INSTITUTE OF INDUSTRIAL AND COMPUTER MANAGEMENT AND RESEARCH NIGDI ,PUNE

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subject name:Enterprise analysis and desk research

class:mba 1year

division:2
assignment: covid and post covid anaylise of automobile sector

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1.2 INTRODUCTION TO THE INDUSTRY:

- The Indian auto industry is found as a "SUNSHINE INDUSTRY" as over the last few years, it has appeared as one of the fastest growing sector. Currently, the automobile industry contributes more than 7% to the total GDP and provides employment to about 31 million people, directly or indirectly. With supportive government policies, strong domestic demand have led to the Indian automotive industry climbing up the ranks to be one of the global leaders. The Indian auto industry sets witness major changes in the form of electric vehicles (EVs) and intelligent transport system (ITS) just like other countries, aims to alleviate existing concern including traffic congestion, fuel dependency, air & noise pollution etc.
- The automotive industry is a pillar of Indian economy and a key driver of macroeconomic growth and technological advancement. The Indian automobile market leads two-wheeler segment with 80% market share owning to a growing middle class and a young populations. Then 14% market share is followed by the passenger vehicles (PV) segment. Low car penetration, emerging demographic dividends, increasing urbanization, rising income levels and consumption are most likely to benefit India.

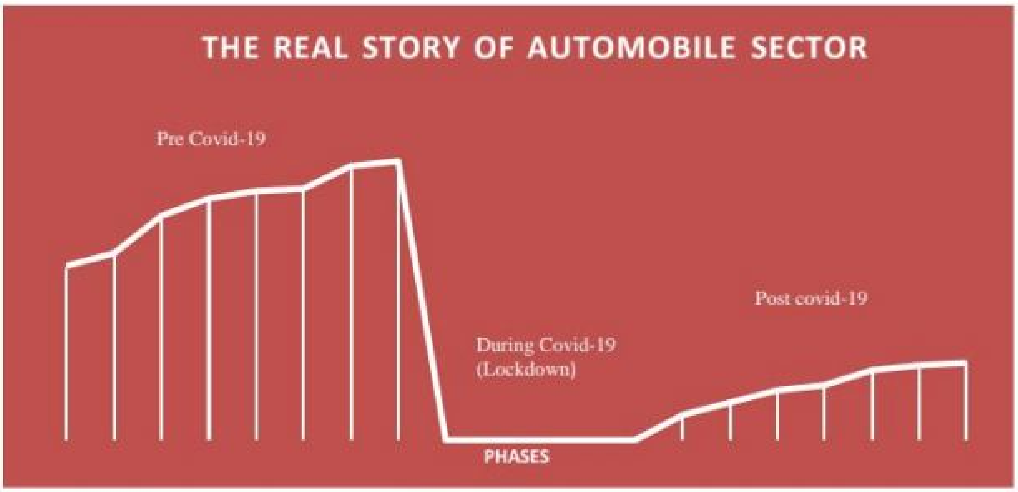

Figure 1

- The above Figure 1 depicts the summary of this whole report. The above figure reveals the real story of automobile sector before, during and after covid-19. This sudden emergence of this pandemic was so worse that it couldn't spare anything and its impact was so high that everything just got so messed up before anyone could able to understand anything. As the straight downfall explains everything itself and by this it can easily perfume that how severely this pandemic has affected not only this sector but every sector of the economy which hasn't seen in years. The situation got even worse when the lockdown started and this sectors faced crores of losses which was never been expected.
- The condition gets better with time and the sector shows slow but steady growth. The sector again start stabilizing its functioning. The major factor affecting this sector and the revival of the companies have been discussed in the upcoming sections. Let's see what all are the factors and how this sector will able to handle its functioning and able to get its position back in the market.

1.3 INTRODUCTION TO THE COMPANY:

MARUTI SUZUKI:

- **Founded:** 24 February, 1981
- **Founder:** Government Of India
- **Head Quarter:** New Delhi, India
- **Major plant in India:** Gurgaon, manesar, Rohtak
- **Products**: Automobiles, Commercial vehicles, Automotive parts, pickup trucks, SUVs
- **Area Served:** India
- **Segment:** 4 wheeler Segment

BAJAJ AUTO MOTORS:

- **Founded:** 29 November, 1945
- **Founder:** Jamnalal Bajaj
- **Head Quarter:** Pune, Maharashtra, India
- **Major plant in India:** Chakan (Pune), Waluj (Near Aurangabad), Pantnagar, Akurdi (Pune)
- **Products:** Motorcycles and three-wheeler India
- **Segment:** 2 Wheeler Segment

1.4 JUSTIFICATION TO THE TOPIC:

The highlights of this report is to Analyze:

- The year on year (YOY) profit.
- The market capture by the companies.
- The pre-post covid-19 impact.
- Financial aspect of the companies.
- How growth hampered and recovered during the following explained period.

CHAPTER-2

REVIEW OF LIETARATUR:

2.1 INTERNATINAL REVIEWS:

- (Impact on the automobile industry: Navigating the human and business impact of covid -19, april 2020) Starting in China, suppliers around the globe placed production lines in quarantine or shut them down completely. Also, legal and trade restrictions, such as closed borders, increased the shortage of required parts and limited distribution of supplies. A limited parts supply and a just-in-time production strategy, coupled with quarantine measures and a reduced workforce, lead Original Equipment manufacturers (OEMs) to shut down their production. This is enhanced by the need to secure liquidity and reduce overproduction due to the decrease in sales. A decline in cash inflow resulted from the drop in demand while short-term liabilities and salaries still need to be paid. Cash reserves are likely to be exhausted within a few months. Politically enforced measures to contain the virus, such as implementing curfews, closing factories, offices, dealerships and the resulting dismissals of short-time workers, as well as the fear of a recession, are likely to lead to a decrease in sales numbers. The risk to supply chains has been compounded as OEMs have created global networks to leverage low-cost labor while striving for zero inventory to minimize working capital. Global auto production is strongly depending on China. Supply shortage is affecting assembly of all OEMs in NA, Europa and Asia. In China, almost 2/3 of auto production was directly affected by the shutdown with a large impact on their suppliers as well. Hubei province accounts for 9% of Chinese auto production, disrupting supply chains until operations recover. With factories operating at a fraction of capacity, and trucks not delivering, ocean carriers cancelled many routes. Effects boosted by legal and trade restrictions such as closed borders.
- (Das, 2020) Nissan decided to shut down its Barcelona plant after reporting the worst profit losses in a decade. This in turn drew protests from the plant workers. Likewise, production stalled elsewhere too due to temporary shutdown of plants. Due to widespread job losses, people started saving more instead of making big transactions like vehicle purchases, which further brought down demand. Yet people have embraced digitization more during their homestay;

working from home, using online services and purchasing goods online. And because use of public transportation has declined for the fear of infection transmission, private vehicles have become preferred. However, sales have remained low.

