

Dividend Payout and Profitability Indicators: Empirical Analysis of BSE Listed Indian Auto Manufacturer Firms

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Abstract

The study has an objective to understand that how profitability indicators of Indian manufacturing firms in automobile segment has been affected by dividend payouts. The industry segment of 2/3 wheeler manufacturers firms has been considered for the study. The study is based upon secondary source of data which has been from firms' annual reports for the period of 10 years i.e. from financial year 2006-07 to 2015-16. The considered study used causal research design and the technique of least square regression analysis has been applied through SPSS 21.0. The dividends payouts (DPOT) have been measured by taking dividend per share (DPS) as numerator and earnings per share as denominator. The profitability indicators were Operating Profit Margin (OPM), Return on Assets (ROA), Return on Sales (ROS) and Return on Equity (ROE). The results of the study showed that dividend payout had significant impact on financial indicators of Indian automobile manufacturer firms.

Key words: Profitability indicators, Dividend Payout, Return on Assets

1. Introduction

The business organizations have set up with the objective to earn profits and providing fair returns to shareholders of the organizations. The level of profitability depends upon the effective utilization of assets and its available funds and hence the organizations differs each other. Corporate profitability helps organization to cope with the negative shocks and have contribution in the stability of the organization (Ani et.al. 2012). Profit is considered to be a prerequisite for various organizations to compete in the market and it is the important internal source of finance which has lower cost. The firms can't survive in long run unless able to earn profitability on their employed assets. As per study by Bobakova, 2003 the profit

earning is the basic aim of an organization and it is the one of the measures of success of it. So, the core objective of the firm is to increase the profitability and enhance the financial performance. Malik, 2011, analyzed the financial position of the firms through ratio analysis and the common ratios which were used for measuring the financial profitability viz. return on equity, return on assets and price earnings ratio. Maximization of profitability leads to enhance the prosperity of shareholders of the firm. The investors who seek long term investment opportunity will analyze the profitability of the firms and expect more dividends on their investments (Ismiyanti et. al. 2003). As per the study by Sortono 2001 the higher profitability leads to higher share of distributable dividend to the existing shareholders. The higher firms' profitability has higher dividends or higher retained earnings which will be available for future investments.

The total earnings of the firm have two parts; one which is retained by the firms for reinvestments and the other part is for distribution to the shareholders. The amount so distributed is known as dividends. The dividend decisions are important decisions; as the organizations has to make decisions for the amount of distributable dividends and amount of retained earnings which will be available for ploughing back to the firms and percentage of profits given to the existing shareholders. In concerning with the corporate finance field; the dividend policy of a firm plays an important role and a controversial problem. The significance of dividend policy lies not only to the firms but to the shareholders, government, employees, consumers or in other words; all stakeholders of the firms. The corporate dividend policy and its pattern are different in different economies; developed or developing. Evaluation of dividend policy is always a cause of concern for financial economists for more than half century (Munaza et. al. 2017). The study by Ross et. al. 2002 depicted that the dividend policy of the firm provides information relating to performance of the firms and determine the amount funds distributed to the existing shareholders. It is important for the firms as well as for the stakeholders to evaluate the dividend pay out and retained earnings of the firm. The study by Swee et. al. 2007 noted that the dividend policy of the firm determined the capacity of dividends distributed to the existing shareholders in future and also determine the potential earnings of the firms.

1.1 Two/three wheelers Industry (2/3 wheelers)

The two wheeler industry in India has its existence since 1955 and from then it grows and yearly progress witnessed the growth in this industry. In year 1971 the sales in 2/3 wheeler industry were approximately 0.1 million units and it has seen tremendous growth in coming

years where sales has increased up to 3 million units p.a. from year 1998. The production of two wheelers has reported 18.49 million in year 2016-17 and three wheelers were 0.78 million; which indicted the growth of industry in years' progress. According to Automotive Component Manufacturers Association of India (ACMA); India stood second largest two wheelers manufacturers in world map.

