results of ANOVA test conclude the null hypotheses 'Average EPS earned across five cement companies is uniform', 'Average DPS paid among five selected cement industries is uniform' and 'Average DPR among five selected cement companies is uniform' have been rejected and the alternate hypotheses have been accepted.

Mano Isac Gnanaraj and Sengottaiyan (2017) specified that Information Technology (IT) industry has played a significant role as one of the fastest growing industries in India with a CAGR of 28% during last decade. The main purpose of this study is to estimate the relationship between dividend pay-out and corporate profitability of selected IT companies in India. Based on the results, it is clear that the impact of dividend pay-out on corporate profitability measured by return on equity is positive and statistically significant for the sample however positive but insignificant relation is found for the dividend paying companies. Further it is evident from the results that the impact of dividend pay-out on profitability in terms of earnings per share was negative.

The above reviews pointed out that there is no any collective consensus on a general dividend theory regarding dividend decision making policy. Further there are no significant studies in recent years on IT companies in India in these lines. Therefore, it is essential to study dividend behavior of IT companies in India using the different tools.

Objectives of the Study:

The decision about dividend has a significant role in the company's decision making process. Dividend decision is directly associated to the financing and investment decision of any company. It becomes imperative of a firm to decide optimum dividend decision to the shareholders. In this context, there is a need to focus on some important questions as listed below:

1. Do the companies belonging to the same industry declare same percentage of dividend?
2. Is the growth rate of the company changing, after the announcement of dividend?
3. Do the dividends declared by the companies differ significantly from each other?

Against this backdrop, this present study is mainly aimed to focus on the following objectives:

1. To examine the Earning Per Share (EPS), Dividend Per Share (DPS) and Dividend Pay-Out Ratio (DPR) of selected IT companies in India
2. To examine the relationship between profitability and Return of selected IT Companies.

Research Methodology

For this study purpose, IT Industry in India is considered as its universe. The companies, which have satisfied the following criteria have been considered for this study:

1. The company should be a listed company in any one of the stock exchanges and
2. Availability of time series data

This study has considered five selected companies of IT industry viz., Infosys, Tata Consultancy Services(TCS), Wipro, Tech Mahindra, Hindustan Computers Limited(HCL).

This study is mainly based on secondary data and it has been drawn from www.moneycontrol.com. This study covers five years of period. i.e from 2012 to 2016. The variables considered for this study are the annual Earning Per Share (EPS), Dividend per share (DPS), and Dividend Pay-out Ratio (DPR) of selected companies in Indian IT industry. Descriptive as well as inferential statistical tools are used to measure the relationship between profitability and dividend payment with the help of statistical tools like ANOVA (Single Factor test).Excel and SPSS are used to analyze the data.

Hypotheses

In order to conduct the study and examine the objectives, the following hypotheses have been formed for testing. The hypotheses for the study have been tested with 95% of significance level.

- a) H01: Average EPS earned among selected sample is uniform
- b) H02: Average DPS paid among selected sample is uniform
- c) H03: Average DPR among selected sample is uniform
- d) H04: EPS and DPS differ together

Data Analysis

The results of this study and the inferences of the study are discussed as follows:

Year	Infosys		TCS		Wipro		Tech Mahindra		HCL	
	EPS	Growth Rate	EPS	Growth Rate	EPS	Growth Rate	EPS	Growth Rate	EPS	Growth Rate
2012-13	158.76		65.23		23.03		51.10		53.32	
2013-14	178.39	12.36	94.17	44.37	30.09	30.66	115.49	126.01	85.66	60.65
2014-15	105.91	-40.63	98.31	4.40	33.38	10.93	23.58	-79.58	45.17	-47.27
2015-16	68.73	-35.11	116.13	18.13	32.97	-1.23	33.40	41.65	33.62	-25.57
2016-17	60.16	-12.47	120.04	3.37	33.61	1.94	31.37	-6.08	48.18	43.31
Descriptive Statistics										
Mean	114.39	-18.96	98.78	17.56	30.62	10.58	50.99	20.50	53.19	7.78
Standard Deviation	52.83	24.18	21.79	19.09	4.47	14.34	37.44	86.22	19.54	52.28
Kurtosis	-2.60	-1.28	0.65	1.22	2.89	1.27	3.53	0.07	2.84	-4.65
Skewness	0.27	0.78	-0.93	1.35	-1.75	1.31	1.86	0.17	1.46	-0.05
Range	118.23	52.99	54.81	41.00	10.58	31.88	91.91	205.59	52.04	107.92
Minimum	60.16	-40.63	65.23	3.37	23.03	-1.23	23.58	-79.58	33.62	-47.27
Maximum	178.39	12.36	120.04	44.37	33.61	30.66	115.49	126.01	85.66	60.65

