

# Analysis of Automobile Sector in India with reference to Maruti Suzuki & Tata Motors

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## **Abstract:**

*The history of Automobile sector in India goes way back to the year 1949, when Hindustan Motors Limited began assembling the first British automobile, the rebadged Morris 10 series M, in a modest plant in Port Okha, Gujarat. In the last 70 years, India has expanded considerably in this business, becoming the fourth largest car producer and the seventh largest commercial vehicle manufacturer in 2019. By 2026, the automobile sector is predicted to reach a value of \$251.4-\$282.8 billion. We can clearly conclude from these estimates that there is a lot of room for growth in this industry. In this research study, we will examine the industry's growth, trends, and future in depth, as well as evaluate the various market competitors who are currently operating in the market. Despite the manufacturing industry's slowdown owing to COVID-19's pandemic impact, the sector has a lot of future promise in terms of output, GDP contribution, and employment prospects. The strategies of Maruti Suzuki Ltd. and Tata Motors Ltd., India's two indigenous vehicle manufacturing behemoths, will be examined.*

## **Introduction:**

India has been regarded as one of the world's fastest growing economies since independence. The local manufacturing sector has seen a surge in the vehicle industry. The government's assistance and other social programmes have aided in delivering a boost to this particular area, allowing it to grow steadily and steadily. The vehicle industry is booming like it's never been before. In terms of both production and sales, India's automobile sector is one of the world's largest. We will cover incubation, its historical background,

expansion, and evolution through time in this study, which will make you wonder how massive this business has become now. We'll also look at the role of several local businesses in the market, who have played a significant role and control the majority of the market in India's automobile sector. India is now ranked fourth in the world for automobile sales within its own borders, with sales anticipated to reach \$251.4-\$282.8 billion by 2026. India gained this position in the previous year, surpassing Germany, and will soon become the world's third largest economy.

India was an automotive importer until the 1930s, and it was not until the 1940s that the country established its own manufacturing facility. Despite its best efforts, the automobile industry in the 1950s was unable to grow due to the government's severe trade prohibitions. From the 1960s through the 1980s, when these trade restrictions began to ease, Hindustan Motors dominated the Indian market. Maruti entered the sector in 1983 and quickly dominated the market. Today's Indian market offers a plethora of options as well as a diverse range of career opportunities. The country's dense population is a crucial element, as it means that job opportunities are plentiful, allowing Indian customers to rely on automobiles for their everyday activities. Due to these factors, there is a high demand for both two and four wheelers. A four-wheeler used to be considered a luxury item reserved for the upper crust of society, but times have changed.

The automobile industry is one of India's most important industries. Since 1991, the Indian government has given the industry a boost by enabling continual economic liberalisation, making India one of the most sought-after sites for many global automakers. India's automobile

industry is increasing at a rate of roughly 18% per year.

In the last 20 years, the Indian automobile sector has grown at a spectacular rate. This is the result of a number of favourable variables coming together. This post will look at a few of them in order to better comprehend the situation.

Automobile sales have increased dramatically from the 1990s to the year 2000. The automobile sector has reaped the benefits of a strong growth in demand by adding extra capacity, better research & development facilities, technical advancements, and a nationwide distribution network.

### **Research Methodology:**

Research methodology is a method for solving a research topic in a methodical manner. The different methods and approaches for conducting research are included in the Research Methodology.

Here we are studying the automobile sector in India taking into consideration Maruti Suzuki and Tata Motors.

### **Objectives:**

- To chart a course for India's automobile industry's growth.
- To investigate Maruti Suzuki's meteoric rise in the automobile industry.
- To investigate Tata Motors' meteoric rise in the industry.
- A financial examination of a few car businesses

The current research study adheres to the research process' conceptual framework. The following sections cover all aspects of the research process at various levels of secondary data is information gathered through publications, internal documents, books, periodicals, journals, and web services.

**Research Design:** This investigation has the potential to uncover a lot of facts. Data is gathered

from original sources, with people's independent opinions taken into account and conclusions drawn.

