An Empirical Analysis of Indian Aviation Sector - Opportunities and Challenges

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Abstract:
India has become the third-largest domestic aviation market in the world. According to the International Air Transport Association (IATA), by the year 2030, India is expected to overtake China and the United States as the world's third-largest air passenger market. The Indian civil aviation industry has experienced rapid growth over the past three years and it is expected to grow rapidly in the coming years, driven by a number of factors, including a growing middle class, a rising number of business travellers, and the government imitative to develop the aviation infrastructure across India as the airport capacity in India is expected to handle 1 billion trips annually by 2023. This paper analyses the Indian aviation industry, micro and macro environment, opportunities and challenges faced by the airlines companies in India.

Keywords: Aviation, Airline, Airport, India, Challenges, Opportunities

Introduction:
Indian aviation has huge growth potential as largely it is an untapped market. While considering air travel is still expensive for the majority of the people in the country and out of which 40% is the upwardly mobile middle class which means the group of people who is expected to climb up the social ladder in the future. This group can also be called typically educated and employed in white-collar jobs. The government is trying to give a boost to this sector by launching the UDAN-RCS scheme and private-public partnerships (PPPs) which is allowing the government to utilize capital and private sector expertise to improve airport infrastructure and services and government believes that these PPPs will contribute a lot to its vision of developing 100 new airports by 2024 which was highlighted in the National Civil Aviation Policy 2016 by this government is aiming to provide affordable and economically viable and profitable travel for the companies.
In India we have 464 Airports and Airstrips and the two industry contacts are the Airports Authority of India (AAI) and the Directorate General of Civil Aviation (DGCA). Growth of Aviation Industry from 2000 to 2022

The Government of India is committed to operationalizing 1,000 UDAN routes and reviving and developing around 100 unserved airports, heliports, and water aerodromes, especially 68 water aerodromes by 2024 and Government of India has given in principle approval for 19 airports out of which 7 of them are developed through PPP model. Under National Civil Aviation Policy, 2016 an Airlines can start its international operations and will have to deploy 20 aircrafts or 20% of their total capacity (whichever is higher) of their total capacity for domestic operations.

AAI plans to invest Rs.25,000 crores (US$3.58 billion) in the coming five years to expand installations and structure at airfields. The Indian Government is planning to invest US$1.83 billion for the development of field structure along with aviation navigation services by 2026 and In 2019 85 AAI airfields were declared as Single-Use Plastic Free Airport Terminals

**Tax incentives and FDI**

Government has announced that there will be 100% tax exemption for airports projects for a period of 10 years and it has also exempted customs and countervailing duties for Indian aircraft MRO (Manufacture, Repair and Overhaul) service providers. Plans to abolish royalty and offer steep in lease and rent to encourage to set up MRO facilities at airport.

There has been a total US$3.61 billion FDI inflows in India’s air transport sector (including airfreight) between April 2000-September 2022.

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<th>100% FDI under Automatic Route</th>
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<td>1) For Greenfield Airport projects</td>
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<td>2) For schedule &amp; Regional &amp; air transport service &amp; domestic scheduled Passenger airline.</td>
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<td>1) 49% for FDI in aviation for foreign carriers.</td>
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Currently we have 5 PPP airports one each at Mumbai, Delhi, Cochin, Hyderabad, and Bengaluru they together handle around 55% of the air traffic in the country. India has approved 15 greenfield PPP projects which is expected to further boost the Indian air traffic these projects are expected to come up in the regions of Goa, Kerala, Puducherry, Karnataka (Bijapur & Gulbarga), Maharashtra (Navi Mumbai), West Bengal, Madhya Pradesh, Sikkim and Uttar Pradesh. The Government of Andhra Pradesh has also decided to develop greenfield airports in six cities (Nizamabad, Nellore, Kurnool, Ramagundam, Tadepalligudem, and Kothagudem) under PPP.

The Government of Maharashtra has also decided to develop the Nagpur airport on PPP basis and allotted Rs 100 crore for the same. The airport will be upgrading on a DBFOT (Design-Build-Finance-Operate-Transfer) basis which means Designing/Building/Finance - ing and operating will be done by a Private Player and later on handed over to the government after a certain period (Here it will be operated for a period of 60 years).
Indian Airlines: Demand, Capacity, and Passenger Traffic

India’s civil aviation sector has shown solid growth during the past years. The growth in domestic flights for ASK (available seat Kilometre) and RPK (Revenue passenger Kilometre) stood at 111,455 million km and 81,778 million km respectively in FY 22. During the year ASK grew at a CAGR rate of 3.5% from 2011-12 to 2021-22 at the same time RPK grew at a CAGR rate of 3.3%

In recent times there is a faster growth of people who are desiring to fly when compared to the growth rate of available seats on the flight. Due to this, there has been an increase in the average utilization of seats on the flights which we can expect more flights that will be full

