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INDUSTRY OUTLOOK

AVIATION INDUSTRY: PROSPECTS AND CHALLENGES

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INTRODUCTION

These are difficult times-times of great challenge and turbulence. These times are characterized by volatility, uncertainty, complexity and ambiguity (VUCA), disruptive innovations and stiffer regulatory compliances. No country can be an island in this time of greater resonance of “Vasudhaiva Kutumbakam”, i.e., the world is one family. Hence, the growth and development of the aviation industry needs to be looked at in the context of global and domestic developments because of the inter-dependencies and inter-linkages of the global financial architecture.

A global flashpoint in Israel and Palestine on top of the Russia- Ukraine war for close to two years has intensified geo-political dynamics. With a ground invasion of the Gaza Strip, mounting casualties, wanton destruction and rising geopolitical tensions, things are worsening. There are lurking fears that things could take a turn for the worse in the China-Taiwan relationship and the forcible eviction of possibly 1.7 million people out of the roughly 4 million Afghans living in Pakistan. Hence all these aspects need to be placed in the backdrop of the COVID-19 pandemic, which is widely considered to be one of the most severe economic and medical emergencies in the last hundred years.



The nearest comparisons are the Spanish flu of 1919 and in terms of the hit to income, output and employment; it was also seen as the most severe debilitating crisis, much more than the Global Financial Crisis of October 2008 and even the Great Depression of 1929. No wonder, then, the World Economic Forum's Global Risks Report 2023¹ characterized the present situation as 'polycrisis' to stress that "present and future risks can also interact with each other to form a 'polycrisis' - a cluster of related global risks with compounding effects, such that the overall impact exceeds the sum of each part". Aspects of poly-crisis include the Russia - Ukraine war, recovery from the COVID-19 pandemic, geopolitical tensions and fragmentation, international financial architecture, industrial policies, climate change, etc.

Change is constant and ubiquitous. New competitive realities blurred industry boundaries, transformed standard practice and rendered conventional blueprint of development obsolete necessitating balancing of culture, process and people. There has been a confluence of innovation, big data, artificial intelligence (AI), machine learning (ML), deep learning (DL), robotics, analytics, internet and entrepreneurship. The present day world is characterized by transformation fuelled by the Internet, rapid technological growth, and rising globalization.

The World Economic Forum (WEF) has pointed out that the fourth industrial revolution occurred because of the velocity of change, scope of change and systems impact, e.g., telecom companies took 20 years to reach 20 billion messages a day, WhatsApp reached 34 billion messages a day in less than 7 years. These and other aspects of changes of tectonic proportions bring out the altered competitive landscape and customer segments in view of the winds of change sweeping the world.

In this setting, the World Bank Group in its important publication Global Outlook forecast forecasted that global growth is expected to decelerate from 3.5 per cent in 2022 to 3 per cent in 2023 and to 2.9 per cent in 2024², well below the historical average of 3.8 per cent. The IMF report said "despite war-disrupted energy and food markets and unprecedented monetary tightening to combat decades-high inflation, economic activity has slowed but not stalled. Even so, growth remains slow and uneven, with widening divergences."

The International Monetary Fund (IMF), however, raised India's GDP projection to 6.3 per cent in its recent World Economic Outlook. The growth in India is projected to remain strong at 6.3 per cent in both 2023 and 2024.³ But the October report did not consider the impact of the Israel-Hamas war. Global inflation, which spurted to 9.2 per cent in the aftermath of the Russian invasion of Ukraine, fell to 5.9 per cent in 2023 as central banks across the world raised interest rates to cool down high prices. The IMF projected inflation at 4.8 per cent in 2024, but with heightening tensions in West Asia, inflation could spiral with a debilitating impact on India through higher crude oil prices, uncertainty over the India-Middle East-Europe Economic Corridor (IMEEC), depreciating rupee caused by the widening trade deficit, bearish stock markets and falling trade, particularly to the war-ravaged area.