Sum	571.95	-75.84	493.88	70.26	153.08	42.30	254.94	81.99	265.95	31.12
Count	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00

Table 1 denotes EPS of the selected five IT companies during the study period. Among the selected companies of IT, Infosys has recorded highest EPS average /Mean value of 114.39. Whereas TCS (98.78), HCL (53.19), Tech Mahindra (50.99) have occupied the second, third and fourth positions in terms of mean value of EPS during the study period. However Wipro has recorded the lowest mean value of 30.62 during the same period. The range of EPS across the selected IT companies has been varied between 10.58 (Wipro) to 118.23(Infosys).The minimum value of EPS across the selected IT companies, the Wipro (23.03) occupied the lowest position and TCS (65.23) occupied the highest position. Similarly, the maximum value of EPA has been varied between Infosys (178.39) and Wipro (33.61).

Table 2 - DPS and Growth in DPS of selected IT Companies

Year	Infosys		TCS		Wipro		Tech Mahindra		HCL	
	DPS	Growth Rate	DPS	Growth Rate	DPS	Growth Rate	DPS	Growth Rate	DPS	Growth Rate
2012-13	42.00		22.00		7.00		5.00		12.00	
2013-14	63.00	50.00	32.00	45.45	8.00	14.29	20.00	300.00	10.00	-16.67
2014-15	59.50	-5.56	79.00	146.88	12.00	50.00	6.00	-70.00	30.00	200.00
2015-16	24.25	-59.24	43.50	-44.94	6.00	-50.00	12.00	100.00	16.00	-46.67
2016-17	25.75	6.19	47.00	8.05	4.00	-33.33	9.00	-25.00	6.00	-62.50
Descriptive Statistics										
Mean	42.90	-2.15	44.70	38.86	7.40	-4.76	10.40	76.25	14.80	18.54
Standard Deviation	18.18	44.95	21.56	81.00	2.97	45.55	6.02	165.60	9.23	122.46
Kurtosis	-2.89	1.22	1.69	0.93	1.45	-2.68	1.23	0.10	2.33	3.50
Skewness	0.08	-0.32	1.11	0.81	0.88	0.39	1.23	1.03	1.43	1.86
Range	38.75	109.24	57.00	191.81	8.00	100.00	15.00	370.00	24.00	262.50
Minimum	24.25	-59.24	22.00	-44.94	4.00	-50.00	5.00	-70.00	6.00	-62.50
Maximum	63.00	50.00	79.00	146.88	12.00	50.00	20.00	300.00	30.00	200.00
Sum	214.50	-8.61	223.50	155.44	37.00	-19.05	52.00	305.00	74.00	74.17
Count	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00

The Dividend per share (DPS) of the selected five IT companies during the study period are described in Table 2. Among the selected companies of IT industry, TCS has noted highest mean value (44.70), and Infosys (42.90), HCL (14.80), Tech Mahindra (10.40) and WIPRO (7.40) have recorded second, third, fourth and fifth positions during the study period. The range of DPS across the selected IT companies has been varied from 57 (TCS) to (8.00) WIPRO during the study period. Wipro (4.00) occupied the lowest position and Infosys (24.25) occupied the highest position. The maximum value of DPA also has been varied between TCS (79.00) and Wipro (12.00).

