# IMPACT OF FUNDAMENTAL FACTORS ON STOCK PRICES WITH SPECIAL REFERANCE TO AUTOMOBILE SECTOR IN INDIA

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#### Abstract

A well organized and a well regulated capital market facilitates sustainable development of the economy by providing long term funds in exchange for financial assets to investors. An economy needs funds for their economic development and growth. These fund requirements of economies are met from savings of the individuals, firms and government whose income exceeds than

The automobile sector is a key player in the global and Indian economy. Indian automobile industry contributes 4.7% of Indian GDP and 19% of India's direct tax revenue. Top most players of automobile sectors are Tata motors, Mahindra& Mahindra, Maruti Suzuki India Ltd, Bajaj auto, Hero moto-corp, Ashok Leyland ltd and TVS motor co etc. Progress and profitability of these companies is clearly understood by each investor by fundamental analysis. Rational investment decisions are based analysis of various fundamental factors. This is the context of the present study.

The study analysis the impact of fundamental factors on stock prices of seven leading automobile companies in India by considering EPS, DPS, and ROCE. The simple& multiple regression and coefficients are used for analysis.

Key words- Capital market, Automobile sector, Fundamental analysis, EPS, DPS, ROCE.

# INTRODUCTION

An economy needs fund for their economic development and growth. These fund requirements of the economies are met from the savings of individuals, firm and government whose income exceeds than consumption. A stockbrokers & traders can buy or sell stocks, bond and other securities. It provide facilities for issue and redemption of securities and other financial instruments and capital events including the payment of market should theoretically increase savings and efficiently allocate capital to productive investment which eventually leads to an increase in the economic development.

The automobile sector is a key player in the global and Indian economy. Indian automobile industry embarked on a new journey in 1991 with relicensing of the sector and subsequent opening up for 100% FDI through automatic route. It contributes 4.7% to India's GOP and 19% to India's indirect tax revenue. Top most players of automobile sectors are Tata Motors, Mahindra and Mahindra Ltd, Marathi Suzuki India Ltd, Bajaj Auto, Hero motorcap, Ashok lei land Ltd and TVs motor company etc. Progress and profitability of these companies is clearly understood by each investor by fundamental analysis. Fundamental analysis is the examination of underlying forces that affect the well-being of the economy, industry groups and companies. Rational investment decisions are based on analysis of various

fundamental factors. This is the context of present study. The study analyses the impact of fundamental factors on stock price with special references to automobile sector by considering EPS, DPS and ROCE.

## REVIEW OF LITERATURE

Dr.M.Rajesh and K.Bhasker (2015)<sup>1</sup> analyses the impact of fundamental factors on share price movements. A study on selected companies of Indian manufacturing industries on Bombay stock exchange. The primary purpose of the study is to examine the share price variation to specific macroeconomic. Market price of specific share (mps), purchasing power parity(PPP), GDP, Inflation, money supply(M2) and industrial production(INP) are the macro economic variables used for the study. The result indicates the industrial production of selected firms is significant and positively related to sock returns of the firms.

Prof. Madhavi Dholes (2013)<sup>3</sup> conducts an analytical study of four automobile sector companies in price movement shares. In this study GDP growth rate of India and industry, industrial output and growth rate have been analyzed for analyzing the performance of the company quarterly financial reports are analyzed by using variables such as EPS, P/E ratio and quality of earnings ratio. She attempts to find the correlation between price movement of the shares and the performance of their respective companies. The speculative or sentimental factors do play a role in price movement of shares.

#### **HYPOTHESIS**

For the purpose of this study, the following alternative hypothesis have been designed,

- HI: There is a significant relationship between EPS and stock price.
- H2: There is a significant relationship between DPS and stock price.
- H3: There is a significant relationship between ROCE and stock price

## RESEARCH DESIGN AND METHODOLOGY

The design of the research adopted for the study is exploratory and analytical in nature. Using secondary data for the purpose of experiential evaluation of stock prices and related important variables.