GROWING AVIATION INDUSTRY

The Indian Aviation market is the third largest and one of the fastest growing markets in the world. The Aviation Industry is a major contributor to global economic prosperity because of significant multiplier effects. The industry generates economic growth, creates jobs, facilitates international trade and tourism. It not only transports passengers from place to place but also greatly contributes to the transportation of all types of cargo around the world. The tourism industry is heavily dependent on aviation. The development and promotion of the tourism industry helps the economy and employment sector - both domestically and globally.⁴

The COVID 19 pandemic devastated the aviation industry because of the disruption of the supply chain and the steep decline in air travel because of the restrictions on air travel. The geo-political tension between Russia and Ukraine further dented the industry.

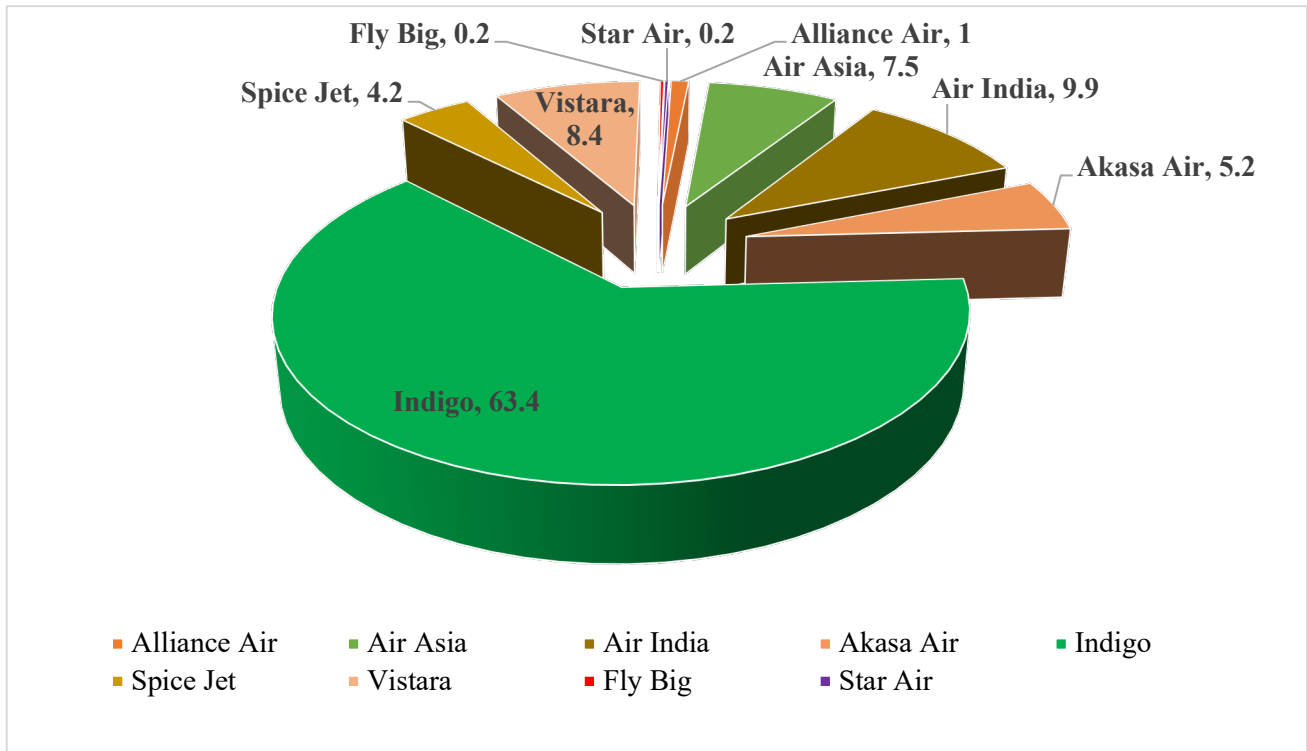
Despite the debilitating hit to the industry for well over two years, the aviation industry is back to the pre-Covid level performance and is now steadily gaining traction. According to the International Air Transport Association (IATA) press release dated June 5, 2023, the airline industry's net profits are expected to reach \$ 9.8 billion in 2023, which is more than double the previous year's (December 2022) forecast of \$ 4.7 billion. The operating profits are expected to reach \$ 22.4 billion in 2023, which has improved over the December forecast of a \$ 3.2 billion operating profit. Around 4.35 billion people are expected to travel in 2023.⁵

