RESEARCH ARTICLE

EVOLUTION AND GROWTH OF INDIAN AUTO INDUSTRY

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ABSTRACT

The Indian Automobile market is a promising industrial sector that is growing immensely every passing year. The automobile industry has an enormous opportunity for creating new wealth by delivering value to the world and also to the domestic user. The four-wheeler industry in India has not been able to match up to the performance of its counterparts in other parts of the world. The main reason for this has been the regulatory atmosphere that prevailed till the deregulation in the mid-1990s. After the liberalization the passenger car segment saw a boom and many companies from India as well as foreign entered the market. With liberalization, Government abolished licensing and removed restrictive trade policies. Automobile industry benefited greatly from these measures. The automobile industry in India happens to be the ninth largest in the world, following Japan, South Korea & Thailand. In 2009, India emerged as the fourth largest exporter of automobiles. Several Indian automobile manufacturers have spread their operations globally as well, asking for more investments in the Indian automobile sector by the MNC's.

Key Words: *Walmik*

INTRODUCTION

Society of Indian Automobile Manufacturers (SIAM) President Mr. Pawan Goenka says that "The Indian auto industry and the Indian auto market have become internationally very important and therefore, no one can ignore this market,".

The Indian economy has grown at an annual rate of more than 8% over the last five years and the industrial production has made an outstanding contribution to this growth. Auto industry was licensed, controlled and restricted in the early years of independent India and had a limited contribution to the economy. But post de-licensing in 1991 the industry has grown at an average rate of 17%. The industry currently contributes about 5% of the GDP and it is targeted to grow fivefold by 2016 and account for over 10% of India's GDP. Automotive Mission Plan (AMP) expects the industry to reach a turnover of $150-200 billion in the next ten years from the current $45 billion levels. Over the last five years the production of four wheelers in India has increased from 9.3 lakh units in 2002-03 to 23 lakh units in 2007-08 reporting a Core Group on Automotive Research and Development (CAGR) of 20%. Vehicle manufacturers are increasingly adopting an outward looking approach and exploring new markets & territories, ranging from Middle East, Europe, South Africa, Algeria, Latin America, Russia, etc. Exports have increased immensely from 84,000 units in 2002-03 to 280,000 units in 2007-08. Crisil estimates the passenger vehicle exports to cross 7 lakh units by 2011-12.

EVOLUTION AND GROWTH

The year 1898 saw the first car rolling out, on the streets of Mumbai. Since then Indian auto industry has witnessed a lot of change. A land of Premier Padminis, Ambassadors, scooters, tempos, trucks and autos galore, India had not seen much of choice in vehicles. Only the affluent could think of owning a personal four-wheeler and the clichéd image of a car followed by lots of children on a dusty road was actually true.

PROTECTIONISM – EARLY 1980s

This was the pre-1980 era where the manufacturing of automobiles especially cars was subject to strict licensing, restrictive tariff structure and limited avenues for expansion. The advent of foreign technology collaboration came with the inception of Maruti Udyog in collaboration with Suzuki of Japan in the passenger car segment. Indian roads saw the launch of Maruti 800. It was still not very easy to own a car, first was affordability and next was a long waiting period.

LIBERALIZATION – 1990s

In the early 1990s, with liberalization, some more Japanese manufacturers entered the two-wheeler and the commercial vehicle segment in a collaborative arrangement. These period characterized joint ventures in India and the market started opening up. Automobile Industry was deli censed in July 1991 with the announcement of the New Industrial Policy. The passenger car industry was, however, deli censed in 1993.

GLOBALIZATION – 2000s

Early 2000 however saw globalization of Indian auto industry. Several policy changes were introduced with focus on boosting the auto exports. A Core Group on Automotive Research and Development (CAGR) was established in 2003 for encouraging R&D activities. Foreign manufacturers started looking at India for sourcing auto components. The buyers started ruling the market due to the availability of choices in the form of models, price points and brands. A vibrant economy meant an increase in the GDP and per capita income. These factors turned out to be significant contributors in pushing up the domestic demand. The vast geographic spread of India attracted foreign investments. The marquee brands from all over the world started courting Indian consumers aggressively. The mature markets in the developed countries paled in comparison to the sheer numbers and the growth phase of the Indian auto industry.