### **Literature Review:**

A four-wheeler is gradually becoming a requirement for those who live in an urban area. Today's family standing cannot be determined by any four-wheeler, but the brand associated with it might reveal a lot. The automobile industry in India has a lot of potential; it accounts for about 4% of the country's GDP. Automobiles such as cars, bikes, jeeps, tractors, and scooters are available from the industry. Around 500 large companies and 1000 small scale licensed companies operate in the country, providing automobile services to Indian customers.

The Indian government began supporting the automobile sector in 1984, which led to the establishment of the Delhi auto show. 1992 was a year of liberalisation, which allowed foreign direct investment into the country. The industry has gone through with a lot of change at this point. In 1996, Maruti and Suzuki joined to form Maruti Suzuki, which dominated the industry with over 60% of the entire market share. By the year 2000, practically every major automobile manufacturer had established production facilities in India. After Japan, South Korea, and Thailand, India became the world's fourth largest exporter of passenger cars in 2009, and later in 2011, India became the world's sixth largest car producer and Asia's second largest two-wheeler manufacturer.

- Willard Hom (2000) divides customer satisfaction models into two categories: macro-models, which situate customer experience among a group of related variables in marketing research, and micro-models, which postulate the aspects of customer satisfaction. The report also discusses alternative customer satisfaction models from the standpoint of marketing research.

- "Daniel Moses Joshuva" indicated in his report titled "Financial Status of Tata Motors LTD" that the corporation is growing steadily and that spending should be cut. Profitability will grow if expenses are reduced. He also urged that the corporation make better use of its working capital.
- Peyton, R.M. (2003) gave a detailed overview of the literature on various Customer Satisfaction (CS/D) theories proposed in their working paper given at the Allied Academies International Conference. The literatures are all from before the 1990s. This review focuses on the key elements of the decision-making process, as well as measurement-related topics that are relevant to this body of literature.
- In this study, the ESRC Centre for Business Research (2004) looks at patterns and trends in motor vehicles based on data from 23.1 million vehicles registered in the United Kingdom between 1992 and 2002. In their article, they incorporated some recommendations for corporate differences in recall propensity, as well as differences between manufacturers and their needs, which should be investigated further, taking into account distinctions in model range, production volumes, and manufacturing design practises, in order to determine the root causes for the alarming trend.
- In his study "Profitability Analysis of Tata Motors," "Rakhi Hotwani" demonstrates that the corporation has created enormous wealth for its stakeholders and delivered some return on investment. Profit margins for businesses fluctuate. In the last two years, the return on net worth has been below 10%. In any case, the company's core strength is impressive. Through optimal capital gearing and a reduction in administrative and financial expenses, the

company can boost its profitability even further.

India has the world's fourth largest vehicle industry. In 2019, India was the world's fourth largest car manufacturer and seventh largest commercial vehicle manufacturer. Between FY16 and FY20, domestic automobile production climbed at a 2.36 percent compound annual growth rate (CAGR), with 26.36 million vehicles produced in FY20. Between FY16 and FY20, domestic automotive sales climbed at a 1.29 percent compound annual growth rate (CAGR), with 21.55 million vehicles sold in FY20.

The domestic Indian car market is dominated by two-wheelers and passenger automobiles. Low- and medium cars account for the majority of passenger car sales. In FY20, two-wheelers and passenger vehicles accounted for 80.8 percent and 12.9 percent of the market share, respectively, with over 20.1 million vehicles sold.

By 2025, India's electric vehicle (EV) market is expected to be worth Rs. 50,000 crore (US\$ 7.09 billion). Several technological and automotive businesses have expressed interest in the India EV market and/or made investments there. Hyundai, MG Motors, Mercedes-Benz, and Tata Motors have all introduced electric vehicles to the market. According to a recent study done by Castrol, the majority of Indian customers would consider purchasing an electric car by 2022. The study also found that a pricing point of Rs. 23 lakhs (US\$ 31,000), a charge time of 35 minutes, and a range of 401 kilometres from a single battery charge will be the 'tipping points' for mainstream EV adoption for an ordinary Indian customer.

