# Czech University of Life Sciences Prague 

## Faculty of Economics and Management

## Department of Management



## Master's Thesis

Assessment of the Financial Position and Performance of the Tata Motors and Maruti Suzuki Ltd.

## Chirag Chalke

© 2022 CZU Prague

# CZECH UNIVERSITY OF LIFE SCIENCES 

## PRAGUE

Faculty of Economics and Management

## DIPLOMA THESIS ASSIGNMENT

Eng. Chirag Chalke, B.E.

Economics Policy and
AdministrationBusiness
Administration

Thesis title

## Assessment of the Financial Position and Performance of the Tata Motors and Maruti Suzuki Ltd.

## Objectives of thesis

The aim of this diploma thesis is to assess the financial position and performance of chosen Indian automobile companies by analyzing the company's financial statements with focus on the reportedassets, liabilities, expenses and revenues for a chosen period and to identify the possible financial problems and the most significant factors influencing the profit.

To evaluate the financial performance of Tata Motors and Maruti Suzuki Ltd. To measure the position of companies by using Ratio analysis.

## Methodology

Methodology for the literature overview is based on data collection from the relevant legal framework, specialized publications and other written or online sources. The practical part of the thesis will be basedon the information gained from the published annual reports of the chosen company.

Vertical and horizontal analysis of the financial statements will be used to assess the financial position andperformance of the company and to prepare the practical part of the thesis. Selected ratios of financial analysis will be calculated. The methods of analysis, synthesis, comparison and deduction will be used toformulate the conclusions of the thesis.

The Balance sheet of the company will be analyzed for the assessment of the financial position and the Income statement (Statement of profit and loss) for the assessment of the financial performance. The analysis covers the financial years 2016-2021. Data are obtained from the annual reports of the company. The results of the horizontal analysis will be in \% and each item will be compared with the immediately preceding same item from the previous year (i.e. no base year). The definitions of the vertical and horizontal analysis as well as the formulas of the selected ratios of the financial analysis are included in the literary review of this thesis.

## The proposed extent of the thesis

90

## Keywords

Financial Position, Performance, financial analysis

## Recommended information sources

Carter, T. (2021). The aftermath of reengineering: Downsizing and corporate performance.
Routledge.EHRHARDT, M. C., BRIGHAM, E. F. Corporate finance: A focused approach. Cengage learning, 2016.
Fred Weston, J. (2001). Merger and Acquisitions as Adjustment Processes. Journal of industry, competition and trade, 1(4), 395-410.
KUBÍČKOVÁ D., JINDŘICHOVSKÁ, I. Finanční analýza a hodnocení výkonnosti firem, Praha: C. H. Beck 2015, ISBN 978-80-7400-538-1

Richard Brealey, Stewart Myers, et al. Principles of Corporate Finance | Feb 28, 2019ROSS, S, WESTERFIELD, R., JAFFE, J., \& JORDAN, B. Corporate Finance,

## Expected date of thesis defence

2021/22 WS - FEM

## The Diploma Thesis Supervisor

doc. Ing. Irena Jindřichovská, CSc.

## Supervising department

Department of Trade and Finance

## Advisor of thesis

Irena Jindrichovska

Electronic approval: 14.3.2022
Electronic approval: 14.3. 2022
prof. Ing. Luboš Smutka,
Ph.D.Head of department
doc. Ing. Tomáš Šubrt, Ph.D.
Dean

## Declaration

I declare that I have worked on my diploma thesis titled "Assessment of the Financial Position and Performance of the Tata Motors and Maruti Suzuki Ltd." by myself, and I have used only the sources mentioned at the end of the thesis. As the author of the diploma thesis, I declare that it does not break the copyrights of any person.

## Acknowledgment

I would like to thank doc. Ing. Irena Jindřichovská, CSc. for her help in preparing the thesis and invaluable recommendations. She provided invaluable support from the beginning of the topic selection until the completion of the thesis. I want to thank all professors at the Czech University of Life Sciences for gaining knowledge in economics and management.

# Assessment of the Financial Position and Performance of the Tata Motors and Maruti Suzuki Ltd. 


#### Abstract

The thesis titled "Assessment of the financial situation and performance of Tata Motors and Maruti Suzuki India Ltd." examines the balance sheet and income statement of selected Indian car firms in order to determine their financial status and performance. The information comes from annual reports from corporations like Tata Motors and Maruti Suzuki India Ltd. The data is for the five years prior to 2017, i.e. from 2017 to 2021. Microsoft Excel was used to analyse the data. Horizontal analysis, vertical analysis, and ratio analysis are some of the statistical methods utilised in the analysis. liquidity ratios, leverage ratios, profitability ratios, and activity ratios are all part of the ratio analysis. Under the heading of the result and discussion chapter, the analysis' findings are addressed. According to the data, Tata Motors has a robust asset base, whereas Maruti Suzuki has lower liabilities. In terms of profitability ratios, liquidity ratios, and leverage ratios, Maruti Suzuki is doing well. Tata Motors, on the other hand, has had a bad record in terms of profitability ratios due to losses reported over the last four years. The conclusion is based on the findings discussed in the results and discussion chapter.


Keywords: Financial Analysis, Financial Position, Financial Performance, Tata Motors, Maruti Suzuki, Vertical analysis, Horizontal analysis.

# Posouzení finanční pozice a výkonnosti Tata Motors a Maruti Suzuki Ltd. 


#### Abstract

Abstrakt Diplomová práce s názvem "Posouzení finanční situace a výkonnosti společností Tata Motors a Maruti Suzuki India Ltd." zkoumá rozvahu a výsledovku vybraných indických automobilek scílem určit jejich finanční situaci a výkonnost. Informace pocházejí z výročních zpráv korporací jako Tata Motors a Maruti Suzuki India Ltd. Údaje jsou za pět let před rokem 2017, tedy od roku 2017 do roku 2021. K analýze dat byl použit Microsoft Excel. Horizontální analýza, vertikální analýza a poměrová analýza jsou některé ze statistických metod používaných v analýze. poměrové ukazatele likvidity, pákové ukazatele, ukazatele ziskovosti a ukazatele aktivity jsou součástí poměrové analýzy. Pod nadpisem výsledné a diskusní kapitoly jsou uvedeny poznatky analýzy. Podle údajů má Tata Motors silnou základnu aktiv, zatímco Maruti Suzuki má nižší závazky. Co se týče ukazatelů ziskovosti, likvidity a pákového efektu, Maruti Suzuki si vede dobře. Tata Motors má naopak špatnou bilanci z hlediska ukazatelů ziskovosti kvůli ztrátám vykázaným za poslední čtyři roky. Závěr je založen na zjištěních diskutovaných v kapitole výsledky a diskuse.


Klíčová slova: Finanční analýza, finanční pozice, finanční výkonnost, Tata Motors, Maruti Suzuki, Vertikální analýza, Horizontální analýza.

## Table of content

1 Introduction ..... 8
2 Objectives and Methodology ..... 11
2.1 Objectives ..... 11
2.2 Methodology ..... 11
2.3 Financial Analysis Ratios ..... 12
3 Literature Review. ..... 16
3.1 Financial Analysis Definition. ..... 16
3.2 Financial Statement Definition ..... 17
3.3 Financial Statement Sources ..... 19
3.4 Financial Statement Types ..... 21
3.5 Financial Statement Techniques ..... 22
3.6 Automobile Industry Overview ..... 25
3.7 Top Automobile Companies ..... 29
4 Practical Part ..... 35
4.1 General Information - Tata Motors ..... 35
4.2 General Information - Maruti Suzuki ..... 38
4.3 Financial Position Analysis - Tata Motors ..... 40
4.4 Financial Performance Analysis - Tata Motors ..... 46
4.5 Ratio Analysis - Tata Motors ..... 48
4.6 Financial Position Analysis - Maruti Suzuki ..... 53
4.7 Financial Performance Analysis - Maruti Suzuki ..... 56
4.8 Ratio Analysis - Maruti Suzuki ..... 58
5 Results and Discussion ..... 64
5.1 Financial Position Analysis - Comparative Assessment ..... 64
5.2 Financial Performance Analysis - Comparative Assessment ..... 65
5.3 Ratio Analysis - Comparative Assessment ..... 66
5.4 Profit Influencing Factors ..... 68
5.5 Possible Problem Areas ..... 68
5.6 Key Recommendations ..... 68
6 Conclusion ..... 70
7 References ..... 72
8 Appendix ..... 77
List of tables
Table 1 Assets Vertical Analysis (Tata Motors) ..... 41
Table 2 Equity and Liabilities Vertical Analysis (Tata Motors) ..... 42
Table 3 Assets Horizontal Analysis (Tata Motors) ..... 43
Table 4 Equity and Liabilities Horizontal Analysis (Tata Motors) ..... 45
Table 5 Vertical Analysis of a Standalone Income Statement (Tata Motors) ..... 46
Table 6 Horizontal Analysis of a Standalone Income Statement (Tata Motors) ..... 48
Table 7 Liquidity Ratios in Millions (Tata Motors) ..... 49
Table 8 Profitability Ratios in Millions (Tata Motors) ..... 50
Table 9 Leverage Ratios in Millions (Tata Motors) ..... 51
Table 10 Activity Ratios in Millions (Tata Motors) ..... 52
Table 11 Assets Vertical Analysis (Maruti Suzuki India Ltd.) ..... 53
Table 12 Equity and Liabilities Vertical Analysis (Maruti Suzuki India Ltd.) ..... 54
Table 13 Assets Horizontal Analysis (Maruti Suzuki India Ltd.) ..... 55
Table 14 Equity and Liabilities Horizontal Analysis (Maruti Suzuki India Ltd.) ..... 56
Table 15 Vertical Analysis of a Standalone Income Statement (Maruti Suzuki India Ltd) ..... 56
Table 16 Horizontal Analysis of a Standalone Income Statement (Maruti Suzuki India Ltd) ..... 58
Table 17 Liquidity Ratios in Millions (Maruti Suzuki India Ltd.) ..... 59
Table 18 Profitability Ratios in Millions (Maruti Suzuki India Ltd.) ..... 60
Table 19 Leverage Ratios in Millions (Maruti Suzuki India Ltd.) ..... 61
Table 20 Activity Ratios in Millions (Maruti Suzuki India Ltd.) ..... 61

## List of figures

Figure 1 Liquidity Ratios in Millions (Tata Motors) ..... 49
Figure 2 Profitability Ratios in Millions (Tata Motors) ..... 50
Figure 3 Leverage Ratios in Millions (Tata Motors) ..... 51
Figure 4 Activity Ratios Millions (Tata Motors) ..... 52
Figure 5 Liquidity Ratios in Millions (Maruti Suzuki India Ltd.) ..... 59
Figure 6 Profitability Ratios in Millions (Maruti Suzuki India Ltd.) ..... 60
Figure 7 Leverage Ratios in Millions (Maruti Suzuki India Ltd.) ..... 61
Figure 8 Activity Ratios in Millions (Maruti Suzuki India Ltd.) .....  .62

## 1 Introduction

According to 2020 statistics (2020 Statistics | www.oica.net, n.d.), India's automobile sector is the fifth biggest in the world. In 2019, India was the world's fifth largest automobile producer and the seventh largest commercial vehicle manufacturer. By 2026, the Indian automobile sector (including manufacturing parts) is predicted to be worth Rs 16.16-18.18 trillion (US\$ 251.4-282.8 billion). According to data supplied by the Department of Industry and Trade and Industry (DPIIT), the industry attracted US $\$ 30.51$ billion in FDI between April 2000 and June 2021, accounting for 5.5 percent of overall FDI during the same period (Indian Brand Equity Foundation, 2017).

By 2026, the Indian automobile sector is anticipated to be worth $\$ 300$ billion. Domestic vehicle production climbed at a 2.36 percent CAGR from FY16 to FY20, with 26.36 million cars manufactured locally in FY20. Between FY16 and FY20, domestic automobile sales climbed by 1.29 percent CAGR, with 21.55 million cars sold in FY20 (Indian Brand Equity Foundation, 2020).

India's domestic automotive market is dominated by two-wheelers and passenger cars. Small and medium-sized automobiles are in high demand as passenger vehicles. Two-car wheels and passenger cars account for 80.8 percent and 12.9 percent of the market share, respectively, with more than 20.1 million vehicles sold in FY20 (Indian Brand Equity Foundation, 2020).

The overall production capacity of passenger vehicles, three-wheel drive, two-wheel drive, and quadricycles reached 2,125,304 units in September 2021 (excluding BMW, Mercedes, Tata Motors, and Volvo Auto). The premium automobile market sold 8,500 units in the quarter of July to September 2021. (Indian Brand Equity Foundation, 2017).

Car exports totalled 4.77 million cars in FY20, representing a CAGR of 6.94 percent from FY16 to FY20. Exports of two-wheeled vehicles account for 73.9 percent of total exports, with passenger cars accounting for 14.2 percent, three-wheeled vehicles accounting for 10.5 percent, and retail vehicles accounting for 1.3 percent. From April to June 2021, Indian automobile exports increased to 1,419,430 units, up from 436,500 units in April to June 2020. (Indian Brand Equity Foundation, 2017).

According to CEEW Centre for Energy Finance study, India's electric vehicle industry would be valued $\$ 206$ billion by 2030. This will necessitate a $\$ 180$ billion investment in car production and charging infrastructure. Manufacturers of electric vehicle components, electric automobiles, and end-of-line firms would spend Rs. 25,045 crore (US $\$ 3.67$ billion) in electric vehicles between January and July 2021. Many technological and automotive businesses have indicated interest in the Indian EV market and/or made investments there. EVs have been launched to the market by firms such as Hyundai, MG Motors, Mercedes-Benz, and Tata Motors. According to a recent survey by Castrol, the
majority of Indian customers may consider purchasing an electric vehicle by 2022. The average Indian customer will be 'tipping points' for regular EV detection at a price of Rs. 23 lakh (or US $\$ 31,000$ ), a 35-minute charging time, and a range of 401 kilometres from a single charge, according to the report (Indian Brand Equity Foundation, 2017).

According to the India Energy Storage Alliance research, the EV market in India is expected to develop at a CAGR of $36 \%$ by 2026. In addition, over the same time period, the market for electric vehicle batteries is expected to grow at a CAGR of $30 \%$. The Indian government announced the PLI programme for car components and cars worth Rs. 25,938 crore (US \$ 3.49 billion) in September 2021. By 2026, the initiative is estimated to produce more than Rs. 42,500 (US $\$ 5.74$ billion) in investment (Indian Brand Equity Foundation, 2017).

Under an upgraded programme to stimulate the manufacturing and export of clean technology cars, the Indian government has set aside $\$ 3.5$ billion in compensation over the next five years, up to 2026. India's government wants to make it a worldwide industrial and research and development hub (R\&D). It has established the National Automotive Testing and R\&D Infrastructure Project (NATRiP) and the National Automotive Board to serve as a conduit between the government and the private sector. Since 2015, five research and research institutions have been formed in the country as part of the (NATRiP). The Project Implementation and Sanctioning Committee (PISC) approved NATRiP's proposal for a "Grant-in-Aid Electric Vehicle (EV) Testing Infrastructure Certificate of Performance from the NATRIP Implementation Society" under FAME (Faster Adoption and Manufacturing (Hybrid) and Electric Vehicle System in India) on January 03, 2019. (Indian Brand Equity Foundation, 2017).

In addition, the Indian government has set a target of selling entirely electric vehicles in the country. As of June 2021, the FAME-II programme has spent Rs. 871 million (R117 million), subsidising 87,659 electric automobiles and restricting 6,265 electric buses to different regional / city transportation operations. Under the FAME initiative, the Government of India's Department of Hard Industry has identified 11 cities around the country for the introduction of electric vehicles into its public transportation system. The program's first phase was extended through March 2019, and the government authorised the FAME-II programme in February 2019, which required a sum of Rs. 10,000 crore (US \$ 1.39 billion) in FY20-22. The government has declared that under the Union's 2019-20 budget, it would grant an extra tax deduction of Rs. 1.5 lakh (US $\$ 2,146$ ) on interest paid on loans taken to acquire electric vehicles (Indian Brand Equity Foundation, 2017).

With the exception of e-rickshaws, EV sales in India increased by $20 \%$ in FY20, reaching 1.56 lakh units driven two-wheel drive. India's financial EV market is expected to reach Rs. 3.7 lakh crore
(US $\$ 50$ billion) by 2030, according to NITI Aayog and the Rocky Mountain Institute (RMI). By 2023, the Indian government wants the automobile industry to generate $\$ 8-10$ billion in local and international investment (Indian Brand Equity Foundation, 2017).

After getting the requisite approvals from the Supreme Court of India, Mr. Nitin Gadkari, Minister of Trade Unions, Transport and Highways, said in September 2021 that the government intends to make it essential for automobile manufacturers to create flexible petrol engines (Indian Brand Equity Foundation, 2017).

In the domains of automobiles and auto components, the Union Cabinet, led by Prime Minister Shri Narendra Modi, has launched the Production-Linked Incentive (PLI) Scheme. The initiative offers financial incentives to encourage further automation of Advanced Automotive Technology household goods and investment in the automotive value chain. The deadline for bidding on this programme was January 9, 2022. (Bajwa, 2018).

## 2 Objectives and Methodology

### 2.1 Objectives

The goal of this diploma thesis is to evaluate the financial position and performance of selected Indian automobile companies by analysing the company's financial statements for a given period, focusing on reported assets, liabilities, expenses, and revenues, and identifying potential financial problems as well as the most significant profit-affecting factors.
$\checkmark$ To assess Tata Motors and Maruti Suzuki Ltd.'s financial performance.
$\checkmark$ To use Ratio Analysis to assess the financial health of firms.

### 2.2 Methodology

The technique for the literature review is based on information acquired from the relevant legal framework, professional publications, and other printed and electronic sources. The practical element of the thesis will be based on data from the published annual reports of the chosen firm.

To examine the company's financial position and performance, as well as to prepare the practical component of the thesis, the financial statements will be analysed vertically and horizontally. There will be a lot of financial analysis ratios computed. Analytical, synthesis, comparison, and deduction processes will be used to develop the thesis' results.

The financial position of the firm will be investigated, as will the income statement (Statement of Profit and Loss). From 2017 through 2021, the research will be conducted. The data comes from the annual reports of the firm. The results of the horizontal analysis will be given in percentages, and each item will be compared to a previous year's equivalent (i.e. no base year). The literary evaluation of this thesis covers the ideas of vertical and horizontal analysis, as well as equations for selected financial analysis ratios.

### 2.3 Financial Analysis Ratios

The following are the ratios that have been used for financial analysis of businesses:

1. Liquidity Ratios The cash ratio is a measure of how liquid a company is.

This rate is used to determine a company's capacity to repay short-term debt in cash or near-cash financials as easily-sold collateral. Lenders can use this information to determine how much, if any, they want to lend to a firm.

The cash ratio formula is as follows:
(Investments + Cash \& Cash Equivalents) / (Cash Ratio) (Total Current Liabilities)

The current ratio is
This represents the company's short-term liquidity, since the current high rate reflects the company's strong quality and sufficient capacity to repay its loans. It also safeguards the safety of debtors' investments (Saigeetha \& Surulivel, 2017).

The current ratio formula is as follows:
Current Ratio $=($ Current Assets $) /($ Current Liabilities $)($ Current Liabilities $)$

Quick ratio
This metric depicts the firm's liquidity situation. In most cases, a rapid 1: 1 ratio is regarded adequate. Despite the fact that a fast rate is a lower income test than the present rate, it should be utilised with caution. When your current assets include doubtful and low-paying debtors, anxiety with an immediate rate of more than 1 may not be able to meet your short-term obligations, whereas anxiety with an immediate rate of less than 1 may be able to meet your short-term value-term obligations over time due to its very effective inventory management. If, on the other hand, present debt exceeds immediate assets, the transaction payment in the future will be unsatisfactory (Kirti et al., 2020).

The quick ratio formula is as follows:
(Current Assets - Inventories) / Quick Ratio (Current Liabilities)

The Profitability Ratio is a measure of how profitable a business is.
Profit after taxes
It determines how lucrative a company's revenues are after all expenditures have been removed, such as interest rates and dividends. The bigger the profit margin of a corporation, the better (Ramana et al, 2011). The rate may be computed as follows in terms of total profit margin.

Return on Investment (ROI) (\%)
It exhibits the capacity to handle deposits at fair market value and invest them profitably (Ahmed, 2009). This estimate depicts the amount of income that can be generated from assets. When the ROA is high, the company makes a lot of money.

The following is the formula for determining return on assets:
(Net Income) / (Return on Assets) / (Return on Assets) / (Return on Assets) / (Return on Assets (Total Assets)

## Return on Investment (ROI) (\%)

There is a supporting definition for equity returns that is significant for company study owners and lenders. In general, the number of indicators should be more than the non-performing bond interest rate (erná, 1997). The rate of return on equity is mostly determined by the return on assets and the loan interest rate. The degree of profit generated by the business study, the fall in interest rates, the decline in equity shares, the return of the business study on assets, and a combination of all of the preceding elements all contribute to a rise in the index's ROE. 2015 (Branham).

The following is the formula for calculating return on equity:
(Net Income) / (Return on Equity) / (Return on Equity) / (Return on Equity) / (Return on Equity) / (Total Equity)

## 3. Ratio of Solvency

The leverage ratio is another term for it. It examines a company's long-term financial obligations. This ranking demonstrates how long-term investments are utilised by businesses. The following are the estimations for solvency:

## Equity to Debt Ratio

In the event that an organisation is necessary to execute a commercial transaction, the Debt Equity rating represents the equity potential associated with the shareholder in the balance of payments (Navneet \& Sakshi, 2020). The debt-to-equity ratio is calculated using the following formula:
(Total Debt) / (Debt to Equity) (Total Equity)

## Assets to Debt Ratio

The whole quantity of assets secured by the total liabilities is represented by this ratio. A lower asset rate is preferable to a higher asset rate, and vice versa. The following is the formula for determining the debt-to-asset ratio:
(Total Debt) / (Debt to Assets) (Total Assets)

## Capital to Debt Ratio

Because the amount of debt is considered in the computations, this rate differs somewhat from the prior rate. It demonstrates how high the risk is and how shaky the solvency is. Calculate the debt-to-equity ratio using the following formula:
(Total Debt) / (Density of Debt) (Total Equity)
4. Ratio of activity

Ratio of asset turnover
In general, for the advantage of an asset, the higher the ratio, the better the condition. This index's suggested minimum value is 1 . However, the industry has an impact on the pricing. Low asset turnover ratio results indicate regions of unequal business research asset utilisation and its inability to be sustained (Knapková, 2013).

The asset turnover ratio is calculated using the following formula:
(Net Sales) / (Asset Turnover Ratio) (Total Assets)

## Ratio of Inventory Turnover

An inventory turnover rate is a metric that assesses how successfully inventory is maintained. The number of times an item is sold during a certain period of time.

The following is the formula for inventory turnover ratio:
$($ Cost of Sales) $/$ Inventory Turnover Ratio $=($ Cost of Sales $) /$ Inventory Turnover Ratio $=$ (Inventory Cost)

## Turnover of Receivables Ratio

This ratio defines how long a corporate asset, such as receivables, stays in the balance sheet or how long it takes to pay a receivable on an average basis. Because most things transported have bills and each invoice has a maturity, the suggested price is plainly the average maturity time of invoices. If the receivable time exceeds the typical maturity of bills, it may indicate that business partners are not adhering to the commercial credit policy. However, it is not unusual for payment bills to be overdue these days. Obviously, the size of the studied firm must be considered in this scenario.

Long-term receivables maturity can cause major financial issues for small enterprises, including the threat of bankruptcy. Large financial institutions, on the other hand, can sustain long-term maturity. The horizontal phase must match the conditions of the company trade policy to be considered fair (Rková, 2005).

The following is the formula for the receivable's turnover ratio:
(Net Sales) / (Total Account Receivables + Vendor non-trade receivables) = Receivables Turnover Ratio

## 3 Literature Review

The literature evaluation serves as a theoretical foundation for the thesis. It covers a variety of financial analysis techniques that serve as a foundation for the thesis's practical section, as well as the features of India's car sector.

### 3.1 Financial Analysis Definition

Financial analysis is the process of studying a company's financial situation in order to determine its stability, performance, and profitability. Financial analysis has several goals, including identifying changes in financial systems, assisting in the measurement of business growth, and identifying linkages in order to reach a sound conclusion in a company's operations. Comparing a company's performance against that of its competitors is another important part of financial analysis (Laitinen, 2002).

Financial analysis is the foundation for examining a company's financial performance, and it frequently falls into important areas and results including efficiency, efficiency, productivity, supply chain management, and so on. Financial analysis is a "health" diagnostic technique that gives significant information to business managers and owners (Vlachynsk, 2009). It highlights a company's shortcomings and strengths.

Company financial analysis, according to Sedláek, is a measure of corporate financial management in which data is collected, assembled, and compared to one another. Furthermore, given the causal link between the data and their evolution, the relationship between them is restricted. This improves data processing's descriptive power as well as its instructional value. As a result, it focuses on identifying issues, strengths, weaknesses, and procedures that provide value to the company.

Financial analysis provides us with information that allows us to draw specific conclusions about a company's general management and financial status, and it serves as the foundation for management choices (Sedláek, 2009). The primary goal of financial analysis is to identify the company's assets and financial status, as well as to produce inputs for internal management choices. Financial analysis requires a high level of complexity and consistent performance (Hrd, 2009).

A system of financial indicators is used to announce a review of a company's financial status, which should be organised and tailored to reflect all of the relevant parts of the financial position. As a result, measuring indicators are utilised to characterise the financial status. Ratings indicators enable a company's performance to be compared to those of other firms or particular geographical indicators. The total number of independent indicators we will offer is equal to the total number of indicators we will present. These will be the most extensively utilised financial indicators in particular. However, a
variety of indications are employed in successful use, and it is impossible to describe them all (Baran, 2015).

In reality, the use of a few fundamental indications that may be classified according to management test sites and the company's financial life has been demonstrated to be acceptable. Credit, liquidity, profitability, activity, financial market indicators, and other indicators are examples of these types of indicators (Knapková, 2013).

### 3.2 Financial Statement Definition

Financial statements are official and legitimate statements issued by a concerned business in order to present its financial data. At the same time, business transactions are documented in the books and published in the financial statements. Certain facts are always assumed to be acceptable or explicit by accountants. In other words, as indicated in the financial accounts, a business transaction is documented with certain assumptions such as 'anxiety flow,' 'fixed quantity of rupee,' and so on (S. Lakshmi, 2015)
"Analysis and interpretation of financial statements is an attempt to evaluate the value and interpretation of financial statements in order to forecast future prospects, interest rates, debt maturity (both current and long-term), and opportunities." "A good dividend policy" Kennedy and Muller (Kennedy \& Muller, 1999).

The financial statements' goals are to give information about the business's financial situation, performance, and changes in financial position that may be used by a variety of users to make economic decisions (S. Lakshmi, 2015).

Users can utilise financial statements for a variety of reasons:

- Financial statements are used by owners and managers to make important business decisions that affect their long-term viability; financial analysis is then performed on these statements to provide management with a more comprehensive understanding of statistics; and financial statements are also used in the annual management report for shareholders.
- Financial institutions use them to decide whether to provide the company with new operating funds or to extend collateral (such as long-term bank loans or loans) to finance extensions and other significant costs. - Employees also need these reports to enter into collective bargaining agreements with management, in the case of trade unions or individuals in negotiating with a partner, promotions and standards (S. Lakshmi, 2015).

Financial statements are a full, meaningful, and dependable source of information in today's world, allowing one to create an opinion on a company's position and financial position based on them (Thalassinos and Liapis, 2014). Financial statements of accounting are an open source of information, according to the law, and their structure, content forms, and presentation are integrated with the fundamental parameters, allowing for common reading and analysis methods (Suryanto and Thalassinos, 2017).

Company leaders rely on reporting to make management choices. Its data is required to examine the organization's activity. As a consequence, the causes of departures from previously specified limitations may be identified, and underused production regions can be revealed. The yearly reports of many corporations on various advances are extensively used by statistical agencies to estimate the technique and amount of product development. The accounting data from the annual report gives top management with the knowledge they need to fund investment initiatives.

The purpose of the user area financial statement analysis is to study and assess the information in the report in order to draw valid conclusions about the entity's previous performance in order to forecast its future performance. An audit of financial accounts is a procedure for evaluating a company's current and previous financial performance. The most essential aspects of the firm are also established as a consequence of the financial statement analysis, which testify, in particular, to its success or risk of collapse (Izuymov et al., 2017). The examination of financial statements is subject to a separate regulation for various users, depending on the rate of usage.

At the same time, when evaluating financial accounts, the analysis and work orientation may differ. As a result, the financial statements of the organisation might be valuable to a variety of parties (Bondarenko, 2010).

Financial statements must be prepared in order for a firm to operate successfully. It has to do with not only summarising the outcomes of its financial and economic operations throughout time, but also analysing the quality of company interactions with government officials who control any economic activity in government, including profit-related activities (Gapsalamov et al., 2017; Bittman et al., 2017). As a result, fines are levied on the firm based on how frequently the financial statements are produced, as well as the frequency and severity of tax assessments. It is also necessary to gain an overall image of a legal company, its efficacy, financial stability, and other indications using timely and high-quality financial statements (Korableva and Kalimullina, 2014). The importance of the company's financial statements to its executives and other entities stems from this.

