



# Critical Study on Financial Performance Analysis of Auto Industry in Context of COVID 19

Dr. Dhvani B. Desai

Assistant professor

Government Arts and Commerce College, Kachhal

## Abstract

COVID-19 pandemic has hit the Automobile Industry severely with unlikeable influences of closure of factories, disruptions in supply chain, and a sudden crumple in the demand. This article aims to explore the financial performance by examining the financial soundness of few selected companies of the automobile sector. The results of the study reveal that the auto sector has seen the downturn for a short term due to the pandemic. The companies are observed to be financially sound.

**Keywords:** GDP, Automobile sector, FDI, financial health, Altman Z score.

## Introduction

India's automotive sector experienced a serious decline after the introduction of the new industrial policy in 1991. This resulted in the license being revoked and the modern factory being 100% built. Then, in 1993, a new automotive policy was introduced, further strengthening the sector's growth schedule by providing a gateway for global assemblers. Giants such as Bajaj Auto, Hyundai, Tata Motors, Maruti Suzuki and Ashok Leyland have brought tremendous dynamism and competition to the sector. As a result of these efforts, in 2017, India produced an average of 29 million cars per year, making it the 6th largest automaker in the world, of which 4 million were exported. Therefore, this sector is an important pillar of the Indian economy, contributing significantly to GDP.

Needless to say, government intervention has supported the sector's growth. In addition to their direct impact through fiscal policy instruments, industry policy has helped to facilitate “enterprise-level learning processes” and shape skill development. In the first phase of the Automotive Mission Plan (2006-2016), the sector has targeted job creation, GDP contribution, and production of two- and three-wheeled vehicles. In 2016, it provided 7.2% of India's GDP and created jobs for around 32 million people. However, growth in 2017 was impacted by constructive changes such as taxes on goods and services and the transition from BS4 to BS6 emission standards (from 1 April 2020). But this was not the last obstacle. The Covid19 pandemic has intensified the still ongoing impacts (financial express, 2021).

Despite growth in exports, FDI and the automotive industry, the outbreak of the COVID-19 pandemic will affect sales and may affect the financial position of businesses. The financial sustainability of any company is a serious concern for all stakeholders. This study is an attempt to assess the financial health of some of the top automakers. This study is very important for predicting potential financial crises in the sector.

## Literature review:

Ranjithkumar and Eahambaram (2018) tried to examine the factors which drives the financial performance of the Indian automotive industry and as well studied the impact of economic performance on the profitability and liquidity of standalone firms. They observed that liquidity plays a vital role in influencing the financial performance of an auto company. Maintaining adequate liquidity is very important to avoid serious situations.

Yadav et. al. (2020) looked at the impact of the automotive sector on air pollution and detailed the growth patterns of this sector. As the disposable income of rural residents increases, the overall supply and demand increases, leading to increased car sales and increased environmental air pollution.

Moradiet. et al. (2020) found in a research study that the COVID-19 pandemic will significantly change consumer attitudes about their safety and hygiene, which will positively increase demand for personal vehicles and increase the number of future purchases. Finally, the researchers encouraged more use of electric vehicles to maintain environmental sustainability levels.

Sulphey and Nisa (2013) have studied the solvency of 220 small firms listed in BSE, and Swalih and Vinod (2017) has investigated the financial performance of Greenex companies computing Altman Z-Score.

## Objectives of the study

The Existing literatures projects the financial health of the companies based on fundamental analysis using different ratios. The present study is conducted with the following objectives:

1. To study the financial performance of the Indian Automobile sector with reference to Covid-19 using Altman Z-Score.
2. To assess the potential financial distress in the automobile sector in the near future.

## Research Methodology:

Although fundamental analysis can be used to calculate efficiency and a company's financial health and performance can be assessed by using ratio analysis, these measures are inadequate to assess future financial difficulties. The study has been conducted for 5 Automobile companies listed in NSE (National stock exchange). The financial performance of the companies has been studied for the study during the COVID period 2020-21. Altman Z score was calculated to study financial stability. It is a multivariate model that uses a combination of weighted average of five variables including profitability, solvency, leverage, liquidity, and activity to understand a company's financial condition. The data of the individual companies have been retrieved from moneycontrol.com. The revised Altman Z-score has been used to calculate the financial health of the selected companies.

