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## Diesel Engine and Car Market in India: Where does FIAT Stand

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#### Abstract-

Automobile industry makes a significant contribution towards the growth of a nation's economy. In the Indian economy, it has emerged as one of the booming sectors with a contribution of around 6% to the nation's GDP. Rising income, growing middle-class and a predominantly young population are some of the prime factors that have propelled this growth. The continuation of this trend can definitely make India one of the top auto producing countries of the world in the coming years. This paper attempts to trace back the history as well as examine the diesel engine (below 1500cc) passenger car segment of the Indian automobile sector with special focus on FIAT. Further this study critically examines the nuances involved in FIAT's success in selling their diesel engines to different companies and its failure in promoting their own vehicles.

Keywords- Automobile Industry; passenger car; diesel engine; FIAT; India

### 1. INTRODUCTION

The automotive industry plays a key role in the growth of a nation's economy. Since its impact is felt in all segments of the economy and can bring a multiplier effect, the growth of the automotive industry becomes very pertinent to propel the economy of a nation (RBSA Advisors, 2012). The same holds true for the Indian automotive industry. With a compound annual growth rate (CAGR) of 15% during the last 5-7 years, this sector can rightly belabeled as a booming sector of the Indian economy (Ministry of Heavy Industries and Public Enterprises [MoHI&PE], India, 2012). Post liberalization, this sector's contribution to the nation's Gross Domestic Production has increased from 2.77% to 6% (MoHI&PE, 2012). It provides employment to around 13.1 million people. The automotive sector includes both the automobile and the auto component sectors. The norms for Foreign Direct Investment (FDI) and import of technology for the manufacture of the vehicle has also been liberalized over the years. At present 100% FDI is permissible under automatic route in this sector including the passenger car segment (RBSA Advisors, 2012).

Automobiles production increased at a CAGR of 12.2 per cent over Financial Year 05-13, while the export volumes increased at a CAGR of 19.1 per cent (Indian Brand Equity Foundation [IBEF], 2013). Rising incomes, growing middle class, and the young population has resulted in strong demand in the automotive industry, which can eventually make India one of the top five autoproducing country by 2015 (IBEF, 2013). Auto firms save 10-25 per cent on operations in India as compared to Europe and Latin America, which shows that India has a significant cost advantage as far as the automotive industry is concerned. A large pool of skilled manpower and a growing technology base are some of the leading factors that strengthen India's advantageous position in this industry. The government aims to develop India as a global manufacturing as well as research and development (R&D) hub. There has been a wide array of policy support in the form of sops, reduced taxes and FDI encouragement. Under the Union Budget 2013-14, the government has also proposed to allocate US\$ 2.7 billion for Jawaharlal Nehru National Urban Renewal Mission (JNNURM) to bolster sales volumes of Medium and Heavy Commercial Vehicles (MHCV). The Indian car market is one of the hot spot in the world automotive industry. But it is going through turbulent phase now. Car sales are down by more than 6% in FY 2012-13 compared to last FY 2011-12. The main reasons behind this phenomenon are high interest rates, rising fuel price, high inflation, low movement in other sectors etc. Only the utility vehicle segment is having maximum

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growth in this segment. Mahindra and Mahindra (M&M) has shown a growth of almost 27% during FY 2012-13 whereas Tata Motors has shown a negative growth of 15% during the same period.

### 2. BRIEF HISTORY OF DIESEL ENGINE PASSENGER CARS IN INDIA

The first diesel engine passenger car that was available commercially was Citroen's Rosalie which came in the year 1933 (Laurentiu, 2010). But in India the diesel engine cars was not available to the masses till the formation of Hindustan Motors in the year 1942 by Mr BM Birla (Carhistory4u.com, n.d.). Although the company started its production in the year 1949, but its first diesel engine passenger car named Ambassador Mark IV came in the year 1979. It was the first diesel engine car in India which was fitted with 1489 cc 37 bhp diesel engine. The company went on to produce different models of Ambassador that were fitted with different variants of diesel engine.

Another automotive company named the Premier Automobiles was formed in the year 1944 and by the year 1949 started producing the Plymouth car under the license from Chrysler Corporation USA (CarHistory4u.com, n.d.). During 1962-98 the company started producing thelicensed version of the Fiat 1100, named as Premier Padmini which was fitted with diesel engine. The other cars which the company produced were the Fiat Uno, Fiat 124 and the Peugeot 303.

