

Indian Automobile Industry: A Review

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Abstract

The automotive Industry in India is now working in terms of the dynamics of an open market. Many joint ventures have been set up in India with foreign collaboration. India ranks just behind China with the world's second largest population at over 1 billion people. Less than 1 percent of the population currently owns automobiles, which is a much smaller proportion than the rest of the Southeast Asia region. India also has one of the fastest growing economies, and many U.S. companies view India as a potentially lucrative market. It is expected that the automotive industry will play an important role in helping the economy to continue this growth. This paper gives an overview of Indian Automobile Industry.

Keywords

Indian Automobile Industry, Automotive Industry, Automobiles

I. Introduction

Indian Automotive Industry growth decades started in the 1970s. Between 1970 and 1984 cars were considered a luxury product; manufacturing was licensed, expansion was restricted; there were Quantitative Restriction (QR) on imports and tariff structure designed to restrict the market but starting in 2000, several landmark policy changes like QR and 100% FDI through automotive route were introduced. In 2003, Core group on Automotive R&D (C.A.R) was set up to identify priority areas for automotive R&D in India [6]. Indian Auto Industry is 2nd in Two Wheelers, 3rd in Small Cars and 5th in Commercial Vehicles among the top 10 in World [3].

India is a global hub of automobile industry having:

- 15 Manufacturers of passenger cars and multi-utility vehicles
- 9 Manufacturers of commercial vehicles
- 16 Manufacturers of 2/3 wheelers
- 14 Manufacturers tractors
- 5 Manufacturers of engines

The evolution of the automotive component industry predictably followed the evolution of the auto industry itself. With the startup of local production of cars, trucks, and two-wheelers in the 1950s, many of the associated component manufacturers (mainly from Europe) started operations in India. Over a period of time, many of the major manufacturers had established plants for manufacture or assembly of parts. These included companies like Bosch (fuel injection systems and spark plugs) and Mahle (pistons) from Germany; Lucas (auto electricals), Girling (brakes), and Lockheed (clutches) from the United Kingdom; and Champion (spark plugs), Armstrong (shock absorbers), and Union Carbide-Exide (batteries) from the United States. From the Indian perspective, these units were primarily intended to aid import substitution. In the process, there was gradual transfer of technology from the parent company [5]. The domestic two-wheeler industry has grown steadily at a CAGR of 8.5 per cent from 4.2 million in 2001 to 7.43 million in 2009. The motorcycle segment continues to dominate the market. Entry-level bikes (engine power below 125cc and price in the range of US\$ 850–1,000) account for around 80 per cent of sales. The cost of ownership and economics of operations are key purchase criteria. The premium-bike segment (engine power above

150cc and price in the range of US\$ 1,200–2,000) is growing at a faster pace than entry-level vehicles; this is an indication of the increasing affluence of customers.

Recent trends indicate that 100cc bikes are being preferred over 125cc bikes by the market [7]. Fig. 1 shows the Segment Wise Market Share.

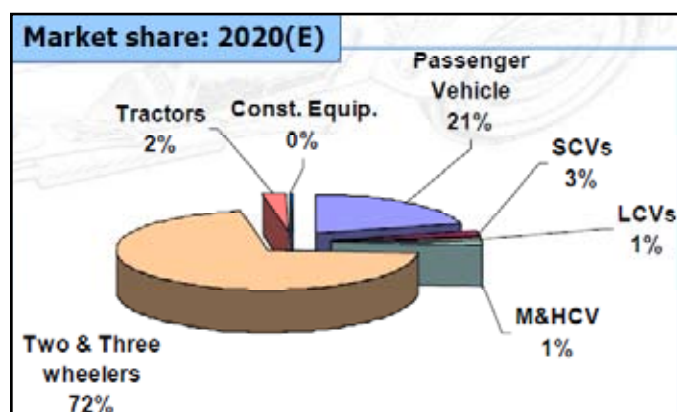


Fig. 1: Segment Wise Market Share [11]

Various types of vehicles are available like Cars, Jeeps, Buses, Trucks, LCVs, Tractors and 2-Wheelers which are produced by India. Table 1 shows the Vehicle Production by Type in India.

Table 1: Vehicle Production by Type, India
Source: ACMA [2]

Year	Car and Jeep	Buses, Trucks and LCVs	Tractors	2-Wheelers
1971	49.3	41.9	17.1	121.1
1975	31.3	42.9	32.4	207.7
1979	41.5	59.7	60.2	306.9
1983	66.8	87.3	71.5	759.2

Rising GDP per capita (US \$) is shown in fig. 2.

