CHAPTER - II

INDIAN AUTOMOBILE INDUSTRY:

POST LIBERALIZATION SCENARIO
The growth prospects of a national economy are largely determined by its key industries. In recent decades, the automobile industries in many countries have proven to be one of the strongest drivers of technology, growth, and employment (Gottschalk and Kalmbach, 2007) and its development has characterized global competitiveness of leading industrialized economies. The automobile industry is fairly developed one and involves huge investments in research and development and technology and is seen as an indicator of the economic progress of a country. An understanding of the automobile industry in some of the developed countries enables one to study the emerging trends in developing countries (Choudhary and Goyal, 1997) like India.

The Indian Automobile Industry has got a tremendous market potential after economic liberalization in 1990s like never before. The various tax reliefs by the Government of India have made remarkable impacts on the industry. The country's large middle class population, growing earning power, strong technological capability and availability of trained manpower at competitive prices are also the reasons that attracted a large number of multinational auto companies, especially from Japan, the U.S.A., and Europe, entering the Indian market. At this juncture firstly, the study endeavors to analyze the post- (deregulation and global environment) liberalization era.

Descriptive and analytical in nature, part of this study is based on secondary data collected from various authentic and reliable sources like the reports and statistics provided by Society of Indian Automobile Manufacturers (SIAM), ICRA and Moody’s, Economist Intelligence Unit (EIU) and Deloitte, International Organization of Motor Vehicle Manufacturers (OICA), Govt. of India, trade journals and white papers, industry portals, monitoring industry news and developments, and research articles from various authors. The study is focused on making a situational/scenario analysis (SWOT analysis, Porter’s Five Forces industry analysis and PEST analysis) in this part, to provide with an understanding of the overall scenario of the Indian automobile industry in the post-economic liberalization era.

2.1 Indian Automobile Industry – Post-Economic Liberalization Era

Since the 1980s, the Indian car industry has seen a major resurgence with the opening up of Indian shores to foreign manufacturers and collaborators. In the early 1990s, the Indian economy faced a very serious economic slump that this almost self-sufficient
system had endured for decades finally led to a massive balance-of-payment crisis. After the International Monetary Fund bailed it out, the Indian government had to take a course of expedient actions toward liberalization and deregulation under the guidance of the International Monetary Fund and World Bank (Jenkins, 1999; and Joshi and Little, 1996). This period became the melting point for the industry in India when large number of foreign players came into the country through collaborations and partnerships. The face of the Indian automobile industry completely changed in the open economy era post liberalization, which brought a remarkable change in the Indian automobile industry. Yeong-Hyun (2003) called it a shift from CLP (controls, licenses and protectionism) to LPG (liberalization, privatization and globalization).

In 1991, the Government of India embarked on an ambitious structural adjustment programme aimed at economic liberalization, based on the pillars of De-licensing, Decontrol, Deregulation and Devaluation. Post-liberalization, the Government of India's new automobile policy announced in June 1993 contained measures, such as de-licensing, automatic approval for foreign holding of 51 per cent in Indian companies, abolition of phased manufacturing programme, reduction of excise duty to 40 per cent and import duties of 'Completely Knocked Down units (CKD)' to 50 per cent and of 'Completely Built Up units CBU' to 110 per cent, and commitment to indigenization schedules (Mukherjee, 1997). The New Industrial Policy was drafted to deregulate market entrance, production capacity and plant location in a wide range of industries, and it was applied to the auto components sector in 1991 and the automotive vehicles sector/passenger car industry in 1993 (Mohnot, 2001; and Ohri, 1997). No industrial license is required for setting up of any unit for manufacture of automobiles except in some special cases. The norms for Foreign Investment and import of technology have also been progressively liberalized over the years for manufacture of vehicles including passenger cars in order to make this sector globally competitive.

Liberalization of economic policies and the outward orientation introduced since 1991 brought about a dramatic change in this industry. These new measures effectively dismantled the license raj, which had made it difficult for Indian firms to import machinery and know-how, and had disallowed equity ownerships by foreign firms (Krishnan, 2002). These newly implemented liberalization measures allowed two
local firms that had been specialized in light commercial vehicles, namely Tata Engineering and Bajaj Tempo, to enter the passenger car industry.

Given the merits of market potential, India witnessed a rushed entry of global car manufacturers in the auto industry. With ten of the world’s leading automobile companies having set up new production facilities around the country, India’s passenger car industry has experienced in the past decade a substantial increase in production, a wave of new models, and unprecedented marketing wars among automobile companies. The world’s major carmakers in the first five years following liberalization were Daewoo, Mercedes-Benz (later changed to DaimlerChrysler), Fiat, General Motors Opel, Ford, Honda, Hyundai, Mitsubishi, PSA Peugeot Citroen and Toyota. Volvo jumped into the commercial vehicle industry, where local manufacturers, such as Tata Engineering, Ashok Leyland and Bajaj Tempo, had been dominant. Today, multi-national companies are using India as a manufacturing "base for exporting vehicles to other countries". The growth rate of the Indian automobile industry is well over 25 per cent, which is enormously larger than other developing countries like Korea and Brazil (Mukherjee, 1997).

By the April of 1996, there were about eighteen automobile companies that had either begun operations in India or were in the process of launching in the country. As a result, while initially there were only about three vehicles to choose from, consumers now have wide variety of options (Mukherjee and Sastry, 1996). Further in 1997, some more reforms were made where new foreign entrants required establishing actual production facilities, the minimum foreign equity was raised to $50 million, and the minimum indigenization was to be 50 per cent in the third year and 70 per cent in the fifth year.

While India has been able to attract a large amount of automotive capital in the past decade, its market has not grown as fast as many expected. The country’s small, stagnant market has forced auto companies to scramble for the right models to meet Indian consumers’ needs and to look for exporting markets to shore up efficiency in production. While the export of cars from India is still minimal, that of auto components has increased dramatically since liberalization. Thanks to numerous collaborations and joint ventures with global companies, the Indian auto component industry has been greatly upgraded in both technology and finance and gained competitiveness in global markets. Auto companies have become highly creative in
running the just-in-time system and overcoming the country’s business-unfriendly transportation infrastructures. The buyer-supplier relationships have been characterized by carmakers’ single sourcing and suppliers’ multiple supplying, both reflecting India’s market conditions, government’s auto policies and, in general, history of the auto industry.

Again in 2002, the government altered auto policy allowing 100 per cent Foreign Direct Investment in Indian automobile industry. With 100 per cent Foreign Direct Investment, the Indian auto industry became a level playing field, with government’s role reduced to providing direction to the industry. The new automobile policy attracted a large number of automobile companies and almost all the global auto companies established facilities in India. These included GM and Ford from US, Toyota and Honda from Japan, seven (Fiat, BMW, Mercedes-Benz, Audi, Volkswagen, Volvo, and Porsche) European and two (Hyundai and Daewoo) South Korean companies. All these measures resulted in tremendous increase in the production levels, from 2 million in 1992 to 9.7 million in 2006 (Mukherjee, 2000).

Every major shift in policies made by the Indian government, the automotive industry has come out stronger and better. While the shift in policies seems to have mostly been brought by chance events, the Indian government has at least to be credited for making the right decisions and implementing them correctly. It is paradoxical that the Indian middle class, the most attractive feature for foreign investment in the liberalization phase, was an outcome of the statist ideologies in the regulatory phase. The product innovations of domestic firms like Tata Motors and Bajaj Auto today are the fruits of indigenization and protection policies of the regulatory phases (Ranawat and Tiwari, 2009).

A study by Rathore and Swarup (2006) estimated that sales of vehicles in India were roughly around one million units per annum by the year 2006. However, they say that this level of sales is "abysmally low" if one were to take into account the other developing countries such as Pakistan and Sri Lanka where the penetration level is still higher. The penetration level in India is substantially low at seven cars per one thousand people. They thus say that even at the level of one million units per annum, "this is just the tip of the iceberg" (Rathore and Swarup, 2006).
To maintain this high rate of growth and to retain the attractiveness of Indian market and for further enhancing the competitiveness of Indian companies, the Government through the Development Council on Automobile and Allied Industries constituted a Task Force to draw up a ten year Mission Plan for the Indian Automotive Industry. The challenge was to give shape to a futuristic plan of action with full participation of the stakeholders and to implement it in a mission mode to remove the impediments coming in the way of growth of industry. Besides making concerted efforts for removal of obstacles for accelerated growth, the prime need was to put in place required infrastructure well in time to facilitate growth. Through this Automotive Mission Plan 2006-2016, Government also wants to provide a level playing field to all players in the sector and to lay a predictable direction of growth to enable the manufacturers to take more informed investment decision (Automotive Mission Plan, 2007).