- (Hauslar, 2020) It is less likely for certain European countries that have been pushing for incentivizing the adoption of electric vehicles for a long time to ease emission laws. Companies and bank have slashes interest rates to encourage people to purchase vehicles. (Surbamanium, 2020) The Reserve Bank of India brought down interest rates on vehicles and increased moratorium on loans by three months. In a similar move, the Bank of Canada slashed interest rates by 1.5%. (Wayland, 2020) The drive for digitization may extend to providing better digital accessibility and integration of tech from vehicles' on-screen controls and such digitization could extend to even touch-less gas station payments and maintenance.
- (Woods, 2020)The industry is facing a heavy headwind amidst the global economic downturn and trade war between China and the US. Moreover, there are several other factors at the regional level that are affecting the industry growth rate in a particular region. For instance, factors such as raising GST on automobile vehicles and mandatory implementation of BS-VI India. The spread of coronavirus across the globe has forced plants to shut down, disrupted supply chain and quarantined workforces. Several automotive giants such as Volkswagen AG, Hyundai, Toyota, and Tesla have shut down their production plants for a definite period, causing severe impact on the global automotive industry .The report analyzes the global automotive market on the basis of sales channels, product type, propulsion technology, and geography.
- (PWC United states) Countries that have been heavily impacted by the outbreak, in particular, China, Japan and South Korea, account for a significant share of global auto manufacturing. For companies in hard-hit regions, such as Italy, France and Spain, that has led to operational disruptions that delayed their ability to finalize financial statements. Additionally, some automotive companies are increasingly concerned about the possibility that the economic impact of the pandemic may cause triggering events for goodwill and long-lived asset impairments, the recoverability of receivables, restructuring actions and/or liquidity issues. To make matters worse, key finance personnel may be directly affected by the virus or forced to shift their focus to mitigating its impact on the business. Reduced productivity of the finance team could make the significant uptick in the volume of work to get through in the coming weeks more daunting. The disruption of the auto supply chain may trap cash that could

otherwise be used to fund operations, provide employee relief or better manage third-party financial commitments. Due to the fact that this trapped cash may be idle in the market for an extended period of time, other strategies can be deployed to help mitigate the downward impact.

- (James Powell, 2020) The pandemic has forced the adoption of hybrid office models. This means working from home. Covid-19 has also forced the companies to adapt more digital communication tools. This has been continues to be an opportunity for automotive firms to gain greater internal efficiency via video conferencing, messaging applications, project management tools, desktop integration and mobile capabilities. Research shows that the share of people who undertake 50% or more of their total purchases online grew from 25 to 80% during covid-19 crisis. For Ex. The pandemic has seen the acceleration of the digital auditing for floor plans, ultimately reducing the need for the physical stock audits, saving plenty of resources for dealerships.

- (MADHOK, 2020) Automotive industry in the US continues to remain fragile. Vehicle sales in August declined close to 20% (YoY), reaching 1.33 million units, despite an extended weekend due to Labor Day falling on a Monday. Total January-August 2020 sales reached around 8.8 million units, down 23%. China automotive sales continue their fast recovery. Vehicle shipments reached close to 2.2 million units in August, up 11.6% on YoY basis. Total shipments during January-August 2020 were down 10% on YoY basis. Counterpoint expects the recovery to continue in coming months driven by improving car-buyer sentiment (especially in affluent classes) and pro-NEV (New Energy Vehicle) policies like scrapping of vehicle purchase tax on NEVs and extension of subsides till 2022 with a slower phase-out pace. In June, the government announced to increase the NEV credit ratio by 2 percentage points every year till 2023, from 12% in 2020 to 14% in 2021, 16% in 2022 and 18% in 2023. In other countries, Vehicle sales in August crossed 1.2 million, declining 16% on YoY basis. Despite the decline, this was a good performance considering sales in August 2019 were high as automakers rushed to push their uncertified vehicles before the September 1, 2019 deadline for the Worldwide Harmonized Light Vehicles Test Procedure (WLTP) testing.
- (S&P GLOBAL) Carmakers across the globe saw initial signs of improvement in the second quarter, but the auto industry remains concerned about the prospects for a long term recovery as COVID-19 cases have continued to flare up. As a result, several countries could find themselves implementing another lockdown, which would delay any economic recovery and undermine consumer confidence.

COVID-19 pandemic has been a disruptive force that has dramatically changed the US transportation industry. In four months, the precipitous decline in public transit ridership, air traffic, parking, toll road transactions, port container volumes, and overall mobility--up to 95% in some subsectors--has contributed to the current recession and the sharpest contraction in economic activity since World War II.

2.2 NATIONAL REVIEWS:

- (Singh, 2020) The COVID-19 lockdown has had a multiplier effect – the industry has almost been at a complete standstill since March 24. A prolonged truncation of consumer demand due to the lockdown has significantly affected auto manufacturers' revenues and cash flows. Auto dealers have been unable to deliver vehicles during the lockdown phase, and have reported 30-45 days of finished goods inventory, likely to be heavily discounted post-lockdown. Further, with BS 6 sales mandated from 10 days after lockdown ends (and sale of 10 % of existing BS 4 inventory until then), dealers face a significant burden to liquidate unsold BS 4 inventory, worth Rs 6,300 crore.
- (Business Today, 2021) Passenger vehicle sales in India, the barometer of the automobile industry's performance, plunged 78.43 per cent in the April-June period this year hit by the pandemic, declining for the ninth straight quarter and making it the longest slowdown in 20 years. The auto industry suffered losses of more than Rs 2,300 crore in turnover for every single day of closure. The Society of Indian Automobile Manufacturers (SIAM) Director General Rajesh Menon told that the growing preference for personal mobility and the gradual opening of economic activities have lent some momentum and the industry is now seeing signs of recovery in some of the industry segments.
- (Mishra, 2020) The GDP growth forecasts were north of 5.5%, COVID-19 may result in a negative impact of 1-2% on the expected growth rates. It is estimated that there will be an overall revenue impact of at least $1.5 -2.0 bn per month across the industry. Even after we open up, further decline in passenger vehicles demand is expected with discretionary spend taking a backseat. This will be coupled with transition to BS-VI norms that will increase cost of ownership.
- (PTI, 2020) The Indian automotive industry suffered Rs 2,300 loss crore per day and an estimated job loss in the sector was about 3.45 lakh, according to a parliamentary panel report

submitted to Rajya Sabha Chairman M Venkaiah Naidu on Tuesday. The Parliamentary Standing Committee on Commerce, chaired by Telangana Rashtra Samithi (TRS) MP Keshav Rao, has also suggested a slew of measures for attracting investment in the automotive sector in the country, including overhauling of prevalent land and labour laws. "The committee was informed by the auto industry associations that all the major original equipment manufacturers (OEM) have cut down their production by 18-20 per cent due to low demand and decline in sales of vehicles. As a result, the employment scenario in the automobile sector has been affected and an estimated job loss in the auto sector at 3.45 lakh," the panel said in its report. 286 auto dealers have been closed. Further, production cuts in the automobile sector have a percolating negative impact on the component industry adversely affecting the Micro, Small and Medium Enterprises (MSME) engaged in the automobile spare parts manufacturing, the report states. As informed by the Automobile Industry Associations, "the production stoppage at the automotive OEM and component supplier due to the COVID-19 pandemic and subsequent lockdowns led to a loss of approximately Rs 2,300 crore per day to the automotive sector," according to the report. Considering the crisis, it is predicted that the automobile industry is likely to go through at least two consecutive years of severe contraction, leading to low levels of capacity utilization, lack of future CAPEX investment, high risk of bankruptcy and job losses across the entire automotive value chain, the committee said.

