# ANALYSIS OF DOMESTIC SALES TRENDS OF AUTOMOBILE INDUSTRY IN INDIA 2016 TO 2022 

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#### Abstract

The present paper aims to study the sales trends of Automobile industry in India for the period 2016 to 2022. Besides studying sales trends of the industry, it also estimates the growth rate of sales of the industry, which helps to understand at what rate the industry, sales are growing. This work also focuses on analysing the segmentation wise sales trends of the industry and also estimates the segmentation wise sales growth rates. This work tries to attempt to compare the overall sales growth rate of the industry with the sales growth rates of various categories of vehicles in the industry. This attempt brings in to light interesting insights regarding sales growth of the industry.


Keywords: Automobile Industry, Growth Rate, Segmentation, India, Estimates

## 1. INTRODUCTION.

The term "automotive industry" refers to all businesses and endeavours concerned with the production of motor vehicles, including the majority of its parts, such as bodywork and engines, but excludes tyres, batteries, and fuel. Passenger cars and light trucks, including pickups, vans, and sport utility vehicles, are the main products of the sector. Despite being essential to the industry, commercial vehicles (such as delivery trucks and huge transport trucks, sometimes known as semis), are secondary ${ }^{1}$.
Despite being brief in comparison to many other businesses, the history of the automotive industry is particularly fascinating; because of the impact it had on history in the 20th century. Despite the fact that the vehicle was invented in Europe in the late 19th century, the United States dominated the global industry throughout the first half of the 20th century thanks to the development of large production.
The situation radically changed in the second part of the century as western European nations and Japan emerged as significant manufacturers and exporters.
Despite the fact that the first cars were steam-powered, the petrol engine's invention in the 1860s and '70s, particularly in France and Germany, is credited with giving rise to the automobile industry. British, Italian, and American manufactures had joined German and French producers by the turn of the 20th century ${ }^{2}$.

## 2. AUTOMOBILE INDUSTRY IN INDIA.

Since the automobile industry is so important to both macroeconomic expansion and technological advancement, it has historically been a reliable indication of how the Indian economy is performing. Due to India's huge proportion of young people and expanding middle class, the two-wheeler category dominates the industry in terms of volume. However, the sector's expansion was further aided by businesses' rising interest in researching rural markets. The demand for commercial vehicles is developing as a result of the expanding passenger and logistical sectors. New trends, such as the electrification of vehicles, especially three-wheelers and small passenger cars, are anticipated to fuel market expansion in the future ${ }^{3}$.
India is the world's largest producer of tractors, the second-largest producer of buses, and the third-largest producer of heavy trucks, giving it a dominant position in the global market for heavy vehicles. In FY22, 22.93 million automobiles were produced annually in India. India is a significant exporter of automobiles as well, and there are high hopes for future export growth. By $2022^{4}$, it is anticipated that the Government of India will have established itself as a global leader in the two-wheeler and fourwheeler markets thanks to a number of initiatives like the Automotive Mission Plan 2026, the scrap page policy, and the production-linked incentive programme in the Indian market

## 3. NEED AND IMPORTANCE OF TH STUDY.

The present work focuses on the analysis of sales trends of the Automobile industry for the period 2016 to 2022. There were limited works on the growth of the sales of the industry during the said period. It throws light on the sales growth of the industry during the pandemic period. This work primarily focuses on the calculation of compound annual growth rate of the sales of the industry simultaneously concentrating on segmentation wise sales growth rates.

## 4. OBJECTIVES.

1) To analyse the overall sales growth rate of Automobile industry in India.
2) To estimate segmentation wise sales growth rates of the industry.
3) To examine sales and segmentation wise sales trends of the industry.

## 5. SECONDARY SOURCES.

The data has been taken from SIAM (Society of Indian Automobile Manufacturers) organization and from reliable sources. Type of data comprises segmentation wise sales trends and overall sales trends of the industry for the six years during 2016 to 2022. I believe that it is important to have reliable sources, the theoretical framework are mostly journal based articles to increase the reliability and validity of this work. In this paper we have used the descriptive method of disclosing the data which is related to sales trends of automobile industry. Further, describing each and every category of sales relating to Automobile Industry.

## 6. DATA ANALYSIS AND INTERPRETATION

Calculation of Compound Annual Growth Rate for six years using the standard formulae.
The following formula is used to calculate the compound annual growth rate.
CAGR $=(\text { Present } / \text { Past })^{\wedge}(1 / n)-1$
Present $=$ Latest year value of the variable under consideration is included.
Past = Initial year value of the variable under consideration is included.
$\mathrm{n}=$ Number of years in the study is considered.