The Automotive Mission Plan 2006-2016 was released in 2007, which visualizes India emerging as a destination of choice in the world for design and manufacture of automobiles and auto components with output reaching a level of $ 145 billion accounting for more than 10 per cent of the GDP and providing additional employment to 25 million people by 2016. LPG also had a positive impact on other sectors vital for automobile industry to thrive. In education sector, thrust on technical education resulted in setting up of numerous engineering colleges and allied technical institutes, between 1991 and 2006, increasing the availability of skilled manpower manifold. Availability of trained engineers and technical personnel propelled further pursuits – technology improvements, research and development, advanced innovations, benchmarking exercises and borrowing best practices, etc. Presence of efficient manpower, availability of advanced technology, low-cost labour and availability of raw materials and ancillary units helped in enhancing production capacities and reducing cost per unit (Automotive Mission Plan, 2007).

Now this industry is fully capable of producing various kinds of vehicles comprising passenger cars, commercial vehicles, three wheelers and two wheelers which presents a galaxy of varieties and models meeting all possible expectations and globally established industry standards. There are 11 essential categories of vehicles on Indian roads as on date. They are: scooters, motorcycles, mopeds in two-wheeler segment; passenger carrying and load carrying in three-wheelers segment; passenger cars,
(including taxis) multi-utility vehicles, light commercial vehicles, buses and trucks and tractors in four- and six-wheeler segments. In each category, there are a number of manufacturing firms and they produce different models of vehicles of varying sizes and capacities. Some of the leading names echoing in the Indian automobile industry include Maruti Suzuki, Tata Motors, Mahindra and Mahindra, Hyundai Motors, Honda and Hindustan Motors in addition to a number of others.

At present 100 per cent Foreign Direct Investment is permissible under automatic route in this sector including passenger car segment. The import of technology/technological up-gradation on the royalty payment of 5 per cent without any duration limit and lump sum payment of USD 2 million is also allowed under automatic route in this sector. With the gradual liberalization of the automobile sector since 1991, the number of manufacturing facilities in India has grown progressively. The cumulative production of automobile for April-December 2011 registered a growth of 14.94 per cent over same period in 2010 and in December 2011 it increased by 10.91 per cent year-on-year (ASA and Associates, 2012).

Automobile Industry comprises of automobile and auto component sectors and is one of the key drivers of the national economy as it provides large-scale employment, having a strong multiplier effect. Being one of the largest industries in India, this industry has been witnessing impressive growth during the last two decades. It has been able to restructure itself, absorb newer technology, align itself to the global developments and realize its potential. This has significantly increased automotive industry's contribution to overall industrial growth in the country.

2.2 Effects of Globalization, Liberalization and Deregulation Policy of India on the Growth of Automobile Industry

The industry is poised for a giant leap forward as it is being rapidly integrated into the global automobile supply chain. Global automobile firms are looking towards India not only for its growing market but also as an efficient supplier base. The researcher evaluated various secondary studies conducted on the automobile industry in India by other researchers.

Pingle (2000) reviews the policy framework of India’s automobile industry and its impact on the growth. While the ties between bureaucrats and the managers of state-owned enterprises played a positive role especially since the late 1980s, ties between
politicians and industrialists and between politicians and labor leaders have impeded the growth. The first phase of 1940s and 1950s was characterized by socialist ideology and vested interests, resulting in protection to the domestic auto industry and entry barriers for foreign firms. There was a good relationship between politicians and industrialists in this phase, but bureaucrats played little role. Development of ancillaries segment as recommended by the L.K. Jha Committee report in 1960 was a major event that took place towards the end of this phase. During the second phase of rules, regulations and politics, many political developments and economic problems affected the auto industry, especially passenger cars segment, in the 1960s and 1970s. Though politicians picked winners and losers mainly by licensing production, this situation changed with oil crises and other related political and macro-economic constraints. The third phase starting in the early 1980s was characterized by de-licensing, liberalization and opening up of FDI in the auto sector. These policies resulted in the establishment of new LCV manufacturers (for example, Swaraj Mazda, DCM Toyota) and passenger car manufacturers. All these developments led to structural changes in the Indian auto industry. Pingle (2000) argues that state intervention and ownership need not imply poor results and performance, as demonstrated by Maruti Udyog Limited. Further, the non-contractual relations between bureaucrats and Maruti Udyog Limited dictated most of the policies in the 1980s, which were biased towards passenger cars and MUL in particular. However, D’Costa (2002) argues that success of Maruti Udyog Limited is not particularly attributable to the support from bureaucrats. Rather, any firm that is as good as Maruti Udyog Limited in terms of scale economies, first-comer advantage, affordability, product novelty, consumer choice, financing schemes and extensive servicing networks would have performed as well, even in the absence of bureaucratic support.

Piplai (2001) examines the effects of liberalization on the Indian vehicle industry, in terms of production, marketing, export, technology tie-up, product up-gradation and profitability. Till the 1940s, the Indian auto industry was non-existent, since automobile were imported from General Motors and Ford. In early 1940s, Hindustan Motors and Premier Auto started, by importing know-how from General Motors and Fiat respectively. Since the 1950s, a few other companies entered the market for two-wheelers and commercial vehicles. However, most of them either imported or
indigenously produced auto-components, till the mid-1950s, when India had launched import substitution programme, thereby resulting in a distinctly separate auto-component sector. Due to the high degree of regulation and protection in the 1970s and 1980s, the reforms in the early 1990s had led to a boom in the auto industry till 1996, but the response of the industry in terms of massive expansion of capacities and entry of multinationals led to an acute over-capacity. Intense competition had led to price wars and aggressive cost-cutting measures including layoffs and large-scale retrenchment. While Indian companies started focusing on the price-sensitive commercially used vehicles, foreign companies continued utilizing their expertise on technology-intensive vehicles for individual and corporate uses. Thus, Piplai (2001) concludes that vehicle industry has not gained much from the reforms, other than being thrusted upon a high degree of unsustainable competition.

In August 2006, a Draft of Automotive Mission Plan Statement prepared in consultation with the industry was released by the Ministry of Heavy Industries and Public Enterprises. This was finally released as a report in December 2006. This document draws an action plan to take the turnover of the automotive industry in India to US$145 billion by 2016, accounting for more than 10 per cent of the GDP and providing additional employment to 25 million people, by 2016. A special emphasis is laid on small cars, MUVs, two-wheelers and auto-components. Measures suggested include setting up of a National Auto Institute, streamlining government/educational/research institutions to the needs of the auto industry, upgrading infrastructure, considering changes in duty structure and fiscal incentives for Research and Development. Similarly, NMCC (2006), which lays down a national strategy for manufacturing, recognizes the importance of the Indian automobile and auto-component industry, particularly the latter, as a competitive knowledge-based industry with immense employment generation potential.

ACMA (2006) notes that India’s joining the WP (Working Party) 29: 1998 Agreement for global harmonization of automotive standards, coupled with the funding of National Automotive Testing and Research Infrastructure Project (NATRIP) by the Government of India, has increased prospects of the Indian auto industry rising up to global standards in the near future, in all aspects.

Narayanan (1998) analyses the effects of deregulation policy on technology acquisition and competitiveness in the Indian automobile industry during the 1980s
and finds that competitiveness has depended on the ability to build technological advantages, even in an era of capacity-licensing. In a liberalized regime, this would depend on firms’ ability to bring about technological changes, as inferred from the behavior of new firms in the sample considered. Further, vertical integration could score over subcontracting in a liberal regime. This is probably because of the entry of new foreign firms that produce technologically superior and guaranteed quality vehicles and choose to produce most of the components in-house. Narayanan (2004) analyses the determinants of growth of Indian automobile firms during three different policy regimes, namely, licensing (1980-81 to 1984-85), deregulation (1985-86 to 1990-91) and liberalization (1991-92 to 1995-96). Unlike the prediction by Narayanan (1998), this study finds that vertical integration is detrimental for growth in a liberalized regime as it potentially limits diversification. Narayanan (2006) also finds that vertical integration plays a positive role in a regulated regime, while it is not conducive for export competitiveness in a liberal regime.

Kathuria (1996), notes that the time-bound indigenization programme for commercial vehicles in the 1980s facilitated the up-gradation of vendor skills and modifying vehicles to suit local conditions, which demand functional efficiency, overloading capabilities, fuel economy, frequent changes in speed and easy repair and maintenance. Kathuria (1996) also mentions that the choice between vertical integration and subcontracting crucially depends on the policy regime: In a liberal regime, vertical integration may not work.

Sharma (2006) analyses the performance of the Indian auto industry with respect to the productivity growth. Partial and total factor productivity of the Indian automobile industry have been calculated for the period from 1990-91 to 2003-04, using the Divisia-Tornquist index for the estimation of the total factor productivity growth. The author finds that the domestic auto industry has registered a negative and insignificant productivity growth during the last one and a half decade. Among the partial factor productivity indices only labour productivity has seen a significant improvement, while the productivity of other three inputs (capital, energy and materials) haven’t shown any significant improvement. Labour productivity has increased mainly due to the increase in the capital intensity, which has grown at a rate of 0.14 per cent per annum from 1990-91 to 2003-04.
The automobile industry is typically considered to be the forefront of globalization. No doubt, the automobile industry is technically advanced but the increasing integration of low income countries into the global division of labor has put competitive pressure on traditional automobile producing countries. The multinational companies are investing in low income countries, resulting in increase in foreign direct investment which is further leading to emergence of new automobile producers and exporters in different parts of the world including India. The sector is not only progressing in terms of production, sales etc. but also adopting the moderate work systems and human resources policies like personal focused comprising job satisfaction, health system and social support, organizational focused comprising organization commitment and perception of organizational justice (Zacharatos, Herschovis, Turner and Barling, 2007).