TATA Motors formerly known as TATA engineering and locomotive company (TELCO) was formed in the year 1945. TATA entered the passenger vehicle segment in the year 1991 with the launch TATA Sierra which was fitted with 1.9 litre turbo diesel engine. Later on the company launched the India's first indigenous car Indica in the year 1998. It was fitted with a 1.2 litre diesel engine. In the year 2002 the improved version of the same Indica V2 was launched which was fitted with 1.4 litre diesel engine.

Mahindra & Mahindra was formed in the year 1945 as steel trading company which later shifted to automobile business and started assembly of the Willy's Jeep in India under it license. Today Mahindra & Mahindra is a key player in the utility vehicle manufacturing and it includes many flagship models like Bolero, Scorpio, Thar, XUV500, Rexton to name a few. All these models are fitted with Common Rail Diesel Injector (CRDi) engines.

Sonalika Group which was founded in the year 1969, are basically in to the manufacturing of farming equipment developed its first utility vehicle known as Sonalika Rhino which was fitted with 2.0 litre diesel engine with 120 bhp. The same engine is supplied to Chevrolet India to power its utility vehicle Tavera.

Force Motors formerly Bajaj Tempo was founded in the year 1958 also entered the personal vehicle segment with the launch of its SUV known as Force One. This company mainly operates in the commercial vehicle segment.

Sipani automobile was an Indian car manufacturer established in 1975 in Bangalore. In 1982 the company started to produce India's first three wheeled four door car known as Badal. This model was not a success and they moved on to develop the four-wheel model known as Badal 4. Sipani then moved on to build a copy of the British car Reliant Kitten and named it as Sipani Dolphin. Later on they went to produce another five-door car known as the Montana. It was equipped with Indian built Mitsubishi-Shakti diesel engine which was intended for mini tractors. Their models were not successful and they lost money in their venture.

### 3. FIAT IN THE INDIAN CAR MARKET

The history of FIAT dates back to 1889 when it was founded by Giovanni Agnelli along with other investors in Turin, Italy (Fiat-India.com, n.d.). FIAT is basically an acronym of FabbricaItalianaAutomobili Torino. Presently Fiat is the seventh largest automobile maker in Europe in the passenger car segment behind Volkswagen Group, PSA (Peugeot), Renault, General Motors (GM), Ford and BMW (European Automobile Manufacturers Association [AECA], 2012). The entry of Fiat in India dates back to 1964 when it entered a tie up with Premier Automobiles to

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manufacture and market the Fiat 1100 D. The Fiat 1100 D was renamed as Premier Padmini in 1973. It gainedimmense popularity against the Hindustan Motors Ambassador, as it looked more modern in appearance, cheaper, more fuel-efficient and was very easy to drive.

In 1985, Fiat introduced its mid-size car Fiat 124 named as Premier 118NE in India (Fiat-India.com, n.d.). Again in 1996 Fiat launched its small car Fiat Uno as a CKD (Complete Knock Down) version which was assembled at the Premier Automobiles plant in Mumbai. Both these cars failed to make a lasting impression and were phased out in 1999 and 2001 respectively. After the Indian economy got liberalized in 1991, it paved the way for major automobile company like-Hyundai, Daewoo, Ford, GM, Toyota etc. to start operations in India. Eventually, the partnership between Premier Automobiles and Fiat came to an end in 2001. In the same year Fiat went ahead alone to launch its premium hatchback Palio in India, which received good response from the auto buyers. Within few years sales started falling gradually due to poor service network and expensive cost of maintenance. Fiat went on launching new models like Fiat Siena, Palio Adventure, Fiat Petra but all of these models failed to make any lasting impression in the Indian car market.

Taking lesson from the previous mistake Fiat entered into a Joint Venture (JV) with Tata Motors, the largest indigenous automaker in December, 2006. As a part of this JV, Fiat and Tata will share the former's manufacturing facility in Ranjangaon, Pune while Fiat will sell its cars through the wide spread solid dealer network of Tata Motors. This strategic move by Fiat was widely applauded by the automobile critics as Fiat with its well-engineered cars can definitely leverage the sales and service network of Tata Motors.

