



Measurement and Investigation of Creation Shareholders' Wealth in Indian Car Manufacturer Companies

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ABSTRACT

One of the most basic and fundamental tenets of capitalism is the obligation to create and maximize shareholders' wealth. Maximization shareholders wealth means maximizing the net worth of the company, and it is depended on performance management. The basic theme of this paper is woven around the ability of create shareholders' wealth in Indian Car Manufacturer Companies and identify that created wealth for shareholders is more than other benchmarks. The study covers some Indian Car Manufacturer Companies listed in Bombay stock exchange. This study is on Created Shareholder Value (CSV), Shareholder Value Added (SVA) and Shareholder Return (SR). As these reports were not available, they have been prepared by the researcher for the first time. The analysis of this study is done in two sections: 1- The analysis that indicates the position of shareholders' wealth creation in Indian Car Manufacturer Companies; 2- The analysis that indicates created wealth for shareholders in the study period is more than other benchmarks, like: Zero, Return of Treasury Bonds (free risk Government bonds or Risk free Rate), Required Return to Equity, Shareholder's returns of companies in the same industry and Return of the Stock Market Index (Sensex). Trend analysis and statistically analyzes methods and calculation the rate of growth have used in the two section of analysis.

Keywords : Share holders wealth, Indian car manufacturer, Shareholder value, Share holder value added, Shareholder return

1. INTRODUCTION

Creation shareholders' wealth has become the new corporate paradigm. It is considered to be one of the main objectives of companies. Indeed one of the most basic and fundamental tenets of capitalism is the obligation to create and maximize shareholders' wealth. Maximization the Shareholders' wealth, which is the heart of economic growth, as a long-term proposition delivers higher economic output and prosperity through productivity gains, employment growth and higher wages. Maximization shareholders wealth means maximizing the net worth of the company, and it is depended on performance management.

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Shareholders' wealth is measuring by the returns that they receive on their investments. These returns are caused from two source; Earning per Share (EPS) and changes in the market price of the shares held by them during the fiscal year. Therefore wealth maximization means maximum EPS plus maximizing the market price of the shares. With greater profit, the EPS (Earning per Share) goes up, resulting in an increase in the price of shares belonging to the shareholders. For definition of wealth creation during the period ending at time t, it is supposed that, V_{t-1} is the value of the total investment (Share Price) in the firm at the end of period t-1. Similarly, by the end of period t the firm's investors own a firm worth (Share Price) V_t and receive a cash distribution (EPS) equal to C_t . To assess the wealth created during period t, it is compared with the value of the investment and cash flow received at the end of the period with the value of the investment at the beginning of the period. However, it is not enough that $(V_t + C_t)$ exceed V_{t-1} . Since the firm's investors have invested an amount equal to V_{t-1} in the firm on which they require a return k. Therefore, a firm creates wealth for its investors during period t only where $(V_t + C_t)$ returns the value of the firm's invested capital (V_{t-1}) plus the investor's required return on the invested capital, kV_{t-1} .

2. OBJECTIVES

The basic theme of the study is woven around the Creation Shareholders' Wealth and assessment the ability of create shareholders' wealth in Indian Car Manufacturer Companies listed in Bombay Stock Exchange (BSE).

The specific objectives of the study are:

1. To identify that Indian car manufacturer companies have created wealth for their shareholders during 2001 to 2005".
2. To identify that created wealth for shareholders in the study period is more than other benchmarks.

3. PROCEDURE AND METHODOLOGY

3.1 Scope of the Study

Car manufacturer companies considered for this study are listed on BSE (Bombay Stock Exchange) during the entire period of the study. Listing on an exchange is a prerequisite since stock price information is needed for calculating the market value of companies. The income and expenditure statement and the balance sheet of the companies are taken from the BSE, Internet, Journals and Annual Reports of these companies. Beta is calculated based on the daily stock price data with the Bombay Stock Exchange's BSE200 index returns as the proxy for the market return. Beta is calculated using data from the period March 31, 2001 to March 31, 2005. The period of the study covered five years starting 2000-2001 and ending 2004-05.