A World Bank report puts, India up ahead as the fourth largest economy in the world in terms of purchasing power parity. The sales of automobiles have increased due to an increase in income and a rapid increase in private final consumption expenditure.

It is estimated that India will see over Rs 30,000 crore being invested by 2010. This is because Indian auto industry is racing ahead with a healthy growth. The graph below (Fig. 1) shows the growth trend in the production of automobiles in million units.

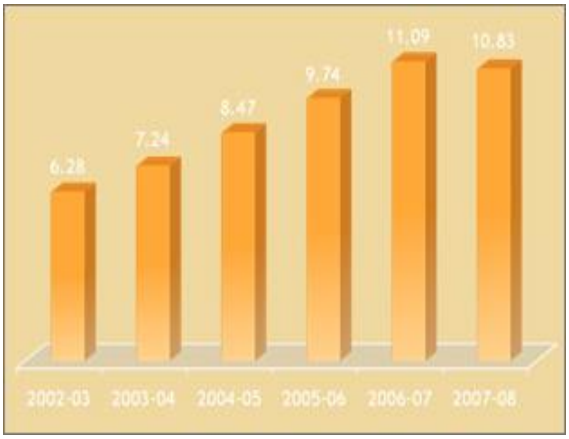

Fig. 1: Growth trend in the Production of Automobiles

DEVELOPING INDIA'S UNIQUE AUTOMOTIVE MARKET

Prior to the early 1990s when India opened its, then-restricted market, owning a vehicle was viewed as a luxury and taxed accordingly. During the early 1990s, domestic companies, such as Tata Motors, Maruti Udyog, Mahindra & Mahindra, Hindustan Motors, and Premier, manufactured a relatively small number of vehicles. In the mid-1990s, foreign manufacturers entered the market through JVs with domestic manufacturers as required by the government. This entry raised the level of competition and brought many global suppliers to India to support their manufacturer customers. It was also a time when the Indian population began to adjust to a new, global automotive economy and manufacturers adjusted to their new partners, developed their supply chains, and began to understand India's challenges and the Indian consumer. In 2000, the government lifted the requirement that foreign companies establish JVs with domestic companies. As, its Gross Domestic Product (GDP) grew, India built and sold more vehicles, reaching the 1-million-vehicle mark in the 2004-2005 fiscal year. In 2006, government support for the industry reached a high point with the creation of the Automotive Mission Plan (AMP). This plan not only documents the importance of the automotive industry to the Indian economy but also the increased support the government will provide through 2016.

A CLOSER LOOK AT THE FOUR-WHEELER SEGMENT IN INDIA

The four wheeler segment comprises of the passenger vehicles, utility vehicles and multi-purpose vehicles. India is the 11th largest passenger car market in the world and prominently features on the major automobile players' road map. The passenger cars segment has the largest share in the domestic passenger vehicles industry. It contributes to a total volume of 78% and the rest of the share is enjoyed by utility and sports vehicles. Some of the key players in the market are Maruti Udyog Ltd. Tata Motors Ltd., Hyundai, Toyota, Honda, Ford and General Motors. The newer entrants are the marquee brands like Mercedes-Benz, BMW and Volkswagen.

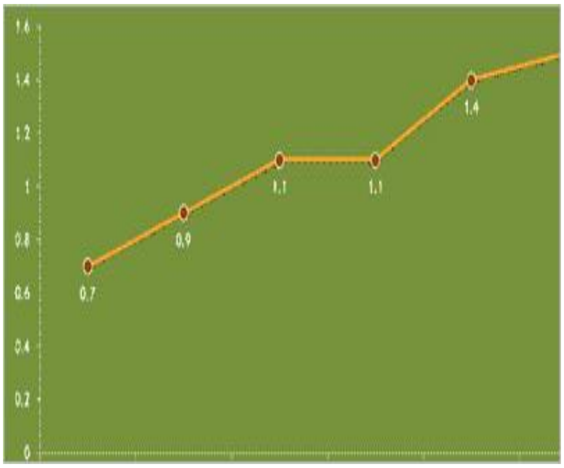

Fig. 2: Sales trajectory of four wheelers in million units

The graph (Fig. 2) shows the sales trajectory of four wheelers in million units. Car sales in India have risen rapidly since 2006 on the back of strong economic growth and government incentives and this trend will also continue in 2010. Industrial growth has also lead to an increase in the multi-utility and the utility vehicles.

