
The covid-19 in India- impacts on the economy and the automobile sector

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Abstract: This paper demonstrates the impact of lockdown in Indian economy particularly on automobile sector. The outcome proves that depending on the period of the lockdown, the Indian economy expected to face a loss of about 10-31% of its Gross Domestic Product and production loss is estimated on automobile sector is Rs 2300 crore per day. This study discusses the impact of covid-19 on economy, particularly on automotive sector. This is a secondary research work wherein aim is to study the potential impact of the novel covid-19 on automotive sector. The methodology adopted includes in-depth review and analysis of various reputed published journals, research works, articles, news paper reports and web sources. The study concludes that impact of corona virus is long term and adverse. It is the turn of Indian automotive industry to grab opportunities and flourish.

Keywords: Automobile Sector, Covid-19, Economic impact of corona virus, Gross Domestic product, lockdown.

INTRODUCTION

Corona Virus was first identified in Wuhan City of China and by the time the severity of the infectious disease made known to the world; it has spread and started showing its impact globally. India is now part of globalised economy and has great connectivity with rest of the world in terms of import and export of goods and services and people migrating in and out for various purposes. India is one among the 200 plus countries which are hit by the pandemic.

Inadequate medical facilities, larger population living in villages and remote locations away from minimum medical aids, less infrastructural facilities; the spread of contagious disease would have been more pathetic than anyone can imagine. In the given circumstances, Government of India was left with no option other than to opt for lockdown compromising on economic health for protecting people. The impact of pandemic and subsequent lockdown decision is very high on Indian economy. Various sectors like automotive sector, manufacturing, tourism, construction, trade, hotels, transport, financial services, agriculture, imports and exports, lives of economically marginalized workers, migrant labour and vulnerable sections of the society have been negatively impacted to note some. This paper demonstrates the overall impact of covid-19 on economic and automotive sector.

LITERATURE REVIEW

Richard Baldwin., et al. (2020) noted that Covid-19 to be both a supply as well as demand shock which will crash international trade in goods and services and the study concluded that there is a chance of permanent damage to trade system driven by firm's reactions and policy. Scott R. Baker., et al. (2020) was observed that Covid-19 strongly impact stock market due to various reasons i.e. it affects public health and economy, inter connection among economies. ShloloMaital., et al.(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 reasonable current scenarios, a global recession is much likely to occur. Abiad.,A. et al.(2020) study estimates that covid-19 would affect global GDP by 0.1 to 0.4% or \$77 billion to \$347 billion. Mahendra Dev., S. (2020) analyzed measures such as lockdown, restrictions on global trade, closure of non-essential services, restriction on movement will adversely affect the financial health of the nation. Mishra., (2020) in his study the Covid-19 expected to affect all the sectors like international trade, Financial markets, unemployment, income, poverty and global trade.

Hypothesis Development

H₀= There is no impact of covid-19 on automobile sector performance

H_A= There is a impact of covid-19 on automobile sector performance

OBJECTIVES OF THE STUDY

Investigate the impact and economic losses of corona virus on Indian economy, analyze and discuss the impact of covid-19 lockdown on automobile sector and offer suggestions to strengthen automobile sector.

METHODOLOGY OF THE STUDY

The aim of this paper is to study the covid-19 in India: Impacts on the economy and automobile sector. The present study is qualitative as well as analytical in nature. The data sources are review and analysis of various literatures, reputed published journals, working papers, articles, news paper reports and web sources. For the study paired sample t-test was performed to study the affect of covid-19 on automobile sales with respect to four wheelers and two wheelers.

RESULTS AND DISCUSSION

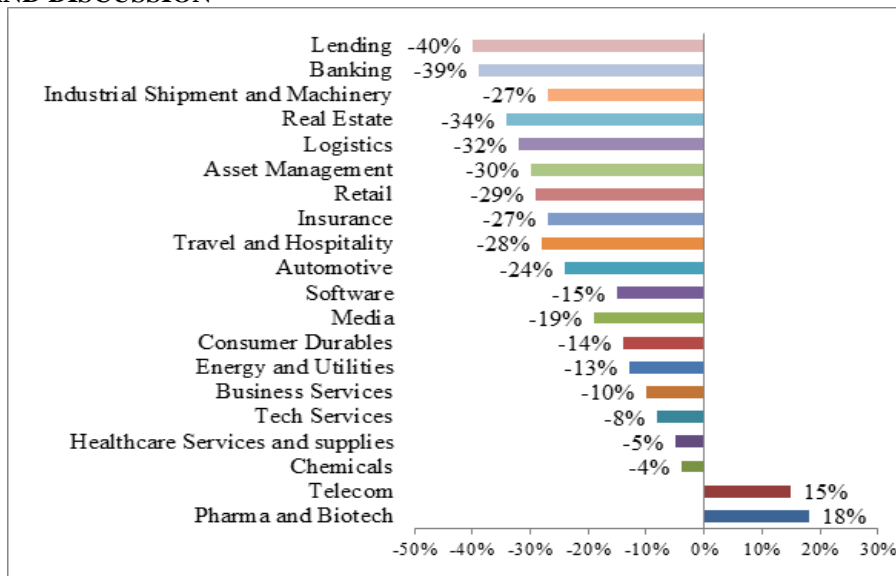


Fig.1: Estimated impact of covid- 19 on market capitalization of key sectors

The above figure represents the impact of covid- 19 on market capitalization of key sector performance in India. It is evident that market capitalization of lending is highly impacted with -40% followed by Banking -39%. On the other side only two sectors could record positive market capitalization, Pharma and Biotech with 18% and Telecom with 15%.