3.2 Selection of the Companies

Since the researcher has about seven years experience in accounting and financial scope of the automobile industry, he had an interest to find out some new challenges in the related industry. On the other hand, the automobile industry is one of the core industries in the Indian economy and this industry is recognized as a basic mother industry. Therefore, any achievement in this area is extendable in other industries.

The study covers some Indian Car Manufacturer Companies listed in Bombay stock exchange. There are 26 companies involved in manufacturer automobiles in India that are listed in Bombay Stock Exchange. But only twenty three of them are active in BSE.

Since current study is related to shareholders' wealth, ten companies which have been

more under consideration by shareholders are selected. These companies have had the highest number of deals and trades during the period of study. The name of selected companies has been arranged alphabetically in the **Table No.1**

Table No.1
Name of Companies Selected for the Study

	Company Name	Scrip Code	Scrip ID
1	Ashok Leyland	500477	ASHOKLEY
2	Bajaj Auto	500490	BAJAJAUTO
3	Escorts	500495	ESCORTS
4	Hero Honda	500182	HEROHONDA
5	Hindustan Motors	500500	HINDMOTOR
6	Mahindra & Mahindra	500520	MNM
7	Maruti	538500	MARTI
8	Punjab Tractors	500344	PUNJABTRAC
9	Tata Motors	500570	TATAMOTORS
10	TVS Motors Co	532343	TVSMOTOR

3.3 Data Collection

This study is on Created Shareholder Value (CSV), Shareholder Value Added (SVA) and Shareholder Return (SR). As these reports were not available, they have been prepared by the researcher for the first time. Some data for this study is based on secondary data in the form of published annual reports of Indian car manufacturer companies listed on the Bombay stock exchange market.

A large amount of data has been collected from "Research, Statistics and Publication Department" and "Library" of Bombay Stock Exchange.

Journal of Capital Market, which is published every fifteen days, is one of the rich sources in these types of researches. The researcher has also arranged interview meetings with managers and expertise of these journals.

Company's sites, BSE site, Reserve Bank of India site, Capital Market Magazine site and other sites in internet have been used for gathering additional data. Some sites are: "Equitymaster.com", "BSE.com", "Indianinfo.com", "Searchindia.com", "statebankofindia.com", "Bankofindia.com", "Centralbankofindia.co.in", "Investopedia.com", "Sensex.in", "EVA.com", "Dcbl.com", "Indiaonestop.com", "cybersteering.com", "Rbi.org.in", "Incometaxdelhi.nic.in", and all the sites related to selected companies.

3.4 Analysis Of Data

In order to meet the objectives of the study, the analysis is divided into two sections:

1. The analysis that indicates the position of shareholders' wealth creation in Indian Car Manufacturer Companies.
2. The analysis that indicates created wealth for shareholders in the study period is more than other benchmarks.

In order to achieve the results of the study the researcher has used trend analysis and statistically analyzes methods in the three section of analysis. The researcher has followed the trend of some variables related to this study such as; Share price, Earning per Share, Created Shareholder Value (CSV), Shareholder Value Added (SVA), Shareholder Return (SR) and Equity Market Value (EMV). Calculation the rate of growth of these variables

was a good comparative manner. In order to neutralization the affect of unusual figures in the result, the average values of variables have been calculated. In this section comparative data and graphs about trend and rate of growth of mentioned variables, explain the relationship between shareholder wealth and other items.

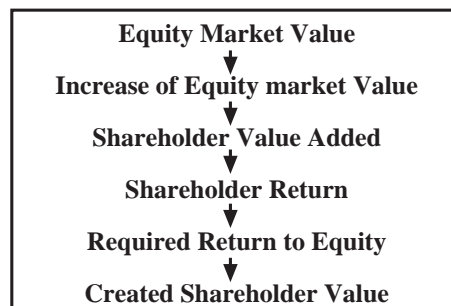
Researcher has attempted to analyze the position of shareholders' wealth creation in car manufacturer companies from 2001 to 2005. In order to evaluate the position of creation wealth in listed companies, the shareholder's returns has been compared with other benchmarks like: Zero, Return of Treasury Bonds (free risk Government bonds or Risk free Rate), Required Return to Equity, Shareholder's returns of companies in the same industry and Return of the Stock Market Index (Sensex).

