# RISK AND RETURN ANALYSIS OF SELECTED **AUTOMOBILE COMPANIES**

#### **R.SHOBIGA**

M.com, Department of Commerce, PSG College of Arts and Science, Coimbatore.

## S.SOWBARNIKA

Ph.D Scholar, Department of Commerce, PSG College of Arts and Science, Coimbatore.

#### Dr.M.JAYANTHI

Associate Professor, Department of Commerce, PSG college of Arts and Science, Coimbatore.

Abstract: The risk and return analysis linked with any industry reveals the intricacies involved with the particular industry. A close watch on these values throws light on a clear understanding and facilitates in decision making about investment in securities. The study focuses on the risk and return characteristics of the equity investment in automobile industry in Indian stock market. That is, the researcher has described the characteristics of the risk and return of selected equity shares of Indian automobile industry. The objective of many investors is to maximize expected return from his investments, subject to various constraints. This study covers a period of 5years which gives a clear picture of current scenario of the performing equity shares of Indian automobile industry. It shows the trend and growth of share price of the selected automobile companies in the stock market. The analysis was made on daily, monthly and yearly basis. The study has resulted in positive relationship between the automobile companies. That is, Hero Moto Corp ltd, Mahindra & Mahindra ltd, Bajaj Auto Ltd.

Keywords: Equity shares, Risk and Return, Investment, Automobile industry, India stock market.

#### Introduction

All the investors make their investment with a vowed objective of increasing their wealth. Among the various investment opportunities equity market is said to be one of the most rewarding investment option even though it involves more risk. A research has been carried out to study the equity shares of sampled companies in automobile industry in Indian stock market. The automotive industry has a strong multiplier effect on the economic growth for this sector. The importance of return in any investment decision can be traced, it enable investors to compare alternative investments in terms of what they have to offer the investor, it helps in measuring of historical returns which enables the investors to assess how well they have done, it facilitates in measuring the historical return and also helps in estimation of future returns. An investment whose returns are fairly stable is considered to be a low-risk investment, whereas an investment whose returns fluctuate significantly is considered to be high-risk investment. Equity shares whose returns are likely to fluctuate widely are considered risky investment. Government securities whose returns are fairly stable are considered to possess low risk.

# Statement of the problem

The investment made in any security involves the element of risk which may be very high or low. But such risk depends upon the nature of the equity shares and the industry which the company belong to. Therefore before taking any rational investment decision, it is good for the investors to analyze the equity in terms of risk and return which provides a clear idea regarding the risk return characteristics of the equity. This study is undertaken to analyze the equity of selected automobile companies listed in Indian stock market.

#### Literature review

M.Muthugopalakrishnan(2017) analyzed Risk Return Analysis of Pharmaceutical Industries in Indian Stock Market in this perspective has statement been undertaken to analyze the risk return relationship of selected companies in pharmaceutical industry of Indian stock market. The investors must be aware of the risk and return involved in the investment. This study helps the potential investors to make informed and rational investment decision. The sample period of this study is five years from 2012 to 2017. This study has attempted to find the risk return characteristics of selected 10 pharmaceutical companies in Indian stock market. The study concluded that from the selected pharmaceutical companies Sun Pharmaceutical Industry Ltd provides high return but the market risk of the shares are much high.

T.Mallikarjunappa and Shaini Naveen (2016) conducted a study on comparative analysis of Risk and Return with reference to stocks of CNX Bank Nifty. This study analyzes the risk and returns in the banking sector. They compare the performance of the 12 listed banks in the Nifty Bank Index. The study also analyses the performance of banking stocks mainly to understand the required rate of return and risk of a particular stock based on different risk elements prevailing in the market and economic factors.

S. Krishnaprabha and Mr. M. Vijayakumar (2015) conducted a study on Risk and Return analysis of selected stock in India. Risk and return analysis play an important role in the decision making process of most of the investors. Here, long term investors were able to take advantage of the market as well as it is less volatile. As there is less fluctuation in the shares when compared to the marketer as well as price, the long term investors are able to predict when the share is increased. The majority of IT, FMCG and Pharmaceutical Sectors give more return while compared to Banking and Automobile sector.