A financial statement is the formal declaration of a corporation that examines every element of its financial information. A financial statement's principal goal is to give information and
comprehension of a company's financial characteristics. As a result, financial statement preparation is just as crucial as financial choices.

A financial statement, according to Hamptors John, is a compilation of facts organised according to good and consistent accounting methods. Its goal is to communicate a company's financial ramifications. It can reflect a company's financial situation over time, as in the case of a balance sheet, or it can show service activity over time, as in the case of an income statement (C. \& T., 2009). "The financial statements give a summary of the entity's financial statements, including a balance sheet displaying assets, liabilities, and obligations as particular data, and an income statement indicating operational results over a period of time," according to John N. Nyer (1969).

### 3.3 Financial Statement Sources

Two key statements are frequently included in financial statements: I Profit and loss account or income statement. (ii) A declaration of balance or condition. Parts of the statements that are particularly valuable for internal purposes are also prepared by business organisations, such as: I A statement of changes in the equity of the owner. (Ii) Statement of Financial Position Changes (C. \& T., 2009).

## Profit and loss statement

The income statement, commonly known as the profit and loss account, is a financial statement that shows a company's success through time. It generally covers a calendar years' worth of accounting. Determines a company's overall performance, including revenue earned and expenditures expended to get that income. The income statement aids in determining the entire profit and loss of the company (C. \& T., 2009).

## Balance sheet statement

The balance sheet, also known as the statement of position, represents the company's financial condition at the conclusion of the fiscal year. The position statement aids in identifying and comprehending the company's overall assets, liabilities, and capital. With the use of a position statement, one may comprehend the benefits and drawbacks of concern (C. \& T., 2009).

A balance sheet (also known as a financial statement or statement of financial position) is a summary of a person's or organization's financial or individual financial balance, whether it is international ownership, corporate, corporate, personal limit, or a company or other organisation such as a government or non-profit organisation. Assets, liabilities, and ownership equity are all reported at a given point in time, such as the conclusion of the fiscal year. The balance sheet is sometimes referred to as a "snapshot of the company's financial status" (Williams, Jan R.; Susan F. Haka; Mark S. Bettner; Joseph V. Carcello, 2008). The balance sheet is the only one of the four main financial statements that only pertains to one region during the business calendar year.

A standard firm balance sheet contains two sides: assets on the left, and funding on the right, which is divided into two sections: liabilities and ownership equity. The most important asset types are generally presented first, and in financial order (Daniels, Mortimer, 1980).

Liabilities come after assets. Equity, also known as total assets or corporate value, is the difference between assets and liabilities, and according to accounting estimates, the total value should be equal to the assets minus liabilities (Williams, Jan R.; Susan F. Haka; Mark S. Bettner; Joseph V. Carcello, 2008).

## Statement of Equity Changes

It's also known as a profit and loss statement. This declaration details changes in the owner's status within the business. How savings are used to deal with corporate problems. Today, the addition of a separate declaration of changes in proprietary equity is unpopular, and no one is going to correct it (C. \& T., 2009).

## Financial Position Changes

We can't measure the true condition of the financial statements since the income statement and position statement are merely suggestive of the financial situation. The statement of financial situation aids in determining how the financial status has changed from one period to the next.

The fund flow statement, which contains changes in active cash flow, and the cash flow statement, which includes changes in the financial position, are both included in the statement of financial status (C. \& T., 2009).

### 3.4 Financial Statement Types

Financial Statement Analysis is also necessary in order to comprehend financial situations throughout time. "The analysis of financial statements is largely a study of the relationship between the different financial assets of an entity as disclosed by a single set of statements, as well as the study of the trends of these components as represented in the series of statements," according to Myres (1969). On the basis of resources and techniques of operation, financial statement analysis may be divided into two categories (C. \& T., 2009).

## 1. Based on the Material

The analysis of financial accounts may be divided into two groups based on the instruments used: external analysis and internal analysis.

## External Evaluation

External audits are frequently performed outside of company issues, although they are indirectly engaged in business concerns such as investors, lenders, government organisations, and rival credit unions. External analysis is extremely useful in gaining a better knowledge of a company's financial status and performance. External analysis is heavily reliant on the concern's publicly available financial statements. This study only gives a limited amount of information on company problems (C. \& T., 2009).

## Internal Examination

In this form of examination, the corporation itself gives certain vital facts about the business concern. This analysis is performed to determine how well each department's function and business concern unit are performing. Internal analysis aids in the decision-making process for accomplishing a company's goals (C. \& T., 2009).

## 2. Based on the operating method

Financial statement analysis may be separated into two broad groups based on operational methods: horizontal analysis and direct analysis.

## Analysis of the Horizontal

The financial accounts are compared over a few years in a horizontal analysis, and the corporation may make decisions based on the results. In general, the current year's data are compared to the base year (which is set at 100) to see how financial information varies from year to year. This type of analysis is also known as dynamic analysis (C. \& T., 2009).

## Analysis from the top down

Financial statements that use vertical analysis analyse the relative density of an asset in a financial statement over time. For example, sales are rounded up to the nearest hundred dollars, and certain things are converted to sales numbers (C. \& T., 2009).

### 3.5 Financial Statement Techniques

The primary goal of financial statement analysis is to identify financial performance and the performance of business concerns. The financial accounts of a corporate organisation are examined using a variety of procedures or methodologies. The following are some of the most frequent approaches or strategies utilised by businesses (C. \& T., 2009).

## 1. Analysis of Comparative Statements

A. Analysis of Comparative Income Statements
B. Analysis of Comparative Position Statements
2. Analysis of Trends
3. Statement of Cash Flow
4. Statement of Cash Flow
5. Analysis of Ratios

## 1. Analysis of Comparative Statements

The comparison of financial statements at various dates is known as comparative statement analysis. This statement clarifies the nature of financial performance comparisons and performance over time. Comparative financial statements are likewise split into two parts: comparative balance sheet analysis and comparative profit and loss analysis (C. \& T., 2009).

## A. Analysis of Comparative Income Statements

Only the income statement at various dates is included in the comparative income statement study. The income statement is compared to prior year's statistics or one year's income statement figures are compared to other years in this study. The comparative income statement can be analysed on a horizontal or vertical level. This sort of study aids in comprehending a company's true financial performance, as well as how profit, sales, and costs fluctuate over time (C. \& T., 2009).

## B. Analysis of Comparative Balance Sheets

Only the balance sheet at various dates is included in the comparative balance sheet analysis. The balance sheets are compared to prior year's figures or one-year balance sheet statistics compared
to past years in this study. The comparative balance sheet can be analysed on a horizontal or vertical level. This form of study aids in comprehending a company's true financial status, as well as how assets, liabilities, and capital are invested throughout time (C. \& T., 2009).

## 2. Analysis of Trends

Making automated data series trends may be used to examine financial accounts. It can be in either an upward or downward direction, with each item having a percentage link to a statement of 100 percent normal value. From financial accounts, trend analysis helps to understand trend correlations and various elements. This percentage may also be used as a sign of changes in financial information from a previous period. Only important components are included in this study when calculating the percentage of trend (C. \& T., 2009).

## 3. Statement of Fund Flows

The funds flow statement is a useful instrument that may be utilised in a variety of ways. It aids in comprehending the changes in a company's financial condition between the starting and ending financial statement dates. It's also known as a statement of finances sources and uses. A funds flow statement is described by the Institute of Cost and Works Accounts of India as "a statement, prospective or retrospective, giving forth the sources and use of an enterprise's money." The goal of the statement is to clearly express the need for finances, how they are planned to be collected, and how they will be used and used efficiently "(C. \& T., 2009).

## 4. Statement of Cash Flow

One of the most significant instruments, the cash flow statement, is employed in a variety of ways. Understanding the changes in the company entity's financial situation between the first and last days of the financial statements is beneficial. The statement of resources and expenditures is another name for it. The cash flow statement is described as "an expected or backward statement, putting forth the resources and spending of a firm" by the Cash and Performance Management Centre of India. The statement's objective is to clearly describe the need for finances as well as how they will be gathered and used economically and effectively" (C. \& T., 2009).

## 5. Analysis of Ratios

A typical method for examining financial accounts is measurement analysis. Calculate one number's mathematical connection with another number. The rating is used as a metric for evaluating
a company's financial performance. A calculation scale depicts the mathematical relationship between two numbers that have a certain relationship. Different sorts of doses can be identified (C. \& T., 2009). The following is a breakdown of financial management perspectives: Liquidity Ratio, Activity Ratio, Solvency Ratio, and Profitability Ratio are all terms used to describe how liquid a company is.

## Ratio of Liquidity

A temporary measurement is another name for it. This metric aids in determining a company's financial success, as well as its capacity to satisfy present obligations. This estimate depicts the link between a company concern's current assets and current assets through time.

## Ratio of activity

It's also known as the turnover rate. This metric assesses the efficiency of a company's existing assets and liabilities over time. This metric is important for determining the efficiency of a company.

## Ratio of Solvency

The leverage ratio is another term for it. It examines a company's long-term financial obligations. This ranking demonstrates how long-term investments are utilised by businesses. The following are the estimations for solvency:

## Ratio of Profitability

This ratio aids in determining a company's profit status. Net profit, return on assets, and return on equity are among the major profit estimates.

### 3.6 Automobile Industry Overview

By 2020, India will have sold 3.49 million passenger and retail cars, making it the world's fifth largest vehicle market. In 2019, it was the sixth largest commercial vehicle manufacturer (IBEF, 2021).

Because of the growing middle class and young population, the two-wheeled category leads the market in terms of volume. In addition, corporations' rising interest in exploring local markets aided the sector's expansion (IBEF, 2021).

India is also a major exporter of automobiles, with considerable growth expected in the near future. Furthermore, various efforts by the Indian government and large vehicle dealers in the Indian market are predicted to propel India to the forefront of the global two-wheeler and four-wheeler markets by 2020. (IBEF, 2021).

## Market Capacity

Domestic vehicle production climbed at a 2.36 percent CAGR from FY16 to FY20, with 26.36 million cars produced locally by FY20. Overall, domestic automobile sales grew at a 1.29 percent compound annual growth rate (CAGR) from FY16 to FY20, with 21.55 million vehicles sold in FY20. The overall passenger car manufacturing capacity in FY21 was 22,652,108. (IBEF, 2021).

As of October 2021, the total production capacity of three-wheel drive, two-wheel drive, and quadricycle passenger vehicles (excluding BMW, Mercedes, Tata Motors, and Volvo Auto) was 2,214,745 units (IBEF, 2021). India's domestic automotive market is dominated by two-wheelers and passenger cars. Small and medium-sized automobiles are in high demand as passenger vehicles. By FY20, two-wheeled vehicles and passenger vehicles accounted for 80.8 percent and 12.9 percent of the market share, respectively, with over 20.1 million cars sold (IBEF, 2021).

The premium automobile market sold 8,500 units during the quarter of July to September 2021. Car exports totalled 4.77 million cars in FY20, representing a CAGR of 6.94 percent from FY16 to FY20. Exports of two tyres account for 73.9 percent of total exports, with passenger cars accounting for 14.2 percent, three-wheelers accounting for 10.5 percent, and retail vehicles accounting for 1.3 percent. From April to June 2021, Indian automobile exports increased to 1,419,430 units, up from 436,500 units in April to June 2020. (IBEF, 2021).

With the exception of E-rickshaws, EV sales in India increased by 20\% in FY20, reaching 1.56 lakh units driven two-wheel drive. India's financial EV market is expected to reach Rs. 3.7 lakh crore (US $\$ 50$ billion) by 2030, according to NITI Aayog and the Rocky Mountain Institute (RMI). According to the India Energy Storage Alliance research, the EV market in India is expected to develop at a CAGR of $36 \%$ by 2026. Furthermore, market speculation on electric vehicle batteries is expected to rise at a CAGR of $30 \%$ over the same time period (IBEF, 2021).

Premium motorbikes had a sevenfold surge in domestic sales in India from April to September 2019, reaching 13,982 units. By 2021, sales of premium cars are predicted to reach $28,000-33,000$ units, up from 20,000-21,000 units in 2020. By 2021, the market is expected to grow due to the infusion of new manufacturers and product releases (IBEF, 2021).

## Investments

A few vehicle manufacturers have begun spending extensively in various segments of the business in response to rising demand in recent months. According to data given by the Department of Industry and Trade and Industry (DPIIT), the industry garnered \$ 30.51 billion in Foreign Direct Investment (FDI) between April 2000 and June 2021, accounting for about 5.5 percent of overall FDI during that time period (IBEF, 2021).

The following are some of the most recent / planned investments and innovations in India's automotive sector:

The Indian Oil Corporation (IOC) and two other public sector oil firms said in November 2021 that they will deploy 22,000 electric vehicle charging stations over the following 3-5 years. Tata Motors stated in November 2021 that in the first quarter of the next fiscal year, it will open automobile dumping centres through a company based in Ahmedabad, Gujarat. Skoda Auto announced intentions to manufacture electrified automobiles in India in November 2021. However, before committing to local manufacture, the corporation may showcase its first electric vehicle, Enyaq, via the CBU (IBEF, 2021).

Hero Motor (HMC), the parent business of Hero Cycles, announced a collaboration with Yamaha, a Japanese two-wheeled champion, to create e-bike electric motors for the global market in November 2021. Tata Motors stated in October 2021 that the independent TPG team and Abu Dhabi ADQ had agreed to invest Rs. 7,500 crore (US \$ 1 billion) in the company's electric vehicle category. Hero Electric announced intentions to raise manufacturing capacity at its facilities in Ludhiana, Punjab, from 1 lakh units per year to 5 lakh units per year by March 2022 in September 2021. (IBEF, 2021).

Hero Electric announced intentions to raise manufacturing capacity at its facilities in Ludhiana, Punjab, from 1 lakh units per year to 5 lakh units per year by March 2022 in September 2021. Hindustan Zinc Ltd. planned a $\$ 1$ billion investment in its eight mines in August 2021 to replace dieselpowered trucks with battery-powered electric vehicles (IBEF, 2021).

Maruti Suzuki India announced an investment of Rs. 18,000 crore (US $\$ 2.42$ billion) in a new manufacturing plant in Haryana in July 2021, with a capacity of 7.5-10 lakh units per year. The business plans to boost capital investment by 67 percent to Rs. 4,500 (US $\$ 605$ million) crore in FY22 as it prepares to protect its market supremacy (IBEF, 2021).

Hyundai Motor India unveiled its new company headquarters in Gurgaon in July 2021, with an investment of Rs. 2,000 crore (US \$ 269 million). Mahindra and Mahindra announced a three-year investment plan for Rs. 3,000 crore (US \$ 403 million) in April 2021. Manufacturers of electric vehicle components, electric automobiles, and end-of-line firms would spend Rs. 25,045 crore (US \$ 3.67 billion) in electric vehicles between January and July 2021. (IBEF, 2021).

In FY21, passenger automobile sales totalled 27.11 lakhs, with two-wheel drive units accounting for 151.19 lakhs, commercial vehicle sales totalling 5.69 lakhs, and three-wheel drive units accounting for 2.16 lakhs. The overall number of passenger cars sold in 2019-20 was 2.8 million, up from 2.7 million units sold in FY21. To encourage the use of electric vehicles, the Delhi government began the process of installing 100 automobile battery charging stations around the country in February 2021. (IBEF, 2021).

Fiat Chrysler Automobiles (FCA) announced a $\$ 250$ million investment in India in January 2021 to increase its line of indigenous goods. To satisfy the demands of the Indian electric automobile, an investment of Rs. 12.5 trillion (US \$ 180 billion) in automotive production and charging infrastructure would be required by 2030. (EV). After recovering from the effects of the pandemic, Lamborghini declared in January 2021 that sales in India will be greater than they were in 2019. Tesla, an electric car manufacturer, established a research and development facility in Bengaluru in January 2021 and formed its subsidiary as Tesla India Motors and Energy Private Limited (IBEF, 2021).

## Initiatives of the Government

The Indian government promotes international investment in the automobile industry by allowing 100 percent direct foreign direct investment (FDI) through the automatic method.

The following are some of the most recent initiatives made by the Indian government:
Under the automotive production-linked incentive (PLI) programme, the union government added 100 advanced technologies by November 2021, including other fuel systems such as compressed
natural gas (CNG), Bharat Stage VI compliant petrol engines, electronic safety (ECU) units, driver assistance systems, and -e- quadricycles (IBEF, 2021).

After getting the requisite approvals from the Supreme Court of India, Mr. Nitin Gadkari, Minister of Trade Unions, Transport and Highways, said in September 2021 that the government intends to make it essential for automobile manufacturers to create flexible petrol engines. The Indian government announced the PLI programme for car components and cars worth Rs. 25,938 crore (US $\$ 3.49$ billion) in September 2021. By 2026, this initiative is estimated to produce more than Rs. 42,500 (US \$ 5.74 billion) in investment (IBEF, 2021).

Under an upgraded programme to stimulate the manufacturing and export of clean technology cars, the Indian government has set aside $\$ 3.5$ billion in compensation over the next five years, up to 2026. As of June 2021, the FAME-II programme has spent Rs. 871 million (R117 million), subsidised 87,659 electric automobiles, and approved 6,265 electric buses for different regional / urban transportation operations (IBEF, 2021).

India opened the National Automotive Tracks Track (NATRAX) in July 2021, which is Asia's quickest track for automotive testing. The government has adopted a voluntary disposal policy in the Union's 2021-22 budget, which is projected to raise demand for new cars when autonomous vehicles already functioning on India's roads are removed. To encourage the use of electric vehicles, the Delhi government began the process of installing 100 automobile battery charging stations around the country in February 2021. (IBEF, 2021).

Under the Department of Heavy Industries' production-linked incentive (PLI) scheme, the Union Cabinet approved Rs. 57,042 crore (US \$ 7.81 billion) for the automobile and automotive industry. India's government wants to make it a worldwide manufacturing and research and development hub (R\&D). The Government of India wants to create R\&D centres at a cost of Rs 388.5 million under the NATRiP in order to make India's industry world-class (IBEF, 2021).

Under the FAME (Faster Adoption and Manufacturing of (Hybrid) and Electric Vehicles in India) initiative, the Government of India has identified 11 cities around the nation that would use EVs in their public transportation systems. The government will also build a learning centre for newcomers to the field of electric vehicles. The FAME-II initiative, which required a sum of Rs. 10,000 crore (US $\$ 1.39$ billion) for FY20-22, was authorised by the Indian government in February 2019. (IBEF, 2021).

## Highlights

The Indian automobile industry has achieved the following:

According to Venture Intelligence, vehicle manufacturers spent US \$ 501 million in the start-up of Indian auto-tech in H1 2019.

Investment surged by around 170 percent to \$ 397 million from the start of EV 2019 (through the end of November).

A delegation of ministers authorised 5,645 electric buses in 65 locations on July 29, 2019.
The Implementation and Reduction Committee (PISC) accepted NATRiP's request for the "Grant-In-Aid infrastructure for EV certification from the NATRIP Implementation Society" under the FAME Scheme on 3 January 2019.

Since 2015, the NATRiP has funded the establishment of the following research and research institutes throughout the country.

National Vehicle Testing, Nutrition, and Training Institute (NIAIMT), Silchar International Automotive Technology Institute (ICAT), Mannesar

Indore's National Vehicle Testing Tracks (NATRAX)
ARAI (Automotive Research Association of India) is a Pune-based organisation that does research on automobiles.

Chennai's Global Automotive Research Centre (GARC)
SAMARTH Udyog - Industrial Institutions SAMARTH Udyog - Industrial Institutions SAMARTH Udyog - Industrial Institutions 4.0: In the country, 'Demo cum experience' centres are being developed to encourage smart and sophisticated production that will assist SMEs in using Industry 4.0. 4.0 out of 5 (automated and data exchange in production technology).

## The Journey Continues

The automobile sector is backed by a number of variables, including the cheap cost of trained labour, robust R\&D facilities, and low-cost metal manufacturing. In addition, the industry offers excellent investment prospects as well as direct and indirect employment for both qualified and unskilled individuals.

By 2026, the Indian automobile sector (including manufacturing) is predicted to be worth Rs 16.16-18.18 trillion (US\$ 251.4-282.8 billion). After recovering from the consequences of the COVID19 outbreak, the Indian automobile sector is predicted to rise rapidly in 2021-22. Electric vehicles, particularly two-wheeled vehicles, are expected to sell well in 2021-22.

### 3.7 Top Automobile Companies

## Tata Motors Limited (TML)

Tata Motors is one of India's and the world's biggest automotive corporations, with operations in more than 175 countries. A wide range of vehicles, including service vehicles, trucks, and buses, are included in the portfolio. In India's Top 10 Automobile Companies by Turnover, the firm is the largest automobile manufacturer. In 2019, the company's sales is $2,96,917$ crores, and it employs 82,797 people. The promoter owns 38.37 percent of the stock in the firm. In 2019, passenger automobiles account for 6.3 percent of the market, while commercial vehicles account for 45.1 percent (Raveendran, 2022).

The company has a global network of 134 firms, joint ventures, and joint partnerships, including Jaguar Land Rover in the United Kingdom and Tata Daewoo in South Korea. TML manufactures automobiles ranging in gross vehicle weight (GVW) from under one tonne to 49 tonne, as well as small, medium, and large buses and coaches, as well as passenger vehicles.

TML leads the India CV market with 45.1 percent market share and $4,68,788$ car sales in FY 2018-19, gaining market share in the Medium and Heavy Commercial Vehicle (MHCV), Intermediate Light Commercial Vehicle (ILCV), and Commercial Vehicle Components (SCV) segments (Raveendran, 2022). Tata Motors is India's largest automobile manufacturer. In FY 2018-19, TML raised its market share in the PV category by 60 basis points to 6.3 percent. It is one of India's most well-known automobile manufacturers (Raveendran, 2022).

## Maruti Suzuki India Ltd.

In India, it is the market leader in the passenger vehicle sector. In 1981, the firm was established. In 1982, the Government of India and the Suzuki Motor Corporation (SMC) of Japan inked a cooperation agreement. In 2002, the firm was acquired by SMC. Maruti is India's second-largest automobile manufacturer by revenue. In 2019, the company's sales is 83,281 crores, and it employs 33,180 people. The promoter owns 56.21 percent of the stock in the firm. Passenger automobiles account for 6.3 percent of the market, while commercial traffic accounts for 56.21 percent. The business controls 53 percent of the passenger automobile market (Raveendran, 2022).

The Company is presently the largest SMC subsidiary in terms of manufacturing capacity and sales. SMC presently holds 56.21 percent of the company's equity. Maruti Suzuki is India's largest automotive business by market share (Raveendran, 2022).

The firm operates two cutting-edge manufacturing facilities in Haryana, Gurugram and Mannesar, with a combined yearly production capacity of 1.58 million units (Raveendran, 2022).

## Mahindra \& Mahindra Ltd.

A key Mahindra Group firm, Mahindra \& Mahindra Ltd., produces transportation goods and agriculture solutions. It is one of the most recognizable automotive manufactures in India. The company has evolved fast since building the first automobile in 1947. India's third-largest automobile manufacturer in terms of total sales. In 2019, the company's revenue is 77,077 crores, and its workforce is 42,875 . The promoter owns $18.90 \%$ of the stock in the firm. The passenger automobile market share is 6.3 percent, while the commercial market share is 45.1 percent. In commercial vehicles, the corporation has a 25.3 percent market share, 7.4 percent in passenger cars, 40.2 percent in tractors, $25 \%$ in UV, and 44.5 percent in LCV. The firm has a market valuation of 70,725 crores (Raveendran, 2022).

From SUVs to electric vehicles, vans, commercial vehicles, tractors, two-wheelers, and construction equipment, the company now provides a diverse variety of goods and solutions. It is one of India's most well-known automobile manufacturers (Raveendran, 2022).

## Hero MotoCorp Ltd.

In terms of unit volume sales for the calendar year, Honda was the world's largest two-wheeler manufacturer in 2001, and it has held that position for the past 18 years. It continues to fight for socioeconomic advancement and empowerment through a variety of products and services, with over 90 million delighted clients worldwide. In the year 2019, the company's revenue is 32,871 crores. In all, the firm employs 8551 people. The promoter owns 34.63 percent of the stock in the firm. The corporation has obtained a 36 percent market share (Raveendran, 2022).

When it opened its production plant in Colombia in 2016, it became the first Indian two-wheeler business to do so in Latin America. The business belongs to a group of Heroes (Raveendran, 2022).

Hero MotoCorp has a total yearly production capacity of almost 9 million two-wheel drive vehicles. Among India's top ten vehicle manufacturers, Tata Motors is the fourth largest (Raveendran, 2022). Hero MotoCorp has taken urgent efforts to grow its footprint in 37 countries throughout Asia, Africa, and South Central America, led by Chairman Dr. Pawan Munjal. Hero MotoCorp is a genuinely worldwide company with individuals from all over the world working for it, including India, Bangladesh, Colombia, Germany, Austria, Japan, and France (Raveendran, 2022).

With more than $50 \%$ of the local motorcycle market, Hero MotoCorp is India's market leader the world's largest two-wheeled market. Hero MotoCorp is reported to have seven manufacturing facilities across the world, including five in India and one each in Colombia and Bangladesh (Raveendran, 2022).

## Bajaj Auto Ltd.

Bajaj Auto is the world's third biggest motorcycle manufacturer and the world's largest threewheeler manufacturer, with products sold in over 70 countries. Its path crosses a variety of sectors, including autos (two-wheeler manufacturer and three-wheeler manufacturer). The firm is a subsidiary of the Bajaj Group. In the year 2019, the company's revenue is $\$ 30,598$ million. The firm employs a total of 8,064 people. The facilitator owns 53.52 percent of the stock of the firm. The corporation owns $18.7 \%$ of the market share (Raveendran, 2022).

Bajaj Auto is the world's fourth biggest producer of three- and two-wheeled vehicles, and the Bajaj brand is well-known in Latin America, Africa, the Middle East, South, and Southeast Asia. The firm is ranked sixth among India's top 10 automobile manufacturers (Raveendran, 2022).

In the Netherlands, Bajaj Auto International Holdings BV is a wholly owned subsidiary of Bajaj Auto Ltd. Bajaj Auto has invested $€ 198.1$ million (H 1,219 crore) in this firm throughout the years and now owns around 48 percent of KTM AG Austria (KTM), the world's fastest growing motorbike brand (Raveendran, 2022).

## Ashok Leyland Limited

The Hindu group's flagship, Ashok Leyland, is India's second-largest commercial vehicle manufacturer, the fourth-largest bus maker, and the tenth-largest truck manufacturer. In the year 2019, the company's revenue is 28,476 crores. In all, the corporation employs 11,966 people. The promoter owns 51.13 percent of the stock in the firm. In the bus sector, the corporation has a market share of 41.2 percent (Raveendran, 2022).

Its headquarters are in Chennai, and it has nine production units across the world, including seven in India and one in Ras Al Khaimah (UAE). In the automobile business, Ashok Leyland offers a diversified portfolio. Ashok Leyland was recently named as India's 38th most valuable brand (Raveendran, 2022).

Ashok Leyland produces trucks, 16- to 80 -seat human buses, self-defence vehicles, and customised applications, as well as industrial diesel engines, i-gensets, and maritime applications with GVWs ranging from 2.5 to 49 tonnes (Raveendran, 2022).

In 2016, Ashok Leyland debuted India's first electric bus as well as a Euro 6-compliant truck. Ashok Leyland buses carry almost a million passengers to their daily destinations, while 7,00,000 trucks keep the economy running (Raveendran, 2022).

## TVS Motor Company Ltd.

With a sale of 15129 Cr INR, TVS Motor Company is India's third-largest two-wheeler producer (2017-18). The firm can produce 4 million two-wheelers and 120,000 three-wheelers every year. In the year 2019, the company's revenue is 15,129 crores. In all, the firm employs 5,121 people. The promoter owns 57.40 percent of the business. In the bus category, the corporation has a market share of 41.2 percent (Raveendran, 2022).

The TVS Group comprises the automobile, aviation, education, electronics, energy, finance, housing, insurance, investment, logistics, service, and textiles segments. There are around 90 companies under the umbrella of the company (Raveendran, 2022).

Three of the company's production factories are in India (Hosur, Tamil Nadu, Mysore, Karnataka, and Nalagarh, Himachal Pradesh), while one is in Indonesia (Karawang). The firm is one of India's Top 10 Automobile Companies (Raveendran, 2022).

## Eicher Motors Ltd.

Eicher Motors Limited (EML) is the parent company of Royal Enfield, a world leader in middleweight motorcycles (Bloomberg: EIM IN Reuters: EICH.NS). Royal Enfield has been producing its own unique motorbike since 1901, making it the world's longest continuous manufacturing motorcycle (Raveendran, 2022).

Royal Enfield operates Tamil Nadu bikes all over the world, with advanced development facilities in Leicestershire, UK, and Chennai, India. In addition to motorcycles, Eicher owns Volvo Eicher Commercial Vehicles Limited (VECV), a joint venture with Sweden's AB Volvo that operates a state-of-the-art automobile dealership in India and other developing nations (Raveendran, 2022).