- (Service, 2020) With India's GDP growth rate for FY21 being downgraded from 5% to 0% and later to (-5%), the auto sector will take a hit. CII has estimated the revenue impact at $2 billion on a monthly basis across the auto industry in India. Even as China recovers, supply chain disruptions are likely to last for some more time. The problems on the Indo-China border at Ladakh are not helping matters. Domestic suppliers are chipping in but they will face an inventory surplus as demand remains tepid. The Unlock 1.0 will coincide with the implementation of the BS-VI norms and that would mean heavier discounts to dealers and also to customers. Even as auto companies are managing costs, the impact of discounts on profitability is going to be fairly steep. The real pain could be on the dealer end with most of them struggling with excess inventory and lack of funding options in the post COVID-19 scenario. The BS-VI price increases are also likely to hit auto demand. There are two positive developments emanating from COVID-19. The China supply chain shock is forcing major investments in the "Make in India" initiative. The COVID-19 crisis has exposed chinks in the automobile business model and it could catalyze a big move towards electric vehicles (EVs). That could be the big positive for auto sector.

- (Bureau, 2021) As per SIAM, in April 2020, the Indian auto industry reported a revenue loss of about INR 69,000 crores. In 2020, the overall auto unit sales were estimated to have declined by 30% as compared with 2019. While the passenger cars segment may witness some recovery in 2021, the luxury and super luxury segments will continue to face challenges. The report also states that an effective Scrap page Policy in India can help create an industry of its own with a business opportunity worth $6 billion1 (Rs 43,000 crore) per year. Apart from the $6 billion steel scrappage potential, there is an additional business that can be generated from recycling of plastic and rubber and other body parts of scrapped vehicles. A big push to E-Mobility will also help the auto sector. As per the report, the Government of India is targeting having only EVs being sold in the country in the next 10 years. The Ministry of Heavy Industries has identified 11 Indian cities for the launch of EVs in their public transport routes under the FAME scheme. The first phase of the scheme involved the Government approving the FAME-II scheme with a fund requirement of INR 10,000 crore for FY20-22, the report points out.

- (M, 2021) According to data on domestic sales released every month by the Society of Indian Automobile Manufacturers, only the sales of two-wheelers have gone up in 2020 compared to 2019. What it means is that the sales of passenger vehicles, commercial vehicles, and three-wheelers have dropped compared to 2019. The total sales of two-wheelers have increased by nearly 25% whereas the total sales of passenger vehicles dropped by 20%, commercial vehicles by 36%, and three-wheelers by 62% in the year 2020. The increase in the sales of two-wheelers bucking the overall trend could be because of the people's general preference to travel in private vehicles instead of public transport in the aftermath of COVID-19. Quarterly data reveals that passenger vehicle sales improved in the quarters from July to September, and October to December of 2020, compared to 2019. It is also observed that the sales of passenger vehicles have overtaken the 2019 levels since August 2020. In December 2020, the sales were about 14% higher than in December 2019. Meanwhile, the sales of commercial vehicles witnessed an improvement in the quarter from October to December of 2020. In the case of two-wheelers, except for a slump in sales in January to March quarter of 2020, the sales increased in all other quarters compared to the same period in 2019. It may be observed that the sales are slowly getting to pre-lockdown levels though the same cannot be said in the case of three-wheelers whose sales have been low all through 2020.

- (Newa18 Auto, 202) While addressing shareholders at the company's 68th annual general meeting (AGM), Bosch Ltd Chairman Bernhard Straub said the downtrend in the Indian automotive segment continues against the backdrop of cyclical and structural changes accompanied by added pressure of the COVID-19 pandemic uncertainties. The nationwide lockdown followed by cluster wise lockdowns and uncertainties have led to the first quarter of the current fiscal seeing the deepest decline ever, he added. The domestic tractor market is witnessing a bounce back to normal levels followed by two-wheeler and passenger cars, while light commercial vehicles also are showing signs of revival, he noted. On the other hand, the heavy commercial vehicle industry has not yet shown any signs of revival, Straub said. "Against this backdrop, the automotive sector is expected to show de-growth for the financial year 2020-21. In this context, it is important that the central government comes up soon with a special comprehensive stimulus package for the automotive sector," he said Investments in construction activities and infrastructure have to continue to boost the demand side, he added. Straub said the Indian economy is expected to see the sharpest contraction in 40 years and as reports suggest India's GDP for the financial year 2020-21 will be negative by 3.5 to 5 per cent.

- (Autovista, 2020) A physical (physical plus digital) approach has brought about a contactless atmosphere with the touch-and-feel element. The pandemic has brought to the vanguard an opportunity for quick adoption of digitization in the passenger vehicle segment, setting the focus on a contactless environment. Private use vehicles is expected to see an expansion attributable to diseases, wellbeing and security worries with shared mobility. However, there are possibilities of equal opportunity for shared mobility also due to the size and forthcoming growth of the industry. In addition, the substitution of shared portability vehicles is 50 per cent quicker than individual use vehicles. Global clients require creative world-class products and services at all times. This could be a great resort for Indian makers to boost their production level and supply chain to global standards. It demands very high degrees of hygiene, cleanliness, standardization, and visualization at the shop floors. It also calls for a system led approach to the businesses.

- (Ajay Seth, 2020) The Auto Industry is a barometer of economic growth of the country through contribution of ~7.5% of India's GDP, providing significant mobility solution as well as creating mass employment for around 35 million workforce. The sector continues to depend upon imports parts and hence gets impacted due to global developments impacting supply chain. India observing a low car penetration of 25 per thousand is an attractive destination for FDI in the auto sector. Higher consumption demand for auto will likely boost the tax revenues for the government in form of GST, Corporate tax, customs duties, road taxes through registration etc. Around 75% of cars bought are financed in India. The cost of financing plays an important role. More aggressive tie-ups to provide competitive financing options as per need of customer will promote auto industry growth.

CHAPTER-3

RESEARCH METHODOLOGY

3.1 OBJECTIVE OF THE STUDY:

- The aim is to study the impact of COVID-19 pandemic on the automobile industry in India.
- To know the Covid-19 pre and post scenario of automobile companies.
- To know the influence of COVID-19 in the financial ratio of automobile industry.

3.2 RESEARCH HYPOTHESIS:

- The impact of covid-19 pandemic has a significant impact on the financial status or on the profitability of the automobile companies, so the hypothesis are:

H0: There is no significant effect on the profitability of automobile sector.
H1: There is a significant effect on the profitability of automobile sector.

3.3 SCOPE OF THE STUDY:

- This study analyze the impact of covid-19 pandemic on the automobile market and related to automotive market of India. This study is useful for the people or the companies who are willing to know or study related to automobile sector. This report gives a clear picture related to the current automotive market scenario. Since this report is mainly based on the automotive market, it will also show the growth/ fall of the companies year by year and factors affecting this sectors. This report also helps in predicting as well as gives an idea about the post covid-19 scenario. This study gives a chance to study the financial and the technical analysis and its various tools to understand the basics of financial statement and helps in comparing the financial ratios of various companies. This report analyze and examines the key ratios of the business to determine the companies' financial health and gives us an idea of the position of each companies in the market. The scope of this report extends to the study of 2 key players of Indian automobile sector. It also helps to predict where these companies actually stand in the market.