India's government aspires to become a major production and research & innovation (R&D) centre. It has established National Automotive Testing and R&D Infrastructure Project (NATRiP) facilities and a National Automotive Board to serve as a conduit between the government and the sector. Since 2015, five evaluation and research facilities have been built in the country under the (NATRiP) programme. The Project

Implementation and Sanctioning Committee (PISC) approved NATRiP's proposal for "Grant-In-Aid for test facility infrastructure for Electric Vehicle (EV) performance Certification from NATRIP Implementation Society" under the FAME (Faster Adoption and Manufacturing of (Hybrid) and Electric Vehicles in India) scheme on January 03, 2019.

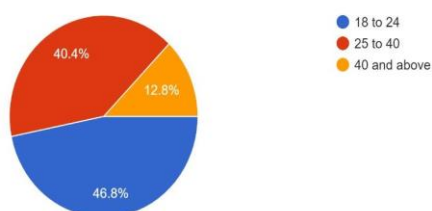
The Indian government has also set a lofty goal of selling exclusively electric vehicles in the country. Under the FAME plan, the Ministry of Heavy Industries of the Government of India has shortlisted 11 cities across the country for the introduction of electric vehicles into their public transportation systems. The scheme's first phase was extended through March 2019, and the government authorised the FAME-II scheme in February 2019, with a fund demand of Rs. 10,000 crores (US\$ 1.39 billion) for FY20-22. The government declared in the Union Budget 2019-20 that the interest paid on loans obtained to acquire EVs will be eligible for an additional income tax deduction of Rs. 1.5 lakh (US\$ 2146).

EV sales in India, excluding e-rickshaws, increased by 20% to 1.56 lakh units in FY20, driven mostly by two-wheelers. By 2023, the Indian government expects the vehicle sector to receive US\$ 8-10 billion in domestic and foreign investment.

## Analysis:

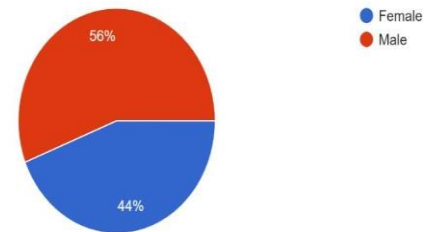
### Ques 1.: Age Category

Your age range  
47 responses



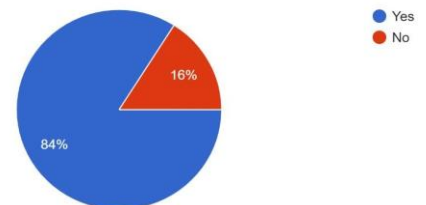
### Ques 2.: Gender Specification

Please Specify your Gender  
50 responses



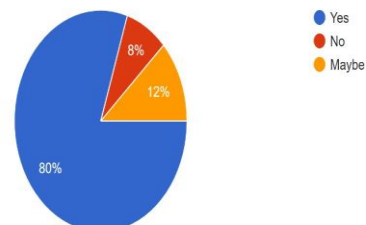
### Ques 3.: Do you own a four-wheeler

Do you own a four wheeler ?  
50 responses



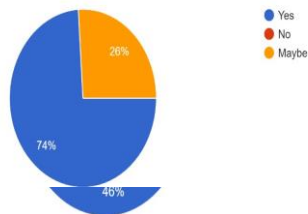
### Ques 4.: Do you think India will be a key player in production of Automobile at Global Level?

Do you think India will be a key key player in production of Automobiles at Global Level ?  
50 responses



Ques 5.: What do you think is the reason that Indian companies are facing challenges in the International Market?

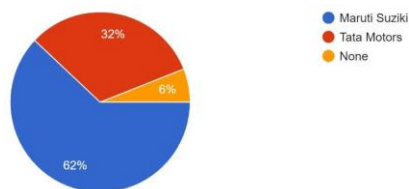
In shaping the future of Automobile Industry in the country do you think Electric vehicles will play a key role ?  
50 responses



Ques 6.: As per you what are the most important points a buyer goes through before purchasing a car?

