KARNATAK

UNIVERSITY

DHARWAD

DYAVAPPANAVAR-KORAVI-SIDNALEDUCATION TRUST’S

CHETAN BUSINESS SCHOOL, HUBLI

INSTITUTE OF MANAGEMENT AND RESEARCH

A Summer Internship Project Report on

“A Study on Fundamental Analysis of Selected companies in Automobile Sector”

Undertaken At

“Unicap Financial Services”

A project report submitted to the Karnataka University Dharwad for the fulfilment of post-graduation degree of

MASTER OF BUSINESS ADMINISTRATION

During the academic year 2021-2023

Submitted by

NAME: SIDDHARTH KALBURGI

REG.NO: P02DR21M0005

UNDER THE GUIDANCE OF

INTERNAL GUIDE	EXTERNAL GUIDE
DR. RAMAKANT KULKARNI	Mr. MAYUR SHARMA
ACADEMIC DIRECTOR	CO-FOUNDER

INDEX

Declaration

This is to declare that I Siddharth Kalburgi of Chetan Business School, Hubballi, Karnataka University Dharwad, MBA batch 2021-2023, have given original data and information to the best of my knowledge in the project report titled **'Fundamental Analysis of Selected Companies in Automobile Sector'** is a record of independent work carried out by me under the guidance and supervision of the **Dr. Ramakant Kulkarni** towards the partial fulfillment of the requirement for the MBA course.

I also agree not to share the vital information with any other person outside the organization and that I have not submitted it for any award, title, degree, or diploma.

Name: Siddharth Kalburgi
Reg No: P02DR21M0005

Acknowledgment

It gives me immense pleasure to present this concurrent Project Report. However, it would not have been possible without the help and support of Unicap Financial Services team members.

I would like to thank **Dr. Ramakant Kulkarni** (internal guide) and **Mr. Mayur Sharma** (external guide) for guiding me in my tenure of internship from December 12th, 2022 to February 10th, 2023. Without their support and guidance, I wouldn’t have come so far to prepare this report.

I would like to thank Chetan Business School, which has given me a great opportunity to work on this project.

I am also grateful to my loving parents and my kind friends whose prayers, affection, and support are always a source of encouragement. Their suggestions and supply of information were really very valuable and helpful to me. Their continuous encouragement and support helped me for completing this project successfully.

Name: Siddharth Kalburgi
Reg No: P02DR21M0005

Executive Summary

Title of the project:

"Fundamental Analysis of Selected Companies in Automobile Sector'

About the company:

Name and address of the company: Unicap Financial Services

No 4, Sai Spandana, Sirur park road

Between 3rd & 4th cross, Sampigne road,

Malleshwaram, Bangalore 560055

Duration of the project:

12th December 2022 to 10th February 2023

Scope Of the Study

Project scope is the part of project planning that involves determining and documenting a list of specific project goals, deliverables, features, functions, tasks, deadlines, and ultimately costs. In other words, it is what needs to be achieved and the work that must be done to deliver a project.

With respect to this project, I am focusing on the 5 Indian automobile companies having their market capitalization at the top in the Indian market to check their fundamental factors accordingly to study the future of the Automobile Sector in India to assist Indian Investors in their Investment Decisions

Objectives Of the Study

1) To study the overview of the Automobile Industry with important fundamental factors

2) To evaluate the financial performance using various fundamental factors.

3) To compare the fundamental factors of selected automobile

companies.

4) To assist the investors in making investment decisions in the Automobile Industry.

Research Methodology in Application:

Type of Study - Analytical and Descriptive

Nature of study - Qualitative and Quantitative

Sample

Top 5 companies in the Indian Automobile Sector with respect to their Market Capital

Sample Size - 5 Companies

Secondary Data

Sources &Collection of data

Secondary Data The sources of secondary data for solving the problems are:

- Company Annual Report
- Internet-websites
- Money Control
- Screener
- News

Each selected company's annual report data is taken with the use of the internet and the data is taken into consideration for analysing using various ratio calculations. In excel the calculation has been done which shows the information given by the website is accurate.

Findings and suggestions

The complete study of the industry factors analysis using the Competitive Forces Model (Porte's 5 factors Model) and PESTEL Analysis along with the Ratio Analysis of some important ratios, here we get to know that how the companies are performing. with the help of mentioned finding points investors will get to know about the each companies performace in the economy ananlysing ratio.

Investors should think rationally because, no one on this earth can predict as accurately about future so , I suggest investors should analyse the company before investing

Conclusion

The money one earns is partly spent on needs and everyone tries to save a part for future expenses. If you keep your savings idle, their nominal value remains the same, but the real value decreases due to a rise in inflation. Instead of keeping the savings idle, it's always better to park money somewhere to get returns on the savings. This is called Investment.

Literature review

1. Ms. Apurva A Chauhan
International Journal of scientific research 3, 2014
Fundamental analysis is the technique for finding the value of the stock which considers economy as a whole then industry and then performance of the company for finding the value of its stock. It uses top to bottom approach for finding the value of the stock. Fundamental analysis considers various factors such as development of the economy as a whole, development in the industry, past performances of company, and future prospectus of the company for finding the value of the stock of the company. The automobile industry is one of the key drivers of economic growth of the nation. Since the delicensing of the sector in 1991, Indian automobile sector has come a long way. Today, almost every global auto major has set up their facilities in the country. This paper attempts to study the fundamental analysis of Indian automobile industry with reference to the selected companies.

2. Richard C. Grimm (2012) fundamental analysis to determine its application as an Austrian approach to common stock selection. The Thymologic method and the category of understanding are applied as framework for an Austrian approach and to evaluate fundamental analysis as a process for common stock selection. The analysis supports the conclusion that fundamental security analysis can be practiced in a manner consistent with traditional Austrian views and is suitable us a common stock selection method by those who wish to adhere to such views. Venkates C K, Dr. Madhu Tyagi, Dr. Ganesh L (2O12) revealed out that investors can create a stronger value portfolio by using simple historical financial performance. They used 'F Score' Model for the same.
Hemal Pandya and Hetal Pandya (2013) curried out Fundamental Analysis of both the companies is carried out and their intrinsic value ranges are obtained from the EIC Analysis of Tata motors und Maruti Suzuki to help investor decisions.

3. S Rajashekar, BK Mallika
Acharya Institute of Technology., 2018
The present examination manages the analysis financial performance of Selected organizations of the automobile industry in India, which depend on the fragment that the organizations which deliver both passenger cars and business vehicles. This examination is inspected money related execution of chose organizations of the automobile industry in India industry in India. The Automobile industry is turned out to be one of the essential businesses of the economy. Car Industry, all around, also in India, is one of the key divisions of the economy. Because of its profound forward and in reverse linkages with a few key portions of the economy, car industry has a solid multiplier impact and goes about as one of the drivers of financial development. The much-created Indian car industry delivers a wide assortment of vehicles: traveler autos, light, medium and overwhelming business vehicles, multi-utility vehicles, for

example, jeeps, bikes, engine cycles, mopeds, three-wheeler, tractors and other rural types of gear and so forth. The segment has gigantic potential for giving work.

4. LINNERTOVÁ Dagmar, Vaibhav Verma
The aim of the thesis is to perform the fundamental analysis of automobile industry with reference to the selected companies. As a part of the analysis, world automotive market was studied with a focus on European market and valuation using appropriate methods and models was carried out for Volkswagen and BMW resulting in formulation of investment recommendation. The first part of the thesis is focused on introduction of necessary theoretical framework, the second part continues with analysis of automobile industry and finally in last part valuation is performed and an investment recommendation is formulated.

CHAPTER – 1

INTRODUCTION OF THE PROJECT

Introduction Of the Project:

Investing requires analyzing the stocks of the company and estimating the fair value of its share price. Arriving at the fair price of the company share is a combination of art and science. An art in deeply understanding the company, the product, the customers, and the competitive landscape, and science in being able to marry those understandings with the financial statements

At the company level, the fundamental analysis may involve the examination of the financial data, the capability of the management to navigate the business through different cycles, and the business model and the intensity of the competition that the company faces from the competitors.

At the Industry level, there might be an examination of supply and demand forces for the products offered by the company. For the national economy, the fundamental analysis might focus on economic data to access the present and future growth of the economy.

To forecast future stock prices, the fundamental analysis combines analysis of the economy, industry, and the company to derive a stock's current fair value and forecast future value. Fundamentalists do not heed the advice of the random walkers and believe that markets are inefficient. By believing that prices do not accurately reflect all the information, fundamental analysts try to capitalize on perceived price discrepancies.

This Study is to execute the fundamental analysis of the Indian automobile industry using various fundamental factors and ratios with reference to selected companies. As a part of the analysis, the Indian Automobile industry is studied with reference to 5 companies selected considering the Market Capital of the companies. Sample Size

The top 5 Indian Automobile companies with respect to their Market Capital are considered as the sample size for this project.

Company Name

1) Mahindra & Mahindra

2) Maruti Suzuki India

3) TATA Motors

4) Eicher Motors

5) Hero MotoCorp

Stock Market

The stock market refers to public markets that exist for issuing, buying, and selling stocks that trade on a stock exchange or over the counter. Stocks, also known as equities, represent fractional ownership in a company, and a stock market is a place where investors can buy and sell ownership of such investible assets. An efficiently functioning stock market is considered critical to economic development, as it gives companies the ability to quickly access capital from the public.

Purposes of the Stock Market - Capital and Investment Income

The stock market serves two very important purposes. The first is to provide capital to companies that they can use to fund and expand their businesses. If a company issues one million shares of stock that initially sell for $10 a share, then that provides the company with $10 million of capital that it can use to grow its business (minus whatever fees the company pays for an investment bank to manage the stock offering). By offering stock shares instead of borrowing the capital needed for expansion, the company avoids incurring debt and paying interest charges on that debt.

The secondary purpose the stock market serves is to give investors - those who purchase stocks — the opportunity to share in the profits of publicly-traded companies. Investors can profit from stock buying in one of two ways. Some stocks pay regular dividends (a given amount of money per share of stock someone owns). The other way investors can profit from buying stocks is by selling their stock for a profit if the stock price increases from their purchase price. For example, if an investor buys shares of a company’s stock at $10 a share and the price of the stock subsequently rises to S15 a share, the investor can then realize a 50% profit on their investment by selling their shares.

What is a Share?

In financial markets, a share is a unit used as mutual funds, limited partnerships, and real estate investment trusts. The owner of shares in the company is a shareholder (or stockholder) of the corporation. A share is an indivisible unit of capital, expressing the ownership relationship between the company and the shareholder. The denominated value of a share is its face value, and the total face value of issued shares represents the capital of a company, which may not reflect the market value of those shares.

The income received from the ownership of shares is a dividend. The process of purchasing and selling shares often involves going through a stockbroker as a middleman. There are different types of shares such as equity shares, preference shares, bonus shares, right shares, and employees stock option plan shares.

Indian Stock Market

Most of the trading in the Indian stock market takes place on its two stock exchanges: the Bombay Stock Exchange (BSE) and the National Stock

Exchange (NSE). The BSE has been in existence since 1875. The NSE, on the other hand, was founded in 1992 and started trading in 1994. However, both exchanges follow the same trading mechanism, trading hours, settlement process, etc. At the last count, the BSE had more than 5,000 listed firms, whereas the rival NSE had about 1,600. Out of all the listed firms on the BSE, only about 500 firms constitute more than 90% of its market capitalization; the rest of the crowd consists of highly illiquid shares.

Almost all the significant firms of India are listed on both exchanges. NSE enjoys a dominant share in spot trading, with about 70% of the market share, as of 2009, and almost a complete monopoly in derivatives trading, with about a 98% share in this market, also as of 2009. Both exchanges compete for the order flow that leads to reduced costs, market efficiency, and innovation. The presence of arbitrageurs keeps the prices on the two stock exchanges within a very tight range.

CHAPTER -2
COMPANY PROFILE

COMPANY PROFILE

Unicap Financial Services

O N E S T O P S O L U T I O N F O R Y O U R I N V E S T M E N T K N O W L E D G E A N D G U I D A N C E

About Company

Unicap Financial Services is a fintech start up, established with a group of professionals in the field of finance carrying a decade of experience providing cutting-edge access to market data & world-class news feed that covers the Indian Financial Markets.

What they do

Our product Turboprofits and Smart-I (in association with “Kotak Securities”) is leveraging its success for all its subscribers via Information, Curated News, and Basket Research helps to educate and guide investors about the opportunities that India’s emerging growth story presents, locate profitable market stories by using our App, social media, & Online Brokerage Platforms.

Experience

For 3 Years, we have been providing 100% Profitable Results, High-Quality Research, and Complete Transparency on Brokerages for beginners. The whole product comes at ZERO COST.