Passenger Traffic

The Total Passenger Traffic stood at 188.89 million and 236.71 million in FY 2021-22 and 2022-2023 (up to December 2022) respectively this traffic include both domestic and international passengers. There has been steady increase of flying people in India since 2000 due to various factors such as rising income, low cost carriers and increasing connectivity of Indian aviation network. By 2036 India is expected to have 480 million flyers which more flyers when compared with Japan (with just under 225 million) and Germany (just over 200 million) combined

India now has become the third-largest domestic aviation market in the world and Indian airports have projected domestic traffic of 166.8 million in FY22 which is 58.5% year-on-year increase and international passenger traffic is projected at 22.1 million which 118% year-on-year increase when compared with FY 2020-21
Key airlines operating in India
There are 8 airlines companies in India:

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Note:
- On March 28, 2023 Air India Group blazoned that there will be complete integration of its two low-cost attachment airlines Air India Express and AirAsia India. This junction comes five months after AirAsia India was completely acquired under Air India, and three months after both airlines were put under a single CEO.
- On January 2022 TATA Group on boards Air India and it is anticipated to combine itself with Vistara by 2024.

Macroeconomic Challenges in Indian Aviation

- **Fuel Cost & Efficiency**

  The Aviation fuel is one of the important and major factor which is affecting the airline industry for decades. It is estimated that around Aviation fuel make up to 40% of the total cost. A spike in jet fuel prices has a direct influence on the financial portfolio of airline firms. The Russia-Ukraine conflict has increased the oil price due to which it is estimated that total operational costs from 2022 could be significantly higher than in 2021. Due to the growing demand for air travel airlines are managing but once this travel season ends Airlines might find it more challenging to manage the increase in fuel prices with respect to demand.

- **Aftermath of the COVID-19 pandemic:**

  The pandemic was among the greatest challenges the aviation companies ever faced, its impacts continuing even after travel restrictions are lifted. As per the IATA report, the pandemic erased essentially 20 years of gains in passenger traffic in one sudden blow. The report forecasts that by 2040,
air traffic would still be 6% below IATA’s pre-pandemic forecast, highlighting the long-lasting effect of the COVID-19 crisis

- **Russia-Ukraine conflict**
The conflict between Russia and Ukraine has brought along the imposition of various sanctions and the creation of a few no-fly zones which has created various challenges for the trading partners and various other key players in the market.

- **Infrastructure**
The aviation industry in India faces several infrastructure challenges, including the need for modernizing old airports, increasing runway capacity, upgrading air traffic management systems, and improving connectivity between airports and other transportation modes. These upgrades are essential for the industry's growth and competitiveness, but they can also have financial implications and pose challenges. Addressing these issues is crucial for the sustainable development of the Indian aviation sector.

- **Regulation**
The regulatory framework for the aviation industry in India is complex, involving multiple government agencies like the Ministry of Civil Aviation, DGCA, AAI, and BCAS. This complexity leads to challenges in obtaining permits and licenses and results in inconsistent application of regulations. Lack of clarity in policies and slow regulatory reform are major hurdles. The slow and cumbersome process of amending regulations hampers the industry’s growth and adaptability to changes. Stakeholders emphasize the need for transparency and accountability in the regulatory process, with more engagement and consultation. To enhance efficiency, the aviation industry requires a streamlined and transparent regulatory framework focused on clarity, consistent policies, faster reform, and improved stakeholder engagement.

- **Environmental Concerns**
The aviation industry faces significant environmental concerns due to greenhouse gas emissions from high fuel consumption and pollutant emissions. Balancing economic growth with environmental sustainability is a challenge, as aviation is essential for global connectivity. Transitioning to cleaner technologies is costly, requiring investment in research and development. Better coordination between stakeholders and regulatory agencies is needed to reduce environmental impact. Raising awareness and promoting sustainability within the industry are essential. Overall, addressing these concerns necessitates collaboration, investment, and commitment from industry stakeholders, government, and regulatory agencies.

- **Global Congestion**
Air congestion and passenger traffic is a new challenge which has no immediate solution. Airports nowadays are often crowded, and flight delays have turned out to become a regular thing. Most of the flights these days are always full with rise in desire if air travel this problem will keep growing and there is an estimate that in the Asia-Pacific region is expected to add around 2.5 billion passenger journey per year by 2040

- **Skilled Workforce**
The airline industry is facing a shortage of skilled workers due to the retirement of older workers, the increasing complexity of aircraft, and the growing demand for air travel. This is having a significant impact on airlines, leading to flight cancellations, delays, and increased costs
Conclusion:
The Indian aviation industry has undergone significant developments and growth in recent years. India has now become the third-largest domestic aviation market and by 2024 it is expected to overtake the UK and become the third-largest air passenger market in the world. The industry's growth and development is expected to continue in the coming years, making India an increasingly important player in the global aviation industry.

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