Fiat launched two internationally successful models namely Grand Punto and Linea in India after this JV which was accepted by Indian consumers well. Within few years of operations the differences started appearing between the partners as customers complained of being not given priority in sales and service. Also sales figures of Grand Punto and Linea gradually started declining due to increased competition and no product facelifts or new launches. This JV produced 190,000 cars and 337,000 powertrains. Even after more than five years of operation it posted huge loses of around Rs.288 crores in 2009-10 and Rs. 227crores respectively in 2010-11. Due to the falling market share of Fiat and piling up loses, Fiat decided to end this JV in May 2012.

Thereafter Fiat established National Sales Corporation (NSC) as an independent entity within Fiat Chrysler India which manages the independent sales and service network. Fiat is presently selling its Grand Punto, Linea and iconic Fiat 500 (in selective cities) in India. It has an optimistic target of appointing 112 dealerships and launching the iconic brand Jeep in India by the end of 2013 (Fiat-India.com, 2013).

Though Fiat is present in the Indian automobile market for almost fifty years but still it has failed to make a mark and consolidate its position. It could not capitalize on it earlyentry and lost ground to other Japanese and Korean auto makers.

### 3.1 FIAT Diesel Engines in India

The dominance of diesel cars has grown rapidly in India in the last decade. The diesel passenger car segment is growing in India due to high price of petrol. This growth has been further fuelled by the more fuel efficient, clean and low maintenance diesel cars. In some segments the sale of diesel cars has even surpassed the number of petrol cars.

Fiat has a wide range of diesel engines globally but it manufactures the most successful 1.3 litersmultijet engine in its Rajangaon, Maharastra plant in India. The state-of-the-art Rajangaon facility is capable of manufacturing 300,000 engines annually. The engines manufactured here are used by Fiat to power its own cars as well as to supply to its alliance partners. The much acclaimed 1.3 litersmultijet engine consists of 4 cylinders in line, 16 valves i,e 4 valves per cylinder with a total displacement of 1248 cubic capacity (cc).

Instead of investing heavily on R&D to develop its own, many companies in India have found it convenient to go ahead with the tried and tested Fiat engine. Some of the major auto giants in India

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who uses this 1.3 Fiat powertrain are- Maruti Suzuki, Fiat India, Tata Motors, General Motors India, and Premier Automobiles. Maruti Suzuki, the market leader uses this engine across a wide range of its vehicles like- Swift, Ritz, Swift Dzire, SX4 and Ertiga. Fiat India powers its Grande Punto, Linea, Palio Stile, 500 with this engine. Tata Indica Vista and Tata Indigo Manza, the best sellers from Tata Motors are available with this engine as well. General Motors which is a partner of Fiat in this 1.3 L multijet engine presently powers its Sail hatchback, Sail Sedan and Enjoy MUV in India. Lastly, Premier Automobiles uses it to power its small SUV Rio. All the car makers have been entitled to badge the engine with different names, for example, Maruti Suzuki calls it DDiS, and Tata Motors sells it as Quadrajet, GM as Smartech etc.

## 4. FIATAS A DIESEL ENGINE MANUFACTURER VS. FIAT AS A CAR MANUFACTURER

FIAT has been one of the pioneers in the diesel engines. The use of the FIAT diesel engines by the Indian automobile manufacturer goes way back to 1962 when Premier automobiles produced the licensed version of FIAT 1100 and christened it as Premier Padmini (Carhistory4u.com, n.d.) which used the FIAT engine.

Passenger vehicle analysis report for the Financial Year (FY) 2012-13 shows that Maruti Suzuki and TATA has a market share of 39.12% and 11.71% respectively and FIAT's market share stands at a meagre amount of only 0.26% (Aravindam, 2013). The objective of this study is therefore to examine whether FIAT is adopting the right strategy to sustain in the highly competitive Indian market by only selling the engine to these manufacturers rather than promoting their own vehicles. Statistics also shows that the market share of FIAT in the Indian automobile industry is decreasing at a fast rate. It has shown a negative growth of 56.87% in the FY 2012-13 (Aravindam, 2013). In India Fiat sells more engines than cars.