Mukherjee and Sastry (1996) have made a comparison between the automobile industries of South Korea, Brazil, China and India and also identify some factors that can lead to better performance. Although South Korea was a late entrant than Brazil in the automobile industry but still it has made much progress. Different factors like government support, clear vision of becoming a world class industry, retaining management control, more investment in Research and development and acquiring product development categories have helped South Korea to develop at a better pace. The other three countries have not invested much in these factors. The markets in Brazil, China and India are dominated by small car segment. Lean production system has not been adopted majorly. Supplier industry has also not been developed properly in these countries. However, due to stagnation in developed markets and increasing capacity in developing and emerging markets, the monopoly of developed nations over car production could erode, although they will continue to dominate product development.

Mukherjee and Sastry (1996) also discuss that penetration of passenger cars in rural and semi-urban areas is extremely low and could provide fresh markets. They opinion that new entrants will have to deal with uncertainty of demand, different and evolving customer needs, a relatively poor supplier base, a market crowded with competition and industry wide capacity shortages. They see the prospect of India emerging as a significant manufacturing base for exports. They conclude that in the highly price sensitive market, reduction of prices because of lower duties and taxes
and progressive indigenization, and rising middle class incomes are likely to further increase industry growth rates.

Sagar and Chandra (2004) have stated how the Indian car industry has transformed from a protected business to a global one. During the process, the Indian car industry has advanced technologically, driven by a confluence of factors such as intense competition, demanding consumer preferences, government policies (especially tightening emission standards), and the global strategies of the various players. They elaborate that cars manufactured in India are based on designs, incorporating advanced technologies, that are often comparable with those available globally and Indian car exports are also growing in the post liberalization era.

Pillai (2009) reported that the car sales are getting into a steady stage, in the month of December 2008. In spite of the general slump in automobile market, the used car segment has not taken much of a beating. Many of the dealers reported steady sales in December 2008, contrary to the negative sales in the previous few months. This is attributed to the package announced by the Government of India for the automobile industry in terms of reduction in the excise duty of cars, and attractive packages announced by the car manufacturers.

Many players have been considering India as their global manufacturing hub for small cars and governments new auto policy are further designed to promote such developments. But, as the global integration of Indian economy goes on and as other developing countries are also emerging as prominent global players, the industry is likely to face more challenges and in order to meet these challenges, the Indian automobile manufacturer as well as the related industries like auto-component suppliers will have to build on their ongoing progress and continue to strengthen their technological capabilities with the support of public policy that needs to pay more attention on the drivers of technological change.

2.3 Car industry in India – The Current Scenario

The Indian Automobile industry has good potential in the existing and future scenario. All the leading car manufacturers have become major players and are manufacturing a wide range of cars in various categories in India. Moreover the globalization and liberalization impact on car industry is huge and significantly contributes to increase the levels of the usage of passenger cars at grassroots levels.
As per a report by Deloitte in 2011, “Indian passenger car market has almost quadrupled over the decade as a result of good economic performance (10% CAGR in GDP PPP over the decade)”. Amongst the Asian countries, India was the fourth largest exporter of passenger cars with Chennai accounting for approximately 60 per cent of the exports (Deloitte, 2011).

The report further explains that the passenger cars comprise of 75 per cent share of the total production of cars and commercial vehicles. China is the leader with 23.51 per cent of the total production, followed by Japan with 12.39 per cent, USA with 9.9 per cent, Germany with 7.6 per cent, South Korea with 5.5 per cent and India with 4.58 per cent of the total global vehicle production in 2009-10. The passenger car density per thousand people in major markets of the world is highest for USA with 1200 vehicles, Germany with 500, UK with 463, Japan with 445, South Korea with 246, Russia with 188, Brazil with 158, Turkey with 85, China with 45 and India continues to have one the lowest car density with 13 (Deloitte, 2011).

Table 2.1: Passenger car density

<table>
<thead>
<tr>
<th>Country</th>
<th>Passenger car density (Per 1,000 persons)</th>
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<tbody>
<tr>
<td>United States of America</td>
<td>1200</td>
</tr>
<tr>
<td>Germany</td>
<td>500</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>463</td>
</tr>
<tr>
<td>Japan</td>
<td>445</td>
</tr>
<tr>
<td>South Korea</td>
<td>246</td>
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<tr>
<td>Russia</td>
<td>188</td>
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<tr>
<td>Brazil</td>
<td>158</td>
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<tr>
<td>Turkey</td>
<td>85</td>
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<tr>
<td>China</td>
<td>45</td>
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<tr>
<td>India</td>
<td>13</td>
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</table>

Source: EIU, Deloitte, 2011

The domestic passenger car industry has been on a relatively steady growth phase over most of the last decade and has registered a 10 years CAGR of 10.3 per cent during the period. It has been one of the few markets worldwide which saw growing passenger car sales during the liquidity crisis and recessionary phase witnessed during financial year 2009 (ICRA, 2011a). Buoyant economic growth, rising disposable
income levels, favorable demographics, strong growth from tier II/III cities and rural India, together with improving availability of vehicle financing at competitive interest rates have been the key factors fuelling growth in the Indian passenger vehicle market. The growth has also been supported by car manufacturer led initiatives like whole host of new model offerings from both from existing companies as well as new entrants in the market. Furthermore, in India, the car prices have remained relatively flat over the years compared to steadily rising per capita income levels.

However, since the beginning of 2011-12, the industry witnessed a slowdown in volume growth marred by rising inflation, hardening interest rates and increasing fuel prices that have combined to dent consumer sentiment. Even the festive season failed to stoke domestic demand despite new model launches, aggressive discounts and promotional schemes offered by car manufacturers. Apart from macro-economic headwinds damping demand, events such as production disruption at India’s largest car manufacturer, Maruti Suzuki, the tsunami in Japan and the recent floods in Thailand also created supply chain stresses, further aggravating the weak performance of the passenger car industry. The above demand-supply pressures effectively translated into a decline in domestic volumes by 0.5 per cent year over year in 8 months in the financial year 2012 (Moneycontrol, 2011).

Within segments, the small car and executive car segments have been the worst impacted so far, even as volume growth in the mid-size car segment and utility vehicles (UVs) segment remained in the positive zone. With steady increase in fuel prices since January 2009, there has been a decisive shift in customer preference in favor of diesel-powered cars, reflected in the 24 per cent growth in sales volumes of diesel vehicles in the financial year 2012 against a 11 per cent decline in sales volumes of petrol vehicles during the same period. In fact, in segments where both petrol and diesel options are available, diesel vehicle sales far outnumber that of petrol variants by an overwhelming factor of 4:1. However, the preference for diesel vehicles fostered by a distorted fuel price regime could get altered in the event of any increase in excise duty on diesel vehicles that is currently being mulled by the government (ICRA, 2011a).

The large incumbents in the domestic car industry derive strength from their low cost manufacturing capabilities, established vendor base and widespread sales and service network; however, their dominance is being challenged by multinational car
manufacturers that have entered the domestic market in the recent past. Overall, ICRA believes that car manufacturers may continue to face challenging times at least over the short term as sluggish demand on one hand and increasing competition on the other may restrict earnings growth.

2.4 Trends in Indian Passenger Vehicle Markets

2.4.1 Market share

The top four players namely Suzuki, Hyundai, Tata Motors and Mahindra and Mahindra constitute almost 80 per cent of the passenger car sales thereby making it a highly concentrated market. However, increasing competition across vehicle segments is expected to lower the concentration levels. As can be observed from the Table 2.2 and Figure 2.1, new players are quickly gaining market share, though small in percentage but it is expected that the passenger car market will have 5 or more players making up for 80 per cent of the market in the upcoming years.

In the financial year 2012 and 2013, industry volumes were impacted by production disruptions at Maruti Suzuki which led to a sharp decline in its domestic market share from 45.9 per cent in the financial year 2011 to 38.8 per cent in the financial year 2012 and 39.1 in 2013. The volumes of all the players were also observed on the path of slow growth due to the overall slump slowdown in the automobile industry in the year 2012-13. Though, MUL and most of the other major players were able to sustain their market share and volumes by sailing on the push in the rural sector (Gupta, 2013).

Although due to production snarls at MUL, a part of the demand shifted to other OEMs like Toyota and Honda which gained market share is also facilitated by their new product launches. Also, market participants having diesel models and newly launched compact SUV’s in their portfolio specifically M&M and Renault and general diesel variants offered by Tata Motors and Ford consolidated their market position.