Products

Turboprofits

Smart-I

The partners

Kotak Securities

Service they provide

Economic-Stock research data

Training/Guidance on Stock Market

Basket Reports

Accurate Information for Informed Decisions

We are providing Mobile News App and website to enable quick access to financial news, and curated news: content is delivered to you by the touch of a button.

Turboprofits is leveraging its success for all its subscribers by applying collective intelligence in the financial domain, we provide information and access that helps locate profitable market stories by using our app and online platforms, and access is provided to market data & world-class news feed that covers the Indian Financial Markets.

Vision

We aim to be the Best Financial App Service Provider in India.

Mission & Goals

To educate investors about the opportunities that India's emerging growth story presents, It is important that Indian investors get maximum benefit by investing in great ideas that the Indian equity space offers. In This, we are committed to informing our investors about emerging stories.

Our firm belief is that our nation's overall economic growth and development will uplift all stakeholders involved.

Across the country, we have taken along with us Research Professionals, Financial Analysts, Innovators, Technologists, Financial Experts, and Ideates and work we are working with the zeal of a missionary in accomplishing the task of Informing and Educating our Subscribers.

Services

Turbo Profits Club Information Subscription Service

Turbo Profits Club App and Website offer access to accurate equity news & market data curated by experts. The platform provides Financial News and Reports, Company News, Breaking News, Results Information and brokerage reports, etc.

Turbo Profits Club is a one-stop financial news app for all the up-to-date information.

Smart Self-Managed Market Asset for Retail Trader- (Investment)

- Margin Investment Facilities (As Per Stock Brokers’ Terms and Conditions)
- Lowest interest rate On Funding
- Zero Brokerage on Intraday
- Holdings At Minimum Charges
- Brokerage Calls
- House Calls
- Access to premium content on Turbo Profits Club Website/App

Turbo Profits Financial Information Mobile App

Turboprofits, help you stay ahead of markets. The Mobile App gives you a birds-eye view of all News stories, plus the App provides you with breaking news and curated content.
Download free from Google Play Store and gets 10 years of Good Luck. Apple Users can Register using their safari browser and get the same features by clicking on www.turboprofits.club (Free to Register)

CHAPTER - 3
AUTOMOBILE SECTOR

Overview of the automobile industry

The Indian automobile industry has historically been a good indicator of how well the economy is doing, as the automobile sector plays a key role in both macroeconomic expansion and technological advancement. The two-wheelers segment dominates the market in terms of volume, owing to a growing middle class and a huge percentage of India’s population is young. Moreover, the growing interest of companies in exploring the rural markets further aided the growth of the sector. The rising logistics and passenger transportation industries are driving up demand for commercial vehicles. Future market growth is anticipated to be fueled by new trends including the electrification of vehicles, particularly three-wheelers and small passenger automobiles.

India enjoys a strong position in the global heavy vehicles market as it is the largest tractor producer, second-largest bus manufacturer, and third-largest heavy truck manufacturer in the world. India’s annual production of automobiles in FY22 was 22.93 million vehicles.

India is also a prominent auto exporter and has strong export growth expectations for the near future. In addition, several initiatives by the Government of India such as the Automotive Mission Plan 2026, scrappage policy, and production-linked incentive scheme in the Indian market are expected to make India one of the global leaders in the two-wheeler and four-wheeler market by 2022.

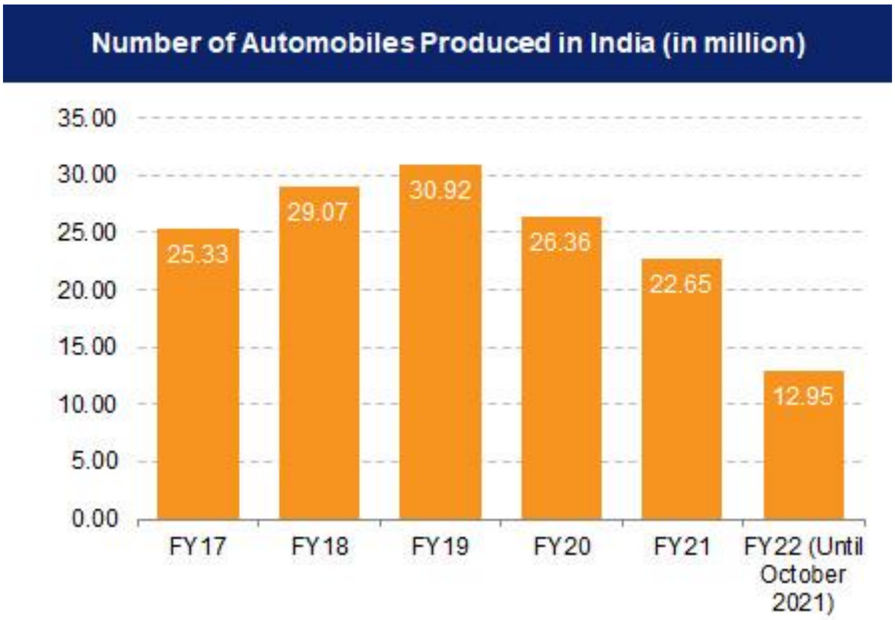
GDP Contribution

Currently, the automobile industry **contributes 7.1% of India's GDP and 49% of its manufacturing GDP**. The EV market is expected to grow at a CAGR of 49% between 2022-2030 and is expected to hit 10 mn-unit annual sales by 2030. The EV industry will create 50 mn direct and indirect jobs by 2030.

MARKET SIZE

The Indian passenger car market was valued at US$ 32.70 billion in 2021, and it is expected to reach a value of US$ 54.84 billion by 2027 while registering a CAGR of over 9% between 2022-27.

The electric vehicle (EV) market is estimated to reach Rs. 50,000 crores (US$ 7.09 billion) in India by 2025. A study by CEEW Centre for Energy Finance recognized a US$ 206 billion opportunity for electric vehicles in India by 2030. This will necessitate a US$ 180 billion investment in vehicle manufacturing and charging infrastructure.



According to NITI Aayog and the Rocky Mountain Institute (RMI), India's EV finance industry is likely to reach Rs. 3.7 lakh crore (US$ 50 billion) by 2030. A report by the India Energy Storage Alliance estimated that the EV market in India is likely to increase at a CAGR of 36% until 2026. In addition, the projection for the EV battery market is expected to expand at a CAGR of 30% during the same period.

Indian automotive industry is targeting to increase the export of vehicles by five times during 2016-26. In FY22, total automobile exports from India stood at 5,617,246.

INVESTMENTS

To keep up with the growing demand, several auto makers have started investing heavily in various segments of the industry during the last few months. The industry attracted Foreign Direct Investment equity inflow (FDI) worth US$ 33.53 billion between April 2000-June and 2022, accounting for 5.54% of the total equity FDI during the period.

Some of the recent/planned investments and developments in the automobile sector in India are as follows:

- In November 2022, Maruti Suzuki India announced plans to spend nearly Rs. 7,000 crore (US$ 865.12 million) on a number of projects this year, including the building of its new facility in Haryana and the introduction of new models.
- In October 2022, the total production of passenger vehicles*, three wheelers, two wheelers, and quadricycles was 2,191,090 units.
- In October 2022, Maruti Suzuki was India’s biggest car seller, with 136,700 units sold.
- In October 2022, Hero MotoCorp sold 507,587 two wheelers, the highest in the segment, which gave it a market share of 32.31%.
- In September 2022, Maruti Suzuki launched the Grand Vitara at a starting price of Rs. 10.45 lakh (US$ 12,915).
- In September 2022, Hero MotoCorp announced an investment of US$ 60 million in California-based Zero Motorcycles to collaborate on the development of electric motorcycles.
- In April 2022, Tata Motors announced plans to invest Rs. 24,000 crore (US$ 3.08 billion) in its passenger vehicle business over the next five years.
- In March 2022, MG Motors, owned by China's SAIC Motor Corp, announced plans to raise US$ 350-500 million in private equity in India to fund its future needs, including EV expansion.
- In February 2022, a memorandum of understanding (MoU) was signed between electric two-wheeler company Ather Energy and Electric Supply Companies (ESCOMs) of Karnataka for setting up 1,000 fast charging stations across the state.
- In February 2022, Tata Power and Apollo Tyres Ltd announced a strategic partnership for the establishment of 150 public charging stations across India.
- Two-wheeler EV maker HOP Electric Mobility, a diversified business venture of Rays Power Infra, is looking at investing Rs. 100 crore (US$ 13.24 million) over the next two years to expand manufacturing capacity for its EVs.
- Investment flow into EV start-ups in 2021 touched an all-time high, increasing nearly 255% to reach Rs. 3,307 crores (US$ 444 million).
- In December 2021, TVS Motor Company and BMW Motorrad, announced a partnership in the two-wheeler EV space, with plans to release their first electric two-wheeler within the next two years.
- In December 2021, Hyundai announced plans to invest Rs, 4,000 crores (US$ 530.25 million) in R&D in India, with the goal of launching six EVs by 2028.

- A cumulative investment of Rs. 12.5 trillion (US$ 180 billion) in vehicle production and charging infrastructure would be required until 2030 to meet India’s EV ambitions.

GOVERNMENT INITIATIVES

The Government of India encourages foreign investment in the automobile sector and has allowed 100% FDI under the automatic route. Some of the recent initiatives taken by the Government of India are:

- In July 2022, the Government amended the National Policy on Biofuels – 2018. The target of 20% blending of ethanol in petrol and 5% blending of biodiesel in a diesel by 2030 was brought forward to 2025-26.

- As of July 15, 2022, under the FAME India Scheme I & II, a total of 532 EV charging stations have been installed by oil companies under the Ministry of Petroleum and Natural Gas (MoPNG).

- In February 2022, Mr. Nitin Gadkari, Minister of Road Transport and Highways, revealed plans to roll out Bharat NCAP, India’s own vehicle safety assessment program.

- In February 2022, 20 carmakers, including Tata Motors Ltd, Suzuki Motor Gujarat, Mahindra and Mahindra, Hyundai, and Kia India Pvt. Ltd was chosen to receive production-linked incentives (PLI) as part of the government's plan to increase local vehicle manufacturing and attract new investment. The 20 automobile companies have proposed a total investment of around Rs. 45,000 crores (US$ 5.95 billion).

- In the Union Budget 2022-23, the government laid out the following initiatives:

    - The government introduced a battery-swapping policy, which will allow drained batteries to be swapped with charged ones at designated charging stations, thus making EVs more viable for potential customers.

    - India’s National Highways would be expanded by 25,000 km in 2022-23 under the Prime Minister’s Gati Shakti Plan.

- In November 2021, the Union Government added >100 advanced technologies, including alternate fuel systems such as compressed natural gas (CNG), Bharat Stage VI compliant flex-fuel engines, electronic control units (ECU) for safety, advanced driver assists systems and e-quadricycles, under the PLI scheme for automobiles.

- In September 2021, Minister of Road Transport and Highways, Mr. Nitin Gadkari, announced that the government is planning to make it mandatory for car manufacturers to produce flex-fuel engines after getting the required permissions from the Supreme Court of India.

- In September 2021, the Indian government issued a notification regarding a PLI scheme for automobile and auto components worth Rs. 25,938 crores (US$ 3.49 billion). This scheme is expected to bring investments of over Rs. 42,500 (US$ 5.74 billion) by 2026, and create 7.5 lakh jobs in India.

- In August 2021, Prime Minister Mr. Narendra Modi launched the Vehicle Scrappage Policy, which aims to phase out old polluting vehicles in an environmentally-safe manner.
- The Indian government has planned US$ 3.5 billion in incentives over a five-year period until 2026 under a revamped scheme to encourage the production and export of clean technology vehicles.
- In July 2021, India inaugurated the NATRAX, which is Asia's longest high-speed track and the fifth-largest in the world.
- As of June 2021, Rs. 871 crores (US$ 117 million) have been spent under the FAME-II scheme, 87,659 electric vehicles have been supported through incentives, and 6,265 electric buses have been sanctioned for various state/city transportation undertakings.
- In May 2021, the Central Government approved a PLI scheme for manufacturing Advanced Chemistry Cells (ACC) with a budget of Rs. 18,100 crores (US$ 2.33 billion). In March 2022, four firms, namely Reliance New Energy Solar Limited, Ola Electric Mobility Private Limited, Hyundai Global Motors Company Limited, and Rajesh Exports Limited, were elected to receive the incentives.

Road Ahead

The automobile industry is dependent on various factors such as availability of skilled labour at low cost, robust R&D centres, and low-cost steel production. The industry also provides great opportunities for investment, and direct and indirect employment to skilled and unskilled labour. The electric vehicles industry is likely to create five crore jobs by 2030.