### 6.1 ANALYSIS OF SEGMENTATION WISE AND TOTAL SALES TRENDS OF THE INDUSTRY

The industry's total sales and segment-specific sales trends are shown in Table 1. Passenger vehicle sales were thirty lakhs forty seven thousand five hundred and eighty two in the 2016-17 fiscal year. They rose to thirty three lakhs seventy seven thousand three hundred and eighty nine in the following fiscal year, before falling to thirty lakhs sixty nine thousand four hundred and ninety nine in the following fiscal year, 2021-22. In terms of commercial vehicle sales, they were 7 lakhs 14 thousand eighty two in the fiscal year 2016-17, 10 lakhs 7 thousand and three hundred and eleven in the fiscal year 2018-19, and 7 lakhs 16 thousand five hundred and sixty six in the fiscal year 2021-22 Sales of three-wheelers were five lakhs eleven thousand eight hundred and seventy nine in the 2016-17 fiscal year, seven lakhs one thousand and five in the 2017-18 fiscal year, and two lakhs sixty thousand nine hundred and ninety five in the fiscal year 2021-22. Sales of two-wheelers were one crore seventy five lakhs eighty nine thousand seven hundred thirty eight in the fiscal year 2016-17. They rose to two crores eleven lakhs eighty nine thousand eight hundred forty seven in the fiscal year 2018-19, before declining to one crore thirty four lakhs sixty six thousand four hundred twelve in the fiscal year 2021-22. Sales of quadricycles were 627 in the 2018-19 fiscal year, increased to 942 in the following year, and then fell to 124 in the following fiscal year.
Two crores eighteen lakhs sixty three thousand two hundred and eighty one crores sixty two crores sixty six thousand one hundred and seventy nine crores one crore seventy five lakhs thirteen thousand five hundred and ninety six crores were the industry's total sales in the year.
If we look at the total industry sales and the sales of different categories, we can see that they increased until the years 2018-19 and subsequently fell until the years 2021-22, underscoring the effect of COVID-19 on the industry's sales
Graphs 1 and 2 at the end of the paper illustrate the aforementioned examination of the industry's total sales and segment-wise sales trends.

### 6.2 ANALYSIS OF SEGMENTATION WISE AND OVERALL SALES GROWTH RATES OF THE INDUSTRY.

From the table 2, it is clear that the compound annual growth rates of the three wheelers and two wheelers showing negative growth rates i.e. -10.62 percent and -4.35 percent. Whereas the growth rate of passenger and commercial vehicles are positive, but they are small ie 0.12 percent and 0.06 percent. The growth rate of quadricycles during the period is quite satisfactory and is positive which is 123.31 percent. In case of total sales of the industry the compound annual growth rate is -3.63 percent.
The negative growth rates in the industry is a clear indication of the slump in the economy due to covid-19. The same thing is explained in the graph 3 at the end of the work.

## 7. MAJOR FINDINGS.

The segmentation wise sales trends in the industry has increased from the year 2016 to 2019 and from then the trends have decreased until the year 2022.

1) The overall sales trends of the industry increased from the year 2016 to 2019 and then started declining until the year 2021-22.
2) The segmentation wise sales trends of the industry started increasing from the year 2016-17 to until 2019-20 and then started declining until 2021-22
3) During the period the growth rates of passenger and commercial vehicles registered positive growth rates but are very small. While the growth rates of quadricycles are positive.
4) Contrary to the positive growth rates of passenger, commercial and quadricycles vehicles the growth rates of three wheelers and two wheelers recorded negative growth rates during the period.
5) Overall the industry total sales recorded negative growth rates during the period which is a noteworthy point to consider.

## 8. CONCLUSION.

The industry has shown declining trend from the year 2020 onwards, which is the beginning of the covid-19. During this period there was frequent lockdowns in the economy and curtailing of production due to lack of demand for goods. Most of the industries were closed down during this period. In this pandemic period workers were thrown out of jobs resulting in lack of incomes, lack of demand for goods, cut down in production and this vicious circle continued from 2020. As a result of this all industries in the economy were severely affected resulted in the slowdown of the economy and the Automobile industry is not left behind.
The results of this work on sales trends of the industry are matching according to the statement of the "Society of Indian Automobile Manufacturers". The association in its report stated that this sector registered negative growth in sales of all vehicle categories in FY21 ${ }^{5}$.

Going forward the sector can be supported by government policies, such as reducing the cost of raw materials required for production and cutting down tax rates imposed on the automobile sector. Such measures can help the automobile industry recover faster and stronger.

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## Sales Trends Of Automobile Industry.

Table: 1 (In Numbers)

| Category | $\mathbf{2 0 1 6 - 1 7}$ | $\mathbf{2 0 1 7 - 1 8}$ | $\mathbf{2 0 1 8 - 1 9}$ | $\mathbf{2 0 1 9 - 2 0}$ | $\mathbf{2 0 2 0 - 2 1}$ | $\mathbf{2 0 2 1 - 2 2}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Passenger <br> Vehicles | $3,047,582$ | $3,288,581$ | $3,377,389$ | $2,773,519$ | $2,711,457$ | $3,069,499$ |
| Commercial <br> Vehicles | 714,082 | 856,916 | $10,07,311$ | 717,593 | 568,559 | 716,566 |
| Three Wheelers | 511,879 | 635,698 | $7,01,005$ | 637,065 | $2,19,446$ | 260,995 |
| Two Wheelers | $17,589,738$ | $20,200,117$ | $21,179,847$ | $17,416,432$ | $15,120,783$ | $13,466,412$ |
| Quadricycles | 0 | 0 | 627 | 942 | -12 | 124 |
| Grand Total | $21,863,281$ | $24,981,312$ | $26,266,179$ | $21,545,551$ | $18,620,233$ | $17,513,596$ |

Source: SIAM $^{6}$.
Segmentation Wise Sales Trends Of The Industry During The Period 2016-2022.

Graph: 1


Total Sales Trend Of The Industry In India During The Period 2016-2022


CAGR is calculated for the segmentation wise and overall sales of the Industry for the period 2016-22.
Table: 2

| Category | CAGR |
| :--- | :--- |
| Passenger Vehicles | 0.12 |
| Commercial Vehicles | 0.06 |
| Three Wheelers | -10.62 |
| Two Wheelers | -4.35 |
| Quadricycles | 123.31 |
| Grand Total | -3.63 |

Graphical Representation Of Segmentation Wise And Total Sales Growth Rates Of The Industry During The Period 2016-2022.
Graph: 3

## CAGR of Total sales and segmentation wi:

140.00
120.00
100.00
80.00
60.00
40.00
20.00


