

AUTOMOBILE INDUSTRY IN INDIA: INNOVATION AND GROWTH

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ABSTRACT

In this paper we aim to through some light on Global and Indian Scenario of Indian Automotive Industry. The automotive industry is increasingly becoming the cynosure of the manufacturing sector across the world. The attention and importance to the automotive industry in the economic development and planning policies of Indian Government and its agencies has also witnessed significant up rise. The Indian industry has been evolving over the years, meeting up with challenges as diverse as transitions, consolidations and restructuring, and thereby adapting to the new market conditions.

Keywords: *Automotive industry, Global, Indian Government, Vehicles*

INTRODUCTION

The automotive industry in India is one of the largest in the world with an annual production of 23.96 million vehicles in FY (fiscal year) 2015–16, following a growth of 2.57 per cent over the last year. The automobile industry accounts for 7.1 per cent of the country's gross domestic product (GDP). The Two Wheelers segment, with 81 per cent market share, is the leader of the Indian Automobile market, owing to a growing middle class and a young population. Moreover, the growing interest of companies in exploring the rural markets further aided the growth of the sector. The overall Passenger Vehicle (PV) segment has 13 per cent market share. India is also a prominent auto exporter and has strong export growth expectations for the near future. In FY 2014–15, automobile exports grew by 15 per cent over the last year. In addition, several initiatives by the Government of India and the major automobile players in the Indian market are expected to make India a leader in the Two Wheeler (2W) and Four Wheeler (4W) market in the world by 2020.^[1]

EVOLUTION OF THE INDIAN AUTOMOTIVE INDUSTRY: FROM STATICS TO DYNAMICS

This sub-section presents an evolutionary analysis of Indian automotive industry's growth over the four decades since independence. The evolution of India's automotive industry from a fairly static/slow-paced growth (from 1940s till 1980s) to the recent impressive showing of dynamism owes formidable precedence to history. If one fishes through the not-so yet impressive documentation of Indian automotive industries' wholesome development since independence in 1947, one would most certainly huddle with either political surmise of industrial developments or a development (or sometimes industrial) economists explanation of the industry's evolutionary characters. So far, most of the prologues on India's automotive industry's development story have been written by economists with industry as specialization or by development thinkers with a political economy bent of mind. I do not have specific preference for either as I would choose to borrow the economic historian's eye and combine both political and economic/industrial development policy angle to describe Indian automotive industry's growth trajectory.

As will become clear from the ensuing discussions, India's industrial development is characterized by more complex processes than one can find in other transition economies and industrialized nations. If one keenly observes the differences in industrial development of some transition economies (for instance, Republic of Korea) with India, among many distinct observations (e.g., a clear and favorable state patronage to liberalization at the initial phase of development), an interesting aspect would emerge, which to my knowledge has flayed the probing eyes of industrial economists or political scientists. The state of development and its sustainability in any economy is contingent upon the stock and accumulation of human capital. The number of educated people among young generations during 1960s and 1970s could make the key difference between the paces of industrial development in the comparable nations. This may appear anecdotal, but it has interesting political economy evolutionary outcome which I believe has shaped the economic and industrial policies in the next decades.^{[2][3][4]}

In 1897, the first car ran on an Indian road. Through the 1930s, cars were imports only, and in small numbers.

An embryonic automotive industry emerged in India in the 1940s. Hindustan Motors was launched in 1942, long-time competitor Premier in 1944, building Chrysler, Dodge, and Fiat products respectively.^[5] Mahindra & Mahindra was established by two brothers in 1945, and began assembly of Jeep CJ-3A utility vehicles. Following independence in 1947, the Government of India and the private sector launched efforts to create an automotive-component manufacturing industry to supply to the automobile industry. In 1953, an import substitution programme was launched, and the import of fully built-up cars began to be restricted.^[5]

1947-1970



The 1949 Hindustan 10 built by Hindustan Motors under license from Morris Motors, UK



The Hindustan Ambassador dominated India's automotive market from the 1960s until the mid-1980s and was manufactured till 2014



Fiat 1100D, built under license by Premier Automobiles later re-christened 'Premier Padmini' was the Ambassador's only true competitor

The 1952 Tariff Commission

In 1952, the government appointed the first Tariff Commission, one of whose purposes was to come out with a feasibility plan for the indigenization of the Indian automobile industry. In 1953, the commission submitted their report, which recommended categorizing existing Indian car companies according to their manufacturing infrastructure, with licensed capacity to manufacture a certain number of vehicles, with capacity increases allowable, as per demands, in the future. The Tariff Commission recommendations were implemented with new policies that would eventually exclude companies that only imported parts for assembly, as well as those with no Indian partner. In 1954, following the Tariff Commission implementation, General Motors, Ford, and Rootes Group, which had assembly-only plants in Mumbai, decided to move out of India.^[6]

The Tariff commission policies, including similar restrictions that applied to other industries, came to be known as the "license raj", which proved to be the greatest undoing of the Indian automotive industry, where bureaucratic red tape ended up causing demand to outstrip supply, with month-long waiting periods for cars, scooters, and motorcycles.

