



## **GROWTH ANALYSIS AND PERFORMANCE RANKING OF SELECT INDIAN AUTOMOBILE COMPANIES**

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### **Abstract:**

The automobile industry plays a vital role to develop the economic growth of the country. Growth is the basic objective of every business concern and automobile companies are also not an exemption to this. This paper aims to analyze the growth and performance of select Indian automobile companies. To achieve this objective, performance of the selected companies on five key parameters over the period from 2007-2016 was taken into account for ranking via: size, growth in net revenue, growth in net profits, profitability and total average returns. The results showed that irrespective of the size of the company. The profitability and returns were on the good record.

**Key Words:** Growth Analysis, Performance Score, Profitability & Performance Ranking

### **Introduction:**

The automobile industry plays a main role in the economic growth of the country. A well developed transportation system plays an important role in the development of an economy, and India is no exception to it. The automobile is one of the largest industries in the universal market. The automobile sector is divided into three segments namely commercial vehicles, Passenger Vehicles and Two & Three wheelers. India is the sixth largest producer in the world with an average annual production of 24 million vehicles, of which 3.64 million are exported in 2016. India is the second largest two-wheeler manufacturer and the fifth largest commercial vehicle manufacturer in the world. Two-wheeler production has grown from 8.5 million units annually to 15.9 million units in the last seven years.

### **Literature Review:**

Baumol (1962) in his growth model argues that growth is primarily desired as a means to greater profitability. The industry seeks to achieve higher growth in the short run that will ensure sustainable returns in the long run. M. E. Gupta (1969) conducted a study to analyze the effects of size, growth and industry influence on the financial structure of American paper manufacturing enterprises; the study revealed that the total debt ratios had been positively related to growth and negatively related to size. Haritha Saranya and B.V. Phani (2004) examined the growth of pharmaceutical firms. Data Envelopment Analysis (DEA) was used on a sample of 44 companies. DEA had been analyses with their compound annual growth rate (CAGR). The results revealed that the internal efficiencies and growth rate had been related to the Indian pharmaceutical Industry. Subhash Chander and Priyanka Aggarwal (2007) made an attempt to identify the determinants of growth of the select companies in drugs and pharmaceutical industry in India. The study sampled 50 companies covering a period of ten years from 1996 to 2005. The result revealed that size, Age, efficiency ratio, profitability and research and development had been statistically significant in determining the growth of the firms. Dr. Govind P. Shinde and Dr. Manisha Dubey (2011) analyzed the industry for the period of 2005 to 2010. The result revealed that the Indian automobile industry has been able to sustain during the toughest time of recession and had record breaking sales growth. C. R. Parvatham and Dr. Anuradha Rajendran (2014) in their article entitled "growth analysis and performance ranking of select Indian fertilizer companies", the result shows that irrespective of the size of the company the profitability and returns are good record. Tom Jacob and Thomas Paul Kattookaran (2017) analyzed the growth and role of the automobile industry in terms of production, sales and exports with special focus of two wheelers.

### **Objective of the Study:**

The main objective of the study is to analyze the growth and performance ranking of the Indian automobile industry.

### **Research Methodology:**

**Data Collection:** The study is based on secondary data. The required data were collected from the Captaline Plus and Prowess IQ database. The data were also collected from journal, periodicals, research publications and dailies.

**Period of the Study:** The period of this study covered ten years from 2007 to 2016.

**Sampling Design:** Sixty six companies are operating in the Indian Automobile industry during the study period. Only 32 companies are listed in BSE & NSE. Out of this only 12 companies were selected for the study based on availability of the data.

**Data Analysis:** Data can be analyzed with the help of statistical tools like ratio, percentage; Annual Compound Growth Rate (ACGR) of each parameter was computed for the study period. The process of ranking of selected companies, for calculating the performance score, the following five key parameters over the study period were taken into account:

Size score: It was calculated by averaging the asset multiple and revenue multiple

$$\frac{\text{Average of a company's past ten years 'total assets'}}{\text{Sum of past ten years' average total assets of all companies in the sample}} \times 100 = \text{Asset Multiple} \quad (1)$$

$$\frac{\text{Average of a company's past ten years' net revenue}}{\text{Sum of past ten years' average net revenue of all companies in the sample}} \times 100 = \text{Revenue Multiple} \quad (2)$$

$$\text{Size Multiple} = \text{Average of asset Multiple and Revenue Multiple} \quad (3)$$

Revenue Growth Score: Cumulative average net revenue growth.