In August 2022, the Indian government launched India's first double decker electric bus in Mumbai. Looking long term, the government feels it is necessary to overhaul the country's transportation system. It is working to create an integrated electric vehicle (EV) mobility ecosystem with a low carbon footprint and high passenger density with an emphasis on urban transportation reform. The government's strategy and policies are intended to promote greater adoption of electric vehicles in response to growing customer demand for cleaner transportation options.

The Government of India expects the automobile sector to attract US$ 8-10 billion in local and foreign investments by 2023. India could be a leader in shared mobility by 2030, providing opportunities for electric and autonomous vehicles.

The Indian auto industry is expected to record strong growth in 2022-23, post recovering from effects of COVID-19 pandemic. Electric vehicles, especially two-wheelers, are likely to witness positive sales in 2022-23.

CHAPTER - 4

THEORETICAL ASPECTS

Fundamental Analysis

Investing requires analyzing the stocks of the company and estimating the fair value of its share price. Arriving at the fair price of the company share is a combination of art and science. An art in deeply understanding the company, the product, the customers, and the competitive landscape, and science in being able to marry those understandings with the financial statements. Before applying fundamental analysis, let's understand what fundamental analysis is all about.

Fundamental Analysis is all about analyzing the factors that impact the well-being of the economy, industries, and companies. As with most analyses, the goal of the Fundamental Analysis is to come to a conclusion about the future movement of the share price of the company and profit from it. At the company level, the fundamental analysis may involve the examination of the financial data, the capability of the management to navigate the business through different cycles, and the business model and the intensity of the competition that the company faces from the competitors. At the Industry level, there might be an examination of supply and demand forces for the products offered by the company. For the national economy, the fundamental analysis might focus on economic data to access the present and future growth of the economy.

To forecast future stock prices, the fundamental analysis combines analysis of the economy, industry, and the company to derive a stock's current fair value and forecast future value. Fundamentalists do not heed the advice of the random walkers and believe that markets are inefficient. By believing that prices do not accurately reflect all the information, fundamental analysts try to capitalize on perceived price discrepancies.

General Steps to Fundamental Evaluation

Though there is no one clear-cut method, a breakdown can be as below in the order an investor can proceed. This method employs a top-down approach that starts with the overall economy and then works down from industry groups to specific companies. As part of the analysis process, it is important to remember that all information is relative. Industry groups are compared with other industry groups and companies against other companies. Usually, companies are compared with others in the same group (i.e., Auto. pharma. ONCG. FMCG., etc.).

a) **Economic Forecast** - First and foremost a top-down approach would be an overall evaluation of the general economy. The economy is like the tide and various Industry groups and Individual companies are like boats. When the company expands, most industry groups and companies benefit and grow, while when the economy declines, most sectors and companies usually suffer. Many economists link economic expansion, and contraction to the level of interest rates. Interest rates are also seen as a leading indicator of the stock market as well. An investor can break down the economy into its various industry groups.

b) **Group Selection** - If your analysis of the economy shows that it is going to expand, then certain sectors or industries are likely to benefit more than others. An Investor can narrow down those groups of industries that are best suited to benefit from the current or future economic environment. If most companies are expected to benefit from an expansion, then risk in equities would be relatively low and an aggressive growth-oriented strategy might be advisable. A growth strategy might involve the purchase of cyclical and sunrise industry stocks. If the economy is forecasted to contract, an investor may opt for a more conservative strategy and seek out stable income-oriented companies. A defensive strategy might involve the purchase of consumer staples, utilities, and energy-related stocks. To assess the industry group's potential, an investor would want to consider the overall growth rate, market size, and its importance to the economy. While the individual company is still important, its industry group is likely to exert just as much, or more, influence on the stock price. When the stocks move, they usually move as groups: there are very few lone guns out there. Many times, it is more important to be in the right industry in the right stock!

c) **Narrow Down Within the Group** - As soon as the industry group is chosen, an investor would need to narrow the list of companies before proceeding to a more detailed analysis. Investors are usually interested in finding the leaders and the innovators within a group. The first task is to identify the current business and competitive environment within a group as well as future trends.
It is better to know the answers to the following questions before moving to the next step. How do the companies rank according to the market share, product position, and competitive advantage? Who is the current leader and how would changes within the sector affect the current balance of power? What are the barriers to entry? Success depends on an edge, be it marketing, technology, market share, or innovation. A 'comparative analysis of the competition within the sector serves as the basis to identify those companies with an edge and those most likely to retain it.

d) **Company Analysis** - With a shortlist of companies an investor might analyze the resources and capabilities within each company to identify those companies that are capable of creating and maintaining a competitive advantage going ahead. The analysis could focus on selecting companies with a robust business plan, professional management, and sound financials.

i. **Business Plan** - The business plan, model or concept forms the bedrock upon which everything is built. If the plan, model or concept stinks, there is little hope for the business to do well.

e) For a new business, the questions may be:
f) / Does the business make sense?
g) Is it feasible?
h) / Is there a market?
i) Can profit 1 be made?

j) For an established business, the questions may be:
k) / Is the company's direction clearly defined?
l) / Is the company a leader in the market?
m) V Can the company maintain leadership?

ii. **Management** - in order to execute a business plan, a company requires top-quality management. Investors might look at the management to access the capabilities, strengths, and weaknesses of those at the helm.

Even the best-laid plan in the most dynamic industry can go to waste with bad management. Ultimately. even strong management can make for extraordinary success in a mature industry.

Some of the questions to ask might include:

/ How talented is the management team?

/ Do they have a track record?

/ How long have they worked together?

/ Can management deliver as per their commitment?

/ Is there a proper succession plan to replace the current top management?

Understanding Ratio Analysis

Financial ratios are mathematical comparisons of financial statement accounts or categories. These relationships between the financial statement accounts help investors, creditors, and internal company management understand how well a business is performing and of areas needing improvement.

Financial ratios are the most common and widespread tools used to analyse a business's financial standing. Ratios are easy to understand and simple to compute. They can also be used to compare different companies in different industries. Since a ratio is simply a mathematical comparison based on proportions, big and small companies can use ratios to compare their financial information. In a sense, financial ratios don't take into consideration the size of a company or the industry. Ratios are just a raw computation of financial position and performance.

There are various different ratios that help to understand the financials of the company completely. Among them, we are here considering only those types which we have used in our research. And those are -

Stock-market related Ratios —

Earnings per Share (EPS)

Cash Earnings per Share (CEPS)

Dividend per Share (DPS)

Pay-out Ratio

Profitability Ratios -

Return on Net Assets (RONA)

Return on Capital Employed (ROCE)

Capital Structure Ratio —

Debt-Equity Ratio (D/E Ratio)

Valuation Ratio -

Enterprise Multiple (EV/EBIDTA)

1) Earnings per Share (EPS) - Earnings per share (EPS), also called net income per share, is a market prospect ratio that measures the amount of net income earned per share of stock outstanding. In other words, this is the amount of money each share of stock would receive if all of the profits were distributed to the outstanding shares at the end of the year.

Earnings per share is also a calculation that shows how profitable a company is on a shareholder basis. So, a larger company’s profits per share can be compared to a smaller company’s profits per share. Obviously, this calculation is heavily influenced by how many shares are outstanding. Thus, a larger company will have to split its earnings amongst many more shares of stock compared to a smaller company.

Formula:

$$EPS = \frac{\text{Net Profit}}{\text{Equity share}}$$

2) Cash Earnings per Share (CEPS) - As the saying goes ‘Cash is King’, CEPS measures the underlying performance of a company by avoiding many accounting leeways available to a company. Financial statements of a company have many non-cash items such as depreciation and amortization that can hide the underlying performance of a company. By removing these accounting adjustments CEPS provides a stricter measure of earnings.

As with the normal EPS, the higher the CEPS better it is. A company should also display an increasing CEPS trend over the years. This ratio becomes important for companies, which have a lot of assets (tangible and intangible) in their books. As the payment for these assets happens in a single period, the depreciation charges on these assets occur over the life of the assets. Thus, the depreciation charges are considered non-cash i.e., no cash outlay is required. It is difficult to ascertain the life of an asset and hence to predict the annual depreciation charges. Hence there is a possibility of manipulation by the company.

Here is how to calculate the Cash EPS ratio.

$$\text{Cash EPS} = \frac{\text{Operating cash flow}}{\text{Outstanding shares}}$$

3) Dividend per Share (DPS) - Dividend per share (DPS) is the sum of declared dividends issued by a company for every ordinary share outstanding. DPS is an important metric to investors because the amount a firm pays out in dividends directly translates to income for the shareholder, and the DPS is the most straightforward figure an investor can use to calculate his or her dividend payments from owning shares of a stock over time. Meanwhile, a growing DPS over time can also be a sign that a company's management believes that its earnings growth can be sustained.

The formula for dividends per share, or DPS,

Dividend per share = Special dividend + Interim dividend + Final dividend

4) Pay-out Ratio - When investors buy stocks, they can make money in two different ways. The first is by selling their shares for a price that's higher than their original cost. The second is by collecting dividends, which are a portion of a company's earnings distributed to shareholders. Not all stocks pay dividends, but those that do offer shareholders a steady stream of income. But just because a company is paying a certain amount in dividends at one point in time doesn't mean it will continue to uphold that practice. That's why it's important for investors to look at a company's payout ratio.

The pay-out ratio is used to determine whether a company's earnings are such that it can sustain its dividend payments. The payout ratio is usually expressed as a percentage and is calculated as follows:

$$\text{Pay-out} = \frac{\text{DPS}}{\text{EPS}}$$

5) Return on Assets (ROA) - The return on assets ratio, often called the return on total assets, is a profitability ratio that measures the net income produced by total assets during a period by comparing net income to the average total assets. In other words, the return on assets ratio or ROA measures how efficiently a company can manage its assets to produce profits during a period.

Since company assets’ sole purpose is to generate revenues and produce profits, this ratio helps both management and investors see how well the company can convert its investments in assets into profits. You can look at ROA as a return on investment for the company since capital assets are often the biggest investment for most companies. In this case, the company invests money into capital assets and the return is measured in profits.

In short, this ratio measures how profitable a company’s assets are. The return on assets ratio formula is calculated by dividing net income by average total assets.

$$ROA = \frac{\text{Net profit}}{\text{Fixed assets + (current asset-current liabilities)}}$$

6) Return on Capital Employed (ROCE) - Return on capital employed or ROCE is a profitability ratio that measures how efficiently a company can generate profits from its capital employed by comparing net operating profit to capital employed. In other words. Return on capital employed shows investors how many dollars in profits each dollar of capital employed generates.

ROCE is a long-term profitability ratio because it shows how effectively assets are performing while taking into consideration long-term financing. This is why ROCE is a more useful ratio than the return on equity to evaluate the longevity of a company.

This ratio is based on two important calculations: operating profit and capital employed. Net operating profit is often called EBIT or earnings before interest and taxes. EBIT is often reported on the income statement because it shows the company profits generated from operations. EBIT can be calculated by adding interest and taxes back into net income if need be.

Capital employed is a fairly convoluted term because it can be used to refer to many different financial ratios. Most often capital employed refers to the total assets of a company less all current liabilities. This could also be looked at as stockholders’ equity less long-term liabilities. Both equal the same figure.

The return on the capital employed formula is calculated by dividing net operating profit or EBIT by the employed capital.

$$ROCE = \frac{\text{EBIT}}{\text{Total assets – Total current liabilities}}$$

7) Debt-Equity Ratio (D/E Ratio) - The debt-to-equity ratio is a financial Capital Structure Ratio, that compares a company's total debt to total equity. The debt-to-equity ratio shows the percentage of company financing that comes from creditors and investors. A higher debt-to-equity ratio indicates that more creditor financing (bank loans) is used than investor financing (shareholders).

This ratio is calculated by dividing total liabilities by total equity. The debt-to-equity ratio is considered a balance sheet ratio because all of the elements are reported on the balance sheet.

$$\text{Debt-equity} = \frac{\text{Debt}}{\text{Equity share capital}}$$

8) Enterprise multiple (EV/EBIDTA) - Enterprise multiple, also known as the EV multiple, is a ratio used to determine the value of a company. The enterprise multiple looks at a firm in the way that a potential acquirer would by considering the company's debt. Stocks with an enterprise multiple of less than 7.5x based on the last 12 months (LTM) are generally considered a good value. However, using a strict cut-off is generally not appropriate because this is not an exact science. The Formula for Enterprise Multiple Is

$$\text{EV/EBITDA} = \frac{\text{Enterprise value}}{\text{EBITDA}}$$

What EV?

EV stands for Enterprise Value. A firm's EV is equal to its equity value (or market capitalization) plus its debt (or financial commitments) less any cash (debt less cash is referred to as net debt).

What is EBITDA?

