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### Impact of COVID-19 on Indian Automobile Industry

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Abstract: The Indian automotive sector continues to struggle because of the ongoing Covid-19 crisis, one of the first pandemics of its kind that is forcing the automotive industry to re-think its business. The industry saw an overall negative growth of nearly 18 per cent in the FY 21. It has also been observed that the Indian Auto industry growth is slowing down, although post August 2020, the sector has shown signs of recovery and the upward sales trends are a welcome sign but the road to recovery is long and uncertain which was badly hit by the covid-19 pandemic.What started as a small fire in September 2018 with a dip in sales of CVs after the regulatory change in the axle-load norm, turned into a full-blown conflagration, at a scale which was never experienced by the automobile sector in the last two decades. Slow economic growth, negative consumer sentiment, BS-VI transition, liquidity crunch, low capacity utilisation and potential bankruptcies continued to depict one side of the coin in the industry. The other side, probably the brighter side sees consumers moving away from all forms of shared mobility to more personal forms of transport, boosting automotive sales. Post government announcing the first batch of corona virus vaccines, an improvement in sales of passenger vehicles, two-wheelers and three-wheelers is noticed. The economic impact of the corona virus pandemic in India has been largely disruptive. India's economy grew at 1.6 per cent in the fourth quarter of FY 21, recording a slight pickup in GDP growth amid the Covid-19 second wave hitting the economy hard. In the full fiscal year, the economy shrunk by -7.3 per cent as the Covid-19 pandemic ravaged the economy which has been worse in the past 40 years.

**KEYWORDS:** Automobile, Covid – 19, Impact, Production, Sales.

#### I. INTRODUCTION

The outbreak of the pandemic Corona virus (Covid-19), which originated in Wuhan, China in December 2019, has fast spread its tentacles across the world and is having a major impact on all aspects of society, including the automotive industry. Automobile industry witnessed one of its sharpest declines in domestic sales in March 2020 due to subdued demand and consumer sentiments which was further aggravated by the Covid-19 outbreak in the country, which has significantly affected the vehicle production and sales across all categories. Between April 2020 and June 2020, passenger vehicles sales in India dipped by 78%, suffering estimated losses of >Rs. 2,300 crore (US\$ 315.09 million) every day during the lockdown. To cope with this crisis, the auto industry set its foot towards digital innovations, leading to rise of ground-breaking trends in various facets of the automobile sector. The study attempts to understand the effect of Covid-19 on the automobile industry in India.

#### **II. LITERATURE REVIEW**

According to Suman Chowdhury, President- Ratings at Acuite Ratings & Research, It is not surprising that the economic lockdown triggered by Covid-19, has sharply impacted the sales in the automobile sector which was already reeling under the effect of a structural slowdown.

According to CRISIL Research Director - Hetal Gandhi, the auto sector could be pulled back anywhere between 3 and 10 years, depending on the segment. Segments like cars and UVs as well as commercial vehicles could reach sales levels of FY11, while two-wheelers could reach the sales levels of FY15. He added that the automobile industry was hit hard in fiscal 2020 as sales fell across vehicle segments. The outbreak has cast a long shadow over a much-anticipated mild recovery in the Indian economy in fiscal 2021. The auto industry has seen the impact of the corona virus crisis evolve from a supply shock to a global demand shock.

BCG's automotive and Centre for Macroeconomics teams forecasted that automotive sales will most likely decrease by 14-22% among China, US and European markets in 2020. Amidst such uncertainty, it is critical that companies take a

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comprehensive approach and develop a range of scenarios and robust contingency plans to navigate through these turbulent times.

As per Madan Sabnavis, chief economist, Even in best possible circumstances, Indian car makers will not be able to kick start operations immediately, China took around four months to restart partial production and the facilities there are still running well below capacity. He further added that the impact of the virus will be so high that the companies will not be able to return to normal production.

FADA President Mr Ashish Harsharaj Kale said that the country today is facing a very tough situation and so is the auto retail industry. Dealers were already faced with the additional issue of BS4 inventory worth ₹ 6400 Cr remaining unsold due to the impact of Covid-19 states and cities under lockdown. More than 12000 dealer outlets were shut in the lockdown states and cities and many more of the members have voluntarily shut their outlets even in areas where there is no mandatory lockdown to break the corona chain.

Deloitte India Partner and Automotive Sector Lead Rajeev Singh stated that the Covid-19 lockdown has had a multiplier effect; the industry has been at a complete standstill since March 24, 2020. A prolonged truncation of consumer demand due to the lockdown has significantly affected auto sector revenues and cash flows.

