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**IMPACT OF DIVIDEND POLICY ON SHARE HOLDER'S WEALTH:  
A STUDY OF SELECTED INDIAN AUTOMOBILE COMPANIES**

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**ABSTRACT**

*In the modern and complex environment globalization and privatization have lead the companies to aim towards the long run objectives of maximizing shareholder's wealth. Shareholder's wealth is reflected in the market price of share of company's common stock. Hence, maximizing shareholder's wealth is possible if the price of company's common stock is maximized. Shareholders are interested in cash dividends and growth in Earnings per share that results from investing the Earnings of business back into it. The best dividend policy is the one that maximises the company's stock price leading to shareholder's wealth maximization. The present study aims at analysing the impact of dividend policy on shareholder's wealth and growth in Earnings per share. It also reveals how much importance the shareholders give to the lagged market price of stock while taking buying decision of stock particularly for automobile sector of India. Five major companies from Indian automobile sector have been selected for this study with the data on the relevant market price and dividend policy variables for the period of Eleven years from 2005-2015. The study uses multiple regression analysis to meet these objectives. Dividend per share is having highest impact on market price per share. Lagged market per share is the most important determinant affecting Market price per share positively.*

**Key words: MPS, EPS, DPS, PE Ratio, Multiple Regression Analysis.**

## **INTRODUCTION:**

The term dividend policy refers to the policy concerning quantum of profits to be distributed as dividend. The concept of dividend policy implies that companies through their Board of Directors evolve a pattern of dividend payments, which has a bearing on future action. "Dividend policy is basically concerned with deciding whether to pay dividend in cash now or to pay increased dividends at a later stage or distribution of profits in the form of bonus shares."

Dividend decision is one of the three major decisions of financial management. The financial management has to choose between distribution of Earnings and retention of Earnings. The choice would depend on the effect of the decision on the shareholders wealth. That is, the payment of dividend should be preferred, if it leads to the maximization of shareholders wealth. If it is not so, the firm should retain the profit and should not distribute dividend. Financial experts have not been unanimous on this issue. Since the principle objective of the firm is to maximize the share price, question arises, what is the relationship between dividend policy and market share price? This is one of the most controversial and unresolved questions, where the empirical evidence is often mixed. However, there are opinions regarding the impact of dividends on the price of share or valuation of firm. One school of thought believes that dividend is irrelevant and does not affect the price of shares. The other school of thought believes that dividend is relevant and affects the prices of shares. Raising the dividend and the dividend pay-out rate should raise stock price. (The pay-out rate or ratio is the proportion of the Earnings paid out as dividends.) But a higher pay-out rate leaves less retained Earnings to fund future growth of the company. Companies would have to borrow or issue more stock. While determining a firm's dividend policy, Management must find a balance between current income for stockholders (dividends) and future growth of the company (retained Earnings).

The interest of shareholders and management are conflicting each other and it only can be satisfied partially. So, management should try to find out the moderate way by which both the management and shareholders can be satisfied to the maximum possible limit. How to balance these two conflicting decisions is a matter of great efforts and research. The focus of this paper is how does the company management decide about their company's dividend policies? It is the comparative study of five automobile companies.

## **LITRETURE REVIEW**

**Joseph Chenchehene, Kingsford Mensah (2015)** in their study on Dividend policy and its effects on shareholders wealth found that dividend policy had positive effect on shareholders wealth and the study had been concluded by indicating some recommendations and areas of future research. **Mohammad Salman Sarwar (2013)** in his study on "Effect of Dividend Policy on Share Holder's Wealth: A Study of Sugar Industry in Pakistan" concluded that dividend per share, Earnings per share, lagged market price ratio and lagged price Earnings ratio has a significant