4. CALCULATION OF CREATED SHAREHOLDERS' VALUE

A company creates value for its shareholders when the shareholder returns exceed the required returns to equity. In other words, a company creates value in one year when it outperforms expectations, (Pablo Fernández and Laura Reinoso 2001). In this section, for calculation of the Created Shareholders' Wealth, Figure No.1 has been used. To obtain the created shareholder Wealth, it must first define the increase of equity market

value, the shareholder value added, the shareholder return, and the required return to equity as shown in Fig No.1

Figure No.1
Stages of Created Shareholders' Value



Source: Pablo Fernández and Laura Reinoso, Shareholder value creators and shareholder value destroyers in USA. Year 2001, SS RN Working Papers.

The created shareholder value is quantified as follows:

$$\text{Created Shareholder Value} = \text{Equity Market Value} \times (\text{Shareholder Return} - K_e)$$

$$K_e = (\text{Risk Free Rate} + \text{Risk Premium}) \times \text{Beta}$$

Created Shareholder Value (CSV) can also be calculated as follows:

$$\text{Created Shareholder Value} = \text{Shareholder Value Added} - (\text{Equity Market Value} \times K_e)$$

The Equity Market Value of a company is defined as the company's market value.

$$\text{Equity Market Value} = \text{Share Price} \times \text{Number of Shares}$$

Shareholder value added is the term used for the difference between the wealth held by the shareholders at the end of a given year and the wealth they held the previous year. The increase of equity market value is not the shareholder value added.

Shareholder value added = Increase of Equity Market Value + Dividends paid during the year - Outlays for capital increases+ Other payments to shareholders (discounts on par value, share buy-backs....) - Conversion of convertible debentures

The Shareholder Value Added has exceeded the increase of Equity Market Value every year. This is because the dividends and other payments to shareholders exceeded the outlays the shareholders had to make.

Table No.2 shows the changes in market share price in the period of study.

Table No.2
Yearly change in share price in BSE for Car Manufacturer Companies
Figures in Rs

	Company Name	Yearly change in share price in BSE				
		2001	2002	2003	2004	2005
1	Ashok Leyland	20.6	29.6	194.6	-269.3	7.5
2	Bajaj Auto	111.0	123.4	635.1	-5.9	869.3
3	Escorts	-6.3	-8.6	40.0	-12.3	-1.1
4	Hero Honda	-6.8	20.7	177.5	122.3	288.6
5	Hindustan Motors	0.5	5.4	8.8	4.6	6.9
6	Mahindra & Mahindra	-67.3	23.4	276.4	155.5	-32.5
7	Maruti	4453.0	1336.2	-5412.9	85.0	175.3
8	Punjab Tractors	-74.4	-25.0	90.7	-43.6	19.5
9	Tata Motors	7.3	61.6	291.0	52.9	157.9
10	TVS Motors Co	-15.8	345.6	-400.9	-25.1	18.4

For calculation of the Shareholder Value Added, changes in the market share price during the year, dividends, outlays and other payments to shareholders are needed.

Table No.3 shows the EPS as the dividends to shareholders in the period of study.

Table No.3
Earning Per Share (EPS) for Car Manufacturer Companies
Figures in Rs

	Company Name	Earning Per Share (EPS)					
		2000	2001	2002	2003	2004	2005
1	Ashok Leyland	6.6	7.7	7.8	10.1	16.3	22.8
2	Bajaj Auto	53.0	22.5	51.2	52.8	73.0	75.6
3	Escorts	14.8	14.8	1.1	3.3	-40.0	5.4
4	Hero Honda	9.6	12.4	23.2	29.1	36.5	40.6
5	Hindustan Motors	-2.1	0.0	-2.1	-1.7	-5.0	3.8
6	Mahindra & Mahindra	23.8	10.9	8.6	12.6	30.0	44.2
7	Maruti	0.0	-10.2	4.0	5.1	18.8	29.6
8	Punjab Tractors	65.8	18.5	16.5	7.1	6.9	10.4
9	Tata Motors	2.8	-18.5	-2.0	9.4	24.7	34.4
10	TVS Motors Co	2.1	2.7	2.3	5.5	5.8	5.8

Table No. 4 shows calculated SVA

Table No.4
Shareholder Value Added (SVA) for Car Manufacturer Companies
Figures in Rs