Table 3 - DPS and Growth in DPS of selected IT Companies

Year	Infosys		TCS		Wipro		Tech Mahindra		HCL	
	DPS	Growth Rate	DPS	Growth Rate	DPS	Growth Rate	DPS	Growth Rate	DPS	Growth Rate
2012-13	26.46		33.73		30.40		9.78		22.51	
2013-14	35.32	33.49	33.98	0.75	26.59	-12.53	17.32	76.99	11.67	-48.13
2014-15	56.18	59.08	80.36	136.48	35.95	35.22	25.45	46.93	66.42	468.92
2015-16	35.28	-37.20	37.46	-53.39	18.20	-49.38	35.93	41.20	47.59	-28.34
2016-17	42.80	21.31	39.15	4.53	11.90	-34.60	28.69	-20.15	12.45	-73.83
Descriptive Statistics										
Mean	39.21	19.17	44.94	22.09	24.61	-15.32	23.43	36.24	32.13	79.65
Standard Deviation	11.11	40.74	19.94	80.72	9.60	36.94	10.14	40.74	24.05	260.18
Kurtosis	1.01	1.83	4.73	2.52	-1.31	0.84	-0.76	2.09	-1.37	3.90
Skewness	0.83	-1.11	2.16	1.33	-0.31	1.09	-0.27	-1.09	0.81	1.97
Range	29.72	96.27	46.63	189.86	24.05	84.59	26.14	97.13	54.74	542.75
Minimum	26.46	-37.20	33.73	-53.39	11.90	-49.38	9.78	-20.15	11.67	-73.83
Maximum	56.18	59.08	80.36	136.48	35.95	35.22	35.93	76.99	66.42	468.92
Sum	196.04	76.69	224.68	88.37	123.03	-61.29	117.17	144.97	160.64	318.61
Count	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00

Table 3 shows the Dividend Pay-out Ratio (DPR) of the selected five IT companies during the study period. Among the selected companies of IT industry, TCS (44.94) has recorded highest mean value of DPR, whereas Infosys (39.21), HCL (32.13), Wipro (24.61), and Tech Mahindra (23.43) have occupied second, third, fourth and fifth positions during the study period. The range of DPR across the selected IT companies has been varied from HCL (54.74) to Infosys (29.72). In terms of DPR across the selected IT companies, Tech Mahindra (9.78) occupied the lowest position and TCS (33.73) occupied the highest position. Similarly, the maximum value of DPR has been varied between TCS (80.36) to Tech Mahindra (35.93).

Hypothesis Testing

a) H01: Average EPS earned across 5 selected IT companies is uniform

From the above illustration, it explains that the EPS earned by the selected IT companies as well as growth in EPS has been highly changing during the study period.

Thus, this study attempts to test whether the difference among the average/mean EPS is uniform or not among the selected IT industries by using ANOVA, single factor test.

Table 4 -ANOVA Summary: EPS for IT Companies

		Infosys	TCS	Wipro	Tech Mahindra	HCL
No. of observations	A	5	5	5	5	5
Mean		114.39	98.78	30.62	50.99	53.19
Mean of all observations		69.59				
Square of Deviation from Mean of all observations	B	2,006.86	851.71	1,519.13	346.11	269.03
A multiplied by "n"(No. of observations)	C(A*B)	10,034.30	4,258.53	7,595.64	1,730.54	1,345.13
SS Between group	Sum of C	24,964.15				
Mean of G.Rate		-18.96	17.56	10.58	20.50	7.78
Mean of all observations		7.49				
Square of Deviation from Mean of all observations	B	699.69	101.45	9.51	169.17	0.08
A multiplied by "n"(No. of observations)	C(A*B)	3,498.44	507.25	47.55	845.85	0.42
SS Between group	Sum of C	4,899.51				
Sum of Squares of Deviations from Mean of all observations with each observation		11,162.34	1,900.09	79.97	5,605.92	1,526.72
SS within Group		20,275.04				
Sum of Squares of Deviations from Mean of all observations with each observation		2,113.10	1,402.10	729.07	22,722.13	8,260.80
SS within Group		35,227.20				

From the above results, the Table 4 is summarized as follows:

Source of Variation	SS	DF	MS (SS/DF)	F	P-Value	F Crit
Between Groups	24,964.15	4.00	6,241.04	7.39	0.000931	2.7763
Within Groups	20,275.04	24.00	844.79			
Total	45,239.18	28.00				
Growth in EPS value of IT companies						
Between Groups	4,899.51	3.00	1,633.17	0.88	0.51	3.1274
Within Groups	35,227.20	19.00	1,854.06			
Total	40,126.72	22.00				

As shown in Table 4, the results of ANOVA Test describes that the calculated value of F (7.39) is greater than the critical value of F (2.7763) and falls in the rejection region in case of EPS. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. The probability value is also greater than 0.05, hence the null hypothesis is rejected. Thus, it is clear that there is a significant difference in EPS of the five selected IT companies during the study period.

From Table 4, it is evident that the calculated value of F(0.88) is less than the critical value of F critical value (3.1274) in case of the growth of EPS. Therefore, the hypothesis is accepted and the alternative hypothesis is rejected. Further the probability value is also greater than 0.05. Hence hypothesis can be accepted and it is clear that there is no significant difference in the growth of EPS of the 5 IT industries considered for this study.

b) H02: Average DPS paid among 5 selected IT Companies is uniform.

Table 5 - ANOVA Summary: DPS for IT Companies

		Infosys	TCS	Wipro	Tech Mahindra	HCL
No. of observations	A	5.00	5.00	5.00	5.00	5.00
Mean		42.90	44.70	7.40	10.40	14.80
Mean of all observations		24.04				
Square of Deviation from Mean of all observations	B	355.70	426.84	276.89	186.05	85.38
A multiplied by "n"(no. of observations)	C(A*B)	1,778.50	2,134.18	1,384.45	930.25	426.89
SS Between group	Sum of C	6,654.26				
Mean of G.Rate		-2.15	38.86	-4.76	76.25	18.54
Mean of all observations		25.35				
Square of Deviation from Mean of all observations	B	756.28	182.59	906.56	2,591.09	46.32
A multiplied by "n"(no. of observations)	C(A*B)	3,781.42	912.94	4,532.79	12,955.47	231.58
SS Between group	Sum of C	22,414.20				
Sum of Squares of Deviations from Mean of all observations with each observation		1,322.33	1,859.80	35.20	145.20	340.80
SS within Group		3,703.33				
Sum of Squares of Deviations from Mean of all observations with each observation		6,065.03	21,192.20	6,247.17	88,082.81	45,330.43
SS within Group		166,917.63				

From the above analysis, the following results are obtained:

Source of Variation	SS	DF	MS (SS/DF)	F	P-Value	F Crit
Between Groups	6,654.26	4.00	1,663.57	10.78	0.000025	2.7763
Within Groups	3,703.33	24.00	154.31			
Total	10,357.59	28.00				
Growth in EPS value of IT companies						
Between Groups	22,414.20	3.00	7,471.40	0.85	0.48	3.1274
Within Groups	166,917.63	19.00	8,785.14			
Total	189,331.83	22.00				

Table 5 discloses that the calculated value of F(10.78) is greater than the critical value of F (2.7763) and falls in the rejection regions. Hence the null hypothesis is rejected and alternative hypothesis is accepted. The probability value is also greater than 0.05 hence the null hypothesis is rejected with 95% confidence. Therefore, it is clear that there is significant difference in DPS of the five selected IT companies.

From Table 5, it is obvious that the calculated value of F (0.48) is less than the critical value of F (3.1274) in case of growth of DPS. Hence the hypothesis is accepted and the alternative hypothesis is rejected. Further, the probability value is also greater than 0.05. Hence the null hypothesis can be accepted thus it is apparent that there is no significant difference in the growth of DPS of the five IT companies considered for this study.

c)H03: Average DPR among 5 selected IT Companies is uniform.

