A PROJECT REPORT ON

“CARTELS IN AVIATION INDUSTRY”

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SUBMITTED TO:

COMPETITION COMMISSION OF INDIA

BY:

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# TABLE OF CONTENTS

I. Acknowledgement..........................................................................................4

II. Objective.......................................................................................................5

III. Research Methodology.............................................................................5

IV. Chapter I
   Introduction................................................................................................6

V. Chapter II
   Aviation Industry in India..........................................................................7
   History of Aviation Industry in India..........................................................7
   Drivers to Growth in Indian Aviation Sector.............................................10
   Players in the Aviation Sector....................................................................10

VI. Chapter III
   Importance of Competition in the Market...............................................14

VII. Chapter IV
    Competition Issues Related to Indian Aviation Sector............................15

VIII. Chapter V
     Cartelization in the Aviation Sector.......................................................17
     Case Studies.............................................................................................29

IX. Conclusions & Recommendations........................................................31

X. Bibliography...............................................................................................33
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I am highly indebted to Mr. Kulvinder Singh Jaggi, Director Law, who was a guiding light in preparing this paper and shared his views and guided me during our many interactions. I am also grateful to Ms. Geeta Gouri who encouraged me with her ideas shared during the presentations at the Commission.

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Last but not the least, I would like to thank my Family without whose support and inspiration, this project would have been possible.
OBJECTIVE

The report analyses the possible cartelization in the Indian airline industry in the light of similar experiences in other parts of the world and cases dealing with cartels.

RESEARCH METHODOLOGY

The present study uses books, internet, articles, reviews, work of various scholars in the field and therefore is a doctrinal research.
CHAPTER I

INTRODUCTION

Airline Industry plays a vital role in economic development of a nation. Aviation is viewed as an essential link not only for international travel and trade but also for providing connectivity to different parts of the country. Every $100 spent on air travel produces benefits worth 325 $ to the Economy. It generates 100 additional jobs in air transport & 610 related jobs.$1 Aviation is, by its very nature, a critical part of the infrastructure of the country and has important ramifications for the development of tourism and trade, the opening up of inaccessible areas of the country and for providing stimulus to business activity and economic growth. Almost 35% of exports from India & 97% foreign tourists to India arrive by Air each year. Aviation sector has witnessed a major change in past 3-4 years. There are certain competition related issues on which the Competition Commission needs to keep an eye on. In this project work, we will analyze one such competition related issue in the aviation sector, i.e. Cartelization in the aviation industry. A cartel is a group of similar, independent companies which join together to fix prices intending to limit production or to share markets or customers between them. Instead of competing with each other’s agreed course of action, which reduces their incentives to provide new or better products and services at competitive prices. As a consequence, consumers or other businesses end up paying more for less quality.

Airlines are an easy target. The lines are too long, the seats are too stuffy, and the tickets are too expensive. Since, aviation industry is an oligopolistic market, i.e. only few players operate in the market, so the chances of cartelisation in the industry are quite high. In recent time, various media houses have reported the maiden attempts of airlines to form a cartel. The newly formed Federation of Indian Airlines comprising of eight domestic airline companies, had in principle agreed that the full service carriers like Jet, Kingfisher, Indian Airlines would not price tickets lower than Rs. 2.40 a mile and the low cost airlines such as Air Deccan, Spice jet, etc would not price tickets lower than Rs. 2.00 a mile. The companies reached an agreement twice, but the cartelisation efforts broke down both times, with low cost airlines demanding a free run at the last minute.

First, let us briefly look into the set up of aviation industry in India.

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$1 As per ICAO’s estimates
1. HISTORY OF AVIATION INDUSTRY IN INDIA

1.1 Indian Aviation Sector (up till 1986):

India’s first air mail service was started by the Tata Airlines in 1912. Although Tata Airlines was started as an air mail service but later it ventured in carrying scheduled passenger traffic. Tata Airlines was renamed as Air India in 1946. In early 1948, a joint sector company, Air India International Ltd., was established by the Government of India and Air India (earlier Tata Airline). There were eight companies operating within and outside the country at the time of independence. These companies were namely: Tata Airlines, Indian National Airways, Air service of India, Deccan Airways, Ambica Airways, Bharat Airways and Mistry Airways.

In 1950, the Government of India had set up an Air Traffic Enquiry Committee to ponder on the problems of the airlines industry. Few problems faced by the airline industry at that time included, the soaring prices of aviation fuel, mounting salary bills and disproportionately large fleets. The financial health of companies declined even with liberal Government support, particularly from 1949, and an upward trend in air cargo and passenger traffic. The Committee, although found no justification for nationalization of airlines, it supported their voluntary merge. So Government in the wake of fading financial conditions of the Airlines decided to take some measures and nationalize the air transport industry. Accordingly, two autonomous corporations were created on August 1, 1953. In 1953, the government nationalized the airlines via the Air Corporations Act, 1953, which gave birth to Indian Airlines and Air India. Indian Airlines came into being with the merger of eight domestic airlines to operate domestic services, while Air India International was to operate the overseas services. Furthermore, the Act gave monopoly power to Indian Airlines to operate on domestic scheduled services ruling out any other operator. Air India became the sole Indian carrier to operate on international routes excluding some routes to the neighbouring countries which were given to Indian Airlines.