3.4 SUMMARY OF ANALYSIS:

For conducting this research, financial statements of five companies (i.e. Maruti Suzuki and Bajaj auto motors) for last 2 years is being used. Ratio analysis and Horizontal analysis technique is being used to analyze the financial statements.

3.5 LIMITATIONS OF THE STUDY:

- The study is based on the secondary data collection methodology, so the information may not be totally liable.
- In this study only 2 companies out of a very large Indian automobile industry is taken into consideration.
- The study frame is considered to be very limited. Since the pandemic has not yet over, it is difficult to understand and study the future trends of the entire sector of 2 years only.

CHAPTER-4

DATA INTERPRETATION & ANALYSIS

- **2019:**

Overall Performance of these top leading automobile companies in the year 2019 (Before covid-19 pandemic):

Table 1: Comparison of the companies on the basis of their Overall performance in the year 2019

Point Of Difference	Maruti Suzuki	Bajaj Auto Motors
I. Sales:		
• **Domestic Sales**	50.01%	53.54%
• **International Sales**	21.51%	52.03%
II. Market Capture (%)	49.77%	9.01%
III. Profit Generated	13.0%	15.1%
IV. Deals In	4 WS	2 WS

Note: WS = Wheeler Segment

ANALYSIS:

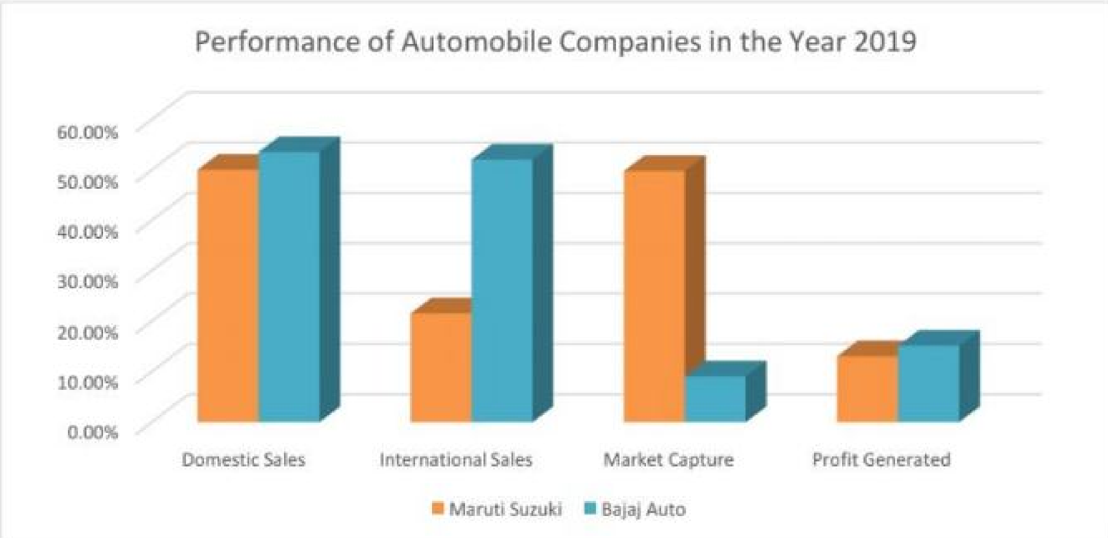

Figure 2

INTERPRETATION:

The automobile sector is one the largest revenue earning industry which contributes almost 8 to 10% to the overll GDP of the Economy, which is the highest revenue generated industry, specially Maruti Suzuki and Bajaj Auto which are the largest companies in the 4 and 2 wheeler segment shows a great performance in the year 2019 as always. It is been clearly visible how high these automotive companies are able genertaed profits and its sales whether its domestic or international with great market share as show in Table 1: Comparison of the companies on the basis of their Overall performance in the year 2019 and Figure 2

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- **2020:**

  Comparison of companies on the basis of before covid-19 pandemic, during lockdown and after lockdown:

Table 2: Comparison of performance of companies in pre and post covid-19

Points Of Difference:	**Before: (1^{st} April 2019-24^{rd} march 2020)**	**Lockdown: 100 Days (25^{th} march 2020-3^{rd} may 2020**	**After:**
1. Sales	6.57	Loss Of 50,000 crore	Decline of 54%
2. Profit Generated	17.55%	Nil	Revenue Loss of Rs 1 lakh crore i.e. 0.5% of GDP

ANALYSIS:

Figure 3

INTERPRETATION:

In this section, the study of impact on the automobile industry before covid-19, during the lockdown period, and after lockdown is shown through the companies sales and profit generated and found that automobile sector has been severly effectd by this pandemic. It indicates straight downfall in its sales and profit and crores of losses during the lockdown period as shown in Figure 3 which this industry haven't seen in years. But after lockdown, the condition reveals a pretty slow but steedy growth which further gets better with time.

Table 3: Comparison of the companies on the basis of their performance in 2020

Point Of Difference	Maruti Suzuki	Bajaj Auto Motors
Sales:		
Domestic Sales	29.51%	20.15%
International Sales	10.01%	19.11%
Market Capture	19.77%	3.10%
Profit Generated	9.11%	10.1%

ANALYSIS:

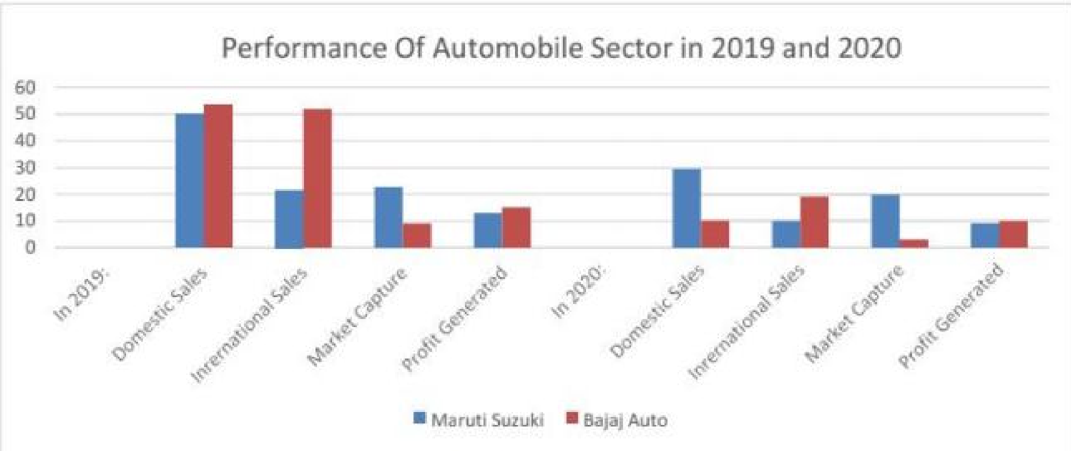

Figure 4

INERPRETATION:

In this section, the data is analyzed and compared on the basis of overall performance of the companies i.e. for the year 2019 and 2020 as shown in above Figure 4. That how the sales and profit of the companies have been drastically effected in 2020 by the pandemic. As this is much clearly visible in the graph that the differences between the figures of 2019 and 2020 are so high which were not yet seen in years and by that we are able to perfume that how dangerously this pandemic have affected not only this sector but every sector of the economy. There are lots of factors that are responsible for this much slow growth of the companies which were discussed in the further sections.