2. Review of Literature

Bhanu Pratap Singh (2018) tried to measure the impact of firms' characteristics of Indian manufacturing firms on dividend policy. Profitability, size of the firm, leverage, growth opportunities and maturity were taken as characteristics of considered firms. Using the panel data analysis; the study applied the quintile regression method and tried to found out how the determinants of dividends changes the decisions regarding with the various levels of dividend. Results of the study found that dividend had varying effect on different levels of it. The results also evidenced the reasons for the difference occurred. It been stated that the difference in firm characteristics and magnitude of its; causes the difference in dividend levels of the companies. Brahmaiah et. al. (2018) analyzed the Indian listed firm during the period of 2013-18 for dividend policy and its determinants. The data were analyzed through panel data technique and results of the study indicated that inflation, liquidity, size and profitability of the firms had negative effect by dividend policy of the firms.

Lihard et. al. (2017) showed the impact of dividend policy on firms' size and productivity performance of manufacturing firms. Study firms were listed at stock exchange of Indonesia and study period was six years i.e. 2008-2014. The data were analyzed by panel data regression where Random Effect Model was applied and it has been established that firms' value has been negatively affected by dividend policy. Firm size and productivity had shown positive impact on value of the firms. The study by Muhammed T. et. al. (2017) on manufacturing companies listed at Indonesia Stock Exchange during the period of 2013 to 2015; measured the impact on firms' value by taking variables such as corporate governance structure and firms' profitability. The technique of WrapPLS was applied for data analysis and results of the study pointed towards where the dividend policy was negatively and significantly affected by the profitability. It was found that firms' value was negatively affected by profitability and it was statistically significant. The corporate governance structure had shown positive effect on value of the firm and dividend policy and it was statistically significant.

The study by Paviththira (2015) on dividend policy and corporate profitability of companies related to food and tobacco and listed at Colombo Stock Exchange during the period from year 2010 to year 2014. The corporate profitability was measured through return on assets and return on equity. The dividend policy was measured and evaluated through two major ratios viz. dividend payout ratio; which showed the share of dividend paid to shareholders and dividend per share; which showed the available dividend amount per share. Techniques of correlation and regression have been applied and the results indicated that there was no significant correlation exists between profitability and dividend policy. The study by Kajola et. al. (2015) on twenty five non financial firms which were listed at Nigerian Stock Exchange during the period of 2004-2013 analyzed the financial performance and dividend payout policy through panel data analysis. The results of the study depicted that the dividend policy had statistically significant correlation with financial performance of the firms.

Study by Ranjit Kumar (2016) on Indian Iron and Steel companies to measure the impact of profitability, size, liquidity and investment decisions on dividend policy of the companies for the period of 2004-05 to 2013-14. It has been found that fewer dividends have been paid by the more profitability firms during the study period. Biza- Khupeet. al. (2016) measured the financial performance of Botswana listed firms and studied its association with dividend payout of the firms. Total employed assets, systematic risk and net profits earned; were taken as variables. . The analysis technique of regression was applied and results indicated that the dividend payout has been positively correlated with firms' profitability.

A study by Enekwe et. al. (2015) on Nigerian listed cement companies for measuring the impact of dividend payout on performance during the period of year 2003 to 2014. The variables taken by the researcher were including Return on Equity (ROE), Return on Capital Employed (ROCE), Returns on Assets (ROA) & dividend payout ratio; which evaluated the impact of independent variables on dependent variable. The study was empirical, secondary data based and financial statements were used for the data collection of the undertaken companies. The technique of least- squares model was applied and the results showed that dividend payout and performance had positive correlation.

Fathima et. al. (2014) studied the company profitability in the Shrilankan manufacturing related companies and studied that how profitability affected by dividend payout of the study companies. The study period was during the financial years from 2007 to 2011. The techniques of correlation and regression analysis have been applied on secondary source of data. The results indicated that returns on assets (ROA) and returns on equity (ROE) had shown positive correlation with dividend payout. The sub sample of the research study had depicted negative association between earnings per share and dividend payout ratio.