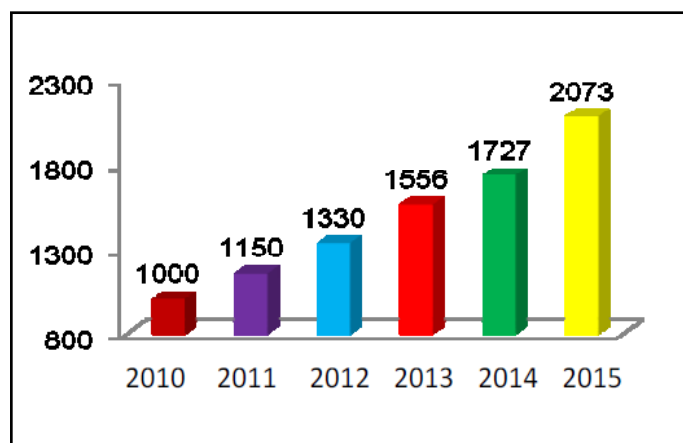


Fig. 2: Rising GDP Per Capita (US \$) [3]

III. Green Motoring

Automobile manufacturers are increasing the thrust on fuel efficiency than before; the initiatives are mainly through improvements in technology and introduction of new fuel variants, thereby reducing toxic emissions. It may be mentioned that China, the EU, Japan and the USA have already established fuel economy rules or agreements of varying stringency. The FIA's declaration for green motoring has set a fuel economy target of 140 gCO₂/km for passenger cars. Such a global fuel economy target could be used as an international benchmark to assess progress in the fuel efficiency of the global fleet of new motor vehicles. Some countries are also undertaking 'Green Rating' of automobiles [10].

IV. Automobile Companies in India

Hero Honda: Largest two-wheeler manufacturer in the world. Bajaj Auto: Second-largest two-wheeler manufacturer and largest three-wheeler manufacturer in India. TVS Motor Co. Third-largest two-wheeler manufacturer in India; has established a manufacturing facility in Indonesia. Honda Motorcycle & Scooter India (Pvt) Ltd. (HMSIL): Has recently entered the Indian market through its own subsidiary (in addition to its joint venture Hero Honda). Suzuki Motorcycle India Pvt. Ltd. The Company started its India operations in February 2006 through this fully-owned subsidiary. Following are the Top Automobile Companies in India [1]:

- Audi
- Bajaj Auto
- BMW
- Chevrolet
- DaimlerChrysler (Mercedes)
- Fiat
- Ford
- General Motors
- Hindustan Motors
- Hero Honda Motors
- Hyundai Motors
- Mahindra & Mahindra
- Maruti Udyog
- San Motors
- Skoda
- Tata Motors
- Yamaha Motors

IV. Indian Automobile Industry SWOT Analysis

A. Strengths

1. Domestic Market is large
2. Government provides monetary assistance for manufacturing units
3. Reduced Labor cost

B. Weaknesses

1. Infrastructural setbacks
2. Low productivity
3. Too many taxes levied by government increase the cost of production
4. Low investments in Research and Development

C. Opportunities

1. Reduction in Excise duty
2. Rural demand is rising
3. Income level is at a constant increase [9]

D. Threats

1. Increasing rates of interest
2. Too much competition
3. Rising cost of raw materials

V. Forecasts for Indian Auto Industry

1. Passenger vehicle market of India will even cross Japan by selling about 5 million vehicles by 2017-18
2. India's passenger vehicle production projections:

In 2010: 2.6 Million Vehicles

By 2015: 5.1 Million Vehicles

By 2020: 9.7 Million Vehicles

Apart from many countries, there are top 12 countries which are the sales destination. Top 12 Car sales Destinations are given in Table 2.

Table 2: Top 12 Car Sales Destinations [4]

Country	Sales in 2007
USA	7.6
China	4.7
Japan	4.4
Germany	3.1
UK	2.4
France	2.1
Russia	2.0
Brazil	1.9
Spain	1.6
India	1.2
South Korea	0.7

VI. Future Technological Demands

Now from Today, there are some future technological demands which should be fulfilled in future, those demands are listed below:

- Fuel Efficiency
- Emission Reduction
- Safety and Durability
- Cost Effectiveness
- Innovative Features

Some of the innovative features are Key Less Entry, Electrically controlled mechanisms, enhanced driving control, Composites, Long life Components, Soft feel interiors.

VII. Various Challenges

In Indian Automotive Market, there are some challenges by virtue of which automobile industry faces lot of problems. These challenges should be overcome and the challenges are listed below:

- Growth in input costs
- Fuel price volatility
- Slowdown in demand
- Slowdown in USA
- Production cuts
- Growing competition
- Changing consumer preferences
- Chinese competition
- Environmental issues
- Low R&D orientation

- Infrastructure constraints
- Low ICT interface [8, 10]

VIII. Conclusion

India has the potential to develop into a significant market for automobile manufacturers. Indian automotive industry holds significant scope for expansion, both in the domestic market, where the vehicle penetration level is on the lower side as compared to world average, and in the international market, where India could position itself as a manufacturing hub.

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Table 1: List of Top Automobile Companies in India 2011 (Figures in Crores Rs) [1]

2011 ET 500 Rank	Company	Turnover	PAT	MCRP CR	Assets
7	Tata Motors Ltd.	123222.91	9273.62	56499.77	52209.48
21	Mahindra & Mahindra Ltd.	37026.37	3079.73	49945.17	36926.19
19	Maruti Suzuki India Ltd.	38140.69	2382.37	31475.63	14762.9
41	Hero MotoCorp Ltd.	19669.29	1927.9	40398.63	4447.22
46	Bajaj Auto Ltd.	17008.05	3454.89	46885.69	5154.96
67	Ashok Leyland Ltd.	11133.04	631.3	6653.15	6621.16
101	Sundaram Clayton Ltd.	7419.41	64.63	529.23	2428.87
110	TVS Motor Company Ltd.	6569.99	127.94	2985	1745.06
148	Eicher Motors Ltd.	5138.64	243.12	4448.27	474.14
396	Force Motors Ltd.	1574.05	58.62	730.05	583.79