positive relationship with share- holder's wealth while price Earnings ratio and /retained Earnings ratio has not a significant relationship with market price per share which shows that price Earnings ratio and retained Earnings ratio does not strongly affect the shareholder's wealth. **R. Azhagaiah et al(2008)** in their study on the Impact of Dividend Policy on Shareholders' wealth found that there was a significant impact of dividend policy on shareholders' wealth in Organic Chemical Companies while the shareholders' wealth is not influenced by dividend pay-out as far as Inorganic Chemical Companies are concerned. **Niharika Maharshi and Sarika Malik(2015)** in their study on The Impact Of The Dividend Policy on The Market Price of The Shares And Growth Of Joint Stock Companies Covered In Sensex" found that Price volatility and dividend yield had strong positive correlation but price volatility was highly negatively correlated with growth in assets. Growth in assets has impact on the price volatility for this time period. **S.M. Tariq Zafar(2012)** A Study on Dividend Policy and its Impact on the Shareholders Wealth in Selected Banking Companies in India" the results shows that there is significant impact of dividend policy on the shareholder's wealth in Indian banking companies Gilt schemes seems to be positive. **Sumninder Kaur Bawa and Prabhjot Kaur(2013)** conducted study on Impact of Dividend Policy on Shareholders Wealth: An Empirical Analysis of Indian Information Technology Sector. The results show that in the long run wealth of shareholders of dividend paying IT company. **Ramachandran Azhagaiah and Sandanam Gejalakshmi (2015)** conducted study on The Relationship between dividend policy and shareholder's wealth: evidence from FMCG sector in India" The Johansen Co-Integration test sets out that there exists a stationary; there was a long – run relationship between dividend per share (DPS) as well as retained earnings per share (RPS) and earnings per share. **Uwalomwa Uwuigbe et al (2012)** conducted study on "Dividend Policy and Firm Performance: A Study of Listed Firms in Nigeria". They found that there was a significant positive association between the performance of firms and the dividend pay-out of the sampled firms in Nigeria. The study also revealed that ownership structure and firm's size has a significant impact of the dividend pay-out of firms too. **Tor Brunzell1 (2013)** conducted study of "A Model of Optimal Dividend Policy to Maximize Shareholder Wealth: When Taxes are considered". In this paper they have outlined that when it is optimal for a company to pay out dividend and when it should reinvest the profit from operations. The model takes taxes in to consideration estimating the value of a company, i.e., the present value after deduction for taxes, is used as objective function. Four different taxes are considered. The analysis shows the terms on which it is profitable to receive dividend pay-out or to reinvest at an arbitrary time. Under the assumption of a unique maximum net present value, the terms at the time for the maximum net present value are also presented.

The present study attempts to analyse the impact of dividend on shareholders wealth of 11 selected Indian banks listed and actively traded in National Stock Exchange (NSE) during the period 2006 to 2010 using multiple regression technique, in addition t-values, the coefficient of

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determination has been calculated and its significance also been tested with the help of F-Value.

## **RESEARCH METHODOLOGY**

### **OBJECTIVES OF STUDY**

- To study the concept of dividend policy.
- To analyse the relationship between dividend pay-out and shareholders wealth.
- To analyse the effect of Earnings per Share on shareholders wealth for sector as a whole.
- To analyse the effect of Earnings per Share on shareholders wealth for selected companies.
- To estimate the impact of retained Earnings and past performance of the company on shareholders wealth.

### **Sample size:**

To study dividend policy of auto mobile sector we have selected 5 companies from Automobile sector in India. The analysis of dividend policy is based on the secondary data of 11 years commencing from 2005 and ending in 2015. Selected companies are:

- TATA MOTORS Ltd.
- BAJAJ AUTO Ltd
- HERO MOTOCORP Ltd
- TVS MOTORS COMPANY Ltd
- MOTHERSON SUMI SYSTEMS Ltd

### **TOOLS AND TECHNIQUES:**

The following Multiple Regression model is used:

$$MPS = b_0 + b_1DPS + b_2EPS + b_3LMPR + b_4LPER + b_5PER + b_6RER + e_{it}$$

Where,

MPS: Market price per Share

DPS: Dividend per Share

EPS: Earnings per Share

LMPR: Lagged Market Price Ratio

LPER: Lagged Price Earnings Ratio

PER: Price Earnings Ratio

RER: Retained Earnings Ratio

**Table: 1 Variable Description**

Name of Variable	Formula
MPS	Market price per share at the end of financial year
EPS	$\frac{PAT - Preference\ dividend}{No\ of\ equity\ shareholder}$
DPS	$\frac{Earnings\ paid\ to\ ordinary\ shareholders}{No\ of\ Equity\ share\ outstanding}$
RETAINED EARNINGSSS	$\frac{EPS - DPS}{EPS} * 100$
PERATIO	$\frac{Price\ per\ share}{Basic\ EPS}$
Lagged MPS	Market price per share at the end of previous financial year
Lagged PER	PE ratio of previous year