Table 4: Ratio Analysis of the Companies:

KEY FINANCIAL RATIOS	MARUTI SUZUKI 2019	2020	2021	BAJAJ AUTO 2019	2020	2021
PROFITABILITY RATIOS:						
Gross Profit Ratio (%)	9.27	4.99	3.20	16.21	16.18	16.11
Operating Profit Ratio (%)	12.78	9.65	7.51	17.09	17.03	17.00
Net Profit Ratio (%)	8.71	7.47	6.01	17.50	17.42	16.23
TOTAL	30.76	22.11	16.72	50.80	50.63	49.34
MANAGEMENT EFFICIENCY RATIOS:						
Inventory Turnover Ratio	25.87	23.52	23.06	31.57	28.13	18.57
Debtors Turnover Ratio	45.61	34.08	30.33	14.99	13.97	12.49
Working Capital Turnover Ratio	1.86	1.56	1.36	1.31	1.22	1.02
TOTAL	73.34	59.16	54.75	47.87	43.32	32.08
LIQUIDITY AND SOLVENCY RATIO:						
Current Ratio	0.64	0.56	0.31	1.14	0.99	0.21
Quick Ratio	0.41	0.36	0.11	0.97	0.77	0.23
TOTAL	1.05	0.92	0.42	2.11	1.76	0.44

ANALYSIS OF FINANCIAL RATIOS OF THE COMPANIES:

PROFITABILTY RATIOS:

Figure 5

INTERPRETATION:

Profitability ratios specially determines the ability of the company to generate profits and against sales, operating costs, assets and shareholder's equity. This means such ratios reveals how well a company makes use of its assets to generate profitability and create value of shareholders.

- **Gross Profit Ratio:**

  The main objective of computing gross profit ratio is to determine the efficiency of the business. No matter how high a company's revenue is, having a low GP ratio means that there isn't much room for errors in its activities. Overall financial performance is likely to be adversely effected owning to ongoing covid-19 crisis with gross profit margin coming under pressure. The percentage of GP ratio of the 2 companies shows a drastic downfall, which indicates lower efficiency of the companies due to this pandemic.

- **Operating Profit Ratio:**

  Operating profit margin reflects the percentage of profit a company produces from its operations, prior to subtracting taxes and interest charges. Due to less availability of equipment and high prices which leads to high operating costs which results in low operating profit which reveals how fails to efficiently manages its companies expenses due to this whole pandemic scenario.

- **Net Profit Ratio:**

  The net profit ratio signifies remaining profit after all costs of production, administration and financing have been deducted from sales, and income taxes recognized. Due to this pandemic, the automobile companies suffered an estimated revenue loss of more than 13 to 15 crore, the companies shows a low margin of net profit ratio which indicates ineffective cost structure and poor pricing strategies and which results in inefficient management, high cost and weak pricing strategies.

MANAGEMENT EFFICIENCY RATIOS:

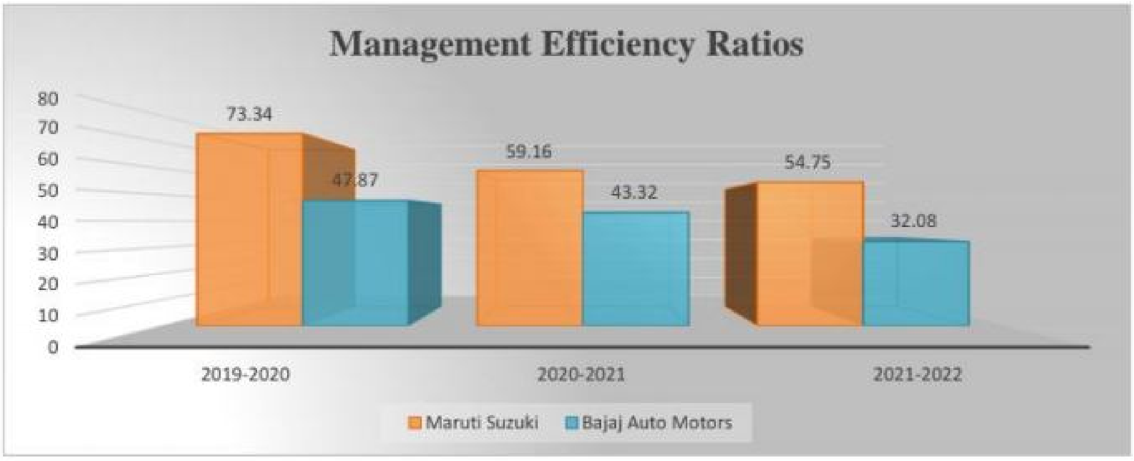

Figure 6

INTERPRETATION:

Efficiency ratios measures a company's ability to use its assets and manage its liabilities effectively in the current period or in the short term. These ratios measures how effectively a company uses its assets to generate revenues and its ability to manage those assets.

- **Inventory Turnover Ratio:**

  It shows how many times a company has sold and replaced inventory during a given period. As by the above calculation and graphs, it is clearly visible that both the companies reveals low inventory turnover ratio in 2020 as well as in 2021 which implies weak sales and possibly excess inventory or overstocking due to the sudden shut down of covid-19.

- **Debtors/ Receivable Turnover Ratio:**

  It measures how effective a company is in extending credit as well as collecting debts. However, this ratio does not tell much about the position of the company but tells about the efficiency of management and as the figures of both the companies degrades with time i.e. in the year 2020 and 2021 which clearly implies that the company's collection of accounts receivable is not efficient because of this pandemic.

- **Working Capital Turnover Ratio:**

  It measures how well a company is utilizing its working capital to support a given level of sales. Both the companies indicates low working capital turnover ratio which clearly indicates that a business is investing in too many accounts, receivable and inventory assets to support its sales, as the sales were nil in the period of high urge of this pandemic which could eventually leads to an excessive amount of bad debts and obsolete inventory write-offs.