1.2 INDIAN AIRLINE INDUSTRY FROM 1986-2003
The second phase of Indian aviation began in the year 1986. In this period, the private sector players were granted permission to operate as air taxi operators. These private players who were allowed to operate as air taxi operators included Air Sahara, Jet Airways, Damania Airways, East West Airlines, Modiluft and NEPC Airways. In 1994, government of India repealed the Air Corporation Act. Consequently, in 1995, government granted scheduled carrier status to six private air taxi operators. But only four operators namely: Jet Airways; Air Sahara; Jagsons and Spicejet (previously operated as Modiluft) started operations by 1997 and continued to operate. Eventually, by 1998, at least six private airlines, East-West, Modi-Luft, NEPC, Damania, Gujarat Airways and Span Air were closed and according to an estimate, the capital losses implicated after these closures were to the tune of Rs 10 billion.

1.3 INDIAN AIRLINE INDUSTRY FROM 2003 – 2006

By 2003, only two private carriers survived to see the dawn of the new century, i.e. Jet and Sahara. But the duopoly of Jet and Sahara as private carrier was challenged in 2003 by Air Deccan whose operations in scheduled services began in August. Air Deccan gave India its first Low Cost Carrier (LCC) or no frills Airline which was a turning point in the history of Indian Aviation Sector. It marked a shift from the stereo type economy fares & business fares to the era of check fares; web fares; APEX fares; internet auctions; Special discounts; Corporate plans; last day fares; promotional fares etc. With the arrival of Deccan, reformation and innovation began in the aviation sector. Air traffic since then had tremendous growth rates. The figure shown below indicates the growth in passenger volumes:
After 2003, a 3 fold increase passengers travelling by air in India is witnessed. On witnessing the success of LCC Model, other airlines also started to operate in the sector and opted for No-Frill Model. These airlines included; Kingfisher; Indigo; Paramount; Go Air which began operations in India. Some new carriers such as Star Airlines, Skylark, Magic Air, Air One and some others were given license to operate in the sector.

1.4 INDIAN AIRLINE INDUSTRY FROM 2006 ONWARDS:

Another milestone in the history of the Indian Aviation sector came in the year 2007. This was the year of marriages in the Indian skies. In the year 2006, the marriage of Jet-Sahara & IA-AI was announced but it materialized only in 2007. After this, the Indian aviation sector has witnessed a series of M&A of airlines namely: Indian-Air India; the Jet-Sahara Deal; the Kingfisher-Deccan Deal. These players after consolidations have gained over 80% of the market share.

Now let us move forward with the competition issues pertaining to the aviation industry in India.
2. DRIVERS TO GROWTH OF THE INDIAN AVIATION SECTOR

Indian Aviation industry has grown tremendously in the recent past. The credit goes to the sound demographic, macroeconomic, government aided reforms and market dynamics. The drivers to growth are:

- Increase in Consumerism
- Increasing Tourists Travel
- Increasing Business Travel
- Entry of Low Cost Carriers
- Untapped Market
- Rising Disposable incomes
- Rising Middle Class Population
- Increasing Competition
- Government Reform Measures

All the above strong favourable dynamics has placed India’s Aviation industry in a high growth trajectory in the foreseeable future. All over the world, there is a strong correlation with air traffic and economic growth especially in emerging markets like India where a rise of 1% in GDP is expected to result in a 2% increase in air traffic. Disposable income in India has gone up by 5 times in the last 2 decades and the expenditure on transportation has risen from 6% to 14% in the same period.\(^2\) This has resulted in increased demand. India is one of the least developed markets in the World and is among the most expensive in the world (after adjusting for purchasing power parity).

3. PLAYERS IN THE AVIATION MARKET

At present, there is decent number of players compared to the one man army scenario prior to 1990’s. These players include the following:

I. Air India

The history of Air India is the History of Indian Aviation. It is the oldest and the largest airline of India. Air-India was founded by J.R.D. Tata in July 1932 as Tata Airlines. Founded

\(^2\) ASSOCHAM Study: Road map to Civil Aviation, 2007.
as a small, private, domestic carrier in 1932, Air-India is now owned by government. It operates only on International routes and has negligible presence in the domestic traffic.

II. Indian Airlines:

With nationalization of Air Transport in 1953 via Air Corporation Act, 1953, National Flag carriers: Indian and Air India were born. Indian was born from merger of 8 domestic carriers. It caters mainly to domestic routes and in some neighbouring nations. It has a subsidiary ‘Alliance Air’. The two national carriers have enjoyed sole monopoly in the air transport segment over a long period of time as private carriers were barred from entering the segment under the Air Corporation Act, 1953. The private players like Jet, Sahara and others were made to enter the segment only after the New Economic Policy, 1991 came into being. Yet another, turning point has come in the history of the Indian Aviation Sector when Air India was granted permission from the Government of India to merge with Indian Airlines, the two flag carriers of India. This Mega Merger marked the first marriage in the Indian skies which was followed by two more marriages. The name of the new airline remained Air India, since it is known worldwide. They have been in the works of completing the merger since January 2007, after permission.

III. Jet Airways:

In May 1974, Naresh Goyal founded Jetair (Private) Limited with the objective of providing Sales and Marketing representation to foreign airlines in India. In 1991, as part of the ongoing diversification programme of his business activities, Naresh Goyal took advantage of the opening of the Indian economy and the enunciation of the Open Skies Policy by the Government of India, to set up Jet Airways (India) Private Limited, for the operation of scheduled air services on domestic sectors in India. Jet Airways is the only airline that stood the crunch of late 1990’s. Jet started its International Operations in 2004 and carries more than 7 million passengers per annum. Recently, the company made news when Naresh Goel led Jet Airways took 100 % stake in their arch old rival Air Sahara in May, 2007. This earmarked the second marriage of the season in the Indian Skies after the AIIA deal.