**DATA ANALYSIS and INTERPRETATION:**

**Table: 2 Result of regression Analysis**

Variables	Overall	Company-Wise Analysis				
		TATA Motors Ltd.	Bajaj Auto Ltd	Hero Moto-corp Ltd.	TVS Motors Ltd	MothersonSumi System Ltd
Constant	100.011	-837.471	-318.463	-1524.718	-274.352	-149.082 (0.285)
EPS	0.038 (0.696)	0.160 (0.193)	-3.840 (0.715)	15.034* (0.025)	29.064 (0.162)	3.852 (0.926)
DPS	4.994 (0.174)	58.532* (0.020)	30.531 (0.440)	-0.451 (0.811)	-40.33 (0.716)	24.874 (0.802)
Retained Earnings	-0.0000 (0.686)	0.235 (0.210)	-0.054 (0.570)	-0.082 (0.482)	0.222 (0.474)	0.000 (0.355)
PE Ratio	2.276 (0.216)	-1.054 (0.447)	40.54* (0.039)	92.112* (0.006)	3.596* (0.02)	2.428 (0.468)
Lagged MPS	0.861* (0.000)	-0.225 (0.357)	0.420 (0.285)	0.088 (0.693)	0.269 (0.407)	-0.575 (0.471)
Lagged PER	-2.348 (0.201)	1.194 (0.416)	-2.858 (0.851)	11.393 (0.575)	0.640 (0.552)	1.502 (0.419)
R-Square		0.897	0.979	0.973	0.960	0.925

	0.834					
F Change	35.896	4.365	23.540	54.962	11.973	6.204
Significant F	0.00	0.127	0.013	0.004	0.033	0.081
D.W	2.259	2.043	2.937	2.705	2.083	1.622

**Interpretation:**

**A. Overall sector Analysis:**

**Estimated Model:**

$$MPS=100.011+0.38EPS+4.994DPS-0.00002679RetainedEarnings+2.276PERatio+0.861LaggedMPS-2.348LaggedPER$$

The above result shows that there is significant impact of Lagged MPS on MPS. The value of R square equals to 0.834, indicating that 83.4 percent variation in MPS is explained by all the independent variables jointly and hence model is powerful. According to regression analysis Durbin Watson is 2.259 which is greater than 2 that indicates that there exists the relationship of negative auto-correlation.

**B. Company-Wise Analysis:**

**1. TATA motors**

**Estimated Model:**

$$MPS = -837.471 + 0.160EPS + 58.532DPS + 0.235RETAINED EARNINGSS - 1.054PE RATIO - 0.225LAGGED MPS + 1.194LAGGED PE RATIO$$

There is positive significant impact of DPS on MPS. EPS, RETAINED EARNINGS, and LAGGED PE RATIO has positive impact on MPS. PE RATIO has negative impact on MPS. DPS is highest off all variables which is 58.532 it means that DPS has highest contribution to MPS. R square is equal to 0.897 which means 89.7 percent variations in MPS explained by all the independent variables jointly and hence model is powerful. DURBIN WATSON is 2.043 which is greater than 2 indicating negative auto correlation among variables under study.

**2. BAJAJ AUTO Ltd**

$$MPS = -318.463 - 3.840EPS + 30.531DPS - 0.054RETAINED EARNINGSS + 40.54PE RATIO + 0.420LAGGED MPS - 2.858LAGGED PE RATIO$$

There is positive significant impact of PE RATIO on MPS. DPS and LAGGED MPS have positive impact on MPS. EPS, RETAINED EARNINGSS and LAGGED PE RATIO have negative impact on MPS. PE RATIO is highest off all variables which are 40.54 it means that PE RATIO has highest contribution to MPS. R square is equal to 0.979 which means 97.9 percent variations in MPS

explained by all the independent variables jointly and hence model is powerful. DURBIN WATSON is 2.937 which is greater than 2 indicating negative auto correlation among variables under study.

### 3. HEROMOTOCORPLtd

$$\text{MPS} = -1524.718 + 15.034\text{EPS} - 0.451\text{DPS} - 0.082\text{RETAINED EARNINGSS} + 92.112\text{PE RATIO} + 0.088\text{LAGGED MPS} + 11.393\text{LAGGED PE RATIO}$$

There is positive significant impact of PE RATIO and EPS on MPS. LAGEGED PE RATIO and LAGGED MPS have positive impact on MPS. RETAINED EARNINGSS and DPS have negative impact on MPS. PE RATIO is highest off all variables which is 92.112 it means that PE RATIO has highest contribution to MPS. R square is equal to 0.973 which means 97.3 per cent variations in MPS explained by all the independent variables jointly and hence model is powerful. DURBIN WATSON is 2.705 which is greater than 2, indicating negative auto correlation among variables under study.

