International Journal of Mechanical Engineering

# A COMPARATIVE STUDY ON THE ECONOMIC SET BACK AND GLOBAL REVIVAL DURING SARS RECESSION AND COVID-19 ON AVIATION INDUSTRY

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Abstract:- Aviation Industry is one of the hardest hit global industries since the very beginning of the crisis. The ongoing covid-19 pandemic has resulted in a full-scale global transportation crisis. It became quickly evident that it would evolve in a crisis like no other bringing the industry into survival mode, impaired by the loss of traffic and revenues. The tightest international travel restrictions in the modern era of flight with the economies worldwide. Consumers will face lower real travel costs as airlines will continue to significantly discount ticket price to stimulate demand. This study aims to understand the impact of SARS, Recession and coronavirus(covid-19) outbreak on Aviation sector around the world and the challenges faced and the strategies adopted to overcome such trivial situations. The GDP (Gross domestic product) of the Aviation Industry has shown a very sharp dip during these crises but covid-19 has paralyzed the society for longer with stricter government measures. The recovery process seems much slower than anticipated and will take much longer time as compared to the other two periods as it has affected the entire globe.

**Keywords:** Aviation Industry, covid-19, virus outbreak, challenges faced, strategies adopted.

## INTRODUCTION

The aviation industry encompasses almost all aspects of air travel and the activities that help to facilitate it. One of the major factors contributing to this immense growth is the sustained GDP growth globally and the increased purchasing power of the people over the last decade which had led to the growth of aviation industry. The SARS and covid-19 pandemic had a significant impact on the aviation industry due to travel restrictions. The great recession refers to the economic downturn from 2007 to 2009 global financial crisis. Even though there is impact on the aviation industry during the covid-19 crises, the civil aviation industry globally has emerged as one of the fastest growing industries in the countries. India has become the third largest domestic aviation market in the world and is expected to overtake UK to become the third largest air passenger market by 2024. This study focuses on understanding the impact of aviation Industry globally

during SARS, Recession and Covid-19 Pandemic. It also tries to bring out the strategies adopted to overcome the crisis scenario on a comparative basis.

Severe acute respiratory syndrome (SARS) is a rapidly spreading, potentially fatal infection viral Disorder. In step with the facilities for ailment manipulate and Prevention (CDC), SARS changed into diagnosed as a worldwide chance in March 2003. The viral disorder first appeared in Southern China in November 2002 and spread to more than 24 countries in Asia, Europe, North the United States, and South us. China has

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Vol.7 No.8 (August, 2022)

reported some instances of SARS in December 2003. Chinese fitness care experts have increased the notice of signs and organized to apply proper contamination control measures to Prevent some other outbreaks. There have now not been any new cases of SARS seeing that 2004, and the danger is surprisingly low.

Great Recession was a period of marked general decline (recession) discovered in national economies globally came about between 2007 and 2009. The recession was not felt similarly round the arena; while a maximum of the world's developed economies, specifically in North America, South us, and Europe, fell into a severe, sustained recession, much greater lately advanced economies suffered ways much less effect, specifically China, India, and Indonesia, whose economies grew substantially during this period. In addition, Oceania suffered a minimum the effect, in component due to its proximity to Asian markets.

Coronavirus disease 2019 (COVID-19) is a contagious sickness resulting from excessive acute respiration syndrome coronavirus 2 (SARS-CoV-2). The first acknowledged case changed into identified in Wuhan, China, in December 2019. The disorder has to see that spread international, main to ongoing pandemic. An ongoing pandemic. Symptoms of COVID-19 are variable, but often encompass fever, cough, headache, fatigue, breathing problems, and lose of smell and taste Symptoms may additionally start one to 14 days after exposure to the virus. As a minimum, a third of folks that are inflamed do no longer increase substantive signs. Of these people who expand 02signs and symptoms significant sufficient to be classed as sufferers, most (81%) broaden mild to moderate symptoms (as much as slight pneumonia), while 14% broaden extreme signs and symptoms (dyspnea, hypoxia, or greater than 50% lung involvement on imaging), and 5% suffer crucial signs (respiration failure, surprise, or multiorgan dysfunction). Older people are at a higher chance of developing intense signs. Some people continue to revel in more than a few consequences (long COVID) for months after recovery and harm to organs have been observed. Multi-year studies are underway to further investigate the long-term results of the disease.