MAJOR PLAYERS IN THE AIRLINE INDUSTRY

Indigo and Air India are in a commanding position in the domestic Indian aviation market. According to a newsletter dated June 16, 2023, Indigo commands over 60 per cent of India's domestic market. In May 2023, Indigo's share was 61.4 per cent, Air India had a share of 9.4 per cent, Vistara stood at the third position with a market share of 9 per cent. Air Asia India was at the fourth spot with a market share of 7.9 per cent, followed by SpiceJet, Akasa Air and Go First with 5.4 per cent, 4.8 per cent and 0.4 per cent, respectively. During the month of May, Akasa was the most punctual airline in India.⁶

According to DGCA July 2023 data, Indigo had a share of 63.4 per cent, Air India had a share of 9.9 per cent, Vistara had a share of 8.4 per cent, Air Asia had a share of 7.5 per cent, Akasa Air had a share of 5.2 per cent, Spice Jet had a share of 4.2 per cent, followed by Alliance Air, Fly Big and Star Air with 1 per cent, 0.2 per cent and 0.2 per cent, respectively (presented in Figure 1, below).

Figure 1: Market Share of Major Players in July 2023 (%)



Source: According to the DGCA data, <https://www.dgca.gov.in/digigov portal/?page=jsp/dgca/InventoryList/dataReports/aviationDataStatistics/airTransport/domestic/airTraffic/July2023.pdf&main4264/4206/sericename; pg-3>

In August 2023, Indigo maintained its top position as the country’s largest airline with a 63.3 per cent market share.

IndiGo currently serves 74 domestic and 26 international destinations. The airline is flying approximately 1,600 flights a day now, of which 150 are international and operates international flights from 16 airports across India. In an attempt to consolidate its already well-entrenched position in the aviation industry, Indigo signed its seventh codeshare agreement with Virgin Atlantic (similar agreements exist with Turkish Airlines, Qatar Airways, Air France, KLM, Qantas and American Airlines) on September 1, 2022 to widen its network further. Indigo and Virgin Atlantic will facilitate passenger journey to India, the USA and the UK and enable their customers to enjoy even more business and leisure destinations. Going ahead, Indigo is expected to perform commendably because of the incessantly rising business convexity in terms of competitive position and expansion of destination.

Vistara moved up and captured 9.8 per cent of the domestic aviation market compared to 8.4 per cent in July. The domestic market share of Akasa Air slipped to 4.2 per cent in August from July’s 5.2 per cent as some of its pilots resigned to join rivals during the past few months which led to cancellation of its flights, with the airline sliding to the sixth spot. The market share of Air India was 9.8 per cent and Air Asia India’s market share stood at 7.1 per cent.