IV. Air Sahara:

Like Jet, Sahara too began its operations in 1993 after the domestic Air Market was opened by the government in 1990’s. Air Sahara Limited is a leading private airline in India, owned by the diversified Sahara India Parivar group. After Jet, it was only airline that could stand
the torrential winds of late 1990’s. After series of controversies Air Sahara has been taken over by Jet Airways in May, 2007. The airline is now renamed as “Jet Lite”. Jet has intentions of converting Air Sahara in sync with LCC model to reach every segment of air travelers.

V. Air Deccan:

India’s first budget carrier and now the largest flew its first carrier in 2003. Headed by Captain Gopinath, Air Deccan truly redefined the accessibility to the Indian Skies. It injected competitive spirits into the system and gave common man wings by reducing airfares which matched the first Class Railway Fares. The third wedding in skies was marked when Dr Vijay Mallya of Kingfisher Airlines picked up 26% stake in Air Deccan.

VI. Kingfisher:

The Airline began its operation in May, 2005. It’s the by far the most ostentatious airline in India, giving tough competition to Jet Airways in in-flight services. It is a major Indian luxury airline operating an extensive network to 34 destinations, with plans for regional and long-haul international services. Kingfisher Airlines, through one of its holding company UB holdings Ltd has acquired 26% stake in the budget airline Air Deccan and has offered to buy further of 20% stake from the secondary market.

VII. GoAir:

GoAir is an Indian low-cost airline based in Mumbai, Maharashtra. It operates domestic passenger services to 18 cities with 131 daily flights and approximately 917 weekly flights. Established in June 2004, the airline started its operations in October 2005 with a fleet of 20 leased Airbus A320 aircraft. In July 2006, GoAir placed an order for 10 aircraft to Airbus. Further, in mid-January 2007 the airline announced that it plans to see a major minority ownership position for its expansion. On January 24, 2007, GoAir and Florida based airline reservation system provider Radixx International jointly announced that the latter had taken over all reservations and passenger management functions.

VIII. Indigo:

The airline made heads turn when it placed the ambitious order of 100 aircrafts with Airbus. IndiGo Airlines commenced its operations in 2006 and went on to quickly establish itself as one of the premier budget airlines in the country. IndiGo Airways soon added IndiGo flights
and destinations to its network. The impeccable services and timely performances of IndiGo flights added to the popularity of the airline. IndiGo Airline won the award for the 'Best Domestic Low Cost Carrier' in 2008. The IndiGo Airline fleet of 20 contemporary aircraft offers travellers a network of 17 destinations in the country.

IX. Spicejet:

SpiceJet, a reincarnation of ModiLuft marked its entry in service by offering fares priced at Rs.99 fares for the first 99 days since its inception in 2005. It began service in May 2005 and by 2008, it was India's second-largest low-cost airline in terms of market share. The carrier is giving tough competition to Railways. This airline is known to have had made the least number of mistakes.
Throughout history, and even today, the importance of competition within a market has been recognized. It is the key element of a market economy. In common parlance, competition in the market means sellers striving independently for buyer’s patronage to maximize profit or other business objectives. A buyer prefers to buy a product at a price that maximizes his profits whereas seller prefers to sell the product at a price that maximizes his profit. Competition makes an enterprise more efficient and offers wider choice to consumers at lower price. Fair competition is beneficial for the Consumers, Producers / Sellers and finally for the whole society since it induces economic growth. In order to realize this objective to competition in the economy, the Competition Act, 2002 was passed which replaced MRTP Act, 1969. The objective of Competition Act is to prevent anti-competitive practices, promote and sustain competition, protect the interest of the consumers and ensure freedom of trade. The objectives of this Act are to be achieved through the instrumentality of the Competition Commission of India (CCI) which has been established by the Central Government w.e.f 14th October, 2003.

The objectives of the Competition Act, 2002 are as follows:

i. Prohibition of anti-competitive agreements;
ii. Prohibition of abuse of dominant position;
iii. Regulation of combinations;
iv. Competition Advocacy;

Competition Act, 2002 shall prohibit anti-competitive agreements and abuse of dominance and regulate combinations (mergers amalgamations or acquisition) through a process of inquiry. It shall give opinion on competition issues on reference received and is also mandated to undertake competition advocacy, create awareness and impart training on competition issues. This Act has been devised keeping in view the economic development of the country by preventing practices which have appreciable adverse effect on competition.
The general view is that competition is healthy for all the market as it guarantees maximum benefits being trickled to the consumer groups. However, this doesn’t hold true for industries where there is room for economies of scale and scope. Undoubtedly, airline is one such industry where there exist economies of scale. There needs to be a minimum efficient scale of operation to be sustained for breaking even. That’s probably the reason for the oligopolistic structure of this industry.

Competition Act, 2002 prohibits associations or enterprises to enter into an agreement in respect of production, supply, distribution, storage, acquisition or control of goods or provision of services, which causes or is likely to cause an appreciable adverse effect on competition within India. The central theme of the competition act, 2002 is to prohibit:

i. Anti-competitive agreements

ii. Abuse of dominance

iii. Regulation of M&A

Now, we shall be analyzing the Competition related issues with the above-mentioned themes in the background.

