
Indian Aviation Industry- A disaster waiting to happen. An Economic Analysis

Parul Kochher*

Abstract

Indian Aviation Industry has undergone a sea change over the last decade. It has moved from expensive carriers to cheap economy travels affordable to the middle class. Due to the need for fast and comfortable intercity travels, the demand for this industry has expanded in recent past. Yet, we find that some of major players such as Kingfisher have been going through major turbulence. This shows that all is not well for the airline industry. The paper examines the growth of aviation sector in India after liberalization and privatization and finds that oligopolistic market in this industry has created unhealthy competition among players. Even though demand for this sector has been increasing, the industry is predicted to have major crisis sooner than later. Frequent price cuts and product differentiation, human resource problems, economic and financing problems have gripped the industry. Lastly, constraints arising due to infrastructure as well as the government's aviation policy are also responsible for problems in the sector. The paper at the end, suggests some steps to recover the industry from eminent disaster.

Key Words - Airline, Product differentiation, Infrastructure, Oligopolistic market.

Introduction

There were many reasons why government resorted to deregulation of Indian Aviation previously monopolized by National airlines carriers. There was a massive decline in profitability; the growing passenger demands could not be met; the organizational and managerial inefficiencies gripped the industry. In 1992, after a monopoly of almost 40 years, the government heralded on the path of the economic reforms and ended the monopoly in Airlines. The industry witnessed another major change in the year 2003 when budget flying Airlines were introduced. This meant lowering of fares to 17 % of what was being charged by others. These budget airlines took a major portion of the market share. Since then , Aviation market has grown in terms of number of players. At present private players account for around 75 % of domestic aviation market. The airline sector is controlled by DGCA (Director General

of Civil Aviation). The boom in Indian Aviation Sector could not continue any more. Many of the airline players today are grappling under sever financial crises. Airfares which were once supposed to be cheap, are sky rocketing at the moment. Some of the reasons for the collapse of multiple airlines are cited as constant strikes and depreciating rupee.

The objectives of the present paper are

1. To evaluate the market structure of the airline industry.

*** Ms. Parul Kochher**
Associate Professor, Economics
National Institute of Entrepreneurship
(NIE), NOIDA

2. To analyze deeply the reasons behind the present financial crises.
3. To suggest solutions which could revive the Industry?

Market Structure- The market structure of aviation industry is strictly oligopolistic in nature. The major characteristics of the oligopolistic structure are

1. Few players having large market shares.
2. Differentiated products.
3. Existence of barriers to entry in the form of high level of regulations and huge cost of initial capital.
4. Highly interdependent decision making- This means no player can take up a pricing decision independent of others.
5. Oligopolistic pricing leads to oligopolistic profits in the long run.
6. There is prevalence of third degree price discrimination.
7. Implementation of peak load pricing.

Cost-Revenue model:

The basic costs of the airlines consists of

1. ATF (Aviation Turbine Fuel) cost - This constitutes around 50% of the total cost
2. Employee cost
3. Maintenance cost
4. Landing, airport and navigating charges
5. General administrative expenses
6. Selling and distribution expenses
7. Other expenses

The basic revenue for the airlines comes from

1. Domestic and International revenues
2. Lease back and aircraft sale
3. Sub lease of aircrafts
4. Cargo and auxiliary
5. Significant rise in Interest expenses if we look at EBIT(Earning before Interest, taxes)

Pricing Strategies of the airlines:

As discussed above the structure of the market is one of differentiated oligopoly. Price is determined by the interaction of demand and supply. But since there are a large number of buyers, the airlines have

the market power to influence the price. Here they participate in third degree price discrimination. Charging higher price where demand is inelastic and vice versa. For example, fares remain high for business travel Airlines also compete on the basis of non price differentials like free meal on board, more friendly service, apex fares, brand loyalty and corporate discounts etc.

Problems afflicting the Industry:

The paper categorizes present problems of airlines in three ways e.g. (1) reasons for cost escalation (2) Problems of increasing revenue (3) funding problems (4) Government's aviation Policies.

Reasons for Cost Escalation :

Lack of trained Personnel in the industry especially pilots- There has been a growing demand of aircraft staff. This has in turn led to poaching of pilots and mechanics for which the staff costs are soaring. Many airlines have started shedding their old staff to save on costs and recruiting new blood so that both wage cost as well as productivity would increase.