Correlation analysis was measured by Ajanthan, (2013); between profitability and dividend payout for hotel and restaurant companies listed at Colombo Stock Exchange and supported the dividend relevance theory. The study by Timothy and Peter (2012) found that the firms' profitability was affected by dividend payout for the period of 2002-2010. The study was based on the firms which were listed Nairobi Securities Exchange. Results of the study pointed out that there was positive correlation exist between performance of firms and dividend payout. Research by Uwuigbe et. al. (2012) studied the firms' performance (financial) of listed firms at Nairobi Stock Exchange and found its association with dividend payout. The financial performance was calculated through operating profit and other variables were firms' size and revenues generated. Technique of regression analysis has been applied and it has been established a positive correlation between financial performance and dividend pay-out.

A study by Amidu M. (2007) on listed firms of Ghana Stock exchange and measured correlation between dividend policy and firms' performance for 7 years from year 1997 to year 2004. The first indicator of firm's performance was Return on Assets (ROA) and second indicator was Return on equity (ROE). Study found that dividend payout and corporate profitability was statically negatively correlated. Firm level analysis of Jordian firms during the period of 1989 to 2000 and applied panel data analysis for evaluating the dividend policy was study by Husam et. al. (2007) The results of the study evidenced that ownership structure affect the dividend policy of the firms. The additional determinants of dividend policy were found to be; profitability, size of the firm and age of the firm.

Study by Arnott et.al. (2003) found that managers do not believe in reducing the dividend payout ratio when firms earn reasonable earnings. It has been believed that higher distribution of dividend enhanced the growth and stability in future earnings. On the other hand lower payout ratio indicated the lower confidence of managers that firm will enhance the future earnings.

Nissim et. al, (2001), through the earning expectation model studied the future earnings of dividend and it has been found that current dividend changes and future earnings changes were positively correlated.

3. Research Objective

The present study is based on Indian auto manufacturer firms and try to understand that how dividend payout affects the Profitability indicators of firms listed at BSE, India in the

segment of 2/3 wheeler manufacturers. The following hypothesis has been framed to achieve the above objective:

H0: No significant impact of dividend payout on profitability indicators of Indian automobile listed firms in the segment of 2/3 wheeler manufacturers.

H1: Significant impact of dividend payout on profitability indicators of Indian automobile listed firms in the segment of 2/3 wheeler manufacturers.

4. Methodology

The present study has been undertaken with the basic objective to understand that how dividend payout affects the Profitability indicators of Indian auto manufacturer firms in listed at BSE, India in the segment of 2/3 wheeler manufacturers. Secondary source of data has been used and the same has collected from annual reports of the considered firms for the period of ten financial years i.e. from year 2006-07 to 2015-16. The study adopted causal research design in which the cause effect relationship has been established. Techniques of correlation and regression analysis have been applied through SPSS 21.0. The dividends payouts (DPOT); as an independent variable; have been measured by taken dividend per share (DPS) as numerator and earnings per share (EPS) as denominator. Profitability indicators were taken as dependent variables. These variables were Operating Profit Margin (OPM) which was measured as operating profit as numerator and sales as denominator; Return on Assets (ROA) measured as earnings before interest & taxes as numerator and total assets as denominator; Return on Equity (ROE) measured as ratio of available earnings to equity shareholders to equity and Return on Sales (ROS) was calculated as the ratio of net profit to sales.

4.1 Sample Selection

Sample for the study has been selected from the category of two/three wheeler manufacturer firms which were listed at Bombay Stock Exchange (BSE), India as on 31st March, 2016. There were fifteen firms registered in this category and from these fifteen firms the delisted and bicycle manufacturing firms were removed. So, the final sample comprises of seven 2/3 manufacturer firms for which the study has undertaken.

