

# Impact Of Covid-19 On Indian Economy In 2020 With Relation To Aviation Sector

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## ABSTRACT

The sudden unanticipated outbreak of the Covid -19 has shattered almost every single economy of the world. The developing economies are facing the heat most, and as far as Indian economy is concerned it's an unprecedented shock to Indian economy. The economy was already in a perilous state before Covid -19 struck.

The Novel Coronavirus COVID-19 has infected more than 93Lakh people in 213 countries and 4 Lakh 56 thousand people in Indian subcontinent, thus translating into a scourge confronting all of humanity, impacting lifestyles, businesses, and the assumption of common well-being that all people have largely taken for granted.

Even before the onset of the global pandemonium, Indian economy was confronting turbulences; the condition has now been aggravated by the demand, supply and liquidity shocks inflicted by COVID-19 at the commencement of new financial year.

Although this problem is almost universal, but it's impact on emerging markets may vary owing dependence of these economies on the world markets for exports and imports, for finances, technology and investments. These economies are likely to face a protracted period of slowdown of economic activity

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## Introduction

In a democracy process of economic growth is greatly influenced by politics. Indian economy is huge and diverse so policy response will have to be quite mindful of this diversity. Especially in this time of crisis, it's a challenge to distribute scarce resources among competing needs. Indian economy is the world's fifth –largest economy by nominal GDP and the third largest by purchasing power parity. As Indian economy comprises of three sectors i.e. Primary, Secondary and Tertiary sector with their contribution to GDP i.e. 15.87%, 29.73%, 54.40% respectively. But with increase in no. of coronavirus cases, lockdown of transport services, closing of all public and private offices factories and restricted mobilization. Based on recent studies, some economists have said that there is a job loss of 40 million people in the country in the unorganized sectors. All sectors of the economy are going to be impacted by this global pandemic. This paper is going to analyze the status of Aviation industry pre and post covid.

## Aviation Industry

The airlines industry has been beleaguered globally on account of international and domestic travel restrictions introduced by nations all over. Indian's too are set not to travel to any place owing to the restricted passenger movements whatsoever. With legal restrains extending to air transport services civil aviation industry in India is among the worst hit, due to COVID-19.

Civil aviation industry is expected to contribute 70% of the total losses and shall crash-land this fiscal with a revenue loss of Rs. 24-25 thousand Cr.; thus, reversing the trend growth of 11% p.a. it had logged over past 10 years. Airline Carriers world over are mulling operations due to lack of

demand and grounding flights resulting in a fragile financial position for the industry.

## Sectoral Overview

### A) GDP of India: \$3.202tn

Service Sector contr. in GDP: 61.5%

Aviation Industry contr. in GDP: 2.4%

### B) India's Labour force: 494mn

Service Sector contr.: 31%

Aviation Industry contr.: 1.5%

Contribution of services to India's GDP is double the amount of employment generated by them

## Objectives

- ❖ To compare the volume of Passengers Handled at Indian Airports in Pre-COVID times with the volume of Passengers Handled at Indian Airports in Post-COVID times.
- ❖ To analyze present condition of Indian Economy with respect to Aviation industry in particular.
- ❖ SWOT Analysis of-Indian Economy after 2020.

## Research Methodology

The Research Design used in this presentation is descriptive and research study is based on secondary data collected from CMIE Reports and The Economic Times.

To fulfil the objectives of research, the researcher has applied mean, standard deviation and coefficient of variation to measure the variation amongst data. The coefficient of variation is ascertained as below:

$$C.V. = \frac{S}{X} \times 100\%$$

Where C.V. = Coefficient of Variation  
 S = Standard Deviation  
 X = Mean

Further frequency polygon is employed to depict trend in air passenger traffic.