The increasing scenario of passenger car segment has shown positive effect on the sales of the segment. Passenger car production in India is projected to cross three million units in 2014-15. Sales of passenger cars during the period 2015-16 are expected to grow around 10 per cent (The Equicom, 2012).
Table 2.2: Trends in Market Share of Leading Manufacturers in the Domestic PV Market (in percentage)

<table>
<thead>
<tr>
<th></th>
<th>FY 02</th>
<th>FY 03</th>
<th>FY 04</th>
<th>FY 05</th>
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<th>FY 09</th>
<th>FY 10</th>
<th>FY 11</th>
<th>FY 12</th>
<th>FY 13</th>
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<tbody>
<tr>
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<td>46.7</td>
<td>46.7</td>
<td>45.9</td>
<td>46.1</td>
<td>46.1</td>
<td>45.9</td>
<td>47.0</td>
<td>45.3</td>
<td>45.9</td>
<td>38.3</td>
<td>39.1</td>
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<td>Hyundai</td>
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<td>14.4</td>
<td>13.4</td>
<td>13.9</td>
<td>14.1</td>
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<tr>
<td>Tata</td>
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<td>14.7</td>
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<td>16.4</td>
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<td>14.1</td>
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<tr>
<td>M&amp;M</td>
<td>6.6</td>
<td>7.4</td>
<td>7.6</td>
<td>7.5</td>
<td>7.4</td>
<td>6.5</td>
<td>8.4</td>
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<tr>
<td>Toyota</td>
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<td>3.3</td>
</tr>
<tr>
<td>Ford</td>
<td>2.2</td>
<td>2.2</td>
<td>2.4</td>
<td>2.6</td>
<td>2.5</td>
<td>3.0</td>
<td>2.2</td>
<td>1.8</td>
<td>1.9</td>
<td>4.0</td>
<td>3.5</td>
<td>2.9</td>
</tr>
<tr>
<td>Honda</td>
<td>1.6</td>
<td>1.9</td>
<td>2.4</td>
<td>3.5</td>
<td>3.7</td>
<td>4.4</td>
<td>4.0</td>
<td>3.4</td>
<td>3.2</td>
<td>2.4</td>
<td>2.1</td>
<td>2.7</td>
</tr>
<tr>
<td>Volkswagen</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.3</td>
<td>2.3</td>
<td>3.0</td>
<td>2.4</td>
</tr>
<tr>
<td>Nissan/Renault</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.5</td>
<td>1.2</td>
<td>1.4</td>
<td></td>
</tr>
<tr>
<td>Skoda</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.9</td>
<td>0.9</td>
<td>0.9</td>
<td>1.3</td>
<td>1.1</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>8.0</td>
<td>7.0</td>
<td>4.3</td>
<td>3.4</td>
<td>3.1</td>
<td>3.0</td>
<td>2.0</td>
<td>2.1</td>
<td>2.6</td>
<td>2.2</td>
<td>1.9</td>
<td>3.3</td>
</tr>
</tbody>
</table>

Source: ICRA and ACG

Figure 2.1: Market Share of Car Manufacturers in the Domestic Passenger Vehicle Market

2.4.2 Sales, Production and Export trends

In India, car production has been greater than sales over the decade. The CAGR of sales and production were 15.8 per cent and 17.6 per cent respectively during the last decade. The domestic sales witnessed and reported a very strong volume growth over
the last few fiscal years, with as much as more than 20 per cent growth in 2010 and even higher than 25 per cent in the year 2011. However, the domestic passenger vehicle industry started observing a drastic slowdown since the beginning of the financial year 2012 with the year ending at only 4 per cent year on year growth. The society of Indian Automobile Manufacturers revised and reduced the projected growth of the industry several times for the year 2013 which finally concluded at just 2 per cent over the previous year.

Table 2.3: Trend in Domestic Passenger Vehicle Sales

<table>
<thead>
<tr>
<th>FY</th>
<th>FY 01</th>
<th>FY 02</th>
<th>FY 03</th>
<th>FY 04</th>
<th>FY 05</th>
<th>FY 06</th>
<th>FY 07</th>
<th>FY 08</th>
<th>FY 09</th>
<th>FY 10</th>
<th>FY 11</th>
<th>FY 12</th>
<th>FY 13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales ('000)</td>
<td>691</td>
<td>675</td>
<td>707</td>
<td>902</td>
<td>1,062</td>
<td>1,143</td>
<td>1,380</td>
<td>1,550</td>
<td>1,553</td>
<td>1,950</td>
<td>2,520</td>
<td>2,638</td>
<td>2,686</td>
</tr>
</tbody>
</table>

Source: SIAM, ICRA and ACG

In the last two years, around 25 new models and 10 refreshed versions of ongoing brands have been launched in the Indian market. This has been amongst the strongest pace of new product introductions in India so far since the start of the industry. However, this increased supply push has coincided with a period of slow industry volume expansion making it difficult for the market to assimilate all new models. Around half of these new product introductions have received a lukewarm market response, exerting pressure on the profitability of OEMs as well as associated suppliers and dealers. In December 2012, the demand for passenger vehicles declined by 1.1 per cent YoY, despite steep discounts being offered across the board to push
year-end sales. While growth momentum slowed down in the passenger cars segment, the Utility Vehicle (UV) segment continued to witness strong volume growth aided by increasing demand for recently introduced models. M&M registered a YoY growth of 16.1 per cent in volumes in December 2012, while Renault also continued to scale-up volumes on the back of the successful launch of Duster. (Moneycontrol, 2013)

Table 2.4: Trend in Domestic Passenger Vehicle Production

<table>
<thead>
<tr>
<th>FY</th>
<th>FY 01</th>
<th>FY 02</th>
<th>FY 03</th>
<th>FY 04</th>
<th>FY 05</th>
<th>FY 06</th>
<th>FY 07</th>
<th>FY 08</th>
<th>FY 09</th>
<th>FY 10</th>
<th>FY 11</th>
<th>FY 12</th>
<th>FY 13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production ('000)</td>
<td>675</td>
<td>707</td>
<td>901</td>
<td>1061</td>
<td>1,210</td>
<td>1,309</td>
<td>1,545</td>
<td>1,778</td>
<td>1,839</td>
<td>2,357</td>
<td>2,987</td>
<td>3,123</td>
<td>3234</td>
</tr>
</tbody>
</table>

Source: SIAM, ICRA’s and ACMA

Figure 2.3: Trend in Domestic Passenger Vehicle Production

Riding majorly on the domestic demand the production trends were very similar to the sales trends. After seeing an exceptional growth of production at more than 25 per cent for two consecutive years in 2010 and 2011, the economic slowdown paralyzed the manufacturers specifically the major players to a point that the units had to be either shut-down or work at half the capacity for several days with piling inventory in the year 2012 and 2013 with the year-on-year growth in production posted at just 4 per cent and 3 per cent respectively. (SIAM, 2013b; ICRA, 2011a; and ACMA, 2013).

Table 2.5: Trend in Passenger Vehicle Exports

<table>
<thead>
<tr>
<th>FY</th>
<th>FY 1</th>
<th>FY 2</th>
<th>FY 3</th>
<th>FY 4</th>
<th>FY 5</th>
<th>FY 6</th>
<th>FY 7</th>
<th>FY 8</th>
<th>FY 9</th>
<th>FY 10</th>
<th>FY 11</th>
<th>FY 12</th>
<th>FY 13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exports ('000)</td>
<td>22</td>
<td>53</td>
<td>72</td>
<td>129</td>
<td>166</td>
<td>175</td>
<td>198</td>
<td>218</td>
<td>335</td>
<td>446</td>
<td>444</td>
<td>508</td>
<td>554</td>
</tr>
</tbody>
</table>

Source: SIAM, ICRA
Counter-balancing the declining domestic sales due to the subdued sentiments in the domestic auto market, a concerted export push and has kept the country’s biggest car makers in good stead. Growing exports also offers a partial hedge on foreign exchange exposures at a time when the rupee has been vacillating sharply.

Maruti Suzuki and the other major players in the country took a conscious call in lieu of the slowing European markets, which accounted for more than 70 per cent of their exports and took a note of the need to develop alternate markets. Consequently new market in Latin America, Africa and the ASEAN countries were targeted and as a result now the dependence on European markets has come down to just 25 per cent and currently 75 per cent of vehicle exports are going to Non-European markets.

Although the economy is adversely affected due to a falling rupee but it is proving beneficial as far as the exports are concerned. This is being attributed as one of the reasons for growing exports in the sector. The exports in the sector has seen a continuous growth every year over the decade, except for the 0.4 per cent decline in 2011, which was majorly attributed to the dependence over the European markets which entered an economic turmoil during the period. With the manufacturers realizing and developing the new markets, the export has again seen respectable growth with 14 per cent in 2012 and 9 per cent in 2013 despite an overall slowdown even in the Asian and non-European markets.
2.5 Situational/Scenario Analysis - The Post Liberalization Scenario of the Automobile Industry in India

Situational/Scenario analysis has been used in this study to provide with a systematic collection and evaluation of the data pertaining to post-economic liberalization era with an objective to identify internal and external forces that may influence car manufacturers’ performance and their choice of strategies. A SWOT analysis of the post-economic liberalization era has been done to assess the present and future strengths, weaknesses, opportunities and threats to the automobile industry. Porter’s Five Forces Industry Analysis is used in understanding the analytical processes in which car manufacturers understand, their consumers and the competitive market environment in which they operate. And, PEST analysis is to assess the external market influences on the automobile business environment in India.