Size- Adjusted net revenue CAGR = Net revenue CAGR x Revenue multiple

Profit growth score: Cumulative net profit growth.

$$\frac{\text{Average of a company's past ten years' net profits}}{\text{Sum of past ten year average net profit of all companies in the sample}} \times 100 = \text{Profit Multiple} \quad (4)$$

$$\text{Size - Adjusted Net Profit CAGR} = \text{Net Profit CAGR} \times \text{Profit Multiple} \quad (5)$$

**Profitability Score:** Average of operating profit and net profit.

**Return Score:** It was calculated by averaging the average return on capital employed and average return on net worth.

**Performance Score:** To determine performance ranking, the average value of individual parameters was first converted into respective scores. Companies were then ranked on the basis of a weighted- average score of individual scores to arrive the order of best companies.

**Growth Analysis and Performance Ranking:**

The growth and performance of an industry are an important dimension, irrespective of its significance in the macro perspective. Growth is often the central theme of corporate planning and an important indicator of the performance of any company. The rapid growth of the corporate sector in India, the increasing scale of its operations and investments has turned it into the most dominant form of economic organization.

For measuring the growth of select companies, the following parameters were used

- ✓ Growth in Total Assets
- ✓ Growth at Equity Base
- ✓ Growth in Revenue
- ✓ Growth in Operating Profit
- ✓ Growth in Net Profit
- ✓ Growth in ROCE
- ✓ Growth in RONW

**Growth Analysis of Indian Automobile Industry** - An Analysis of growth in total assets, equity base, revenue, operating profit, net profit, ROCE and RONW

The value of the total assets at the end of the year includes net fixed assets, net current assets and investments. Equity base consists of equity share capital of the company. Revenue means revenue earned from the main line of business. It excludes other incomes, non-recurring and extraordinary income. Operating profit is taken as the difference between net revenue and total operating expenses. The reported net profit of sample companies is considered as the net profit for this study. ROCE is obtained by dividing profit before interest and tax (PBIT) by averaging capital employed. It is the average of capital employed of all sample companies. PBIT is net income and expenses of sample companies after adjusting extraordinary income and expense before interest and tax. RONW is calculated by averaging each of sample Company's net profit. Then it is divided by average net worth of sample company year wise. Net profit is adjusted for extraordinary income and expense. The growth index of all indicators, annual compound growth rates is given in Table No.1

Table 1: Annual Compound Growth Rate

Period	Growth Indicators	ACGR(%)
	Total Assets	14.62

2006-07 To 2015-16	Equity Base	5.06
	Revenue	11.89
	Operating Profit	11.52
	Net Profit	8.88
	ROCE	2.35
	RONW	3.02

Above Table shows the Annual compound growth rates of Indian automobile industry over the last ten years. The maximum annual compound growth rate was 14.62% of total assets. ACGR of returns are very low rates was 2.35% (ROCE) and 3.02% (RONW).

**Performance Ranking:**

Companies' performance on five key parameters over the period from 2007 to 2016 was taken into account for ranking viz., Size (this was a function of the total assets and net revenue), growth in net profits, profitability and total average returns. The size of the company was deducted by taking a simple average on net revenue and total assets. In the case of the sales and profit growth parameters, compounded annual growth rate(CAGR) for the ten years was taken into account. While calculating profitability, a simple average of net profit margins and operating profit margins were taken. Similarly, to calculate the returns, a simple average return on capital employed (ROCE) and return on net worth (RONW) was used.