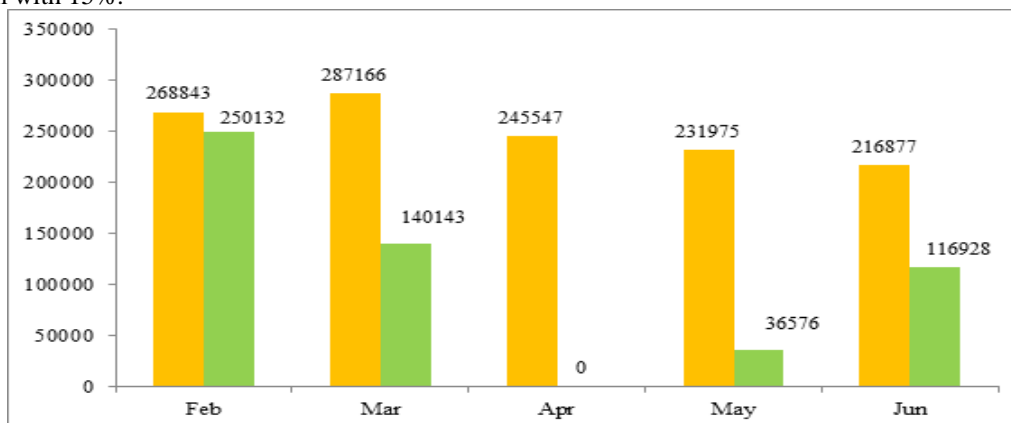


Fig.2: Estimated impact from the covid-19 on four wheelers sales (Pre & Post covid)

The above figure depicts the performance of four wheelers sales in India during pre and post covid-19 scenario against sales in financial year 2019-20 during the same period. On a whole four wheeler sales during 2020-2021 are comparatively less than the sales of 2019-20 for all the five months. The decrease in performance was at accelerated pace with -6.90%, -51.10% during February and March 2020. During April 2020, four-wheeler

reported zero sales. Even though, sales could gain momentum after April, they were still back with -84.20% and -46% during May and June 2020.

Formulation and Testing of Hypothesis

H₀= There is no impact of covid-19 on four wheeler sales performance

H_A= There is a impact of covid-19 on four wheeler sales performance

From the study it is clear that the critical value of paired t test is less than the calculated value at 5 percent level of significance and 4 degrees of freedom. Hence, the null hypothesis is rejected. We may conclude that there is an impact of covid-19 on four wheeler sales performance.

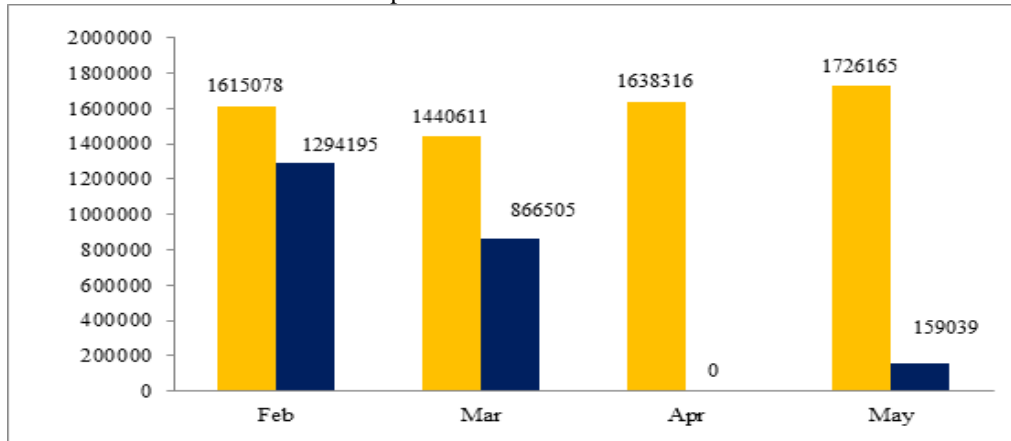


Fig.3: Estimated impact from the covid-19 on two wheelers sales (Pre & Post covid)

The above figure depicts the performance of two wheelers sales in India during pre and post covid-19 scenario against sales in financial year 2019-20 during the same period. The Two wheeler sales reported negative sign in its performance compared to previous year. The percentage of sales decrease reported at -19.80%, -39.80%, -100% and -90.70% during February, March, April and May respectively in 2020 against 2019.