# **Impact of Recent Pandemic COVID-19 on Aviation**

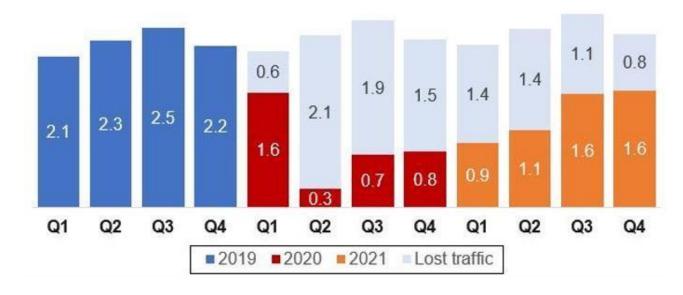
The effect of the COVID-19 disaster is forecasted to eliminate an extra four.7 billion passengers via 12 months quit 2021 as compared to the projected baseline (pre-COVID-19 forecast for 2021), representing a decline of 47.5% of worldwide passenger site visitors (see desk 1). As compared to the 2019 degree, the decline is forecasted to be -forty-three. 6% with the aid of year-end. The primary zone of 2021 is predicted to show little signs and symptoms of improvement in comparison to q4 2020. As the vaccination rollout and vaccine uptake will increase, greater passengers are expected to go back to travel with the biggest surge in Q3 and q4 of 2021. similar to 2020\*\*, Europe\*\* and the Middle East are forecasted to remain the two most impacted regions with declines of one% and 58.9%, respectively, in comparison to the projected baseline because of their excessive dependence on global travel and connectivity which can be improving at a slower pace than domestic travel.

Following its early beginning to restoration, Asia-Pacific will outperform all different regions in every region of 2021 and is forecasted to give up the yr 2021 with an estimated site visitors lack of 40.3% compared to the projected baseline (a decline of 35.1% as compared to the 2019 degree). Driven through the combination of a quick-improving US home market and strong vaccination rate, North us forecast for 2021 will significantly enhance and the location is expected to end the 12 months 2021 at 43.5% in comparison to the projected baseline (or - 39.9% compared to 2019 degree). worldwide passenger visitors are predicted to stay susceptible in the first half of 2021, but early signs are pointing to an enormous surge in air journeys call for the second 1/2 in 2021 as increasingly people get vaccinated and the global journey restrictions are progressively eased. Whilst international passenger site visitors' volume will nevertheless lag nine behind home site visitors in 2021, its miles forecasted to cease the 12 months above 1.6 billion passengers or four% of the 2019 stage (see Chart 2). International passenger traffic commenced its route to recovery quicker than international traffic. Globally, home visitors will continue to boom in 2021 to reach near 5 billion passengers by means of the cease of 2021 correspond to 65.6% of the 2019 degree (see Chart 2). Find more details as well as regional breakdowns in **Table 1**, **Table 2** and **Chart 1**, **Chart 2** 

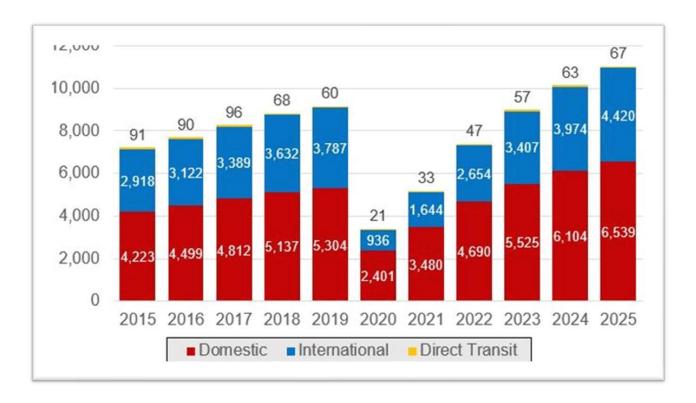
Table 1: The impact of the COVID-19 crisis on quarterly passenger traffic by region (2020-2021, Rounded in million passengers)