2.5.1 SWOT Analysis

SWOT analysis is a tool of strategic planning which is used to evaluate the strength, weakness, opportunities, and threats involved in a business venture. It involves identifying the external and internal factors which are either favorable or unfavorable for the company or industry. The two main categories in a SWOT analysis are; internal and external factors. The internal factors comprise of strength and weakness, and the external factors include opportunities and threats.

Table 2.6: SWOT analysis of Indian Automobile Industry in Post Liberalization Scenario

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Investment by Foreign Car Manufacturers</td>
<td>• Low Labor Productivity</td>
</tr>
<tr>
<td>• Increase in Passenger Vehicle Exports</td>
<td>• Production Costs and Regulatory Environment</td>
</tr>
<tr>
<td>• Low Cost and Cheap Labor</td>
<td>• Localization and the Quality of Production</td>
</tr>
<tr>
<td>• Rising Middle Class and Disposable Income Levels</td>
<td>• Poor Infrastructure</td>
</tr>
<tr>
<td>• Expertise as a Small Car Hub</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Government Reforms</td>
<td>• Economic Slowdown</td>
</tr>
<tr>
<td>• Low Car Penetration Levels</td>
<td>• Unskilled Labor</td>
</tr>
<tr>
<td>• Niche Rural Markets</td>
<td>• Diminishing Export Markets</td>
</tr>
<tr>
<td>• Changing Demographics and Differentiation Acceptability</td>
<td>• Saturating Domestic Urban Markets</td>
</tr>
</tbody>
</table>
The presented SWOT analysis of the Indian Car Industry in the post liberalization scenario is focused on both the internal and external factors. This analysis will be used to do a comprehensive strategic assessment for the industry. Through the analysis, identification and highlighting of the major areas of strengths, weaknesses, opportunities and threats the players in the car industry can make useful adjustments, realignments, and changes in their business strategies.

**Strengths**

- **Investment by Foreign Car Manufacturers:** India has seen significant amount of FDI from the foreign origin car manufacturers over the last decade. In all, the automobile sector has seen a cumulative Foreign Direct Investment (FDI) equity inflows of US$ 8.217 Billion (₹ 38, 571 Crore) in this sector during the period of 2000 to 2013 which is nearly 4.32 per cent of the total FDI inflows in the country and the portion of Passenger Vehicle segment accounts to more than 50 per cent of the total inflows in Automobile Industry Sector (Department of Industrial Policy and Promotion Statistics, 2013).

- **Increase in Passenger Vehicle Exports:** The economy is adversely affected due to a falling rupee but it is proving beneficial as far as the exports are concerned. This is being attributed as one of the reasons for growing exports in the sector. The exports of passenger vehicles from India has grown with a CAGR of more than 20 per cent over the last five years and despite the slowdown in the economy during the last one year the exports have still managed a growth of 9 per cent in 2013 with the manufacturers realizing the slowdown in European markets and consequently developing the new ones (ICRA, 2011; and SIAM, 2013c). In recent years India has become the export hub for several global automobile manufacturers. Several large automotive players in India are investing substantially in capacity expansion, establishing partnerships in India and abroad, positioning India as an export center for vehicles and corporate intelligence, and setting up R&D facilities and design capabilities (Ernst and Young, 2012).

- **Low Cost and Cheap Labor:** Cost competitiveness remains one of the key characteristic of India with the availability of low cost labor and inexpensive manufacturing capabilities it is a key attraction for the businesses. In particular, India’s attractive labor costs can explain the phenomenal growth of its rapidly
growing manufacturing sector including the automobile. Although India has witnessed some increases in its labor cost, but it remains a highly attractive destination for investors who struggle to find the same mixture of low cost and high quality (Ernst and Young, 2012).

- Rising Middle Class and Disposable Income Levels: Rising disposable income over the last decade have led to increased discretionary spending which in turn have driven car sales during that period. In 2002, the per capita disposable income was $399 (nominal)/$1,381 (PPP), when the sales started picking up. The car sales have mostly followed the trends in per capita disposable income. Post 2002, the per capita disposable income has seen a CAGR of 13 per cent as against a CAGR inflation growth of 7 per cent which has resulted in a real disposable income growth of 6 per cent. With the growth in per capita income and overall growth in the economy the proportion of middle class households have also grown which explains the popularity of smaller cars segments in India in the last few years (Delloite, 2011).

- Expertise as a Small Car Hub: With the launch of world’s cheapest car “Nano” at a price of US$ 2500, Tata Motors bought a revolution in the industry, not just in India but even globally. Presently, in India there are 33 Small Cars (198 Variants) with in a range of ₹ 8 Lakh that are manufactured locally and 7 Hatchbacks (13 Variants) in the luxury segment ranging from ₹ 20 to ₹ 40 Lakhs which are imported as CBU’s, on offer and comprise of nearly 80 per cent of the total car sales in the country. With changing customer preferences towards small fuel-efficient cars, in the developed countries, it is clearly an advantage for the developing nations. Every big automobile player in the world is ready to invest in the Indian automobile sector, especially in the small car segment.

Weaknesses

- Low Labor Productivity: According to the Economic Survey highlights, recent trends in industrial employment creation in India have been cause of concern. Even if industry's share of total employment has been comparable to other large Asian countries at similar stage of their growth, its share of gross value added has remained more or less stagnant over the last decade and is far less than that in
other countries. The main reason for this near stagnant share of industrial sector value addition is the low productivity in the sector (Gulzar, 2013).

- **Production Costs and Regulatory Environment:** The production costs are still higher in India as compared to the other Asian countries including China, Thailand and other. Apart from the production costs the regulatory environment in other Asian countries is more affable as compared to India that gives these nations an edge over India (The Economist, 2013).

- **Localization and the Quality of Production:** Though most of the major car manufacturers from around the world have set up their assembling units in India but still they prefer to import most of the sophisticated parts instead of sourcing it from the local manufacturers. The ratio of localization with most of the foreign car manufacturers is significantly low as compared to their units elsewhere in the Asian countries. This aspect has been majorly attributed to the quality of production of the local parts manufacturers (The Economist, 2013).

- **Poor Infrastructure:** Road infrastructure is a crucial factor that affects the automobile industry. Poor condition of roads in villages and cities burden consumers with heavy repair bills of their cars. Many owners approach automobile companies with complains of parts that wear out soon. Others working in travel industry have spoken about increase in maintenance cost of their cars due to poor road conditions (Motortrend, 2013).

**Opportunities**

- **Government Reforms:** The Government of India allows 100 per cent foreign direct investment (FDI) in the automotive industry through automatic route. The Government has plans in process to accelerate the supply of electric vehicles over the next eight years and also plans to introduce fuel-efficiency ratings for automobiles to encourage sale of cars that consume less petrol or diesel (IBEF, 2013).

- **Low Car Penetration Levels:** The low car penetration levels make India one of the most attractive markets for the global automobile industry. Accordingly, India's current average of just 15 cars per 1000 people is among the lowest in the world as compared to China with the average at 60 per 1000, Brazil at 200 and in USA it
is 800 per 1000. With a strong 200 million middle class, the India is a huge potential in the Indian Car Industry (Ghosn, 2013).

- **Niche Rural Market:** Car sales in rural India have been on the increase in the last few years since the government announced various schemes such as farm loan waiver etc. for the rural population. Major players in the industry including Maruti Suzuki, Tata, Mahindra and Mahindra and others have been focusing on and targeting the niche untapped rural market in last few years and in the time of economic slowdown have been able to maintain their sales figures riding on this segment of the market. Foreign players like Toyota Kirloskar Motor are planning to sell 40 per cent of their cars in rural markets in India. The rural population in India comprises nearly 70 per cent of the consumer base in the country and so far not much has been catered to and thus, this segment provides a great opportunity for the players in the industry (Kotni, 2012).

- **Changing Demographics and Differentiation Acceptability:** With the change in the demographics of the Indian Corporate world, as the average working population is getting younger and the rising number of females, the acceptability towards newer brands, newer designs and newer segments have also increased. Over the last few years even the existing car manufacturers have launched newer models and variants with specific focus on the features and designs targeted at the sporty youth and sleeker female drivers oriented designs. It provides the potential car manufacturers an open opportunity to enter the markets with products targeted on the newer segments (Grewal, 2013).

**Threats**

- **Economic Slowdown:** Just when the exports had begun to rise after the global economic crisis, the Indian economy has slowed down and the car industry has witnessed straight nine months year on year negative sales growth for the first time in last one decade. And the current economic state is bound to continue over the next few years which are turning out to be one of the biggest threat to not only the car manufacturers, but to all the industries (Thakkar, 2013).