INDIA'S POSITION IN THE GLOBAL AUTO INDUSTRY

The automotive sector is one of the core industries of the Indian economy. Indian Auto industry has come of age only since the complete de-licensing of 1991. Indian auto industry defied global economic recession and continued to register high sales both in domestic and export markets.

In 2007, India was ranked as the 12th fastest growing market in the world. Presently, India is the 2nd largest two wheeler market in the world and 4th largest commercial vehicle market worldwide. India is the 11th largest market in the passenger car segment globally which is expected to become the 7th largest market by 2016.

India holds a total of 3% share in global four wheeler production and ranks 9th in the world in the production of cars. There is a huge potential which needs to be tapped through an integrated effort of the government, OEM's and also the auto component manufacturers. India is a base for the manufacturing of small cars and has attracted the attention of global giants for investing in this segment.

The graph below (Fig. 3) shows that Indian Auto Industry has a potential to sell 31.96 million vehicles by 2015-2016.

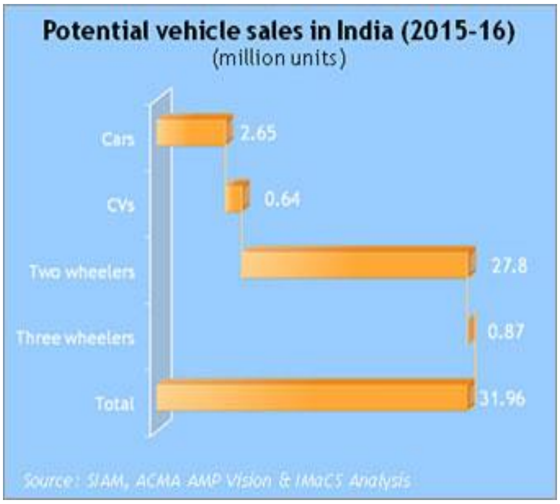

Fig. 3: Potential vehicle sales in India (2015-2016)
Source: SIAM

It is expected that Indian automobile industry will be among the world's top five automotive economies by 2025, due to the huge future potential for growth.

Ernst and Young have predicted the Indian passenger car market to grow at 12 percent annually over the next five years to touch 3.75 million units by 2014 from 1.89 million units at present. Analysts with Ernst and Young say that "The industry's turnover is estimated to touch $155 billion by 2016, this would make the Indian auto industry the seventh largest in the world, and the third largest by 2030, behind China and the US."

The government's Automotive Mission Plan also envisages India emerging as the world's seventh largest carmaker by 2016, contributing over 10 percent to the country's $1.2-trillion economy from under five percent at present.

THE FUTURE OF INDIAN AUTO INDUSTRY

According to a report from United Nations Industrial Development Organization's (UNIDO) in 'International Yearbook of Industrial Statistics 2008', India enjoys 12th position amongst top 15 automakers in the world. India is at the 4th position amongst the auto makers of developing countries. By 2016 the size of the Indian automobile industry is expected to grow by 13%, to reach a mark of US$ 120-159 billion. Presently, India is the 2nd largest two wheeler market in the world and fourth largest commercial vehicle market worldwide. With allies in a strong economy, rising demand and financial backing, Indian auto industry is standing at the threshold of success.

OBJECTIVE OF THE STUDY

1. To know the present status of the four wheeler and its prospects in India.
2. To find out the strength and weakness of four wheeler Industries.
3. To undertake a comparative studies of different automobile companies and to identify the financial sound position of a companies.
4. To know the problems and prospects of automobile industry and to suggest the suitable remedies to overcome the problems.