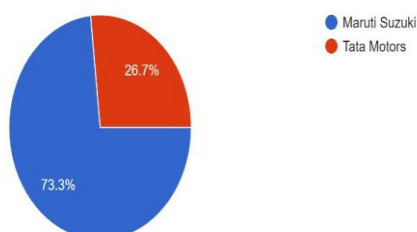
Ques 7.: Between the following companies which company do you think has more brand value?

Between the following companies which company do you think has more brand value ?  
50 responses



Ques 8.: Which company do you think offer more affordable price segment in cars?

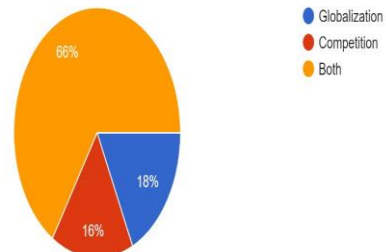
Which Company do you think offers more affordable price segment in cars ?  
45 responses



Ques 9.: Given the choice between the two automobile companies which one will you prefer?

Ques 10.: In shaping the future of Automobile Industry in the country do you think Electric Vehicles will play a key role

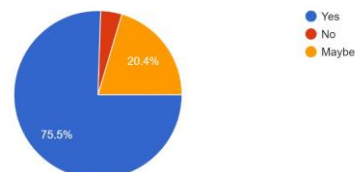
What do you think is the reason that Indian companies are facing challenges in the International Markets ?  
50 responses



Ques 11. Looking at the increased price of oil, will

As per you what are the most important points a buyer goes through before purchasing a car ?  
50 responses

Looking at the increased prices of Oil, will you prefer shifting your preference to Electric vehicles ?  
49 responses



you prefer shifting your preference to Electric Vehicles

## Findings & Observations:

Here we are using Chi- square test to compare and observe the results.

The Chi-square test examines two factors in a distribution table to determine whether or not they are linked. To determine how a model compares to actual observed data, a test is conducted between two qualitative data. To arrive at a conclusion, a chi square test was performed on PSPP software based on the study survey.

**Case 1)** Question 2 vs Question 4 i.e., Gender vs Do you think India will be a key

player in automobile production at Global Level?

$H_0$  = There is no substantial relationship between two variables, indicating that they are unrelated.

$H_1$  = Two variables have a significant relationship, i.e. they are dependant.

Output -- PSPPIRE Output Viewer

File Edit Windows Help

\* Crosstabs /CELLS=COUNT ROW COLUMN TOTAL.

		Cases				Total	
		Valid	Missing				
		N	Percent	N	Percent	N	Percent
Gender x Response2		50	100.0%	0	.0%	50	100.0%

		Response2			Total
		Yes	No	Maybe	
Gender Male	Count	20	3	5	28
	Row %	71.4%	10.7%	17.9%	100.0%
	Column %	56.1%	42.9%	83.3%	56.0%
	Total %	40.0%	6.0%	10.0%	56.0%
Female	Count	17	4	1	22
	Row %	77.3%	18.2%	4.5%	100.0%
	Column %	45.9%	57.1%	16.7%	44.0%
	Total %	34.0%	8.0%	2.0%	44.0%
Total	Count	37	7	6	50
	Row %	74.0%	14.0%	12.0%	100.0%
	Column %	100.0%	100.0%	100.0%	100.0%
	Total %	74.0%	14.0%	12.0%	100.0%

	Value	df	Asymptotic Sig. (2-tailed)
Pearson Chi-Square	2.37	2	.306
Likelihood Ratio	3.58	2	.176
Linear-by-Linear Association	.93	1	.334
N of Valid Cases	50		

The significant value of the chi square test, according to the third table, is.306. This significance value is compared to the value of Alpha, which is 5% or.05. We accept  $H_0$  if the significance value is greater than.05, and we reject  $H_0$  if it is less than.05.