- **Unskilled Labor:** For India, on the one hand, domestic economic growth has created huge employment demand and job opportunities, while on the other; a shortage of skills is making more people unemployable. The large size of the
population alone cannot be India’s problem since China, with a similar scale of population and training structure, has better labor productivity (indicating higher skills). In essence, India lacks sufficient skilled workers as its existing vocational training system does not target the casual or informal workforce that constitutes majority of India’s working population (Hajela, 2012).

- Diminishing Export Markets: Exports in the car segment have been hit by the turmoil in the Eurozone. A significant chunk of India's car exports were to Europe and car makers are now looking at alternative destinations in Asian and Africa to make up for those lost numbers. Also where development of these new markets will take time, the Indian exporter will have a bigger challenge and threat from the exporters from other Asian countries including China, Thailand, Indonesia etc. which has a better productivity, quality and lower costs of production (Gupta, 2013).

- Saturating Domestic Urban Markets: The demand from the population with considerably higher disposable income which mainly stays in the major cities have now reached its saturation and the traffic congestions are now adding to the woes of the daily commuter, due to ever increasing number of vehicles on the roads. The car sales growth which has diminished during the last couple of years have also been constituted by saturating urban demand as a crucial attribute. Though, still there lies a niche in semi urban and rural markets but the initial investment and time required to set up facilities in those markets is another challenge and a significant threat for the competitors in the industry (Ravichandran, 2013).

- Some other Threats to the Indian Car Industry: Public transport like buses and railways also form an important means of transportation in the Indian cities especially in the urban areas. Despite the growth in the number of private vehicle owners in middle income segments in the metro cities, a substantial number of commuters are still dependent on the public transport. Hundred million out of 235 million people living in the Indian cities belong to lower income segment who cannot afford to own a private vehicle. Currently, many state governments have taken up various initiatives regarding improving the intra-city transportation by allowing private operators to run buses within the city, introducing new and better means of transportation like metro rail in Delhi, new buses, investment in road
infrastructure like making new roads and widening of existing roads, etc. These initiatives, coupled with increase in the fuel prices, present a potential threat to the sales of the passenger cars (Gupta, 2008).

- **International Car Rental Firms:** Another threat to the passenger car market is that international car rental firms are making a beeline for the Indian shore with almost a dozen car rental brands expected to enter the market soon. Several International players like Hertz, Europcar, Leaseplan and Avis among others have already established their presence in the country, while others like, Thrifty, Dollar, Enterprise and Vanguard's brands like Almo and National among others are also said to be firming up their Indian plans. This sudden rush to India has been attributed to a slump in the US and European market. However, in spite of being US$2.24 Bn., car rental industry in India is highly unorganized. The market share of organized players in car rental industry is just 3 per cent. However, the industry, on the whole, has been seeing a buoyant growth of about 35-50 per cent in the last two years (Verma and Mohapatra, 2007).

Moreover, easy availability of credit financing has led to increased demand for bigger and better cars. Foreseeing the Indian market potential, major luxury automakers were setting up their offices in India to cater to the rich people's fancy for trendy and luxurious cars. Mercedes and BMW have offered products at a starting price of INR 25-30 lakh (US$54,945-65,934), whereas the Maybach has lured the consumers to pay as much as INR 5 Cr. (US$1,098,901) to drive in the lap of luxury. Other motor giants like Volkswagen, Audi, Lamborghini, Rolls Royce Phantom, Bentley, and Porsche have already joined the luxury car revolution in India (McKinsey Global Institute, 2005).

### 2.5.2 Porter’s Five Forces Industry Analysis

Backed by robust volumes as well as realizations, car manufacturers have registered a phenomenal growth across the world over the past few years. The situation in the domestic industry is no exception. In fact, it enjoyed a double digit growth rate backed by a robust growing economy over the last decade. Car manufacturers are always subject to industry forces which they would have to keep dealing with constantly. And irrespective of the size or stature of the business or its dominance of the market in terms of brand value or market share, there is no escaping the fact that
these competitive forces could dislodge the car manufacturing company from its position of dominance in the market at a quick turn of events.

Porter (1985) and Porter (2008) listed down five major forces of competition that applies to every industry including to that of the car manufacturers that needs to be kept track of, if they have to succeed in the complex world of industry dynamics and competitive strategy. The five competitive forces that shape strategy includes:

1. Threat of New entrants
2. Bargaining power of Suppliers
3. Bargaining Power of Buyers
4. Threat of Substitute products or services
5. Intensity of Rivalry among existing competitors.

This part of the study analyzes the economic and market forces that will ultimately influence the car manufacturing industry in India through Michael Porter's five force model so as to understand the competitiveness of the sector.

Automobile industry in India is an emerging sector and has a potential to improve it. The increasing GDP and economical resources have boost up during the last decade which has increased purchasing power of the Indian consumer. The car segment in India has emerged as one of the promising sector and has shown growth trends in tremendous production, sales and exports (The Equicom Research, 2013). Despite economic slowdown, the Indian automobile sector has shown high growth. The passenger vehicle market, which constitutes around 80 per cent of automobile sales, has immense growth potential as passenger car stock which stood at around 13 per 1,000 people in 2011 (Delloite, 2011) increased to around 18 to 20 per 1,000 people in 2012-13 (Trefis, 2013). Anticipating the future market potential, the production of passenger vehicle is forecasted to grow at a CAGR of around 10 per cent from 2009-10 to 2012-13. This took the Indian automobile production from 2001-02 to 10.8 Million Units in 2007-08 to 14.6 Million Units 2011-12. The other reasons attracting global auto manufacturers to India are the country's large middle class population, growing earning power, strong technological capability and availability of trained manpower at competitive prices.
Threat of New Entrants

According to Porter (2008), the new entrants bring new capacity and a desire to gain market share that puts pressure on prices, costs, and the rate of investment necessary to compete in an industry. Thus, the threat of new entrants puts a cap on the profit potential of an industry. The threat of entry in an industry is determined by the level of entry barriers that are present and on the reaction entrants can expect from incumbents. The barriers to entry includes the factors like Economies of Scale and Capital requirement; Brand identity, Product Differentiation and Customer Switching Costs; Access to technology, raw material and Channels of distribution; and Government policies and protection.

In the automobile industry, the existing loyalty to major brands, high set-up costs, scarcity of resources, high cost of switching companies, slowdown in the economy, rising fuel prices and government regulations serve as entry barriers which reduce competition in the industry. So far there is moderate to high competition in the automobile sector in the Indian domestic market. The competition is however increasing with new players entering the market and some smaller players catching up.

Firstly, considering the factor of Economies of Scale and Capital requirement as a barrier for new entrants in the automobile industry, an enormous amount of capital is required. Besides capital, a new firm that is interested in entering the market needs to conduct in-depth research beforehand. An entering firm would need a tremendous amount of implicit and explicit knowledge in order to design and manufacture a product that has never been presented or offered before. An automobile manufacturing facility is very specific and specialized; therefore in the event of a failure or malfunction, the cost of repair is extensive. In recent years the international majors like Renault, Nissan, Volkswagen, Fiat etc. have overcome this factor by inculcating strategies like alliances initially with domestic players, or alliances based on Badge engineering for their manufacturing and marketing in case of Fiat with Tata and Renault with Mahindra and Mahindra or setting up the facilities in alliances like Renault - Nissan and Volkswagen for its offered brands including Skoda, Volkswagen and Audi (Business Line, 2012; and Ramanathan and Raj, 2013). Though on this factor it may be stated that large amount of capital for entering the industry is required.
and that economy of scale prevails and make it a significantly difficult for new entrants to enter the industry.

As far as Brand identity, Product Differentiation and Customer Switching Costs are concerned; Brand identity is a crucial barrier to entry. Exclusive high quality car brands have established extremely high brand equity-value over time. This is one of the main reasons why the public is willing to pay premium price for it. Although the barriers to this exclusive market are substantial, there are various ways around this obstacle. Companies who are well established in the automobile sector may enter the new market (luxury cars) through strategic partnerships or through buying out or merging with other companies. Maruti Suzuki India Limited, a subsidiary of Suzuki Motor Corporation of Japan is India's largest and leading passenger car companies which presently hold a share of over 45 per cent of the domestic car market, despite the entry of many multinationals over the years, post liberalization. Although, in recent years Tata Motors which was leader in commercial vehicle segment has emerged as key player in Indian Passenger Vehicles as well with a market share of 16.45 per cent. Tata motors recently entered the luxury and premium segment with the acquisition of Jaguar and Land Rover Brands on one hand and launched the world’s cheapest car “Nano” on the other, which changed and shifted the automobile sector paradigm as many other companies have started focusing on the cheapest segment of the industry (The Equicom Research, 2013). Other key players in automobile segment of India have also performed well and have contributed significantly and the scenario in market is attracting other international brands to the market. With the increasing per capita income and purchasing power of the Indian population, the sale of luxury cars has grown and market share has gained over the years and India is projected to be amongst top three luxury car market by 2020 (Malhi, 2013).