VECV manufactures trucks and buses ranging in size from 5-55 tonnes, and its integrated production factory in Pithampur, Madhya Pradesh, serves as a global hub for Volvo Group's five- and eight-litter engines. In India's top ten vehicle manufacturing firms, the company is placed eighth (Raveendran, 2022).

## Force Motors Ltd.

Force Motors was started in 1958 by Shri. N. K. Firodia, who had a mission to make commercial transportation more accessible to more people by utilising the most advanced technology and by providing products that are cost-effective, dependable, and efficient. On India's top ten automotive companies list, the firm is rated ninth. The corporation makes a profit of $\$ 3,487$ million, and reparation equity accounts for around 7.67 percent of the company's value. In 2021, the company's sales increased by 6.48 percent (Raveendran, 2022).

Small Business Vehicles (SCV), Most Used Vehicles (MUV), Light Commercial Vehicles (LCV), Special Vehicles (SUV), and Agricultural Tractors are among the company's current offerings. So, whatever the situation, the Force has a remedy (Raveendran, 2022).

## SML ISUZU Ltd.

Since 1985, SML Isuzu Ltd. (SMLI) has been producing dependable and trustworthy automobiles. It has more than 33 years of expertise manufacturing Light and Medium Commercial Vehicles for Indian clients. SMIL was the first to design and manufacture cutting-edge buses, ambulances, and bespoke vehicles. It ranks last among India's main automobile manufacturers.

The corporation makes a profit of $\$ 1,312$ million, and reparation equity accounts for around 4.79 percent of the company's value. In 2021, the company's sales increased by 6.51 percent. The company's dividend profit is around 0.78 percent (Raveendran, 2022). Sumitomo Corporation of Japan and Isuzu Motors of Japan own 44 percent and 15\% of the company, respectively. It is one among India's top ten automobile manufacturers (Raveendran, 2022).

## 4 Practical Part

The practical portion of the thesis comprises a vertical and horizontal study of two selected car businesses, Tata Motors and Maruti Suzuki, as well as the assessment of selected financial ratios.

### 4.1 General Information - Tata Motors

Tata Motors Limited is a component of the Tata Group and is an Indian firm that makes worldwide vehicles. It is located in Mumbai, India. Passenger vehicles, trucks, vans, coaches, buses, luxury automobiles, sports cars, and construction materials are all manufactured by the corporation (Tata Motors - TTM - Fortune Global 500 Top Companies, 2013).

The firm, formerly known as Tata Engineering and Locomotive Company (TELCO), began as a railway manufacturer in 1945. In 1954, the business formed a cooperation with Daimler-Benz AG to produce the first commercial car, which lasted until 1969.

Tata Motors originally entered the passenger vehicle industry with the Tata Mobile in 1988, followed by the Tata Sierra in 1991, becoming the first Indian company to build a competitive conventional automobile (Bhaktavatsala Patra \& C., 1993). Tata launched the Indica, India's first passenger automobile, in 1998, and the Tata Nano, the world's most cheap car, in 2008. Daewoo Commercial Vehicles Company, a South Korean truck manufacturer, was bought by Tata Motors in 2004. Since the acquisition of Jaguar Cars and Land Rover from Ford in 2008, Tata Motors has been the parent company of Jaguar Land Rover.

The British automotive company Jaguar Land Rover (Jaguar and Land Rover) and the South Korean commercial car manufacturer Tata Daewoo are two of Tata Motors' major subsidiaries. Tata Motors has a manufacturing joint venture with Hitachi (Tata Hitachi Construction Machinery) as well as a joint venture with Stellates that produces car components and automobiles under the Fiat Chrysler and Tata brands. TPG, an independent equity firm, invested $\$ 1$ billion in Tata Motors' company on October 12, 2021. (Barman \& Arijit, 2021).

At India, Tata Motors has plants in Jamshedpur, Pantnagar, Lucknow, Sanand, Dharwad, and Pune, as well as in Argentina, South Africa, the United Kingdom, and Thailand. It has R\&D centres in India's Pune, Jamshedpur, Lucknow, and Dharwad, as well as South Korea, the United Kingdom, and Spain Tata Motors is listed on the BSE (Bombay Stock Exchange), the NASDAQ (New York Stock Exchange), and the National Stock Exchange of India. It is a component of the BSE SENSEX index. Since 2019, the firm has been rated 265th on the Fortune Global 500 list of the world's largest corporations (Lbelanger225, 2019).

Natarajan Chandrasekaran was elected chairman of Tata Group on January 17, 2017. By FY2019, Tata Motors has expanded its UV market share by more than $8 \%$. (Tata Motors increases its UV market share by more than 8 percent by FY2019, 2019).

Tata Motors began as a railway builder in 1945. After uniting with Daimler-Benz of Germany in 1954, the Tata Group joined the commercial vehicle market. Tata Motors joined the passenger vehicle industry in 1991 with the debut of the Tata Sierra, a sports car based on the Tata Mobile area, after dominating the business car market in India for years. Tata then introduced the Tata Estate (1992), Tata Sumo (1994), and Tata Safari (1995), all of which were based on the earlier Tata Mobile (1998).

Despite being produced by I.D.E.A, Italy, Tata debuted the Indica in 1998, a local Indian passenger automobile designed to fulfil the demands of Indian customers. Despite early criticism from vehicle critics, its efficient fuel efficiency, strong engine, and aggressive marketing campaign have helped it become one of India's best-selling cars in the country's history. The latest version of the automobile, known as the Indica V2, is far superior to the previous model and has rapidly become a popular choice among many people. The bulk vehicle was also successfully exported by Tata Motors to South Africa. Tata Motors' expansion has been aided by the popularity of the Indica (Tata Motors Rereview, 2010).

The Daewoo Commercial Vehicles Company, subsequently renamed Tata Daewoo, is a Daewoo-based truck manufacturing company in South Korea that Tata Motors bought in 2004. (Tata Motors - Media Centre, 2010).

Ratan Tata, Chairman of Tata Motors, rang the opening bell on the New York Stock Exchange on September 27, 2004, to commemorate the company's listing (Hindu Business Line: Tata Motors List on NYSE).

Tata Motors bought $21 \%$ of Spanish bus control holdings from co-producer Hispano Caracara in 2005. (Tata Hispano, 2010). Tata Motors continued to grow its market share by launching new vehicles like as buses (the Starbus and Globus, which were developed in collaboration with Hispano Caracara) and trucks (Novus, developed in partnership with a subsidiary of Tata Daewoo).

Tata formed a joint venture with Brazilian company Marcopolo, Tata Marcopolo Bus, in 2006 to provide completely constructed buses and trainers (Hindu Business Line: Tata Motors, Brazil co form joint venture, 2010).

Jaguar Land Rover, a manufacturer of Jaguar and Land Rover at Ford Motor Company, was bought by Tata Motors in 2008. (Ford Motor Company - Press Release - Ford Motor Announces Jaguar Land Rover Agreement For Tata Motors, 2008).

Tata revealed the Tata World Truck line-up in May 2009, which was designed in collaboration with Tata Daewoo and went on sale in late 2009 in South Korea, South Africa, the SAARC nations, and the Middle East. In 2009, Tata bought full control of Hispano Caracara (Tata Motors gained control of Hispano Caracara, 2010).

Tata Motors paid 1.85 million euros buying 80 percent of the Italian designer and engineering firm Trilix in 2010. The purchase was made as part of the company's strategy to increase its style and design capabilities (Tata Motors acquires 80 percent of shares in Trilix Italy - CNBC-TV18-, 2010).

Tata Motors stated in 2012 that it will invest R6 billion in the creation of futuristic infantry combat vehicles in collaboration with the Defence Research and Development Organisation (DRDO) (Business Line: Corporate News: Piramal Enterprises owns 27 percent stake in Bluebird Aero Systems, 2012). Tata Motors declared in 2013 that it will market the "Mini CAT," the world's first automobile to use compressed air (engines created by French company MDI). Tata Motors debuted India's first truck racing championship, "T1 Prima Truck Racing Championship," in 2014.

Karl Slym, the Executive Director, was discovered deceased on January 26, 2014. He was attending a meeting of Tata Motors Thailand when he fell from the 22nd storey to the fourth floor of the Shangri-La Hotel in Bangkok (Le dG du géant indien de l'automobile Tata Motors retrouvé dead dans un hôtel, 2014).

Tata Motors named Lionel Messi as its worldwide brand ambassador on November 2, 2015 in New Delhi, with the goal of promoting and approving passenger automobiles all over the world (Times of India, 2015 - Tata Motors appoints Lionel Messi as worldwide brand ambassador). Tata Motors stated on March 8, 2017, that it has signed a memorandum of understanding with Volkswagen to jointly develop automobiles for the Indian domestic market (Sinha \& Manav, 2017).

Tata Motors announced the sale of its aerospace and military division to Tata Advanced Systems, a Tata Group entity, on May 3, 2018, in order to unlock its full potential (Tata Motors will sell defence, business -aerospace in Tata Advanced Systems - Moneycontrol.com, 2018).

Tata Motors established a cooperation with Nirma University in Ahmedabad on April 29, 2019 to create a B.Tech. Staff programme for its Sanand business (Tata Motors collaborates with Nirma University with a B.Tech degree for Sanand workforce, 2019). Tata Motors Ltd stated on March 24, 2020 that the passenger car division will be demerged from the business (Mobile \& Shally Seth, 2020). Tata Motors' shareholders approved the removal of the passenger car operations from a separate site on March 5, 2021. (James, 2021).

### 4.2 General Information - Maruti Suzuki

Maruti Suzuki India Limited, formerly Maruti Udyog Limited, is an Indian vehicle manufacturer headquartered in New Delhi. It was formed in 2001 and was owned by the Indian government until 2003, when it was sold to Suzuki Motor Corporation of Japan (Know Maruti Suzuki | The Finest Car Maker, 2013). Maruti Suzuki has a 44.2 percent market share in the Indian passenger car industry as of February 2022. (Punditz, 2022).

Maruti Udyog Limited was founded by the Indian government on January 24, 1981, with Suzuki Motor Corporation as a junior partner. In August 2021, Suzuki became the formal partner of the JV and was licenced ("Maruti Suzuki India Ltd.", n.d.). In the same year, the first Maruti production unit was constructed in Gurugram, Haryana (Maruti Recent Company Review, 2013).

Maruti Udyog Ltd. and Suzuki of Japan inked a licence and partnership agreement (JVA) in 1982. Maruti Suzuki began as a car enthusiast. Maruti Suzuki obtained the authority to import two completely manufactured Suzukis into the closed Indian market for the first two years, and even after that, the first objective was to employ 33 percent native parts. This has irritated local farmers immensely. There was considerable fear that the Indian market would be too tiny to handle Maruti Suzuki's rather big product, so the government explored changing the fuel tariff and decreasing taxes to boost sales (B M, 2021). With the debut of the SS30 / SS40 Suzuki Fronte / Alto-based Maruti 800 in December 1983, local manufacture commenced. In 1984, Maruti produced the Maruti Van, which included an 800-cylinder engine comparable to the 800 and factory-installed power in Gurgaon. Up to 40,000 units are possible.

The Suzuki SJ410-based Gypsy, a 970cc 4WD off-road vehicle, was created in 1985. The original 800 was replaced by a new model 796 cc hatchback Suzuki Alto (SS80) in 1986, marking the company's 100,000th automobile (Maruti Suzuki India Ltd: Maruti 800, Alto, Zen, Wagonr, Versa, Esteem, Baleno , Grand Vitara, Gypsy, finance, insurance, accessories, real value, shipping solutions, 2007). The firm began exporting to western countries in 1987, with over 500 automobiles shipped to Hungary. In 1988, the Gurgaon factory's capacity was increased to 100,000 units per year.

The Maruti 1000, a 970 cc three-box sedan, was released in 1989 and became India's first contemporary sedan. 65 percent of all components in all produced automobiles were outlawed in 1991. Suzuki upped its share of Maruti to $50 \%$ after India's economic crisis in 1991, making the firm a 5050 joint venture with the Indian government as one of the partners.

The Zen hatchback with a 993 -cc engine was released in 1993, while the 1,298 cc Esteem sedan was introduced in 1994. Since its debut in 1994, Maruti has been developing its million-dollar
automobile. The second Maruti facility opened with a production capacity of up to 200,000 vehicles per year. For road cars, Maruti has devised a 24 -hour emergency plan. The redesigned Maruti 800 was unveiled in 1998, marking the first design update since 1986. The Zen D, a 1,527-cc diesel hatchback that was Maruti's first diesel car, as well as the revised Omni, were also unveiled. Maruti Baleno's 1.6liter three box sedan and Wagon R. were released in 1999.

Maruti was the first automotive maker in India to open an in-house telephone and customer support centre in the year 2000. A new Alto model has been introduced. Maruti True Value, which sells and buys old automobiles, was established in 2001. Maruti Versa was introduced in October of that year. The Esteem Diesel was introduced in 2002. Maruti Insurance Distributor Services and Maruti Insurance Brokers Limited are two new subsidiary firms. Suzuki Motor Corporation bought a 54.2 percent stake in Maruti Suzuki.

In 2003, Suzuki introduced the new Grand Vitara XL-7, as well as upgrades and redesigns to the Zen and Wagon R. The Maruti four million automobile was manufactured, and they partnered with the State Bank of India. After a ten-times-registered public hearing, Maruti Udyog Ltd. was listed on the BSE and NSE. After nearly two decades, the Alto surpassed the Maruti 800 as India's best-selling car in 2004. In contrast, the five-seater Versa 5-seater was produced when the Esteem was re-launched. Maruti Udyog ended the 2003-04 fiscal year with an annual turnover of 472,122 units, the largest since the firm began operations and the launching of the 50 lakh (five million) automobile in April 2005. Suzuki Swift 2005, five-door, 1.3-liter (July 2014: Indian Car Sales Statistics \& Analysis, n.d.).

Suzuki and Maruti established "Maruti Suzuki Automobiles India" in 2006 to establish two new manufacturing enterprises, one for vehicles and the other for engines. It also introduces clean automobiles, with numerous new models meeting Bharat Stage III criteria. Maruti Suzuki shipped its ten millionth automobile to India in February 2012. In July 2014, the company had a market share of almost 45 percent (July 2014: Indian Car Sales Figures \& Analysis, n.d.). In May 2015, the Swift Dzire, the company's 15 millionth car, was built in India (Maruti Suzuki manufactures 15 million automobiles | Team-BHP, n.d.).

Maruti Suzuki said on April 25, 2019, that it would stop producing diesel cars by April 1, 2020, when the Bharat Stage VI emission requirements take effect. The corporation will have to invest a large amount of money to modify its existing diesel engines to meet the higher pollution regulations. "We have taken this choice so that by 2022, we can fulfil the norms of corporate average fuel (CAFE), and the large number of CNG cars would help us stick to the principles," stated Chairman R.C. Bhargava. Diesel automobiles account for $23 \%$ of Maruti Suzuki's annual sales (Ghosh, 2019).

The Maruti Suzuki WagonR Electric (Maruti Suzuki WagonR electric test mule spotted again, 2021) and the same test mule seen recently multiple times is the company's first electric automobile, which it aims to market in the second half of 2021.

### 4.3 Financial Position Analysis - Tata Motors

The company's financial condition is analysed using a vertical and horizontal study of the Balance Sheet's components, such as assets, liabilities, and equity, with the goal of getting the key elements by vertical analysis and changes over time by horizontal analysis.

## Vertical examination of the elements on the balance sheet (Tata Motors)

Vertical analysis is a proportionate study of certain financial statement items relative to the total items with the goal of determining their relevance. It's helpful to compare the proportions of balance and variations in proportions from one year to the next. It clearly shows whether anything is rising or decreasing as a proportion of the total, as well as the impact on the total number of things. However, reducing the percentage of one thing does not always imply diminishing value for money over time; it might indicate a major shift in another item

Table 1: Assets Vertical Analysis (Tata Motors)

| Standalone Statement of Financial Position (in Crores) |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Particulars | 2016-17 | \% | 2017-18 | \% | 2018-19 | \% | 2019-2020 | \% | 2020-2021 | \% |
| ASSETS |  |  |  |  |  |  |  |  |  |  |
| Non-Current Assets |  |  |  |  |  |  |  |  |  |  |
| (a) Property, plant and equipment | 17364.77 | 29.66\% | 18192.52 | 30.72\% | 18316.61 | 30.07\% | 18870.67 | 30.15\% | 19153.47 | 29.44\% |
| (b) Capital work-in-progress | 1870.93 | 3.20\% | 1371.45 | 2.32\% | 2146.96 | 3.52\% | 1755.51 | 2.80\% | 1400.82 | 2.15\% |
| (c) Right of use assets | - | 0.00\% |  | 0.00\% | - | 0.00\% | 669.58 | 1.07\% | 768.59 | 1.18\% |
| (d) Goodwill | 99.09 | 0.17\% | 99.09 | 0.17\% | 99.09 | 0.16\% | 99.09 | 0.16\% | 99.09 | 0.15\% |
| (e) Other intangible assets | 2773.69 | 4.74\% | 3312.14 | 5.59\% | 3871.13 | 6.36\% | 5568.64 | 8.90\% | 6401.95 | 9.84\% |
| (f) Intangible assets under development | 5366.03 | 9.17\% | 3825.15 | 6.46\% | 4139.63 | 6.80\% | 2739.29 | 4.38\% | 1605.64 | 2.47\% |
| (g) Investments in subsidiaries, joint ventures and associates | 14778.87 | 25.25\% | 13950.6 | 23.56\% | 14770.81 | 24.25\% | 15182.29 | 24.26\% | 15147.26 | 23.28\% |
| (h) Financial assets |  |  |  |  |  |  |  |  |  |  |
| (i) Investments | 528.37 | 0.90\% | 310.19 | 0.52\% | 663.38 | 1.09\% | 548.57 | 0.88\% | 967.65 | 1.49\% |
| (ii) Loans and advances | 389.61 | 0.67\% | 143.96 | 0.24\% | 143.13 | 0.23\% | 138.46 | 0.22\% | 126.05 | 0.19\% |
| (iii) Other financial assets | 196.32 | 0.34\% | 793.4 | 1.34\% | 994.39 | 1.63\% | 1512.96 | 2.42\% | 1631.83 | 2.51\% |
| (i) Non-current tax assets (net) | 724.58 | 1.24\% | 695.75 | 1.18\% | 715.3 | 1.17\% | 727.97 | 1.16\% | 715.31 | 1.10\% |
| (i) Other non-current assets | 1856.28 | 3.17\% | 1546.39 | 2.61\% | 1819.9 | 2.99\% | 1208.08 | 1.93\% | 1187.41 | 1.83\% |
| Total Non-Current Assets | 45948.54 | 78.50\% | 44240.64 | 74.72\% | 47680.33 | 78.28\% | 49021.11 | 78.32\% | 49205.07 | 75.63\% |
| Current Assets |  |  |  |  |  |  |  | 0.00\% |  | 0.00\% |
| (a) Inventories | 5504.42 | 9.40\% | 5670.13 | 9.58\% | 4662 | 7.65\% | 3831.92 | 6.12\% | 4551.71 | 7.00\% |
| (b) Investment in subsidiaries, joint ventures and associates | - | 0.00\% | 681.91 | 1.15\% | 257.81 | 0.42\% | - | 0.00\% | - | 0.00\% |
| (c) Financial assets |  |  |  |  |  |  |  |  |  |  |
| (i) Investments | 2400.92 | 4.10\% | 1820.87 | 3.08\% | 1175.37 | 1.93\% | 885.31 | 1.41\% | 1578.26 | 2.43\% |
| (ii) Trade receivables | 2128 | 3.64\% | 3479.81 | 5.88\% | 3250.64 | 5.34\% | 1978.06 | 3.16\% | 2087.51 | $3.21 \%$ |
| (iii) Cash and cash equivalents | 188.39 | 0.32\% | 546.82 | 0.92\% | 487.4 | 0.80\% | 2145.3 | 3.43\% | 2365.54 | 3.64\% |
| (iv) Bank balances other than (iii) above | 97.67 | 0.17\% | 248.6 | 0.42\% | 819.21 | 1.34\% | 1386.89 | 2.22\% | 1953.4 | 3.00\% |
| (v) Loans and advances | 231.35 | 0.40\% | 140.27 | 0.24\% | 200.08 | 0.33\% | 232.14 | 0.37\% | 185.42 | 0.28\% |
| (vi) Other financial assets | 100.76 | 0.17\% | 646.31 | 1.09\% | 1279.68 | 2.10\% | 1546.56 | 2.47\% | 1745.06 | 2.68\% |
| (d) Current tax assets (net) | 129.49 | 0.22\% | 73.88 | 0.12\% | - | 0.00\% | - | 0.00\% | - | 0.00\% |
| (e) Assets classified as held-for-sale | - | 0.00\% | 223.33 | 0.38\% | 162.24 | 0.27\% | 191.07 | 0.31\% | 220.8 | 0.34\% |
| (f) Other current assets | 1807.06 | 3.09\% | 1439.73 | 2.43\% | 934.87 | 1.53\% | 1371.51 | 2.19\% | 1166.89 | 1.79\% |
| Total Current Assets | 12588.06 | 21.50\% | 14971.66 | 25.28\% | 13229.3 | 21.72\% | 13568.76 | 21.68\% | 15854.59 | 24.37\% |
| Total Asset | 58536.6 | 100.00\% | 59212.3 | 100.00\% | 60909.63 | 100.00\% | 62589.87 | 100.00\% | 65059.66 | 100.00\% |

Source: Own analysis based on Tata Motors' FY 2017-2021 Standalone Statement of Financial Position.

Table 1 depicts Tata Motors' Standalone Statement of Financial Position, which shows variations in component proportions from year to year. Property, plant, and equipment are all examples of proportionate changes. Buildings, machinery, processing facilities, and equipment are included in the property, plant, and equipment.

According to vertical analysis, property, plant, and equipment make up the largest share of the balance sheet's non-current assets and all assets. In 2017, it was 29.66 percent; in 2018, it was 30.72 percent; in 2019, it was 30.07 percent; in 2020, it was 30.15 percent; and in 2021, it was somewhat lower at 29.44 percent.

Investments in subsidiaries, joint ventures, and associates follow property, plant, and equipment. In 2017, it was 25.25 percent of total assets, and by 2020, it will have climbed to 24.26 percent. However, in 2021, it declined somewhat by 23.28 percent.

Apart from non-current assets, inventories make up the largest portion of all current assets. In 2017, it collected Rs. 5504.42 crores. Furthermore, it shows a downward tendency in the future years when compared to 2017. It was about 6.12 percent in 2020, which was the lowest in comparison to previous years. In the year 2021, however, it reported a minor growth of $7 \%$.

Investments were the largest item on the company's financial sheet in 2018-19, accounting for 41339.58 crores, while investment in 2019-20 was the lowest compared to previous years.

In the last five years, there have been no significant changes in goodwill and loans \& advances under the heading of non-current assets. In the last five years, the share of loans and advances, as well as assets categorised as held-for-sale, has not changed much.

Table 2: Equity and Liabilities Vertical Analysis (Tata Motors)

| Standalone Statement of Financial Position (in Crores) |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Equity | 2016-17 | \% | 2017-18 | \% | 2018-19 | \% | 2019-2020 | \% | 2020-21 | \% |
| Equity Share capital | 679.22 | 1.16\% | 679.22 | 1.15\% | 679.22 | 1.12\% | 719.54 | 1.15\% | 765.81 | 1.18\% |
| Reserves and surplus | 20129.93 | 34.39\% | 19491.76 | 32.92\% | 21483.3 | 35.27\% | 17668.1 | 28.23\% | 18290.2 | 28.11\% |
| Total shareholder's equity | 20809.15 | 35.55\% | 20170.98 | 34.07\% | 22162.5 | $36.39 \%$ | 18387.7 | 29.38\% | 19056 | 29.29\% |
| Liabilities |  |  |  |  |  |  |  |  |  |  |
| Non-current liabilities |  |  |  |  |  |  |  |  |  |  |
| (a) Financial liabilities |  |  |  |  |  |  |  |  |  |  |
| (i) Borrowings | 13686.09 | 23.38\% | 13155.91 | 22.22\% | 13914.7 | 22.84\% | 14776.5 | 23.61\% | 16326.8 | 25.10\% |
| (ii) Lease liabilities | - | 0.00\% | - | 0.00\% | 5.07 | 0.01\% | 522.24 | 0.83\% | 593.74 | 0.91\% |
| (iii) Other financial liabilities | 1123.66 | 1.92\% | 211.28 | 0.36\% | 180.8 | 0.30\% | 854.74 | 1.37\% | 659.64 | 1.01\% |
| (b) Provisions | 850.71 | 1.45\% | 1009.48 | 1.70\% | 1281.59 | 2.10\% | 1769.74 | 2.83\% | 1371.94 | 2.11\% |
| (c) Deferred Tax liabilities (net) | 97.95 | 0.17\% | 154.61 | 0.26\% | 205.86 | 0.34\% | 198.59 | 0.32\% | 266.5 | 0.41\% |
| (d) Other non-current liabilities | 321.24 | 0.55\% | 291.09 | 0.49\% | 218.24 | 0.36\% | 269.58 | 0.43\% | 533.55 | 0.82\% |
| Total Non-current Liabilities | 16079.65 | 27.47\% | 14822.37 | 25.03\% | 15806.3 | 25.95\% | 18391.4 | 29.38\% | 19752.1 | 30.36\% |
| Current Liabilities |  |  |  |  |  |  |  |  |  |  |
| (a) Financial liabilities |  |  |  |  |  |  |  |  |  |  |
| (i) Borrowings | 5375.52 | 9.18\% | 3099.87 | 5.24\% | 3617.72 | 5.94\% | 6121.36 | 9.78\% | 2542.5 | 3.91\% |
| (ii) Lease liabilities | - | 0.00\% | - | 0.00\% | 3.64 | 0.01\% | 83.3 | 0.13\% | 96.47 | 0.15\% |
| (ii) Trade payables | 7015.21 | 11.98\% | 9411.05 | 15.89\% | 10408.8 | 17.09\% | 8102.25 | 12.94\% | 8115.01 | 12.47\% |
| (iii) Acceptances | 4379.29 | 7.48\% | 4814.58 | 8.13\% | 3093.28 | 5.08\% | 2741.69 | 4.38\% | 7873.12 | 12.10\% |
| (iv) Other financial liabilities | 2465.14 | 4.21\% | 4091.16 | 6.91\% | 2234.34 | 3.67\% | 5976.35 | 9.55\% | 425.57 | 6.54\% |
| (b) Provisions | 467.98 | 0.80\% | 862.92 | 1.46\% | 1148.69 | 1.89\% | 1406.75 | 2.25\% | 1043.54 | 1.60\% |
| (c) Current Tax liabilities (net) | 80.64 | 0.14\% | 21.77 | 0.04\% | 78.3 | 0.13\% | 31.49 | 0.05\% | 37.84 | 0.06\% |
| (d) Other current liabilities | 1864.02 | 3.18\% | 1917.6 | 3.24\% | 2356.01 | 3.87\% | 1347.63 | 2.15\% | 2287.5 | 3.52\% |
| Total Current Liabilities | 21647.8 | 36.98\% | 24218.95 | 40.90\% | 22940.8 | 37.66\% | 25810.8 | 41.24\% | 26251.6 | 40.35\% |
| Total liabilities and shareholder's equity | 58536.6 | 100.00\% | 59212.3 | 100.00\% | 60909.6 | 100.00\% | 62589.9 | 100.00\% | 65059.7 | 100.00\% |

Source: Own analysis based on Tata Motors' FY 2017-2021 Standalone Statement of Financial Position.

With the use of vertical analysis across sectors, financial statements from multiple organisations can be simply compared. The vertical analysis of equity and liabilities is shown in table 2 .

In comparison to other non-current assets, borrowings make for the majority of overall equity and liabilities. Tata Motors has 13686.09 crores in long-term debt, accounting for 23.38 percent of total equity and liabilities. In the year 2020, it was increased by 23.61 percent, and in 2021, it was increased again to 25.10 percent.

In comparison to non-current liabilities and shareholder's equity, current liabilities accounted for the largest fraction of overall equity and liabilities. In the year 2020, the greatest proportion was 41.24 percent, and in the year 2021, it was 40.35 percent. The largest portion of total current liabilities is trade payables, which accounted for 7015.21 crores in 2017 , or 11.98 percent of total current liabilities.

It has shown an upward tendency over the past two years, with 15.89 percent in 2018 and 17.09 percent in 2019. However, in 2020 and 2021, it was reduced to 12.94 percent and 12.47 percent, respectively.

Short-term borrowings come after trade payables. In the year 2020, it accounts for 6121.4 crores, or 9.78 percent of total equity and liabilities, which is the largest in comparison to previous years. An examination of the balance sheet elements from a horizontal perspective (Tata Motors)

Trend analysis is another name for horizontal analysis. This approach displays past data and allows comparisons to be made. It may be used as one basic year for the selected year or as the base year for the preceding year in this fashion, and it always compares two years and shows proportionate changes in items from year to year. This research makes it simple to understand how specific factors have changed over time and how they effect a company's growth, operations, and revenue.

