Determinants of Dividend Policy for Information Technology Sector in India: An Empirical Analysis

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Abstract:

Determinants of Dividend Distribution are one of the hotly debated topics in corporate finance. In this research paper top 8 Information Technology (IT) companies in India are analysed over a span of 5 financial years. 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.

Key Words: Dividend Distribution, Leverage, PE Ratio, Return on Equity

JEL Classification: G35

Introduction:

Distribution of profit to shareholders is termed as dividend (Pandey, 2004). Profit earned by companies can be retained by them for future usage, or can be returned to shareholders as dividends. Each business organization, has their own unique circumstances to take a very strategic decision with regards to the money generated through profit, i.e. whether to keep retain it or to return it to the shareholders. A number of conflicting theories have also been developed with respect to this (Alkuwari, 2009). The pertinent in this respect to note that

"The harder we look at the dividend picture the more it seems like a puzzle, with pieces that just do not fit together" (Black 1976). There are different theories on dividend payment, and they deal with whether dividend payment increases or decreases the valuation of the company. It is not difficult to identify the variables which affect the dividend payment decisions, however, what is difficult to determine is how these factors interact among themselves (Ross, 2009).

Most of the existing researches have focussed on developed Western Europe and the Northern American regions. Whereas emerging economies as a whole attracted very little attention in this respect (Musiega et al, 2013).

Models developed in the western world, may or may not be applicable to emerging markets, due to their unique social as well as corporate culture, regulations and nature of investors (Musiega et al, 2013). Decisions to pay dividend and its impact on valuation of shares, is also widely debated in the literature of corporate finance, one set of argument put forth says that, dividend payment and increase in its amount, increases the valuation of the firm, whereas another line of argument says that, it decreases the valuation of the firm, still there are other researchers who think, dividend payment decisions have no impact on the valuation of the shares (Anupam, 2012). Modigliani and Miller (1961) proposed that dividend payment decisions are irrelevant from the equity valuation perspective.

Dividend payment decisions are signals to the investors regarding, what the incumbent management thinks about the future of the company. According to Bishop et al (2000), profits earned can be ploughed back into the business or kept by the management for investment for capital expenditure in future projects. In taking these decisions, what is pertinent to consider is not only how much money is needed for fresh capital expenditure , but also, what effect the capital expenditure will have on the share price of the company, thus affecting wealth of the shareholders of the company. Also firms should not drastically

change, their dividend pay-out ratio, as it will impact the planned future investments (Abdullahi, 2011).

India Information Technology Sector:

Information Technology sector in India is one of the few areas where India became globally competitive. According to a report prepared by India Brand Equity Foundation (IBEF), India approximately counts for sixty seven per-cents of the global outsourcing market of US$ 130 billion. According to the industry body NASSCOM (National Association of Software and Services Companies) data, the industry grew at a Compounded Annual Growth Rate (CAGR) of fifteen per-cents between 2010 and 2015.

Literature Review:

Krishman (1963) propagated a bird in the hand theory, regarding dividend distribution. According to this theory investors are risk averse by their very nature. Linter (1962), Gordon and Shapiro (1956) got support for this theory, through their research. The underlying logic for this behaviour was that returns from the equity market is uncertain, also there is considerable information asymmetry in the system, as a result, investors will like dividend payment, as it transfers money from the company to the investors.

On the other hand 'Agency Theory', propagated by Jensen (1986), argues that the dividend payment restricts the fund available to managers, as far as investment in new projects is concerned.

Lintner (1956) focussed on the behavioural side of the policy regarding Dividend Payment Decisions. He concluded that the managers take the decisions to increase the proportion of Dividend Payment, only when they are certain that the firm's earnings have increased permanently. Brittain (1966) studied the Dividend Payment Policy and tax structure, over a long period (1919-1960) of time and concluded that, the principal determinant of Dividend Payment Policy decisions are Cash Flow of firms, and not the Net Profit figure. On the other hand Fama and Babiak (1968), concluded that Net Profit is a better determinant of Dividend Payment, than either the Cash Flow figures or the Net Profit and the Depreciation figures are taken separately, they reached this conclusion, on the basis of data analysed of 392 major firms, on a timeframe of 1946 to 1964.

In the Indian context, there are certain studies, in this regard. For example, Rao and Sarma (1971) concluded that Lintner model can explain the Dividend Payment Decisions, in industries such as coal mining, sugar, jute textiles, chemical, and cement industries.

Bhattacharya (1979) was of the view that bird in hand hypothesis is not proper. Moreover, it was further suggested, that the firm's level of risk assumption affects the level of dividend. Bhat and Pandey (1994) found support of Lintner's model in the Indian context, which proved that Indian managers increased the level of dividend, only when they became absolutely certain about the permanent nature of the increase in profitability.

Mishra and Narender (1996) tested the Lintner's model of Dividend Payment on Public Sector Units (PSUs) in India. The study concluded that, the number of Dividend Paying PSUs compared to the total number of PSUs is quite small. The study also came to the conclusion that, the Dividend Payment Ratio (DPR), remain constant for most of the companies, even if the Earning per Share (EPS) figure shows a constant improvement. On the other hand Saxena (1999) found that, past revenue growth rate, future earnings forecast, how many shareholders a company has, and systematic risk act as the Determinants of Dividend Pay-out Policy.