<https://economictimes.indiatimes.com/topic/international-passenger-traffic>



<https://www.cmie.com/komon/bin/sr.php?kall=warticl&msc=510>

**Results**

**A. Statistical Analysis**

| International Passengers Handled at Airports |                |            |                |
|--|----------------|------------|----------------|
| Pre Covid                                    |                | Post Covid |                |
| Month  | Y-o-Y % change | Month      | Y-o-Y % change |
| Sept'19                                      | 0.2            | Jan'20     | 0.2            |
| Oct'19                                       | 3.7            | Feb'20     | -3.4           |
| Nov'19                                       | 4              | Mar'20     | -56.2          |
| DEC'19                                       | 2              | Apr'20     | -99.1          |
| MEAN=  | 2.475          | MEAN=      | -39.625        |
| $\sigma=$                                    | 1.518840018    | $\sigma=$  | 40.95817226    |
| C.V.%=                                       | 61.36727345    | C.V.%=     | -103.3644726   |

Source : CMIE report on cmie.com accessed on June 15,2020

**Table1.1**

| Domestic Passengers Handled at Airports |                |            |                |
|---|----------------|------------|----------------|
| Pre Covid                               |                | Post Covid |                |
| Month                                   | Y-o-Y % change | Month      | Y-o-Y % change |
| Sept'19                                 | 0.2            | Jan'20     | 1.5            |
| Oct'19                                  | 2.7            | Feb'20     | 9.8            |
| Nov'19                                  | 10.5           | Mar'20     | -32.9          |
| DEC'19                                  | 1.9            | Apr'20     | -100           |
| MEAN=                                   | 3.825          | MEAN=      | -30.4          |
| $\sigma=$                               | 3.958140346    | $\sigma=$  | 43.2552309     |
| C.V.%=                                  | 103.4807934    | C.V.%=     | -142.2869437   |

Source : CMIE report on cmie.com accessed on June 15,2020

**Table1.2**

The two tables namely International Passengers Handled at Airports and Domestic passengers Handled at Airports compare passenger footfall in Pre-Covid times with passenger footfall in Post-Covid times.

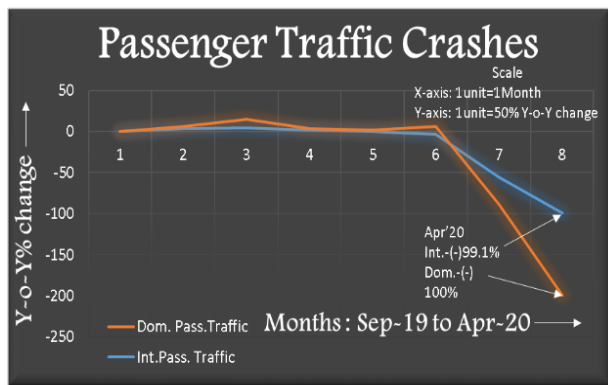
**Pre – Covid**

- ❖ **Finding:** Value of C.V. is **positive** and **smaller**.
- ❖ **Interpretation:**
  - There is negligible downfall in no. of passengers handled at Indian Airports, so C.V. is positive.
  - Consumer propensity to travel is moderate.

**Post – Covid**

- ❖ **Finding:** Value of C.V. is **negative** and **higher**.
- ❖ **Interpretation:**
  - There is 80% downfall in no. of passengers handled at Indian Airports, so C.V. is negative, showing downward trend.
  - Consumer propensity to travel is low.