High cost of flying due to high rates of aviation turbine fuel- The aviation turbine fuel accounts for 40 % of input costs of airlines. Crippling cost of oil has badly affected the industry. But what can't be denied that this is a valuable source of revenue out of which fuels like kerosene and diesel used by the poor are subsidized. Along with high price of fuel, the oil companies have started demanding daily cost payments for fuel else they would stop the supply. The high cost of fuel has marred the competitiveness of Indian aviation industry. This was thus a reason for airlines cancelling their flights frequently.

Rising labor costs due to labor conflicts- Frequent strike by pilots, lack of commercially trained pilots and inflexible labor laws have crippled the airline industry.

Pilots of airlines such as air India and Kingfisher are seen frequently going on strikes. Their strikes encourages other aviation staff to go on strike too. Frequent strikes increase cost and lead to revenue loss.

Reckless expansion - Reckless expansion of fleet has led to the growth of capacity by 30-50%. This fleet expansion is being done on lease agreements and debt financing. All this has crippled the basic capital structure and rendered the airline industry weak. This itself has resulted in non viability of most airlines. But another side of the story still remains that most of the airlines have ageing problems and lower fleet capacity if we compare it in terms of the global scenario.

Cost effectiveness of given investments- The cost problems are further intensified when the rates of currency in different countries are converted in terms of dollar exchange rate and inflation rate.

Most airlines have achieved a cost threshold. When we compare the airport hub charges in India, it is more than 50% in comparison to major airports of the world such as Heathrow. Talking further of charges, if this was not enough, Delhi Airport authority of India limited is deciding to increase cost by 340 %. If this is the scenario, Delhi airport would become the costliest in the world.

Problems of increasing revenue:

Revenue of Indian aviation industry is low in comparison with world aviation sector. Even after reducing prices, the industry hasn't achieved any increase in revenues. The industry has been incurring cumulative losses in recent times. Table 1 present comparative revenue and costs of major players in the industry. Losses of Indian airlines is the highest followed by Kingfisher (which had acquired air deccan amidst much fanfare). Carriers like Jet airways and Kingfisher decided to shut operations of their low cost carriers. The only exception in this situation is indigo, the low cost carrier which has posted net profits.

Price competition - The industry sees new players entering the industry even before the existing ones are able to stabilize their operations. Existing Players tend to opt for Predatory Pricing in order to reduce competition. This kind of predatory nature of pricing has resulted in an unsustainable yield-cost imbalance. The airlines are sometimes seen to be operating even below their basic cost. This is also the result of gaining of major market share by the LCC which do not offer

food and other services like TV viewing layers. The existence of too many players means that some would perish and few would survive. Though in major aviation markets of the world, we see only handful of players, the reckless expansion in Indian aviation sector is taking place without any due consideration to Capital requirement.

Weak Airport Infrastructure - Though modernization has taken place in metro airports but many of the airports in the non metros are operating beyond the capacity specified by the design of the airport. Though by modernization, lots of costs have been incurred, the revenue collection remains poor. There are obstructive rules to the development of Infrastructure. Land acquisition also plays a major problem. The clearances from the ministry of environment take too long a time.

Funding Problems:

With the kingfisher debacle, it is now quite clear that many of the carriers have been able to access funding that they might have been denied on a strictly commercial basis. The current market capitalization of most of the airlines is far less than the funds which they require. The aviation exposure of banks has also increased. But the banks also are now keeping themselves at a distance and are not willing to enhance their exposure to the aviation industry.

Government Policies and Aviation crisis

The steep depreciation in rupee plays a crucial factor in aviation crisis. Many of the lease agreements and payments to employees, expat salaries, commissions are in US dollars. The rupee has seen the worst fall in recent times. It has already fallen 25% of its value against the dollar since the month of August, 2012. Though the Government talks about making the air travel more accessible, contrary to it, high aviation taxes tell different story. First, there is the service tax which a passenger has to pay on the sale of the airline ticket; the fuel is made much more expensive though hike in excise duty. Also, Airlines have to pay more than 30 % to state Governments in the form of fuel tax. The tax structure in Indian aviation is a complicated. India is the only country to put service tax on airlines. The service tax which was previously

10 % of the ticket value has been hiked to 40 % which is clearly unacceptable.