METHODOLOGY OF THE STUDY

Collection of data

The present study is mainly based on secondary data which were collected from the facts and figures published by Automobile Manufacturers Association of India. Further, the data were collected from time to time from the official Directory of Bombay Stock Exchange. Whenever there were gaps in the above sources, it was supplemented by the other sources like Society of Indian Automobile Manufacturers. (SIAM), Kothari's year Book on Business and Industry and Continuous Monitoring of Indian Economy (CMIE) data base.

Apart from this, information is also tapped from Journals, magazines, related websites and daily newspapers like Financial Express and Economic Times.

Secondary Source

The study is mainly based on secondary data. The external source includes internet, Published data printed and electronic that is newspapers, Journals, Annual reports, Books etc. The internal source includes Sales records, Distribution reports, Feedback etc.

Selection of Samples

At present there are 28 manufacturing automobiles industries in India. Due to time and cost constraints it was not possible to deal with all the automobile industries. By the help of convenience sampling method eight different automobile industries have selected for the study purpose. The industries have selected by virtue of their long standing existence in the industry, wide product range, extensive manufacturing infrastructure and scale of operations. The selected eight industries are as follows.

1. **Mean:** Arithmetic mean is commonly called as average. Mean or Average is defined as the sum of all the given elements divided by the total number of elements.

Sample Mean	Population Mean
$\bar{x} = \frac{\Sigma x}{n}$	$\mu = \frac{\Sigma x}{N}$

where Σx is sum of all data values

N is number of data items in population

n is number of data items in sample

2. **Standard Deviation** is a widely used measurement of variability or diversity used in statistics and probability theory. It shows how much variation or "dispersion" there is from the average (mean, or expected value). A low standard deviation indicates that the data points tend to be very close to the mean, whereas high standard deviation indicates that the data are spread out over a large range of values.

$$\sqrt{\frac{\Sigma(X - \bar{X})^2}{(n - 1)}}$$

where:

X = each score
$\bar{X}$ = the mean or average
n = the number of values
Σ means we sum across the values

3. **t-test:** It is most commonly applied when the test statistic would follow a normal distribution if the value of a scaling term in the test statistic were known. When the scaling term is unknown and is replaced by an estimate based on the data, the test statistic (under certain conditions) follows a Student's *t* distribution.

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{s_1^2 + s_2^2}{N}}}$$

It reads: mean 1 minus mean 2 divided by the square root of (variance 1 plus variance 2, over n)

1. X_1 is read as x1-bar and is the mean of the first group;
2. X_2 is read as x2-bar and is the mean of the second group;
3. The variance is the standard deviation squared (hence S^2).
4. The subscript numbers (1 and 2 to the bottom right of the x and S in the formula) refer to group 1 and group 2

MAJOR CONCLUSIONS

1. Tata Motors and Maruti Suzuki are the most profitable company in the automobile industry, but this has comparatively not managed well their resources in an efficient way. Hence, there is further opportunity with these two to maximise their profit by reducing their cost.
2. Mahindra & Mahindra has kept its Cost of production per unit of sales at lowest possible by using its resources in most efficient manner followed by Ashok Leyland.
3. Hindustan Motors and Swaraj Mazda cost of production was high due to the fact that it is labour oriented unit and labours are permanent in nature. Hyundai Motors cost of production was high due to manufacturing cost and it has to be reduced to increase the profits. Force motor, being the poorest in cost management, consequently being the least profit making company in the industry.

From the overall profitability analysis it is found that Tata Motors stands a No1

4. Tata Motors rank no.1 as it has presence in all segment of passenger and goods carrying Vehicle. It is considered as the leader of Industry.
5. Maruti Suzuki and Mahindra & Mahindra is the cut throat competitor. Both are in car and SUV segment.
6. Hyundai and Ashok Leyland respectively is the market competitor. Hyundai is leading Ashok Leyland due to presence in car and SUV segment; buyer is more in car and SUV segment.
7. Hindustan Motors and Force Motors are the cut throat competitors.
8. Swaraj Mazda is laggard and has to face heavy losses if any innovative idea is not implemented.