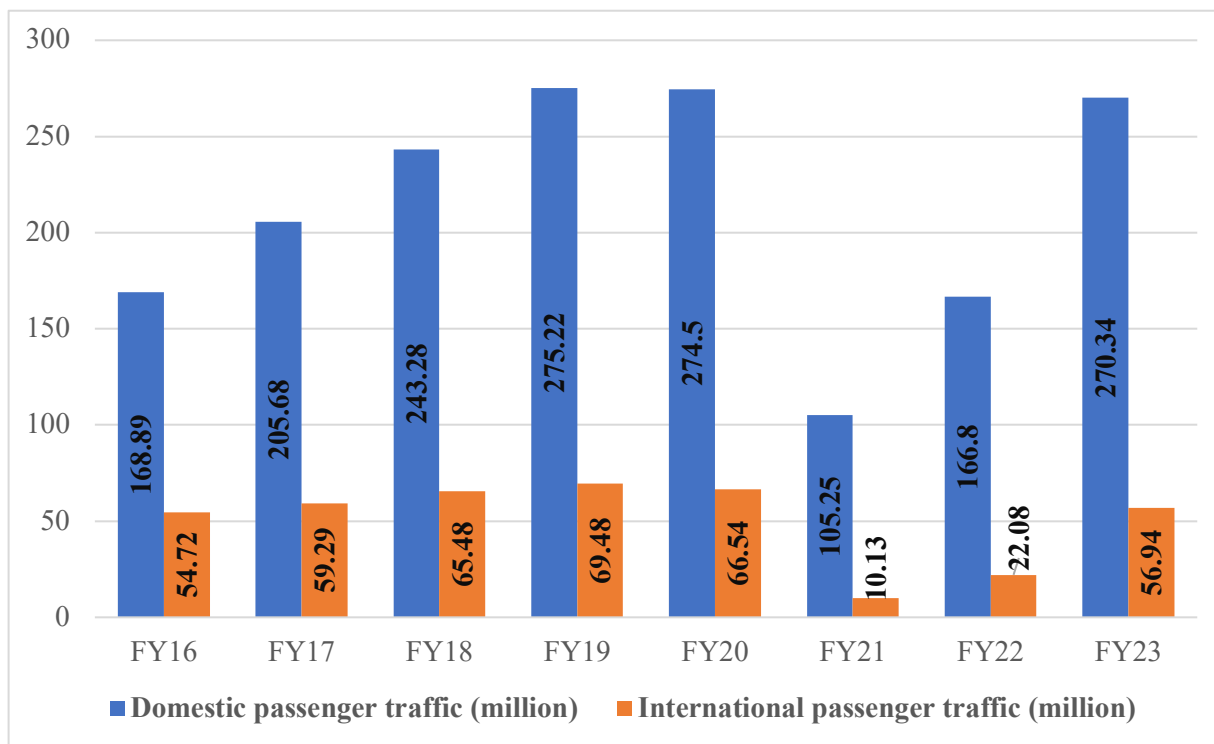
In terms of occupancy, Vistara topped the list of airlines as it registered a 91.3 per cent passenger load factor in August, SpiceJet was ranked second with 90.9 per cent load factor. The load factors of Indigo, Air India and Akasa were recorded at 83.6, 84.5 and 87.3 per cent, respectively.⁷

AIR TRAFFIC – DOMESTIC AND INTERNATIONAL

During January-June 2023, passengers carried by Indian domestic airlines were 760.93 lakhs, as against 572.49 lakhs during the corresponding period of 2022.⁸ In FY23, passenger traffic, both domestic and international combined, stood at 327.28 million as against 188.89 million in FY22. Passenger traffic has increased by 138.39 million in FY23 as compared to FY22.

Globally, the Indian domestic aviation market became the third largest and is expected to overtake the UK to become the third largest air passenger market by 2024. From FY16 to FY23, the domestic passenger and international passenger traffic increased at a CAGR of 6.95 per cent and 0.57 per cent, respectively, which can be inferred from figure 2.⁹

Figure 2: International and Domestic Passenger Traffic (in million)