### 5. SWOT ANALYSIS OF FIAT

The use of SWOT analysis goes way back to the early 1960's (Learned et al., 1965). It is commonly used to identify the strength and weakness of an organisation and the opportunities and threats in the environment. Having identified these factors, an organisation has to build upon its strengths, eliminate the weakness, exploit the opportunities and counter the threats (Dyson, 2002). Strength and weakness are internal to the organisation and it examines the aspects within the organisation like personnel, facilities, location, products and service. Opportunities and threats are external to the organisation and it examines the factors like economic, social, environmental and technological which are present in the external environment. Thus, procuring the definition of Dyson (2002) to identify the in-house strength and weakness as well as outward opportunities and threats, the following SWOT analysis is performed for Fiat.

### Strength

Fiat's history dates back to 1889. Hence it has a rich experience of manufacturing world class vehicles of various capacities. Fiat enjoys very high brand awareness in India. Its presence for more than fifty years is one of the primary reasons for the same. Have substantial stake in some of the finest car maker like- Ferrari, Lancia, Alfa Romeo, Maseratti, and Chrysler etc. So compared to its major competitors in India, Fiat has the edge of technology backed by a strong research and development team spread worldwide which can easily be translated in creating an umbrella, under which all the above mentioned major players as key buyers of different parts of a vehicle and thus can have effect of diminishing the supplier's bargaining power.

### Weakness

Despite of its presence for fifty years, Fiat has a very small market share of only 0.26% in the Indian Automobile market. Maruti Suzuki, the market leader enjoys a market share close to 50%. Fiat needs to improve its market share to remain relevant in the highly competitive passenger car market of India.

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One of the biggest weaknesses of Fiat is it poor sales and service network. Fiat has failed to set up a strong sales and service network in spite of its long presence in the Indian sub-continent. The failure of the Joint Venture with Tata Motors is another setback in this regard. This in result has reduced the capability of backward integration and eventually low acceptance of the product/cars in Indian market.

Even new players like Volkswagen, Honda, Ford, Renault, Nissan etc have substantially ramped up their Indian distribution network in the recent past.

Fiat offers just two models Grand Punto and Linea (excluding Fiat 500) in India. The product portfolio is too small to stay relevant in the market when the market leaders like Maruti Suzuki is offering 16 models followed by Hyundai with 8 models.

Fiat has also failed to provide periodic facelifts to its models to stay competitive in the market. In India the car makers are providing facelifts in every 2-3 years.

### **Opportunity**

The Fiat 1.3 Multi-jet engine is very popular in India. Maruti Suzuki, Tata Motors, Chevrolet are outsourcing this engine in high numbers and also some of their bestselling models like Swift, Swift Dzire, Indigo Manza etc. are powered by it.

Fiat can launch its global models like- Panda, Bravo, Freemont, Dobloetc in India to provide a healthy competition in the market.

Fiat can also launch its other brands like- Alfa Romeo, Maseratti, Lancia, Jeep, Chrysler etc. have a greater presence and consolidate its market share in India. By increasing the no. of models the company can increase its presence in the market and can address a larger market segment with finer variances in choices.

### **Threat**

With home grown strong players like Maruti, Mahindra, and Tata Motors along with the presence of almost all major global car makers, Indian car market is a tough nut to crack.

Fiat models have always received a good response in its launch but the lack of service network and reliability has made the customers stay away from it. The biggest challenge for Fiat now is to regain the lost customer trust.

Though many car makers are outsourcing their diesel engines from Fiat, they are also working to develop their own power plants as it provides more room for cost reduction. In the long run Fiat cannot be sure of generating revenue by selling engines. Even Honda, which is known for gasoline engines have developed a 1.5 litre diesel engine to power its top selling models of Amaze and City in India.

Fiat's USP is its highly acclaimed 1.3 Multijet engine. But by supplying engines to other car makers it is fast losing its advantage over other players because a normal customer is unaware about the use of Fiat engines by other car makers.

In India, the price of diesel is cheaper than petrol (due to government subsidies) which is one of the primary reasons for the popularity of diesel cars. But the gradual withdrawal of subsidy in diesel will encourage customers to switch to petrol vehicles and which may in turn reduce the growth of diesel cars in India.

### 6. CONCLUSION

It is evident that even after fifty years of existence in India; FIAT has failed to make its mark in the growing Indian car market. Despite of its presence in the high growing segment of premium hatch back (with Grand Punto) and mid-size sedan (with Linea) Fiat's combined sales figures of both the models lie at a low of 16,074 units for 2011-12 and 6,933 units for 2012-13. Powered by the 1.3 L Multijet engine of Fiat Maruti Suzuki Swift and Maruti Suzuki Dzire are the market leaders in the premium hatchback and entry level sedan segments respectively both selling more than 15,000 units monthly on an average. Even with the same engines Tata Motor's Indica Vista and Indigo Manza

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are selling in much large numbers. The monthly average of both the models clocks nearly 5000 units and 2300 units. In India Fiat sells more engines rather than cars.