## SOURCES OF SECONDARY DATA

Data, which are not originally collected, but rather it is obtained from published or unpublished sources are known as secondary data. In this study, secondary data have been collected from website of SEBI, website of BSE, magazines, newspapers, and journals.

# SAMPLE SIZE

For this study, there are seven sample companies of automobile sector (which are listed in both NES and BSE) for minimum period of 5 year. The companies include Hero Honda, Maruti Suzuki, Tata Motors, Mahindra, Bajaj Auto, etc

## VARIABLE USED FOR THE STUDY

The relationship between fundamental factors and stock price is analyzed by using earnings per Share (EPS), Divided per share (DPS), and Return on Capital Employed (ROCE) as independent variables where stock price of each company is taken as dependent variables.

# **TOOLS FOR ANALYSIS**

Simple Correlation and multiple regressions, co-efficient are used for analyzing the collected data.

## ANALYSIS AND INTERPRETATION

# TABLE -1 Analysis of EPS during 2010-2015

Name of	2010	2011	2012	2013	2014	2015
company						
Maruti	86.42	79.22	56.6	79.19	92.13	122.85
Suzuki						

Tata	39.26	6.06	3.90	0.93	1.03	-14.72
motors						

Bajaj auto	117.51	115.4	103.80	105.20	112.10	97.2
Mahindra	36.89	46.21	48.97	56.85	63.67	56.23
&						
Mahindra						
Hero	111.76	100.53	119.09	106.07	105.61	119.46
Moto crop						
Ashok	3.18	2.37	2.13	1.63	0.11	1.2
Leyland						
TVs motor	3.17	4.10	5.24	2.44	5.51	7.32

The above table shows that EPS of different company fluctuating trend during the study period. In case of Tata Motors, EPS was negative only in 2015 and other companies will have a good EPS position.

Table -2 Analysis of DPS during 2010-2015

Name of Company	2010	2011	2012	2013	2014	2015
Maruti Suzuki	6	7.5	7.5	8	12	25
Tata Motors	15	20	4	2	2	0
Bajaj auto	40	40	45	45	50	50
Mahindra & Mahindra	9.5	11.5	12.5	13	14	12
Hero Motocorp	110	105	45	60	65.05	60
Ashok Leyland	1.50	2	1	0.60	0	0.45
TVs motor	1.2	1.10	1.30	1.20	1.40	1.90

The table 2 reveals Hero motorcrop shows a highest DPS providing company. Maruti Suzuki shows a continuous increase in DPS, while Ashok Leyland and TVs motor company have a lowest DPS during the study period.

Table - 3
Analysis of ROCE during 2010- 2015

Name of company	2010	2011	2012	2013	2014	2015
Maruti Suzuki	20.01	15.88	10.37	11.95	12.39	15
Tata Motors	7.75	5.14	3.84	0.97	1.08	-16.02
Bajaj auto	38.24	61.93	46.53	36.47	32.37	25.38

Mahindra & Mahindra	18.75	19.59	17.39	17.36	16.68	13.85	
Hero motocorp	60.45	40.93	42.86	38.71	37.16	35.93	
Ashok Leyland	6.67	9.23	8	5.55	0.35	4.04	
TVs motor	4.31	11.49	13.87	6.22	12.85	14.73	

Table 3 shows that ROCE of the company 1 fluctuate trend during the study period. There is no continuous increase in ROCE. In 2015 Tata Motors has negative ROCE.

# SIMPLE REGRESSION

It gives a single summary number that tells you whether a relationship exists between two variables, how strong that relationship is and whether the relationship is positive or negative. Here EPS, DPS, and ROCE is taken as independent variables and stock price is taken as dependent variable. Level of significance is taken as 10%.