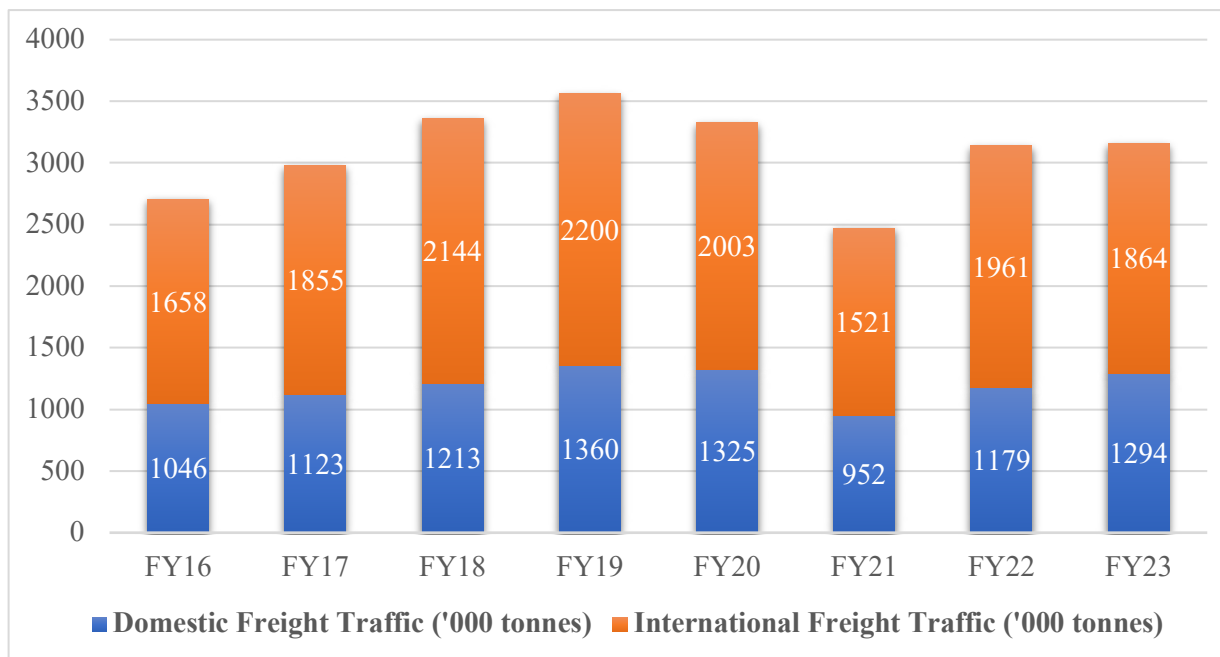
Source: According to the IBEF Aviation Industry Report (May 2023) data, https://www.ibef.org/download/1690789439_Aviation-May-2023.pdf

FREIGHT TRAFFIC

Freight traffic increased between FY16 and FY23 at a CAGR of 2.20 per cent from 2.70 MMT to 3.15 MMT. In FY23, freight traffic (domestic + international), stood at 3.15 MMT.

The growth in export and import in India will be the key driver for growth in freight traffic as 30 per cent of total trade is undertaken via airways. For the same period, domestic and international freight traffic increased at a CAGR of 3.7 per cent and 1.7 per cent, respectively. In FY23, international freight traffic was 1.86 MMT and domestic freight traffic stood at 1.2 MMT as can be seen in figure 3.¹⁰

Figure 3: International and Domestic Freight Traffic (in million metric tonnes)



Source: According to the IBEF Aviation Industry Report (May 2023) data, https://www.ibef.org/download/1690789439_Aviation-May-2023.pdf

GROWING DRONE INDUSTRY

Drones are advantageous across sectors for slashing turnaround time (TAT), enhancing efficiency, timelines of response, reducing wastage in freight, facilitating transportation and boosting profit and profitability. In the agriculture sector, drones are extensively used for crop monitoring, pesticide spraying and fertilizer application. They are also being adopted for mapping, surveying, and creating 3D models of terrain and buildings. Drone technology is heavily adopted in the defence and security sectors for surveillance, reconnaissance, and target acquisition. It is projected that the market for drones in India will grow at a compound annual growth rate (CAGR) of 10.23 per cent between 2023 and 2028.

According to the Government forecasts, the annual sales turnover of the Indian drone manufacturing sector is likely to exceed ₹ 900 crores. The annual sales turnover of the drone services sector is projected to cross ₹

30,000 crores in the next three years, which will, in turn, create over 5 lakh jobs in the country. The Indian government has taken various measures to support the sector and has set a target of achieving a \$1 billion drone industry by 2025. To promote the growth of the drone industry, the government has created a drone task force and launched a dedicated portal for drone operations. An amount of ₹ 120 crores has been allocated by the government for a PLI scheme to incentivize drone manufacturing in India.¹¹

INSTITUTIONAL INITIATIVES

In the Union Budget 2023-2024, the government has allocated ₹ 1244.07 Crore for the Regional Connectivity Scheme, which is higher than the previous budget allocation. Like the last year 2022-23 budget allocation, this year's budget allocation to the Krishi Udaan Scheme is the same. An amount of ₹ 33 crore has been allocated to the PLI scheme for Drones and Drone Component in this year's budget.¹²(See Table 1 below)

Table 1: Budget 2023-2024 Allocation for Central Sector Schemes (In ₹ Crores)