The Indian aviation sector has its own competition related issues that needs to be address. Some needs to be addressed by the ministry where as some must be evaluated by the competition authorities. The Indian aviation sector in a nutshell is plagued with the following issues:

1. Regulatory Barriers
   Regulatory barriers are one of the stumbling block that may discourage new participants in the industry. There are some inherent policies that may discourage competition in the sector and may ensue in a loose form of oligopoly type of market structure. Some regulations that may prove as barriers to domestic operations include regulations governing minimum fleet size, minimum equity requirements, route dispersal guidelines et al. The regulation governing minimum fleet & experience requirements for international operations in a way strengthens the incumbents’
position. Further the exclusive right to National carriers to fly to Gulf Routes et al is highly discriminative.

2. Scarcity of slots
3. Cartelization
4. Regulation of M&A

We shall be addressing the cartelization issue and analyzing the competition related matters with the same.
CHAPTER V
CARTELISATION IN AVIATION SECTOR

People of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices. It is impossible indeed to prevent such meetings, by any law, which either could be executed, or would be consistent with liberty and justice. But though the law cannot hinder people of the same trade from sometimes assembling together, it ought to do nothing to facilitate such assemblies, much less to render them necessary - Adam Smith

A cartel is a group of formerly independent producers whose goal is to increase their collective profits by means of price fixing, limiting supply, or other restrictive practices. Cartels typically control selling prices, but some are organized to control the prices of purchased inputs. Cartels are prohibited by antitrust laws in most countries; however, they continue to exist nationally and internationally, openly and secretly, formally and informally. It may be guilty of abusing said monopoly in other ways. Cartels usually occur in oligopolies, where there are a small number of sellers and usually involve homogeneous products.

As per section 3 of the Competition Act, 2002 any agreement which causes or is likely to cause, appreciable adverse effects on competition in markets in India is prohibited. Any such agreements will be void.

Any agreement entered into between enterprises or associations of enterprises or persons or associations of persons or between any person and enterprise or practice carried on, or decision taken by, any association of enterprises or association of persons, including cartels, engaged in identical or similar trade of goods or provision of services shall be presumed to be anti-competitive if they —

a) *directly or indirectly determines purchase or sale prices*;

When the parties enter into collusion, they draw out various tacit agreements. One such agreement is to fix sales price or fix purchase price depending upon whether the agreement is drawn from sellers’ side or buyers’ side.

b) *limits or controls production, supply, markets, technical development, investment or provision of services*;
The second kind of agreement is where by the production, supply is deliberately constrained to justify the artificial raise in prices & be able to charge an exorbitant amount from the consumers.

c) shares the market or source of production or provision of services by way of allocation of geographical area of market, or type of goods or services, or number of customers in the market or any other similar way;

Here, the colluding parties divide the entire market amongst themselves based upon geographical area, types of goods and services, or number of customers in the market & others.

d) directly or indirectly results in bid rigging or collusive bidding:

"Bid rigging" means any agreement, between enterprises or persons engaged in identical or similar production or trading of goods or provision of services, which has the effect of eliminating or reducing competition for bids or adversely affecting or manipulating the process for bidding.

Collusive bidding or bid rigging may be of different kinds, namely, agreements to submit identical bids, agreements as to who shall submit the lowest bid, agreements for submission of cover bids (voluntary inflatory bids), agreements to bid against each other agreements on common norms to calculate prices or terms of bids, agreements to squeeze out outside bidders, agreements designating bid winners in advance on a rotational basis, or on a geographical or customer allocation basis. Inherent in some of these agreements, is a compensation system to unsuccessful bidders by dividing a certain percentage of profits of successful bidders.

Cartels are productive structures involving multiple producers acting in unison that allow producers to exercise monopoly power. It refers to the illegal behavior of competitors in which they coordinate explicitly or tacitly to regulate their market behavior so as to restrict competition. These agreements are frequently verbal and although they can be harmful to competition they are difficult to detect. It is actually difficult to decide when a cartel is a cartel, what cartel success means, let alone if it acts inefficiently or destructively.

Cartels are an attractive option when actions/operations of different firms are strategic complements rather than strategic substitutes\(^3\). Cartels often establish committees or secretariats to collect and share market sales intelligence of the participating members.

\(^3\) The decisions of two or more players are called strategic complements if they mutually reinforce one another, and they are called strategic substitutes if they mutually offset one another (http://en.wikipedia.org/wiki/Strategic_complements)
In periods of high demand, with capacity constraints, bigger firms have incentives to join the cartel as they can cut their production and maximize profits through price increase. However, in periods of low demand, smaller firms have greater incentive to remain outside the cartel, as they would be in an advantageous position to sell their product without the burden of price fixation. Cartels can deter entry for new firms through price wars. They can also use price wars to force outsiders to join the cartel or to punish existing defectors for non-compliance. Cartels can be classified as explicit or tacit, with explicit cartels referring to a situation where firms directly interact to establish the cartel, as in the case of OPEC$. Tacit Cartels in contrast describes a situation where the firms can establish super competitive prices without any direct interaction. The incentive to defect exists in both tacit and explicit cartels, unless there is a written enforceable contract. Thus, sustainability of a cartel is an important area of study. A Cartel which is stable satisfies the property of “Internal stability” i.e. no cooperating firms find it desirable to become independent or break out of the cartel and “External Stability” i.e. no independent firm finds it desirable to join the cartel. Cartels persist among firms with similar cost functions. If the cost functions are similar, all participating firms have similar incentive to remain in the cartel. Entry of new participants into a cartel is disruptive because it destabilizes the collusive agreement, often leading to the breakdown of the cartel or results in the cartel being discovered. Transparency in the market makes it easier for the cartel members to have access to there sales and market share data of the participating cartel members. Persistent demand instability puts a strain on the management and coherence of any collusion. High concentration of buyers, makes it difficult for monitoring the cartel, as with high buying power, buyers would buy only from a single supplier i.e. one of the cartel members creating the impression that the member has defected.