**B) Frequency Analysis**



Graph1.1

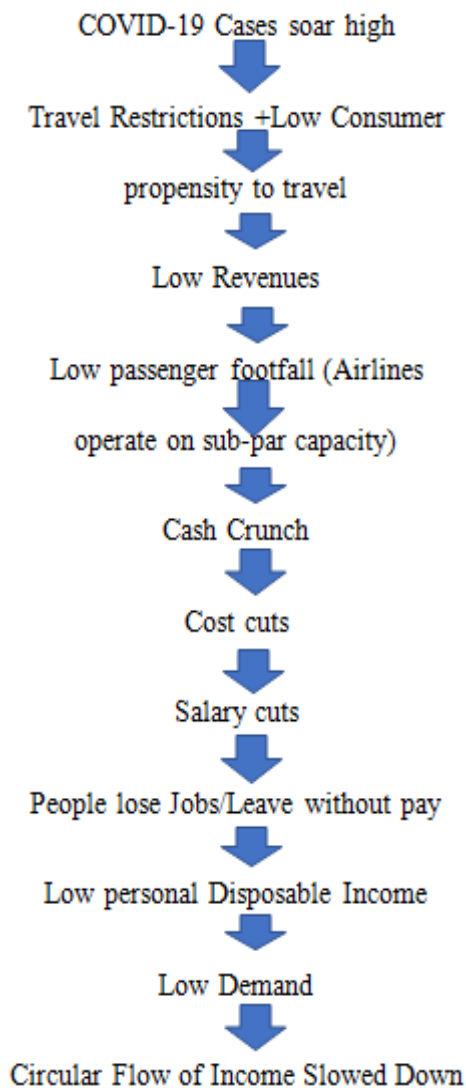
| MONTH   | Intl. | Domt. |
|---------|-------|-------|
| Sept'19 | 0.2   | 0.2   |
| Oct'19  | 3.7   | 2.7   |
| Nov;19  | 4     | 10.5  |
| Dec'19  | 2     | 1.9   |
| Jan'20  | 0.2   | 1.5   |
| Feb'20  | -3.4  | 9.8   |
| Mar'20  | -56.2 | -32.9 |
| Apr;20  | -99.1 | -100  |

Table1.3

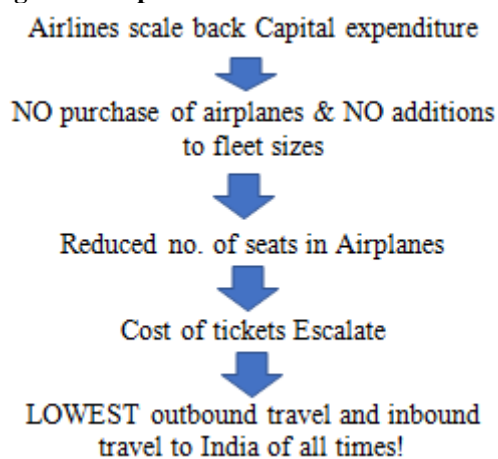
**Finding:** Passenger traffic declined by 80% from Sep'19 - Apr'20.

- ❖ **Interpretation:** Downward trend shows-
  - Fall in passenger footfall.
  - Rise in unemployment due to low business and low revenues.
  - Downward trend in industries subsidiary to civil aviation like caterers associated with aviation and cab services.