Table 3: Assets Horizontal Analysis (Tata Motors)

| Standalone Statement of Financial Position (in Crores) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Particulars | 2015-16 | 2016-17 | \% | 2017-18 | \% | 2018-19 | \% | 2019-2020 | \% | 2020-2021 | \% |
| ASSETS |  |  |  |  |  |  |  |  |  |  |  |
| Non-Current Assets |  |  |  |  |  |  |  |  |  |  |  |
| (a) Property, plant and equipment | 17573.25 | 17364.77 | $-1.19 \%$ | 18192.52 | 4.77\% | 18316.61 | 0.68\% | 18870.67 | $3.02 \%$ | 19153.47 | 1.50\% |
| (b) Capital work-in-progress | 1557.95 | 1870.93 | 20.09\% | 1371.45 | -26.70\% | 2146.96 | 56.55\% | 1755.51 | -18.23\% | 1400.82 | -20.20\% |
| (c) Right of use assets | - | - | 0.00\% | - | 0.00\% | - | 0.00\% | 669.58 | $0.00 \%$ | 768.59 | 14.79\% |
| (d) Goodwill | 99.09 | 99.09 | 0.00\% | 99.09 | 0.00\% | 99.09 | 0.00\% | 99.09 | 0.00\% | 99.09 | 0.00\% |
| (e) Other intangible assets | 3403.47 | 2773.69 | $-18.50 \%$ | 3312.14 | 19.41\% | 3871.13 | 16.88\% | 5568.64 | 43.85\% | 6401.95 | $14.96 \%$ |
| (f) Intangible assets under development | 4128.58 | 5366.03 | 29.97\% | 3825.15 | -28.72\% | 4139.63 | 8.22\% | 2739.29 | -33.83\% | 1605.64 | -41.38\% |
| (g) Investments in subsidiaries, joint ventures and associates | 14590.41 | 14778.87 | 1.29\% | 13950.6 | -5.60\% | 14770.81 | 5.88\% | 15182.29 | 2.79\% | 15147.26 | -0.23\% |
| (h) Financial assets |  |  |  |  |  |  |  |  |  |  |  |
| (i) Investments | 627.07 | 528.37 | -15.74\% | 310.19 | -41.29\% | 663.38 | 113.86\% | 548.57 | -17.31\% | 967.65 | 76.39\% |
| (ii) Loans and advances | 252.93 | 389.61 | 54.04\% | 143.96 | -63.05\% | 143.13 | -0.58\% | 138.46 | -3.26\% | 126.05 | -8.96\% |
| (iii) Other financial assets | 102.92 | 196.32 | 90.75\% | 793.4 | $304.14 \%$ | 994.39 | 25.33\% | 1512.96 | $52.15 \%$ | 1631.83 | 7.86\% |
| (i) Non-current tax assets (net) | 799.63 | 724.58 | -9.39\% | 695.75 | -3.98\% | 715.3 | 2.81\% | 727.97 | 1.77\% | 715.31 | $-1.74 \%$ |
| (i) Other non-current assets | 1679.01 | 1856.28 | 10.56\% | 1546.39 | -16.69\% | 1819.9 | 17.69\% | 1208.08 | -33.62\% | 1187.41 | $-1.71 \%$ |
| Total Non-Current Assets | 44814.31 | 45948.54 | 2.53\% | 44240.64 | -3.72\% | 47680.33 | 7.77\% | 49021.11 | 2.81\% | 49205.07 | 0.38\% |
| Current Assets |  |  |  |  |  |  |  |  |  |  |  |
| (a) Inventories | 5117.92 | 5504.42 | 7.55\% | 5670.13 | 3.01\% | 4662 | -17.78\% | 3831.92 | -17.81\% | 4551.71 | 18.78\% |
| (b) Investment in subsidiaries, joint ventures and associates | - | - | 0.00\% | 681.91 | 0.00\% | 257.81 | -62.19\% | - | $0.00 \%$ | - | $0.00 \%$ |
| (c) Financial assets |  |  |  |  |  |  |  |  |  |  |  |
| (i) Investments | 1745.84 | 2400.92 | 37.5\% | 1820.87 | -24.16\% | 1175.37 | -35.45\% | 885.31 | -24.68\% | 1578.26 | 78.27\% |
| (ii) Trade receivables | 2045.58 | 2128 | 4.03\% | 3479.81 | 63.22\% | 3250.64 | $-6.59 \%$ | 1978.06 | -39.15\% | 2087.51 | 5.53\% |
| (iii) Cash and cash equivalents | 427.07 | 188.39 | -55.89\% | 546.82 | $190.26 \%$ | 487.4 | $-10.87 \%$ | 2145.3 | $340.15 \%$ | 2365.54 | 10.27\% |
| (iv) Bank balances other than (ii) above | 361.35 | 97.67 | -72.97\% | 248.6 | 154.53\% | 819.21 | 229.53\% | 1386.89 | 69.30\% | 1953.4 | 40.85\% |
| (v) Loans and advances | 484.44 | 231.35 | -52.24\% | 140.27 | -39.37\% | 200.08 | 42.64\% | 232.14 | $16.02 \%$ | 185.42 | -20.13\% |
| (vi) Other financial assets | 125.2 | 100.76 | -19.52\% | 646.31 | $541.44 \%$ | 1279.68 | 98.00\% | 1546.56 | 20.86\% | 1745.06 | 12.83\% |
| (d) Current tax assets (net) | 3.84 | 129.49 | $3272.14 \%$ | 73.88 | -42.95\% | - | 0.00\% | - | $0.00 \%$ | - | 0.00\% |
| (e) Assets classified as held-for-sale | - | - | 0.00\% | 223.33 | 0.00\% | 162.24 | -27.35\% | 191.07 | 17.77\% | 220.8 | 15.56\% |
| (f) Other current assets | 1550.45 | 1807.06 | 16.55\% | 1439.73 | $-20.33 \%$ | 934.87 | -35.07\% | 1371.51 | $46.71 \%$ | 1166.89 | -14.92\% |
| Total Current Assets | 11861.69 | 12588.06 | 6.12\% | 14971.66 | 18.94\% | 13229.3 | -11.64\% | 13568.76 | 2.57\% | 15854.59 | 16.85\% |
| Total Asset | 56676 | 58536.6 | 3.28\% | 59212.3 | 1.15\% | 60009.63 | $2.87 \%$ | 62589.87 | 2.76\% | 65059.66 | 3.95\% |

Source: Own analysis based on Tata Motors' FY 2017-2021 Standalone Statement of Financial Position.

Table 3 shows a horizontal asset analysis from Tata Motors' financial statement. It not only depicts changes in various assets such as property, plant and equipment, and many others from the overall proportion of total assets, but it also displays the importance of each item included in the company's balance sheet. Table 3 shows the changes in a single line for the five years prior to 2021.

Over the last five years, there have been minor proportionate changes in property, plant, and machinery. It fell by -1.19 percent in 2017 and rose by 4.77 percent in 2018, the largest growth among the remaining years. This suggests that instead of investing money on investments, Tata Motors has grown its machines and facilities.

Among non-current assets, other financial assets saw the largest percentage change. In comparison to 2016, it climbed by 90.75 percent in 2017. It possesses 793.40 crores in 2018, accounting for 304.14 percent of total assets, the biggest proportionate rise recorded by the corporation when compared to other non-current assets.

In 2017, the current asset tax was raised to its maximum level of 3272.14 percent. In 2018, however, it was reduced to -42.95 percent. -55.89 percent in 2017, 190.26 percent in 2018, -10.87 percent in $2019,340.15$ percent in 2020 , and 10.27 percent in 2021 , cash and cash equivalents have shown a turbulent trajectory. Other than cash and cash equivalents, bank balances grew at the fastest rate of 229.53 percent in 2019 and have exhibited positive growth for the previous four years. Other financial assets are progressively expanding, with a -19.52 percent share in $2017,541.44 \%$ in 2018 , 98 percent in 2019, 20.86 percent in 2020, and 12.83 percent in 2021.

In the years 2017 and 2018, inventories increased by 7.55 percent and 3.01 percent, respectively. However, owing to the Covid-19 epidemic, this growth has decreased by -17.78 percent and -17.81 percent in the years 2019 and 2020, respectively, indicating that the corporation has fared poorly in terms of transforming its inventory into money. However, in 2021, the firm had positive growth of 18.87 percent, indicating that it is progressively rebounding from the effects of the covid-19 epidemic. Other financial assets have grown the most in the previous five years, with a $541.66 \%$ increase in 2018. It has been in a growth stage for the past three years, with a rising tendency.

Table 4: Equity and Liabilities Horizontal Analysis (Tata Motors)

| Standalone Statement of Financial Position (in Crores) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Equity | 2015-16 | 2016-17 | \% | 2017-18 | \% | 2018-19 | \% | 2019-2020 | \% | 2020-21 | \% |
| Equity Share capital | 679.18 | 679.22 | 0.01\% | 679.22 | 0.00\% | 679.22 | 0.00\% | 719.54 | 5.94\% | 765.81 | 6.43\% |
| Reserves and surplus | 22582.93 | 20129.93 | -10.86\% | 19491.76 | -3.17\% | 21483.3 | 10.22\% | 17668.11 | -17.76\% | 18290.16 | $3.52 \%$ |
| Total shareholder's equity | 23262.11 | 20809.15 | -10.54\% | 20170.98 | -3.07\% | 22162.52 | $9.87 \%$ | 18387.65 | -17.03\% | 19055.97 | 3.63\% |
| Liabilities |  |  |  |  |  |  |  |  |  |  |  |
| Non-current liabilities |  |  |  |  |  |  |  |  |  |  |  |
| (a) Financial liabilities |  |  |  |  |  |  |  |  |  |  |  |
| (i) Borrowings | 10599.96 | 13686.09 | 29.11\% | 13155.91 | -3.87\% | 13914.74 | 5.77\% | 14776.51 | 6.19\% | 16326.77 | 10.49\% |
| (ii) Lease liabilities | - | - | 0.00\% | - | 0.00\% | 5.07 | 0.00\% | 522.24 | 10200.59\% | 593.74 | 13.69\% |
| (iii) Other financial liabilities | 2911.84 | 1123.66 | -61.41\% | 211.28 | -81.20\% | 180.8 | $-14.43 \%$ | 854.74 | $372.75 \%$ | 659.64 | -22.83\% |
| (b) Provisions | 750.89 | 850.71 | 13.29\% | 1009.48 | 18.66\% | 1281.59 | 26.96\% | 1769.74 | 38.09\% | 1371.94 | -22.48\% |
| (c) Deferred Tax liabilities (net) | 71.39 | 97.95 | 37.20\% | 154.61 | 57.85\% | 205.86 | $33.15 \%$ | 198.59 | -3.53\% | 266.5 | 34.20\% |
| (d) Other non-current liabilities | 378.07 | 321.24 | -15.03\% | 291.09 | -9.39\% | 218.24 | -25.03\% | 269.58 | 23.52\% | 533.55 | 97.92\% |
| Total Non-current Liabilities | 14712.15 | 16079.65 | 9.30\% | 14822.37 | -7.82\% | 15806.3 | $6.64 \%$ | 18391.4 | 16.35\% | 19752.14 | 7.40\% |
| Current Liabilities |  |  |  |  |  |  |  |  |  |  |  |
| (a) Financial liabilities |  |  |  |  |  |  |  |  |  |  |  |
| (i) Borrowings | 3654.72 | 5375.52 | 47.08\% | 3099.87 | 42.33\% | 3617.72 | 16.71\% | 6121.36 | 69.20\% | 2542.5 | -58.47\% |
| (ii) Lease liabilities | - | - | 0.00\% | - | 0.00\% | 3.64 | $0.00 \%$ | 83.3 | 2188.46\% | 96.47 | 15.81\% |
| (ii) Trade payables | 514.17 | 7015.21 | $36.45 \%$ | 9411.05 | 34.15\% | 10408.83 | 10.60\% | 8102.25 | -22.16\% | 8115.01 | 0.16\% |
| (iii) Acceptances | 3887.28 | 4379.29 | 12.66\% | 4814.58 | 9.94\% | 3003.28 | -35.75\% | 2741.69 | -11.37\% | 7873.12 | 187.16\% |
| (iv) Other financial liabilities | 3784.19 | 2465.14 | -34.86\% | 4091.16 | 65.96\% | 2234.34 | -45.39\% | 5976.35 | 167.48\% | 4255.57 | -28.79\% |
| (b) Provisions | 450.27 | 467.98 | 3.93\% | 862.92 | 84.39\% | 1148.69 | $33.12 \%$ | 1406.75 | 22.47\% | 1043.54 | -25.82\% |
| (c) Current Tax liabilities (net) | 79.27 | 80.64 | 1.73\% | 21.77 | -73.00\% | 78.3 | 259.67\% | 31.49 | -59.78\% | 37.84 | 20.17\% |
| (d) Other current liabilities | 1704.84 | 1864.02 | 9.34\% | 1917.6 | 2.87\% | 2356.01 | 22.86\% | 1347.63 | -42.80\% | 2287.5 | 69.74\% |
| Total Current Liabilities | 18701.74 | 21647.8 | 15.75\% | 24218.95 | 11.88\% | 22940.81 | -5.28\% | 25810.82 | 12.51\% | 26251.55 | 1.71\% |
| Total liabilities and shareholder's equity | 56676 | 58536.6 | $3.28 \%$ | 59212.3 | 1.15\% | 60909.63 | 2.87\% | 62589.87 | 2.76\% | 65059.66 | 3.95\% |

Source: Own analysis based on Tata Motors' FY 2017-2021 Standalone Statement of Financial Position.

Table 4 depicts the horizontal examination of Tata Motors' equity and liabilities. Non-current liabilities climbed by 9.30 percent in 2017 compared to 2016 , although they are still smaller than current liabilities, accounting for 15.75 percent of total liabilities and shareholder's equity. Deferred tax obligations have been increased to 37.20 percent in 2017, 57.85 percent in 2018, 33.15 percent in 2019, -3.53 percent in 2020, and 34.20 percent in 2021 under non-current liabilities. Last year, there was a large increase in provisions accepted, but it fell by -22.48 percent in 2021. Borrowing over the long term is continuously growing. In 2017, it was 29.11 percent, and in 2021 , it will be 10.49 percent. The amount of lease liabilities is likewise increasing. In 2021, they will climb by 13.69 percent.

The largest portion of total current liabilities is made up of short-term borrowings. Short-term borrowings were about 47.08 percent in 2017, down -42.34 percent from the previous year. In 2019, it climbed by 16.71 percent, and in 2020, it increased by 69.20 percent. In 2021, however, it will have declined by -58.47 percent.

Trade receivables are also fast growing. In 2017, it was roughly $36.45 \%$; in 2018, it was 34.15 percent; in 2019, it was 10.60 percent; in 2020, it was -22.16 percent; and in 2021 , it was 0.16 percent.

### 4.4 Financial Performance Analysis - Tata Motors

A company's financial performance analysis combines a vertical and horizontal study of the profit and loss statement's elements: expenses and revenue, with the goal of identifying the most relevant items using vertical analysis and comparing changes over time using horizontal analysis.

## Income Statement Vertical Analysis (Tata Motors)

Table 5: Vertical Analysis of a Standalone Income Statement (Tata Motors)

| Standalone Statement of Income (in Crores) |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Particulars | 2016-17 | \% | 2017-18 | \% | 2018-19 | \% | 2019-20 | \% | 2020-21 | \% |
| I. Income from operations | 48319.9 | -1933.62\% | 59624.69 | -6012.80\% | 69202.76 | $3465.04 \%$ | 45311.22 | -590.89\% | 47031.47 | -2408.84\% |
| II. Other Income | 982.12 | -39.30\% | 1557.6 | $-157.07 \%$ | 2554.66 | 127.91\% | 1383.05 | $-18.04 \%$ | 842.96 | -43.17\% |
| III. Total Income (I+II) | 49302.02 | -1972.92\% | 61182.29 | -6169.87\% | 71757.42 | 3592.96\% | 45311.22 | -590.89\% | 47874.43 | -2452.02\% |
| IV. Expenses: |  |  |  |  |  |  |  |  |  |  |
| (a) Cost of material consumed | 27390.59 | -1096.09\% | 37080.45 | -3739.34\% | 43748.77 | 2190.54\% | 26171.85 | -341.30\% | 30010.61 | -1537.07\% |
| (b) Purchase of products for sale | 4405.11 | -176.28\% | 4762.41 | -480.26\% | 6722.32 | 336.59\% | 5679.98 | -74.07\% | 5490.67 | -281.22\% |
| ss in inventories of finished goods, work-in-progress, and produ | -193.81 | 7.76\% | 842.05 | -84.92\% | 144.69 | 7.24\% | 722.68 | -9.42\% | -69.02 | 3.54\% |
| (d) Excise duty | 4506.71 | -180.34\% | 793.28 | -80.00\% | - | 0.00\% | - | 0.00\% | - | 0.00\% |
| (e) Employee benefits expense | 3401.34 | -136.11\% | 3966.73 | -400.02\% | 4273.1 | 213.96\% | 4384.31 | -57.17\% | 4212.99 | -215.78\% |
| (f) Finance cost | 1556.9 | -62.30\% | 1744.43 | $-175.92 \%$ | 1793.57 | 89.81\% | 1973 | -25.73\% | 2358.54 | -120.80\% |
| (g) Foreign exchange (gain)/loss (net) | -253.82 | 10.16\% | 17.14 | -1.73\% | 215.22 | 10.78\% | 239 | -3.12\% | 1.67 | -0.09\% |
| (h) Depreciation and amortisation expense | 2763.11 | -110.57\% | 3101.89 | -312.81\% | 3098.64 | 155.15\% | 3375.29 | -44.02\% | 3681.61 | -188.56\% |
| (i) Product development/Engineering expenses | 453.33 | -18.14\% | 474.98 | -47.90\% | 571.76 | 28.63\% | 830.24 | -10.83\% | 907.64 | -46.49\% |
| (j) Other expenses | 8494.68 | -339.93\% | 9234.27 | -931.22\% | 9680.46 | 484.71\% | 7720.75 | -100.68\% | 5801.9 | -297.16\% |
| (K) Amount capitalised | -941.55 | 37.68\% | -855.08 | 86.23\% | -1093.11 | -54.73\% | -1169.46 | 15.25\% | -817.53 | 41.87\% |
| Total Expenses (IV) | 51582.59 | -2064.18\% | 61162.55 | -6167.88\% | 69155.42 | 3462.67\% | 49927.64 | $-651.09 \%$ | 51579.08 | $-2641.76 \%$ |
| V. Profit(Ioss) before exceptional items and tax (III-V) | -2280.57 | 91.26\% | 19.74 | -1.99\% | 2602 | 130.28\% | -4616.42 | 60.20\% | -3704.65 | 189.74\% |
| VL. Exceptional items |  |  |  |  |  |  |  |  |  |  |
| (a) Provision for impairment of investments and cost associated with closure of operations of a subsidiary | - | 0.00\% | - | 0.00\% | - | 0.00\% | - | 0.00\% | - | 0.00\% |
| (b) Write off/provision(reversal) for tangible/intangible assets (including under development) | - | 0.00\% | - | 0.00\% | 180.66 | 9.05\% | -73.03 | 0.95\% | 114 | -5.84\% |
| (b) Provision for impairment of investment in a subsidiary | 123.17 | -4.93\% | - | 0.00\% | - | 0.00\% | - | 0.00\% | 123.36 | $-6.32 \%$ |
| ent of capitalized property, plant and equipment and other intan | - | 0.00\% | 962.98 | -97.11\% | - | 0.00\% | 1418.64 | -18.50\% | -1182.41 | 60.56\% |
| (d) Profit on sale of investment in a subsidiary company | - | 0.00\% | - | 0.00\% | -332.95 | $-16.67 \%$ | - | 0.00\% | - | 0.00\% |
| (e) Employee separation cost | 67.61 | -2.71\% | 3.68 | -0.37\% | 4.23 | 0.21\% | 2.69 | -0.04\% | 215.97 | -11.06\% |
| tran given to/investment and cost of closure in subsidiary com | - | 0.00\% | - | 0.00\% | 241.86 | 12.11\% | 385.62 | -5.03\% | -663 | 33.96\% |
| (g) Provision for Onerous Contracts | - | 0.00\% | - | 0.00\% | 109.27 | 5.47\% | 777 | -10.13\% | - | 0.00\% |
| (f) Others | 147.93 | -5.92\% | - | 0.00\% | - | 0.00\% | - | 0.00\% | - | 0.00\% |
| VII. Profit/(loss) before tax(V-VI) | -2619.28 | 104.82\% | -946.92 | 95.49\% | 2398.93 | $120.12 \%$ | -7127.34 | 92.94\% | -2312.57 | $118.44 \%$ |
| VIII. Tax expense/(credit) (net) |  |  |  |  |  |  |  |  |  |  |
| (a) Current tax | -8.52 | 0.34\% | 92.63 | -9.34\% | 294.66 | 14.75\% | 33.05 | -0.43\% | 82.31 | -4.22\% |
| (b) Deferred Tax | -13.14 | 0.53\% | -4.7 | 0.47\% | 83.67 | 4.19\% | 129.24 | $-1.69 \%$ | 0.56 | $-0.03 \%$ |
| Total Tax Expense/(credit) | -21.66 | 0.87\% | 87.93 | -8.87\% | 378.33 | 18.94\% | 162.29 | -2.12\% | 82.87 | -4.24\% |
| . Profit/(loss) for the period from continuing operations (VII-V1 | -2597.62 | 103.95\% | -1034.85 | $104.36 \%$ | 2020.6 | 101.17\% | -7289.63 | 95.06\% | -2395.44 | $122.69 \%$ |
| X. Other comprehensive income/(loss) | 98.68 | -3.95\% | 43.22 | -4.36\% | -23.43 | -1.17\% | -378.72 | 4.94\% | 442.99 | -22.69\% |
| Total other comprehensive income/(loss) for the period (IX+X) | -2498.94 | 100.00\% | -991.63 | 100.00\% | 1997.17 | 100.00\% | -7668.35 | 100.00\% | -1952.45 | 100.00\% |

Own processing based on Tata Motors' Standalone Statement of Income for FY 2017-2021.
Table 5 shows the vertical examination of Tata Motors' income statement. Revenue from operations has been on a downward trajectory, accounting for - 1933.62 percent of total comprehensive loss in 2017 and negative growth of - 2408.84 percent in 2021. As the firm declared profit in the given year, revenue from other sources declined by -39.30 percent in 2017 and climbed by 127.91 percent in 2019. In 2021, however, it fell to - 43.17 percent once more. The income statement's total income takes up the most space. In 2017, it was approximately -1972.92 percent, and in 2021, it will be around 2452.02 percent. Because revenue from operations represents for a tiny part of total income, changes in income from other sources have little influence on total income.

Table 5 demonstrates that Indian Oil Corporation Limited has just two income categories, and as previously stated in the revenue analysis, the majority of the revenue comes from operations. During the three years of analysis, the revenue from operations was approximately 99 percent, which includes main product and crude sales, and it was 99.37 percent in the last year, 2020.

Under overall costs, the cost of material utilised takes up the most space. In 2017, it was -1096.09 percent, and in 2021, it was -1537.07 percent. Other costs, which held -339.93 percent in 2017 and declined to -297.16 percent in 2021, are the next highest expense. Other expenditures include processing fees, store and spare part usage, electricity and gasoline, freight, transportation, and port fees, among others. It also covers publicity costs, warranty costs, information technology/computer costs, trade \& other receivables allowances, and works operation costs, among other things.

Employee benefit expenditures accounted for -136.11 percent of total comprehensive loss in 2017 and will account for -215.78 percent in 2021. Employee benefit expenditures include salaries, wages, bonuses, contributions to provident funds and other funds, and staff welfare expenses.

Changes in inventories of finished items, work-in-progress, and for-sale products have increased by 7.76 percent in 2017, 7.24 percent in 2019 , and 3.54 percent in 2021 . Aside from that, the amount capitalised climbed by 37.68 percent in 2017 and will rise to 41.87 percent in 2021. In the year 2021, the gain and loss from foreign exchange was $-0.09 \%$.

In 2019, the depreciation and amortisation expenditure showed a positive rise of 155.15 percent. Despite this, the straight-line technique is used by companies to calculate depreciation on property, equipment, and machinery.

## An examination of the income statement from a horizontal perspective (Tata Motors)

Table 6: Horizontal Analysis of a Standalone Income Statement (Tata Motors)

| Standalone Statement of Income (in Crores) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Particulars | 2015-16 | 2016-17 | \% | 2017-18 | \% | 2018-19 | \% | 2019-20 | \% | 2020-21 | \% |
| I. Income from operations | 46715.9 | 48319.9 | 3.43\% | 59624.69 | 23.40\% | 69202.76 | 16.06\% | 45311.22 | -34.52\% | 47031.47 | 3.80\% |
| II. Other Income | 1406.58 | 982.12 | -30.18\% | 1557.6 | $58.60 \%$ | 2554.66 | $64.01 \%$ | 1383.05 | -45.86\% | 842.96 | -39.05\% |
| III. Total Income (I+II) | 48122.48 | 49302.02 | 2.45\% | 61182.29 | 24.10\% | 71757.42 | 17.28\% | 45311.22 | -36.86\% | 47874.43 | 5.66\% |
| IV. Expenses: |  |  |  |  |  |  |  |  |  |  |  |
| (a) Cost of material consumed | 24313.08 | 27390.59 | 12.66\% | 37080.45 | 35.38\% | 43748.77 | 17.98\% | 26171.85 | -40.18\% | 30010.61 | 14.67\% |
| (b) Purchase of products for sale | 5259.27 | 4405.11 | $-16.24 \%$ | 4762.41 | 8.11\% | 6722.32 | $41.15 \%$ | 5679.98 | -15.51\% | 5490.67 | -3.33\% |
| s in inventories of finished goods, work-in-progress, and produ | 22.94 | -193.81 | -944.86\% | 842.05 | -534.47\% | 144.69 | -82.82\% | 722.68 | 399.47\% | -69.02 | -109.55\% |
| (d) Excise duty | 4325.81 | 4506.71 | 4.18\% | 793.28 | -82.40\% | - | 0.00\% | - | 0.00\% | - | 0.00\% |
| (e) Employee benefits expense | 3048.71 | 3401.34 | 11.57\% | 3966.73 | $16.62 \%$ | 4273.1 | 7.72\% | 4384.31 | 2.60\% | 4212.99 | -3.91\% |
| (f) Finance cost | 1541.54 | 1556.9 | 1.00\% | 1744.43 | 12.05\% | 1793.57 | 2.82\% | 1973 | 10.00\% | 2358.54 | 19.54\% |
| (g) Foreign exchange (gain)/loss (net) | 200.86 | -253.82 | -226.37\% | 17.14 | -106.75\% | 215.22 | $1155.66 \%$ | 239 | $11.05 \%$ | 1.67 | -99.30\% |
| (h) Depreciation and amortization expense | 214.89 | 2763.11 | 28.82\% | 3101.89 | 12.26\% | 3098.64 | -0.10\% | 3375.29 | 8.93\% | 3681.61 | 9.08\% |
| (i) Product development/Engineering expenses | 417.89 | 453.33 | 8.48\% | 474.98 | 4.78\% | 571.76 | 20.38\% | 830.24 | 45.21\% | 907.64 | 9.32\% |
| (j) Other expenses | 8003.71 | 8494.68 | 6.13\% | 9234.27 | 8.71\% | 9680.46 | 4.83\% | 7720.75 | -20.24\% | 5801.9 | -24.85\% |
| (K) Amount capitalized | -1034.18 | -941.55 | -8.96\% | -855.08 | -9.18\% | -1093.11 | 27.84\% | -1169.46 | 6.98\% | -817.53 | -30.09\% |
| Total Expenses (IV) | 48244.52 | 51582.59 | 6.92\% | 61162.55 | 18.57\% | 69155.42 | 13.07\% | 49927.64 | -27.80\% | 51579.08 | 3.31\% |
| V. Profit/(loss) before exceptional items and tax (III-IV) | -122.04 | -2280.57 | 1768.71\% | 19.74 | $-100.87 \%$ | 2602 | 13081.36\% | $-4616.42$ | -277.42\% | -3704.65 | -19.75\% |
| VI. Exceptional items |  |  |  |  |  |  |  |  |  |  |  |
| (a) Provision for impairment of investments and cost associated with closure of operations of a subsidiary | 97.86 | - | 0.00\% | - | 0.00\% | - | 0.00\% | - | 0.00\% | - | 0.00\% |
| (b) Write off/provision(reversal) for tangible/intangible assets (including under development) | - | - | 0.00\% | - | 0.00\% | 180.66 | 0.00\% | -73.03 | $-140.42 \%$ | 114 | -256.10\% |
| (b) Provision for impaiment of investment in a subsidiary | - | 123.17 | 0.00\% | - | 0.00\% | - | 0.00\% | - | 0.00\% | 123.36 | 0.00\% |
| ent of capitalized property, plant and equipment and other intans | 163.94 | - | 0.00\% | 962.98 | 0.00\% | - | 0.00\% | 1418.64 | 0.00\% | $-1182.41$ | -183.35\% |
| (d) Profit on sale of investment in a subsidiary company | - | - | 0.00\% | - | 0.00\% | -332.95 | 0.00\% | - | 0.00\% | - | 0.00\% |
| (e) Enployee separation cost | 10.04 | 67.61 | $573.41 \%$ | 3.68 | -94.56\% | 4.23 | 14.95\% | 2.69 | -36.41\% | 215.97 | 7928.62\% |
| floan given to/investment and cost of closure in subsidiary com | - | - | 0.00\% | - | 0.00\% | 241.86 | 0.00\% | 385.62 | 59.44\% | -663 | -271.93\% |
| (g) Provision for Onerous Contracts | - | - | 0.00\% | - | 0.00\% | 109.27 | 0.00\% | 777 | $611.08 \%$ | - | 0.00\% |
| (f) Others | - | 147.93 | 0.00\% | - | 0.00\% | - | 0.00\% | - | 0.00\% | - | 0.00\% |
| VII. Profit/(loss) before tax (V-VI) | -393.88 | -2619.28 | 564.99\% | -946.92 | -63.85\% | 2398.93 | -353.34\% | -7127.34 | $-397.10 \%$ | -2312.57 | -67.55\% |
| VIII. Taxexpense/(credit) (net) |  |  |  |  |  |  |  |  |  |  |  |
| (a) Current tax | -88.52 | -8.52 | -90.38\% | 92.63 | -1187.21\% | 294.66 | 218.10\% | 33.05 | -88.78\% | 82.31 | 149.05\% |
| (b) Deferred Tax | -2.92 | -13.14 | 350.00\% | -4.7 | -64.23\% | 83.67 | -1880.21\% | 129.24 | $54.46 \%$ | 0.56 | -99.57\% |
| Total Tax Expense/(credit) | -91.44 | -21.66 | -76.31\% | 87.93 | -505.96\% | 378.33 | $330.26 \%$ | 162.29 | -57.10\% | 82.87 | -48.94\% |
| . Profi/loss) for the period from continuing operations (VII-vII | -302.44 | -2597.62 | 758.89\% | -1034.85 | -60.16\% | 2020.6 | -295.26\% | -7289.63 | -460.77\% | -2395.44 | -67.14\% |
| X. Other comprehensive income/(loss) | 86.23 | 98.68 | 14.44\% | 43.22 | -56.20\% | -23.43 | -154.21\% | -378.72 | 1516.39\% | 442.99 | -216.97\% |
| Total other comprehensive income/(loss) for the period (IX +X ) | -216.21 | -2498.94 | 1055.79\% | -991.63 | $-60.32 \%$ | 1997.17 | -301.40\% | -7668.35 | -483.96\% | -1952.45 | -74.54\% |

Own processing based on Tata Motors' Standalone Statement of Income for FY 2017-2021.
A trend analysis, also known as a horizontal analysis, is a way of examining a financial statement that illustrates changes in the values of the corresponding financial statement components over time. It's a handy tool for determining trends. The base year in the above study is 2016, and the comparative year is 2017. All balance sheet and income statement items for 2017 are compared to the 2016 balance sheet and income statement items. Similarly, for the other years, the same has been done.