*Altman Z-score model:*

$$Z = 3.25 + 6.56X_1 + 3.26X_2 + X_3 + 6.72X_4 + 1.05X_5$$

Where,

$$X_1 = \frac{\text{working capital}}{\text{total assets}}$$

$$X_2 = \frac{\text{retained earnings}}{\text{total assets}}$$

$$X_3 = \frac{\text{EBIT}}{\text{total assets}}$$

$$X_4 = \frac{\text{Book value of equity}}{\text{total liabilities}}$$

**Model interpretation:**

If Z-score is greater than 2.60= “safe zone”

If Z-score is less than 2.60= “Grey zone”

Z-score is less than 1.1= “Distress zone”

**Data Analysis:**

The Altman Z-score of 5 companies listed in NSE have been calculated and the data considered are Total assets, working capital, retained earnings, Earnings before interest and taxes (EBIT), Market value, Book Value, Total liabilities and sales.

**Table 1: Financials of selected companies**

Company	Total amount of Assets	Firm's net Working capital	Retained earnings	EBIT	Market value	Book Value	Total amount of liabilities	Total amount of Sales
Mahindra & Mahindra	50502.06	4168.7	33871.3	5243.2	75393.4	34492.4	50502.06	45487.8
Ashok Leyland	16389.61	-1575.44	6970.4	672.2	14281.3	7265.43	16389.6	17467.5
Maruti Suzuki	62552.1	-2867.4	48286	7197.7	189185.2	48437	62552.1	75610.6
Bajaj Auto	24773.3	2343.8	19636.1	6583.36	86953.34	19908.4	24773.3	29918.7
Tata Motors	62589.9	-12242.06	17668.11	-2643.4	32326.1	18286.7	62589.9	43485.8

Source: moneycontrol.com

**Table 2: Altman Z-score calculated**

Company	Altman Z-score
Mahindra & Mahindra	7.4
Ashok Leyland	4.8
Maruti Suzuki	7.1
Bajaj Auto	9.2
Tata Motors	2.9

Table 2 shows that all five companies taken for the study are in the safety zone in the Z-score model. The highest Z score is for Bajaj Auto (9.2), whereas it is observed that Tata Motors has the lowest Z-score value i.e., 2.9.

**Discussion**

COVID-19 has thrown the global economy into a major devastation that has disturbed the entire value chains in most Indian industries. This has also affected the automotive to a great extent. The automobile industry had a set-back in FY 2019-20 as sales fell across vehicle segments. According to SIAM data, the Indian auto industry saw a 20.3 degree increase in domestic sales in FY 2020 compared to 5.9% growth in FY 2019. The passenger car segment decreased by 17.3% in FY2020 (up 2.8% in FY2019). This was due to weakening consumer sentiment, rising cost of owning a vehicle and a general recession.

India's commercial vehicle industry recorded a 30.0% decline in FY 2020 compared to 17.1% growth in FY 19 as a result of reduced demand and increased capacity following the transition to BSVI. After the spectacular growth in fiscal 2019, motorcycle sales in the Indian domestic market decreased by 17.5% in fiscal 2020. The motorcycle industry is not in relative demand because it has had to comply with a set of regulations that significantly increase the cost of ownership. Domestic sales of the three-wheeled vehicle industry also declined. After gaining more than 10% in FY2019, it fell 9.2% in FY2020. According to the Ministry of Industrial Development and Domestic Trade (DPIIT), from April 2000 to March 2020, the automobile industry attracted \$24.21 billion in FDI. But, despite of all, the pandemic outbreak has had significant impact on the sales, thus affecting the companies' financial performance.

## Conclusion

According to Altman ZScore analysis, the industry is very strong and healthy. The company's financial performance has declined in the aftermath of COVID-19, but the impact is short-lived. Companies like Mahindra & Mahindra, Bajaj Auto and Maruti Suzuki outperform others in their industry. In September 2021, the Indian government issued a PLI Scheme Notice for automobiles and auto parts worth Rs. 25,938 million (IBEF, 2021). The plan is expected to generate more than 10 billion won in investment. 42.5 billion by 2026 As a result, the industry is booming and likely to accelerate in the post-pandemic situation.

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