Central Sector Schemes	Budget Estimates 2022-2023	Revised Estimates 2022-2023	Budget Estimates 2023-2024
Regional Connectivity Scheme (RCS)	600.71	1078.81	1244.07
Krishi Udaan Scheme	0.01	0.01	0.01
Production Linked Incentive (PLI) Scheme for Drones and Drone Component		40.00	33.00

Source: <https://www.indiabudget.gov.in/doc/eb/vol1.pdf>; pg-34

India Infrastructure Finance Company Limited (IIFCL) has approved loans worth ₹ 8,800 crore for airports and civil aviation infrastructure development in the country. IIFCL is one of the major financiers of airports in India. The passenger handling capacity is expected to increase from the existing 350 million per annum to 500 million per annum by the end of the current financial year and 2 billion by 2047.¹³

Only 74 airports were operational in the country till 2014. The government operationalized another 74 airports/Helicopters/Water Aerodromes by the end of March 2023 and the Government of India aims to take the total to 220.¹⁴

The government of India has taken several initiatives to fuel the Aviation Industry's growth. Through the National Civil Aviation Policy (NCAP) 2016, Regional Connectivity Scheme (RCS), etc., the government has added momentum to boost the sector's growth.

Regional Connectivity Scheme (RCS) Udan

RCS UDAN was launched by the government on 21st October 2016, to promote regional air connectivity by making flying affordable for the common citizen. The main idea of the scheme is to encourage airlines to operate flights on regional and remote routes through enabling policies and extending incentives. The aim is to enhance airline access across the country and provide air travel access to tier-2 and tier-3 cities. The

scheme was launched with the twin objectives of promoting balanced regional growth and making flying affordable for the masses.

The RCS UDAN scheme operates at three levels to ensure sustainability of regional routes:

- Reducing operating costs pertaining to operating flights on regional routes.
- Providing a market discovered subsidy for some of the seats deployed on these routes.
- Providing a three-year exclusivity period.¹⁵

The Krishi UDAN scheme was conceptualized to assist farmers in transporting agricultural products so that it improves their “value realization”, especially in the north-east and tribal districts. It was operationalized in December 2020.

According to a news article in the Financial Express dated February 15, 2023, the government plans to add 21 more airports under the Krishi Udan scheme, aimed at facilitating faster movement of agricultural produce in north-eastern, hilly, and tribal regions of the country. Under the Krishi Udan scheme 2.0 launched in October 2021, to promote transportation of perishable agricultural produce from the north-eastern, hilly, and tribal regions, the Airport Authority of India provides waiver of landing charges, parking charges, terminal navigation landing charges and route navigation facility charges to cargo aircraft.¹⁶

Production Linked Incentive (PLI) Scheme

During FY 2022-23, the Ministry of Civil Aviation (MoCA) disbursed an amount of ₹ 30 crores to the beneficiaries under the PLI scheme for drones and drone components. The government notified the Production Linked Incentive (PLI) scheme for drones and drone components on 30th September, 2021 to promote the indigenous drone industry.

The features of the scheme are:

- For the scheme, the total incentive is ₹ 120 crores spread over three financial years.
- The PLI rate is 20 per cent of the value addition.
- The minimum value addition norm for the scheme is 40 per cent of net sales for drones and drone components.
- The coverage of the scheme includes developers of drone related software also.
- Under this scheme, PLI for a manufacturer is capped at 25 per cent of the total annual outlay.¹⁷

SOME OTHER GOVERNMENT INITIATIVES

As part of efforts to improve ease of doing business in the aviation sector, the Indian Government has extended the validity of commercial pilot licenses (CPL) from five years to ten years. It is expected to reduce administrative burdens on pilots and aviation authorities and streamline the licensing process.¹⁸

The Indigo airline is set to connect two of the most popular tourist destinations in India. It has launched new flights between Jaipur in Rajasthan and Agra in Uttar Pradesh from October 29. Jaipur and Agra share strong cultural and economic ties. These new daily flights will further strengthen the ties while promoting both business and leisure travel between the two major cities.¹⁹

INDUSTRY RISK

The three major challenges for the Indian Aviation Industry are aviation turbine fuel (ATF), competition, and currency. The aviation fuel accounts for about 20-30 per cent of operating costs for Indian air carriers. The ATF price is greatly influenced by global crude oil prices. The factors determining the ATF price in India are global crude oil price, currency fluctuation, production of crude in various regions of the world, process refining, local government VAT, Tax, and duties. High operating costs lead to higher air fares.