Table 6 shows the profit change over the last five years. The study of income statement components determines the change in profit. In 2018, income from operations, which is simply revenue from operations, grew at the fastest rate of 23.40 percent. Due to the covid-19 pandemic, it will be 34.52 percent in 2020. However, by 2021, the rate had risen to $3.80 \%$.

In 2017, overall costs climbed by 6.92 percent, with the biggest growth of 18.57 percent in 2018. The cost of depreciation and amortisation has been raised to 28.82 percent in 2017 and 9.08 percent in 2021.

### 4.5 Ratio Analysis - Tata Motors

For the ratio study of Tata Motors, liquidity ratios, profitability ratios, leverage ratios, and activity ratios were calculated during a five-year period, from 2017 to 2021.

## Ratios of liquidity

Table 7: Liquidity Ratios in Millions (Tata Motors)

| Particulars | $\mathbf{2 0 1 6 - 1 7}$ | $\mathbf{2 0 1 7 - 1 8}$ | $\mathbf{2 0 1 8 - 1 9}$ | $\mathbf{2 0 1 9 - 2 0}$ | $\mathbf{2 0 2 0 - 2 1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cash Ratio | 0.01 | 0.02 | 0.02 | 0.08 | 0.09 |
| Current Ratio | 0.58 | 0.62 | 0.58 | 0.53 | 0.6 |
| Quick Ratio | 0.33 | 0.38 | 0.37 | 0.38 | 0.43 |

Author's work based on annual report 2021
Figure 1: Liquidity Ratios in Millions (Tata Motors)


Author's work based on annual report 2021

If the cash ratio is greater than one, the corporation will be able to pay its existing debts in cash and cash equivalents and still have cash on hand.

In the previous five years, the company's cash ratio has been less than one, indicating that Tata Motors does not have enough cash to pay down its debt. In 2017, Tata Motors' cash ratio was 0.01 , in 2018 it was 0.02 , in 2019 it was 0.02 , in 2020 it was 0.08 , and in 2021, it was 0.09 . Cash and cash equivalents, as well as the bank balance, must be appropriately maintained by the firm.

In addition to the cash ratio, the company's current ratio should be larger than 1 , since it is beneficial to the company's financial health. A current ratio greater than one implies that the company's current assets are sufficient to cover its current liabilities.

According to the research, the business's current ratio has been less than 1 over the preceding five years, indicating that the company lacks sufficient liquid assets to pay down its short-term creditors. Every year, the company's current ratio has been less than one, showing that it lacks the financial capacity to pay down its obligations. In 2017, it was 0.58 , and by 2021 , it would have risen to 0.60 .

A quick ratio greater than one is beneficial to a corporation since it indicates that it is financially solid in terms of repaying short-term debt. In the last five years, Tata Motor's quick ratio has been less than one, indicating that the firm does not have enough long-term assets to cover its short-term commitments.

## Ratios of profitability

Table 8: Profitability Ratios in Millions (Tata Motors)

| Particulars | $\mathbf{2 0 1 6 - 1 7}$ | $\mathbf{2 0 1 7 - 1 8}$ | $\mathbf{2 0 1 8 - 1 9}$ | $\mathbf{2 0 1 9 - 2 0}$ | $\mathbf{2 0 2 0 - 2 1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Net Profit | $-5.17 \%$ | $-1.66 \%$ | $2.89 \%$ | $-16.92 \%$ | $-4.15 \%$ |
| Return on Assets (\%) | $-4.27 \%$ | $-1.67 \%$ | $3.28 \%$ | $-12.25 \%$ | $-3.00 \%$ |
| Return on Equity (\%) | $-12.01 \%$ | $-4.92 \%$ | $9.01 \%$ | $-41.70 \%$ | $-10.25 \%$ |

Author's work based on annual report 2021
Figure 2: Profitability Ratios in Millions (Tata Motors)


Author's work based on annual report 2021

A profitability ratio is a metric that measures a company's capacity to create profit in relation to its sales. Net profit, Return on Assets, Return on Equity, and Return on Capital Employed are examples of profitability ratios.

Except for 2019, the net profit ratio is negative for all years since the firm has lost money for the preceding five years. In terms of net profit ratio, the corporation is underperforming. In 2017, the ratio was -5.17 percent, and in 2020, it was -16.92 percent, the highest among the remaining years. In 2021, the net profit ratio fell by -4.15 percent. The return on assets (ROA) ratio shows how much profit a firm makes on the money it spends on its operations. Except for 2019, Tata Motors has a negative return on assets ratio in every year. In 2020, the return on assets ratio was -12.25 percent, the highest in the previous five years. Tata Motors' negative return on assets ratio implies that the company has not appropriately invested its funds.

Return on equity (ROE) is a metric that evaluates how much profit a firm makes from individual investments. The company's return on equity has been steadily declining over the last five years. In 2017, the ratio was -12.01 percent; in 2018, it was -4.92 percent; in 2019, it was 9.01 percent; in 2020, it was -41.70 percent; and in 2021, it was -10.25 percent. This suggests that the corporation is inefficient and is not properly utilising the money of its shareholders.

## Ratios of leverage

Table 9: Leverage Ratios in Millions (Tata Motors)

| Particulars | $\mathbf{2 0 1 6 - 1 7}$ | $\mathbf{2 0 1 7 - 1 8}$ | $\mathbf{2 0 1 8 - 1 9}$ | $\mathbf{2 0 1 9 - 2 0}$ | $\mathbf{2 0 2 0 - 2 1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Debt to Equity | 0.92 | 0.81 | 0.79 | 1.14 | 0.99 |
| Debt to Asset | 0.33 | 0.27 | 0.29 | 0.33 | 0.29 |
| Debt to Capital | 0.48 | 0.45 | 0.44 | 0.53 | 0.5 |

Author's work based on annual report 2021
Figure 3: Leverage Ratios in Millions (Tata Motors)


Author's work based on annual report 2021

The debt-to-equity ratio assesses a company's debt-to-equity condition. A debt-to-equity ratio greater than one indicates that the firm has more debt than equity. Except for the year 2019, when it has a debt to equity ratio of 1.14 , Tata Motors' debt to equity ratio has always been less than one. This indicates that the firm has a lower debt-to-equity ratio.

If a firm's debt to asset ratio is greater than one, it means the company has more obligations than assets. Tata Motors has more assets than liabilities, according to the debt to asset ratio, which has been less than one for the previous five years.

The debt-to-capital ratio of Tata Motors is steadily rising. In 2017, the ratio was 0.48 ; in 2018, it was 0.45 ; in 2019, it was 0.44 ; in 2020, it was 0.53 ; and in 2021 , it was 0.50 . Despite the increase in
debt to capital ratio, the company's ratio is still less than one, indicating that Tata Motors has sufficient capital to service its debts.

## Ratios of Activity

Table 10: Activity Ratios in Millions (Tata Motors)

| Particulars | $\mathbf{2 0 1 6 - 1 7}$ | $\mathbf{2 0 1 7 - 1 8}$ | $\mathbf{2 0 1 8 - 1 9}$ | $\mathbf{2 0 1 9 - 2 0}$ | $\mathbf{2 0 2 0 - 2 1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Asset Turnover Ratio | 0.83 | 1.01 | 1.14 | 0.72 | 0.72 |
| Inventory Turnover Ratio | 8.78 | 10.52 | 14.84 | 11.82 | 10.33 |
| Receivables Turnover | 22.71 | 17.13 | 21.29 | 22.91 | 22.53 |

Author's work based on yearly report 2021
Figure 4: Activity Ratios in Millions (Tata Motors)


Author's work based on yearly report 2021

The asset to turnover ratio measures the value of a company's revenue in relation to the value of its assets. In 2017, the asset-to-turnover ratio was 0.83 ; in 2018, it was 1.01 ; in 2019, it was 1.14 ; and in 2020 and 2021, it was 0.72 . The corporation should make effective use of its assets in order to increase income.

The inventory turnover ratio is used to determine whether or not a firm is effectively utilising its inventory. In 2017, the ratio was $8.78,10.52$ in 2018, and 14.84 in 2019 , the highest of the future years. In 2020, the ratio was reduced to 11.82 , and in 2021 , it was reduced to 10.33 . This indicates that the firm is making optimal use of its inventory and is not overpaying on inventory purchases and management.

The capacity of a corporation to recover money owed to it from customers is measured by its receivable turnover ratio. The receivable turnover ratio of the organisation is on the rise. In 2017, the
ratio was 22.71 , and in 2020, it will be 22.91 percent higher. The company's high receivable turnover ratio has remained constant, hovering around 22.53 in 2021.

### 4.6 Financial Position Analysis - Maruti Suzuki

Maruti Suzuki India Limited's financial status was examined utilising both vertical and horizontal asset and liability analysis.

## Vertical examination of the elements on the balance sheet (Maruti Suzuki India Ltd.)

Vertical analysis is a technique for quantifying financial statements of specific things based on a numerical value. It's interesting to examine the item balance and proportions from one year to the next.

Table 11: Assets Vertical Analysis (Maruti Suzuki India Ltd.)

| Standalone Statement of Financial Position (in millions) |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Particulars | 2016-17 | \% | 2017-18 | \% | 2018-19 | \% | 2019-2020 | \% | 2020-2021 | \% |
| ASSETS |  |  |  |  |  |  |  |  |  |  |
| Current Assets |  |  |  |  |  |  |  |  |  |  |
| Inventories | 32622 | 6.40\% | 31608 | 5.32\% | 33257 | 5.28\% | 32149 | 5.14\% | 30500 | 4.35\% |
| Financial assets |  |  |  |  |  |  |  |  |  |  |
| Investments | 20137 | 3.95\% | 12173 | 2.05\% | 50455 | 8.02\% | 12188 | 1.95\% | 84157 | 12.01\% |
| Trade receivables | 11992 | 2.35\% | 14618 | 2.46\% | 23104 | 3.67\% | 19749 | 3.16\% | 12766 | 1.82\% |
| Cash and bank balances | 131 | 0.03\% | 711 | 0.12\% | 1789 | 0.28\% | 182 | 0.03\% | 323 | 0.05\% |
| Other bank balances |  |  |  |  |  |  | 29 | 0.00\% | 30041 | 4.29\% |
| Loans | 25 | 0.00\% | 30 | 0.01\% | 160 | 0.03\% | 169 | 0.03\% | 230 | 0.03\% |
| Other financial assets | 950 | 0.19\% | 2846 | 0.48\% | 4964 | 0.79\% | 6596 | 1.05\% | 6410 | 0.91\% |
| Current tax assets | 4854 | 0.95\% | 4109 | 0.69\% | 4274 | 0.68\% | 5269 | 0.84\% | 5396 | 0.77\% |
| Other current assets | 15388 | 3.02\% | 13119 | 2.21\% | 5613 | 0.89\% | 7943 | 1.27\% | 15444 | 2.20\% |
| Total current assets | 86099 | 16.88\% | 79214 | 13.34\% | 123616 | 19.64\% | 84274 | 13.47\% | 185267 | $26.44 \%$ |
| Non-Current Assets |  |  |  |  |  |  |  |  |  |  |
| Property, plant and equipment | 129162 | 25.33\% | 130473 | 21.98\% | 149567 | 23.77\% | 147618 | 23.60\% | 141511 | 20.20\% |
| Capital work-in-progress | 12523 | 2.46\% | 21259 | 3.58\% | 16001 | 2.54\% | 13374 | 2.14\% | 11923 | 1.70\% |
| Intangible assets | 3730 | 0.73\% | 3117 | 0.53\% | 4511 | 0.72\% | 3358 | 0.54\% | 2242 | 0.32\% |
| Intangible assets under development | - | 0.00\% | - | 0.00\% | - | 0.00\% | 709 | 0.11\% | 2975 | 0.42\% |
| Right-of-use Assets | - | 0.00\% | - | 0.00\% | - | 0.00\% | 6127 | 0.98\% | 5817 | 0.83\% |
| Financial assets |  |  |  |  |  |  |  |  |  |  |
| Investments | 262147 | 51.41\% | 340729 | 57.39\% | 314695 | 50.01\% | 352488 | 56.35\% | 333710 | 47.63\% |
| Loans | 3 | 0.00\% | 2 | 0.00\% | 2 | 0.00\% |  | 0.00\% | 2 | 0.00\% |
| Other financial assets | 238 | 0.05\% | 324 | 0.05\% | 340 | 0.05\% | 358 | 0.06\% | 363 | 0.05\% |
| Other non-current assets | 16031 | 3.14\% | 18583 | 3.13\% | 20586 | 3.27\% | 17213 | 2.75\% | 16864 | 2.41\% |
| Total Non-current Assets | 423834 | 83.12\% | 514487 | 86.66\% | 505702 | 80.36\% | 541247 | 86.53\% | 515407 | 73.56\% |
| Total Asset | 509933 | 100.00\% | 593701 | 100.00\% | 629318 | 100.00\% | 625521 | 100.00\% | 700674 | 100.00\% |

Own processing based on Maruti Suzuki India Limited's FY 2017-2021 Standalone Statement of Financial Position.

Table 11 shows a vertical examination of Maruti Suzuki India Limited's standalone statement of financial status. The research reveals a shift in asset component proportions. Components like as investments, property, plant, and equipment have all changed as a result of these developments.

Current assets account for $16.88 \%$ of total assets, while non-current assets account for $83.12 \%$. Inventories made up the largest percentage of total assets under the heading of current assets. In 2017, it was 6.40 percent, and by 2021, it had dropped to 4.35 percent. In the last five years, there has been no significant change in cash and bank balances, as well as loans.

In comparison to other non-current assets, property, plant, and equipment accounted for the largest share of total asset. In 2017, it absorbed 25.33 percent of total assets, which was the largest in comparison to previous years.

Aside from land, plant, and equipment, investments in financial assets have been steadily expanding. Investments increased by 51.41 percent in 2017, 57.39 percent in 2018, and a modest drop of 50.01 percent in 2019, 56.35 percent in 2020, and 47.63 percent in 2021.

Table 12: Equity and Liabilities Vertical Analysis (Maruti Suzuki India Ltd.)

| Standalone Statement of Financial Position (in millions) |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EQUTTY | 2016-17 | \% | 2017-18 | \% | 2018-19 | \% | 2019-2020 | \% | 2020-21 | \% |
| Equity share capital | 1510 | 0.30\% | 1510 | 0.25\% | 1510 | 0.24\% | 1510 | 0.24\% | 1510 | 0.22\% |
| Other equity | 360201 | 70.64\% | 416063 | 70.08\% | 459905 | 73.08\% | 482860 | 77.19\% | 512158 | 73.10\% |
| Total shareholder's equity | 361711 | 70.93\% | 417573 | 70.33\% | 461415 | 73.32\% | 484370 | 77.43\% | 513668 | 73.31\% |
| Liabilities |  |  |  |  |  |  |  |  |  |  |
| Non-current liabilities |  |  |  |  |  |  |  |  |  |  |
| Financial liabilities |  |  |  |  |  |  |  |  |  |  |
| Borrowings | - | 0.00\% | - | 0.00\% | - | 0.00\% | - | 0.00\% | - | 0.00\% |
| Lease liabilities | - | 0.00\% | - | 0.00\% | - | 0.00\% | 550 | 0.09\% | 353 | 0.05\% |
| Provisions | 219 | 0.04\% | 265 | 0.04\% | 395 | 0.06\% | 516 | 0.08\% | 447 | 0.06\% |
| Deferred tax liabilities (Net) | 4640 | 0.91\% | 5589 | 0.94\% | 5640 | 0.90\% | 5984 | 0.96\% | 3847 | 0.55\% |
| Other non-current liabilities | 11050 | 2.17\% | 15853 | 2.67\% | 20365 | 3.24\% | 21153 | $3.38 \%$ | 21292 | 3.04\% |
| Total non-current liabilities | 15909 | 3.12\% | 21707 | 3.66\% | 26400 | 4.20\% | 28203 | $4.51 \%$ | 25939 | 3.70\% |
| Current liabilities |  |  |  |  |  |  |  |  |  |  |
| Financial liabilities |  |  |  |  |  |  |  |  |  |  |
| Borrowings | 4836 | 0.95\% | 1108 | 0.19\% | 1496 | 0.24\% | 1063 | 0.17\% | 4888 | 0.70\% |
| Trade payables | 83673 | 16.41\% | 104970 | 17.68\% | 96330 | 15.31\% | 74941 | 11.98\% | 101617 | 14.50\% |
| Lease liabilities | - | 0.00\% | - | 0.00\% | - | 0.00\% | 94 | 0.02\% | 65 | 0.01\% |
| Other financial liabilities | 13027 | 2.55\% | 13338 | 2.25\% | 14400 | 2.29\% | 9017 | 1.44\% | 12693 | 1.81\% |
| Provisions | 4490 | 0.88\% | 5600 | 0.94\% | 6244 | 0.99\% | 6796 | 1.09\% | 7416 | 1.06\% |
| Current tax liabilities (Net) | 8036 | 1.58\% | 8541 | 1.44\% | 6729 | 1.07\% | 6962 | 1.11\% | 8539 | $1.22 \%$ |
| Other current liabilities | 18251 | 3.58\% | 20864 | $3.51 \%$ | 16304 | 2.59\% | 14075 | 2.25\% | 25849 | 3.69\% |
| Total current liabilities | 132313 | 25.95\% | 154421 | 26.01\% | 141503 | 22.49\% | 112948 | 18.06\% | 161067 | 22.99\% |
| Total liabilities | 148222 | 29.07\% | 176128 | 29.67\% | 167903 | 26.68\% | 141151 | $22.57 \%$ | 187006 | 26.69\% |
| Total liabilities and shareholder's equity | 509933 | 100.00\% | 593701 | 100.00\% | 629318 | 100.00\% | 625521 | 100.00\% | 700674 | 100.00\% |

Own processing based on Maruti Suzuki India Limited's FY 2017-2021 Standalone Statement of Financial Position.

Maruti Suzuki India Limited's equity and liabilities are analysed vertically in Table 12. According to the research, trade payables accounted for the largest percentage change in overall equity and liabilities. In 2017, trade payables were 16.41 percent, while in 2018, they were 17.68 percent. However, in 2020, it fell by 11.98 percent, the lowest of all years. In 2021, it was 14.50 percent.

In 2017, Maruti Suzuki India Limited's non-current liabilities accounted for $3.12 \%$ of the company's total liabilities and equity. Other non-current obligations have remained stable during the last five years, with no significant changes in their share.

Long-term debt makes up the majority of non-current liabilities (Borrowings). Bharat Petroleum Corporation Ltd. has a large debt of 26272.7 crores in 2019-20, accounting for 20.77 percent of total liabilities and equity.

The long-term debt has risen in the last two years, with lease liabilities of 0.09 percent in 2020 and 0.05 percent in 2021, respectively. Since the last five years, short-term debt has been steadily expanding. In 2017, the short-term debt was 0.95 percent, and by 2021, it had dropped to 0.70 percent.

In the last five years, shareholder equity has risen to roughly $70 \%$. Because there are no significant changes in the proportion of equity, the equity share capital remains constant. The other equity, which consists only of reserve and excess, is steadily expanding. In 2017, it was 70.64 percent, and by 2020, it will be 77.19 percent. The other equity was 73.10 percent in 2021.

## An examination of the balance sheet elements from a horizontal perspective (Maruti Suzuki India Ltd.)

Table 13: Assets Horizontal Analysis (Maruti Suzuki India Ltd.)

| Standalone Statement of Financial Position (in millions) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Particulars | 2015-16 | 2016-17 | \% | 2017-18 | \% | 2018-19 | \% | 2019-2020 | \% | 2020-2021 | \% |
| Assets |  |  |  |  |  |  |  |  |  |  |  |
| Current Assets |  |  |  |  |  |  |  |  |  |  |  |
| Inventories | 31321 | 32622 | 4.15\% | 31608 | -3.11\% | 33257 | 5.22\% | 32149 | -3.33\% | 30500 | -5.13\% |
| Financial assets |  |  |  |  |  |  |  |  |  |  |  |
| Investments | 10568 | 20137 | 90.55\% | 12173 | -39.55\% | 50455 | 314.48\% | 12188 | -75.84\% | 84157 | 590.49\% |
| Trade receivables | 13222 | 11992 | -9.30\% | 14618 | 21.90\% | 23104 | 58.05\% | 19749 | -14.52\% | 12766 | -35.36\% |
| Cash and bank balances | 391 | 131 | -66.50\% | 711 | 442.75\% | 1789 | 151.62\% | 182 | -89.83\% | 323 | 77.47\% |
| Other bank balances | - | - | $0.00 \%$ | - | $0.00 \%$ | - | 0.00\% | 29 | 0.00\% | 30041 | 103489.66\% |
| Loans | 31 | 25 | -19.35\% | 30 | 20.00\% | 160 | $433.33 \%$ | 169 | $5.63 \%$ | 230 | $36.09 \%$ |
| Other financial assets | 1478 | 950 | -35.72\% | 2846 | 199.58\% | 4964 | 74.42\% | 6596 | $32.88 \%$ | 6410 | -2.82\% |
| Current tax assets | 4854 | 4854 | $0.00 \%$ | 4109 | -15.35\% | 4274 | 4.02\% | 5269 | 23.28\% | 5396 | 2.41\% |
| Other current assets | 16595 | 15388 | -7.27\% | 13119 | -14.75\% | 5613 | -57.21\% | 7943 | 41.51\% | 15444 | 94.44\% |
| Total current assets | 78460 | 86099 | 9.74\% | 79214 | -8.00\% | 123616 | 56.05\% | 84274 | -31.83\% | 185267 | 119.84\% |
| Non-Current Assets |  |  |  |  |  |  |  |  |  |  |  |
| Property, plant and equipment | 121631 | 129162 | 6.19\% | 130473 | 1.02\% | 149567 | 14.63\% | 147618 | $-1.30 \%$ | 141511 | -4.14\% |
| Capital work-in-progress | 10069 | 12523 | 24.37\% | 21259 | 69.76\% | 16001 | -24.73\% | 13374 | -16.42\% | 11923 | -10.85\% |
| Intangible assets | 3469 | 3730 | 7.52\% | 3117 | -16.43\% | 4511 | 44.72\% | 3358 | -25.56\% | 2242 | -33.23\% |
| Intangible assets under development | - | - | 0.00\% | - | $0.00 \%$ | - | 0.00\% | 709 | 0.00\% | 2975 | 319.61\% |
| Right-of-use Assets | - | . | $0.00 \%$ | - | $0.00 \%$ | - | 0.00\% | 6127 | $0.00 \%$ | 5817 | -5.06\% |
| Financial assets |  |  |  |  |  |  |  |  |  |  |  |
| Investments | 188754 | 262147 | 38.88\% | 340729 | 29.98\% | 314695 | -7.64\% | 352488 | 12.01\% | 337710 | -5.33\% |
| Loans | 4 | 3 | -25.00\% | 2 | -33.33\% | 2 | 0.00\% | 2 | 0.00\% | 2 | 0.00\% |
| Other financial assets | 231 | 238 | 3.03\% | 324 | 36.13\% | 340 | 4.94\% | 358 | 5.29\% | 363 | 1.40\% |
| Other non-current assets | 16872 | 16031 | -4.98\% | 18583 | 15.92\% | 20586 | 10.78\% | 17213 | -16.38\% | 16864 | $-2.03 \%$ |
| Total Non-current Assets | 340940 | 423834 | 24.31\% | 514887 | 21.39\% | 505702 | -1.71\% | 541247 | 7.03\% | 515407 | -4.77\% |
| Total Asset | 419400 | 509933 | 21.59\% | 593701 | 16.43\% | 629318 | 6.00\% | 625521 | ${ }^{-0.60 \%}$ | 700674 | 12.01\% |

Own processing based on Maruti Suzuki India Limited's FY 2017-2021 Standalone Statement of Financial Position.

Maruti Suzuki India Limited's assets are analysed horizontally in Table 13. The study depicts changes in the proportions of several asset components, such as investments, capital work-in-progress, and property, plant, and equipment. The research looks at how one line has changed over the last five years, from 2017 to 2021.

In 2017, current assets accounted for 9.74 percent of total assets, while non-current assets accounted for 24.31 percent. Under current assets, investments have seen phenomenal increase during the last five years. In 2017, investments totalled $\$ 137$ million, accounting for 90.55 percent of total assets. It climbed by 590.49 percent in 2021, indicating that the corporation has raised its investment spending.

Capital work-in-progress climbed by 24.37 percent in 2017 and will drop by -10.85 percent in 2021 in non-current liabilities. In 2017, the investments climbed by 38.88 percent. In 2020 and 2021, inventories fell by -3.33 percent and -5.13 percent, respectively, indicating that the corporation is performing poorly in terms of turning inventory into cash.