Passenger Cars

- Hindustan Motors, Calcutta - technical collaboration with Morris Motors to manufacture Morris Oxford models that would later become HM Ambassador.
- Premier Automobiles, Bombay - technical collaboration with Chrysler to manufacture Dodge, Plymouth and Desoto models and with Fiat to manufacture the 1100D models which would later with Premier Padmini range.
- Standard Motor Products of India, Madras - technical collaboration from Standard-Triumph to manufacture Standard Vanguard, Standard 8, 10 and later Standard Herald.

Utility and Light Commercial Vehicles

- Vehicle Factory Jabalpur - started manufacturing Jonga Light Utility Vehicles and Vahan 1 Ton (Nissan 4W73 Carriers) in India, under license from Nissan of Japan. They were the main troop carriers of the Indian Armed Forces and much powerful than any other vehicle of their class.
- Mahindra & Mahindra, Bombay - technical collaboration with Willys to manufacture CJ Series Jeep.
- Bajaj Tempo, Poona now Force Motors - technical collaboration with Tempo (company) to manufacture Tempo Hanseat, a three-wheeler and Tempo Viking and Hanomag, later known as Tempo Matador in India.
- Standard Motor Products of India - technical collaboration from Standard has licence to manufacture the Standard Atlas passenger van with panel van and one-tonne one tonne pickup variants.

Medium and Heavy Commercial Vehicles

- Vehicle Factory Jabalpur - started manufacturing Shaktiman trucks with technical assistance from MAN SE of Germany. The trucks were the main logistics vehicle of the Indian Army with several specialist variants. VFJ still is the sole supplier of B vehicles to the Indian Armed Forces.
- Heavy Vehicles Factory - was established in 1965 in Avadi, near Chennai to produce tanks in India. Since its inception, HVF has produced all the tanks of India, including Vijayanta, Arjun, Ajeya, Bhishma and their variants for the Indian Army. HVF is the only tank manufacturing facility of India.
- Tata Motors, Poona, then known as TELCO - technical collaboration with Mercedes Benz to manufacture medium to heavy commercial vehicles both Bus and Trucks.
- Ashok Motors, later Ashok Leyland, Madras - technical collaboration with Leyland Motors to manufacture medium to heavy commercial vehicles both Bus and Trucks. Ashok Motors also discontinued its Austin venture formed in 1948 to sell Austin A40 and retooled the factory to make trucks and buses.
- Hindustan Motors - technical collaboration with General Motors to manufacture the Bedford range of medium lorry and bus chassis.
- Premier Automobiles - technical collaboration with Chrysler to manufacture the Dodge, Fargo range of medium lorry, panel vans, mini-bus and bus chassis.
- Simpsons & Co, Madras - part of Amalgamations Group (TAFE Tractors)- technical collaboration with Ford to manufacture medium lorry and bus chassis, but did not utilise that option until the 1980s.

Scooters, Mopeds and Motorcycles



The Vespa 150 Sprint

known as Bajaj Chetak, by Bajaj became the largest sold scooter in the world

- *Many of the two-wheelers manufacturers were granted licenses in the early 1960s, well after the tariff commission was enabled.*
- Royal Enfield (India), Madras - technical collaboration with Royal Enfield, UK to manufacture the Enfield Bullet range of motorcycles.
- Bajaj Auto, Poona - technical collaboration with Piaggio, Italy to manufacture their best selling Vespa range of scooters and three wheelers with commercial option as well.

- Automobile Products of India, Bombay (Better known for API Lambretta - technical collaboration with Innocenti of Milan, Italy to manufacture their Lambretta range of mopeds, scooters and three-wheelers. This company was actually the Rootes Group car plant that was bought over by M. A. Chidambaram family.
- Mopeds India Limited, Tirupathi - technical collaboration with Motobécane, France to manufacture their best selling Mobylette mopeds.
- Escorts Group, New Delhi - technical collaboration with CEKOP of Poland to manufacture the Rajdoot 175 motorcycle whose origin was DKW RT 125
- Ideal Jawa, Mysore - in technical collaboration with CZ - Jawa of Czechoslovakia for its Jawa and Yezdi range of motorcycles.

CONCLUSION

An *automobile*, motor car or car is a wheeled motor vehicle used for transporting passengers, which also carries its own engine or motor. Most definitions of the term specify that *automobiles* are designed to run primarily on roads, to have seating for one to eight people, to typically have four wheels, and to be constructed principally for the transport of people rather than goods. *Automobile* have several impacts on our lives. They have changed our lifestyle, living habits, city lives. They have also great effect on transportation and mass transit. Finally, they changed the way we think to our nature and environment. Indeed, we could not live without automobiles. They will change their technology and appearance but the way that we use in our lives may not change. And from generation to generation, we will have new habits and things as it was happened in the past.

References:

- [1] Automobile, Industry. "Automotive industry in India". www.ibef.org. Indian Brand Equity Foundation. Retrieved 31 January 2016.
- [2] ACMA (2001): *Buyers Guide*, New Delhi, India.
- [3] ACMA (2004): *Facts and Figures: Automotive Industry of India, 2002-03*, New Delhi, India.
- [4] Athreye, S. (2005), "The Indian Software industry and its evolving service capability"; *Industrial and Corporate Change*, Vol. 14(3), 393-418.
- [5] Piplai, p. 2892
- [6] *The rise of the automobile in free India, Mumbai (Bombay): Autocar Professional India*