Following steps are suggested as remedies for eminent crisis in the aviation sector:

High quality Human Resource training in the area of skilled technical and management personnel are perceived as the major step for revitalizing the aviation sector.

The training methods should be practical and revolutionary in approach to make the aspirants a mark in the aviation industry. Also it should be noted that appropriate training for a specific period is important for the safety and security of the customer and necessary caution should be taken to grant a license for employability of the pilot. In countries like US, the time required is 4-6 months of training. In India, an applicant has to pass only 5 exams with 3 months gap between each other. There is a lack of the staff capable of providing high skill training. The number of training institutes should increase with government support. Training- of ground aviation staff is required as the industry is facing paucity of such trained staff. There is multitude of facets involved in safety issues such as the personal safety of the people, passenger baggage, and airline equipment. For the success of safety measures, the workforce has to be properly trained as well as various aviation departments have to work in tandem.

Reduction of Taxation on ATF- The finance ministry has allowed for direct importation of ATF but the cost of storage is a big question mark as private storage facilities are still not available. The destructive fuel charges have crippled the industry. There is futile fighting between the various oil companies over aviation fuel pricing. The government is also planning to allocate an airport to each oil company. The airlines should further be allowed to source ATF from supplier of their choice instead of relying on the monopolizing nature of state owned oil companies.

Approval of private carrier application for international flights- Owing to the pressures from the airlines, the government has taken various steps towards approving private national as well as international carriers. The first move towards this

came in the year 2004 when private carriers were allowed to fly on the lucrative international south Asia routes. Recently, 11 new international routes were opened to private players; this has made aviation sector more competitive for private carriers in International destinations. It is pertinent to note that international carriers provide better margins, fuel pricing at competitive rates, higher fleet utilization as international carriers help utilize the idle times.

Foreign Direct Investment will bring in the required finances and technological expertise. The FDI will also help in bridging the capital gap. But knowing well that aviation business environment in the country is weak, the international players will also be cautious in their approach, besides they have profitable access to various international routes including code sharing agreement with many domestic players.

Enhancement of Air Traffic Management Infrastructure is very crucial as only this can resolve the technical issues and meet strategic objectives so that the flyers could be assured of a safe, secure and efficient air travel.

Domestic servicing of Airlines will lower operation cost. Our own Aircrafts have to incur high costs by getting servicing done in foreign shores. In house servicing would mean huge generation of employment as well as reduction in costs. This involves a need for setting up of Units meant for maintenance of aircraft (MRO). As we know that majority of flight delays are due to reasons related to maintenance. These MRO units help in engine overhauling, heavy checks, line maintenance etc. Airline maintenance and overhaul could be an area where India could enter into a new and dynamic field of international business to develop world class engineering to reduce costs and thereby provide service for other airlines as well.

If Mergers take place, the carriers which acquires, should be asked to reapply for time slots rather than getting all the time slots of the carrier which it acquired. There are various aspects of mergers to be discussed here. Though it could lead to cost reduction by the elimination of overlapping routes for the players who are merging, for customers it means heightened fares and reduced frequency of flights. A non discriminatory approach should be used by the

government to ensure that no public inconvenience is caused due to the merger.

There should be **an autonomous regulatory authority** which could work at prescribed minimum standards in working and settling of disputes. Ensuring of security and safety should be of prime most concern for the industry. The proposed new civil aviation act of 2012 will replace the antiquated aircraft act of 1934. The new law will be in sync with international standards.

There are some specific problems of Air India regarding : level playing ground- There should be some true commitment in removing mindless political meddling and sychcophancy that have led to the collapse of the Airline. The need of the moment is to have the brightest executors on board. The government has some exclusive obsession with Air India which has a bloated workforce and Indian Airlines performs many functions in house which other airlines outsource.

To summarize core problem of infrastructure, cost, investment and taxes has to be addressed in order to make Indian aviation sector viable unit.