Though Fiat earns handsome revenue by selling engines to various car makers, the assumption that they will be able to survive with this strategy can eventually result in a strong backfire effect. In fact, every auto maker is investing heavily in R&D to have its own diesel powertrains as it becomes more economical in the long run. If we consider the major car makers in India who uses the Fiat engine we can see that every player is trying hard to have its own engine at place. Premier Automobiles has the least market share in India, so it hardly makes a substantial contribution towards Fiat to bank upon. General Motors for instance developed its own 900cc diesel engine to power its hatchback Chevrolet Beat. GM is working to develop more powerful variants to use in its models. Even Tata Motors which is the second largest outsourcer of the Fiat 1.3 litre engine in India has its own 1.4 litre diesel engine which appears in the various models of Tata Indica and Tata Indigo. Diesel engines has always been a stronghold for Tata Motors so no one can deny that Tata may someday stop outsourcing the Fiat engines and go ahead with its own modern, efficient engines. Lastly Maruti Suzuki, the biggest client of Fiat is investing heavily for engine development. They have developed an efficient K-series engine to power its petrol cars and now working on diesel engines. Japanese auto maker Honda, which is traditionally considered as a pioneer of gasoline engines has developed a 1.5 litre engine for its entry level sedan Honda Amaze. The same engine is used to power its newly launched 4th generation model of Honda City, a high selling mid-size sedan. No doubt the engine is a very integral part of a car and that's why a successful car always has an excellent engine. But commercial success of a car is not ensured just by an engine, hence it can be said that an engine matters a lot but it's not the only thing that matters in a car.

### **REFERENCES**

- 1. ArunAravindam. "Passenger Vehicle Analysis Fiscal Year 2012-13" Weblog entry. Autobei Consulting Group 12 April 2013. [http://autobei consulting group.com/blog/Passenger Vehicle Analysis Fiscal Year 2012-13.htm/]
- 2. Autoweek. "GM to create new diesel unit as it untangles its Fiat joint powertrain operations". Autoweek, 2005. Web. 6 October 2005 [http://autoweek.com/article/20050610/FREE/506100702/]
- 3. Car history 4u. (n.d.). "History of Indian Automobile Manfufacturer". [http://Car History 4U.com/ History of Indian Motor Car /Automobile Manufacturers.htm]
- 4. Dyson G Robert, (2002), "Strategic development and SWOT analysis at the University of Warwick", European Journal of Operational Research, Vol 152, pp 631–640.
- European Automobile Manufacturers Association. "New vehicle Registration-By Manufacturer". European Automobile Manufacturers Association 2012.Web.[http://acea.be/news/newsdetail/newvehicleregistrationsbymanufacturer/20130306072012voByMan ufacturerEnlargedEuropeLV.xls]
- 6. Fiat History (n.d.). [http://fiat-india.com/history]
- 7. Fiat History (2013). [http://fiat-india.com/ docs/pdf/FIAT\_Press\_Release\_Mumbai\_10th\_April2013.pdf]
- 8. Indian Brand Equity Foundation. (2013). "Indian Automobile Industry Analysis". [http://www.ibef.org/industry/indian-automobile-industry-analysis-march-2013.aspx]
- 9. Laurentiu. (2010)."The first three diesel engine cars" Weblog entry. [http://ecomodder.com/forum/showthread.php/first-three-diesel-passenger-cars-13755.html]
- 10. Learned, E.P., Christensen, C.R., Andrews, K.E., Guth, W.D, 1965."Business Policy: Text and Cases". Irwin, Homewood, IL.
- 11. Ministry of Heavy Industries and Public Enterprises [MoHI& PE], India (2012). "Report of the working group on automotive sector for the 12th 5 year plan (2012-17)". [http://dhi.nic.in/autopolicy/Report of the working group on automotive sector for the 12th 5 year plan.pdf]
- 12. R B Shah& Associates (RBSA) Advisors. (2012). "Automotive Sector Analysis FY-2012". [http://rbsa.in/articles/RBSA-automotive-sector-analysis.pdf]