Table 14: Equity and Liabilities Horizontal Analysis (Maruti Suzuki India Ltd.)

| Standalone Statement of Financial Position (in millions) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EQUTY | 2015-16 | 2016-17 | \% | 2017-18 | \% | 2018-19 | \% | 2019-2020 | \% | 2020-21 | \% |
| Equity share capital | 1510 | 1510 | 0.00\% | 1510 | 0.00\% | 1510 | 0.00\% | 1510 | 0.00\% | 1510 | $0.00 \%$ |
| Other equity | 297332 | 360201 | 21.14\% | 416063 | $15.51 \%$ | 459905 | 10.54\% | 482860 | 4.99\% | 512158 | $6.07 \%$ |
| Total shareholder's equity | 298842 | 361711 | $21.04 \%$ | 417573 | 15.44\% | 461415 | 10.50\% | 484370 | 4.97\% | 513668 | 6.05\% |
| Liabilities |  |  |  |  |  |  |  |  |  |  |  |
| Non-current liabilities |  |  |  |  |  |  |  |  |  |  |  |
| Financial liabilities |  |  |  |  |  |  |  |  |  |  |  |
| Borrowings | - | - | 0.00\% | - | 0.00\% | - | 0.00\% | - | 0.00\% | - | 0.00\% |
| Lease liabilities | - | - | 0.00\% | - | 0.00\% | - | 0.00\% | 550 | 0.00\% | 353 | -35.82\% |
| Provisions | 148 | 219 | 47.97\% | 265 | 21.00\% | 395 | 49.06\% | 516 | 30.63\% | 447 | -13.37\% |
| Deferred tax liabilities (Net) | 1943 | 4640 | 138.81\% | 5589 | 20.45\% | 5640 | 0.91\% | 5984 | 6.10\% | 3847 | -35.71\% |
| Other non-current liabilities | 8075 | 11050 | $36.84 \%$ | 15853 | 43.47\% | 20365 | 28.46\% | 21153 | 3.87\% | 21292 | $0.66 \%$ |
| Total non-current liabilities | 10166 | 15909 | 56.49\% | 21707 | $36.44 \%$ | 26400 | 21.62\% | 28203 | 6.83\% | 25939 | -8.03\% |
| Current liabilities |  |  |  |  |  |  |  |  |  |  |  |
| Financial liabilities |  |  |  |  |  |  |  |  |  |  |  |
| Borrowings | 774 | 4836 | $524.81 \%$ | 1108 | -77.09\% | 1496 | 35.02\% | 1063 | -28.94\% | 4888 | 359.83\% |
| Trade payables | 74073 | 83673 | $12.96 \%$ | 104970 | 25.45\% | 96330 | -8.23\% | 74941 | -22.20\% | 101617 | $35.60 \%$ |
| Lease liabilities | - | - | $0.00 \%$ | - | 0.00\% | - | 0.00\% | 94 | 0.00\% | 65 | -30.85\% |
| Other financial liabilities | 11971 | 13027 | 8.82\% | 13338 | 2.39\% | 14400 | 7.96\% | 9017 | -37.38\% | 12693 | $40.77 \%$ |
| Provisions | 3989 | 4490 | 12.56\% | 5600 | 24.72\% | 6244 | 11.50\% | 6796 | 8.84\% | 7416 | $9.12 \%$ |
| Current tax liabilities (Net) | 7956 | 8036 | 1.01\% | 8541 | 6.28\% | 6729 | -21.22\% | 6962 | 3.46\% | 8539 | 22.65\% |
| Other current liabilities | 11629 | 18251 | 56.94\% | 20864 | 14.32\% | 16304 | -21.86\% | 14075 | -13.67\% | 25849 | 83.65\% |
| Total current liabilities | 110392 | 132313 | 19.86\% | 154421 | $16.71 \%$ | 141503 | -8.37\% | 112948 | -20.18\% | 161067 | 42.60\% |
| Total liabilities | 120558 | 148222 | 22.95\% | 176128 | 18.83\% | 167903 | -4.67\% | 14151 | -15.93\% | 187006 | $32.49 \%$ |
| Total liabilities and shareholder's equity | 419400 | 509933 | 21.59\% | 593701 | 16.43\% | 629318 | 6.00\% | 625521 | -0.60\% | 700674 | 12.01\% |

Own processing based on Maruti Suzuki Limited's Standalone Statement of Financial Position for FY 2017-2021.

The horizontal analysis of Maruti Suzuki India Limited's liabilities and equity is shown in Table 16. Deferred tax obligations account for the largest portion of overall non-current liabilities, accounting for 138.81 percent in 2017, 20.45 percent in 2018, 0.91 percent in $2019,6.10$ percent in 2020, and 35.71 percent in 2021, as compared to other non-current liabilities. Maruti Suzuki India Limited has no borrowings disclosed under non-current liabilities.

In 2017, the short-term borrowing rate was hiked to 524.81 percent. In 2018, it was -77.09 percent, and in 2020, it will be -28.94 percent. In 2021, it was raised by 359.83 percent once again. Other current liabilities climbed by 56.94 percent in 2016 and by 83.65 percent in 2021, according to current liabilities.

### 4.7 Financial Performance Analysis - Maruti Suzuki

## Income statement vertical analysis (Maruti Suzuki India Ltd.)

Table 15: Vertical Analysis of a Standalone Income Statement (Maruti Suzuki India Ltd.)

| Standalone Statement of Income (in millions) |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Particulars | 2016-17 | \% | 2017-18 | \% | 2018-19 | \% | 2019-20 | \% | 2020-21 | \% |
| I Revenue fromoperations | 772662 | 1022.12\% | 819944 | 1018.18\% | 860203 | 1178.75\% | 756106 | 1451.57\% | 703325 | 1483.09\% |
| II Other income | 22798 | 30.16\% | 20455 | 25.40\% | 25610 | 35.09\% | 34208 | 65.67\% | 29464 | 62.13\% |
| III Total Income (I+II) | 795460 | 1052.28\% | 840399 | 1043.58\% | 885813 | 1213.84\% | 790314 | 1517.24\% | 732789 | 1545.22\% |
| IV Expenses |  |  |  |  |  |  |  |  |  |  |
| Cost of materials consumed | 426296 | 563.93\% | 449413 | 558.07\% | 450239 | 616.97\% | 346366 | 664.95\% | 332969 | 702.13\% |
| Purchases of stock-in-trade | 44821 | 59.29\% | 99930 | 124.09\% | 150195 | 205.81\% | 187581 | $360.12 \%$ | 172472 | $363.69 \%$ |
| ss in inventories of finished goods, work-in-progress and stock- | -3801 | -5.03\% | 407 | 0.51\% | 2108 | 2.89\% | -2381 | -4.57\% | 2731 | 5.76\% |
| Exise duty | 92314 | 122.12\% | 22317 | 27.71\% | - | 0.00\% | - | 0.00\% | - | 0.00\% |
| Employee benefits expense | 23310 | 30.84\% | 28338 | 35.19\% | 32549 | 44.60\% | 33839 | 64.96\% | 34029 | 71.76\% |
| Finance costs | 894 | 1.18\% | 3457 | 4.29\% | 758 | 1.04\% | 1329 | 2.55\% | 1008 | 2.13\% |
| Depreciation and amortization expense | 26021 | 34.42\% | 27579 | 34.25\% | 30189 | $41.37 \%$ | 35257 | 67.69\% | 30315 | 63.92\% |
| Other expenses | 87228 | 115.39\% | 99915 | 124.07\% | 116340 | 159.42\% | 118892 | 228.25\% | 108399 | 228.58\% |
| Vehicles/dies for own use | -1036 | -1.37\% | -991 | -1.23\% | -1221 | -1.67\% | -1217 | -2.34\% | -728 | -1.54\% |
| Total expenses (IV) | 696047 | 920.77\% | 730365 | 906.95\% | 781157 | 1070.43\% | 719666 | 1381.61\% | 68195 | 1436.42\% |
| V Profit before tax (III-V) | 99413 | 131.51\% | 110034 | $136.64 \%$ | 104656 | $143.41 \%$ | 70648 | 135.63\% | 51594 | 108.80\% |
| VITax expenses |  |  |  |  |  |  |  |  |  |  |
| Current tax | 23317 | 30.85\% | 33495 | 41.59\% | 29323 | 40.18\% | 13748 | 26.39\% | 11556 | $24.37 \%$ |
| Deferred tax | 2719 | 3.60\% | -679 | -0.84\% | 327 | 0.45\% | 394 | 0.76\% | -2259 | $-4.76 \%$ |
| VIIProfit for the period (V-VI) | 73377 | 97.07\% | 77218 | 95.89\% | 75006 | 102.78\% | 56506 | 108.48\% | 42297 | 89.19\% |
| VIII Other Comprehensive Income | 2217 | 2.93\% | 3312 | 4.11\% | -2030 | $-2.78 \%$ | -4417 | -8.48\% | 5126 | 10.81\% |
| IX Total Comprehensive Income for the period (VII+VIII) | 75594 | 100.00\% | 80530 | 100.00\% | 72976 | 100.00\% | 52089 | 100.00\% | 47423 | 100.00\% |

Own processing based on Maruti Suzuki India Limited's Standalone Statement of Income for FY 2017-2021.

Total income accounts for the largest percentage of total comprehensive income for the period, as shown in table 15. The revenue from operations accounts for the largest percentage of overall income, at 1022.12 percent in 2017 and 1483.09 percent in 2021. Other revenue accounted for 30.16 percent of overall income in 2017 and 65.67 percent in 2018.

The cost of materials utilised accounts for the largest amount of overall costs. In 2017, it was 563.93 percent; in 2018, it was 558.07 percent; in 2019, it was 616.97 percent; in 2020, it was 774.95 percent; and in 2021, it was 702.13 percent. Stock-in-trade purchases have been steadily growing during the last five years. The biggest percentages were about 59.29 percent in 2017, 124.09 percent in 2018, 205.81 percent in 2019, 360.12 percent in 2020, and 363.69 percent in 2021.

Other expenses include store consumption, power and fuel, rent, plant and machinery repair and maintenance, building and other expenses, insurance, rates, taxes and fees, royalty, tools / machinery spares charged off, advertisement, sales promotion, warranty and product recall, transportation and distribution expenses, net loss on sale / discarding of property, plant and equipment, corporate social responsibility expenses, and other miscellaneous expenses, among others.

Other costs accounted for 115.39 percent of total expenses in 2017. In the year 2021, other costs climbed by 228.58 percent. Over the last five years, the financing cost has remained unchanged.

In 2017, employee benefits spending climbed by 30.84 percent. It has been steadily increasing over the previous four years. In 2020, it was 64.96 percent, and by 2021, it had risen to 71.76 percent.

Expenses for depreciation and amortisation have been steadily rising over the last five years. In 2017, it was 34.42 percent; in 2018, it was 34.25 percent; in 2019, it was 41.37 percent; in 2020, it was 67.69 percent; and in 2021, it was 63.92 percent.

An examination of the income statement from a horizontal perspective (Maruti Suzuki India Ltd.)

Table 16: Horizontal Analysis of a Standalone Income Statement (Maruti Suzuki India Ltd.)

| Standalone Statement of Income (in Crores) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Particulars | 2015-16 | 2016-17 | \% | 2017-18 | \% | 2018-19 | \% | 2019-20 | \% | 2020-21 | \% |
| I. Income from operations | 46715.9 | 48319.9 | 3.43\% | 59624.69 | 23.40\% | 69202.76 | 16.06\% | 45311.22 | -34.52\% | 47031.47 | 3.80\% |
| II. Other Income | 1406.58 | 982.12 | -30.18\% | 1557.6 | 58.60\% | 2554.66 | $64.01 \%$ | 1383.05 | -45.86\% | 842.96 | -39.05\% |
| III. Total Income ( $1+1$ I) | 48122.48 | 49302.02 | 2.45\% | 61182.29 | 24.10\% | 71757.42 | 17.28\% | 45311.22 | -36.86\% | 47874.43 | 5.66\% |
| IV. Expenses: |  |  |  |  |  |  |  |  |  |  |  |
| (a) Cost of material consumed | 24313.08 | 27390.59 | 12.66\% | 37080.45 | 35.38\% | 43748.77 | 17.98\% | 26171.85 | -40.18\% | 30010.61 | 14.67\% |
| (b) Purchase of products for sale | 5259.27 | 4405.11 | -16.24\% | 4762.41 | 8.11\% | 6722.32 | 41.15\% | 5679.98 | -15.51\% | 5490.67 | -3.33\% |
| s in inventories of finished goods, work-in-progress, and produ | 22.94 | -193.81 | -944.86\% | 842.05 | -534.47\% | 144.69 | -82.82\% | 722.68 | 399.47\% | -69.02 | -109.55\% |
| (d) Exise duty | 4325.81 | 4506.71 | 4.18\% | 793.28 | -82.40\% | - | 0.00\% | - | 0.00\% | - | $0.00 \%$ |
| (e) Employee benefits expense | 3048.71 | 3401.34 | 11.57\% | 3966.73 | 16.62\% | 4273.1 | 7.72\% | 4384.31 | 2.60\% | 4212.99 | -3.91\% |
| (f) Finance cost | 1541.54 | 1556.9 | 1.00\% | 1747.43 | 12.05\% | 1793.57 | 2.82\% | 1973 | 10.00\% | 2358.54 | 19.54\% |
| (g) Foreign exchange (gain)/loss (net) | 200.86 | -253.82 | -226.37\% | 17.14 | -106.75\% | 215.22 | $1155.66 \%$ | 239 | 11.05\% | 1.67 | -99.30\% |
| (h) Depreciation and amortization expense | 2144.89 | 2763.11 | 28.82\% | 3101.89 | 12.26\% | 3098.64 | -0.10\% | 3375.29 | 8.93\% | 3681.61 | 9.08\% |
| (i) Product development/EEngineering expenses | 417.89 | 453.33 | 8.48\% | 474.98 | 4.78\% | 571.76 | 20.38\% | 830.24 | 45.21\% | 907.64 | 9.32\% |
| (j) Other expenses | 8003.71 | 8494.68 | 6.13\% | 9234.27 | 8.71\% | 9680.46 | 4.83\% | 7720.75 | -20.24\% | 5801.9 | -24.85\% |
| (K) Amount capitalized | -1034.18 | -941.55 | -8.96\% | -855.08 | -9.18\% | -1093.11 | 27.84\% | -1169.46 | 6.98\% | -817.53 | $-30.09 \%$ |
| Total Expenses (IV) | 4824.52 | 51582.59 | 6.92\% | 61162.55 | 18.57\% | 69155.42 | 13.07\% | 49927.64 | -27.80\% | 51579.08 | $3.31 \%$ |
| V. Profit/(loss) before exceptional items and tax (III-V) | -122.04 | -2280.57 | 1768.71\% | 19.74 | $-100.87 \%$ | 2602 | 13081.36\% | $-4616.42$ | $-277.42 \%$ | -3704.65 | -19.75\% |
| VL. Exceptional items |  |  |  |  |  |  |  |  |  |  |  |
| (a) Provis ion for impairment of investments and cost associated with closure of operations of a subsidiary | 97.86 | - | 0.00\% | - | 0.00\% | - | 0.00\% | - | 0.00\% | - | 0.00\% |
| (b) Write off/provision(reversal) for tangible/intangible assets (including under development) | - | - | 0.00\% | - | 0.00\% | 180.66 | 0.00\% | -73.03 | $-140.42 \%$ | 114 | -256.10\% |
| (b) Provision for impaiment of investment in a subsidiary | - | 123.17 | 0.00\% | - | 0.00\% | - | 0.00\% | - | 0.00\% | 123.36 | 0.00\% |
| ent of capitalized property, plant and equipment and other intans | 163.94 | - | 0.00\% | 962.98 | 0.00\% | - | 0.00\% | 1418.64 | 0.00\% | -1182.41 | -183.35\% |
| (d) Profit on sale of investment in a subsidiary company | - | - | 0.00\% | - | 0.00\% | -332.95 | 0.00\% | - | 0.00\% | - | 0.00\% |
| (e) Enployee separation cost | 10.04 | 67.61 | 573.41\% | 3.68 | -94.56\% | 4.23 | 14.95\% | 2.69 | -36.41\% | 215.97 | 7928.62\% |
| -loan given to/investment and cost of closure in subsidiary com | - | - | 0.00\% | - | $0.00 \%$ | 241.86 | 0.00\% | 385.62 | $59.44 \%$ | -663 | -271.93\% |
| (g) Provision for Onerous Contracts | - | - | 0.00\% | - | 0.00\% | 109.27 | 0.00\% | 777 | 611.08\% | - | 0.00\% |
| (f) Others | - | 147.93 | 0.00\% | - | 0.00\% | - | 0.00\% | - | 0.00\% | - | 0.00\% |
| VII. Profit/(loss) before tax (V-VI) | -393.88 | -2619.28 | $564.99 \%$ | -946.92 | -63.85\% | 2398.93 | -353.34\% | -7127.34 | -397.10\% | $-2312.57$ | -67.55\% |
| VII. Tax expense/(credit) (net) |  |  |  |  |  |  |  |  |  |  |  |
| (a) Current tax | -88.52 | -8.52 | -90.38\% | 92.63 | -1187.21\% | 294.66 | 218.10\% | 33.05 | -88.78\% | 82.31 | 149.05\% |
| (b) Deferred Tax | -2.92 | -13.14 | 350.00\% | -4.7 | -64.23\% | 83.67 | -1880.21\% | 129.24 | 54.46\% | 0.56 | -99.57\% |
| Total Tax Expense/(credit) | -91.44 | -21.66 | -76.31\% | 87.93 | -505.96\% | 378.33 | $330.26 \%$ | 162.29 | -57.10\% | 82.87 | -48.94\% |
| \|Profit(loss) for the period from continuing operations (VII-vi | -302.44 | -2597.62 | 758.89\% | $-1034.85$ | -60.16\% | 2020.6 | -299.26\% | -7289.63 | -460.77\% | -2395.44 | $-67.14 \%$ |
| X. Other comprehensive income/(loss) | 86.23 | 98.68 | $14.44 \%$ | 43.22 | -56.20\% | -23.43 | $-154.21 \%$ | -378.72 | 1516.39\% | 442.99 | -216.97\% |
| Total other comprehensive income/(loss) for the period (IX $+\mathbf{X}$ ) | -216.21 | -2498.94 | 1055.79\% | -991.63 | $-60.32 \%$ | 1997.17 | -301.40\% | -7668.35 | -483.96\% | -1952.45 | -74.54\% |

Own processing based on Maruti Suzuki India Limited's Standalone Statement of Income for FY 2017-2021.

Maruti Suzuki India Limited's financial performance was investigated using a horizontal analysis of its standalone statement of income. From 2017 to 2021, table 16 demonstrates how profit has changed owing to the effect of various components. From 2017 through 2021, revenue from operations has been declining. In 2017, it was 18.77 percent, while in 2018, it was 6.12 percent. In 2019, it fell to 4.91 percent once more. It is adversely dropped by -12.10 percent in 2020 , and then again by -6.98 percent in 2021. Total costs have been steadily reducing over the last five years, from 17.83 percent in 2017 to -5.35 percent in 2021.

Employee benefits costs have been steadily rising over the last five years. Employee benefits costs accounted for 17.80 percent of total expenses in 2017, 21.57 percent in 2018, 14.86 percent in 2019, 3.96 percent in 2020, and 0.56 percent in 2021.

From 2017 to 2020, the other costs increased. Other expenditures accounted for 8.52 percent of total expenses in 2017 and 14.54 percent in 2018. Other expenditures accounted for 16.44 percent of total expenses in 2019 and 2.19 percent in 2020. Other expenditures, on the other hand, have been cut by -8.83 percent in 2021.

### 4.8 Ratio Analysis - Maruti Suzuki

Maruti Suzuki India Limited's liquidity ratios, activity ratios, leverage ratios, and profitability ratios were constructed using data from the last five years, from 2017 to 2021.

## Ratios of liquidity

Table 17: Liquidity Ratios in Millions (Maruti Suzuki India Ltd.)

| Particulars | $\mathbf{2 0 1 6 - 1 7}$ | $\mathbf{2 0 1 7 - 1 8}$ | $\mathbf{2 0 1 8 - 1 9}$ | $\mathbf{2 0 1 9 - 2 0}$ | $\mathbf{2 0 2 0 - 2 1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cash Ratio | 0 | 0 | 0.01 | 0 | 0.19 |
| Current Ratio | 0.65 | 0.51 | 0.87 | 0.75 | 1.15 |
| Quick Ratio | 0.4 | 0.31 | 0.64 | 0.46 | 0.96 |

Author's work based on annual report 2021
Figure 5: Liquidity Ratios in Millions (Maruti Suzuki India Ltd.)


Author's work based on annual report 2021

In 2017, 2018, and 2020, Maruti Suzuki India Limited's cash ratio was 0.00. In the year 2019, the ratio was 0.01 ; in the year 2021, it was 0.19 . The cash ratio has been below one for the past five years, indicating that the firm is not effectively managing its cash and cash equivalents, and as a result, it will be unable to pay off its current commitments. As a result, Maruti Suzuki India Limited should concentrate on effectively managing its cash and financial equivalents.

The company's current ratio was 0.65 in 2017. For the past five years, the current ratio has been rising. In 2018, 2019, 2020, and 2021, the ratios were $0.51,0.87,0.75$, and 1.15 , respectively. In the last five years, the company's current ratio has been less than one. This shows that the firm is unable to meet its responsibilities due to a lack of resources.

In 2017, the company's quick ratio was $0.40,0.31$ in $2018,0.64$ in $2019,0.46$ in 2020, and 0.96 in 2021. Maruti Suzuki India Limited's quick ratio has been less than one in each of the last five years, indicating that the firm may not be able to fully repay its current creditors.

## Ratios of profitability

Table 18: Profitability Ratios in Millions (Maruti Suzuki India Ltd.)

| Particulars | $\mathbf{2 0 1 6 - 1 7}$ | $\mathbf{2 0 1 7 - 1 8}$ | $\mathbf{2 0 1 8 - 1 9}$ | $\mathbf{2 0 1 9 - 2 0}$ | $\mathbf{2 0 2 0 - 2 1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Net Profit | $9.50 \%$ | $9.42 \%$ | $8.72 \%$ | $7.47 \%$ | $6.01 \%$ |
| Return on Assets (\%) | $14.39 \%$ | $13.01 \%$ | $11.92 \%$ | $9.03 \%$ | $6.04 \%$ |
| Return on Equity $(\%)$ | $20.29 \%$ | $18.49 \%$ | $16.26 \%$ | $11.67 \%$ | $8.23 \%$ |

Author's work based on annual report 2021
Figure 6: Profitability Ratios in Millions (Maruti Suzuki India Ltd.)


Author's work based on annual report 2021

Net profit, Return on Assets, and Return on Equity are all huge numbers in profitability measures. Maruti Suzuki India Limited has had a positive net profit ratio for the previous five years. In 2017, the net profit ratio was 9.50 percent; in 2018, it was 9.42 percent; in 2019 , it was 8.72 percent; in 2020, it was 7.47 percent; and in 2021 , it was 6.01 percent. Although the net profit ratio is favourable, it has been declining in recent years. As a result, the corporation should strive to raise its sales in order to enhance profits.

Since the last five years, the Return on Assets has been steadily falling. In 2017, it was 14.39 percent, which was the highest in comparison to previous years. In 2018, the ratio was 13.01 percent; in 2019 , it was 11.92 percent; and in 2020, it was 9.03 percent. In 2021, the rate will be reduced to 6.04 percent. This suggests that the firm is not making the best use of its resources.

Return on equity has also been falling over the past five years. In 2017, it accounted for 20.29 percent, 18.49 percent in 2018, and 16.26 percent in 2019. In addition, it will decline by 11.67 percent in 2020 and by 8.23 percent in 2021. According to the return on equity ratio, the corporation is less efficient in terms of generating profit from its capital.

## Ratios of leverage

Table 19: Leverage Ratios in Millions (Maruti Suzuki India Ltd.)

| Particulars | $\mathbf{2 0 1 6 - 1 7}$ | $\mathbf{2 0 1 7 - 1 8}$ | $\mathbf{2 0 1 8 - 1 9}$ | $\mathbf{2 0 1 9 - 2 0}$ | $\mathbf{2 0 2 0 - 2 1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Debt to Equity | 0.01 | 0 | 0 | 0 | 0.01 |
| Debt to Asset | 0.01 | 0 | 0 | 0 | 0.01 |
| Debt to Capital | 0.01 | 0 | 0 | 0 | 0.01 |

Author's work based on annual report 2021
Figure 7: Leverage Ratios in Millions (Maruti Suzuki India Ltd.)


Author's work based on annual report 2021
For the years 2017 and 2021, Maruti Suzuki India Limited's debt to equity ratio is 0.01 . Between 2018 and 2020, the ratio was 0.00 . This signifies that the business is debt-free. Table 19 demonstrates that Maruti Suzuki India Limited's debt to asset ratio has been less than one over the past five years. This signifies that the company's assets outnumber its liabilities.

In both 2017 and 2021, the debt-to-capital ratio was 0.01 . From 2018 to 2020, the ratio was recorded at 0.00 . Maruti Suzuki India Limited has sufficient capital to satisfy its obligations, as its debt-to-capital ratio has decreased during the last five years.

## Ratios of Activity

Table 20: Activity Ratios in Millions (Maruti Suzuki India Ltd.)

| Particulars | $\mathbf{2 0 1 6 - 1 7}$ | $\mathbf{2 0 1 7 - 1 8}$ | $\mathbf{2 0 1 8 - 1 9}$ | $\mathbf{2 0 1 9 - 2 0}$ | $\mathbf{2 0 2 0 - 2 1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Asset Turnover Ratio | 1.52 | 1.38 | 1.37 | 1.21 | 1 |
| Inventory Turnover Ratio | 23.69 | 25.94 | 25.87 | 23.52 | 23.06 |
| Receivables Turnover | 64.43 | 56.09 | 37.23 | 38.29 | 55.09 |

Author's work based on yearly report 2021
Figure 8: Activity Ratios in Millions (Maruti Suzuki India Ltd.)


Author's work based on yearly report 2021

Maruti Suzuki India Limited had an asset-to-turnover ratio of 1.52 in 2017. In 2018, the figure was about 1.38 . In 2019, it fell by 1.37 percent, then fell by 1.21 percent in 2020 , before returning to 1 percent in 2021. The company's assets aren't being used efficiently to generate money.

An inventory turnover ratio is a metric that assesses how successfully inventory is maintained. It shows how many times an item is sold in a certain period of time. This metric may be used to determine if inventory levels are too high in comparison to sales. The greatest rate of inventory turnover was recorded in 2018, at 25.94 percent, indicating that the firm successfully manages its inventory, does not overpay on acquisitions, and does not suffer excessive holding and retention costs. For the year 2021, the lowest point was about 23.06. In 2017, the ratio was 23.69; in 2019, it was 25.87; and in 2020, it was 23.52.

Maruti Suzuki India Limited's Receivable Turnover Ratio was 64.43 in 2017 and fell to 55.09 in 2021, indicating that the firm is inefficient in collecting money from its consumers.

## 5 Results and Discussion

The balance sheet data is used to analyse both firms' financial positions, and the income statement is used to study their financial performance.

### 5.1 Financial Position Analysis - Comparative Assessment

The financial situation of Tata Motors and Maruti Suzuki India Limited has been examined using vertical and horizontal balance sheet analysis.

Tata Motors' vertical study revealed that non-current assets are the most important assets for the firm, accounting for 78.50 percent of total assets. Non-current assets include property, plant, and equipment, which make for 29.66 percent of the company's total assets. In addition, in 2017, investment in subsidiaries, joint ventures, and associates accounted for 25.25 percent of total assets. Trade payables and short-term obligations are the key sources of financing in liabilities, with trade payables accounting for 11.98 percent of total liabilities and short-term liabilities accounting for 9.18 percent of total liabilities and shareholder's equity. Total liabilities and equity accounted for 35.55 percent of total liabilities and equity. The reserve and surplus is an important source of funding, accounting for 34.49 percent of Tata Motors' equity.

The most important assets for Maruti Suzuki India Limited are non-current assets, which account for $83.12 \%$ of the company's total assets. When compared to other non-current assets, investments have the highest share of 51.41 percent. In terms of current assets, inventories are the most important asset, accounting for roughly 6.40 percent of total assets in 2017. The firm does not have any longterm debt. In 2017, short-term debt accounted for 0.95 percent of total liabilities and equity. Within equity, other equity is an important source of funding.

Tata Motors has a stronger asset base than Maruti Suzuki India Limited, with property, plant, and equipment accounting for 29.66 percent of total assets. In terms of liabilities, Maruti Suzuki India Limited has performed better. The company's non-current and current liabilities are respectively 3.12 percent and 25.95 percent, which is lower than Tata Motors.

In terms of current assets, the largest percentage changes were noted in investment, current tax assets, and inventories, according to Tata Motors' horizontal study. The investments accounted for $37.52 \%$ of total assets. According to vertical analysis, investments and current tax assets have little influence on the company's financial status. Short-term debt is a large component of current liabilities, and it is expected to decrease in 2021. Non-current liabilities account for 29.11 percent of total equity and liabilities, with long-term liabilities being the most substantial. In the last five years, there have
been no significant changes in the equity share capital. In 2021, the reserve and surplus were boosted by 3.52 percent.

When compared to other non-current assets, the largest proportionate changes occurred in capital work-in-progress and investments at Maruti Suzuki India Limited. However, according to the results of vertical analysis, these changes in capital work-in-progress and investments are not substantial. Non-current liabilities account for the largest share of overall equity and liabilities, with significant variations in the proportion of deferred tax obligations and provisions. Apart from that, the year 2017 saw a significant change in short-term debt under current liabilities. There was no significant change in the company's equity share capital. The proportion of total liabilities and shareholder's equity held by other equity is significant.

According to the results of the horizontal analysis, Tata Motors has reported higher performance with a stronger asset base than Maruti Suzuki India Limited, while Maruti Suzuki India Limited has performed better in terms of liabilities than Tata Motors since the business has less liabilities.

The horizontal analysis revealed that several variables changed significantly throughout the years under consideration, but that these changes were not substantial in net assets, total liabilities, or equity amounts. The short-term debt is the only major quantity when modifications are made. Over the years, short-term debt has continuously increased. Because both corporations have a lot of longterm and short-term debt, higher interest rates might cause concerns. Some of the loans' interest rates might be tied to lower floating international and Indian rates.

### 5.2 Financial Performance Analysis - Comparative Assessment

The company's financial performance was examined using a vertical and horizontal examination of the profit and loss statement.

According to Tata Motors' vertical study, the cost of material utilised accounts for the largest share of total expenditures. In 2017, it was -1096.09 percent, and in 2021, it was -1537.07 percent. Other costs, which held -339.93 percent in 2017 and declined to -297.16 percent in 2021, are the next highest expense.