LIQUIDITY AND SOLVENCY RATIO:

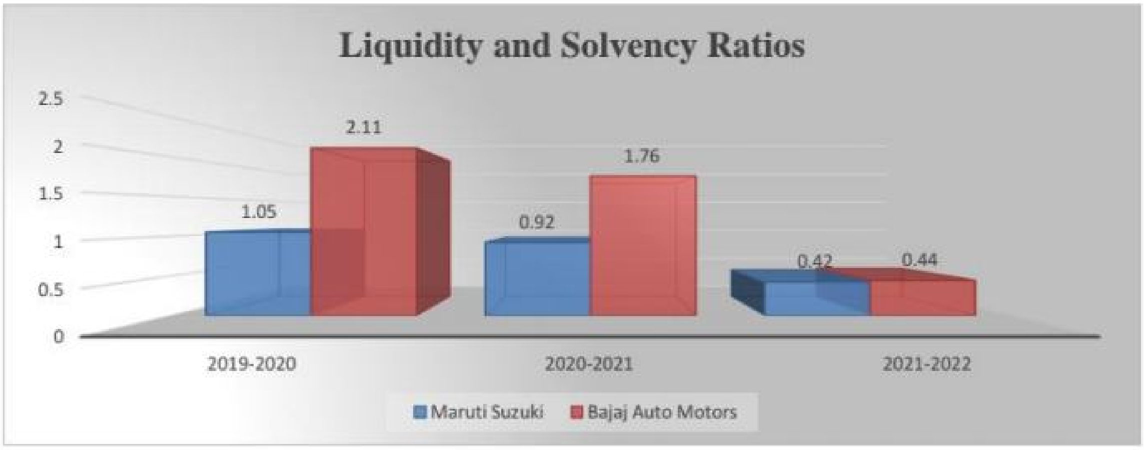

Figure 7

PERFORMANCE OF AUTOMOBILE SECTOR AFTER UNLOCK 2020:

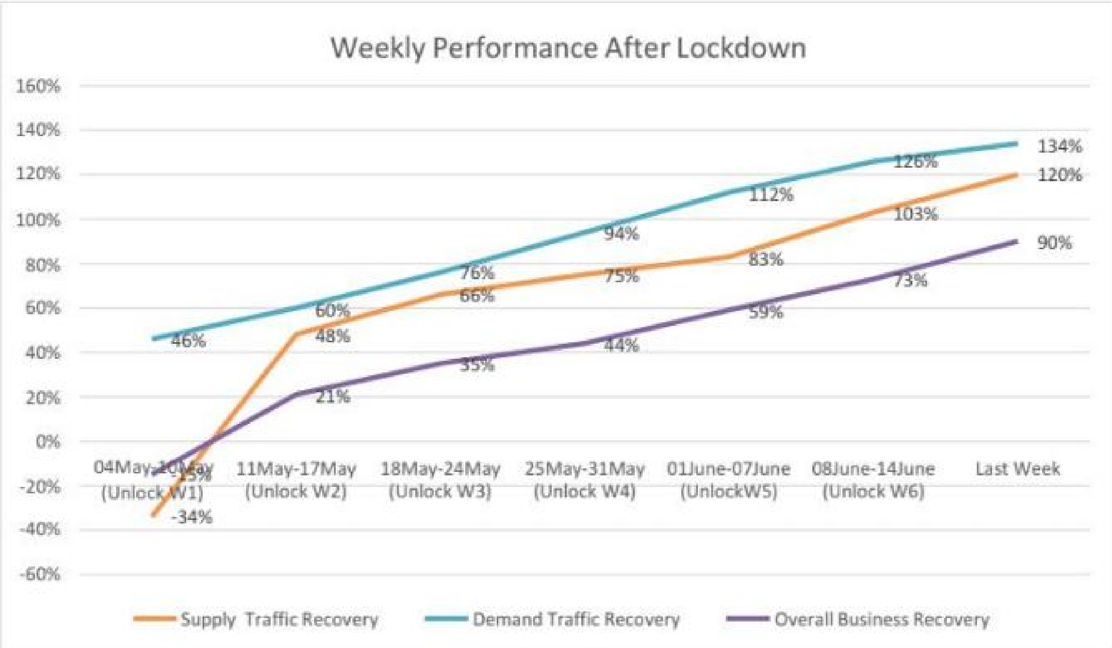

Figure 8

Note: W = Week

ANALYSIS:

In the above graph Figure 8, the weekly performance of the automobile companies after the lockdown period is shown. In the lockdown period, the companies already faced crores of loses and in order to recover that loss and to get back their position in the market is really a big and tuff task for every automobile company. But this act as a challenge as well opportunities for many companies and immediately after the lockdown the companies rush towards selling more and more vehicles. As shown in the above figures slowly but the companies are able to generate profit and showed a steady growth. Hope the situation gets better with time and the top automobile companies will again be able to get their position back in the market.

MAJOR OF IMPACT OF COVID-19 ON AUTOMOBILE INDUSTRY DURING THE PERIOD OF LOCKDOWN:

- **DECLINE IN SALES**:

  The emergence of covid-19 has severely impact the sales of automobile industry. The Indian Automotive industry suffered Rs 2,300 loss crore per day. The production by OEM's have cut down by 18-20% due to low demand and decline sales of vehicles. Auto manufacture's revenue and cash flow has significantly affected the prolonged truncation of consumer demand due to lockdown.

- **INFLATION:**

  The automobile sector is expected to face commodity cost inflation which will be offsetting the same through price increase (of 1-6% in 2 W's, tractors and PV's), lower discounts (100-400bp across segment), and cost cutting (80-100bp), and operating leverage (150-170bp). Most reports said that spot prices of base commodities saw a sharp increase (15-40%) over FY21-22.

- **GDP PROFIT**:

  More cautious spending on everything from shampoo to cars and travel threaten to weaken what's been the backbone of the economy, contributing about three-fifth of gross domestic product? The pullback has acted as a drag on growth, which is predicted to have slowed for a fourth consecutive quarter to 6.5% in the three-months to march, the weakest pace since mid-2017 and almost on par with china.

- **DIFFICULTY WITH UNSOLD INVENTORY:**

  During the Lockdown phase, Auto dealers have been unable to deliver vehicles and have reported 30-45 days of finished goods inventory, likely to be heavily discounted post-lockdown. Dealers face a significant burden to liquidate unsold BS 4 inventory, worth Rs 6,300 crore.

- **DIFFICULTY WITH MAN POWER:**

  Auto suppliers have a high dependence on migrant labour, whose absenteeism is expected to further delay revival post-lockdown, resulting in the domino effect on the entire value chain. Suppliers facing liquidity issue may succumb to deteriorating market condition, causing widespread disruption across the entire manufacturing ecosystem.

2021:

AFTER- EFFECT OF COVID-19 ON AUTOMOBILE INDUSTRY:

- **PRICE HIKING:**

  For new vehicle buyers, the New Year may not be too kind as major automakers of the country has announced a price hike due to rising commodity costs. For Example, Maruti Suzuki, the country's largest automaker was among the first to announce the hike and has increased its price 3 times till date.

- **MORE PURCHASE OF PERSONAL VECHILE:**

  Coronavirus related concerns might lead to an increase in car sales in India as more and more Indians prefer to have a personal car, according to a survey, at least 40% people said they are more likely to buy a new car or used car after coronavirus crisis and 13% said their buying pattern will no change due to the coronavirus pandemic.

- **LESS OPENING OF MANUFACTURING UNITS AND SHOWROOMS:**

  All the auto companies are grappling with getting suppliers back online and also ensuring that their retail showrooms are able to open once again. Also there are booking which are already delayed due to pandemic, and due to the sudden shut down of manufacturing units no companies will able to avail many equipment which further delayed in supplying the vehicles to their owners.