P.Vignesh (2009) analyzed the equity of selected companies in the automobile industry. They use Beta and Alpha techniques for analyzing risk and return of the automobile companies. The calculation of the return indicator and systematic risk provide a clear understanding regarding the investment decisions on these companies.

## Research methodology

Research design: This study is of descriptive in nature

Data Collection: This study is based on secondary data mainly collected from the website of NSE, newspapers and report by management, scholars and researchers.

Period of study: The study covers a period of 5 years from 2013 to 2018.

### Selected companies:

- Mahindra and Mahindra Ltd
- Hero MotoCorp Ltd
- Bajaj Auto Ltd

# Tools used for analysis:

- Growth rate
- Alpha
- Correlation

# Objectives of the study

- To study the growth of share price of selected automobile companies in the stock market.
- To analyze the movement of share price of selected automobile companies and the NSE index.

### **Data Analysis**

#### Growth rate

I. To study the growth of share price of selected automobile companies in the stock market

Table 1.1

Growth rate - Share price of Hero Motor Corp Ltd, Mahindra and Mahindra Ltd, Bajaj Auto Ltd from 2013-2014 to 2017-2018.

Year	Hero Moto Corp Ltd		Bajaj Auto Ltd		Mahindra and Mahindra Ltd	
	Share Price	Growth Rate	Share Price	Growth Rate	Share Price	Growth Rate
2013-2014	2274.8	-	2744.7	-	490.35	-
2014-2015	2639.8	13.83%	2805.45	2.17%	593.9	17.44%
2015-2016	2945.7	10.38%	2405.95	-16.60%	605.349	1.89%
2016-2017	3221.95	8.57%	2016.66	-19.30%	643.45	5.92%
2017-2018	3542.8	9.06%	2083.6	3.21%	738.9	12.92%

There is a fluctuating movement in the share price of Hero Motor Corp from 2274.8 to 3542.8 during the year 2013-2014 to 2017-2018. The highest growth rate of 13.83 was during the year 2014-15 and the lowest growth rate of 8.57 was during the year 2016-17.

There is a fluctuating movement in the share price of Bajaj Auto from 2744.7 to 2083.6 during the year 2013-2014 to 2017-2018. The highest growth rate of 2.17 was during the year 2014-2015 and the lowest growth rate of -19.30 was during the year 2016-2017.

There is a fluctuating movement in the share price of Mahindra and Mahindra from 409.35 to 738.9 during the year 2013-2014 to 2017-2018. The highest growth rate of 17.44 was during the year 2014-2015 and the lowest growth rate of 1.89 was during the year 2015-2016.

II. To analyze the movement of share price of selected automobile companies and the NSE index.

Table 2.1 Alpha of Hero Motor Ltd, Bajaj Auto Ltd, Mahindra and Mahindra from 2013-2014 to 2017-2018

Year	Hero Motor Ltd	Bajaj Auto Ltd	Mahindra and Mahindra
2013-2014	-0.03	0.06	0.08
2014-2015	-0.01	0.12	0.11
2015-2016	-0.3	-0.04	-0.04
2016-2017	0.6	0.08	0.07
2017-2018	0.05	-0.05	0.05

Alpha value of Hero Motor was negative (-0.3) in the year 2015-2016, it indicates the Hero Motor has underperformed NSE index. The Hero Motor performance was very poor during the year 2015-2016. The performance was positive (0.6) in the year 2014-2015, it indicate the Hero Motor has over performed NSE index. The performance of Hero Motor was very good during the year 2014-2015.

Alpha value of Bajaj Auto was negative (-0.04) in the year 2015-2016, it indicates the Bajaj Auto was under performed on its NSE index. The Bajaj Auto performance was very poor in the year 2015-2016. The performance was positive (0.12) in the year 2014-2015, it indicate the Bajaj Auto was over performed on it NSE index. The Bajaj Auto performance was very good in the year 2014-2015.