Many foreign automobile manufacturers are aggressively entering high growth emerging markets such as India amidst slowing demand in the developed economies. Volkswagen has succeeded in establishing its brand in the Indian market since its entry in 2008. After its entry into India, Volkswagen’s Polo, along with Ford India’s Figo and General Motors India’s Beat have managed to capture the market share from the companies such as Maruti, Hyundai and Tata Motors Ltd.
The threat of new entrants is high for the car industry in general but specifically for the small car segment it is very high. The growing economy and the increasing buying power of the customers have made every automobile player to grab the opportunity in small car segment. There are around five new players coming in to the small car market; H800 from Hyundai priced around 1.6 lack, Maruti Cervo 600 priced 1.6 lacks, Bajaj-Nissan’s new electric car etc. Non automobile players also have their focus in this segment like Ajanta Manufacturing limited has launched electric car ‘Orevo’. Barriers for entering would include economies of scale, competition from existing players, customer switching costs and the investment decisions.

As far as other factors like access to raw material, technology and distribution channel in the automobile industry are concerned, are not easily accessible or easy to establish. With the new regulation policies pertaining to fuel emission, efficiency and a projected efficiency rating; rising fuel prices; downturn in the economic scenario and new segments like compact sedans, compact SUVs, luxury hatchbacks etc. (Bhanushali, 2013; and Baggonkar, 2013). Having created and established by the existing competitors, it would be really challenging for the potential new entrants in the industry to bring out such technologically advanced products that can compete in the existing market. Another barriers for the new entrant and even the recently entered players in the industry would be to compete with the major players like Maruti Suzuki, Hyundai and Tata’s which has established and provides the dealership and service networks for their vehicle even in the remote countryside areas of the country (Gupta, 2013). With the saturating urban demands and huge countryside market potentials, the distribution channels are going to play a significant role in the future course and direction of the car market.

Another significant and one of the most important factors includes the Government policies and protection for the sector. And since the automobile sector in India is a crucial aspect of its growing economy and the GDP, the government has liberalized the policies pertaining to the sector. Currently, the Government of India allows 100 per cent foreign direct investment (FDI) in the automotive industry through automatic route and is also planning to introduce fuel-efficiency ratings for automobiles to encourage sale of cars that consume less petrol or diesel along with the plans to accelerate the supply of electric vehicles over the next eight years (IBEF, 2013).
From the present scenario pertaining to the Threat of New Entrants in the car manufacturing industry in India, it may be concluded on the basis of the above discussions on the factors including Economies of Scale and Capital requirement; Brand identity, Product Differentiation and Customer Switching Costs; Access to technology, raw material and Channels of distribution; and Government policies and protection, that the threat is medium, and hence Industry attractiveness from this aspect is moderate.

**Bargaining Power of Suppliers**

The automobile industry is considered to be highly Capital and Labor intensive as the major part of the cost of production include wage bills of labor; material costs including that of steel, aluminum, dashboards, seats, tires etc.; and intensive advertising and market research activities. Though, the automotive market majorly comprise of the vehicles, but the auto parts make up the other half of the industry which includes the parts manufactured by the original equipment manufacturers themselves and the replacement parts or accessories and other rubber fabrications that are procured from the suppliers in the industry (Investopedia, 2013).

The suppliers play a vital role in the value chain of the automobile industry and affect the crucial aspects including the lead times and even the overall quality of the products, and thus, analyzing the bargaining power of the suppliers in the Indian automobile industry is significant. According to Porter (2008), the parameters on which the bargaining power of suppliers can be assessed includes the number of suppliers present, availability of substitutes for suppliers available to the manufacturers, contribution of suppliers in cost and quality and the importance of the industry for the suppliers.

As far as suppliers in Indian automotive industry is concerned, there are more than 500 auto component manufacturers in the organized sector which are largely represented by the Automotive Components Manufacturer’s Association of India - ACMA apart from other 5000 manufacturers in the unorganized sector which caters to the domestic market demand and also export a significant share of its output (Automotive Mission Plan, 2006-16). Apart from the available large number of suppliers in almost all the categories of required components the manufacturers also have an alternative to source the auto components from the nations which have the
free trade agreements with India and from the countries for which India has lowered
the duties and taxes including the auto technology majors like Japan, South Korea and
even Thailand and other low cost labor oriented nations including China, Malaysia
and South Africa (ICRA, 2011b).

As far as the contribution of suppliers in cost and quality of the product is concerned,
it is significant in the automobile sector, but with the alternatives available to the
manufacturers ranging from the large number of domestic suppliers to globally
available sources which have excelled in the technology over the years it does not
extends the bargaining power to the suppliers in the industry (ICRA, 2011b).

Thus, on the aspect of the bargaining power of suppliers in the Indian automobile
industry, based on the noteworthy dependence of the component suppliers on the
domestically growing industry and a downturn in the economies globally on one hand
and the alternatives available with the manufacturers for the sourcing component
ranging from domestic to global suppliers on the other, it may be concluded that the
overall bargaining power with the suppliers in the present Indian automobile scenario
is either moderate or low.

**Bargaining Power of Buyers**

In today’s competitive environment and customer driven markets, the bargaining
power of the buyers or customers is significant and influence every decision that the
manufacturers make and the automobile industry is no different in this case.
According to Porter (2008), the bargaining power of buyers can be assessed on the
basis of number of buyers in the industry, the availability of substitutes, switching
costs involved and the contribution of buyers in the cost and quality.

The Indian automobile industry has been enjoying the CAGR of around 10 per cent
over the last decade and with the potential in unexplored and rural markets, it is
expected to continue the run over the coming many years (Deloitte, 2011). With an
increased purchasing power, a developing state of the economy and large untapped
rural markets, the number of potential customers in India is huge and all the existing
manufacturers as well as the proposed new entrants can expect to grow enormously in
those areas.

Though with the changing preferences, income graphs and saturating urban markets
on one hand and increasing number of alternatives, be it mode of transportation, types
of vehicles or the number of brands and their products ranging from hatchbacks and sedans to SUVs and luxury segments, the power of choosing from the available alternatives lies with the customers. At present there are 9 Indian and 15 foreign manufacturers producing or assembling nearly 120 models and their variants locally apart from another 100 models that are imported by the car manufacturers as complete built units. Further, most of the car manufacturers are either proposed to launch new models or are developing newer ones to be launched in Indian market over the next few years (Surfindia, 2013).

In the automobile industry with low switching costs involved and since most of the brands are new in the market except from the few established ones, the brand loyalty aspect does not impact much, and thus the manufacturers are continuously challenged to bring out more efficient and quality vehicles at the lowest possible costs. Apart from that the manufacturers have to incur a significant amount on the market research at the time of development and on advertising and promotion at the time of launch and sale of the product, which constitutes a large part of the overall cost of the product (Bradley, Bruns, Fleming, Ling, Margolin, Roman and Flury, 2005).

Thus, it may be concluded that the relationship between the car industry and its buyers or purchasers of finished vehicles, the power axis is tipped towards the consumers. The Consumers enjoys the greatest power in this relationship due to the fairly standardized nature of the commodity and the low switching costs associated with selecting from among competing brands. However, the automotive industry remains marginally powerful due to the large customer to producer ratio.

**Threats from Substitutes**

The threat to a car manufacturer is not just that a customer would buy a different brand of car but they also need to consider the likelihood of a potential customer taking the alternative modes of transport including bus, train or airplane to their destination. The higher the cost of operating a vehicle, the more likely people will seek alternative transportation options (Investopedia, 2013). The factor of fuel prices has a large effect on consumer’s decisions to buy vehicles. Apart from the cost while determining the availability of substitutes the factors including time, money, personal preference and convenience are also considered in the travel industry. According to Porter (2008), while analyzing the threat from substitutes, one need to consider the
parameters including availability of close substitutes, switching cost and substitute’s price and value.

As far as the scenario of travel industry in India is concerned, rail and air travel comprise of 10 per cent of the total passenger travel and rest 90 per cent of passenger travel is undertaken by roads (World Bank, 2013). And this share of road travel encompass 72 per cent of two-wheelers, 14 per cent of passenger vehicles including cars, jeeps and taxis and rest 14 of other public transport busses and non-passenger vehicles (Govt. of India, 2011). The biggest and ever emerging available substitute for passenger cars is the two-wheeler segment, which has grown from 8 per cent at the time of independence to the whopping 72 per cent in the present scenario. And this one segment has very low switching cost and price. There have been efforts from the respective state governments to promote the public transportation modes, but the positive shift in the incomes and purchasing power graphs has increased the usage of private vehicles. Although in metro cities like Delhi, there has been a marginal increase in usage of the economical public transport, with the start of the dedicated metro rail projects, and considering the response of commuters a number of other such projects have been proposed and approved for other metro cities (The Indian Express, 2012).

Based on the evidences and reports on the factors pertaining to the threat from substitutes to the Indian car industry, it may be concluded that threat is significantly high and thus the industry attractiveness on this aspect is low.