Table 6- ANOVA Summary: DPR for IT Companies

		Infosys	TCS	Wipro	Tech Mahindra	HCL
No. of observations	A	5.00	5.00	5.00	5.00	5.00
Mean		39.21	44.94	24.61	23.43	32.13
Mean of all observations		32.86				
Square of Deviation from Mean of all observations	B	40.26	145.77	68.16	88.90	0.54
A multiplied by "n"(no. of observations)	C(A*B)	201.31	728.85	340.79	444.52	2.69
SS Between group	Sum of C	1,718.16				
Mean of G.Rate		19.17	22.09	-15.32	36.24	79.65
Mean of all observations		28.37				
Square of Deviation from Mean of all observations	B	84.56	39.36	1,908.91	62.02	2,630.22
A multiplied by "n"(no. of observations)	C(A*B)	422.79	196.82	9,544.53	310.08	13,151.10
SS Between group	Sum of C	23,625.32				

Sum of Squares of Deviations from Mean of all observations with each observation	494.15	1,589.73	368.59	411.49	2,312.79
SS within Group	5,176.75				
Sum of Squares of Deviations from Mean of all observations with each observation	5,347.13	20,033.22	4,328.25	6,292.06	209,420.66
SS within Group	245,421.32				

From the above analysis, Table 6 is constructed as follows:

Source of Variation	SS	DF	MS (SS/DF)	F	P-Value	F Crit
Between Groups	1,718.16	4.00	429.54	1.99	0.11495	2.7763
Within Groups	5,176.75	24.00	215.70			
Total	6,894.92	28.00				
Growth in EPS value of IT companies						
Between Groups	23,625.32	3.00	7,875.11	0.61	0.58673	3.1274
Within Groups	245,421.32	19.00	12,916.91			
Total	269,046.65	22.00				

The results of ANOVA as revealed in Table 6, it is clear that the calculated value of F (1.99) is greater than the critical value of F 2.7763 and falls in the rejection regions. Thus the null hypothesis is rejected and alternative hypothesis is accepted. The probability value was also greater than 0.05, so the null hypothesis is rejected. Therefore, it is clear that there is a significant difference in DPR of the five selected IT companies.

From the Table 6, it is clear that the calculated value of F(0.61) is less than the critical value of F (3.1274) in case of the growth of DPR . Thus the hypothesis is accepted and the alternative hypothesis is rejected. The probability value is also greater than 0.05, hence hypothesis can be accepted. Therefore, it is evident there is no significant difference in the growth of DPR of the five IT companies selected for this study.

d)H04: EPS and DPS differ together

To test the above hypothesis, Karl Pearson’s correlation coefficient has been estimated between EPS and DPS for selected five IT Companies during the period 2012-2016.

Table 7- Correlation Results of EPS and DPS for IT Companies

IT Company	Correlation Coefficient
Infosys	0.7515288
TCS	0.8662382
Wipro	0.8390074
Tech Mahindra	0.9772910
HCL	0.9935168

Table 7 reveals that there is significantly positive correlation between EPS and DPS in HCL, as the coefficient value is almost 1. Similarly, Tech Mahindra (0.9773), TCS (0.8662), Wipro (0.8390) also have shown highly positive correlation. Infosys (0.7515) have shown positive correlation but the coefficient values have shown but not so high. Therefore it can be established that the hypothesis – Earning Per Share and Dividend Per Share vary together holds good.

Conclusions

From the entire analysis, the major findings of the study are briefed as follows:

In terms of EPS, Infosys has registered highest average/mean, while Wipro has exposed lowest average during the study period 2012 to 2016 among the selected five IT companies. Whereas TCS (98.76), HCL (53.11), Tech Mahindra (50.93) have occupied the second, third and fourth places in terms of mean value of EPS during the study period.

Among the selected companies, TCS has noted highest mean value of 44.70, and INFOSYS (40.60), HCL (14.80), Tech Mahindra (10.40) and WIPRO (7.28) have occupied second, third, fourth and fifth positions in terms of DPS the study period under consideration.

Similarly in terms of DPR , TCS (44.95) has recorded highest mean value of DPR, but Infosys (37.93), HCL (32.17), Wipro (23.54) and Tech Mahindra (23.42) have ranked second, third, fourth and fifth positions among the selected companies of during the study period.