According to SIAM President Kenichi Ayukawa, A deep structural slowdown in the industry even before the pandemic, combined with the impact of Covid-19 in 2020-21, has pushed all vehicle segments back by many years; there is uncertainty in the value chain owing to semiconductors, lockdowns and raw material.

According to the Federation of Automobile Dealers (FADA) President Vinkesh Gulati, global shortage of wafers, which is an input for semiconductors, continued to linger around and kept passenger vehicle waiting for periods as high as seven months in the FY 20, Also, it was noted that the second wave of Covid is not only spreading faster but is also trying to destabilise the growth which India has been able to achieve in the last few months of FY 21.

A recent analysis report by Deloitte states that the pandemic is expected to lead the country towards a major slowdown. Major financial institutions have lowered growth estimates for India by 0.5-1.5 percent. As India and the world alike grapple through the ongoing coronavirus pandemic, it is a unanimous opinion that consumer business segments will take a negative hit that will cause long term effects. The automobile industry is one of those segments.

According to the ratings agency ICRA, India's automobile industry is likely to be negatively impacted and supply chain to remain disrupted if the Coronavirus (Covid-19) outbreak in China and South-East Asia persisted longer. Richard Baldwin and Eiichi Tomiura (2020) found that Covid-19 has been both a supply as well as demand shock which has crashed international trade in goods and services. They have further highlighted that there is also a danger of permanent damage to the trade system driven by policies and firms' reactions. The combination of the US' ongoing trade war against all of its trading partners (but especially China) and the supply-chain disruptions that are likely to be caused by COVID-19 could lead to a push to repatriate supply chains. The study concluded that there is a chance of

Scott R. Baker, Nicholas Bloom, Steven J. Davis, Kyle Kost, Marco Sammon, and Tasaneeya Viratyosin (2020) observed that Covid-19 strongly impacted the stock market due to various reasons i.e. it affected public health and economy, interconnection among economies. It has alos been observed that the government-mandated restrictions on commercial activity, as well as voluntary social distancing actions have had an effect on the economy.

permanent damage to trade system driven by firm's reactions and policy.

Shlomo Maital, Ella Barzani (2020) found that the major impact of Covid-19 outbreak would be on supply side of the market, but the remedies being considered currently is mainly focusing on the demand side. The study also pointed that under the current scenarios, a global recession is much likely to occur.

Abiad A, Arao R M, Dagli S (2020) in their study estimated that covid-19 would affect global GDP by 0.1 to 0.4% or \$77 billion to \$347 billion, It was further highlighted that the magnitude of the economic impact will depend on how the outbreak evolves, which still remains highly uncertain.

S Mahendra Dev, Rajeswari Sengupta (2020) analyzed that the outbreak of the Covid-19 pandemic is an unprecedented shock to the Indian economy. The economy was already in a parlous state before Covid-19 struck. The measures such as lockdown; restrictions on global trade, closure of non-essential services, and restriction on movement will adversely affect the financial health of the nation.

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Mishra (2020) in his study highlighted that, the Covid-19 is expected to affect all the sectors like international trade, financial markets, unemployment, income, poverty and global trade. It was further highlighted that the Foreign Direct Investment (FDI) could prove to be an important factor in bringing capital, as well as jobs, technology and management skills to many developing countries.

According to Dev and Sengupta (2020), amidst the economic slowdown triggered by the outbreak of the Covid-19 pandemic in India, there have been many demands for the government to announce a large fiscal stimulus to support the economy. Economic growth and tax revenues remain uncertain in 2020-21 making it challenging for the government to finance any addition to the fiscal deficit.

Lavanya P, Dr. Subba Rayudu Thunga, Dr. N. Y. Raju (2021) demonstrate the impact of lockdown in Indian economy particularly on automobile sector. The study concludes that impact of corona virus is long term and adverse which can recover faster if the opportunities are grabbed and put to proper use.

#### **Objective of the study:**

To study the Impact of Covid-19 on Indian Automobile Industry.