EBITDA stands for Earnings Before Interest Taxes Depreciation and Amortization. It is often used in valuation as a proxy for cash flow.

Yardstick For Analysing a Company

Company analysis is done considering every aspect of the company/organization. For an easy analysis, the following checklist can be followed.

a. **Background:** When and where was the company promoted? How long has it been in operation? This information helps to know the history of the organization.
b. **Promoters and management:** Knowing about the hands which are controlling the strings of the organization and about the backup of the promoters it got, helps to reduce the risk of uncertain decisions.
c. **Capital History:** There are companies that are too liberal in declaring bonuses or rights issues. Such companies are a good bargain. Similarly, some companies mismanage debts and approach capital markets too often. Such companies should be avoided.
d. **Shareholding Pattern:** If you know the shareholding pattern, you can guess the floating stock. The lower the floating stock, the higher the stock price, and vice-versa.
e. **Growth:** Check the past growth trend in terms of sales, assets, and profits. A high-growth-oriented company always has the potential to grow big.
f. **Market Capabilities:** For this, one may consider how the company’s product is faring in the market. How good is its brand image? How is the distribution network? What are the pricing and promotion strategies?
g. **Exports:** In this Globalized era with favourable export policy, companies with high export earnings attract the investor. In the case of an export company, the import dependence of exports is also considered in view of the fact that the net foreign exchange earnings are more important.
h. **Production and Capacity Utilization:** The use of the latest production management techniques useful in increasing productivity. High-capacity utilization indicates strong demand.
i. **Profitability:** The past trend of profitability is one of the most important measures to judge the performance of the company.
j. **Activity Ratios:** Activity ratios help to answer, how good is the management in controlling working capital? How good is inventory management, collection of debt, or repayment of creditors for generating higher sales?
Along with the above points one can also consider Liquidity, Expansion Plans, etc. to analyze the company.

Yardstick For Analysing Industry Structure

How do you analyse industry structure?

Certain important aspects of the industry structure are:

a. **Growth:** A growing industry gives room for profitability, while a mature industry does not leave much headroom for profit appreciation.
b. **Profitability:** The average profitability of the industry should be attractive. Even if the past profitability figures may not be high, a sudden turnaround in profitability is favourable.
c. **Demand-Supply:** The wider the demand-supply gap, the better the industry's prospects in the future.
d. **Capacity utilization:** Low-capacity utilization is an indication of slackening demand. Hence, if you find capacity utilization of any sector going down, you should remain away from the sector.
e. **Entry barrier:** High entry barrier is good for the existing companies. For instance, licensing requirements for pollution-prone industries like asbestos and cement stand as an entry barrier. Similarly, high investment costs stand as entry barriers for the integrated steel, cement, and petrochemical industries. On the other hand, the low entry barrier for sectors like financial services makes them vulnerable to competition.
f. **Competition and market share:** Lesser the number of competitors, the more the market share and the higher the margin. Sometimes the price war forces the industry to become sick. (Example - Telecom Industry)
g. **Bargaining Power of Buyers V/s Bargaining Power of suppliers:** if the customers have greater bargaining power with the industry, its profits go down and vice-versa. The bargaining power of the suppliers and the availability of inputs can affect the industries which do not have multiple sourcing.
h. **The Threat of Substitute products:** Industries that are innovation-oriented always face a threat of product obsolescence. The competition from substitute products can take the industry down. For example, Cameras are now rare after smartphones became popular with good quality cameras inbuilt.

Research Methodology

Research Methodology means the various method used by the researcher to obtain knowledge of information about the subject that one selected for the project. The methodology may differ from person to person, subject to subject. Some people refer to books, practical knowledge, interviews with people, and Questionnaires. Here in this Research Process, I have used Secondary Data which is easily available from many News Papers, Research Papers. Economic Magazines, and Books. Both Qualitative and Quantitative Data is used while doing research.

1) Research

"Research is a process of steps used to collect and analyze information to increase our understanding of a topic or issue". It consists of three steps: pose a question, collect data to answer the question, and present an answer to the question.

-John W. Creswell

2) Type of Research

a) Quantitative research

‘‘Quantitative research methods are basically applied to the collection of data that is structured and which could be represented numerically”. Generally, quantitative data is collected when the researcher has adopted the positivist epistemological approach, and data is collected that can be scientifically analyzed. - Matthews & Ross

b) Qualitative research

“Qualitative research is a research strategy that indicates the relationship between theory and research and usually emphasizes how theories were generated. As a research strategy, qualitative research is inductivist, constructionist, and interpretivism - Bryman and Bell

3) Research methodology

“Research methodology is a method to analytically explain the research problem. It may be described as a science of analysis of how research is done systematically. In it we investigate the various stages that are generally implemented by a scholar in studying his problem of research in conjunction with the reason behind them. Additionally, “research methods are the tools and techniques for doing research. Research is a term used liberally for any kind of investigation that is intended to uncover interesting or new facts.”

4) Type of Research methodology

1. Exploratory: As the name suggests, exploratory research is conducted to explore a group of questions. The answers and analytics may not offer a final conclusion to the perceived problem. It is conducted to handle new problem areas which haven’t been explored before. This exploratory process lays the foundation for more conclusive research and data collection.

2. Descriptive: Descriptive research focuses on expanding knowledge on current issues through a process of data collection. Descriptive studies are used to describe the behavior of a

sample population. In a descriptive study, only one variable is required to conduct the study. The three main purposes of descriptive research are describing, explaining, and validating the findings. For example, a study was conducted to know if top-level management leaders in the 21 st century 27 possess the moral right to receive a huge sum of money from the company profit.

3. Explanatory: Explanatory research or causal research is conducted to understand the impact of certain changes in existing standard procedures. Conducting experiments is the most popular form of casual research. For example, a study was conducted to understand the effect of rebranding on customer loyalty.

4. Analytical Research is primarily concerned. With testing hypothesis and specifying and. Interpreting relationships, by analyzing the data.

Primary data is information collected through original or first-hand research. For example, surveys and focus group discussions.

Secondary data is information that has been collected in the past by someone else.

Competitive Forces Model of the Automobile Industry (Porter's 5 Forces Model)

One of the most famous models ever developed for industry analysis, famously known as Porter's 5 Forces, was introduced by Michael Porter in his 1980 book "Competitive Strategy: Techniques for Analysing Industries and Competitors.'' According to Porter, analysis of the five forces gives an accurate impression of the industry and makes analysis easier. In our Corporate & Business Strategy course, we cover these five forces and an additional force - the power of complementary goods/service providers.

Porter's five forces model on Automobile Industry

1. The threat of new entrants: Weak

It is difficult for new brands to enter the automobile industry which is because of the large investment required for establishing a car brand. At the initial stage, huge investment will be required to set up the manufacturing facilities, and distribution network and hire skilled staff. Another major barrier is the level of competition from the existing brands. Unless a new brand brings an innovative and differentiated product to the market, chances to gain a significant market share are low. While the law was not a barrier for the new entrants earlier, legal requirements have grown in recent years, creating one more barrier to entry. Brand image and reputation can also be major challenges before new players. Brand image and equity are some major advantages for existing brands. Any new brand would have to focus a lot on engineering and product quality. Getting access to raw materials can be easy but then achieving economies of scale is difficult for small players. Moreover, penetrating new markets is not easy either. Some governments have applied high import taxes to discourage foreign brands. So, there are several factors that minimize the threat of new players. Apart from Tesla, there is hardly a new brand that has been able to make a significant mark at the international level in the automobile industry.

2. Bargaining power of suppliers: Weak

The bargaining power of suppliers in the automotive industry is weak for most of them are small players. Only two of them are significant in size. The threat of forwarding integration is minimum from the suppliers for the reasons discussed in the first category. These suppliers have to play according to the rules set by the car brands. The vehicle brands like BMW, Ford, Toyota, and VW hold immense clout because the raw material is always available in plenty, and switching from one supplier to another is not difficult for them. In this way, the bargaining power of suppliers is considerably low.

3. Bargaining power of buyers: Moderately strong

A large part of the buyers is the small individual buyers that buy single vehicles. However, there are corporations and government agencies that buy fleets of vehicles. Such buyers are in a position to bargain for lower prices. Whether small or large buyers can easily switch to a new brand. There are no big costs involved in switching to another brand or to an alternative mode of transportation. The buyers are price sensitive mostly and would switch to another brand that offers a better product at a lower price. However, none of the buyers whether big corporations or individual small buyers pose a threat of backward integration. Based on the overall picture their bargaining power is moderately strong. Brands focus on building customer loyalty through design, quality, and by offering competitive prices. Competition in the automobile industry has grown intense and changing consumer trends have also led to growth in the bargaining power of customers.

4. The threat of substitutes: Weak

There are several substitutes and alternative modes of transportation including taxis, buses, trains, and planes. However, none of them can provide the kind of accessibility and convenience that owning an automobile does. Your own car will serve you round the clock but if you missed a train or bus you have to wait for Page - 42 - of 70. However, in the case of the alternative modes you do not need to worry about maintenance. Still, owning a car is both a matter of convenience and prestige for most. So, the threat of substitutes is weakened. Still, there is some threat from the substitute products where daily commuters may find it cheaper and easier to take a train or bus.

5. Competitive Rivalry in the industry: Very strong

The number of recognized and influential brands is low and the exit barriers are very high. Any brand trying to exit would have to bear large losses. The level of customer loyalty is high and while the industry is large, it has matured. This intensifies the competition for market share. However, different brands target different market segments but yet they overlap. Brands compete on the basis of price, design, quality, technology, customer safety, and several other points. Overall, competition in the auto industry is a strong force or rather very strong. Auto firms are investing aggressively in research and development, digitalization as well as marketing and overall customer experience to grow sales and customer base. Whether in the premium category or the small car segment and SUVs, the level of competitive rivalry among leading brands is strong. With higher competition, brands are trying to maximize customer satisfaction and competing to provide the best customer experience. They are also investing in growing their sales and distribution network as well focus on after-sales service is higher now.

PESTEL Analysis of the Automobile Industry

(Broad Factor Analysis)

A PESTLE analysis (formerly known as PEST analysis) is a framework or tool used to analyze and monitor the macro-environmental factors that may have a profound impact on an organization's performance. This tool is especially useful when starting a new business or entering a foreign market. It is often used in collaboration with other analytical business tools such as the SWOT analysis and Porter's Five Forces to give a clear understanding of a situation and related internal and external factors.

PESTEL is an acronym that stands for Political, Economic, Social, Technological, Environmental, and Legal factors. However, throughout the year, people have expanded the framework with factors such as Demographics, Intercultural, Ethical, and Ecological resulting in variants such as STEEPLED, DESTEP, and SLEPIT. In this article, we will stick simply to PESTEL since it encompasses the most relevant factors in general business.

1. POLITICAL

i) SAFETY REGULA T1ONS

Driving motor vehicles can be extremely dangerous. Although we like to think of airplanes as being unsafe, the truth is that you're significantly more likely to have a car or motorcycle accident than to be involved in a plane crash. As a result of this, governments across the world enforce strict safety regulations around the automotive

industry. Not only do these regulations govern the manufacturing of motor vehicles —providing specific build requirements, such as seatbelts, to ensure passenger safety —but they also affect those behind the wheel. This makes it more difficult to launch a new business in the automotive space, helping existing brands to maintain their place in the market.

ii) EMISSIONS POLICIES

Aside from controlling the safety aspect of the automotive industry, politicians also take great interest in the environmental consequences of motor vehicles. Almost all cars, motorcycles, and buses are powered by fossil fuels such as petroleum and diesel, which produce a number of environmental pollutants when burnt. A major concern with motor vehicles is that of carbon emissions, i.e., the amount of carbon dioxide produced by driving a vehicle. As such, governments also have a great interest in the emissions statistics of new and existing vehicles. This, along with other environmental concerns, is yet another regulatory hoop for automotive manufacturers to jump through.

2. ECONOMIC

i) GRO WING DISPOSAL BLE INCOMES

As a general trend, individuals around the world are earning more and more money every year. This means they have more money to spend on luxury items such as electronics and, of course, automobiles! It comes as no surprise, then, that demand for motor vehicles is slowly but surely growing. This is especially true in developing regions — such as some African states — where recent economic developments have only now made it possible for poorer households to afford their own car. Ultimately, this growing demand for motor vehicles means that more cars will be sold, and the automotive industry will become even more profitable for its participants.

3. SOCIOCULTURAL

i) POPULARITY OF DRIVING

There's no doubt that, from a Sociocultural perspective, the popularity of driving is growing. It's becoming commonplace for families around the world to own one or more motor vehicles; in fact, owning one or more motor vehicles is already the norm in developed countries such as the United States, Canada, and much of the European Union. Part of this is a cultural phenomenon: it's not like many of us can't get away with bicycles and buses, but instead, we choose to drive motor vehicles simply because that's what is expected of us.