In this example, the significance value of.306 is more than.05, thus we accept  $H_0$  and conclude that there is no significant relationship between gender and vehicle output at the global level. Do you think India will be a major participant in automobile manufacture?

**Case 2)** Question 1 vs Question 4 i.e., Age vs Do you think India will be a key player in

automobile production at Global Level?

Output -- PSPPIRE Output Viewer

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\* Crosstabs Response x Age 50 100.0% 0 .0% 50 100.0%

		Age			Total
		18-24	25-40	40 and above	
Response Yes	Count	15	18	4	37
	Row %	40.5%	48.6%	10.8%	100.0%
	Column %	65.2%	85.7%	66.7%	74.0%
	Total %	30.0%	36.0%	8.0%	74.0%
No	Count	1	0	0	1
	Row %	100.0%	.0%	.0%	100.0%
	Column %	4.3%	.0%	.0%	2.0%
	Total %	2.0%	.0%	.0%	2.0%
Maybe	Count	7	3	2	12
	Row %	58.3%	25.0%	16.7%	100.0%
	Column %	30.4%	14.3%	33.3%	24.0%
	Total %	14.0%	6.0%	4.0%	24.0%
Total	Count	23	21	6	50
	Row %	46.0%	42.0%	12.0%	100.0%
	Column %	100.0%	100.0%	100.0%	100.0%
	Total %	46.0%	42.0%	12.0%	100.0%

	Value	df	Asymptotic Sig. (2-tailed)
Pearson Chi-Square	3.29	4	.511
Likelihood Ratio	3.75	4	.442
Linear-by-Linear Association	.36	1	.548
N of Valid Cases	50		

The significant value of the chi square test is.511, according to the third table. This significance value is compared to the value of Alpha, which is 5% or.05. We accept  $H_0$  if the significance value is greater than.05, and we reject  $H_0$  if it is less than.05.

In this example, the significance value of.511 is greater than.05, thus we take  $H_0$  and conclude that there is no relationship between gender and vehicle output at the global level. Do you think India will be a major participant in automobile manufacture?

**Case 3)** Question 1 vs Question 10 i.e., Age Group vs do you think Electric vehicles will play a key role?

Output -- PSPPIRE Output Viewer

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\* Crosstabs Age x Response2 50 100.0% 0 .0% 50 100.0%

		Response2			Total
		Yes	No	Maybe	
Age 18-24	Count	16	6	1	23
	Row %	69.6%	26.1%	4.3%	100.0%
	Column %	43.2%	85.7%	16.7%	46.0%
	Total %	32.0%	12.0%	2.0%	46.0%
25-40	Count	17	1	3	21
	Row %	81.0%	4.8%	14.3%	100.0%
	Column %	45.9%	14.3%	50.0%	42.0%
	Total %	34.0%	2.0%	6.0%	42.0%
40 and above	Count	4	0	2	6
	Row %	66.7%	.0%	33.3%	100.0%
	Column %	10.8%	.0%	33.3%	12.0%
	Total %	8.0%	.0%	4.0%	12.0%
Total	Count	37	7	6	50
	Row %	74.0%	14.0%	12.0%	100.0%
	Column %	100.0%	100.0%	100.0%	100.0%
	Total %	74.0%	14.0%	12.0%	100.0%

	Value	df	Asymptotic Sig. (2-tailed)
Pearson Chi-Square	8.25	4	.083
Likelihood Ratio	8.65	4	.070
Linear-by-Linear Association	.54	1	.464
N of Valid Cases	50		

The significant value of the chi square test is.083, as seen in the third table. This significance value is

compared to the value of Alpha, which is 5% or.05. We accept  $H_0$  if the significance value is greater than.05, and we reject  $H_0$  if it is less than.05.

Because the significance value of.083 is greater than.05, we accept  $H_0$  and conclude that there is no significant relationship between gender and whether or not you believe electric vehicles will help shape the future.