- **EFFECT OF AUTO ANCILLARY ON AUTO MOBILE SECTOR:**

  Auto components makers are facing a double whammy of subdued demand covid-19 induced production restriction. Automotive Component Manufacturers Association of India (ACMA) pegged the industry revenue fall at 11.7% last fiscal year. According to the Society of Indian Automobile Manufacturers (SIAM), automobile production dropped 14.7% in FY20. With automobile industry sales estimated to fall by about one-fifth in the current fiscal year, revenue of the auto component industry may also shrink.

- **FEAR OF COVID:**

  Since this covid-19 pandemic is not yet over, the fear still prevails in the minds of the people. And the situation is again becoming worse, weekends are locked down, people start avoiding to visit any showrooms or any social gathering. Also due to the so much fear of this pandemic, people again start moving to their native places which leads to again fall in sales of vehicles and that earlier situation of extreme fear of covid-19 emerged again.

- **PREFERENCE TOWARDS ONLINE PLATFORMS:**

  Against the backdrop of the covid-19 pandemic, online platforms have emerged as a preferred marketplace to buy vehicle digitally. According to a survey by auto research platform, it is to be found that 60% of its respondents showed a willingness to buy their vehicle online, with the good deal and convenience being the key drivers.

- **FUEL PRICE HIKING:**

  Due to continue price hike in crude oil, many countries hault the production of crude oil for some time which leads to price hike of crude oil in global market which resulted in continuing fuel price hike.

- **EMERGENCE OF ELECTRIC VEHICLES (EV'S):**

  Post pandemic measures will establish the direction of various economic sector for the future. The EV (Electronic Vehicle's) sector has only just started to move towards its potential in India. It's a great initiative by the government which is beneficial to provide short-term incentives or higher subsidies to increase the use of EV two-wheeler and four-wheeler.

  Government Incentives:

  To boost electric mobility, the government aims to support through subsidies about 62,000 electric passenger cars and buses, besides 15 lakh electric three- and two-wheeler, parliament was informed on Thursday. Highway Minister Nitin Gad Kari told in the Lok Sabah that phase-2 of faster adoption and manufacturing of (hybrid) electric vehicle scheme is being implemented with a total budgetary support of Rs 10,000 crore.

  Tax exemption:

  State Government announces 100% tax redemption for battery-operated vehicles for more than 2 years. The exemption is also being extended to even transport vehicles. The tax redemption will apply to all battery-operated vehicles, including transport and non-transport types, till December 31, 2022.

  And according to the recent news, JLR (Jaguar-Range Rover), a subsidiary of Tata Group has now decided that it will now only produce EV's for this segment in the upcoming future.

- **TRUMP EXIT, BIDEN ENTRY:**

  A central piece of democratic presidential candidate Joe Biden's bid for the white house is a drastic change in U.S environmental policy. Biden's climate plan includes the promise to reinstate and advance more stringent fuel economy standards. He had made boosting Electric Vehicle (EV) a top priority and pledged to spend billions to add 550,000 EV charging stations. He also support new tax credits for EV purchases and retrofitting factories for EV production.

CHAPTER-5

RESULT AND DISCUSSION

INTERPRETATION OF OBJECTIVES:

- The aim is to study the impact of COVID-19 pandemic on the automobile industry in India:

  In this report, it is studied that how this covid-19 has impacted the automobile sector in every aspect. The overall performance of both the companies have severely been impacted whether its sales, profit generated by the companies or its market capture. It is seen that how the companies faced crores of losses during this pandemic, and the position of the companies has so drastically been effected that it has never expected in years. And the various factors affecting is also been studied, so it is not wrong to say that this pandemic has shown a situation that no one has ever expected but also gives the strength to cope in such kind of conditions. So, in this way, the objective and aim to study the impact of covid-19 pandemic on the automobile industry in India has fulfilled.

- To know the Covid-19 pre and post scenario of automobile companies:

  In this report, it is also been studied the pre and post scenario of the automobile companies. In Table 1: Comparison of the companies on the basis of their Overall performance in the year 2019 Table 2: Comparison of performance of companies in pre and post covid-19 Table 3: Comparison of the companies on the basis of their performance in 2020, the margin of impact is clearly been visible in the pre and post scenario in the graph that at what extent this pandemic has affected and hampered the overall growth and performance of both the companies. By seeing both the pre and post situation, it is easily been analyzed that pre covid-19 figures (Figure 2) differs a lot in comparison with the post figures (Figure 3) and Figure 4 reveals the clear picture of the whole report. So, in this way, the 2nd objective to know the Covid-19 pre and post scenario of automobile companies is also fulfilled.

- To know the influence of COVID-19 in the financial ratio of automobile industry:
  In Table 4: Ratio Analysis of the Companies: all the key financial ratios of both the companies for the year 2019, 2020 and 2021 is being studied and it is seen that this pandemic has a high influence on the financial ratios of both the companies with a high margin. In Figure 5, Figure 6 and Figure 7, the figures of the graph clearly reveals the financial status of both the companies in pre and post covid-19. The impact is not only limited to the year 2020, but the effect of this pandemic has the worse impact in the year 2021 also. Since this pandemic is not over yet, it can't presume that what impact it will leave on this sector in the upcoming future. And by this, the 3rd objective to know the influence of COVID-19 in the financial ratio of automobile industry is also got fulfilled.

India has the potential to Develop into a significant market for automobile manufacturers. Indian Automotive Industry holds significant scope for expansion, both in domestic as well as in international market. In the report I try to show every possible impact of covid-19 pandemic on the automobile industry in every aspect. The report signifies that this pandemic has severely affected the automobile industry in every possible aspect. In the recent years, the global share of the automotive industry in the GDP structure is increasing, and the growth dynamics will create new jobs and increase the average wage. The effective functioning and the development of the automotive industry is important not only economics, but also social significance for any country. In many ways, the automobile industry is a mirror for the whole of the Indian industry. After all, a return to status quo ante couldn't have been expected at once after almost such a long total shutdown. But it should be kept in mind that 2019 was already a year of slowing growth. In the automobile industry, growth was down about 18% over the previous year. It will be a very long road back to the peek.

SUGGESTION:

- There is an urgent need for a clear government policy roadmap to overcome the ill-effect of the pandemic on the people and the economy. Even pre-pandemic, government must take the opportunity to focus on the sectors that have been lagging behind.
- With the added benefit of cleaner mobility, the EV sector presents a window for the government to support the recovery of the economy.
- The government has an opportunity to invest in skilling. Infrastructure and manufacturing in the EV sector to provide the required reboot to the economy. Making this recovery investment in the sector will accelerate the transition to clean mobility in India.
- It is an opportunity moment for the government to undertake the much-needed re-skilling of labour to fit the green sectors such as EV. This will not only support people who lost their jobs due to pandemic but also provide them a more stable and secure career pathway.
- In addition, focusing the recovery stimulus on supporting innovation and small-scale businesses in critical as it allow for a more ground-up and comprehensive approach in promoting the EV sector in India.
- Investment must also be made in strengthening ties with neighbouring countries that are initiating their own EV sectors
- The imperative is enabling a holistic growth for the EV sector and developing a strong EV value chain in the country. This will also support the government's objective of the country becoming self-reliant and enhancing domestic manufacturing.
- The government must treat the stimulus capital in EV sector, making it lucrative for private investors which can then provide the working capital for taking the sector to new heights.