Table 1: Variables and their measures

Variables		Measures
Dividend	Dividend Payout Ratio (DPOT)	Distributed dividend per share (DPS) Earnings Per Share (EPS)
Profitability Indicators	Operating Margin (OPM)	Operating Profit (OP) X 100 Total Sales (TS)
	Return on Assets (ROA)	Earnings Before Interest & Taxes (EBIT)X 100 Total Assets (TA)
	Return on Sales (ROS)	Net Profit (NP) X 100 Total Sales (TS)

	Return on Equity (ROE)	Net Profit Available for Equity Shareholders(AvP) X 100 Equity (Equ)
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5. Findings, Results and Discussions

The data has been analyzed through SPSS 21.0 and the following correlation coefficients had been found in variables; dependent and independents.

Table 2: Correlations

		DPOT	OPM	ROA	ROS	ROE
DPO T	Pearson's Correlation	1	.557**	.477**	.469**	-.057
	Sig. (2-tailed)		0.00	0.00	0.00	.639
	Sample Size	70	70	70	70	70
OPM	Pearson's Correlation	.557**	1	.726**	.728**	-.079
	Sig. (2-tailed)	0.00		0.00	0.00	.515
	Sample Size	70	70	70	70	70
ROA	Pearson's Correlation	.477**	.726**	1	.563**	-.325**
	Sig. (2-tailed)	0.00	0.00		0.00	.006
	Sample Size	70	70	70	70	70
ROS	Pearson's Correlation	.469**	.728**	.563**	1	-.083
	Sig. (2-tailed)	0.00	0.00	0.00		.493
	Sample Size	70	70	70	70	70
ROE	Pearson's Correlation	-.057	-.079	-.325**	-.083	1
	Sig. (2-tailed)	.639	.515	.006	.493	
	Sample Size	70	70	70	70	70

** Significant Correlation at 1% level of significance (2-tailed).

The correlation table indicated correlation coefficient among the variables of the study; as dependent and independents. The DPOT had positive correlation ($r= +0.557$, 1% level of significance) with OPM and statistically significant. It indicated that operationally efficient firms had more dividends payout to their shareholders and if; operational efficiently increases then divined payout ratio also increases. DPOT has shown statically significant positive

correlation ($r= 0.477$, 1% level of significance) with ROA; showed that when firms earned returns on their employed assets it increases the dividend payments to their shareholders (see Amidu, 2007). DPOT had shown positive and statistically significant correlation ($r= +0.467$, 1% level of significance) with ROS; depicted that profit margin on sales increases resulted in higher dividend pay out to the shareholders. DPOT had shown negative correlation ($r= -0.057$, 5% level of significance) with ROE and statistically it is not significant (see Priya K et. al. 2013). It has been found that increase in ROE decreases DPOT or vice versa.

Table 3: Model Summary^b

Regression Model	R	R Square	Adjusted R Square	Standard Error of the Estimate	Change Statistics					Durbin - Watson Value
					R Square Change	F Change	df1	df2	Sig. F Change	
OPM	.557 ^a	.310	.300	.13160	.310	30.546	1	68	.000	.739
ROA	.477 ^a	.228	.216	.34276	.228	20.035	1	68	.000	.830
ROS	.469 ^a	.220	.208	.16523	.220	19.141	1	68	.000	1.807
ROE	.057 ^a	.003	-.011	1.12691	.003	.222	1	68	.639	2.097

a. Predictors: (Constant), DPOT

b. Dependent Variable: OPM, ROA, ROS, ROE in each regression Model

Above mentioned table no. 3 depicted that the summarized results of regression models. Regression model 1 (Model: OPM) showed that coefficient only 31 % variation has been explained by Dividend payout ratio in operating profit margin ratio and rest 69% is explained by some other variables. The model is statistically fit and significant as Anova table showed that ($p=0.000$) value of p is lower than the significance level at 5%.