**Analyzing Impact through Flow Diagram**

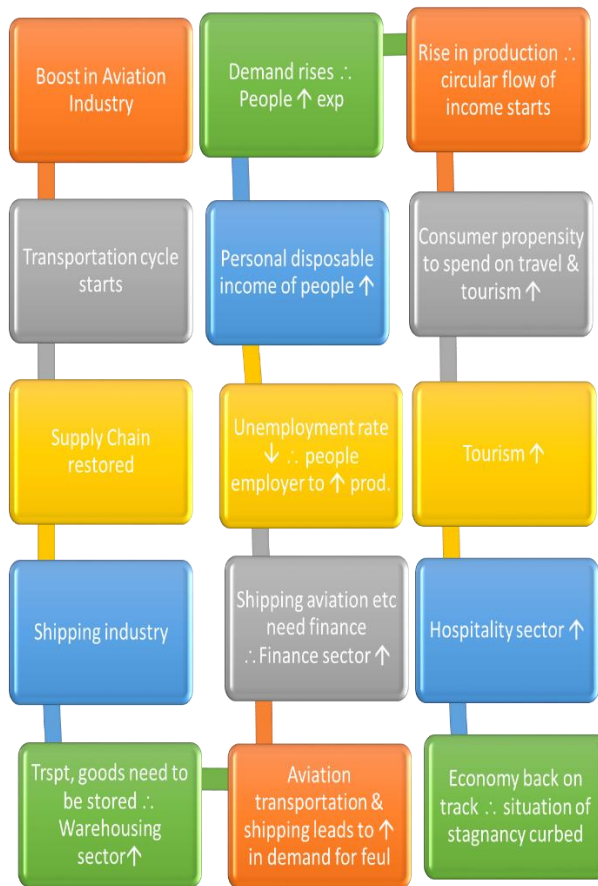


**B) Long Term Impacts**



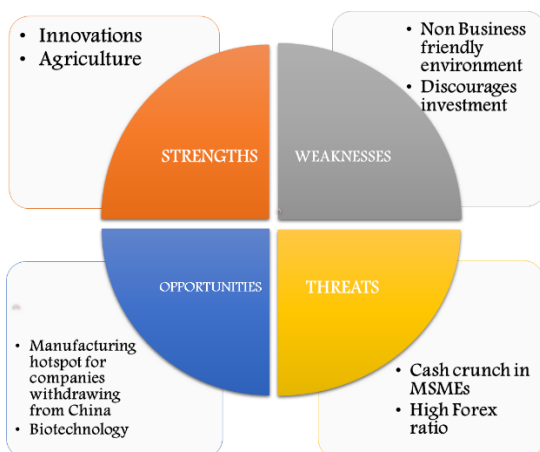
Explicit turbulence and stormy clouds for the Indian Aviation Industry as airlines operate on sub-par capacity, resulting in low booking, fall in revenues and low passenger load factor (PLF). Passenger growth of airlines is to fall sharply and register a negative 20-25% growth FY21.

**How aviation moves the cycle of Indian Economy**



Freight movements acted as support to overall traffic movements. Boost in aviation sector restarted transportation cycle and restored supply chains, as orders cancelled earlier were then replaced, transported and shipped. Subsequently boosting all other backward and forward linked industries from finance to hospitality (as shown above) and bringing the economy out of stagnancy thus improving consumer propensity to spend.

**SWOT: India After 2020**



A SWOT on India’s strengths, weaknesses, opportunities and threats due to the ongoing pandemonium that has severely affected India by creating a liquidity crunch leading to a lending crisis in the nation, causing distrust in INR, leading to a fall in the value of Indian Rupee while at the same time paving way for new opportunities in the field of biotechnology, food processing and health & fitness.

**If India Plays On Its Strengths**

**1) Innovations**

- IIT Roorkee and AIIMS Rishikesh together developed a portable ventilator – ‘PRANA VAYU’ for COVID patients at 50% less cost.
- A Kerala based start-up Asimov Robotics developed a robot that thermal scans humans (main idea – to reduce the risk of more people being diseased while thermal screening the masses).The robot was also deployed in hospital isolation wards to carry food and medicines over there and relieve medical practitioners of some pressure. Such innovations require immediate commercialization to go under mass production, which in turn shall lead to import substitution for India and prevent outflow of Foreign Exchange, reducing India’s trade deficit.

**2) Agriculture**

With 43.21% of India’s Labour force engaged in agriculture, agriculture sector is India’s real strength. Need of the hour is to educate Indian farmers. Educated farmers shall automatically explore new techniques of production and try to increase output per hectare. This will cause automatic development of infrastructure and modernization of agriculture to increase productivity. Moreover, farmers need to be made aware of the latest updates regarding weather and climate by IMD. This would increase knowledge about the day on which seed must be sown or by which date crops need to be harvested to avert them from getting destroyed by untimely rains. In order to sustain the demand for agricultural goods, investments in key logistics must be increased. E-commerce and delivery companies and start-ups need to be encouraged with suitable policies and incentives. Before Aatm Nirbhar Bharat, it is important to ensure self-sufficiency of villages or Aatm Nirbhar Villages.

**India’s Weaknesses Decoded**

**As per IMF there is a weaker economic environment in India. Many factors are responsible For Non-Business Friendly environment in India;**

- Lack of infrastructure and continuous energy/power supply
- Expensive land and costly transportation
- Complicated Labour laws
- No firmness in government policies

**Many economists are of the view that low investment growth is due to subdued confidence in Indian Inc. i.e. about rate of returns in the future.**

The above mentioned causes of a non-business friendly atmosphere in India discourage companies to invest in the

country. As a manifestation of this, India has been ranked 63rd in ease of doing business. Coupled with this Moody has also put India in the lowest investment return block due to COVID.