Alpha value of Mahindra and Mahindra was negative (-0.4) in the year 2015-2016, it indicates the Mahindra and Mahindra was under performed on its NSE index. The Mahindra and Mahindra performance was very poor in the year 2015-2016. The performance was positive (0.11) in the year 2017-2018, it indicates the Mahindra and Mahindra was over performed on it NSE index. The Mahindra and Mahindra stock performance was very good in the year 2017-2018.

Nse Index And Share Price Of Hero Motocorp Limited

H<sub>0</sub>: There is no significant relationship between NSE index and Hero Motor corp

#### Table 3.1

Correlation analysis - NSE index and share price of Hero Motor Corp Limited

Variables	N	Correlation	Sig
Hero motor corp	1232	0.925	0.000

It is inferred from the Correlation value of 0.925 that change in return on NSE index is positively correlated with change in return on Share price of Hero Moto Corp. There is a significant relationship between NSE index and Hero Moto Corp.

Nse index and share price of bajaj auto limited

H<sub>0</sub>: There is no significant relationship between NSE index and Bajaj Auto limited

Table 3.2

Correlation analysis – NSE index and share price of Bajaj Auto Limited

Variables	N	Correlation	Sig
Bajaj Auto and NSE Index	1232	0.887	0.000

Correlation value of 0.887 infers that change in return on NSE index is positively correlated with change in return on Share price of Bajaj Auto Limited. There is a significant relationship between NSE index and Bajaj Auto Limited.

Nse Index And Share Price Of Mahindra And Mahindra Limited

H<sub>0</sub>: There is no significant relationship between NSE index and Mahindra and Mahindra limited

**Table 3.3** 

Correlation analysis – NSE index and share price of Mahindra and Mahindra Limited

Variables	N	Correlation	Sig
M&M and NSE Index	1232	0.884	0.000

Correlation value of 0.884 infers that change in return on NSE index is positively correlated with change in return on Share price of Mahindra and Mahindra Limited. There is a significant relationship between NSE index and Mahindra and Mahindra Limited.

## **Findings**

- Mahindra and Mahindra had highest growth rate of 17.44 during the year 2014-2015 and the lowest growth rate of 1.89 during the year 2015-2016.
- Alpha value of Bajaj Auto is 0.12 in the year 2014-2015, Hero Moto Corp is 0.6 in the year 2014-2015, Mahindra and Mahindra is 0.11 in the year 2017-2018. Therefore, Bajaj Auto has a potential of gaining a high return. Similarly, the alpha values of Mahindra and Mahindra Limited, Hero Motor Corp are also less. Therefore such equities have a low return.
- There is a significant positive relationship between Share Price of Hero Moto Corp and NSE index.
- There is a significant positive relationship between Share Price of Bajaj Auto and NSE index.
- There is a significant positive relationship between Share Price of Mahindra and Mahindra and NSE index.

## Conclusion

The automobile industry is growing at a very rapid pace and its evident by a couple of indicators like the arrival of international brands in India and its financial gains. Many automobile companies, be it manufacturers or ancillaries are listed on either BSE or NSE and are gaining return during the study period. This study shows that Hero Moto Corp, Bajaj Auto Ltd, Mahindra and Mahindra Ltd has a significant positive relationship with NSE index. Therefore a successful investment in automobile sector requires a careful assessment of the automobile company's potential risk and return as well as deep examination of Indian stock market. A firm's risk and expected returns directly affect its share price. If an investor wishes to earn highest returns than the investor must appreciate that this can be achieved by accepting a commensurate increase in risk.

# **Bibiliography**

# **Books**

- V.A Avadhani, "Investment and Securities Markets in India" Himalaya Publishing House, 9th Revised Edition 2011.
- K.Sasidharan, Alex K Mathews, "Security Analysis and Portfolio Management" Tata McGraw Hill Education Private Limited, New Delhi, 2009.
- Prasanna Chandra, "Investment Analysis and Portfolio Management" Tata McGraw Hill Education Private Limited, New Delhi, 4<sup>th</sup> Edition.
- S.Kevin, "Security Analysis and Portfolio Management" PHI Learning Private Limited New Delhi 2010.

# Websites

- www.economictimes.com
- www.investopedia.com
- www.moneycontrol.com
- www.nseindia.com