Factors and their corresponding impact on cartel sustainability

<table>
<thead>
<tr>
<th>Factors</th>
<th>Impact on sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Number of Firms</td>
<td>Positive</td>
</tr>
<tr>
<td>High Concentration Index</td>
<td>Positive</td>
</tr>
<tr>
<td>Similar Cost Functions of firms</td>
<td>Positive</td>
</tr>
</tbody>
</table>

$\text{OPEC: The Organization of the Petroleum Exporting Countries is a permanent intergovernmental organization created on September 10–14, 1960. The OPEC Members coordinate their oil production policies and thus influence the price of oil in the international market.}$
<table>
<thead>
<tr>
<th>High Entry and Exit Barriers</th>
<th>Positive</th>
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</thead>
<tbody>
<tr>
<td>Low Price Elasticity of Demand</td>
<td>Positive</td>
</tr>
<tr>
<td>Discontent with Existing Performance</td>
<td>Positive</td>
</tr>
<tr>
<td>Trade Associations</td>
<td>Positive</td>
</tr>
<tr>
<td>Mutual Trust</td>
<td>Positive</td>
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<tr>
<td>Homogenous goods</td>
<td>Positive</td>
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<tr>
<td>Market Transparency</td>
<td>Positive</td>
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<tr>
<td>Threat of legal Sanctions</td>
<td>Positive</td>
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<tr>
<td>Large powerful buyers</td>
<td>Positive</td>
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<tr>
<td>Demand Fluctuations</td>
<td>Positive</td>
</tr>
</tbody>
</table>

Cartel Members agree on price fixing, total industry output, allocation of customers, bid-rigging, setting common sale agencies, and allocating territories, division of profits or combination of these to gain supernormal profits.

The aviation industry in India, especially with regard to passenger airlines, follows a strictly oligopoly-type structure with the characteristics such as (i) an industry dominated by a small number of large firms (ii) firms sell either identical or differentiated products (the only differentiation here being in service quality and frills offered), and (iii) the industry has significant barriers to entry (which holds true both with respect to regulations and huge capital investment required). One sees the following characteristics with respect to the Indian passenger airlines market –

1. Few number of firms contributing to majority of the market share
2. Products are differentiated in terms of service quality and offerings
3. Entry Barriers
4. Firm is a price-setter
5. Strategy dependent on individual rival firm’s behaviour

With all these characteristics, the chances of cartelisation are higher.

Further, Cartels are perceived to be productive structures which exploit consumers and reduce the consumer welfare surplus. However, Cartel formation does have some positive externalities which are beneficial to the industry and society. Cartels generate positive externalities for the firms that remain independent of the cartel.
Moreover, facilities with high cost of production tends to close under cartels because of future market growth is restricted owing to higher prices leading to a reduction in operating margin. Variability in prices of cartelized products is reduced and demand for substitutes boosted as a result of cartel formation. Cartels also encourage standardization of products and the industry as a whole benefits from economies of scale.

**History of Collusion:**

It has long been posited that when firms face each other in a large number of markets they may complete less vigorously by allowing each other more or less exclusive spheres of influence. Put another way, the number of markets in which firms meet is a factor influencing the likelihood of oligopolistic coordination or “tacit collusion”.

The **FIA—Federation of Indian Airlines**, a conglomerate of top honchos of domestic airlines met in 2005 to form a federation that will provide a common platform to debate industry issues and lobby the government and hammer out solutions. To their misfortune, at their first meeting they were discussing about pricing issues, which timely was bought to the notice by CCI, and hence the very first step towards Cartelization was aborted.

Moreover, that time the industry was scattered into many players so chances of deviations were very high. In today’s scenario, chances of Cartelization and its materialization are quite high as post consolidation with less number of players tacit collusion is more chase able and deviation is less unlikely. So CCI must keep an eye on such tendencies. Moreover, chances of coordination in prices might become even higher if the Proposed Alliance between AI and Jet materializes. It is highly recommended that the Commission scrutinizes the proposal & its prospective pros and cons before the two are allowed to sign on the dotted line.

It is in this regard, that the Commission has identified some conditions conducive for Cartelization. Cartels usually function in secrecy. The member of a cartel by and large seeks to camouflage their activities to avoid detection by commission. If there is effective competition in the markets, cartels would find it difficult to be formed & sustained.

**Some of the conditions conducive to formation of cartels are:**

1. High concentration
2. High entry & exit barriers
3. Homogeneity of products
4. Similar production costs
5. Excess capacity
6. High dependence of consumers on the product
7. History of collusion
Now keeping these factors in the backdrop, we check for cartelization tendencies in the Aviation Sector.