According to Maruti Suzuki India Limited's vertical study, the cost of materials utilised accounts for the largest share of overall expenditures. In the year 2017, it was 563.93 percent. Stock-in-trade purchases have been steadily growing during the last five years. Other costs accounted for 115.39 percent of total expenses in 2017.

Transportation expenditures and natural gas and liquid purchases are the most critical operational expenses, according to the vertical analysis, followed by taxes (other than income tax). The firm
employs trunk and low-pressure special pipelines for natural gas transmission, which accounts for the majority of transportation costs. The firm also transports stable gas condensate and other associated liquefied petroleum products through rail and tankers, which accounts for a significant portion of transportation costs.

The horizontal analysis revealed that the most important changes were in the Exploration expenditures, but they were minor. The most important changes were in fair value of financial instruments and foreign currency gains (losses), however the quantities were not considerable and the corporation could not influence the change of these items. As reported in the company's annual report, volatile exchange rates of the national currency and unstable lending conditions, as well as a drop-in hydrocarbon prices and the precarious financial position of contractors and oil and gas equipment suppliers, may have an impact on the company's performance.

The revenue from operations of Tata Motors has been declining from 2017 to 2021, according to the company's horizontal study. Total costs have been steadily reducing over the last five years, from 17.83 percent in 2017 to -5.35 percent in 2021 . Employee benefits costs have been steadily rising over the last five years.

According to Maruti Suzuki India Limited's horizontal study, revenue from operations has been declining from 2017 to 2021. In 2017, it was 18.77 percent. It is adversely dropped by -12.10 percent in 2020 , and then again by -6.98 percent in 2021 . Over the last five years, overall costs have been steadily dropping.

### 5.3 Ratio Analysis - Comparative Assessment

Tata Motors had a cash ratio of 0.09 in 2021. In the year 2021, Maruti Suzuki India Limited has a cash ratio of 0.19 , indicating that Tata Motors has sufficient cash to settle its short-term commitments.

Tata Motors' current ratio was 0.62 in 2018, which was the highest in comparison to previous years. Maruti Suzuki India Limited, on the other hand, recorded a current ratio of 1.15, which is the highest of all the years. In terms of current ratio, this suggests that Maruti Suzuki India Limited is doing well.

Both Tata Motors and Maruti Suzuki India Limited have a quick ratio of less than one, indicating that the business would have to liquidate long-term assets to pay off its present debt. When compared to Tata Motors, Maruti Suzuki India Limited performs better in terms of quick ratio. In 2017, Maruti Suzuki India Limited had a quick ratio of 0.40 ; in 2018, it was 0.31 ; in 2019, it was 0.64 ; in 2020, it was 0.46 ; and in 2021, it was 0.96 .

Maruti Suzuki is performing better in terms of net profit, according to the research, as the business has declared earnings for the last five years. Tata Motors, on the other hand, has declared losses in every year except 2019. This indicates that Tata Motors has not made sufficient investments.

Tata Motors' return on assets has been negative for all five years. In 2020, the firm had the greatest return on assets of -12.25 percent. Maruti Suzuki's return on assets has been declining in recent years. The corporation, on the other hand, has had a good return on equity ratio over the past five years. Maruti Suzuki's Return on Assets was 14.39 percent in 2017, which was the greatest in comparison to previous years. In compared to Tata Motors, Maruti Suzuki is performing well in terms of return on assets ratio.

Except for 2019, Tata Motors' return on equity has been negative for the previous five years. Maruti Suzuki has a positive ratio that is on the decline. In 2017, the ratio reached a new high of 20.29 percent. It suggests that Maruti Suzuki is making sound business decisions in order to generate profits for its stockholders.

Tata Motors' debt to equity ratio was 0.92 in 2017, but it grew to 1.14 in 2020 and then marginally fell to 0.99 . Maruti Suzuki has a low debt-to-equity ratio since it did not record any debt from 2018 to 2020.

Tata Motors has a higher debt-to-asset ratio than Maruti Suzuki, according to the research. Tata Motors had a debt-to-asset ratio of 0.33 between 2017 and 2020, which was the greatest in comparison to previous years, while the debt-to-asset ratio was 0 between 2018 and 2020. In 2017 and 2021, however, the corporation reported a ratio of 0.01 . Maruti Suzuki has a lower debt-to-asset ratio than Tata Motors, according to the findings.

Maruti Suzuki has a lower debt-to-capital ratio than Tata Motors, indicating that the firm is operating well. Tata Motors' debt-to-capital ratio increased for four years before falling to 0.50 in 2021.

Tata Motors had an asset turnover ratio of 0.83 in 2017, 1.01 in 2018, 1.14 in 2019, 0.72 in 2020 and 2021. Tata Motors has a lower asset turnover ratio than Maruti Suzuki. In 2017, the firm had the highest asset turnover ratio of 1.52 . In comparison to Tata Motors, this indicates that Maruti Suzuki is performing better.

Maruti Suzuki's greatest inventory turnover ratio was 1.38 in 2018, indicating that the firm is effectively managing its inventory and is not spending excessive amounts of money on inventory purchases or incurring high holding and storage costs. In the years 2020 and 2021, the ratio was at its lowest, about 0.72 .

Maruti Suzuki performs better in terms of receivable turnover ratio because it is more efficient in collecting money from its consumers. In 2017, the company's inventory turnover ratio was 64.43 .

The inventory turnover ratio for Tata Motors was 22.91 , which was the highest in comparison to previous years.

Except for 2019, Tata Motors' return on equity has been negative for the previous five years. Maruti Suzuki has a positive ratio that is on the decline. In 2017, the ratio reached a new high of 20.29 percent. It suggests that Maruti Suzuki is making sound business decisions in order to generate profits for its stockholders.

### 5.4 Profit Influencing Factors

$>$ Tata Motors has lost money for the past four years, whilst Maruti Suzuki India Limited has made money for the previous five years.
$>$ Profit may be influenced by both internal and external variables. The characteristics of the industry might be considered.
$>$ Revenues and costs have an impact on profit.
$>$ The cost of resources used, procurement of items for sale, and other costs are the most significant expenses that influence earnings.
$>$ Depreciation has an effect on costs, yet it is necessary since it can reduce future losses and boost profits.

### 5.5 Possible Problem Areas

$>$ Long-term debt derived from borrowings - the risk is linked to the possibility of an increase in interest rates as well as credit risk.
> Losses in exchange rates Changes in the foreign currency rate are a source of risk.
> Transportation costs - danger of depending on a monopoly of transportation service providers
$>$ Hazards unique to each nation Changes in national legislation, such as tax regulations, licencing requirements, environmental and safety standards, government effect on gasoline costs, and penalties imposed by other nations, all offer concerns.

### 5.6 Key Recommendations

$>$ Tata Motor and Maruti Suzuki are not keeping their liquidity ratios as well as they should be. As a result, businesses should make better use of their cash and cash equivalents in order to boost profits.
$>$ Tata Motors should keep enough long-term assets on hand to meet its short-term obligations.
> Maruti Suzuki should make sure it has enough cash on hand to satisfy its debt obligations.
> In order to prevent losses and make a profit, Tata Motors should work on minimising its other expenditures, as well as expenses connected to the cost of materials utilised.
$>$ Before investing money somewhere to improve its return on assets, Tata Motors should do a thorough examination.
$>$ Tata Motors should devise effective tactics for maximising the wealth of its stockholders.
$>$ Tata Motors and Maruti Suzuki should make better use of their assets in order to increase income.
$>$ Tata Motors should employ excellent inventory management procedures to keep its inventory in good shape.
$>$ Both Maruti Suzuki and Tata Motors should reduce not just their long-term obligations but also their short-term loans in order to avoid interest rate risk.
$>$ Maruti Suzuki should develop credit procedures to improve its ability to collect money from customers.

## 6 Conclusion

The main purpose of this thesis is to look at the financial health and performance of two automotive companies, Tata Motors and Maruti Suzuki India Limited. The balance sheet was used to assess the financial situation, while the income statement was used to examine the financial performance. The data for the investigation was obtained from annual reports of specific companies. From 2017 through 2021, the data is analysed for the five years before to 2017. Vertical and horizontal analysis were used to examine the data. Non-current assets are the company's most essential assets, accounting for the bulk of total assets, according to the results of Tata Motors' vertical study. The highest share of non-current assets, property, plant, and equipment is invested in subsidiaries, joint ventures, and associates.

The most typical sources of funding in liabilities are trade payables and short-term obligations. Short-term debt has steadily grown during the years analysed. Non-current assets are the most essential assets, according to Maruti Suzuki India Limited's financial analysis, with investments accounting for the biggest share of non-current assets. Short-term debt is the company's major source of finance. Maruti Suzuki India Limited has a weaker asset base than Tata Motors, with property, plant, and machinery accounting for a considerable portion of total assets. Maruti Suzuki India Limited, on the other hand, has a superior track record when it comes to liabilities.

The non-current and current liabilities of the corporation are lower than Tata Motors'. According to Tata Motors' horizontal investigation, the highest percentage changes in current assets were seen in investment, current tax assets, and inventory. There have been no substantial changes in the equity share capital in the recent five years. Tata Motors' reserve and surplus for 2021 have been increased. Capital work-in-progress and investments at Maruti Suzuki India Limited had the biggest percentage changes when compared to other non-current assets. Other equity accounts for a large percentage of total liabilities and shareholder equity. The income and costs of both companies have an influence on their earnings. The most major expenses that impact earnings are the cost of resources consumed, acquisition of things for sale, and other charges.

The profit of a company is impacted by the increase of sales and expenses inside the company, as well as rules particular to the nation and industry. According to liquidity standards, Tata Motors does not have adequate funds to service its debt. As a result, the company must retain adequate cash and cash equivalents on hand in order to increase performance. Tata Motors has been losing money for the previous four years, resulting in a decline in the net profit ratio during the last five years. The firm should, however, attempt to increase its profit by implementing a good business strategy. Tata Motors performs poorly in terms of asset and inventory turnover as compared to Maruti Suzuki India Limited. As a result, the company should maximise its assets in order to generate more revenue, and it should keep its inventory in excellent shape by employing effective inventory management practises. The firm must make the best use of its financial resources to maximise profits.

## 7 References

Ahmed, M., B. (2009). Measuring the Performance of Islamic Banks by Adapting Conventional Ratios German University in Cairo Faculty of Management Technology Working Paper No. 16 pp 1-26.
B M (30 August 2021). "Message of Maruti-Suzuki". Economic and Political Weekly. Mumbai, India: Sameeksha Trust. XVII (38): 1524-1525.
Bajwa, N. (2018). Automobile. Investindia.gov.in. https://www.investindia.gov.in/sector/automobile BARAN, D. 2015. Controlling. Bratislava. ES STU.

BARAN, D. 2015. Controlling. Bratislava. ES STU.
ČERNÁ, A. 1997. Financial analysis: Prague: Bank Institute plc.
Barman, Arijit (12 October 2021). "TPG - Tata Motors: TPG drives into Tata Motors EV business with $\$ 1$ billion investment". The Economic Times. Retrieved 25 March 2022.

Bhaktavatsala Patra, C. (20 February 1993). "Structural Configurations and Strategic Investments: Indian Automobile Industry". Economic and Political Weekly. Mumbai, India: Sameeksha Trust. 28 (8/9): M29.

Bondarenko, L.V. 2010. Formation market environment in selected service sectors. Terra Economicus, 8(3-2), 93-98.

Business Line : Companies News : Piramal Enterprises picks up 27\% stake in Bluebird Aero Systems. (2012, August 19). Web.archive.org. https://web.archive.org/web/20120819073146/http://www.thehindubusinessline.com/companies/artic le3780888.ece
C., P., \& T., S. (2009). Financial management Book. StuDocu; New Age International Publishers, ISBN 8122425739, 9788122425734. https://www.studocu.com/row/document/university-of-embu/financial-management/financial-management-book-c-paramasivan-t-subramanian/18358444 Daniels, Mortimer (1980). Corporation Financial Statements. New York: New York : Arno Press. pp. 13-14. ISBN 0-405-13514-9.

Ford Motor Company - Press Release - FORD MOTOR COMPANY ANNOUNCES AGREEMENT TO SELL JAGUAR LAND ROVER TO TATA MOTORS. (2008, June 12). Web.archive.org. https://web.archive.org/web/20080612192629/http://media.ford.com/newsroom/release_display.cfm? release $=27953$

Gapsalamov, A.R., Vasilev, V.L., Ilyin, A.G. 2017. State planning of the Russian economy: Past and present. International Journal of Economic Perspectives, 11(1), 474-480.

Ghosh, M. (2019, April 25). Maruti to phase out all diesel cars from April next year. Mint. https://www.livemint.com/auto-news/maruti-to-phase-out-all-diesel-cars-from-april-next-year1556184892655.html

Helfert, Erich A. (2001). "The Nature of Financial Statements: The Income Statement". Financial Analysis - Tools and Techniques - A Guide for Managers. McGraw-Hill. p. 40. doi:10.1036/0071395415. ISBN 9780071378345.
HRDÝ, M. a HOROVÁ, M. 2009. Business Finance. Prague: Wolters Kluwer, ČR.
IBEF. (2017). Automobile Industry in India, Indian Automobile Industry, Sector, Trends, Statistics. Ibef.org. https://www.ibef.org/industry/india-automobiles.aspx
India brand equity foundation. (2017). Indian Automobile Industry Analysis, Sector Report, Presentation, Pdf Report. Ibef.org. https://www.ibef.org/industry/automobiles-presentation
Izuymov, I.V., Liman, I.A., Korenkova, S.I., Sadykova, H.N., Ignatova, Y.V., Bogdanova, J.Z. 2017. Economic and legal review of pretrial warning of insolvency in foreign legislation. Man in India, 97(20), 475-493.

James, N. (2021, March). Tata Motors' shareholders approve hiving off PV business to separate entity. Www.thehindubusinessline.com. https://www.thehindubusinessline.com/companies/tata-motors-shareholders-give-nod-to-hive-off-pv-biz-into-new-entity/article34017974.ece
John, N. M. (1969). Financial Statements analysis. Prentice-Hall.
July 2014 : Indian Car Sales Figures \& Analysis. (n.d.). Team-BHP.com. Retrieved March 25, 2022, from https://www.team-bhp.com/forum/indian-car-scene/154170-july-2014-indian-car-sales-figuresanalysis.html

Kennedy and Muller. 1999. Analysis of Financial Statements', pg no 1-3.
Kirti, K., Sushma, Dr. M., \& Vijay Kumar, Dr. K. (2020, March). LIQUIDITY ANALYSIS: A COMPARATIVE STUDY OF SELECTED REAL ESTATE COMPANIES IN INDIA. Www.ijrar.org; International Journal of Research and Analytical Reviews (IJRAR).
KNAPKOVÁ, A., PAVELEKOVÁ, D. 2013. Financial analysis: A Comprehensive Guide with examples.2. Extended Release. Prague: Grada Publishing.
KNAPKOVÁ, A., PAVELEKOVÁ, D. 2013. Financial analysis: A Comprehensive Guide with examples.2. Extended Release. Prague: Grada Publishing.
Knowing Maruti Suzuki | The Finest Car Makers. (2013, January 26). Web.archive.org. https://web.archive.org/web/20130126163908/http://marutisuzuki.com/corporate.aspx
Korableva, O.N., Kalimullina, O.V. 2014. The formation of a single legal space as a prerequisite for overcoming systemic risk. Asian Social Science, 10 (21), 256-260.

Laitinen, Erkki K. (2006). Financial Statement Analysis of a Network of SMEs: towards measurement of Network Performance, International Journal of Networking and Virtual Organizations, 3, No.3, 258 - 282.

Latest Maruti Company Update. (2013, May 15). Web.archive.org. https://web.archive.org/web/20130515090458/http://www.marutisuzuki.com/Latest-Maruti-
Company-Update.aspx
lbelanger225. (2019, July 22). Global 500. Fortune; Fortune. https://fortune.com/global500/2019/ Le DG du géant indien de l'automobile Tata Motors retrouvé mort dans un hôtel. (2014, January 27). LEFIGARO. https://www.lefigaro.fr/societes/2014/01/27/20005-20140127ARTFIG00312-le-dg-du-geant-indien-de-l-automobile-tata-motors-retrouve-mort-dans-un-hotel.php
Maruti Suzuki India Ltd. (n.d.). Business Standard India. Retrieved March 25, 2022, from https://wap.business-standard.com/company/maruti-suzuki-5496/information/companyhistory\#:~:text=Maruti\ Suzuki\ India\ Ltd\ was

Maruti Suzuki India Ltd: Maruti 800, Alto, Zen, Wagonr, Versa, Esteem, Baleno, Grand Vitara, Gypsy, finance, insurance, accessories, true value, fleet management solutions. (2007, October 12). Web.archive.org.
https://web.archive.org/web/20071012122151/http://www.marutiudyog.com/ab/aboutus.asp?ch=1\&c $\mathrm{t}=1 \& \mathrm{sc}=6$

Maruti Suzuki rolls out 15 million cars | Team-BHP. (n.d.). Team-BHP.com. Retrieved March 25, 2022, from https://www.team-bhp.com/news/maruti-suzukis-manesar-plant-rolls-out-15-million-cars Maruti Suzuki WagonR electric test mule spotted yet again. (n.d.). Www.timesnownews.com. Retrieved March 25, 2022, from https://www.timesnownews.com/auto/car-news/article/maruti-suzuki-wagonr-electric-test-mule-spotted-yet-again/774784
Mohile, Shally Seth (27 March 2020). "Tata Motors to carve out PV biz as separate entity, to see change of guard". Business Standard India. Retrieved 25 March 2022.

Navneet, Dr. J., \& Sakshi, K. (2020, June). HUDCO: RATIO ANALYSIS AS A REFLECTION OF FINANCIAL PERFORMANCE (S. Sanjive, Ed.). Www.eprajournals.com; EPRA International Journal of Research and Development.

Punditz, T. A. (2022, March 3). February 2022 Car Sales - Snapshot. Autopunditz. https://www.autopunditz.com/post/february-2022-car-sales-snapshot
Ramana, N. V., Azash, S. MD., \& Krishnaiah, K. R. (2011). PROFITABILITY PERFORMANCE: A CASE STUDY OF PANYAM CEMENTS AND MINERAL INDUSTRIES (AP), INDIA.

Www.ijrcm.org.in; INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION \& MANAGEMENT.

Raveendran, R. (2022, January). Redirect Notice. Www.google.com. https://www.google.com/amp/s/indiancompanies.in/top-10-companies-in-india-automobile/\%3Famp RŮČKOVÁ, P. 2005. Finanční analýza. Study materials. Karviná: OPF SLU.
S. Lakshmi, R. B. (2015, July). A STUDY ON FINANCIAL STATEMENT ANALYSIS OF SRIRAM PERFUMES, TRICHY. Www.garph.co.uk; International Journal of Advanced Research in Management and Social Sciences.

Saigeetha, S. Saigeetha., \& Surulivel, Dr. S. T. (2017, April). A STUDY ON FINANCIAL PERFORMANCE USING RATIO ANALYSIS OF BHEL, TRICHY. International Journal of Innovative Research in Management Studies (IJIRMS).
SEDLÁČEK, J. 2009. Financial analysis of company. Brno: Computer press, plc.
Sinha, Manav (10 March 2017). "Tata Motors, Volkswagen Group And Skoda Sign MoU to Explore Joint Development Projects". news18. Retrieved 25 March 2022.

Suryanto, T., Thalassinos, I.E. 2017. Cultural ethics and consequences in whistle-blowing among professional accountants: An empirical analysis. Journal of Applied Economic Sciences, 12(6), 17251731.

TATA HISPANO. (2010, September 30). Web.archive.org. https://web.archive.org/web/20100930184142/http://www.tatahispano.com/
Tata Motors - Media Centre. (2010, February 8). Web.archive.org. https://web.archive.org/web/20100208185806/http://www.tatamotors.com/our_world/press_releases. php?ID=108\&action=Pull
Tata Motors - Rearview. (2010, December 6). Web.archive.org. https://web.archive.org/web/20101206003027/http://www.tatamotors.com/our_world/rearview.php? version=text

Tata Motors - TTM - Fortune Global 500 Top Companies. (2013, October 16). Web.archive.org. https://web.archive.org/web/20131016104556/http://money.cnn.com/magazines/fortune/global500/2 012/snapshots/11629.html
Tata Motors acquires $80 \%$ stake in Italy's Trilix - CNBC-TV18 -. (2010, October 10). Web.archive.org.
https://web.archive.org/web/20101010161318/http://www.moneycontrol.com/news/business/tata-motors-acquires-80-stakeitaly\�\�\�s-trilix_488677.html

Tata Motors acquires control of Hispano Carrocera. (2010, April 21). Web.archive.org. https://web.archive.org/web/20100421094550/http://www.business-standard.com/india/news/tata-motors-acquires-controlhispano-carrocera/76320/on
Tata Motors increases its UV market share to over 8\% in FY2019. (2019). Https://Www.autocarpro.in. https://www.autocarpro.in/analysis-sales/tata-motors-increases-its-uv-market-share-to-over-8-in-fy2019-42688

Tata Motors partners Nirma University for B.Tech degree for Sanand workforce. (2019, April 30). Web.archive.org. https://web.archive.org/web/20190430103012/https://www.autocarpro.in/news-national/tata-motors-partners-nirma-university-for-btech-degree-for-sanand-workforce-42851
Tata Motors ropes in Lionel Messi as global brand ambassador - Times of India. (2015, November 5). Web.archive.org.
https://web.archive.org/web/20151105043812/http://timesofindia.indiatimes.com/sports/football/top-stories/Tata-Motors-ropes-in-Lionel-Messi-as-global-brand-ambassador/articleshow/49631831.cms Tata Motors to sell defence, aerospace business to Tata Advanced Systems - Moneycontrol.com. (2018, May 4). Web.archive.org. https://web.archive.org/web/20180504155511/https://www.moneycontrol.com/news/business/tata-motors-sells-defence-biz-to-group-co-tasl-for-rs-725-cr-2562407.html
Thalassinos, I.E. and Liapis, K. 2014. Segmental financial reporting and the internationalization of the banking sector. Chapter book in, Risk Management: Strategies for Economic Development and Challenges in the Financial System, (eds), D. Milos Sprcic, Nova Publishers, 221-255, ISBN: 978-163321539-9; 978-163321496-5.

The Hindu Business Line : Tata Motors lists on NYSE. (2013, October 23). Web.archive.org. https://web.archive.org/web/20131023060510/http://www.thehindubusinessline.in/2004/09/28/storie s/2004092802890100.htm

The Hindu Business Line : Tata Motors, Brazil co form joint venture. (2010, October 10). Web.archive.org.
https://web.archive.org/web/20101010031938/http://www.thehindubusinessline.com/2006/05/06/stor ies/2006050602340200.htm

VLACHYNSKÝ, K. 2009. Business Finance. Iura Edition, Bratislava.
Williams, Jan R.; Susan F. Haka; Mark S. Bettner; Joseph V. Carcello (2008). Financial \& Managerial Accounting. McGraw-Hill Irwin. p. 40. ISBN 978-0-07-299650-0.
Williams, Jan R.; Susan F. Haka; Mark S. Bettner; Joseph V. Carcello. (2008). Financial \& Managerial Accounting. McGraw-Hill Irwin. P. 40. ISBN 978-0-07-299650-0.

## 8 Appendix

Appendix 1 Standalone Statement of Financial Position of March2021 and March 2020

## TАTА MOTORS

## Balance Sheet



See accompanying notes to financial statements
interms of our report attached
For B S R \& Co. LLP
or B R a Co. LLP
Firm's Registration No: 101248W/W-100022

SHIRAZ VASTANI
Partner
Membership No. 103334
UDIN: 21103334AAAAAW6929
Place- Pune

Date: May 18, 2021
178 | $76^{\text {th }}$ Integrated Annual Report 2020-21

For and on behalf of the Board

N CHANDRASEKARAN [DIN: 00121863] Chairman
Place-Mumbai
VEDIKA BHANDARKAR [DIN: 00033808] Director
Place- Mumbai

GUENTER BUTSCHEK [DIN: 07427375] CEO and Managing Director lace- Austria

BBALAII
Group Chief Financial Officer Place- Mumbai

H K SETHNA [FCS: 3507]
Company Secretary
Place- Mumbai
Date: May 18, 2021

Appendix 2 Standalone Statement of Income of March 2021 and March 2020


## Statement of Profit and Loss

|  |  |  | (₹ in crores) |
| :---: | :---: | :---: | :---: |
|  | Notes | Year ended <br> March 31, 2021 | Year ended <br> March 31, 2020 |
| Revenue from operations |  |  |  |
| Revenue |  | 46,559.39 | 43,485.76 |
| Other operating revenue |  | 472.08 | 442.41 |
| Total revenue from operations | 32 | 47,031.47 | 43,928.17 |
| II. Other Income | 33 | 842.96 | 1,383.05 |
| III. Total Income ( $1+1$ ) |  | 47,874.43 | 45,311.22 |
| IV. Expenses |  |  |  |
| (a) Cost of materials consumed |  | 30,010.61 | 26,171.85 |
| b Purchases of products for sale |  | 5,490.67 | 5.679.98 |
| c) Changes in inventories of finished goods, work-in-progress and products for sale |  | (69.02) | 722.68 |
| (d) Employee benefits expense | 34 | 4,212.99 | 4,384.31 |
| (e) Finance costs | 35 | 2,358.54 | 1,973.00 |
| f) Foreign exchange loss (net) |  | 1.67 | 239.00 |
| g) Depreciation and amortisation expense |  | 3,681.61 | 3,375.29 |
| (h) Product development/Engineering expenses |  | 907.64 | 830.24 |
| (i) Other expenses | 36 | 5,801.90 | 7.720 .75 |
| () Amount transferred to capital and other accounts | 37 | (817.53) | (1,169.46) |
| Total Expenses (IV) |  | 51,579.08 | 49,927.64 |
| V. Profit/(loss) before exceptional items and tax (III-IV) |  | $(3,704.65)$ | $(4,616.42)$ |
| VI. Exceptional items |  |  |  |
| (a) Employee separation cost |  | $215.97$ | ${ }^{2.69}$ |
| b) Write off/provision (reversal) for tangible/intangible assets (including under development) | 38 |  |  |
| (c) Provision/(reversal) for loan given to/investment and cost of closure in subsidiary |  | 123.36 | 385.62 |
| (d) Impairment losses/(reversal) in passenger vehicle business | 6 (a) | $(1,182.41)$ | 1,418.64 |
| (e) Provision/(reversal) for Onerous Contracts and related supplier claims | 6 (b) |  |  |
| VII. Profit/(loss) before tax (V-VI) |  | $(2,312.57)$ | (7,127.34) |
| VIII. Tax expense (net) | 29 |  |  |
| (a) Currenttax |  | 82.31 | 33.05 |
| (b) Deferred tax |  | 0.56 | 129.24 |
| Total tax expense |  | 82.87 | 162.29 |
| IX. Profit/(loss) for the year from continuing operations (VII-VIII) |  | ( $2,395.44$ ) | $(7,289.63)$ |
| X. Other comprehensive income/(loss): |  |  |  |
| (A) (i) Items that will not be reclassified to profit and loss: |  |  |  |
| (a) Remeasurement losses on defined benefit obligations (net) |  | (23.62) | (105.32) |
| (b) Equity instruments at fair value through other comprehensive income |  | 365.84 | (115.72) |
| (ii) Income tax credit/(expense) relating to items that will not be reclassified to profit and |  | (8.60) | 33.71 |
| loss |  |  |  |
| (B) (i) Items that will be reclassified to profit and loss - gains/(losses) in cash flow hedges <br> (ii) Income tax credit/(expense) relating to items that will be reclassified to profit and |  | (58.75) | $\begin{gathered} (294.19) \\ 102.80 \end{gathered}$ |
| (ii) loss |  |  |  |
| Total other comprehensive income/(loss), net of taxes |  | 442.99 | (378.72) |
| X1. Total comprehensive income/(loss) for the year ( $\mathrm{I}+\mathrm{X}$ ) |  | (1,952.45) | (7,668.35) |
| Xil. Earnings/(loss) per share (EPS) | 40 |  |  |
| (A) Ordinary shares (face value of ₹2 each): |  |  |  |
| (i) Basic | ₹ | (6.59) | (21.06) |
| (ii) Diluted | ₹ | (6.59) | (21.06) |
| (B) 'A' Ordinary shares (face value of ₹2 each) |  |  |  |
| (i) Basic | ₹ | (6.59) | (21.06) |
| (ii) Diluted | ₹ | (6.59) | (21.06) |

See accompanying notes to financial statements

In terms of our report attached
For B S R \& Co. LLP
Chartered Accountants
Firm's Registration No: 101248W/W-100022

## SHIRAZ VASTANI

Partner
Membership No. 103334
UDIN: 21103334AAAAAW6929
Place- Pune

Date: May 18, 2021

For and on behalf of the Board
N CHANDRASEKARAN [DIN: 00121863]
Chairman
Place- Mumbai
VEDIKA BHANDARKAR [DIN: 00033808 ]
Director
Place- Mumbai

GUENTER BUTSCHEK [DIN: 07427375)
CEO and Managing Director
Place- Austria
PB BALAJI
Group Chief Financial Officer Place- Mumbai