Conclusion-

A dynamic airline industry would lead to multiplier effects in terms development of travel and tourism

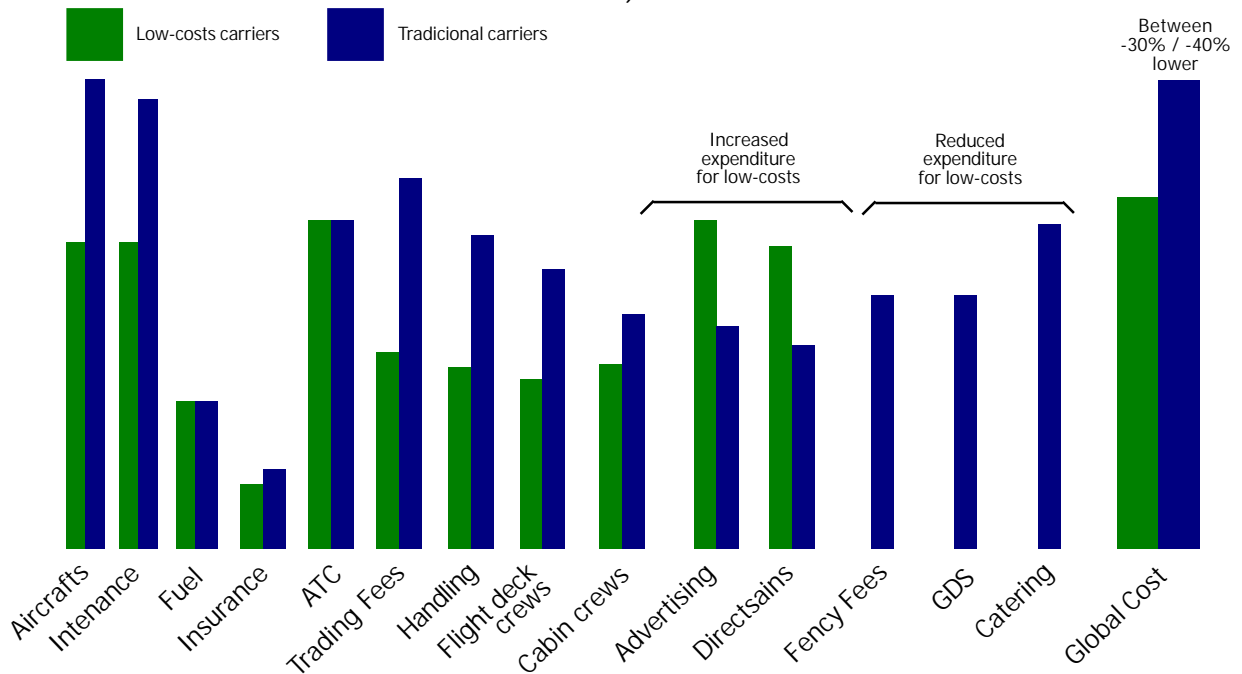
and generation of income and employment. There are plans to have more than 200 airports in the next 10 years. The passenger demand in future will grow at an approximate rate of 12-15%. There are several drivers for growth due to increase in disposable incomes, expansion of middle class, and the nature of untapped market, increase in travel and tourism as well as business travels.

Today, India is the ninth largest civil aviation market in the world. The fleet of the aircrafts is expected to touch approximately 1000 aircraft in 2020. Any airline which enters the business knows about the economic toughness involved. There are sunk costs as well as involvement of huge capital. Economic viability is the most importance. The golden rule is striking profitability and at the same time not taxing the customer. There is definitely a strong growth potential in the aviation industry with the number of passengers multiplying every year. It continues to be an underpenetrated market. Time has come for the aviation industry to focus on stable profits.

Also government efforts focusing on the development of mass transit system are also required. There is a need for more innovation and efficiency in the industry. The need is to concentrate on orderly growth of air transport which contributes to social and economic development of the country. Safety and viability should be major concerns of the government.