	Company Name	Shareholder Value Added (SVA)				
		2001	2002	2003	2004	2005
1	Ashok Leyland	28.31	37.31	204.66	-253	30.25
2	Bajaj Auto	133.41	174.56	687.89	67.13	944.9
3	Escorts	8.5	-7.42	43.28	-52.26	4.36
4	Hero Honda	5.6	43.9	206.53	158.72	329.19
5	Hindustan Motors	0.45	3.3	7.09	-0.47	10.7
6	Mahindra & Mahindra	-56.34	32.02	288.95	185.49	11.71
7	Maruti	23.27	70.8	91.94	103.72	204.8
8	Punjab Tractors	-55.85	-8.5	97.78	-38.65	29.85
9	Tata Motors	-11.15	99.87	373.01	163.78	267.33
10	TVS Motors Co	-13.12	347.87	-395.37	-17.98	24.48

However, the Shareholder Value Added is not the created shareholder value. For value to be created during a period, the Shareholder Returns must exceed the Required Return to Equity.

The Shareholder Returns are the Shareholder Value Added in one year, divided by the Equity Market Value at the beginning of the year.

Shareholder Return (SR) = Shareholder Value Added / Equity Market Value in the beginning of the year

Table No.5 shows the summarized of Shareholder Returns of Companies under study in the 2001 to 2005.

Table No.5
Shareholder Return (SR) for Car Manufacturer Companies
Figures in Percent

	Company Name	Shareholder Return (SR)				
		2001	2002	2003	2004	2005
1	Ashok Leyland	57.78	53.61	206.41	-86.15	123.98
2	Bajaj Auto	49.78	46.06	136.95	5.9	83.51
3	Escorts	13.88	-13.5	93.28	-60.52	5.89
4	Hero Honda	2.17	17.51	76.1	35.36	57.64
5	Hindustan Motors	10.84	71.74	70.9	-2.51	45.92
6	Mahindra & Mahindra	-36	35.88	256.5	47.68	2.15
7	Maruti	0.52	1.59	1.59	27.56	44.4
8	Punjab Tractors	-22.52	-4.89	65.78	-16.15	15.25
9	Tata Motors	-12.05	100.07	231.18	36.21	52.92
10	TVS Motors Co	-7.37	214.47	-77.87	-16.83	29.93

Shareholder Value has been created when the Shareholder Returns exceed the Share Cost (Required Return to Equity).

The required returns of equity (share cost) are the returns that shareholders expect to obtained in order to feel sufficiently remunerated. The required returns to equity depend

on the interest rates of long-term treasury bonds and the company's risk. As is mentioned in previous sections, CSV is:

$$\text{Created Shareholder Value} = \text{Equity Market Value} \times (\text{Shareholder Return} - K_e)$$

Equity Market Value and Shareholder Returns are calculated in the above equation. As it is mentioned in the EVA section:

$$K_e = (\text{risk free rate} + \text{risk premium}) \times \text{Beta}$$

Table No.6 shows the K_e .

Table No.6
Rate of cost of Equity(K_e)
Figures in Percent

	Company Name	Rate of cost of Equity					
		2000	2001	2002	2003	2004	2005
1	Ashok Leyland	20.17	20.93	19.49	17.43	15.59	16.23
2	Bajaj Auto	24.2	25.12	23.39	20.92	18.71	12.98
3	Escorts	22.19	25.12	21.44	20.92	15.59	19.48
4	Hero Honda	14.12	14.65	11.69	15.69	15.59	14.61
5	Hindustan Motors	22.19	23.02	23.39	20.92	17.15	22.72
6	Mahindra & Mahindra	14.12	14.65	13.64	12.2	10.91	16.23
7	Maruti	26.22	27.21	25.34	22.66	18.71	19.48
8	Punjab Tractors	12.1	12.56	11.69	10.46	9.35	9.74
9	Tata Motors	26.22	27.21	25.34	22.66	20.27	21.1
10	TVS Motors Co	14.12	12.56	13.64	12.2	9.35	12.98

Table No.7 has shown the summary of calculated "Shareholder returns minus K_e " in companies under study.