RECOMMENDATIONS AND SUGGESTIONS

1. By analyzing the industry on various parameters with the help of implementing fundamental and technical tools, we came to know that this industry has a lot of potential to grow in future. So it can be recommended investing in four wheeler Industry, is going to be a good and smart option, as this industry is booming like never before, not only in India but all around the world. The returns which came out of this industry were very impressive recently, as if we take an example of TATA Motors it gives approx. 90% return in a period of just 3 months while Maruti Suzuki , Mahindra & Mahindra, Ashok Leyland, Swaraj Mazda, Force Motors, show always a buy and hold position because there is possibility of growth in future.
2. Hyundai Motors shows the sell position as the financial position of the company is not sound and it should try to merge with any other four wheeler industry.
3. Through technical analysis of the companies it was found that there is scope in further rise in share prices of TATA Motors and Maruti Suzuki until and unless any negative reaction or sentiments comes in the economy.
4. The four wheeler companies like TATA Motors, Maruti Suzuki, Mahindra & Mahindra, Swaraj Mazda, Ashok Leyland are paying more than 20% dividend to their shareholders they have to take social responsibility and do the social work for the society. Government has to take such type of steps for growing economy.
5. The success of the firm depends upon the competence and calibre of the officers who are working at managerial as well as technical level. The companies incurred losses over a period of time because of untrained labour, inadequate qualifications and non availability of experts. Therefore training and orientation programs should be conducted regularly.
6. High technology tolls and machines should be installed so that production can be increased along with quality assurance and production cost can be controlled effectively.
7. Vendor development programmes to be conducted.
8. Rural base vehicle to be manufactured to increase the sales in rural area.
9. Government and respective authorities has to improve the road conditions in the village so that four wheeler markets increase automatically.

CONCLUDING REMARKS

1. Indian Automobile Industry is in the growth phase and the expected growth rate is 9-10% for the financial year 2009-10 as compared to last year growth rate which was just 0.7%.
2. Indian Automobile has a lot of scope in four wheelers due to development in infrastructure of the country.
3. According to Indian Statistical Organization, the per capita income (Rs.38000) is increasing and national income at the rate of 14.4%, which shows potential to buy vehicle in auto industry. The growth rate of Indian Automobile is so fast that by 2016 Indian Industry will be world 7 largest manufacturers in all sections.
4. The Indian auto market is still untapped, the majority of the people in country, don't own a four wheeler, and all the major auto companies are trying to increase their sales by several moves. Like TATA has launched NANO, the people's car and now TATA Motors is also planning to come up with an electric car as well as hybrid car.
5. From the Technical Analysis of the companies it is found that the share price of Tata Motors will move in the range of Rs. 450 to Rs. 510, Hyundai Motors in the range of Rs 20 to Rs. 23, Force Motors in the range of Rs. 120 to Rs.160,Mahindra & Mahindra in the range of Rs. 370 to Rs. 420, Maruti Suzuki will move in the band of Rs.1425 to Rs.1550, Swaraj Mazda in the range of Rs.200 to Rs.215 and Ashok Leyland will move in the range of Rs.30 to Rs.39 if certain correction made in the market.
6. We have also come to know that share price movement of TATA Motors is just according to the movement of SENSEX, whenever there is a negative sentiment in the market regarding TATA Motors here is a steep fall in the stock price of TATA Motors, however, we have seen quick recovery in its share prices to regain its primary trend. For example: As we seen in last 3-4 months TATA recovers approx. 90% after downfall.
7. By analyzing the current trend of Indian Economy and Automobile Industry we can say that being a developing economy there is lot of scope for growth and this industry still have to cross many levels so there is huge opportunities to invest in and this is proving as more and more foreign companies setting up there ventures in India.

In the present study, the Automotive Industry being one of the key industries in India has received due attention and concerted efforts are being made for the rapid development of the Industry. These are well supported by various Government initiatives towards the development of the Indian Automotive Industry. The brief analysis above gives the optimistic view about the industry and the overall industry shows a positive growth which recommends the investors to keep a good watch on the major players to benefit in terms of return on investments.

This analysis helps us to know the actual position of the industries in the present scenario.

Eventually, it will be observed from the present study that this research methodology and findings may help in better functioning of the industries and may provide a good platform for further specific research activities in more detail. A review of the literature on related aspects of the study is presented in the next chapter.

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