Table -4 EPS and Stock price

Name of company	Correlation co- efficient (r )	$\mathbf{R}^2$	P value
Maruti Suzuki	0.897	80.46	.01
Tata motors	-0.847	71.76	.16
Bajaj auto	-0.456	20.7	.99
Mahindra & Mahindra	0.371	13.76	.005
Hero motocorp	-0.446	19.89	.99
Ashok Leyland	-0.337	11.35	.20
TVs motors	0.835	69.7	.24

Table 4 shows the relationship between EPS and stock price of selected automobile companies. In case of Maruti Suzuki correlation co-efficient is 0.89, it explains a strong relationship between EPS and stock price of Maruti Suzuki. R² clarifies how much dependent variable can be explained by independent variable. R² Statistic of 80.46% Means that a variation in the stock price of Maruti is explained by EPS to the extent of nearly 81%. P value (.01) implies that there exists a strong relationship between EPS and stock price.

In case of TVs motors (r=0.835) there is a strong positive relationship between EPS and stock price and 69.7% variation in the stock price of TVs motors is explained by EPS. P value (.24),there is no significant relationship between stock price and EPS.

From the above analysis, it may be concluded that EPS of Maruti Suzuki and TVs motors are significantly related to stock price. But in other companies EPS is not significantly related to stock price. Hence the null hypothesis that there is no significant relationship between EPS and stock price is accepted.

Table 5
DPS and stock price

Name of companies	Correlation co-efficient	$\mathbb{R}^2$	P value
Maruri suzuki	0.975	95.06	0.31
Tata motors	-0.547	29.92	0.52
Bajaj auto	0.7704	59.35	0.32

Mahindra &Mahindra	0.199	39.89	0.01
Hero motocorp	0.257	66.1	0.32
Ashok Leyland	-0.355	12.66	0.18
TVS motors	0.93	86.6	0.47

From the above table shows it is evident in the case of all companies except Maruti Suzuki and TVS Motors, there is not a significant relationship between DPS and stock prices.

From the above facts we can conclude that DPS has no impact on stock price. Hence we accept null hypothesis.

Table 6
Simple regression of ROCE and stock price

Name of companies	Correlation co-efficient	$\mathbb{R}^2$	P value
Maruti Suzuki	0.0044	0.0005	0.05
Tata Motors	-0.7069	49.8	0.16
Bajaj auto	-0.935	87.42	0.61
Mahindra & Mahindra	-0.168	28.25	0.22
Hero moto corp	-0.503	25.30	0.14
Ashok Leyland	-0.348	12.11	0.54
TVS motors	0.54	29.1	0.75

The above table explains the significant relationship between ROCE and company market price. In case of Maruti Suzuki and TVS motors there is a positive correlation between ROCE and stock price. In case of other companies there is a negative correlation between these two variables. Here almost all the companies P value is also greater than 0.1, so ROCE has no impact on stock prices, hence we accepted the null hypothesis.

Table 7

Hypothesis and results

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hypotheses	relationship	results			
H1	There is a significant relationship	REJECTED			
	between EPS and stock prices				
H2	There is significant relationship	REJECTED			
	between DPS and stock prices	(/ )			
Н3	There is significant relationship	REJECTED			
A W	between ROCE and stock prices.	7/			

# **FINDINGS**

- The EPS of Maruti Suzuki is increasing year after year. Other company has fluctuating trend. Highest EPS was given by Maruti Suzuki in 2015
- Highest DPSwass given by hero Moto-corp.
- ROCE of companies fluctuating trend
- In simple regression, correlation co-efficient is highest in Maruti Suzuki and shows high positive correlation between EPS and company's stock price
- Maruti Suzuki and TVS motors show significant positive relationship between DPS and stock price.
- Significant relationship of ROCE and Stock price is expressed in TVS motors and Maruthi Suzuki. Other company does not show any significant relationship between two variables.

# CONCLUSION

The study conducted on "impact of fundamental factors on stock price, a case based approach to auto mobile sector", it is clear that there is no significant relationship with company market price and company fundamentals. The study considered three performance indicators that is EPS, DPS, and ROCE to determine the co-relation with the stock price. But it was found that there is no significant co-relation between stock price and these variables. So the study concludes that the price of stock is influenced more by factors other than company fundamentals. It reenforces the fact that either price is controlled by big market manipulators or by market rumors, which is possible

due to the profile of retail investors of auto mobile, majority being either educated or little educated with no clue about the market fundamentals or company fundamentals what so ever.

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