Table No.7
"Shareholder Returns – K_e " for Car Manufacturer Companies
Figures in Percent

	Company Name	Shareholder Return – K_e				
		2001	2002	2003	2004	2005
1	Ashok Leyland	36.85	34.12	188.98	-101.7	107.75
2	Bajaj Auto	24.66	22.67	116.03	-12.81	70.53
3	Escorts	-11.24	-34.94	72.36	-76.11	-13.59
4	Hero Honda	-12.48	5.82	60.41	19.77	43.03
5	Hindustan Motors	-12.18	48.35	49.98	-19.66	23.2
6	Mahindra & Mahindra	-50.65	22.24	244.3	36.77	-14.08
7	Maruti	-26.69	-23.75	-21.07	8.85	24.92
8	Punjab Tractors	-35.08	-16.58	55.32	-25.5	5.51
9	Tata Motors	-39.26	74.73	208.52	15.94	31.82
10	TVS Motors Co	-19.93	200.83	-90.07	-26.18	16.95

Next data for calculation of CSV is Equity Market Value.

Table No.8
Equity Market Value (EMV) for Car Manufacturer Companies
Figures in Million Rs

	Company Name	Equity Market Value (EMV)				
		2001	2002	2003	2004	2005
1	Ashok Leyland	8277	11792	34930	29019	37879
2	Bajaj Auto	38343	50824	115081	114489	202448
3	Escorts	3969	3351	6237	5349	5273
4	Hero Honda	50062	54195	89630	114042	171671
5	Hindustan Motors	742	1613	3024	3757	4870
6	Mahindra & Mahindra	9861	13068	45133	63167	59402
7	Maruti	58909	76586	108717	133260	183891
8	Punjab Tractors	10550	9031	14539	11893	13075
9	Tata Motors	25539	51605	144659	180253	239867
10	TVS Motors Co	37468	117290	24682	19431	23790

As it is mentioned in the last section, the Created Shareholder Value is equal to Equity Market Value multiply by the difference between Shareholder return and Ke.

Table No. 9 shows the Created Shareholder Value (CSV) for Car Manufacturer Companies in the period of study.

Table No.9
Created Shareholder Value (CSV) for Car Manufacturer Companies
Figures in Million Rs

	Company Name	Created Shareholder Value (CSV)				
		2001	2002	2003	2004	2005
1	Ashok Leyland	3050	4023	66010	-29524	40815
2	Bajaj Auto	9456	11522	133529	-14666	142787
3	Escorts	-446	-1171	4513	-4071	-717
4	Hero Honda	-6248	3154	54145	22546	73870
5	Hindustan Motors	-90	780	1511	-739	1130
6	Mahindra & Mahindra	-4994	2906	110260	23226	-8364
7	Maruti	-15723	-18189	-22907	11793	45826
8	Punjab Tractors	-3701	-1497	8043	-3033	720
9	Tata Motors	-10027	38564	301643	28732	76326
10	TVS Motors Co	-7467	235554	-22231	-5087	4032

Table No.10 shows the Created Shareholder Value per share.

Created Shareholder Value per share = Created Shareholder Value / Number of Issued Shares

Table No.10
Created Shareholder Value (CSV) per Share
Figures in Rs

	Company Name	Created Shareholder Value Per Share				
		2001	2002	2003	2004	2005
1	Ashok Leyland	25.65	33.83	555.03	-24.82	34.32
2	Bajaj Auto	93.45	113.87	1,319.67	-144.95	1,411.16
3	Escorts	-6.18	-16.21	62.48	-56.36	-9.92
4	Hero Honda	-31.29	15.8	271.15	112.91	369.93
5	Hindustan Motors	-0.56	4.84	9.37	-4.58	7.01
6	Mahindra & Mahindra	-45.21	25.05	950.45	200.21	-72.1
7	Maruti	-1,188.51	-1,374.93	-79.29	40.82	158.62
8	Punjab Tractors	-60.92	-24.65	132.38	-49.92	11.86
9	Tata Motors	-39.18	120.58	943.14	80.52	210.97
10	TVS Motors Co	-32.33	1,019.71	-96.24	-21.42	16.98

Table No. 11 show the Rate of Return on Created Shareholder Value.

Rate of Return on Created Shareholder Value = CSV per Share / Market Share Price at End of Year

Rate of Return on Created Shareholder Value shows how many percent values have been created by companies' managers for shareholders during one year.