But in spite of this grim situation, of decreasing investments, contracting demands there are still

### A lot of opportunities on India's way

#### 1) Manufacturing Hotspot

After countries like Japan having already announced a 2.2 billion USD economic stimulus package for its companies shifting production from China and announcement by Indian govt. to ban Chinese products, it paves the way for India to become a manufacturing hub. It's an opportune for India to **harness manufacturing companies** wanting to withdraw from china.

Additionally, India's forecast GDP growth is 2.1% while China's forecast GDP growth is 1%, and for western nations and U.S.A it is in negative, adding to India's advantages.

#### 2) Favourable destination for Biotechnology

India has 3% share in **global biotechnology industry** and is a leading supplier of DPT, BCG, measles vaccines and BT cotton.

With GOI providing support to worthy biotech ideas through Biotechnology Ignition Grant and BIRAC, Bio NEST and BIRAC supported incubators working together to encourage start-ups, tech companies to enter into fields of drug discovery & chemical trials start-ups have started mushrooming pan India.

**But the future picture of great business opportunities is marred by many threats for India**

#### 1) Low Liquidity/cash crunch

Small businesses and businesses with weaker balance sheets are adversely affected due to the COVID-19 pandemic, owing to which frequent hire and fire in small businesses and MSMEs were seen as a cost cutting measure leading to low productivity.

Low productivity meant low revenues and fall in personal disposable income leading to fall in demand.

Financial institutions in India continue to face a difficult operating environment amid macroeconomic slowdown and weak funding conditions are a real challenge.

#### 2) High Forex ratio

Forex ratio (USD/INR) rose from 71.027 in Dec.'19 to 75.324 in June'20 despite an increase in Forex reserves, highlighting distrust/no faith in Indian Rupee.

High FOREX ratio directly impacted the price of raw materials imported by Indian producers and hence increased the cost of final product. Due to a rise in prices, demand for products fell down, worsening the slowdown of economy.

## Conclusion

This research concludes that the prevailing pandemic has adversely affected Indian Economy and there is a deep recession ahead with respect to aviation sector i.e. expected to contribute 70% of the losses this fiscal with 80% downfall in volume of passengers and rise in unemployment as C.V. shows a negative and larger value when compared with Pre-COVID times. Backward and forward linkages with aviation sector like cab services, caterers associated with civil aviation, hospitality and transportation shall witness a downward trend as depicted in Graph 1.1.

Despite government's efforts to avert lending crisis, lack of liquidity still prevails in small business. The study reveals that although GOI's policies are directed at improving availability of credit through state/central govt. guaranteed loans, MSMEs still suffer cash crunch. The study explained that increased Forex reserves and lower oil prices (which is a positive fallout for India as it imports 80% of its oil needs) are not enough to mitigate impact on cash flow as no efforts have been made to strengthen the demand side which drives the economy.

Keeping in mind the above mentioned aspects, this study identifies sectors with potential enough to translate into India's strengths such as Biotechnology & Drug Discovery which have seen significant growth in last 5 years and observed mushrooming of BIO-Tech start-ups pan India.

The present study highlighted that although manufacturing units intending to shift from China are looking up to India as their new production ground (a major opportunity for India to harness its growth focusing manufacturing), firm government decisions involving improved infrastructure and ruling out non-business friendly environment (because of which India had lost huge foreign investment to Vietnam earlier) are yet to be taken.

Despite being in the toughest possible condition Innovation and Agriculture sector persist to be India's greatest strength. Demand is to commercialize innovations like 'PRANA VAYU' (portable ventilator) for import substitution and prevention of outflow of foreign exchange. Furthermore, this study reveals the prompt necessity to educate farmers which is a pre-requisite for modernization of agriculture and infrastructural development of the same. India is in a dire need to track its consumption expenditure along with employment data for policy intervention. There is an enormous, unprecedented, economic pain in the times to come. Bad policy measures can even derail economic revival whereas good policies can minimize the suffering of masses

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