On the whole, it is evident that the EPS, DPS and DPR of five selected IT companies have been highly fluctuating during the study period.

ANOVA Test results conclude that the null hypotheses, 'Average EPS earned across five selected IT Companies is uniform', 'Average DPS paid among five selected IT Companies is uniform' and the 'Average DPR among the selected IT Companies is uniform' have been rejected and alternative hypotheses have been accepted. However opposite results have been found in year to year growth of EPS, DPS and DPR.

Furthermore, it is found that there is highly positive correlation between EPS and DPS in WIPRO (0.9384) and HCL (0.9484) Infosys (0.8961) and Tech Mahindra (0.8501) .Therefore it concludes that the hypothesis 'EPS and DPS vary together' holds good.

Based on the findings of the study, it is proposed that the investors can think about investing in TCS , Infosys and HCL, since their basics are strong and established the significant relationship between profitability and dividend payment.

References:

1. Gugler, K. (2003), Corporate Governance, Dividend Pay out Policy, and the Interrelation Between Dividends, R&D and Capital Investment, *Journal of Banking and Finance* 27 (7):
2. Anand, M. (2004), Factors Influencing Dividend Policy Decisions of Corporate India. *The ICAI Journal of Applied Finance*, 2(10): 5 - 16.
3. Hu Y and Liu S (2005), Empirical Analysis of Cash Dividend Payment in Chinese Listed Companies, *Nature and Science*, Vol. 3, No. 1, pp. 65-70
4. Das P K (2006), Dividend Practices in Selected Company: An Empirical Analysis, *The Management Accountant*, Vol.41, No. 4, pp. 288-293.
5. Kent Baker H and Dutta Gandhi D (2007), The Perception of Dividend, by an Indian Managers: New Evidence *International Journal of Managerial Finance*, Vol. 3, No. 1, pp. 70-91.
6. Bhayani, S. J. (2008). Dividend Policy Behavior in Indian Capital Market: A Study of BSE - 30 Companies. *DIAS, Technology Review*, 4(1): 30 - 39.
7. Afza, T., Mirza, H, H., (2010), Ownership Structure and Determinants of Corporate Dividend Policy in Pakistan, *International Business Research*, 3(3), 2010-2021
8. Anupam Mehta(2012), An Empirical Analysis of Determinants of Dividend Policy - Evidence from the, UAE Companies, Vol3, No1, *Global Review of Accounting and Finance*, March , PP-18-31
9. Al- Gharaibeh , M., Ziad, Z., and Al-Harabsheh, K., (2013), The Effect of Ownership Structure on Dividends Policy in Jordanian Companies, *Interdisciplinary Journal of Contemporary Research in Business*4(9)759-796
10. Marxia Oli.Sigo and Selvam, M., (2013)Corporate Governance and the Determinants of Dividend Policies of Information Technology Companies in India (October 11, 2013), 24 Pages. Available at SSRN: <https://ssrn.com/abstract=2339030> or <http://dx.doi.org/10.2139/ssrn.2339030>,

11. Biswajit Prasad Chhatoi(2015), A Study on Relationship between Profitability and Dividend Payment in Iron and Steel Industries in India, Pacific Business Review, International Volume 8, Issue1, July , pp 1-9
12. Souvik Banerjee, (2016), Determinants of Dividend Policy for Selected Information Technology Companies in India: An Empirical Analysis, Parikalpana ,KIIT Journal of Management, Vol-12(I), Jan-June, pp-11-17
13. Krishna Veni.L, ,(2017) Relationship Between Profitability and Dividend Payment in Selected Cement Companies in India-An Empirical Analysis, GE-International Journal of Management Research, Volume 5, Issue2, February, pp 66-79
14. Mano Isac Gnanaraj. S and Sengottaiyan.A ,(2017) Impact of Dividend Policy on Profitability of Selected Information Technology Companies in India. International Journal of Advanced Scientific Research & Development Vol. 04, Iss. 08, Ver. I, August, pp. 01 – 15