Table 2: Performance Ranking- Automobile Companies

**P Rank	Name of Company	Company Size				Growth Dynamics			
		Total Assets 2015-16	Total Revenue 2015-16	Avg Assets & Rev	Size Rank	Revenue Growth Adjusted CAGR%	Rank	Net profit Growth Adjusted CAGR%	Rank
1	Maruti Suzuki India Ltd	25770.90	57746.30	23.52	2	410.35	1	372.74	2
2	Mahindra & Mahindra Ltd	21458.55	40884.98	19.35	3	328.52	2	375.60	1
3	Hero Motocorp Ltd	6742.37	28599.30	10.38	4	175.96	3	361.89	3
4	TVS Motor Co	2909.24	11243.87	3.79	6	58.69	6	50.65	4
5	Maharashtra Scooters Ltd	288.72	8.97	0.17	10	0.00	11	12.39	7
6	Ashok Leyland Ltd	7726.86	19257.39	8.46	5	89.42	5	28.74	5
7	Atul Auto Ltd	152.53	531.04	0.16	11	3.51	10	7.55	9
8	VST Trillers Tractors Ltd	448.97	646.67	0.32	9	5.03	8	12.35	8
9	SML Isuzu Ltd	397.41	1164.30	0.54	8	4.72	9	4.76	10
10	Scooters India Ltd	130.20	139.10	0.10	12	-0.21	12	25.39	6
11	Tata Motors Ltd	30893.59	42369.82	32.07	1	135.59	4	-159.87	11
12	Force Motors Ltd	1305.43	3059.80	1.16	7	16.13	7	-348.48	12

**P Rank	Name of Company	Profitability		Runs		*P Score
		Avg Profit Margin%	Rank	Total Avg Returns %	Rank	
1	Maruti Suzuki India Ltd	1362.04	1	19.66	5	437.66
2	Mahindra & Mahindra Ltd	1321.57	2	24.24	4	413.86
3	Hero Motocorp Ltd	1149.68	3	49.79	1	349.54
4	TVS Motor Co	412.64	4	14.77	8	108.11
5	Maharashtra Scooters Ltd	278.70	5	14.56	9	61.16
6	Ashok Leyland Ltd	152.33	6	14.99	7	58.79
7	Atul Auto Ltd	38.55	8	28.50	3	55.47
8	VST Trillers Tractors Ltd	43.58	7	32.92	2	18.84
9	SML Isuzu Ltd	37.07	9	16.10	6	12.64
10	Scooters India Ltd	-407.71	10	3.36	11	-75.76
11	Tata Motors Ltd	-871.91	11	8.96	10	-171.03
12	Force Motors Ltd	-1175.41	12	-2.71	12	-301.86

\*P. Score: Performance Score

\*\*P. Rank: Performance Rank

From the above table displays the performance in terms of total assets, net revenue, net profit, return on capital employed and return on net worth. As per the revenue grouping Maruti Suzuki ranked first, followed by Mahindra& Mahindra and Hero Motocorp Ltd. Tata Motors had the good assets base (30893.59crores) among the companies even though it ranked eleven out of twelve companies. Hero Motocorp had better return among the companies.

**Conclusion:**

The following are the specific observations of the study, Maruti Suzuki ranked first, followed by Mahindra& Mahindra and Hero Motocorp Ltd. The industry has recorded phenomenal growth during the last decade. A market trend is growing at a faster rate. Thus, strict quality standards, services and use latest technology can provide an edge over competitors across the globe. In order to meet the extent of severe competitions through the invasion of the Indian automobile industry are under the compulsion to develop.

**References:**

1. M. E. Gupta(1969),”The Effect of Size, Growth and Industry of Financial Structure of Manufacturing companies”, Journal of Finance, Vol. 24, No.3, June 1969, pp. 517-529.
2. Haritha Saranya and B.V. Phani(2004), “The Indian Pharmaceutical Industry: An overview of Internal Efficiencies using Data Envelopment Analysis”, Social Science and Research Network, May 2004, pp. 1-24.
3. Subhash Chander and Priyanka Aggarwal(2007), “Determinants of Corporate Growth: An Empirical Study of Indian Drugs and Pharmaceutical Industry”, The ICFAIAN Journal of Management Research, Vol. VI, No.10, October 2007, pp. 23-28
4. Dr. Govind P. Shinde and Dr. Manisha Dubey (2011),” Automobile Industry and Performance of Key players”, Asian Journal of Technology & Management Research, Vol.01, No.02, July-December 2011.
5. Dr. S. Devaki (2016) “A Study on Electrical Energy Conservation Practiced in Shop Floor Management of Select Oil Mills in Kangayam, Tirupur District, Tamilnadu”, International Journal of Multidisciplinary Research and Modern Education (IJMRME) ISSN (Online): 2454 – 6119, Volume II, Issue II, Page Number 424-434.
6. Dr. K. Veerakumar & Ms. T. Mohana Sundari (2017). “Acceptance about GST- a study with special reference to manufacturing industry in Coimbatore”, International Journal of Recent Research and Applied Studies, 4, 8(1), 1-14.