H K SETHNA [FCS: 3507]
Company Secretary
Place- Mumbai
Date: May 18, 2021

## Balance Sheet



## See accompanying notes to financial statements

In terms of our report attached
For B S R \& Co. LLP
Chartered Accountants
Firm's Registration No: 101248W/W-100022

## YEZDI NAGPOREWALLA <br> Partner

Membership No. 049265
UDIN: 20049265AAAAAP9940
Place- Mumbai
Date: June 15, 2020

For and on behalf of the Board

| N CHANDRASEKARAN [DIN: 00121863] | GUENTER BUTSCHEK [DIN: 07427375] |
| :--- | :--- |
| Chairman | CEO and Managing Director |
| Place- Mumbai | Place-Austria |
| VEDIKA BHANDARKAR [DIN: 00033808] | PB BALA.I |
| Director | Group Chief Financial Officer |
| Place- Mumbai | Place-Mumbai |
|  | H K SETHNA [FCS: 3507] |
|  | Company Secretary |
| Date: June 15, 2020 | Place-Mumbai |

## Statement of Profit and Loss



See accompanying notes to financial statements

In terms of our report attached
For BS R \& Co. LLP
Chartered Accountants
Firm's Registration No: 101248W/W-100022

## YEZDI NAGPOREWALLA

Partner
Membership No. 049265
UDIN: 20049265AAAAAP9940
Place- Mumbai
Date: June 15, 2020

For and on behalf of the Board

N CHANDRASEKARAN (DIN: 00121863)
Chairman
Place-Mumbai
VEDIKA BHANDARKAR [DIN: 00033808]
Director
Place-Mumbai

Date: June 15, 2020

GUENTER BUTSCHEK [DIN: 07427375)
CEO and Managing Director Place- Austria

## TАTА MOTORS

Balance Sheet


Statement of Profit and Loss
( F in crores)

|  |  | Notes | Year ended March 31, 2018 | Year ended March 31,2017 |
| :---: | :---: | :---: | :---: | :---: |
| 1. | Revenue from operations | 32 | 59,624.69 | 49,054.49 |
| II. | Other Income | 33 | 1,557.60 | 981.06 |
|  | Total Income (1+1\|) |  | 61,182.29 | 50,035.55 |
| IV. Expenses |  |  |  |  |
|  | (a) Cost of materials consumed |  | 37,080.45 | 27,651.65 |
|  | (b) Purchases of products for sale |  | 4,762.41 | 3,945.97 |
|  | (c) Changes in inventories of finished goods, work-in-progress and products for sale |  | 842.05 | (252.14) |
|  | (d) Excise duty | 32(2) | 793.28 | $4,738.15$ |
|  | (e) Employee benefits expense | 34 | 3,966.73 | 3,764.35 |
|  | (f) Finance costs | 35 | 1,744.43 | 1,569.01 |
|  | (g) Foreign exchange (gain)/Loss (net) |  | 17.14 | (252.78) |
|  | (h) Depreciation and amortisation expense |  | 3,101.89 | 3,037.12 |
|  | (i) Product development/Engineering expenses |  | 474.98 | 454.48 |
|  | (j) Other expenses | 36 | 9,234.27 | 8,335.90 |
|  | (k) Amount capitalised |  | (855.08) | (94.60) |
|  | Total Expenses (IV) |  | 61,162.55 | 52,050.11 |
|  | Profit(loss) before exceptional items and tax (III-IV) |  | 19.74 | (2,014.56) |
| VI. | Exceptionalitems |  |  |  |
|  | (a) Provision for impairment of investment in a subsidiary |  | . | 123.17 |
|  | (b) Employee separation cost |  | 3.68 | 67.61 |
|  | (c) Provision for impairment of capital work-in-progress and intangibles under development | 37(a) | 962.98 |  |
|  | (d) Others | 37(b) | . | 147.93 |
|  | Profit/(loss) before tax (V-VI) |  | (946.92) | $(2,353.27)$ |
| VIII | Tax expense/(credit) (net) |  |  |  |
|  | (a) Currentax |  | 92.63 | 57.06 |
|  | (b) Deferredtax |  | (4.70) | 19.27 |
|  | Total tax expense/(credit) |  | 87.93 | 76.33 |
| IX | Profit/(loss) for the year from continuing operations (VII-VIII) |  | $(1,034.85)$ | (2,429.60) |
| X. | Other comprehensive income/(loss): |  |  |  |
|  | (A) (i) Items that will not be reclassified to profit and loss: |  |  |  |
|  | (a) Remeasurement gains and (losses) on defined benefit obligations (net) |  | 18.24 | 8.24 |
|  | (b) Equity instruments at fair value through other comprehensive income |  | 44.04 | 73.84 |
|  | (ii) Income tax (expense)/credit relating to items that will not be reclassified to profit or loss |  | (6.27) | (3.12) |
|  | (B) (i) Items that will be reclassified to profit or loss - gains and (losses) in cash flow hedges |  | (19.56) | 23.32 |
|  | (ii) Income tax (expense)/credit relating to items that will be reclassified to profit or loss |  | 6.77 | (8.07) |
|  | Total other comprehensive income/(loss), net of taxes |  | 43.22 | 94.21 |
| XI. | Total comprehensive income/(loss) for the year ( $\mathrm{X}+\mathrm{X}$ ) |  | (991.63) | $(2,335.39)$ |
|  | Earnings per equity share (EPS) | 39 |  |  |
|  | (A) Ordinary shares (face value of 22 each): |  |  |  |
|  | (i) Basic |  | (3.05) | (7.15) |
|  | (ii) Diluted |  | (3.05) | (7.15) |
|  | (B) 'A' Ordinary shares (face value of 2 each): |  |  |  |
|  | (i) Basic |  | (3.05) | (7.15) |
|  | (ii) Diluted |  | (3.05) | (7.15) |

See accompanying notes to financial statements

As per our report of even date attached
For and on behalf of the Board

## For B S R \& Co. LLP

Firm's Registration No: 101248W/W-100022

## YEZDI NAGPOREWALLA

Partner
Membership No. 049265
Mumbai, May 23, 2018

N CHANDRASEKARAN [DIN: 00121863] N MUNJEE [DIN:00010180] Chairman

V K JAIRATH [DIN:00391684]
F S NAYAR [DIN:00003633]
O P BHATT [DIN:00548091]
R SPETH [DIN:03318908]
Directors

GUENTER BUTSCHEK (DIN: 07427375)
CEO and Managing Director
S B BORWANKAR [DIN: 01793948]
ED and Chief Operating Officer
PBBALAJI
Group Chief Financial Officer H K SETHNA (FCS: 3507)
Company Secretary
Mumbai, May 23, 2018

## BALANCE SHEET



## Statement of Profit and Loss

( $₹$ in crores)

|  |  | Notes | $\begin{array}{r} \hline \text { Year ended March } \\ 31,2018 \\ \hline \end{array}$ | Year ended March 31,2017 |
| :---: | :---: | :---: | :---: | :---: |
| 1. | Revenue from operations | 32 | 59,624.69 | 49,054.49 |
| II. | Other Income | 33 | 1,557.60 | 981.06 |
| III. | Total Income ( $1+11$ ) |  | 61,182.29 | 50,035.55 |
| IV. | Expenses |  |  |  |
|  | (a) Cost of materials consumed |  | 37,080.45 | 27,651.65 |
|  | (b) Purchases of products for sale |  | 4,762.41 | 3,945.97 |
|  | (c) Changes in inventories of finished goods, work-in-progress and products for sale |  | 842.05 | (252.14) |
|  | (d) Excise duty | 32(2) | 793.28 | 4,738.15 |
|  | (e) Employee benefits expense | 34 | 3,966.73 | 3,764.35 |
|  | (f) Finance costs | 35 | 1,744.43 | 1,569.01 |
|  | (g) Foreign exchange (gain)/loss (net) |  | 17.14 | (252.78) |
|  | (h) Depreciation and amortisation expense |  | 3,101.89 | 3,037.12 |
|  | (i) Product development/Engineering expenses |  | 474.98 | 454.48 |
|  | (j) Other expenses | 36 | 9,234.27 | 8,335.90 |
|  | (k) Amount capitalised |  | (855.08) | (941.60) |
|  | Total Expenses (IV) |  | 61,162.55 | 52,050.11 |
| V. | Profit/(loss) before exceptional items and tax (III-IV) |  | 19.74 | ( $2,014.56$ ) |
| VI | Exceptional items |  |  |  |
|  | (a) Provision for impairment of investment in a subsidiary |  | - | 123.17 |
|  | (b) Employee separation cost |  | 3.68 | 67.61 |
|  | (c) Provision for impairment of capital work-in-progress and intangibles under development | 37(a) | 962.98 | - |
|  | (d) Others | 37(b) | - | 147.93 |
| VII | Profit/(loss) before tax (V-VI) |  | (946.92) | $(2,353.27)$ |
| VIII | Tax expense/(credit) (net) |  |  |  |
|  | (a) Current tax |  | 92.63 | 57.06 |
|  | (b) Deferred tax |  | (4.70) | 19.27 |
|  | Total tax expense/(credit) |  | 87.93 | 76.33 |
| IX. | Profit/(loss) for the year from continuing operations (VII-VIII) |  | $(1,034.85)$ | $(2,429.60)$ |
|  | Other comprehensive income/(loss): |  |  |  |
|  | (A) (i) Items that will not be reclassified to profit and loss: |  |  |  |
|  | (a) Remeasurement gains and (losses) on defined benefit obligations (net) |  | 18.24 | 8.24 |
|  | (b) Equity instruments at fair value through other comprehensive income |  | 44.04 | 73.84 |
|  | (ii) Income tax (expense)/credit relating to items that will not be reclassified to profit or loss |  | (6.27) | (3.12) |
|  | (B) (i) Items that will be reclassified to profit or loss - gains and (losses) in cash flow hedges |  | (19.56) | 23.32 |
|  | (ii) Income tax (expense)/credit relating to items that will be reclassified to profit or loss |  | 6.77 | (8.07) |
|  | Total other comprehensive income/(loss), net of taxes |  | 43.22 | 94.21 |
| XI. | Total comprehensive income/(loss) for the year (IX+X) |  | (991.63) | $(2,335.39)$ |
|  | Earnings per equity share (EPS) | 39 |  |  |
|  | (A) Ordinary shares (face value of ₹ 2 each) : |  |  |  |
|  | (i) Basic |  | (3.05) | (7.15) |
|  | (ii) Diluted |  | (3.05) | (7.15) |
|  | (B) 'A' Ordinary shares (face value of ₹ 2 each): |  |  |  |
|  | (i) Basic |  | (3.05) | (7.15) |
|  | (ii) Diluted |  | (3.05) | (7.15) |


| As per our report of even date attached |  | For and on behalf of the Board |  |
| :---: | :---: | :---: | :---: |
| For B S R \& Co. LLP | N CHANDRASEKARAN [DIN: 00121863] | N MUNJEE [DIN:00010180] | GUENTER BUTSCHEK [DIN: 07427375] |
| Chartered Accountants | Chairman |  | CEO and Managing Director |
| Firm's Registration No: 101248W/W-100022 |  | V K JAIRATH (DIN:00391684) | S B BORWANKAR [DIN: 01793948] |
|  |  | F S NAYAR [DIN:00003633] | ED and Chief Operating Officer |
| YEZDI NAGPOREWALLA |  | O P BHATT [DIN:00548091] | PB BALAII Group Chief Financial Officer |
| Partner |  |  | H K SETHNA (FCS: 3507] |
| Membership No. 049265 <br> Mumbai, May 23, 2018 |  | RSPETH (DIN:03318908) | Company Secretary |
|  |  | Directors | Mumbai, May 23, 2018 |



Standalone Financial Statements Consolidated Financial Statements

## Balance Sheet

As at March 31, 2021
(All amounts in ₹ million, unless otherwise stated)

| Particulars | Notes No. | Page No. | $\begin{array}{r} \text { As at } \\ 31.03 .2021 \end{array}$ | $\begin{array}{r} \text { As at } \\ 31.03 .2020 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: |
| ASSETS |  |  |  |  |
| Non-current assets |  |  |  |  |
| Property, plant and equipment | 4 | 221-222 | 141,511 | 147,618 |
| Capital work-in-progress | 4 | 221-222 | 11,923 | 13,374 |
| Intangible assets | 5 | 222 | 2,242 | 3,358 |
| Intangible assets under development | 5 | 222 | 2,975 | 709 |
| Right-of-use Assets | 35 | 258-259 | 5,817 | 6,127 |
| Financial assets |  |  |  |  |
| Investments | 6 | 223-225 | 333,710 | 352,488 |
| Loans | 7 | 226 | 2 | 2 |
| Other financial assets | 9 | 227 | 363 | 358 |
| Other non-current assets | 12 | 228 | 16,864 | 17,213 |
| Total non-current assets |  |  | 515,407 | 541,247 |
| Current assets |  |  |  |  |
| Inventories | 10 | 227 | 30,500 | 32,149 |
| Financial assets |  |  |  |  |
| Investments | 6 | 223-225 | 84,157 | 12,188 |
| Trade receivables | 8 | 226 | 12,766 | 19,749 |
| Cash and cash equivalents | 11.1 | 228 | 323 | 182 |
| Other bank balances | 11.2 | 228 | 30,041 | 29 |
| Loans | 7 | 226 | 230 | 169 |
| Other financial assets | 9 | 227 | 6,410 | 6,596 |
| Current tax assets (net) | 21 | 235 | 5,396 | 5,269 |
| Other current assets | 12 | 228 | 15,444 | 7,943 |
| Total current assets |  |  | 185,267 | 84,274 |
| Total assets |  |  | 700,674 | 625,521 |
| EQUITY AND LIABILITIES |  |  |  |  |
| Equity |  |  |  |  |
| Equity share capital | 13 | 229 | 1,510 | 1,510 |
| Other equity | 14 | 230-232 | 512,158 | 482,860 |
| Total equity |  |  | 513,668 | 484,370 |
| Liabilities |  |  |  |  |
| Non-current liabilities |  |  |  |  |
| Financial liabilities |  |  |  |  |
| Lease liabilities | 35 | 258-259 | 353 | 550 |
| Provisions | 17 | 233-234 | 447 | 516 |
| Deferred tax liabilities (net) | 18 | 234 | 3,847 | 5,984 |
| Other non-current liabilities | 19 | 235 | 21,292 | 21,153 |
| Total non-current liabilities |  |  | 25,939 | 28,203 |
| Current liabilities |  |  |  |  |
| Financial liabilities |  |  |  |  |
| Borrowings | 15 | 232 | 4,888 | 1,063 |
| Trade payables |  |  |  |  |
| Total outstanding dues of micro and small enterprises | 20 | 235 | 691 | 478 |
| Total outstanding dues of creditors other than micro and small enterprises | 20 | 235 | 100,926 | 74,463 |
| Lease liabilities | 35 | 258-259 | 65 | 94 |
| Other financial liabilities | 16 | 232 | 12,693 | 9,017 |
| Provisions | 17 | 233-234 | 7,416 | 6.796 |
| Current tax liabilities (Net) | 21 | 235 | 8,539 | 6,962 |
| Other current liabilities | 19 | 235 | 25,849 | 14,075 |
| Total current liabilities |  |  | 161,067 | 112,948 |
| Total liabilities |  |  | 187,006 | 141,151 |
| Total equity and liabilities |  |  | 700,674 | 625,521 |

The accompanying notes are forming part of these financial statements


In terms of our report attached
For Deloitte Haskins \& Sells LLP
Chartered Accountants
JITENDRA AGARWAL
Partner

Place: New Delhi
Place: New Delni
Date: April 27, 2021
206

## Statement of Profit and Loss <br> for the year ended March 31, 2021

(All amounts in ₹ million, unless otherwise stated)

| Particulars | Notes No. | Page No. | For the Year ended 31.03.2021 | For the Year ended 31.03.2020 |
| :---: | :---: | :---: | :---: | :---: |
| I Revenue from operations | 22 | 236 | 703,325 | 756,106 |
| II Other income | 23 | 236 | 29,464 | 34,208 |
| III Total Income (I+II) |  |  | 732,789 | 790,314 |
| IV Expenses |  |  |  |  |
| Cost of materials consumed | 24.1 | 237 | 332,969 | 346,366 |
| Purchases of stock-in-trade |  |  | 172,472 | 187,581 |
| Changes in inventories of finished goods, work-in-progress and stock-in-trade | 24.2 | 237 | 2,731 | $(2,381)$ |
| Employee benefits expenses | 25 | 237 | 34,029 | 33,839 |
| Finance costs | 26 | 238 | 1,008 | 1,329 |
| Depreciation and amortisation expense | 27 | 238 | 30,315 | 35,257 |
| Other expenses | 28 | 238-239 | 108,399 | 118,892 |
| Vehicles / dies for own use |  |  | (728) | $(1,217)$ |
| Total expenses (IV) |  |  | 681,195 | 719,666 |
| $V$ Profit before tax (III - IV) |  |  | 51,594 | 70,648 |
| VI Tax expense |  |  |  |  |
| Current tax | 29 | 239-240 | 11,556 | 13,748 |
| Deferred tax | 29 | 239-240 | $(2,259)$ | 394 |
|  |  |  | 9,297 | 14,142 |
| VII Profit for the year (V - VI) |  |  | 42,297 | 56,506 |
| VIII Other Comprehensive Income/(loss) |  |  |  |  |
| (i) Items that will not be reclassified to profit or loss |  |  |  |  |
| (a) gain / (loss) of defined benefit obligation | 14.4 | 231 | 545 | (718) |
| (b) gain / (loss) on change in fair value of equity instruments | 14.5 | 231 | 4,704 | $(3,902)$ |
|  |  |  | 5,249 | $(4,620)$ |
| (ii) Income tax relating to items that will not be reclassified to profit or loss | 29 | 239-240 | (123) | 203 |
| Total Other Comprehensive Income/(loss) (i+ii) |  |  | 5,126 | $(4,417)$ |
| IX Total Comprehensive Income for the year (VII + VIII) |  |  | 47,423 | 52,089 |
| Earnings per equity share (₹) | 31 | 241 |  |  |
| Basic |  |  | 140.02 | 187.06 |
| Diluted |  |  | 140.02 | 187.06 |

The accompanying notes are forming part of these financial statements
For and on behalf of the Board of Directors

In terms of our report attached
For Deloitte Haskins \& Sells LLP Chartered Accountants

## JITENDRA AGARWAL

Partner

Place: New Delhi
Date: April 27, 202

KENICHI AYUKAWA
Managing Director \& CEO
DIN: 02262755

## AJAY SETH

Chief Financial Officer

Place: Gurugram Date: April 27, 2021

KENICHIRO TOYOFUKU
Director DIN: 08619076

## Financial

 StatementsStandalone
Independent
Auditor's Repor
$\rightarrow$ Balance Sheet
Statement of Profit and Loss Statement of Changes in
Equity
Cash Flow
Statement
Notes

Balance Sheet
As at March 31, 2019
(All amounts in ₹ million, unless otherwise stated)

| Particulars | Notes No. | Page No. | $\begin{array}{r} \text { As at } \\ 31.03 .2019 \end{array}$ | $\begin{array}{r} \text { As at } \\ 31.03 .2018 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: |
| ASSETS |  |  |  |  |
| Non-current assets |  |  |  |  |
| Property, plant and equipment | 4 | 175 | 149,567 | 130,473 |
| Capital work-in-progress | 4 | 175 | 16,001 | 21,259 |
| Intangible assets | 5 | 177 | 4,511 | 3,117 |
| Financial assets |  |  |  |  |
| Investments | 6 | 178 | 314,695 | 340,729 |
| Loans | 7 | 181 | 2 | 2 |
| Other financial assets | 9 | 182 | 340 | 324 |
| Other non-current assets | 12 | 183 | 20.586 | 18,583 |
| Total non-current assets |  |  | 505,702 | 514,487 |
| Current assets |  |  |  |  |
| Inventories | 10 | 182 | 33,257 | 31,608 |
| Financial assets |  |  |  |  |
| Investments | 6 | 178 | 50,455 | 12,173 |
| Trade receivables | 8 | 181 | 23,104 | 14,618 |
| Cash and bank balances | 11 | 183 | 1,789 | 711 |
| Loans | 7 | 181 | 160 | 30 |
| Other financial assets | 9 | 182 | 4,964 | 2,846 |
| Current tax assets (Net) | 21 | 192 | 4,274 | 4,109 |
| Other current assets | 12 | 183 | 5,613 | 13,119 |
| Total current assets |  |  | 123,616 | 79,214 |
| Total assets |  |  | 629.318 | 593,701 |
| EQUITY AND LIABILITIES |  |  |  |  |
| Equity |  |  |  |  |
| Equity share capital | 13 | 184 | 1,510 | 1,510 |
| Other equity | 14 | 185 | 459,905 | 416,063 |
| Total equity |  |  | 461,415 | 417.573 |
| Liabilities |  |  |  |  |
| Non-current liabilities |  |  |  |  |
| Provisions | 17 | 188 | 395 | 265 |
| Deferred tax liabilities (Net) | 18 | 190 | 5,640 | 5,589 |
| Other non-current liabilities | 19 | 191 | 20,365 | 15,853 |
| Total non-current liabilities |  |  | 26,400 | 21,707 |
| Current liabilities |  |  |  |  |
| Financial liabilities |  |  |  |  |
| Borrowings | 15 | 187 | 1,496 | 1,108 |
| Trade payables |  |  |  |  |
| Total outstanding dues of micro and small enterprises | 20 | 191 | 682 | 711 |
| Total outstanding dues of creditors other than micro and small enterprises | 20 | 191 | 95,648 | 104,259 |
| Other financial liabilities | 16 | 188 | 14,400 | 13,338 |
| Provisions | 17 | 188 | 6,244 | 5,600 |
| Current tax liabilities (Net) | 21 | 192 | 6,729 | 8,541 |
| Other current liabilities | 19 | 191 | 16,304 | 20,864 |
| Total current liabilities |  |  | 141,503 | 154,421 |
| Total liabilities |  |  | 167.903 | 176,128 |
| Total equity and liabilities |  |  | 629,318 | 593,701 |

The accompanying notes are forming part of these financial statements
For and on behalf of the Board of Directors

In terms of our report attached
For Deloitte Haskins \& Sells LLP Chartered Accountants

JITENDRA AGARWAL
Partner

Place: New Delhi
Date: $25^{\text {m }}$ April, 2019

KAZUNARI YAMAGUCHI
DIN : 07961388
SANJEEV GROVER Chief General Manager \& Company Secretary
CSI Membership No : F3788

## Statement of Profit and Loss

for the year ended March 31, 2019
(All amounts in ₹ million, unless otherwise stated)

| Particulars | Notes <br> No. | Page No. | For the Year ended 31.03.2019 | For the Year ended 31.03 .2018 |
| :---: | :---: | :---: | :---: | :---: |
| I Revenue from operations | 22 | 192 | 860,203 | 819,944 |
| II Other income | 23 | 193 | 25,610 | 20,455 |
| III Total Income (I+II) |  |  | 885,813 | 840,399 |
| IV Expenses |  |  |  |  |
| Cost of materials consumed | 24.1 | 193 | 450,239 | 449,413 |
| Purchases of stock-in-trade |  |  | 150,195 | 99,930 |
| Changes in inventories of finished goods, work-in-progress and stock-in-trade | 24.2 | 193 | 2,108 | 407 |
| Excise duty |  |  | - | 22,317 |
| Employee benefits expense | 25 | 194 | 32,549 | 28,338 |
| Finance costs | 26 | 194 | 758 | 3,457 |
| Depreciation and amortisation expense | 27 | 194 | 30,189 | 27,579 |
| Other expenses | 28 | 194 | 116,340 | 99,915 |
| Vehicles / dies for own use |  |  | $(1,221)$ | (991) |
| Total expenses (IV) |  |  | 781,157 | 730,365 |
| $V$ Profit before tax (III - IV) |  |  | 104,656 | 110,034 |
| VI Tax expense |  |  |  |  |
| Current tax | 29 | 195 | 29,323 | 33,495 |
| Deferred tax | 29 | 195 | 327 | (679) |
|  |  |  | 29,650 | 32,816 |
| VII Profit for the period (V - VI) |  |  | 75,006 | 77,218 |
| VIII Other Comprehensive Income |  |  |  |  |
| A (i) Items that will not be reclassified to profit or loss |  |  |  |  |
| (a) gain / (loss) of defined benefit obligation | 14.4 | 186 | (435) | (196) |
| (b) gain / (loss) on change in fair value of equity instruments | 14.5 | 186 | $(1,745)$ | 3,470 |
|  |  |  | $(2,180)$ | 3,274 |
| A (ii) Income tax relating to items that will not be reclassified to profit or loss |  |  | 149 | 39 |
| B (i) Items that will be reclassified to profit or loss |  |  |  |  |
| (a) effective portion of gain / (loss) on hedging instruments in a cash flow hedge | 14.6 | 186 | 2 | (2) |
|  |  |  | 2 | (2) |
| B (ii) Income tax relating to items that will be reclassified to profit or loss |  |  | (1) | 1 |
| Total Other Comprehensive Income ( $\mathrm{A}(\mathrm{i}+\mathrm{ii})+\mathrm{B}$ (i+ii)) |  |  | $(2,030)$ | 3,312 |
| IX Total Comprehensive Income for the period (VII + VIII) |  |  | 72,976 | 80,530 |
| Earnings per equity share (₹) | 31 | 196 |  |  |
| Basic |  |  | 248.30 | 255.62 |
| Diluted |  |  | 248.30 | 255.62 |

The accompanying notes are forming part of these financial statements
For and on behalf of the Board of Directors

In terms of our report attached
For Deloitte Haskins \& Sells LLP
Chartered Accountants
JITENDRA AGARWAL
Partner
Place: New Delhi
Date: $25^{\text {h }}$ April, 2019

KAZUNARI YAMAGUCHI
DIN : 07961388

## SANJEEV GROVER

Chief General Manager
\& Company Secretary

ICSI Membership No : F3788

## Balance Sheet

## As at March 31, 2017

(All amounts in ₹ million, unless otherwise stated)


## Statement of Profit and Loss

for the year ended March 31, 2017
(All amounts in ₹ million, unless otherwise stated)

|  | Particulars | Notes No. | For the Year ended 31.03.2017 | For the Year ended 31.03.2016 |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Revenue from operations | [2] | 772,662 | 650,546 |
| II | Other income | [2] | 22,798 | 14,610 |
| III | Total Income ( $\mathrm{l}+\mathrm{II}$ ) |  | 795,460 | 665,156 |
| IV | Expenses |  |  |  |
|  | Cost of materials consumed | 24.1 | 426,296 | 3,54,839 |
|  | Purchases of stock-in-trade | 53 | 44,821 | 32,066 |
|  | Changes in inventories of finished goods, work-in-progress and stock-in-trade | 24.2 | $(3,801)$ | 69 |
|  | Excise duty |  | 92,314 | 75,165 |
|  | Employee benefits expense | 23 | 23,310 | 19,788 |
|  | Finance costs | 26 | 894 | 815 |
|  | Depreciation and amortisation expense | 27 | 26,021 | 28,202 |
|  | Other expenses | 28 | 87,228 | 80,377 |
|  | Vehicles / dies for own use |  | $(1,036)$ | (602) |
|  | Total expenses (IV) |  | 696,047 | 590,719 |
| V | Profit before tax (III - IV) |  | 99,413 | 74,437 |
| VI | Tax expense |  |  |  |
|  | Current tax | 2] | 23,317 | 20,414 |
|  | Deferred tax | [2] | 2,719 | 380 |
|  |  |  | 26,036 | 20,794 |
| VII | Profit for the period (V - VI) |  | 73,377 | 53,643 |
| VIII | Other Comprehensive Income |  |  |  |
|  | A () Items that will not be reclassified to profit or loss |  |  |  |
|  | (a) gain / (loss) of defined benefit obligation | 114.4 | (158) | (99) |
|  | (b) gain / (loss) on change in far value of equity instruments | 14.5 | 2,361 | 99 |
|  |  |  | 2,203 | - |
|  | A (ii) Income tax relating to items that will not be reciassified to profit or loss |  | 61 | 44 |
|  | B (i) Items that will be reclassified to profit or loss |  |  |  |
|  | (a) effective portion of gain / (loss) on hedging instruments in a cash flow hedge | 14.6 | (72) | 40 |
|  |  |  | (72) | 40 |
|  | B (i) Income tax relating to items that will be reclassified to profit or loss |  | 25 | (14) |
|  | Total Other Comprehensive Income ( $\mathrm{A}(\mathrm{i}+\mathrm{ii)}$ ) B (i+ii)) |  | 2,217 | 70 |
| IX | Total Comprehensive Income for the period (VII + VIII) |  | 75,594 | 53,713 |
|  | Earnings per equity share | 31 |  |  |
|  | Basic |  | 242.91 | 177.58 |
|  | Diluted |  | 242.91 | 177.58 |

The accompanying notes are forming part of these financial statements

In terms of our report attached
For DELOITTE HASKINS \& SELLS LLP
Chartered Accountants

JITENDRA AGARWAL
Partner
Place: New Delhi
Date: 27" April 2017

SHIGETOSHI TORII DIN : 06437336
S. RAVI AIYAR Executive Director (Legal) \& Company Secretary ICSI Membership No : F1734