Tables and graphs : Graph 1

Graph showing percentage share of various cost elements aviation industry (Comparison between LCC and FCC)

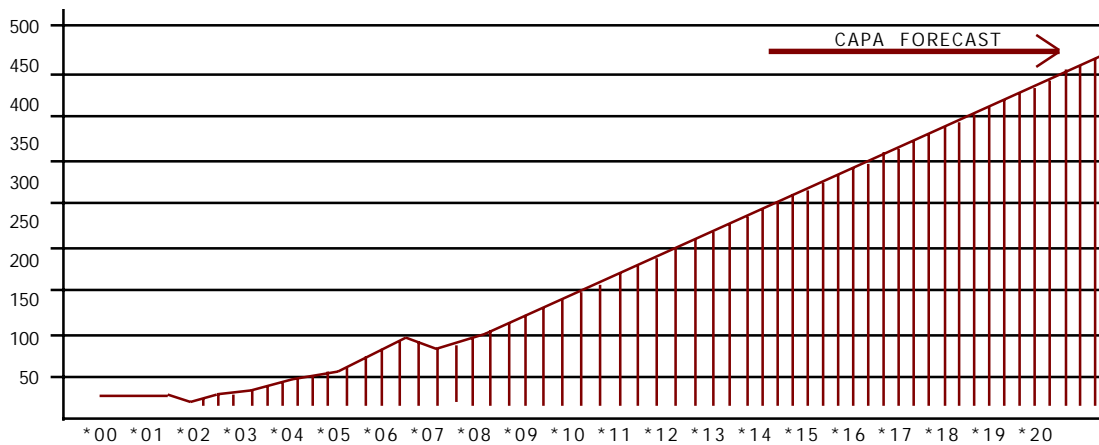


Sources : <http://aviatingindia.wordpress.com>

Graphs : 2

Increase In Annual passengers in last 10 years and forecast for 2020

ANNUAL PASSENGERS HANDLED BY INDIAN AIRPORTS
2000-2010 AND CAPA FORECAST TO 2020



Source : CAPA Annual Report 2008

Table showing overall profit and losses of various players (Only those which are listed on BSE)

| Table : 1 | |
|-----------------|--------------------------------------|
| Name of Airline | Profit and loss in crores(2011-2012) |
| Jet Airways | -1,236 |
| Kingfisher | -2328 |
| Spice Jet | -606 |
| Jagson Airlines | 1.9 |

Source: Wikipedia

Table showing the fleet size of major players.

| Table 2 | |
|-----------------|------------|
| Name of Airline | Fleet Size |
| Air India | 89 |
| Spice Jet | 45 |
| Indigo | 58 |
| Go Air | 12 |
| Jet Airways | 89 |
| Kingfisher | 44 |

Source: Individual websites of Airlines accessed through Internet

References:

Bidwai Praful , (2009) When corporations capture the state, *Rediff.com/Business*, August 07,

Dhawan Ashish, Mishra Nidhi, Yadav Nithya R, Payal, Rajesh B, Dahiya Siddharth, Butalia Siddhartha. (2009) Study of the Indian Aviation Industry, *Economic Times*, August 8,

IBEF report available at www.ibef.org

ICRA report available at www.icra.in last accessed at 19 June, 6:00 pm

Phadnis Ashwini , Srinivasa-Raghavan T. C. A. (2009) How many airlines do we need, *Business Line*, 4 August

Lenders losing patience with Kingfisher airlines, (2012) *The Economic Times* , July 3

Narasimhan Ganesh (2010) The secret behind the success of Spicejet , *Rediff.com/ business*, June 29

Ramya K, Siji Smitha- Strategic Alliances and Joint Venture in civil aviation- A Case Study at dSPACE.iimk.ac.in/bitstream/2259/490/1/309-322.pdf%20

Report of the committee on the road map of civil aviation, (2003) Ministry of Civil Aviation, Government of India, 30th November

Sharma Shashi, Aviation Industry in India, Challenges for the low cost carriers, Selected works of Shashi Sharma, Begin 2007 LL.M., American University, Washington College of Law, Washington D.C at www.scribd.com/doc/.../Growth-of-Aviation-Industry-in-India

No end in sight to turbulence,(2012) *The Bangkok post*, June 18, www.bangkokpost.com/business/

www.Airlinesindia.org last accessed on 2 January, 2012, 2:20 pm

www.cci.gov.in last accessed on February 2, 2012

www.centreforaviation.com last accessed on 5 January, 11:40 am

www.iata.org last accessed on 20 June at 6:00 pm

<http://business.mapsofindia.com/aviation> last accessed on 3 January, 11:30

http://www.researchandmarkets.com/reports/449298/the_indian_aviation_industry last accessed 4 January, 2012, 2:00 pm