Regression model 2 (Model: ROA) showed that only 22.8 % variation in return on assets has been explained by dividend payout ratio. Remaining 77.2 % is explained by some other variables. The model is statistically fit and significant as Anova table showed that value of $p=0.000$ is less than level of significance i.e. 0.05.

Regression model 3 (Model: ROS) showed that only 22 % variation has been explained by dividend payout ratio (DPOT) in return on sales (ROS) and rest 78% explained by some other variables. The model is statistically fit and significant as Anova table showed that ($p=0.000$) p-value is lower than 5% level of significance i.e. 0.05.

The regression model 4 (Model: ROE) showed that only 0.3 % variation in Return on equity (ROE) has been explained by dividend payout ratio. This regression model is statistically fit and but not significant as Anova table showed that (p=0.639) p-value is more than 0.05.

As it has been found from the regression results that the profitability indicators affect dividend payout in lesser magnitude. Hence; there may some more internal and external variables which may affect the dividend decisions of the considered firms (see Akinyomi Oladele John, 2014).

Table 4 : Anova Statistics

Regression Models	Sum of Squares	Df	Mean Square	F	Sig.
OPM Regression	.529	1	.529	30.546	.000 ^a
Residual	1.178	68	.017		
Total	1.707	69			
ROA Regression	2.354	1	2.354	20.035	.000 ^a
Residual	7.989	68	.117		
Total	10.343	69			
ROS Regression	.523	1	.523	19.141	.000 ^a
Residual	1.856	68	.027		
Total	2.379	69			
ROE Regression	.281	1	.281	.222	.639 ^a
Residual	86.355	68	1.270		
Total	86.636	69			

a. Predictors: (Constant), DPOT

b. Dependent Variable: OPM

Following regression models have been proposed for the profitability indicators with the help of coefficient tables generated in results:

Regression Models

$$\text{OPM} = -0.049 + 0.274 \text{ DPOT} + ut$$

$$\text{ROA} = 0.001 + 0.578 \text{ DPOT} + ut$$

$$\text{ROS} = -0.070 + 0.272 \text{ DPOT} + ut$$

$$\text{ROE} = 0.474 - 0.200 \text{ DPOT} + ut$$

The above regression models have been depicted that dividend payout has been affected the profitability indicators of selected auto manufacturer firms in India in 2/3 wheeler segment. Operating profit margin had been positively affect by dividend payouts. Return on assets and return sales were also positively affected by dividend payouts. The financial indicator return on equity was negatively affected by dividend payout for the study firms.

On the basis of regression models for profitability indictors and showing that these indicators are affected by dividend payout ratio of Indian auto 2/3 wheeler manufacturers. On the basis of results the alternative hypothesis has been accepted that there is significant impact of dividends payout on profitability indicators of the considered firms.

6. Conclusion

The preset study was based on the measuring of impact of dividend payout on profitability indicator of Indian auto manufacturer firms in 2/3 wheeler segment. It has found that the dividend payout had positive impact on profitability indicators of the firms except Return on Equity (ROE). The operationally efficient firms paid more dividend as positive impact has been found on operating profit margin of the considered auto manufacturer firms in 2/3 wheeler segment. In line with that; the return on assets has been positively affected by dividend payout & it is statistically significant; which indicated that higher dividend payout possible when firms had higher return on assets. It can be said that when firms earned higher earnings on employed assets it distributed the higher dividends. The return on sales and dividend payout showed that the higher rate of sales or higher revenues motivates the firms to pay higher dividends.

7. Limitations and Future Directions

The undertaken study was limited to two/three wheelers manufacturer firms which are listed at BSE, India. There are number of private firms exist in Indian market which make the market more competitive. The future research may cover the other private firms exist in Indian market. There are other firm specific variables which can affect the dividend decisions of the firms. The further research studies may cover micro and macro variables which may affect the dividend decisions of the firms.

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