**High Concentration**

In order to calculate the potential monopoly power from a merger, a commonly accepted measurement is the Herfindal-Hirschman Index (HHI). In fact, this index is a measure of Industry concentration. According to U.S Merger Guidelines, if post merger, HHI takes a value between 1,000 and 1800 and merger adds more than 100 points, the merger is likely to be challenged; whereas if post merger HHI takes a value higher than 1800 and merger adds more than 100 points, the merger should be challenged. To illustrate this, the HHI index is calculated and the results are presented in following table:

<table>
<thead>
<tr>
<th>Firms</th>
<th>Market Share 2006</th>
<th>Square of Market share</th>
<th>Market Share 2007</th>
<th>Square of Market Share</th>
<th>After Merger</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kingfisher Airlines</td>
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<td>100</td>
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<td>784</td>
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<td>225</td>
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<td>Go Air</td>
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With respect to the HHI ratios, we have come to the conclusion that the concentration post merger is fairly high in the industry. Hence, chances of Cartelization and its materialization
are quite high as with such less number of players tacit collusion is more chase able and deviation is less unlikely. Cartels are universally recognized as harmful type of anti-competitive conduct. It is condemned in all competition laws of the World. No legitimate economic and social benefit is derived out of it. So CCI must keep an eye on such tendencies.

**Price Transparency & Collusion:**

The airline industry features a very high degree of transparency over prices and volumes. All of an airline’s future fares are instantaneously available over computer reservation systems, to which rival airlines can subscribe. Unlike other industries, such transparency can be an instrument for collusion as it facilitates the detection of cheating on a cartel agreement. It appears to be common practice for an airline to announce, through the CRSs that its price on a certain route will increase by some amount beginning on a certain date in the future. The colluding parties take advantage of this transparency & enter to a tacit collusion. The carrier then waits to see if others will match. If they do, the price increase is implemented. If they don’t, the airline suggesting the increase will either withdraw it or push back the implementation dates. Other airlines might counteroffer with a smaller increase, effective a day after the first increase. Then the first airline may proceed with a smaller increase or counteroffer again. All of this occurs without the airlines changing prices on actual sales.

This transparency acts as a boon and as a bane too. While transparency in the pricing pattern is important to Consumer so as to make choice keeping in mind the cost, schedule and time taken to complete the journey. At the same time, chances of cartelization can’t be ruled out either. As discussed above, the CRS system facilitates Cartelization.

With respect to the Indian Scenario, after the series of marriages in the Indian Skies; the chances of Cartelization has increased by many folds. With top 3 players pocketing more than 80% market share, chances of prices increasing on key routes, which are essentially long distance and have no immediate substitutes are likely.

The setting up of **FIA-Federation of Indian Airlines**, a conglomerate of top honchos of domestic airlines met in 2005 to form a federation that will provide a common platform to debate industry issues and lobby the government and hammer out solutions. To their misfortune, at their first meeting they had pricing issues on their agenda, which by timely intervention of CCI was hauled and hence the very first step towards cartelizeation was aborted. Moreover, that time the industry was scattered into many players so chances of
deviations were very high. In today’s scenario, chances of cartelization and its materialization are quite high as post consolidation with less number of players tacit collusion is more chase able and deviation is less unlikely. So CCI must keep an eye on such tendencies.

DIFFICULTY IN IDENTIFYING AND PROSECUTING

Cartelization is very difficult to detect and investigate for its inherently secretive nature. The task is more difficult in aviation industry as it operates across border. Fewer the number of operators in the market, the simpler it is to coordinate the actions and easier is to keep the arrangement secret. Airline industry retains oligopoly due to enormous barriers to entry for new competition. Thus, barriers to entry are important to successful operation of cartels.

Alliance allowed with Remedy: (when two companies merge and competition issue arises what remedies can be available)

The European Competition Commission under the provisions of the EC Merger Regulation cleared the alliance between KLM & Alitalia. The Commission considered that the alliance was globally pro-competitive, in particular in view of the largely complementary nature of the parties' activities. Nevertheless, the Commission found that the operation would have led to monopoly positions on two markets: Amsterdam-Milan and Amsterdam-Rome. The parties had therefore to accept undertakings with a view to attract potential new entrants on these markets and to exercise a competitive pressure on the parties. The remedies included *inter alia* the release of a significant number of slots at the congested airports in question and the reduction of the parties' frequencies (up to 40% of the frequencies actually operated) when a new entrant starts operating the problematic routes.

Alliance rejected out rightly:

1. **American Airlines and the TACA group** composed of six Central American airlines serving Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and the Republic of Panama. American and some TACA carrier operated overlapping nonstop flights on virtually all routes between Miami -- the principal Latin American hub in the United States -- and the gateway cities in the Central American countries just mentioned, so that American and TACA had combined market shares ranging from 88 percent to 100 percent on those overlap city pairs. At the same time, the number of passengers travelling between Interior points in the United States beyond the Miami gateway and interior points beyond the Central
American gateways -- the only passengers who could not already obtain full on-line service available from either American or the TACA group -- was an extremely small fraction of passengers flying gateway-to-gateway. So we found this to be an almost exclusively horizontal agreement, in contrast to the largely end-to-end international code-share agreements we had previously reviewed.

The DOJ concluded that the claimed efficiency benefits that are specific to the transaction are very slight, while some potential risks to competition would inevitably persist despite the best efforts to eliminate them through imposing conditions.