4. TECHNOLOGICAL

I. SELF-DRIVING CARS

Without a doubt, the biggest Technological shift impacting the automotive industry is the advance of self-driving technology. With some automotive brands such as Tesla already offering nearly completely autonomous motor vehicles, there is a huge change to the way we commute on the horizon. This isn't necessarily a good or bad thing for the automotive industry, but it may mean that manufacturers of conventional cars have to change their business strategy to stay relevant.

II. IMPROVED SAFETY

Aside from the advent of self-driving cars, another big Technological advancement in the automotive industry is, generally speaking, the safety of motor vehicles. It was only in the 1980s that wearing seat belts became a requirement; similarly, it took lower-end automotive brands until the early 2000s to begin rolling out airbags across their models. Not only are standards improving across the industry, but so is the underlying technology. Most recently, automotive manufacturers have begun introducing emergency brake assist systems to their vehicles, vastly reducing the likelihood of front-end collisions.

5. ENVIRONMENTAL

i) CARBON EMISSIONS

As touched upon earlier, carbon dioxide is one of the most serious Environmental pollutants generated by the automotive industry. It plays a large role in global climate change, by means of the greenhouse effect. Over the last few years, the issue of carbon emissions has gained global attention. We continue to drive motor vehicles on a daily basis, but it’s unclear whether governments will be forced to take greater action to stop global warming — and that might involve a complete ban on the production or usage of motor vehicles or at least a switch towards electric vehicles.

6. LEGAL

i) COPYRIGHT ISSUES

Interestingly, the issue of copyright also affects the automotive industry. Certain features of a car — from its branding to even its shape — can be protected by copyright, trademark, or patent laws. It’s uncommon to hear about legal showdowns in the automotive space, but they do happen. In recent decades, a rising issue has been that of Chinese automobile manufacturers blatantly stealing the designs of their Western counterparts. For example, the Chinese brand Geely has created some oddly similar copies of the Rolls Royce Phantom, resulting in some conflict. It’s unclear what net effect this copying has on the industry, but it's definitely present.

FINAL THOUGHTS

The motor vehicle has become a part of everyday life for many of us. Not only can we afford to buy and fuel our cars more than ever before, but we’re also implicitly expected to use automobiles. However, the Ecological consequences of driving are serious, and it looks like we might have to think about making the switch to electric vehicles to save our planet.

CHAPTER – 5

DATA ANALYSIS AND INTERPRETATION

Introduction of each selected company

1. Mahindra & Mahindra Limited (M&M)

SPORT UTILITY VEHICLES

Type	**Public**
Founder	**J.C. Mahindra**
	K.C. Mahindra
	M.G. Muhammad
Headquarters	**Mumbai, Maharashtra, India**
Founded	**2 October 1945, 77 years ago**
Key People	**Anand Mahindra (Chairman)**
	Dr. Anish Shah (MD & CEO)
	Rajesh Jejurikar (Executive Director)
Industry	**Automotive**
Revenue	**$9.3 Billion (2021)**
Net income	**$1.1 Million (2021)**
Employees	**40,619 (2021)**
Website	**www.auto.mahindra.com**

Introduction

It is an Indian multinational automotive manufacturing corporation headquartered in Mumbai. It was established in 1945 as Mahindra & Mohammed and later renamed as Mahindra & Mahindra. Part of the Mahindra Group, M&M is one of the largest vehicle manufacturers by production .0n India. Its subsidiary Mahindra Tractor Company is the largest manufacturer of tractors in the world by volume. It was ranked 17th on a list of top companies in India by Fortune India 500 in 2018. Its major competitors in the Indian market include Maruti Suzuki and Tata Motors. Recently Mahindra tractor company launched TREM IV pollution norms tractors, which have common rail direct injection technology. Mahindra has launched a total of 6 tractors with CRDI technology one of these is the Arjun Novo 605 DI PP which is with common rail direct injection technology and provides different power outputs with different modes i.e. tractor has 3 modes.

History

Mahindra & Mahindra was founded as a steel trading company on 2 October 1945 in Ludhiana as Mahindra & Mohammed by brothers Kailash Chandra Mahindra and Jagdish Chandra Mahindra along with Malik Ghulam Muhammad. Anand Mahindra, the present Chairman of Mahindra Group, is the grandson of Jagdish Chandra Mahindra.

In 1948, the company changed its name to Mahindra & Mahindra.[7] They eventually saw a business opportunity in expanding into manufacturing and selling larger MUVs and started assembling under the license of the Willys Jeep in India. Soon, M&M was established as the Jeep manufacturer in India and later commenced manufacturing light commercial vehicles (LCVs) and agricultural tractors.

Jeep was bought by American Motors Corporation in 1970 and thereafter Jeeps continued to be built under license from AMC, and in turn under Chrysler after Chrysler bought AMC in 1987.

In 1999, Mahindra purchased 100% of Gujarat Tractors from the Government of Gujarat, and in 2017 Mahindra renamed it as Gromax Agri Equipment Limited, as part of a new brand strategy and the models continue to be sold as Trakstar.[8][9]

In 2007, M&M acquired Punjab Tractor Limited (PTL) making it the world's largest tractor manufacturer.[10][11] Subsequent to this take-over, the former PTL was merged into M&M and transformed into the Swaraj division of Mahindra & Mahindra in the year 2009.[12]

Mahindra & Mahindra Strengths

The strengths of Mahindra & Mahindra look at the key aspects of its business which gives it competitive advantage in the market. Some important factors in a brand's strengths include its financial position, experienced workforce, product uniqueness & intangible assets like brand value. Below are the Strengths in the SWOT Analysis of Mahindra & Mahindra:

1. Mahindra has been one of the strongest brands in the Indian automobile market
2. Mahindra group give employment to over 110,000 employees
3. Excellent branding and advertising, and low after sales service cost
4. Sturdy SUV’s good for Indian roads and off-road terrain

Mahindra & Mahindra Weaknesses

The weaknesses of a brand are certain aspects of its business which are it can improve to increase its position further. Certain weaknesses can be defined as attributes which the company is lacking or in which the competitors are better. Here are the weaknesses in the Mahindra & Mahindra SWOT Analysis:

1. Mahindra’s partnership with Renault did not live up to international quality standards through their brand Logan

2.Maruti Suzuki India Limited

Type	**Public**
Founder	**Government of India**
Headquarters	**New Delhi, India**
Founded	**24 February, 1981 (41 years ago)**
Key People	**R.C. Bhargava (Chairman)**
	Hishahi Takeuchi (MD & CEO)
	Kenichi Ayukawa (Executive Vice Chairman)
	Shashank Srivastava (Executive Director)
Industry	**Automotive, Commercial vehicles, Automotive parts**
Revenue	**$9.2 Billion (2021)**
Net income	**$530 Million (2021)**
Employees	**16,025 (2021)**
Website	**www.marutisuzuki.com**

Introduction

Maruti Suzuki India Limited, formerly known as Maruti Udyog Limited, is an Indian automobile manufacturer, based in New Delhi. It was founded in 1981 and owned by the Government of India until 2003, when it was sold to the Japanese automaker Suzuki Motor Corporation. As of September 2022, Maruti Suzuki has a market share of 42 percent in the Indian passenger car market.

Details of the Business

Maruti Suzuki India Limited (MSIL), a subsidiary of Suzuki Motor Corporation, Japan, is India's largest passenger car maker. Maruti Suzuki is credited with having ushered in the automobile revolution in the country. The Company is engaged in the business of manufacturing and sale of passenger vehicles in India. Making a small beginning with the iconic Maruti 800 car, Maruti Suzuki today has a vast portfolio of 16 car models with over 150 variants. Maruti Suzuki’s product range extends from entry level small cars like Alto 800, Alto K10 to the luxury sedan Ciaz. Other activities include facilitation of pre-owned car sales fleet management, car financing. **The** Company has manufacturing facilities in Gurgaon and Manesar in Haryana and a state-of-the-art R&D centre in Rohtak, Haryana.

The Company, formerly known as Maruti Udyog Limited, was incorporated as a joint venture between the Government of India and Suzuki Motor Corporation, Japan in February, 1981. Presently, Suzuki Motor Corporation owns equity of 56.2%. The Company’s shares are traded on the National Stock Exchange (NSE) and the Bombay Stock Exchange (BSE).

History

Maruti Udyog Limited was founded by the Government of India on 24 Jan 1981 with Suzuki Motor Corporation as a minor partner, only to become the formal JV partner and license holder of Suzuki in August 2021. The first manufacturing factory of Maruti was established in Gurugram, Haryana, in the same year.

Maruti Suzuki Strengths

The strengths of Maruti Suzuki looks at the key aspects of its business which gives it competitive advantage in the market. Some important factors in a brand's strengths include its financial position, experienced workforce, product uniqueness & intangible assets like brand value. Below are the Strengths in the SWOT Analysis of Maruti Suzuki:

1. Maruti Suzuki is the largest passenger car company in India, accounting for around 45% market share

2. Over 12,000 people are employed with Maruti

3. Good advertising, product portfolio, self-competing brands

4. Largest distribution network of dealers and after sales service centres

5. Strong brand value and strong presence in the second-hand car market

6. Having different revenue streams like Maruti finance, Maruti Insurance and Maruti driving schools

7. Over 700,000 units sold in India annually including 50,000 exports

8. Maruti Suzuki launched NEXA showrooms to cater to its premium cars market

9. The company has been recognized by several awards in the automobile segment in India

Maruti Suzuki Weaknesses

The weaknesses of a brand are certain aspects of its business which are it can improve to increase its position further. Certain weaknesses can be defined as attributes which the company is lacking or in which the competitors are better. Here are the weaknesses in the Maruti Suzuki SWOT Analysis:

1. Inability to penetrate into the international market

2. Employee management, strikes, worker wage problems have affected Maruti's brand image in the past

3. Tata Motors Limited (TML)

Type	**Public**
Founder	**Jehangir Ratanji, Dadabhoy Tata**
Headquarters	**Mumbai, Maharashtra, India**
Founded	**1945 (78 years ago)**
Key People	**Natarajan (Chairman)**
	Guenter Butschek (CEO)
Industry	**Automotive**
Revenue	**$38 Billion (2022)**
Net income	**$1.4 Billion (2022)**
Employees	**50,837 (2022)**
Website	**www.tatamotors.com**

Introduction

Tata Motors Limited is an Indian multinational automotive manufacturing company, headquartered in Mumbai, India, which is part of the Tata Group. The company produces passenger cars, trucks, vans, coaches, buses.

Formerly known as Tata Engineering and Locomotive Company (TELCO), the company was founded in 1945 as a manufacturer of locomotives. The company manufactured its first commercial vehicle in 1954 in a collaboration with Daimler-Benz AG, which ended in 1969. Tata Motors entered the passenger vehicle market in 1988 with the launch of the Tata Mobile followed by the Tata Sierra in 1991, becoming the first Indian manufacturer to achieve the capability of developing a competitive indigenous automobile.[6] In 1998, Tata launched the first fully indigenous Indian passenger car, the Indica, and in 2008 launched the Tata Nano, the world's most affordable car. Tata Motors acquired the South Korean truck manufacturer Daewoo Commercial Vehicles Company in 2004. Tata Motors has been the parent company of Jaguar Land Rover since the company established it for the acquisition of Jaguar Cars and Land Rover from Ford in 2008.

History

Tata Motors was founded in 1945, as a locomotive manufacturer. Tata Group entered the commercial vehicle sector in 1954 after forming a joint venture with Daimler-Benz of Germany. After years of dominating the commercial vehicle market in India, Tata Motors entered the passenger vehicle market in 1991 by launching the Tata Sierra, a sport utility vehicle based on the Tata Mobile platform. Tata subsequently launched the Tata Estate (1992; a station wagon design based on the earlier Tata Mobile), the Tata Sumo (1994, a 5-door SUV) and the Tata Safari (1998).

On 3 May 2018, Tata Motors announced that it sold its aerospace and defence business to another Tata Group Entity, Tata Advanced Systems, to unlock their full potential.[29]

On 29 April 2019, Tata Motors announced a partnership with Nirma University in Ahmedabad to provide a B.Tech. degree programme for employees of its Sanand plant.[30][31]

On 24 March 2020, Tata Motors Ltd announced that it would spin off its passenger vehicles arm as a separate unit within the company.[32][33]

On 5 March 2021, Tata Motors' shareholders approved hiving off its passenger vehicles business into a separate entity.[34]

In August 2021, as a complimentary reward for Indian Olympians who finished close fourth in Tokyo Olympics 2021 and missed the place for Bronze, the company planned to recognize the efforts by gifting an Altroz hatchback.