#### **III. NEED FOR THE STUDY**

Automobile Industry is one of the world's largest economic sectors by revenue. With the World Health Organisation declaring the Covid-19 outbreak a pandemic, an unprecedented global disruption continues at hand. Automobile and component manufacturing plants are being shuttered around the world, consumer footfalls in showrooms have fallen sharply, vehicle sales are dropping dramatically and almost every major industry event is either being cancelled or going the digital way. According to a report published by Deloitte India, the automobile sector has inventories sufficient for short-term support, but lack of single, critical components can hurt OEMs (Original Equipment Manufacturers), with people exploring more affordable options promoting the demand for electric vehicles as well as second hand vehicles. Social distancing and the digital life is the need of the hour, amidst current situation, the automobile industry has already been witnessing a slow down to lock down post the outbreak of the corona virus pandemic, the underlying question still remains as to whether the automobile industry would bounce back, or will witness significant negative impact in the upcoming days.

#### Limitation of the study:

This study is confined only to Indian Automobile industry post the outbreak of the novel corona virus pandemic and is based on secondary data.

#### **IV. RESEARCH METHODOLOGY**

This study has been conducted to understand the impact of Covid-19 on the Indian automobile industry. Inferences were drawn from online newspapers, SIAM reports, ICRA, Grant Thornton Report and WHO publications. An attempt is made here to understand the condition of the automobile industry in the changing phases of slowdown, lockdown and to realize whether the industry would be able to bounce back amid the new normal of social distancing being the need of the hour or whether the consumers will choose to explore new markets like that of the electric vehicles or the demand for more used cars will increase.

#### Analysis:

Category	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Passenger Vehicles	34,65,045	38,01,670	40,20,267	40,28,471	34,34,013	30,62,221

#### Automobile Production Trend

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Commercial Vehicles	7,86,692	8,10,253	8,95,448	11,12,405	7,52,022	6,24,939
Three Wheelers	9,34,104	7,83,721	10,22,181	12,68,833	11,33,858	6,11,171
Two Wheelers	1,88,30,227	1,99,33,739	2,31,54,838	2,44,99,777	2,10,36,294	1,83,49,941
Grand Total	2,40,16,599	2,53,30,967	2,90,94,447	3,09,14,874	2,63,62,282	2,26,48,272

Source: SIAM

#### **Automobile Domestic Sales Trend** 2015-16 2016-17 2017-18 2020-21 Category 2018-19 2019-20 Passenger 30,47,582 27,89,208 32,88,581 33,77,389 27,73,575 27,11,457 Vehicles Commercial 6,85,704 7,14,082 8,56,916 10,07,311 7,17,688 5,68,559 Vehicles Three 7,01,005 5,38,208 5,11,879 6,35,698 6,36,569 2,16,197 Wheelers Two Wheelers 1,64,55,851 1,75,89,738 2,02,00,117 2,11,79,847 1,74,17,616 1,51,19,387 2,04,68,971 2,18,63,281 2,49,81,312 2,62,66,179 2,15,46,390 1,86,15,600 **Grand Total**

Source: SIAM

#### **Automobile Export Trends**

Category	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Passenger Vehicles	6,53,053	7,58,727	7,48,366	6,76,192	6,77,311	4,04,400
Commercial Vehicles	1,03,124	1,08,271	96,865	99, 993	60,713	50,334

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Three Wheelers	4,04,441	2,71,894	3,81,002	5,67,683	5,02,169	3,92,941
Two Wheelers	24,82,876	23,40,277	28,15,003	32,80,841	35,20,376	32,77,724
Grand Total	36,43,828	34,80,725	40,42,841	46,29,049	47,65,754	41,25,399

Source: SIAM

#### Findings:

Production

The industry produced a total 2,26,48,272 vehicles including Passenger Vehicles, Commercial Vehicles, Three Wheelers, and Two Wheelers in April-March 2021 as against 2,63,62,282 in April-March 2020, registering a de-growth of (-) 16.39 percent over the same period last year.

#### **Domestic Sales**

The industry sold a total 1,86,15,600 vehicles including Passenger Vehicles, Commercial Vehicles, Three a. Wheelers, and Two Wheelers in April-March 2021 as against 2,15,46,390 in April-March 2020, registering a de-growth of (-) 15.74 percent over the same period last year.

The sale of Passenger Vehicles declined by (-) 2.24 percent in April-March 2021 over the same period last h year. Within the Passenger Vehicles, the sales of Passenger Cars and Vans declined by (-) 9.06, percent and (-) 17.62 percent respectively while sales of Utility Vehicles increased by 12.13 percent in April-March 2021 over the same period last year.

The overall Commercial Vehicles segment registered a de-growth of (-) 20.77 percent in April- March 2021 as c. compared to the same period last year. Within the Commercial Vehicles, Medium & Heavy Commercial Vehicles (M&HCVs) and Light Commercial Vehicles (LCVs) declined by (-) 28.40 percent and (-) 17.30 percent respectively in April-March 2021 over the same period last year.