Formulation and Testing of Hypothesis

H₀= There is no impact of covid-19 on two wheeler sales performance

H_A= There is a impact of covid-19 on two wheeler sales performance

From the study it is clear that the critical value of paired t test is less than the calculated value at 5 percent level of significance and 3 degrees of freedom. Hence, the null hypothesis is rejected. We may conclude that there is an impact of covid-19 on two wheeler sales performance.

ANALYSIS AND DISCUSSION

For the couple of years, countries across the world started facing economic slowdown. In the globalised economy countries are so well connected and dependent on each other that, the slowdown in one economy is impacting the performance of another economy too. Countries were in deep discussions for reviving their economies and brining structural changes. Unexpected pandemic, Covid-19 which was first detected in China has worsened the situations among 200 countries. Many were compelled to shut their economies and announce lockdown for protecting the life of their citizens.

In India, the wave of pandemic was seen around in the month of February, making the work of Government, Administrators and regulatory bodies challenging. Indian economy is diverse in its nature compared to other countries in the world. It has 130 billion populations with high density of population living in remote and village areas. It has inadequate infrastructural, medical facilities, insufficient masks, Personal Protective equipment, respiratory and life support systems during the initial days of pandemic hit. The government has taken decision to protect the health of the people at the cost of the economy and announced lockdown. These decisions made the economy to a standstill position for a period of more than 45 days from 25th March, 2020 to 13th May, 2020 unlock process started only from 01st June, 2020.

Lock down decision has heavily impacted Indian economy and on the performance of many sectors. Even India has reported a negative GDP for two consecutive quarters followed by lockdown decision. The impact was clearly evident on market capitalization of key sectors. Banking sector, Retail and Software which were operating as emergency services also got impacted negatively in terms of its Market capitalization with -39%, -29% and -15%. The other major sectors include lending -40%, Industrial Shipment -27%, Real estate -34%, Logistics -32%, Asset Management -30%, Insurance -27%, Travel and Hospitality -28%, Automotive -24%, Media -19%, Consumer Durables -14%, Energy and Utilities -13%, Business Services -10%, Tech Services -

8%, Health Services and Supplies -5%, Chemicals -4%. Only Pharma and Biotech and Telecom companies registered positive Market capitalization with 18% and 15% respectively.

Indian Auto industry is one of the well established and employment generating source and contributes for the GDP of the nation. Environmental consciousness and changing international standards have set new norms for auto players. In India, auto manufactures were informed of changes in emission standards from BS4 to BS6 and given 3 years of time from 2017-2020 for transition. During the three years span many players could not transform to BS6 standard and were left with more BS4 vehicles. Auto players had high expectations on clearing their BS4 vehicles during the first half of 2020 and announced huge discounts. But the reality turned differently with lockdown decision. During April month auto industry was completely shut and reported zero sales. Even though sales started registering in May 2020, they were far below the sales of 2019 during the same period. The Society of Indian Automobile Manufacturers (SIAM) estimated a production loss of Rs. 2,300 crore per day due to lock down decision.

The scenario of Indian auto industry could not have been something great without lockdown also. Auto manufacturers in India import components from China, Germany, US which are worst hit with pandemic. The Indian auto manufacturers maintain an inventory required for 2-3 months production capacity. According to ICRA Ltd., a rating agency, around 27% of components were imported in 2019 to India from Wuhan City (The first place affected with Covid-19 and lock down announced). The major disruption in the Supply chain in Wuhan, The “motor city” of China, a manufacturer and supplier of sensors, power and engine control units, motor and batteries could have impacted the production in India.

CONCLUSION

Indian automobile industry is one of the well established and ripest industries. It offers employment for more than 35 million employees working under permanent and temporary categories. It accounts for nearly fifty percent of manufacturing output in India. The Indian auto industry is facing several challenges for couple of years. On one side, the largest global auto markets are witnessing the flattened curve of performance and disruptions in the supply chain impacting sales of Indian automobile industry. On the other hand, environmental concerns of emission standards from BS4 to BS6 are already posing a challenge for clearing BS4 vehicles before 2020. Covid 19 has more worsened the situation of automobile industry with production loss, reduced sales, termination of employees and pay cuts. The Bailout package announced by Government of India could not really boost the industry in real time. The government can provide special bailout package exclusively for the automotive industry along with reduction in GST for some months and introduction of vehicle scrappage policy. These initiatives can revamp the Indian auto industry and strengthen the economy.

LIMITATIONS AND SCOPE FOR FUTURE STUDIES

The present study has certain limitations such as: it considered only secondary source of data and studied only on impact of covid-19 lockdown in Indian economy particularly to automobile sector in an analytical manner. So in future, researchers can consider primary data and can also consider other sectors such as manufacturing, retail, banking, pharmaceuticals, telecom, agriculture and software.

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