Tata Motors Strengths

The strengths of Tata Motors looks at the key aspects of its business which gives it competitive advantage in the market. Some important factors in a brand's strengths include its financial position, experienced workforce, product uniqueness & intangible assets like brand value. Below are the Strengths in the SWOT Analysis of Tata Motors:

1. Tata Motors is one of the most established companies in automobile sector in India

2. Tata Motors has a wide & extensive distribution and service network

3. Good market penetration in the taxi & rental segment

4. Expert service professionals available

5. Many associations like Jaguar Land Rover, Hispanso, Macropolo etc increases Tata Motors' international presence

6. Dedicated engineering and R&D department

7. More than 70,000 employees are present with Tata Motors

8. Highly diversified product portfolio

9. Strong brand legacy owing to parent brand Tata

Tata Motors Weaknesses

The weaknesses of a brand are certain aspects of its business which are it can improve to increase its position further. Certain weaknesses can be defined as attributes which the company is lacking or in which the competitors are better. Here are the weaknesses in the Tata Motors SWOT Analysis:

1. Limited international presence as compared to international car manufacturers

2. Controversies like Singur plant for Nano etc hurt Tata Motors

4. Eicher Motors Limited

Type	**Public**
Founder	**Vikram Lal**
Headquarters	**New Delhi, India**
Founded	**1984 (75 years ago)**
Key People	**S Sandilya (Chairman)**
	Siddhartha Lal (MD)
Industry	**Automotive**
Revenue	**$1.3 Billion (2020)**
Net income	**$230 Million (2020)**
Employees	**4899(2020)**
Website	**www.eicher.in**

Introduction

Eicher Motors Limited is an Indian multinational automotive company that manufactures motorcycles and commercial vehicles, headquartered in New Delhi. Eicher is the parent company of Royal Enfield, a manufacturer of middleweight motorcycles.

History

Eicher Motors is a commercial vehicle manufacturer in India. The company's origins date back to 1948, when Goodearth Company was established for the distribution and service of imported tractors. In 1959 the Eicher Tractor Corporation of India Private Ltd was established, jointly with the Eicher tractor company, a German tractor manufacturer. Since 1965, Eicher in India has been completely owned by Indian shareholders. The German Eicher tractor was partly owned by Massey Ferguson from 1970, when they bought 30%. Massey Ferguson bought out the German company in 1973.

In 2005, Eicher Motors Ltd sold their tractors and engines business to TAFE Tractors (Tractors and Farm Equipment Ltd) of Chennai, the Indian licensee of Massey Ferguson tractors. [citation needed]

In October 1982, a collaboration agreement with Mitsubishi for the manufacture of light commercial vehicles (LCVs) was signed in Tokyo and in the same period the incorporation of Eicher Motors Limited also took place. LCVs were sold under the "Eicher Mitsubishi" brand. In February 1990, Eicher Goodearth bought 26% stake in Enfield India Ltd and by 1993 Eicher acquired a majority stake (60% equity shareholding) in Royal Enfield India.

In July 2008, Eicher Motors Limited (EML) and Volvo Group's formed a 50:50 joint venture called VE Commercial Vehicles (VECV) which designs, manufactures and markets commercial vehicles, engineering components and provides engineering design.

Strengths of Eicher Motors

Strengths are the firm's capabilities and resources that it can use to design, develop, and sustain competitive advantage in the marketplace

- Talent management at Eicher Motors and skill development of the employees - Human resources are integral to the success of Eicher Motors in Auto & Truck Manufacturers industry.

- High margins compare to Auto & Truck Manufacturers industry's competitors - Even though Eicher Motors is facing downward pressure on profitability, compare to competitors it is still racking in higher profit margins.

- Market Leadership Position - Eicher Motors has a strong market leadership position in the Auto & Truck Manufacturers industry. It has helped the company to rapidly scale new products successes.

Weaknesses of Eicher Motors

What are "Weaknesses" in SWOT Analysis?

Weaknesses of Eicher Motors can either be absence of strengths or resources of capabilities that are required but at present the organization doesn't have. Managers have to be certain if the weakness is present because of lack of strategic planning or as a result of strategic choice.

- High cost of replacing existing experts within the Eicher Motors. Few employees are responsible for the Eicher Motors's knowledge base and replacing them will be extremely difficult in the present conditions.

- Niche markets and local monopolies that companies such as Eicher Motors able to exploit are fast disappearing. The customer network that Eicher Motors has promoted is proving less and less effective.

- Declining market share of Eicher Motors with increasing revenues - the Auto & Truck Manufacturers industry is growing faster than the company. In such a scenario Eicher Motors has to carefully analyze the various trends within the Consumer Cyclical sector and figure out what it needs to do to drive future growth.

5. Hero Moto Corp Limited

Type	**Public**
Founder	**Brijmohan Lall Munjal**
Headquarters	**New Delhi, India**
Founded	**19 January, 1984 (39 years ago)**
Key People	**Pawan Munjal (Chairman, MD, CEO)**
Industry	**Automotive**
Revenue	**$3.9 Billion (2021)**
Net income	**$370 Million (2021)**
Employees	**8599 (2020)**
Website	**www.heromocorp.com**

Introduction

Hero MotoCorp Limited (formerly Hero Honda) is Indian multinational motorcycle and scooter manufacturer headquartered in New Delhi. The company is one of the largest two-wheeler manufacturers in the world, as well as in India, where it has a market share of about 37.1% in the two-wheeler industry. As of 27 May 2021, the market capitalization of the company was ₹59,600 crore (US$7.5 billion)

History

Hero Honda started its operations in 1984 as a joint venture between Hero Cycles of India and Honda of Japan. In June 2012, Hero MotoCorp approved a proposal to merge the investment arm of its parent Hero Investment Pvt. Ltd. with the automaker. This decision came 18 months after its split from Hero Honda.

"Hero" is the brand name used by the Munjal brothers for their flagship company, Hero Cycles Ltd. A joint venture between the Hero Group and Honda Motor Company was established in 1984 as the Hero Honda Motors Limited at Dharuhera, India. Munjal family and the Honda group both owned a 26% stake in the company.

During the 1980s, the company introduced motorcycles that were popular in India for their fuel economy and low cost. A popular advertising campaign based on the slogan 'Fill it – Shut it – Forget it' that emphasized the motorcycle's fuel efficiency helped the company grow at a double-digit pace since its inception. In 2001, the company became the largest two-wheeler manufacturing company in India and globally. It maintains global industry leaders to date. The technology in the bikes of Hero MotoCorp (earlier Hero Honda) for almost 26 years (1984–2010) has come from the Japanese counterpart Honda

Hero Moto Corp Strengths

The strengths of Hero Moto Corp look at the key aspects of its business which gives it competitive advantage in the market. Some important factors in a brand's strengths include its financial position, experienced workforce, product uniqueness & intangible assets like brand value. Below are the Strengths in the SWOT Analysis of Hero Moto Corp:

1. Hero Moto Corp has a huge brand equity and one of the biggest players in the two wheelers Indian market
2. Excellent R&D of Hero Moto Corp, and wide variety of products in every segment.
3. Excellent distribution, over 3000 dealerships and service canters
4. Good advertising and excellent branding & marketing of Hero Moto Corp
5. More than 5000 people are employed with the organization
6. Sponsorship of many events related to sports & racing has made Hero Moto Corp a strong brand
7. The brand has received several awards & recognition for its work in the industry
8. Ad campaigns through TV, billboards, online media etc boost the brand image

Hero Moto Corp Weaknesses

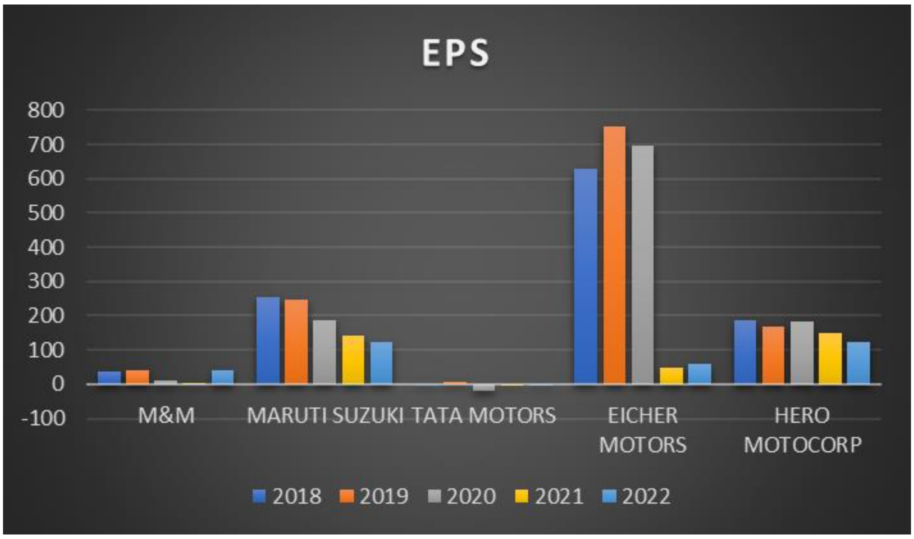
The weaknesses of a brand are certain aspects of its business which are it can improve to increase its position further. Certain weaknesses can be defined as attributes which the company is lacking or in which the competitors are better. Here are the weaknesses in the Hero Moto Corp SWOT Analysis:

1. Intense competition from Indian and international players means limited market share growth of Hero Moto Corp

2. Most of the products have similar features and low on design and innovation

Ratio Analysis and Interpretation of the study

1. EPS (Earning Per Share)



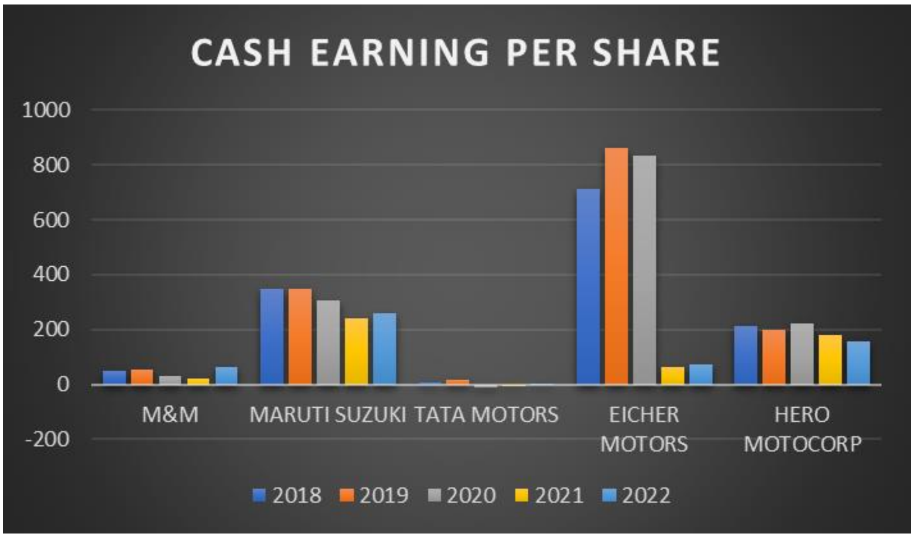
YEAR/COMPANY	M&M	MARUTI SUZUKI	TATA MOTORS	EICHER MOTORS	HERO MOTOCORP
2018	36.61	260.86	-3.05	629.07	185.14
2019	40.25	253.21	5.94	753.37	169.48
2020	11.51	187.9	-20.06	697.05	181.19
2021	2.25	145.3	-5.99	48.68	148.39
2022	41.24	128.3	-4.54	58.02	123.78

Interpretation

Though Eicher motors shows the highest earning per share with a clear increasing rate in the first three years but next two years, due to covid-19 the number of earning per share has decreased with the decreasing rate. Mahindra and Mahindra ltd has maintained a stable earnings per share with the highest in numbers compare to other companies.

More the earnings per share, the more the interest of the shareholders and investors in the company. Overall, it can be concluded that the share prices of most of the companies declined in 2020 due to the global economic slowdown caused by the pandemic. However, the share prices of most of the companies have recovered in 2021 and are in line with the market trends. But here Mahindra and Mahindra have stood up high as compared to the other companies so Mahindra and Mahindra is good to invest and also, we can interpret that this company becoming more profitable year after year and also has maintained stable EPS.