Sale of Three Wheelers declined by (-) 66.06 percent in April-March 2021 over the same period last year. d. Within the Three Wheelers, Passenger Carrier and Goods Carrier declined by (-).74.49 percent and (-) 26.38 percent respectively in April-March 2021 over April-March 2020.

Two Wheelers sales registered a de-growth of (-) 13.19 percent in April-March 2021 over April-March 2020. e. Within the Two Wheelers segment, Scooters, Motorcycles and Mopeds declined by (-) 19.51 percent, (-) 10.65 percent and (-) 3.07 percent respectively in April-March 2021 over April-March 2020.

#### Exports

The industry exported a total 41,25,399 vehicles including Passenger Vehicles, Commercial Vehicles, Three a. Wheelers, and Two Wheelers in April-March 2021 as against 47,65,754 in April-March 2020, registering a de-growth of (-) 15.52 percent over the same period last year.

In April-March 2021, overall automobile exports declined by (-) 13.05 percent. Passenger Vehicles, b. Commercial Vehicles, Three Wheelers and Two Wheelers exports also declined by (-) 38.92 percent, (-) 16.64 percent, (-) 21.67 percent, and (-) 6.87 percent respectively.

#### **V. CONCLUSION**

The Covid-19 outbreak has wreaked havoc worldwide. The Indian automotive sector continues to struggle because of the ongoing Covid-19 crisis, one of the first pandemics of its kind that is forcing the automotive industry to re-think its business. The coronavirus (Covid-19) outbreak is causing widespread concern and economic hardship for consumers, businesses and communities across the globe. The Indian auto industry had already been witnessing testing times over the past few years and COVID-19 has proven to be a litmus test. In the financial year FY20-21, there was a de-growth in sales of all segments compared to the previous years. (-) 2.24% for Passenger Vehicles with sales of 27.11 Lakhs units; (-) 13.19% for Two-Wheelers with sales of 151.19 Lakhs units; (-) 20.77% for Commercial Vehicles with sales

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5.69 Lakhs units and (-) 66.06% for Three-Wheelers with sales of 2.16 Lakhs units. It has been observed that the Indian Auto industry growth has slowed down, although post August 2020, the sector has shown signs of recovery and the upward sales trends are a welcome sign but the road to recovery is long and uncertain which was badly hit by the covid-19 pandemic. The auto industry is cautiously looking forward to 2021, although a lot will hinge on how the economy grows. Despite the ongoing challenge of COVID-19, the Indian automotive industry seems to be overcoming most of its challenges, and many are now in the rear view mirror. The sector is also benefiting from new tailwinds, such as global supply-chain rebalancing, government incentives to increase exports, and technology disruptions that create white spaces. These developments will help create opportunities at all levels of the automotive value chain. Digitalization is emerging as a key channel. 'Protect-Restore-Rebound' approach will help navigate the Covid-19 turbulence for the automotive sector.