Region	2020						2021				
	Q1	œ	Q3	Q4	TOTAL	Q1	Q2	Q3	Qŧ	TOTAL	
	Projected baseline (pre-COVID-19)*					Projected baseline (pre-COVID-19)*					
Africa	56	58	68	62	244	60	63	74	67	263	
Asia-Pacific	860	858	893	894	3.505	899	897	932	932	3.660	
Europe	495	663	779	585	2.502	508	680	798	579	2.585	
Latin America-Caribbean	178	169	182	180	708	184	178	189	188	737	
Middle East	105	105	117	104	431	110	111	123	109	453	
North America	477	542	553	518	2.089	491	558	569	534	2,152	
World	2,170	2,395	2,592	2,323	9,480	2,253	2,484	2,684	2,409	9,830	
	Estimated under COVID-19**					Estimated under COVID-19**					
Africa	48	1.5	11	21	79	26	27	32	31	116	
Asia-Pacific	545	152	304	355	1.356	437	459	568	722	2.188	
Europe	381	25	213	119	739	110	209	453	303	1.075	
Latin America-Cari bbean	152	10	37	77	275	77	85	102	113	377	
Middle East	81	3.7	16	28	127	31	37	58	60	186	
North America	386	59	155	182	783	207	255	385	389	1,216	
World	1,592	251	737	779	3,359	888	1,073	1,578	1,619	5,157	
	1	Esti	nated traffic	loss			Estiv	nated traffic	loce		
Africa	-10	-56	-57	-41	-165	-34	-35	-42	-38	-147	
Asia-Pacific	-315	-708	-588	-539	-2,148	-482	-438	-383	-211	-1,474	
Europe	-114	-638	-566	-445	-1.764	-398	-471	-345	-276	-1,490	
Latin America-Cari bbean	-25	-159	-145	-104	-433	- 107	-91	-87	-75	-360	
Middle East	-23	-102	-101	-78	-304	-79	-74	-85	-49	-267	
North America	-90	-483	-397	-336	-1.307	-284	-303	-204	-144	-936	
World	-578	-2,145	-1,855	-1,543	-6,121	-1,364	-1,412	-1,106	-790	-4,673	
	Estimated traffic loss (%)					Estimated traffic loss (%)					
Africa	-17.2%	-97.4%	-83.9%	-65.8%	-87.8%	-56.9%	-56.3%	-58.7%	-53.4%	-55.8%	
Asia-Pacific	-38.6%	-82.3%	-85.9%	-60.3%	-81.3%	-51.4%	-48.8%	-39.0%	-22.6%	-40.3%	
Europe	-23.0%	-96.2%	-72.7%	-78.8%	-70.5%	-78.3%	-69.3%	-43.3%	-47.8%	-58.1%	
Latin America-Caribbean	-14.3%	-94.2%	-79.8%	-57.6%	-81.1%	-58.1%	-51.8%	-46.0%	-39.7%	-48.8%	
Middle East	-22.4%	-96.5%	-86.1%	-75.0%	-70.5%	-71.8%	-88.4%	-52.9%	-44.9%	-58.9%	
North America	-19.0%	-89.1%	-71.9%	-84.9%	-82.5%	-57.9%	-54.3%	-35.9%	-27.1%	-43.5%	
World	-26.6%	-89.5%	-71.6%	-66.5%	-64.6%	-60.6%	-56.8%	-41.2%	-32.8%	-47.5%	

Chart:1 Projected global quarterly passenger losses due to the COVID-19 Crisis (2019,2020,2021) in billion passenger