The two carriers competed in a number of large nonstop city-pair markets, but also, as was the case with USAir and British Airways in 1991, they compete for passengers traveling between interior U.S. points and the United Kingdom. A key issue is whether and under what circumstances it is likely that "future competitors" will replace the competition lost as a result of the proposed alliance. With open skies, new entry might be likely on many of the overlapping city pairs in the absence of airport access constraints, but the fact is that constraints on new or expanded service at London's Heathrow Airport are significant. Consequently, we are assessing whether there are any conditions that can resolve the Heathrow access problems to allow sufficient entry to replace the competition lost from an American/British Airways combination. Since the DOJ was unsure about the viability of new entry of a competitive airline service between the United States and the United Kingdom, DOJ disapproved the alliance.

3. Delta, Continental, and Northwest Alliance:

In August 2002, Delta, Continental, and Northwest submitted code-sharing to the U.S. Department of Transportation (DOT) for review. The DOT expressed concerns about the potential competitive effects of the proposed Delta/Continental/Northwest code-sharing alliance. The DOT’s main concern lies in the significant extent to which the three airlines’ route networks overlapped, which is unlike any other existing domestic alliance.

The DOT’s analysis revealed that the three airlines offered overlapping services in 3,214 markets accounting for approximately 58 million annual passengers. Given the broad nature of discussions that is required to implement the alliance, the DOT is concerned that such communications among the carriers may result in collusion, either tacit or explicit, on fares and service levels.

Note: Similar to this domestic alliance, is the recent announcement of Jet Group Led Naresh Goyal’s willingness & keeness to forge an alliance with AI for its International Operations.
All though, nothing official has been made till date, however if the two enter in an alliance with one another in the near future, it would have serious anticompetitive effects. Things wouldn’t have been different had IA not merged with AI.

Now, things are different. The same alliance would have been a welcome change had IA not merged with AI. Since, the domestic & the International Carriers have merged, hence any attempts made towards alliance will have severe impact on competition as the two operating carriers have heavy domestic presence. The two carriers have an extensively overlapping network of routes in the country. Coordination among fares may get enhanced on domestic operations more than International operations. Together, Jet & IA serve around 50% of the Indian market. This 50% is an aggregate all India figure; however in individual city pair markets, their share may vary from 60% to even 90% for different routes owing to their vast route networks and frequency of flights operating per day. Both of them are Full service carriers with the most extensive route network, which no other domestic carrier in the country has. The two being the oldest airlines have access to the peak slots at the congested airports, hence they have a dominant position w.r.t to certain flights operating on key routes at peak slots. Therefore, the commission must review the Alliance if it takes place in future. It is highly recommended that the commission must not permit Jet & IA to get into Code Sharing Arrangement where by the two coordinate their prices. The two carriers’ operation’s must be strictly kept independent in terms of pricing and marketing via Blockaded Seat Arrangement (which I will discussed shortly). Also, the committee must see whether there exists chances of new entry if the proposed alliance is leading to anticompetitive effects or say on monopoly on some routes.

Hence, in particular, an alliance can significantly reduce competition on overlapping non-stop routes and overlapping connecting routes where the allied airlines were once main competitors. Even where the two networks do not overlap in the markets they serve, the alliance can have serious anti-competitive effects by reducing or eliminating competition on the hub-to-hub route(s) between the networks. Moreover, alliances between airlines operating hub-and-spoke networks will normally enhance demand for the network as a whole and increase the market power of the network, especially at its hub airports. This entails the risk of rendering still more difficult new entry into the network’s markets to the detriment of both international and domestic competition.

In contrast, when a code share is proposed to link a city-pair market served by one carrier with a city-pair market served by the other, rather than to cover a city-pair market in which
both carriers are actual or potential competitors, the proposed code share would create what is referred to as an “end-to-end efficiency,” which is generally procompetitive.

The commission must weigh both the pro and anti-competitive effects of the proposed alliance before finally granting the anti-trust immunity to the alliance members.

**Some important issues relating code sharing from competition angle:**

If the code share partners will both operate flights in the market, the Division/Commission then considers whether the agreement is structured in a way that *the partners’ capacity, scheduling, and pricing decisions will remain independent* – that is, whether it is structured *in a way that gives each carrier the strongest possible incentive to sell seats on the flights it operates rather than on those of its code-share partner, and to cut its prices and improve its service to gain market share against its partner.*

Now, code share agreements are of different types. The carrier that actually carries the passenger is called as the ‘operating carrier’ while the carrier that doesn’t operate that Route, yet it markets that route is called as the ‘marketing carrier’. Now, there are different levels of cooperation’s possible in code sharing. First of all, airlines might give their code-sharing agreement partners free or limited access to their seats. **Free flow** (free sale) code-sharing agreements give the marketing carrier access to the operating carrier’s inventory and allow it to market seats independently of the operating carrier. The risk is completely on the operating carrier since the marketing carrier functions almost as an agent.

With respect to **pricing**, airlines might set the price of the seat sold under a code-sharing agreement either in a coordinated way, which may lead to the result that the seat will be sold at the same price wherever (operating or marketing carrier) the ticket is bought, or each airline participating in the agreement can set its prices independently.

Where the code share does not entail a blocked space agreement, airlines have to agree on how to compensate each other for the seats sold on one another’s flights. This is normally done in special pro-rate agreements which establish the terms of revenue proration between the partners.