#### REFERENCES

- 1. Abiad, A., Arao, R.M., Dagli, S. (2020). The economic impact of the covid-19 outbreak on developing Asia, 2020, https://doi.org/10.22617/BRF200096
- 2. Accenture, Impact on the Automotive Industry: Navigating the Human and Business Impact of COVID-19, April 2020
- 3. Baker, S., Bloom, N., Davis, S. J., Kost, K., Sammon, M., &Viratyosin, T. (2020). The unprecedented stock market reaction to covid-19. Covid Economics: Vetted and real-time papers, 1(3)
- 4. Baldwin, R., Tomiura, E (2020). Thinking ahead about the trade impact of covid-19, Economics in the time of covid-19
- 5. Dev, S. M., & Sengupta, R. (2020). Covid-19: Impact on the Indian economy (No. 2020-013). Indira Gandhi Institute of Development Research, Mumbai, India
- 6. Dr. Mukesh Kumar Mishra(2020), The World after COVID-19 and its impact on Global Economy
- 7. Grant Thornton, Sector Flash, Indian Auto Industry, April 2021
- 8. https://www.econstor.eu/bitstream/10419/215931/1/MKM%20PAPER%20FOR%20COVID.pdf
- 9. https://www.entrepreneur.com/article/349464#:~:text=The%20Indian%20automobile%20industry%20is,vehicles% 20manufacturer%20in%20the%20world.
- 10. https://en.wikipedia.org/wiki/COVID-19\_pandemic
- 11. https://www.who.int/health-topics/coronavirus#tab=tab\_1
- 12. http://www.siam.in/
- 13. https://en.wikipedia.org/wiki/Economic\_impact\_of\_the\_COVID 19\_pandemic\_in\_India
- 14. https://yourstory.com/smbstory/coronavirus-pandemic-automobile-car-industry-impact
- 15. https://www.business-standard.com/article/economy-policy/life-after-covid-19-how-the-indian-auto-sector-can-be-future-ready-120042900315\_1.html
- 16. https://www.entrepreneur.com/article/349464#:~:text=The%20Indian%20automobile%20industry%20is,vehicles% 20manufacturer%20in%20the%20world.
- 17. https://yourstory.com/2020/06/india-automobile-industry-digitisatisation-coronavirus
- 18. https://www.dtnext.in/News/Business/2020/04/01224709/1222858/Covid19-dents-auto-industrys-March-offtake.vpf
- 19. https://steelguru.com/auto/covid-19-to-drag-indian-automobile-sector-by-a-decade/558114
- 20. https://www.bcg.com/en-in/publications/2020/covid-automotive-industry-forecasting-scenarios.aspx
- 21. https://www.carandbike.com/news/indian-automobile-sector-could-bear-revenue-loss-of-around-rs-15-000-croresevery-day-2199256
- 22. https://auto.hindustantimes.com/auto/news/virus-effect-auto-industry-may-cut-r-d-funds-exit-unprofitable-segments-41588505897103.html
- 23. https://www.business-standard.com/article/economy-policy/life-after-covid-19-how-the-indian-auto-sector-can-be-future-ready-120042900315\_1.html
- 24. https://yourstory.com/2020/06/india-automobile-industry-digitisatisation-coronavirus
- https://www.financialexpress.com/auto/industry/impact-of-coronavirus-on-auto-sector-production-slowdownchina-covid19-pandemic/1916987/
- 26. https://www.cars24.com/blog/impact-of-coronavirus-on-indian-auto-industry/
- 27. https://www.pwc.com/us/en/library/covid-19/coronavirus-impacts-automotive.html
- 28. https://www.news18.com/news/auto/coronavirus-pandemic-impacts-indias-struggling-auto-industry-vehicle-production-critically-disrupted-2533229.html
- 29. https://www.thehindubusinessline.com/economy/logistics/prolonged-coronavirus-outbreak-could-impact-indiasauto-supply-chain-icra/article30861652.ece

#### International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET)

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#### | DOI:10.15680/IJIRSET.2021.1010017 |

- 30. https://economictimes.indiatimes.com/industry/auto/auto-news/indian-auto-industry-to-be-negatively-impacted-supply-chain-disrupted-if-coronavirus-persists-icra/articleshow/74210052.cms?from=mdr
- 31. https://economictimes.indiatimes.com/https://economictimes.indiatimes.com/industry/auto/auto-news/auto-salesin-march-fall-45-due-to
  - lockdown/articleshow/75120690.cms?utm\_source=contentofinterest&utm\_medium=text&utm\_campaign=cppst
- 32. https://www.autocarindia.com/industry/how-coronavirus-has-hit-the-global-auto-industry-a-timeline-416615
- 33. https://economictimes.indiatimes.com/industry/auto/auto-news/auto-industry-stares-at-2-bn-loss-as-factories-and-dealers-shut-shop-to-stem-covid-19-contagion/articleshow/74782274.cms?from=mdr
- 34. https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/the-indian-automotive-industry-from-resilience-to-resurgence
- 35. https://www.ibef.org/blogs/indian-automobile-sector-witnessing-ground-breaking-trends
- 36. http://www.businessworld.in/article/2020-for-Indian-Automobile-sector-A-Forgettable-Year-Which-Started-The-Build-Up-Of-The-Digital-Future-/06-01-2021-362187/
- 37. KPMG Josh, Indian Auto Components Industry post Covid-19, June 2020,
- 38. Lavanya P, Dr. Subba Rayudu Thunga, Dr. N. Y. Raju, The covid-19 in India- impacts on the economy and the automobile sector, Journal of Contemporary Issues in Business and Government Vol. 27, No. 3, 2021, 197-201.
- 39. Shlomo Maital Ella Barzani,(2020), The Global Economic Impact of COVID-19: A Summary of Research, Samuel Neaman Institute for National Policy Research





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