**Intensity of Industry Rivalry**

The auto industry is considered to be an oligopoly around the globe, which helps to minimize the effects of price-based competition (Investopedia, 2013). Though, while taking a note of Indian automobile industry, the industry rivalry has been divided into two major phases: the phase before the economic reforms in 1991 and the other post the reforms. In the first phase there were only three major players including the Maruti Udyog, Hindustan Motors and Premier Automobiles which were competing in the passenger car segment which were not even able to meet the market demand during that time. Such factors and other economic circumstances led to the economic reforms and with the opening up of a market for foreign players that had enormous potential, the attractiveness was very high. At present the Indian customer has more
than 20 domestic and foreign players offering 120 locally manufactured models and their variants apart from other foreign players offering another 100 imported models in almost all the price bands ranging from ₹1.45 Lakh to whopping amount of ₹20 Cr. to choose from (Morey, 2013; and Silicon India, 2013).

Porter (2008) suggests considering parameters that includes number of competitors, industry growth rate, product differentiation, switching costs involved and the strategic stakes of the manufacturers to assess the industry rivalry among existing competitors.

The number of competitors in the Indian car market has grown significantly in last decade and many others are expected to arrive over the next few years with 100 per cent FDI allowed in Indian automobile sector (Philip, 2013). The industry has grown with a CAGR of 10 per cent over the last decade and though it might have slowed down over the current economic crunch across the globe, but is expected to continue the growth over the next few years (Delloite, 2011; and IBEF, 2013).

The product war in the Indian car market is intense and with minimal differentiation almost every player offers one or more products in the defined segments. The extreme competition exists in the small car or the hatchback segment which constitutes nearly 80 per cent of the total car sales (ICRA, 2011a). Though, in last few years the SUV and luxury segment with a CAGR of nearly 30 per cent has also witnessed a close competition (Thakker, 2012). The companies have focused on new product launches, be it the newer enhanced versions of the existing products or launching a new product altogether in the market. The new product war is so intense that the major players are considering it as one of the major strategies to capture and increase their market share, since the market shares have picked up for auto majors like Honda, Maruti Suzuki, Renault, Ford and others after their recently launched products have been well accepted by the consumers (Bhargava, 2013).

With decreasing brand loyalty among customers, number of available alternatives and nature of commodity with low switching costs, the manufacturers need to review, revive and enhance their customer experience on a continuous basis and with the intensity of competition it only increases the rivalry (Capgemini, 2013). Car Manufacturing/Assembling industry being capital intensive in nature involves high strategic stakes of the competitors involved in the industry. Though, most of the major
players be it Maruti Suzuki (Now wholly owned by Suzuki), Tata, Mahindra and Mahindra, Toyota, Ford and others, do have their diversified businesses be it in two-wheeler or commercial vehicles; or entirely conglomerate in nature, but the stakes in this industry for all the players are very high.

Based on the reports and analysis on the factors including number of competitors, growth rate, differentiation, switching costs and the strategic stakes involved it may be concluded that the intensity of rivalry is skewed towards the higher side and thus the attractiveness in the industry may be rated as considerably low in this aspect.

2.5.3 PEST Analysis - Indian Car Industry

The economic reforms in India in 1991 changed the entire business scenario, as it opened up the market for foreign investors. The automobile market in India was however, opened up to foreign investors in 1996. International names like Ford, Hyundai, Toyota, Volvo, Daimler Chrysler, Volkswagen, GM, Honda and others were thus, able to make their foray into the Indian automobile sector. This section of the study includes an analysis of the macro-environment factors including Political, Economic, Social and Technology, based on the PEST Analysis.

**Political Environment**

- Indian Government has changed its role from controller to facilitator with prime focus on providing better infrastructure, growth oriented economic policies and right environment to attract investments. This has made giant auto manufacturers enter into India and affect the competitive environment.

- The liberalization steps, such as, relaxation of the foreign exchange and equity regulations, reduction of tariffs on imports, and refining the banking policies, have played an equally important role in bringing the Indian Automotive industry to great heights.

- The Government presently allows 100 per cent foreign direct investment (FDI) in the automotive industry through automatic route.

- The auto emission rules issued by the government in recent years ensured that the vehicles manufactured in India, catered to international standards.

- A reduction in the tariff imposed on car exports has been effected by the Indian government. There has also been a removal of the minimum capital investment
required from new investors. The new policy is also in favor of reduction in excise duty for small automobiles and low emission and multi utility cars. The tariff policy is also to be reviewed on a regular basis in order to affect a balance between domestic industry and international trade.

- The government has recently proposed for an infrastructure that will provide one stop clearance for any kind of proposal for foreign direct investment in the automotive sector. This will include the local clearance system also for the same purpose. The government has also proposed for a concession in import duty for the establishment of new manufacturing units and industrial holdings.

- The Indian government is also urging the state governments to ensure continuous power supply to the automotive manufacturing units as well as granting them with the preferred plots of land. Captive Generation for the automobile sector has also been proposed. The auto policy of the Indian government also includes the promotion of vehicles which are run on alternative energy resources. Talks are also on for extensive research, development and designing facilities that would affect modernization in the automotive sector.

(Ranawat and Tiwari, 2009; Equicom, 2012; ACMA, 2013; Economy Watch, 2010; Premalatha and Iyer, 2013; IBEF, 2013; Deloitte, 2011; and AMP, 2006-16)

**Economic Environment**

- Focused at promoting the Research and development and skill development the economic policy provides a 5 years extension of 200 per cent weighted deduction of R&D expenditure under Income Tax Act and introduced weighted deduction of 150 per cent for expenditure on skills development.

- Over the last decade the economy has witnessed a rise in disposable income that led to increased discretionary spending which in turn have driven car sales. The car sales have mostly followed the trends in per capita disposable income. Post 2002, the per capita disposable income has seen a CAGR of 13 per cent which has resulted in a real disposable income growth of 6 per cent. With the growth in per capita income and overall growth in the economy the proportion of middle class households have also grown.
• Weighted tax deduction of up to 150 per cent for in-house research and R&D activities. Govt. has granted concessions, such as reduced interest rates for export financing.

• Several Indian firms have partnered with global players. While some have formed joint ventures with equity participation, other also has entered into technology tie-ups.

• Increase in the number of financing options while car purchase due to changed economic policy in India.


Social Environment

• With the change in the demographics of the Indian Corporate world, as the average working population is getting younger and the rising number of females, the acceptability towards newer brands, newer designs and newer segments have also increased. Over the last few years even the existing car manufacturers have launched newer models and variants with specific focus on the features and designs targeted at the sporty youth and sleeker female drivers oriented designs. It provides the potential car manufacturers an open opportunity to enter the markets with products targeted on the newer segments.

• The average distances between work-place and Residence is increasing. As more population is migrating to the already saturated metropolitan cities and urban areas seeking jobs and careers, it has become a trend to reside on the outskirts and downtown areas and travel long distances every day to the offices.

• With increasing disposable income the average number of vehicles per household has increased, as not only the earning members, but also the dependents in regard to the adolescent now prefer to travel in the cars.

• Another aspect that has increased the average number of vehicles per household is that of the utility of the car as per the occasion. As a trend, the households with very high disposable incomes have separate vehicles for their everyday individual travel and family travel needs.

**Technology Environment**

- **Emission Norms:** As per the Auto Fuel Policy approved by the Cabinet in 2003, the quality of Petrol and Diesel has been upgraded to Bharat Stage-IV (equivalent to Euro-IV specifications) in 13 identified cities with effect from 1st April, 2010. In the rest of the country, BS-III Petrol and Diesel (equivalent to Euro-III specifications) has been introduced from 1st April, 2010.

- The Government of India is in process to introduce fuel-efficiency ratings for automobiles to encourage sale of cars that consume less petrol or diesel or other fuel. And also extends exemption from BCD on lithium ion automotive battery for manufacture of lithium ion battery packs for supply to manufacturers of hybrid and electric vehicles.

- Contemporary technologies have now become very much part of mainstream Indian car market. Now a significant fraction of the models available in the country have technology that is at par with what is available in rest of the world, including industrialized countries. While many of the global firms that are in India have often introduced models that already have been launched in other countries but over time, the lag between the first launch of the product and its introduction in India has been generally reduced, or sometimes eliminated to an extent that some of the cars and even the concepts are now first worldwide launch are done in India.

- Many of the Indian manufacturers have been emphasizing improvements in manufacturing processes that increase productivity and/or quality. The fact that many of the Indian manufacturers either had or have an MNC partner, or they are an MNC subsidiary, helps in improving manufacturing practices, since these global players are able to draw upon their knowledge and deep experience.

- The need to reduce costs has provided an impetus to manufacturers to move toward greater indigenization. With the lower domestic operational costs as compared to the higher import costs, most of the players including the luxury and premium brands in the industry have now moved towards the indigenization.
Alternate Fuel and Hybrid Cars: increasing use of CNG, LPG and electricity as a source of fuel instead of conventional fuel has made the entry of new kinds of vehicles in the market.

(PIB, Govt of India, 2010; Sagar and Chandra, 2004; Mohanty, Sahu and Pati, 1994; IBEF, 2013; and Premlatha and Iyer, 2013)