As per the data of Aviation fuel prices as on August 1st, 2023, the ATF price rose by 7728.38 per kilolitre, or 8.5 per cent, to ₹ 98,508.26 per kl in New Delhi.²⁰ See figure 4.

Figure 4: Aviation Fuel Price in Major Metro Cities of India

CITY	RUPEES ₹		DOLLARS \$	
	₹/KL	₹/LIT.	\$/KL	\$/LIT.
Kolkata	107383	107.383	941.09	0.94109
Mumbai	92124	92.124	900.73	0.90073
Chennai	102391	102.391	897.83	0.89783
New Delhi	98508	98.508	902.62	0.90262

Source: <https://www.petroldieselpri.com/atf-aviation-jet-turbine-fuel-oil-price-in-india-and-cities>

India, being an importer of oil, the increase in oil prices exacerbates pressure on the finances. The impact is multifold because of the depreciation in the value of the rupee vis-à-vis the dollar. Airlines are also impacted by the sliding rupee. The lease rentals for the airlines are dollar denominated and airlines in India largely rely on leasing for their fleet requirements.²¹

NO PREDATORY PRICING

The Parliamentary Standing Committee on Transport, Tourism and Culture stressed in its report on the Ministry's demand for grants for 2023-24 that the airlines should not adopt predatory pricing under cloak of free market economy. The Committee recommended "a perfect balance has to be maintained between the commercial interest of the private airlines and the interest of the passengers so as to enable the private airlines to grow and at the same time the interest of passengers should also be kept in mind, so that they are not fleeced in the garb of commercialization". The report was tabled in Parliament on March 14, 2023. This came amid a sudden spike in air ticket prices during the peak travel seasons, including the upcoming summer vacation time.

In August last year, the Indian government had removed price caps on domestic airfares after a span of approximately 27 months. The Ministry had imposed lower and upper limits on domestic airfares based on flight durations when services were resumed on May 25, 2020 after a two-month lockdown due to the COVID-19 pandemic. When the caps were imposed, airlines could not charge a passenger less than ₹ 2,900 (excluding GST) and more than ₹ 8,800 (excluding GST) for domestic flights of less than 40 minutes. The

lower caps were intended to protect the airlines which were financially weaker and the upper caps to protect the passengers from higher fares.

The panel also observed that presently the surge in airfares does not reflect any sort of mechanism on part of the Ministry to control the fares, based on existing Aircraft Rules, 1937, as during surge in air fares the prices go beyond the acceptable or justifiable limits of 'reasonable profit and generally prevailing tariff'. While the government plans to make air transport affordable for the common man and the air capacity is being increased, there is no commensurate expansion of the capacity to bring in aircraft. This creates lack of airline tickets considering the high demand and leads to increase in the prices. The committee recommends "there should be a mechanism with the ministry such as capping of upper and lower prices to stop the practice of 'predatory pricing' or the sudden surge in prices... even though price buckets are being created as per international aviation norms, a close watch has to be maintained by the DGCA & the ministry and a mechanism should be devised to monitor the websites of various airlines to prevent them from misguiding passengers."

Further, the panel said that in case private airlines do not publish the correct information regarding fares, they should be penalized for it. "The committee observes that the Ministry of Civil Aviation has a responsibility to the travelling public and the nation at large to ensure that predatory pricing mechanisms are not adopted by the airlines under the cloak of free market economy. The committee recommends the ministry should formulate a pricing mechanism for air fares to ensure that passengers are not charged exorbitant prices." In sum, a judicious balance has to be struck between the commercial interest of the private airlines and the interest of the passengers for the salubrious growth of the sector while ensuring that the customers are not fleeced by the ills of the dynamic pricing and the free play of the unfettered market mechanism.