Table No.11
Rate of Return on Created Shareholder Value for Car Manufacturer Companies
Figures in percent

	Company Name	Rate of Return on Created Shareholder Value				
		2001	2002	2003	2004	2005
1	Ashok Leyland	0.52	0.49	5.6	-0.08	1.41
2	Bajaj Auto	0.35	0.3	2.63	-0.13	1.25
3	Escorts	-0.1	-0.29	1.35	-0.65	-0.13
4	Hero Honda	-0.12	0.06	1	0.25	0.65
5	Hindustan Motors	-0.13	1.05	0.94	-0.24	0.3
6	Mahindra & Mahindra	-0.29	0.28	8.44	0.51	-0.13
7	Maruti	-0.27	-0.31	-0.01	0.11	0.34
8	Punjab Tractors	-0.25	-0.14	0.89	-0.21	0.06
9	Tata Motors	-0.42	1.21	5.85	0.18	0.42
10	TVS Motors Co	-0.18	6.29	-0.19	-0.2	0.21

5. ANALYSIS OF DATA

This section belongs to observations, discussions, analysis of data and the results of analyzed data. Findings of the various observations and discussions have been presented

in different tables, graphs and figures in this chapter. The results of various statistical tests that have been done are presented in this section. The acquired results in this study indicate that all the specific objectives mentioned in this study have been achieved.

Position of Shareholders' Wealth Creation in Indian Car Manufacturer Companies:

In this section, the researcher has attempted to analyze the position of Shareholders' Wealth creation of car manufacturer companies from 2001 to 2005.

In order to evaluate the position of creation wealth in listed companies, the Shareholder's Return is often compared with other benchmarks (Fernandez Pablo, 2002). The most common benchmarks are:

1. Zero. If the Shareholder's Return is positive (above zero), the shareholders have more money in nominal terms than at the beginning of the year.
2. The return of Treasury bonds (free risk Government bonds or Risk Free Rate). If the Shareholder's Return exceeds that of investing in treasury bonds, the shareholders have obtained an additional return for bearing more risk (the additional risk of investing in the company instead of investing in Treasury bonds).
3. Required return to equity. If the Shareholder's Returns exceeds the expected returns, the company has created value: the shareholders have obtained a return that is greater than that required to compensate the additional risk of investing in the company instead of investing in treasury bonds.
4. Shareholder's Returns of companies in the same industry. If the Shareholder's Returns exceeds the Shareholder's Returns of companies in the same industry, the company has created more value than the other companies in its industry (for an equal investment and risk).
5. Returns of the stock market index (Sensex). If the Shareholder's Returns exceed the returns of the stock market index, the company has outperformed the market as whole.

Comparison between Shareholder Return and different Benchmarks:

A company creates value for its shareholders when the shareholder's returns exceed the required return to equity.

The Shareholder's Returns is the shareholder value added in one year, divided by the equity market value at the beginning of the year.

Shareholder's Returns (SR) = Shareholder Value Added / Equity Market Value in the beginning of the year

The percentage of Shareholder's Returns of Car Manufacturer Companies for the period of study has been shown in Table No.12

Table No.12
Shareholder Returns (SR) for Car Manufacturer Companies
Figures in Percent

	Company Name	Percent of Shareholder Return (SR)				
		2001	2002	2003	2004	2005
1	Ashok Leyland	58	54	206	-86	1240
2	Bajaj Auto	50	46	137	6	84
3	Escorts	14	-14	93	-61	6
4	Hero Honda	2	18	76	35	58
5	Hindustan Motors	11	72	71	-3	46
6	Mahindra & Mahindra	-36	36	257	48	2
7	Maruti	1	2	2	28	44
8	Punjab Tractors	-23	-5	66	-16	15
9	Tata Motors	-12	100	231	36	53
10	TVS Motors Co	-7	214	-78	-17	30

The data which has been presented in Table No.12 shows that 80% of car manufacturer companies have positive Shareholder's Returns. More than 33% of figures exceed 50 and around 62% of figures are more than 10.

Table No.13 has shown the minimum rate of returns which belong to Risk Free Rate of government bonds.