2.CASH EARNING PER SHARE



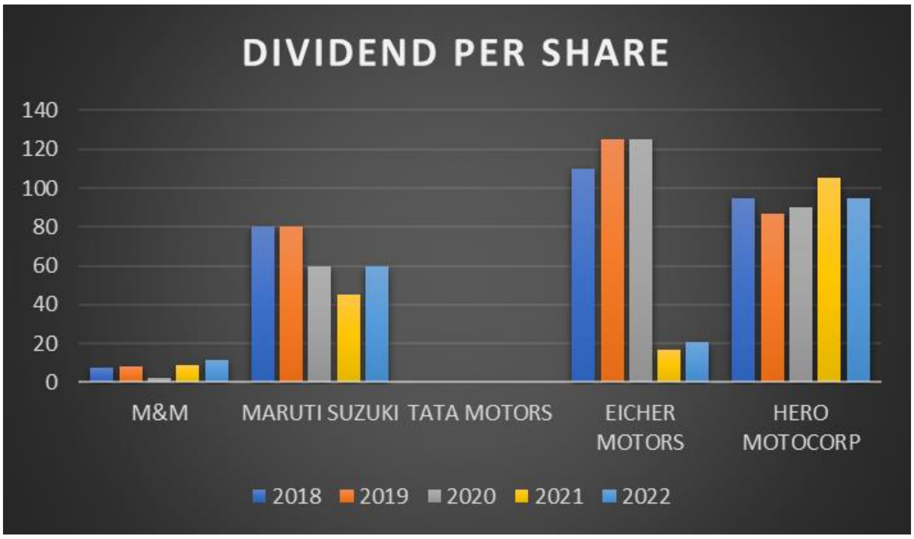
YEAR/COMPANY	M&M	MARUTI SUZUKI	TATA MOTORS	EICHER MOTORS	HERO MOTOCORP
2018	49.04	347.01	6.09	709.92	212.97
2019	55.86	348.33	15.07	862.67	199.59
2020	29.78	303.85	-10.88	835.8	222.84
2021	20.94	240.44	-1.74	64.97	182.24
2022	61.73	260.98	0.97	74.31	156.29

Interpretation

Eicher motor shows the highest earnings per share with a clear increasing rate in the starting years which taken but in the past two years it has decreased and again it started increasing. Mahindra and Mahindra, Maruti Suzuki, Eicher Motors show rise in the last year whereas the other two look like to play in a certain range.

High cash earnings imply the strong underlying performance of a company. Here as well alike the EPS, 3 of 5 companies show that have been able to increase their Cash EPS over the years.

3.DIVIDEND PER SHARE



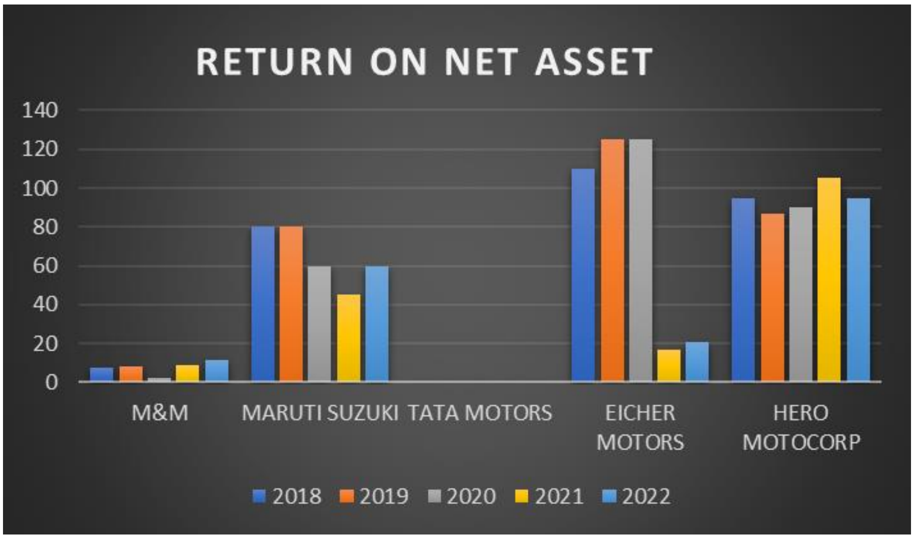
YEAR/COMPANY	M&M	MARUTI SUZUKI	TATA MOTORS	EICHER MOTORS	HERO MOTOCORP
2018	7.5	80	0	110	95
2019	8.5	80	0	125	87
2020	2.35	60	0	125	90
2021	8.75	45	0	17	105
2022	11.55	60	0	21	95

Interpretation

Eicher motors looks like the company with the highest dividend providing company among selected once up to the year 2020 and then it's started decreasing. All of the above companies except TATA Motors show a good number of dividends given. Investors along with a good earning per share also expect a good return from the company.

The above analysis shows that investing in these selected companies will reward the investor with good number of dividends return every year. Though all the companies DPS started decreasing from 2020, but in the increasing rate from the year 2021.So, this makes these companies favourites of the investors who like to earn money from dividend returns rather than trading the shares in the market.

4. RETURN ON NET ASSET



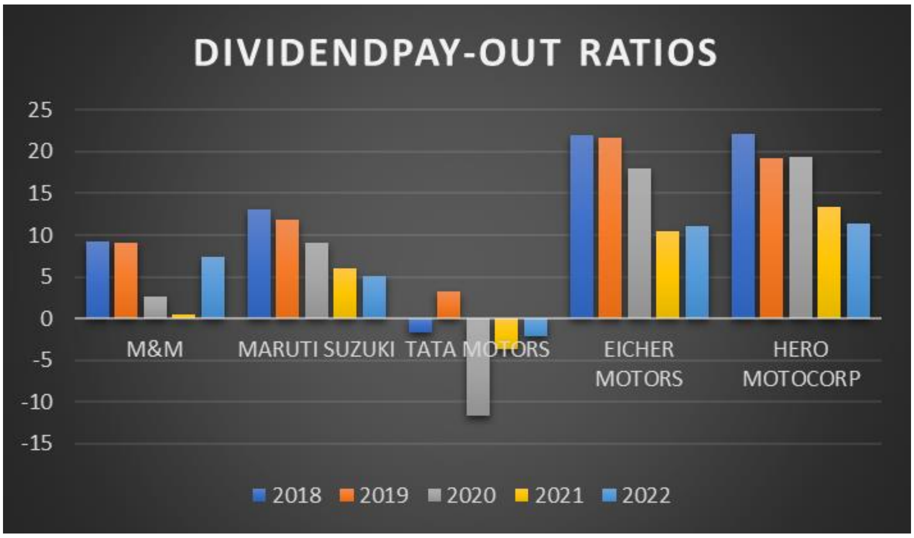
YEAR/COMPANY	M&M	MARUTI SUZUKI	TATA MOTORS	EICHER MOTORS	HERO MOTOCORP
2018	9.18	13	-1.74	21.97	22.08
2019	9.1	11.91	3.31	21.67	19.18
2020	2.63	9.03	-11.64	17.99	19.37
2021	0.45	6.03	-3.68	10.53	13.37
2022	7.35	5.13	-2.17	11.1	11.38

Interpretation

None of the above companies shows an increase in the returns on the assets. All the except M&M and Eicher motors show a clear decrease in the return over the years.

RONA is an important tool to measure the asset utilization of the company. RONA depends on the profit margin and the number of assets deployed by a company. The above analysis helps to interpret the decrease in the RONA of the companies over recent years. It is disheartening to see the performance of these companies, especially in light of the current economic climate.

5 DIVIDEND PAY-OUT RATIOS



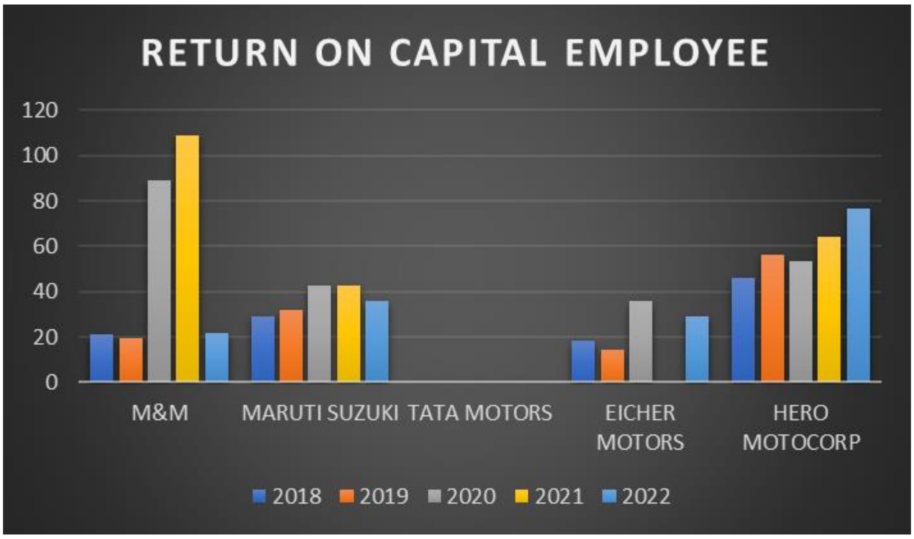
YEAR/COMPANY	M&M	MARUTI SUZUKI	TATA MOTORS	EICHER MOTORS	HERO MOTOCORP
2018	21.24	29.34	0	18.51	45.91
2019	19.43	32.21	0	14.59	56.05
2020	89.23	42.76	0	35.84	53.32
2021	108.74	42.85	0	0	64.02
2022	22.04	36.09	0	29.29	76.75

Interpretation

Similar to the analysis of DPS amounts, the pay-out ratio graph shows well that these companies give good amount of dividend return to the investors. But the decrease in the ratio over the years of all companies except Eicher motors and Hero MotoCorp state that the dividend income from the all companies in reducing year after year.

Those who buy stocks with the goal of collecting dividends want to make sure those payments are likely to continue or increase. The pay-out ratio helps investors determine whether the dividends a company is paying can be maintained in the long run. And the above analysis clearly states the decrease in dividend payments.

5. RETURN ON CAPITAL EMPLOYEE



YEAR/COMPANY	M&M	MARUTI SUZUKI	TATA MOTORS	EICHER MOTORS	HERO MOTOCORP
2018	16.95	25.83	5.04	52.91	42.35
2019	16.86	21.6	11.57	42.05	37.15
2020	13.26	14.04	-7.18	28	26.52
2021	12.35	9.74	0.37	17.58	24.43
2022	13.8	8.35	1.07	18.6	19.68

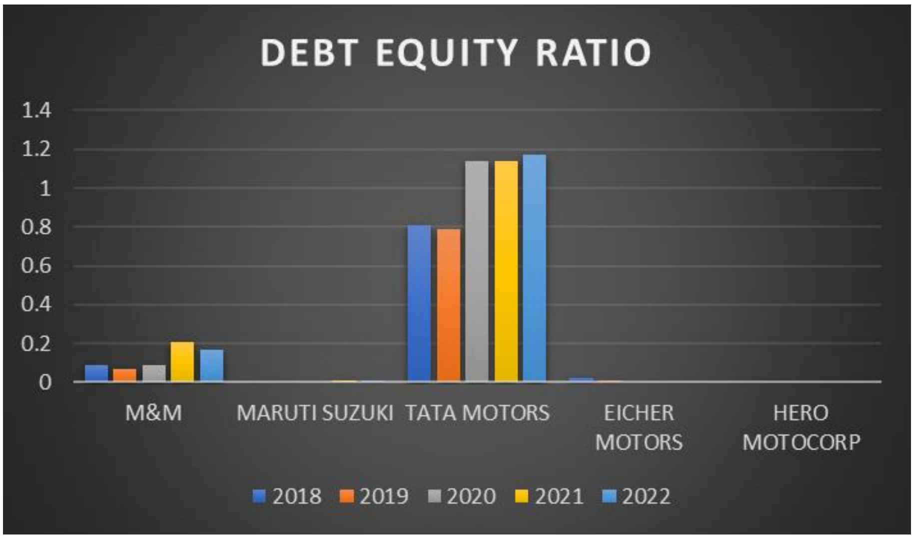
Interpretation

Like the RONA graph, the ROCE graph also is showing a clear decrease in the returns on capital employed. Hero MotoCorp shows a higher drop in the recent year.

ROCE is a long-term profitability ratio because it shows how effectively assets are performing while taking into consideration long-term financing. This is why ROCE is a more useful ratio than the return on equity to evaluate the longevity of a company. The return on capital employed ratio shoes how much profit each Rupee of employed capital generates. Obviously, a higher ratio would be more favourable because it means that more profits are generated by each Rupee of capital employed.

But as per the above analysis, it can be interpreted that in recent years these companies are not able to generate a good number of profits with respect to the capital employed.