Objective of the Research:

In this research endeavour, the objective is to check what determines the Dividend Payment decisions in the listed Indian companies. The primary objective of this research is to

understand the effect of Size, Profitability, PE Ratio, Leverage Ratio, and Liquidity Ratio of the companies on Dividend Payment decisions of the firms.

Hypothesis of the Research:

The null hypotheses of the research are depicted below

H01- Size of the company has a no effect on the dividend policy.

H02- Profitability of the companies has no effect on the dividend policy.

H03- PE Ratio of the companies has no effect on the dividend policy.

H04- Leverage Ratio of the companies has no effect on the dividend policy.

H05- Liquidity Ratio of the companies has no effect on the dividend policy.

Research Methodology:

Variables Used:

In this research endeavour Dividend Pay-out Ratio of the firm is taken as the dependent variable, whereas Size, Profitability, Risk, Leverage, and Liquidity of the firm are taken as the independent variables.

The Size of the firm is computed as the natural logarithm of the book value of the firm's Total Assets. This method is in accordance with Joseph (2001).

Profitability of the firm is measured by three parameters, i.e. Return on Equity (ROE), Return on Assets (ROA), Earnings per Share (EPS).

ROE = Net Profit after Preference Dividend/Book Value of Equity Capital

ROA=Net Profit/Total Assets

EPS = Net Profit/ Number of Equity shares outstanding. This is taken in terms of Indian Rupees.

The Risk is measured by PE Ratio.

PE Ratio= Market Price of One Share/ Earning per Share

Leverage=Total Debt (Short Term Debt as well as Long Term Debt)/Total Shareholder's Fund.

Liquidity = Current Ratio (CR) = Current Assets/Current Liabilities

Dividend Pay-out Ratio (DPR) = Cash Dividend/Net Profit *100

Profitability, Risk, Leverage, and Liquidity are taken in accordance to the method adapted by Mehta (2012).

Data Used:

The source of the data for this research has been Capital Market and Securities Exchange Board of India (SEBI) databases. The companies are chosen from the Cement sector in India. The period of the study, which is taken into account is five years period starting from 1st. January, 2010 to 31st. December, 2014. The companies which have not paid continuous dividend in this period are excluded. The companies with the Government ownership, financial institutions/companies are also excluded. The sample selection framework is in accordance to Gupta and Banga (2010). In total 8 top listed IT companies are taken into account. These 8 companies are the IT companies listed in Capital Market database as Large Computer Software companies. The companies considered for analysis in this study are TCS Ltd., Infosys Ltd., Wipro Ltd., and HCL Technologies Ltd.

Empirical Results:

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.404a	0.163	0.202	33.05
2	0.543b	0.295	0.219	32.87
3	0.576c	0.332	0.302	32.98
4	0.692d	0.479	0.442	33.01
5	0.712e	0.507	0.483	33.07

a. Predictors: (Constant), PE Ratio, CR, LEV, EPS, ROA, LTA, ROE

b. Predictors: (Constant), PE Ratio, CR, LEV, EPS, ROA, ROE

c. Predictors: (Constant), PE Ratio, CR, LEV, EPS, ROE

d. Predictors: (Constant), PE Ratio, LEV, EPS, ROE

e. Predictors: (Constant), PE Ratio, LEV, ROE

Table: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	0.014	3.452		0.406	.532		
PE Ratio	1.604	0.456	-0.224	4.346	0.001	0.674	1.548
LEV	3.402	0.345	0.354	5.462	0.005	0.542	1.688
ROE	4.065	0.455	0.456	7.080	0.002	0.754	1.243

Dependent Variable: DPR

The step wise regression model, used here, gradually removed the insignificant predictors one by one. The final model, with three predictors namely PE Ratio, LEV, and ROE can explain 50.7% of the variations in the Dividend Payment decisions. This is quite an improvement over 20.7% explaining capability of the initial model, as depicted by the R-Square values.

The fitted regression equation is

DPR = 0.014 + 1.604[PE Ratio] + 3.402[LEV] +4.065[ROE]

All the three predictors namely, PE Ratio, LEV, and ROE are statistically significant, even at 5% level. All the three factors have positive influence on the dependent variable (DPR).

Conclusions:

Firms with higher PE Ratio are high growth firms, so it is natural that these firms pay higher dividend. Similarly higher Leverage for firm, results in higher portion of the profit is left for the equity holders. So it is no wonder that, firms with higher Leverage have higher DPR. ROE is intrinsically related, to return of the equity holders, so higher ROE results in higher DPR. These findings are in line with the existing literature. This study was done on a period, when Indian equity markets saw some of the exciting phases, and touched new all-time high. This research covered the 8 biggest IT services companies in India. This should be an important addition to the existing literature on Dividend Payment decisions, especially in the context of the Indian capital market.

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Annexure

The eight companies are:

1. HCL Technologies
2. Infosys
3. MphasiS
4. Oracle Financial Services
5. Polaris Financial
6. TCS
7. Tech Mahindra
8. Wipro

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