**Case 4)** Question 2 vs Question 10 i.e., Gender vs do you think Electric vehicles will play akey role?

Output - PSPPIRE Output Viewer

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Get /FORMAT=AVALUE TABLES PIVOT  
Crosstabs /STATISTICS=CHISQ  
Crosstabs /CELLS=COUNT ROW COLUMN TOTAL.

Summary

		Cases		
		Valid	Missing	Total
Gender x Response	N	Percent	N	Percent
Gender x Response	50	100.0%	0	.0%

Gender x Response

		Response			Total
		Yes	No	Maybe	
Gender: Male	Count	22	1	5	28
	Row %	76.6%	3.6%	17.9%	100.0%
	Column %	59.5%	100.0%	41.7%	56.0%
	Total %	44.0%	2.0%	10.0%	56.0%
Female	Count	15	0	7	22
	Row %	68.2%	.0%	31.8%	100.0%
	Column %	40.5%	.0%	58.3%	44.0%
	Total %	30.0%	.0%	14.0%	44.0%
Total	Count	37	1	12	50
	Row %	74.0%	2.0%	24.0%	100.0%
	Column %	100.0%	100.0%	100.0%	100.0%
	Total %	74.0%	2.0%	24.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Sig. (2-tailed)
Pearson Chi-Square	1.97	2	.374
Likelihood Ratio	2.33	2	.312
Linear-by-Linear Association	.96	1	.322
N of Valid Cases	50		

CROSSTABS

/TABLES= Gender BY Response2  
/FORMAT=AVALUE TABLES PIVOT  
/STATISTICS=CHISQ  
/CELLS=COUNT ROW COLUMN TOTAL.

The significant value of the chi square test is.374, according to the third table. This significance value is compared to the value of Alpha, which is 5% or.05. We accept  $H_0$  if the significance value is greater than.05, and we reject  $H_0$  if it is less than.05.

Because the significance value of.374 is more than.05 in this situation, we accept  $H_0$  and conclude that there is no significant relationship between gender and whether or not you believe electric vehicles will help shape the future.

## Recommendation:

From the above data, theory, tables, diagrams and graphs it is to be observed that, Maruti Suzuki is doing well in the market in which the vehicles of Maruti are always preferred by the people as they are low cost and have more features. Furthermore, Maruti Suzuki has maintained its standards in the capital market by upholding its reputation in the market and protecting the interests of investors, resulting in increased investor confidence in the firm and its shares.

Economic analysis is used to determine how corporations gain from economic elements such as GDP, inflation rates, interest rates, and tax rates, as well as how companies are negatively affected.

The report's industrial analysis informs us about how the industry is currently operating and how it will grow in the near future. In addition, the study discusses the industry's participants.

The specific information of the favoured companies, such as Maruti Suzuki and Mahindra & Mahindra, is provided by company analysis. About the company, its goods, as well as quantitative company analysis metrics such as financial and operational efficiency indicators. Financial indicators are profitability and financial position indicators that are examined using the income and balance sheet statements of the company in the report. The reputation of the management, the company's name, the company's future operational plans, and so on, as revealed in the director's/reports, auditor's as well as amount by the management to the media, are all examples of qualitative criteria.

## Conclusion:

The purpose of this study was to determine the financial state of automobile industry and the both the companies i.e., Maruti Suzuki and Tata Motors. And people's perspective of the companies.

With the use of four methodologies, the study aims to analyse the trajectory of Maruti Suzuki India Limited and Tata Motors from roughly 2011 to 2022. Because both Tata Motors and Maruti Suzuki have a debt equity ratio of less than 2:1 for the study period, it suggests that both firms, Tata Motors and Maruti Suzuki, have good long-term solvency and will be able to meet their long-term commitments without difficulty. Furthermore, the foregoing study demonstrates that the debt equity ratios of Tata Motors and Maruti Suzuki are not significantly different.

Maruti Suzuki automobiles are the best-selling and fastest-moving models. Customers' demand for automobiles is on the rise these days, and they anticipate simple handling, safety and security, and higher performance, among other things, which drives improved technology and the adoption of new models.

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