Table No. 13
Risk Free Rate (percent)

2001	2002	2003	2004	2005
10.93	9.49	7.43	5.59	6.23

Source: Web site of Reserve Bank of India

The range of Rate of Free Risk Bonds as it has been shown in Table No.13 is from 5.6% to 11%. Rate of Free Risk Bonds is least return without any risk that an investor may achieve during a year.

The Rate of Required Returns has been shown in Table No.14

Table No.14
Rate of Required Return (RRR) for selected Companies
Figures in Percent

	Company Name	Rate of Required Return (RRR)				
		2001	2002	2003	2004	2005
1	Ashok Leyland	21	19	17	16	16
2	Bajaj Auto	25	23	21	19	13
3	Escorts	25	21	21	16	19
4	Hero Honda	15	12	16	16	15
5	Hindustan Motors	23	23	21	17	23
6	Mahindra & Mahindra	15	14	12	11	16
7	Maruti	27	25	23	19	19
8	Punjab Tractors	13	12	10	9	10
9	Tata Motors	27	25	23	20	21
10	TVS Motors Co	13	14	12	9	13

Table No.14 shows the rate of return that the shareholders of car manufacturer companies required achieving. As it has been shown in this Table the maximum rate of return that shareholders required to achieve is 27% and it is belong to Maruti in 2001 and the minimum Rate of Required Return is 9% and it is belong to Punjab Tractor in 2004. As it is mentioned Rate of Required Return is:

$$\text{Rate of Required Return} = \text{Risk Free Rate} + \text{Market Risk Premium} \times \text{Beta}$$

Table No.15 has shown the trend of Sensex in Bombay stock exchange during the period of study. It has also indicated the rate of growth of Sensex in that period.

Table No.15
Sensex and the Rate of Growth in Sensex

Year	2001	2002	2003	2004	2005
Index	3262.3	3377.3	5839	6602.7	9397.9
Rate of growth in Sensex	-%18	%4	%73	%13	%42

Source: web site of Bombay Stock Exchange

Table No.16 compare the trend and the average of Shareholder's Returns with Rate of Required Return, Sensex and Risk Free Rate of Government Bonds in the period of study.

Table No. 16
Total and Average of SR, RRR, Sensex and RER
Figures in Percent

	Company Name	Total of SR for 5 years	Total of RRR for 5 years	Average of SR per year	Average of RRR per year	Rate of Sensex growth	Yearly Average of RFR
1	Ashok Leyland	1472	89	294.4	17.8		
2	Bajaj Auto	323	101	64.6	20.2		
3	Escorts	38	102	7.6	20.4		
4	Hero Honda	189	74	37.8	14.8		
5	Hindustan Motors	197	107	39.4	21.4		
6	Mahindra & Mahindra	307	68	61.4	13.6		
7	Maruti	77	113	15.4	22.6		
8	Punjab Tractors	37	54	7.4	10.8		
9	Tata Motors	408	116	81.6	23.2		
10	TVS Motors Co	142	61	28.4	12.2		
	Total	3190	885	638	177	114	39.67
	Average per year	319	88.5	63.8	17.7	22.8	7.934

As it has been shown in Table No.16 the average of Shareholders' Return is 63.8% and the average of Rate of Required Return is 17.75%. This means that Car Manufacturer Companies have acquired 46% more than Rate of Required Return during of 2001 to 2005. In other words the Shareholders' Return of Car Manufacturer Companies is 3.5 times more than their expectations every year.

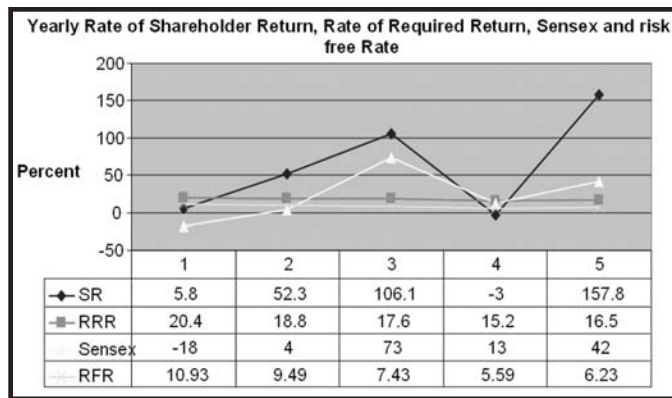
The average of growth of Sensex during 2001 to 2005 as it has been shown in Table No.16 is 22.8% and this is equal to the average of rate of return of total capital market. Comparatively, the Rate of Shareholders' Return is 40% more than the average of Sensex. It indicates that the revenue of Car Manufacturer's shareholders is higher than the average revenue of other shareholders in Bombay stock exchange market.