### 4. TVS MOTORS COMPANY Ltd

$$\text{MPS} = -274.352 + 29.064\text{EPS} - 40.33\text{DPS} + 0.222\text{RETAINED EARNINGSS} + 3.596\text{PE RATIO} + 0.269\text{LAGGED MPS} + 0.640\text{LAGGED PE RATIO}$$

There is positive significant impact of PE RATIO on MPS. EPS, RETAINED EARNINGSS, LAGGED MPS and LAGGED PE RATIO have positive impact on MPS. DPS has negative impact on MPS. EPS is highest off all variables which is 29.064 it means that EPS has highest contribution to MPS. R square is equal to 0.979 which means 97.9 percent variations in MPS explained by all the independent variables jointly and hence model is powerful. DURBIN WATSON is 2.083 which is greater than 2 indicating negative auto correlation among variables under study.

### 5. MOTHERSONSUMISYSTEMS Ltd

$$\text{MPS} = -149.082 + 3.852\text{EPS} + 24.874\text{DPS} + 0.00\text{RETAINED EARNINGSS} + 2.428\text{PE RATIO} - 0.575\text{LAGGED MPS} + 1.502\text{LAGGED PE RATIO}$$

EPS, DPS, RETAINED EARNINGSS, PE RATIO and LAGGED PE RATIO have positive impact on MPS. LAGGED MPS has negative impact on MPS. DPS is highest off all variables which is 24.087 it means that DPS has highest contribution to MPS. R square is equal to 0.925 which means 92.5 percent variations in MPS explained by all the independent variables jointly and hence model is powerful. DURBIN WATSON is 1.622 which is less than 2 indicating positive auto correlation among variables under study.

### FINDINGS:

- From regression analysis of Industry as a whole it is found that DPS is highest contributing variable. LAGGED MPS has positive significant impact on MPS. EPS; DPS, PE Ratio has positive

impact on MPS. Retained Earnings and Lagged PE ratio has negative impact on MPS. For industry as a whole Lagged MPS is significant determinant of MPS.

- By analysing company wise regression it is found that in TATA MOTORS Ltd, There is positive significant impact of DPS on MPS. EPS, Retained Earnings, Lagged PE ratio has positive impact on MPS. PE Ratio has negative impact on MPS. DPS is highest off all variables which is 58.532 it means that DPS has highest contribution to MPS.
- The results of BAJAJ AUTO Ltd show that PE Ratio has positive significant impact on MPS. DPS and LAGGED MPS have positive impact on MPS. EPS, Retained Earnings and Lagged PE Ratio has negative impact on MPS. PE Ratio is highest of all variable which is 40.54 it means that PE Ratio has highest contribution to MPS.
- In case of HERO MOTORCOP Ltd, PE RATIO and EPS are positive significant determinants of MPS. Lagged PE Ratio and Lagged MPS have positive impact on MPS. Retained Earnings and DPS have negative impact on MPS. PE Ratio is highest off all variables which is 92.112 it means that PE Ratio has highest contribution to MPS.
- Form the results of TVS Motors it is found that, PE Ratio is positive significant determinant of MPS. EPS, RETAINED EARNINGSSS, LAGGED MPS and LAGGED PE RATIO has positive impact on MPS. DPS has negative impact on MPS. EPS is highest off all variables which is 29.064 it means that EPS has highest contribution to MPS.
- For MothersonSumi Systems Ltd, EPS, DPS, RETAINED EARNINGSS, PE RATIO and LAGGED PE RATIO has positive impact on MPS. LAGGED MPS has negative impact on MPS. DPS is highest off all variables which is 24.087 it means that DPS has highest contribution to MPS.

### **CONCLUSION:**

- For Automobile sector, Dividend per share is having highest impact on market price per share. Lagged market per share is the most important determinant affecting Market price per share positively.
  - Earnings per share has positive significant impact in Hero Motocorp Ltd., TATA motors, TVS motors company Ltd and MothersonSumi System Ltd whereas negative impact in Bajaj auto Ltd.
  - Dividend per share has positive significant impact in TATA motors. Dividend per share has positive impact in Bajaj auto Ltd and Mothersonsumi system Ltd. Dividend per share has negative impact in Hero Motocorp Ltd and TVS motors company Ltd.
  - Retained Earnings has positive impact in TATA Motors, TVS motors company Ltd and Motherson sumi-system Ltd. It has negative impact in Bajaj auto Ltd and Hero Motocorp Ltd.
  - PE ratio has positive significant impact in Bajaj auto Ltd; Hero Motocorp Ltd and TVS Motors Company Ltd. PE ratio has positive impact in Motherson Sumi system Ltd whereas negative impact in TATA motors. Lagged market price per share has positive impact in Bajaj auto Ltd, Hero Motocorp Ltd and TVS motors company Ltd. It has negative impact in TATA motors and Motherson Sumi system Ltd.
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- Lagged PE ratio has positive impact in TATA motors, Hero MotocorpLtd, TVS motors company Ltd and Motherson Sumi system Ltd.

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