CONCLUSION:

The Indian Automotive industry has definitely been affected by the virus outbreak, from the dealership front right up to supporting ancillaries. The mass shutting of factories has put a strain on the workforce, which requires financial aid to support their families during this difficult scenario. Demand slowdown. New emission norms, and coronavirus pandemic have delivered a fatal blow to the Indian automobile industry. Production has reduced in each segment, pushed it back to the level of 2016. But as production has started again in some plants and some dealers started operating in less affected areas, we can see some activities returning to the sector. The Indian automotive industry has already seen difficult past few quarters and this pandemic led lockdown couldn't have been more ill-timed. However, a planned and concerted response, both immediate and medium to long term will ensure a V shape recovery soon. Overall the market is going to remain lukewarm for carmakers. It is expected to plummet further by 15-20% going by the current predictions and may see some revivals only in the third-quarter of 2021. So considering the present scenario, it is unlikely that the automobile sector of India will go back to its pre-covid-19 situation anytime soon. There will be significant change in the consumer preference and buying behavior of the consumers. The post covid-19 era will bring in many challenges as well as many opportunities. The companies will now rely intensively on the digital showrooms for increasing their customer base and the Electric Vehicle will surely make a place in the Indian market.

ANNEXURE:

FINANCIAL STATEMENT OF THE COMPANIES FOR THE YEAR ENDING MARCH 2019-2020, 2020-2021, AND 2021-2022:

MARUTI SUZUKI:

Maruti Suzuki India Previous Years »

Consolidated Balance Sheet	------------------- in Rs. Cr. -------------------				
	Mar '21	**Mar '20**	**Mar '19**	**Mar '18**	**Mar '17**
	12months	12 months	12 months	12 months	12 months
Sources Of Funds					
Total Share Capital	151.00	151.00	151.00	151.00	151.00
Equity Share Capital	151.00	151.00	151.00	151.00	151.00
Reserves	52,349.60	49,262.00	46,941.10	42,408.40	36,924.10
Net worth	**52,500.60**	**49,413.00**	**47,092.10**	**42,559.40**	**37,075.10**
Secured Loans	491.60	111.70	157.60	0.00	0.00
Unsecured Loans	0.00	0.00	0.00	120.80	483.60
Total Debt	**491.60**	**111.70**	**157.60**	**120.80**	**483.60**
Minority Interest	0.00	19.20	17.60	16.10	15.40
Total Liabilities	**52,992.20**	**49,543.90**	**47,267.30**	**42,696.30**	**37,574.10**
	Mar '21	**Mar '20**	**Mar '19**	**Mar '18**	**Mar '17**

	12months	12 months	12 months	12 months	12 months
Application Of Funds					
Gross Block	16,485.50	29,238.10	25,909.20	21,130.00	18,464.40
Less: Accumulated. Depreciation	0.00	13,422.80	10,471.90	7,741.20	5,153.70
Net Block	**16,485.50**	**15,815.30**	**15,437.30**	**13,388.80**	**13,310.70**
Capital Work in Progress	0.00	1,344.30	1,606.90	2,132.10	1,252.30
Investments	**42,944.80**	**37,488.00**	**37,503.60**	**36,123.10**	**29,150.60**
Inventories	3,049.00	3,213.90	3,322.60	3,160.20	3,263.70
Sundry Debtors	1,279.90	2,129.80	2,312.80	1,465.40	1,202.60
Cash and Bank Balance	3,047.10	29.00	187.80	74.00	23.50
Total Current Assets	7,376.00	5,372.70	5,823.20	4,699.60	4,489.80
Loans and Advances	4,476.40	3,607.40	3,597.70	3,904.80	3,757.10
Total CA, Loans & Advances	11,852.40	8,980.10	9,420.90	8,604.40	8,246.90
Current Liabilities	17,503.00	13,351.50	16,036.50	16,964.70	13,914.70
Provisions	787.50	732.30	664.90	587.40	471.70
Total CL & Provisions	18,290.50	14,083.80	16,701.40	17,552.10	14,386.40
Net Current Assets	**-6,438.10**	**-5,103.70**	**-7,280.50**	**-8,947.70**	**-6,139.50**
Total Assets	**52,992.20**	**49,543.90**	**47,267.30**	**42,696.30**	**37,574.10**
Contingent Liabilities	0.00	11,232.80	11,948.60	10,455.20	9,828.00
Book Value (Rs)	1,738.43	1,635.76	1,558.93	1,408.88	1,227.33

BAJAJ AUTO MOTORS:

Bajaj Auto Previous Years »

Consolidated Balance Sheet	------------------- in Rs. Cr. -------------------				
	Mar '21	**Mar '20**	**Mar '19**	**Mar '18**	**Mar '17**
	12months	12 months	12 months	12 months	12 months
Sources Of Funds					
Total Share Capital	289.37	289.37	289.37	289.37	289.37
Equity Share Capital	289.37	289.37	289.37	289.37	289.37
Reserves	26,984.06	21,372.71	22,944.44	20,135.87	17,567.20
Net worth	**27,273.43**	**21,662.08**	**23,233.81**	**20,425.24**	**17,856.57**
Minority Interest	0.01	0.01	0.01	0.02	0.03
Total Liabilities	**27,273.44**	**21,662.09**	**23,233.82**	**20,425.26**	**17,856.60**
	Mar '21	**Mar '20**	**Mar '19**	**Mar '18**	**Mar '17**
	12months	12 months	12 months	12 months	12 months
Application Of Funds					
Gross Block	1,683.53	4,118.27	4,271.60	4,506.25	4,502.46
Less: Accumulated Depreciation	0.00	2,419.25	2,507.66	2,627.92	2,500.67
Net Block	**1,683.53**	**1,699.02**	**1,763.94**	**1,878.33**	**2,001.79**

Capital Work in Progress	0.00	60.19	48.02	56.47	42.17
Investments	**24,686.65**	**19,913.58**	**20,602.85**	**18,894.57**	**15,477.04**
Inventories	1,493.89	1,063.50	961.51	742.58	728.38
Sundry Debtors	2,716.85	1,725.10	2,559.69	1,491.87	953.29
Cash and Bank Balance	538.84	316.34	933.07	792.66	301.36
Total Current Assets	4,749.58	3,104.94	4,454.27	3,027.11	1,983.03
Loans and Advances	2,481.95	1,732.29	1,965.33	1,284.52	2,133.59
Total CA, Loans & Advances	7,231.53	4,837.23	6,419.60	4,311.63	4,116.62
Current Liabilities	6,173.92	4,609.46	5,445.41	4,477.95	3,581.96
Provisions	154.35	238.47	155.18	237.79	199.06
Total CL & Provisions	6,328.27	4,847.93	5,600.59	4,715.74	3,781.02
Net Current Assets	**903.26**	**-10.70**	**819.01**	**-404.11**	**335.60**
Total Assets	**27,273.44**	**21,662.09**	**23,233.82**	**20,425.26**	**17,856.60**
Book Value (Rs)	942.51	748.60	802.92	705.86	617.09