Risk Free Rate of Government Bonds during the period of study is 7.93%. This means that average of car manufacturer shareholder's returns are 56% more than the average of Risk Free Rate of Returns. In other words, it is 8 times more than the average of Risk Free

Rate.

Figure No.2 compares the trend of average of Shareholder's Returns with Rate of Required Return, Sensex and Risk Free Rate of Government Bonds in the period of study. This figure shows that the Shareholder's Return of car manufacturer companies mostly is positive and has considerable difference to other rates; so the car manufacturer companies have created value for their shareholders. Figure No.2 also shows that the relationship between shareholder returns and the sensex is more than other items.

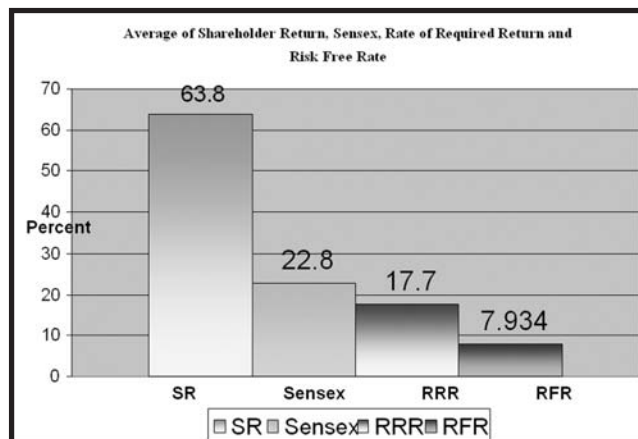
Figure No.2
Comparison between SR, RRR, Sensex and RFR



Data in Table No.16 and Figure No.2 have confirmed that: "The wealth created for shareholder in the study period is more than the Rate of Required Return by shareholders and also it is more than Sensex and Risk Free Rate of return".

Figure No. 3 shows the position of average of yearly Shareholder's Returns in all of the car manufacturer companies during the period of study and compares it with average of Sensex, Rate of Required Return and Risk Free Rate of Government Bonds during the five years "2001 to 2005".

Figure No. 3
Average of different Yearly Return during the period of study



6. CONCLUSION

Maximization of shareholders' value now is considered to be one of the main objectives of companies. Shareholders' value is measured by the returns they receive on their investments. Returns are received in two parts, form the dividends and in the form of capital appreciation reflected in the market value of shares.

Shareholders need to forecast the changes in their wealth before end of year. They need to find out a relation between financial data and their wealth.

Acquired results in this study indicate that all the specific objectives mentioned in this study have been achieved. The results of analysis which has been done are arranged in below:

Result of analyzed data which determined the position of Shareholders' Wealth creation in Indian Car Manufacturer Companies.

In overall analysis reveals that car manufacturer companies have created value for their shareholders in the period of study. In order to evaluate the position of creation wealth in listed companies, the calculated shareholder returns is often compared with different benchmarks.

Briefly the average of Shareholders' Return in the period of study in car manufacturer companies has been 63.8% and the average of Rate of Required Return has been 17.75%. In this period the average of growth of Sensex has been 22.8% and the Risk Free Rate of Government Bonds has been 7.93%. This means that car manufacturer companies have created a return that is 46% more than Rate of Required Return, 40% more than the average of Sensex, 56% more than the average of Risk Free Rate of Return and 8 times more than the average of Risk Free Rate. In other words the shareholders' Return has been more than all of the compared benchmarks. Investigation of the mentioned variables in each company also showed that the rate of value created is positive and higher than the Risk Free Rate, Rate of Required Return and Sensex. The trend analysis indicate that accompanying to

India economy, the rate of growth of car manufacturer companies also is very high and Shareholders' Wealth position had an ascending rate of growth in the period of study.

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