WAY FORWARD

Airline retailing is an integral element of airline revenue, projected to reach \$40 billion in value in the next seven years. Since payments constitute a significant portion of airline retailing, airlines may find it profitable to focus on the costs associated with them. Reducing payment costs would enhance customer experience by increasing payment options, ease, and customer loyalty. Airlines could potentially reap a further \$14 billion in value through strategically addressing payments.²² This sum of \$14 billion is made up of revenue from payments (\$8 billion), which could be generated by increasing sales of ancillary services, enhancing loyalty programs, and giving customers more flexible exchange and refund processes. A further \$2 billion in value lies in reducing payment cost, particularly for B2B or corporate sales, while \$4 billion could be generated through payment enablers to raise direct channel usage, and enhance payment conversion.

The aviation July-September 2023 financial results were languid because of the double whammy of seasonality discipline and higher crude price. Of late, the aviation industry in India has been in the news for all the wrong reasons, viz., pilot shortage at Akasa, the cancelled flights, and irate passengers and the hikes in passenger fares post this news within an hour. To be sure, these are areas of concern. But there is little doubt that over the long haul India is a huge market and with the continuous development of aviation infrastructure, existing airlines expanding their fleets, and newer/older ones coming into the business, we hope to see a rise in the competition eventually leading to getting the end user benefitted.

A recent book entitled *Aviation & Foreign Policy: Convergence* by Dr Sanat Kaul ²³ makes a strong case for connectivity to regional areas across India and includes incentives and even subsidies (where possible) on lines of the domestic UDAN. Other suggestions include incentivization of fast growing India outbound traffic and divert it to locations of our political advantage since China is already effectively using its huge outbound passenger traffic as a part of its foreign policy to reward and punish countries, India could also emulate the Chinese experience of convergence between aviation and foreign policy to consolidate the gains of development. India's Act East policy failed to adequately harness the soft power of Andaman and Nicobar Islands. There is a strong case for leveraging the immense latent potential by allowing international flights for high-value low-volume tourism.

Creating highly successful organizations is not possible in a vacuum. This process has to be placed in a proper historical and comparative perspective. In this setting, domain knowledge and big-picture issues facing the industries and organizations assume great significance. Towards this end, Airport-Centric Advanced Air Mobility (AAM) ²⁴ is an innovative concept. This broad concept is enabled by new technology with the potential to transform aviation and urban transportation systems over the next 10 years. Some of these technologies include electric vertical take-off and landing (eVTOL) aircraft as well as traditional fixed-wing aircraft using electric or other advanced propulsion systems.

In the flourishing post-pandemic aviation market, the aviation industry is well on the path of sustained growth and transformation recovering well from the ravages of the Covid-19 pandemic. With growing travel and tourism demand, opening of other economies and lifting of restrictions by the government due to plummeting Covid cases, have benefitted the aviation industry significantly. The increase in both domestic and international passenger traffic and the growing number of aircraft are positive signs of recovery. Augmented capacities by airlines and development of aviation related infrastructure are likely to provide an impetus to the air passenger traffic.

The Tata-owned Air India Express has set out an expansion drive deploying 50 Boeing 737 Max planes by the end of 2024. It is planning to expand to 30 international destinations including Bangladesh, Cambodia, China, Indonesia, the Philippines, Turkey, and Vietnam. Air India Express is aiming to corner second place, behind market leader Indigo in the Indian domestic market. The airline currently has 25 aircraft and is in the process of merging with Air Asia. The combined entity with the addition of 50 more aircraft will make it the second largest low-cost airline in the Indian market.²⁵

Akasa Air has recently received approval from the Indian Government to operate flights to Riyadh, Jeddah, Doha, and Kuwait. With this, the carrier marks its entry into the international market, taking a giant leap from its current domestic operations.²⁶

High fuel and oil prices have increased costs for airline operators. Going forward, it will be essential to have a close watch on the performance of the aviation industry and pay close attention to how inflation trends affect the industry. With the right pricing strategy by the airlines in conformity with the overall global and Indian economy scenario and the tailwinds as highlighted earlier, the aviation industry in India is likely to do well.

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