7 DEBT EQUITY RATIO



YEAR/COMPANY	M&M	MARUTI SUZUKI	TATA MOTORS	EICHER MOTORS	HERO MOTOCORP
2018	0.09	0	0.81	0.02	0
2019	0.07	0	0.79	0.01	0
2020	0.09	0	1.14	0	0
2021	0.21	0.01	1.14	0	0
2022	0.17	0.01	1.17	0	0

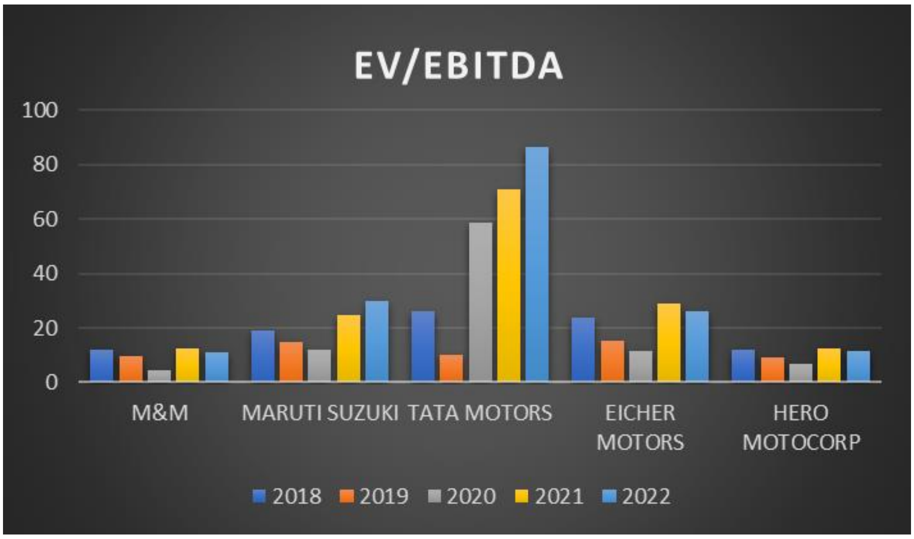
Interpretation

All other companies show the negligible amount of Debt-to-equity ratio. Hero MotoCorp shows that their debts are very well managed as the company figure of DE Ratio is '0' (Zero) for all 3 selected years.

A higher debt to equity ratio indicates that more creditor financing (bank loans) is used than investors financing (shareholders). Considering the above analysis of the data, we interpret that, all the selected companies have a good amount of investors equity than creditors.

A lower debt to equity ratio usually implies a more financially stable business.

8 EV/EBITDA



YEAR/COMPANY	M&M	MARUTI SUZUKI	TATA MOTORS	EICHER MOTORS	HERO MOTOCORP
2018	12.13	18.98	26.03	23.9	12.17
2019	9.46	14.86	10.06	15.4	9.06
2020	4.38	12.08	58.65	11.64	6.67
2021	12.4	24.68	70.96	29.2	12.61
2022	10.89	30.11	86.45	26.19	11.65

Interpretation

Except TATA Motors, no other of the selected companies show a rise in the EV/EBITDA value. Maruti Suzuki, who showed a good rise in the EV/EBITDA value in 2021, starts growing up. Whereas other companies show a constant fall in the value.

Just like the P/E ratio (price-to-earning), the lower the EV/EBITDA, the cheaper the valuation for a company. And above analysis states that the recent years have been hard for the companies to keep their valuation at a good level.

CHAPTER – 6

FINDINGS, SUGGESTIONS AND CONCLUSION

Expert Opinion

BNP Paribas

a. NSE 0.00%. India has buy call on **Mahindra & Mahindra** with a target price of Rs 1760. The current market price of Mahindra & Mahindra is Rs 1320.

   Mahindra & Mahindra, incorporated in the year 1945, is a Large Cap company (having a market cap of Rs 164207.09 Crore) operating in Auto sector.

b. BNP Paribas
   NSE 0.00 % has buy call on
   Maruti Suzuki India Ltd
   NSE 0.12 %. with a target price of Rs 11800. The current market price of **Maruti Suzuki** India is Rs 9511.9.

   Maruti Suzuki India Ltd., incorporated in the year 1981, is a Large Cap company (having a market cap of Rs 287368.76 Crore) operating in Auto sector.

c. **Motilal Oswal Financial Services**
   NSE 0.86% has buy call on
   Tata Motors
   NSE 2.08% with a target price of Rs 500. The current market price of Tata Motors is Rs 394.1.

   Tata Motors, incorporated in the year 1945, is a Large Cap company (having a market cap of Rs 130754.67 Crore) operating in Auto sector.

d. Religare
   NSE -0.85 % Broking has buy call on
   Eicher Motors
   NSE -0.77 % with a target price of Rs 4050. The current market price of Eicher Motors is Rs 3846.5.

   Eicher Motors Ltd., incorporated in the year 1982, is a Large Cap company (having a market cap of Rs 105292.76 Crore) operating in Auto sector.

e. Emkay Global has buy call on **Hero MotoCorp** with a target price of Rs 3400. The current market price of
   Hero MotoCorp
   NSE 0.94% is Rs 2827.45. Time period given by analyst is one year when
   Hero MotoCorp Ltd
   NSE 0.94% price can reach defined target.

   Hero MotoCorp Ltd., incorporated in the year 1984, is a Large Cap company (having a market cap of Rs 56957.39 Crore) operating in Auto sector.

Observations And Findings

The complete study of the industry factors analysis using the Competitive Forces Model (Porte's 5 factors Model) and PESTEL Analysis along with the Ratio Analysis of some important ratios, I observed the following.

Considering the growth in Domestic and International sales over the past few years, the Automobile Industry looks promising to earn a good amount of money in coming years.

After a good success of FAME (Faster Adoption and Manufacturing of (Hybrid) and Electric Vehicles in India) scheme, and knowing that FAME-II Scheme is in action with Rs. 10,000 Crore funding from Government of India, Upcoming years look bright for the Automobile Industry.

EPS and Cash-EPS both show a rise in recent years for the Mahindra and Mahindra, Eicher motors companies. However, Hero MotoCorp, TATA Motors and Maruti Suzuki don't show the constant rise in the ratio and they are decreasing.

DPS shows a considerable Dividend return on the shares in recent years for almost all the companies, but the Pay-out Ratio reveals that these dividend returns are not much feasible for these companies in recent years except Eicher motors and Hero Motocorp.

Return on Net Assets (RONA) and Return on Capital Employed (ROCE) give the firm back up to the above point showing Constant decrease and certain stable numbers over the years.

Debt to Equity Ratio (DE Ratio) relaxes me a bit here showing all numbers close to zero except TATA Motors, indicating the companies not drowning under loads of debts from creditors.

The clearly visible diminishing value of EV/EBITDA here shows that the companies are not being able to keep their valuation at a good cost.

Suggestions And Solution

Now after studying all these above terms and reaching till the conclusion, let’s now focus on our main Problem Statement of the Study. So, to recall, our Problem

Statement is —

“Should one invest in the Automobile Sector of India and why?”

So, considering the Conclusions we got up here,

Indian Automobile Sector is seeing a good future with good GDP growth in the Economy, increasing FDI, and Government policies. Also, on the other hand in recent years, All the Industries including the Automobile are struggling hard to keep up because of the recession in the Indian Economy.

Ratios of our selected Companies led US to the conclusion that these companies are giving Dividend to the investors but at the cost of diminishing pay-out ratio. Also, other ratios like RONA, ROCE, EV/EBIDTA confirmed the recent time struggle of the Industry Players.

But considering both these sides of this coin, though this is looking like the bad investment or a risky one from distance, this sector will see a great boom in next few years.

So, investing today to earn a big amount tomorrow, is what I will suggest after all this study,

Conclusion

From the analysis of the Indian economy, we have found that Indian economy is one of the growing economies of the World. In India inflation rate has declined in the last two years. Due to this up to some extent control on the cost of raw materials and other expenses is possible.

GDP growth rate in India has also an overall increasing trend in the last decade except for the recessionary period. Due to this production of goods and services have increased in the economy, and the rate of unemployment has increased in the economy.

In the last few years, FDI in India has also increased. This shows the willingness of foreigners to invest in the Indian economy. There is a huge FDI available in Indian economy, which is helping India to grow and to be more competitive in the world.

On the basis of the analysis of export trends and domestic sales trends, we conclude that demand for automobiles is very high compared to its production. So, we can say that the automobile industry has a huge potential to grow in future.

Because of the increase in infrastructural facilities in India, the automobile industry shows an opportunity to grow.

But there is a great threat to the automobile industry in India that there are more than 20 MNCs operating in India. So, the Indian automobile industry has to meet global competition.

On the basis of the debt-equity ratio, we conclude that the interest burden is less on the selected companies.

With the RONA, ROCE, and EV/EBIDTA it can be concluded that recent years have been very struggling for the Automobile industry players.

Bibliography

"[2022] Eicher Motors SWOT Analysis / Matrix." Accessed February 8, 2023. https://embapro.com/frontpage/swotcoanalysis/10613-eicher-motors.

"About Eicher Motors - Search." Accessed February 8, 2023. https://www.bing.com/search?q=about+eicher+motors&qs=UT&pq=about+eicher&sc=10-12&cvid=5B953E91585840158839997F28FA5F69&FORM=QBRE&sp=1&ghc=1.

"About Tata Motors - Search." Accessed February 8, 2023. https://www.bing.com/search?q=about+tata+motors&qs=AS&pq=about+tata&sc=10-10&cvid=253ADDC1663D4AB0B7C816473624DC9E&FORM=QBRE&sp=1&ghc=1.

India Brand Equity Foundation. "Automobile Industry, Indian Automobile Companies - IBEF." Accessed February 8, 2023. https://www.ibef.org/industry/india-automobiles.

"Eicher Motors." In *Wikipedia*, February 8, 2023. https://en.wikipedia.org/w/index.php?title=Eicher_Motors&oldid=1138150600.

"Eicher Motors Key Financial Ratios, Eicher Motors Financial Statement & Accounts." Accessed February 8, 2023. https://www.moneycontrol.com/financials/eichermotors/ratiosVI/EM.

"Hero Moto Corp SWOT Analysis, Competitors & USP | MBA Skool." Accessed February 8, 2023. https://www.mbaskool.com/brandguide/automobiles/1196-hero-moto-corp.html.

"Hero MotoCorp." In *Wikipedia*, January 13, 2023. https://en.wikipedia.org/w/index.php?title=Hero_MotoCorp&oldid=1133429608.

"Hero Motocorp Key Financial Ratios, Hero Motocorp Financial Statement & Accounts." Accessed February 8, 2023. https://www.moneycontrol.com/financials/heromotocorp/ratiosVI/HHM.

"Mahindra & Mahindra SWOT Analysis, Competitors & USP | MBA Skool." Accessed February 8, 2023. https://www.mbaskool.com/brandguide/automobiles/1298-mahindra-a-mahindra.html.

"Mahindra & Mahindra SWOT Analysis, Competitors & USP | MBA Skool." Accessed February 8, 2023. https://www.mbaskool.com/brandguide/automobiles/1298-mahindra-a-mahindra.html.

"Mahindra and Mahindra Key Financial Ratios, Mahindra and Mahindra Financial Statement & Accounts." Accessed February 8, 2023. https://www.moneycontrol.com/financials/mahindramahindra/ratiosVI/mm.

"M&M's." In *Wikipedia*, February 7, 2023. https://en.wikipedia.org/w/index.php?title=M%26M%27s&oldid=1137895741.

"Maruti Suzuki." In *Wikipedia*, February 6, 2023. https://en.wikipedia.org/w/index.php?title=Maruti_Suzuki&oldid=1137805037.

"Maruti Suzuki SWOT Analysis, Competitors & USP | MBA Skool." Accessed February 8, 2023. https://www.mbaskool.com/brandguide/automobiles/1299-maruti-suzuki.html.

Moneycontrol.com. "Hero Motocorp Key Financial Ratios, Hero Motocorp Financial Statement & Accounts." Accessed February 8, 2023. https://www.moneycontrol.com/financials/heromotocorp/ratiosVI/HHM.

———. "Maruti Suzuki India Key Financial Ratios, Maruti Suzuki India Financial Statement & Accounts." Accessed February 8, 2023. https://www.moneycontrol.com/financials/marutisuzukiindia/ratiosVI/MS24.

"Tata Motors." In *Wikipedia*, February 7, 2023. https://en.wikipedia.org/w/index.php?title=Tata_Motors&oldid=1137962215.

"Tata Motors Key Financial Ratios, Tata Motors Financial Statement & Accounts." Accessed February 8, 2023. https://www.moneycontrol.com/financials/tatamotors/ratiosVI/TM03.

"Tata Motors SWOT Analysis, Competitors & USP | MBA Skool." Accessed February 8, 2023. https://www.mbaskool.com/brandguide/automobiles/5022-tata-motors.html.

"Tata Motors SWOT Analysis, Competitors & USP | MBA Skool." Accessed February 8, 2023. https://www.mbaskool.com/brandguide/automobiles/5022-tata-motors.html.