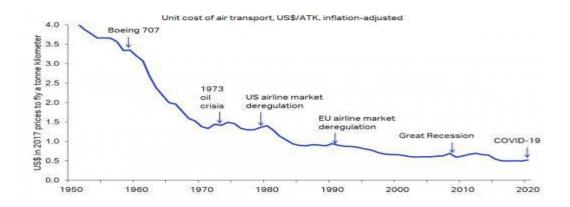


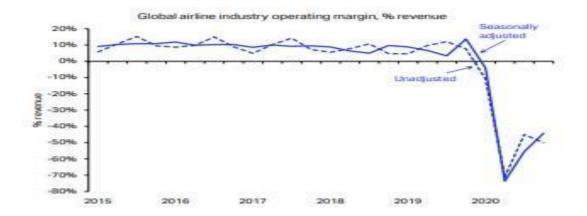
**Chart:2 Global passenger Traffic by type (in Million passenger)** 



# CHALLENGES FACED BY THE INDUSTRY

The air travel industry is one of the toughest affected sectors within the revenue due to the COVID- 19 Outbreak. It's miles common in maximum international locations with tour restrictions, tour bans, and cancellations of flights with the coronavirus problem. The available facts on the global Civil Aviation Industry (ICAO) shows a 38% decrease in international overall air ability in March 2020. Consistent with ICAO facts, the number of global passengers declined from 44% to 80% in 2020 because of the COVID-19 outbreak. The air bookings display the very best decline global. Asia and the Pacific location (-98%) show the biggest drop and started to decline earlier; with the advent of tour regulations in China. Air bookings from Europe (66%), the America (-67%), Africa, and the middle East (65%) all had excessive declines in the first quarter of 2020. IATA Forecasts a complete lack of 113 billion US\$ to the airline industry.





## RELATED WORK

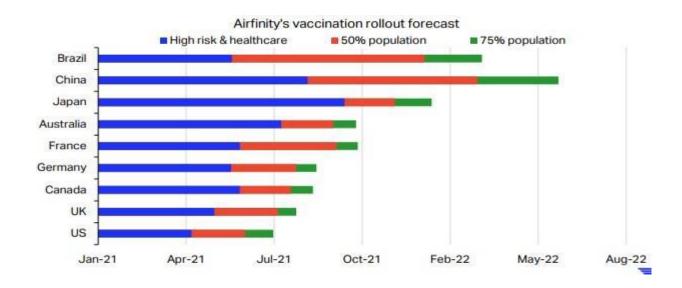
As these days as 2019, the Aviation Industry Reference Committee (IRC) capabilities Forecast (Aviation Enterprise Reference Committee, 2019) identified the Australian aviation enterprise as one of Australia's biggest and unexpectedly developing industries. The enterprise report mentioned shortages of skilled Aviation specialists along with pilots, flight teachers, and renovation engineers paving the manner for new graduates to sense assured of their destiny career possibilities. But, the COVID-19 Pandemic, which noticed the grounding of airways nationally and globally as international locations tried to Include the virus, has resulted in not most effective process losses within the industry but also organizational closures and restructuring of human assets (Albers and Rundshagen, 2020; Tanriverdi et al., 2020). This resulted in the forecasted requirement for aviation positions now not being a pressing Requirement (IATA, 2020a). IATA (2020c) has predicted it can take approximately four years for the industry to get better and return to pre-COVID-19 operational degrees. The themes of career surprise and undergraduate aviation programs were illuminated in a restricted range of studies. (Peter Miania, Tarryn Killea, Seung YongLeea, YahuaZhang, Paul Raymon22d Batesa 2021)

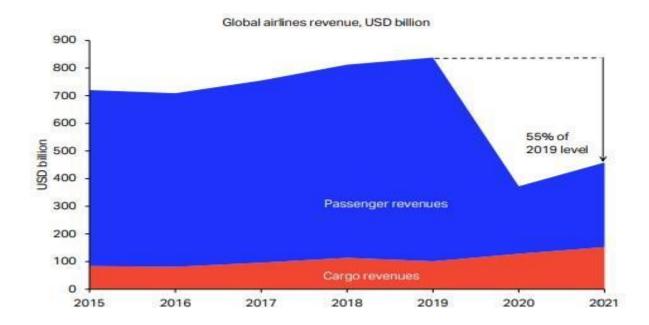
# STRATERGIES ADOPTED TO OVERCOME CHALLENGES AND MINIMIZE ECONOMIC SHOCK IN AVIATION SECTOR

According to a press launch from IATA, to correctly restart aviation in energizing travel and in tourism sectors and widening the economic system, the government needs to start that specializing in danger control to guard the livelihood and their lives. It also urges the Governments to make plans in restarting the arena whilst the epidemiological scenario allows to re-open borders. Employment aid fee-cutting and authorities' monetary comfort degree and capital markets were supplied to a few airlines to prevent bankruptcies. The industry will get better with more authorities' remedy measures with employment guide applications (IATA press release). Others may must raise budget from banks or capital markets with a purpose to finally boom the industries debt burden. Price containment/ discount where ever possible can be a key element in restoring economic health (IATA Press launch). Expanded tour value will simply slow down the economic recuperation consequently calls for cost discounts on all sides as the key to healing awareness. The call for the journey is simply choosing up from the standstill function brought about because of tour restrictions, Quarantines and lockdowns. IATA estimates home markets to get better quicker with 96% of precrisis stage as in 2019 within the second half of 2021 accounting for 48% improvement on 2020 overall performance while in comparison to the global Markets which remained at 86.6% down on pre-crisis stages over the first quartile of 2021. This is largely due to accumulated disposable income, Pent-up call for and absence of domestic tour regulations. Vaccination progress in developed nations mixed with sizeable trying out talents will assist to revive faster inside the global Passenger visitors. Cargo has outperformed the passenger commercial enterprise in the course of the disaster and the call for cargo are anticipated to grow via thirteen.1% over 2020 and attain 63.1 million tones that are closer to the pre-disaster height in 2018. Revenue from shipment accounts for one-third of the industries sales are extensively above shipment's ancient contribution.

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Vol.7 No.8 (August, 2022)





### RESEARCH METHODLOGY

This study involves quantitative approach to understand the aviation Industry and its contribution to the economy. To understand the economic impact of Aviation Industry during SARS, Recession and Covid-19 Pandemic, To Analyze the impact on Aviation Industry during the period of SARS, Recession and covid-19. To understand the Strategies adopted to overcome the crisis during their respective recovery period.

### RESEARCH DESIGN

Research design in a scheme, that provides answer to research problem. It in collecting and arranging and analysis the data to combine relevance with the research purpose. The study adopted qualitative analysis as it is. For this purpose, secondary data from various source (IATA), (NCBI.com) studied and analyzed and explained

### **CONCLUSION**

This observation specializes in the effect of the SARS and COVID-19 outbreak on the sector of Aviation Industry. The outbreak is a unique pandemic that significantly impacted the lifestyle of the majority of people throughout the globe. The vital economic surprise to everyone and every enterprise in maximum international locations are the most common function of the novel coronavirus. COVID-19 has a huge effect on monetary growth worldwide and creates a financial recession due to quarantines, journey restrictions, and social distancing. The various report said that the hundred% travel regulations on international destinations in 2020 had the hardest hit in the Aviation Industry, as compared to the other trades. The unavailability of sufficient information regarding the outbreak of COVID-19 is extra hard to factor out a selected have an effect on the Aviation enterprise. The examiner discovered the decline of Aviation sector sales inside the global and areas inside the international in 2020. It additionally in addition evaluated an unexpected decrease in the air journey industry, inn industry, and employment. Accordingly, it could be concluded that the COVID-19 pandemic generation hit hard within the Aviation Sector

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