One approach taken in some code shares to preserve some independence in pricing and marketing of seats on the shared flights has been to use a **block seat arrangement**, where the marketing carrier purchases a fixed number of seats and bears the risk of loss if those seats
are not sold. The block-seat arrangement is not an ideal solution, because the cost of the block of seats to the non-operating carrier, which is the key determinant of the ultimate fare to the consumer, is set by agreement between competitors. But the block seat arrangement is an improvement over joint sales and marketing, because it can create some additional incentive to each partner to market its seats aggressively.

In cases in which independent operations by the two partners are not contemplated or considered likely under their proposed code-share agreement, and the Division concludes that the code-share agreement would reduce or eliminate competition between the codeshare partners in certain city-pair markets, the next step in the Division’s analysis will be to consider how likely it would be that new competitors would enter these markets in response to any anticompetitive behavior by the code-share partners. If sufficient and timely entry could be expected to neutralize any anticompetitive behavior, then the Division would conclude that the code-share agreement would not be likely to create or facilitate the exercise of market power by the code-share partners.

In recent years some countries (particularly the US) have sought to negotiate “open skies” agreements which are less restrictive in regard to the number and identity of airlines and the routes or capacities that can be flown. A number of such agreements have been signed between the US and individual EU countries. These agreements still do not permit entry from carriers based in countries outside the agreement to fly on routes covered by the agreement (e.g., a USUK open skies agreement would not permit Alitalia to fly London-Rome-New York). Nor do the agreements permit cabotage (e.g., an US-UK agreement would not allow BA to carry passengers from New York to San Francisco when flying London-New York-San Francisco). There remains considerable scope for further multilateral liberalisation, particularly in relation to the discriminatory treatment of foreign-owned airlines.

Hence, in the case of an international code share, an important threshold factor in assessing likelihood of new entry is whether the market is covered by an “open skies” bilateral agreement. Open skies means that new entry by a carrier is legally possible, although we would still need to investigate how likely such entry actually would be in the event the code-share partners attempted to raise fares or reduce service. However, new entry is legally constrained by a restrictive bilateral agreement, the threat to competition of a code share on that city pair could be substantial, particularly if the code-share partners were the only two carriers authorized under the bilateral agreement.
The Antitrust Division assesses on a case-by-case basis -- and market-by-market basis -- whether a proposed code-share alliance is likely to act as a disincentive for the alliance partners to enter markets served by the other or to compete vigorously in markets that they both serve. Commission must look to see whether the alliance is likely to divide and allocate markets, or to produce high fares. Commission will place critical importance on carefully reviewing the actual terms of each alliance agreement. Incentive for each partner to market its own seats. Similarly, they would also look to see if there were persuasive evidence that the code-share agreement would result in significant procompetitive efficiencies in serving other city pairs on a code-share basis – efficiencies that could not otherwise be obtained except through the code share. If so, also would assess whether the procompetitive effect of these efficiencies would outweigh the potential competitive harm in the overlap city pair.

CASE STUDIES

Oil Marketing Companies cartel (OMCC)

The Competition Commission of India had ordered an investigation into the alleged ‘anti-competitive agreement’ entered into by leading oil marketing companies like Indian Oil Corporation, Bharat Petroleum Corporation and Hindustan Petroleum Corporation over supply of aviation turbine fuel (ATF) to the national carrier Air India.

Kingfisher-Jet Airways Agreement on Code Sharing

The code-sharing agreement between private airlines, Jet Airways and Kingfisher came under the lens of Competition Commission of India on a complaint being filed that the pact could lead to formation of cartel. It is alleged that if such an agreement is linked then the two airlines would dominate the market leading to cartel formation. This could result in an abuse of dominance as the two would control market share of close to 60%. The scope of the strategic alliance between Jet and kingfisher, announced in October 2008, includes code-sharing on both domestic and international flights and joint fuel management with a view to reducing expenses. Besides, common ground-handling, cross-selling of flight inventories using a common global distribution system platform and cross utilisation of crew on similar aircraft types are the other key elements of the agreement. The matter is still pending before CCI.
• US ANTITRUST LAW ON TREATMENT OF CARTELS

US v. Airline Tariff Publishing Company (ATP)

On December 21, 1992, the government filed a complaint, which randomly was assigned to the late Judge Revercomb, charging eight major domestic airlines and the Airline Tariff Publishing Company ("ATP") with violations of Section One of the Sherman Act, 15 U.S.C. Count One of the complaint charges defendants with agreeing to fix prices by increasing fares, eliminating discounted fares, and setting fare restrictions. This count alleges that defendants reached these agreements through the use of defendant ATP's fare dissemination services; the government contends that defendants used these services to exchange proposals, negotiate fare changes, and trade fare increases in one or more markets for fare increases in other markets. Count Two of the complaint alleges that defendants agreed to create, maintain, operate, and participate in the ATP dissemination system in a manner that unnecessarily facilitates the ability of the airline defendants and their co-conspirators to coordinate changes to their fares. The government contends that as a result of these agreements, consumers have paid higher prices for airline tickets. Court ordered the airlines to comply with the anti trust act.

• EU COMPETITION LAW TREATMENT OF CARTEL

SAS & Maersk Air Case

SAS and Maersk Air attempted to undermine the massive price reductions that flowed to air travellers from the European Commission's deregulation of the aviation industry, with a market-sharing agreement from 1998 to 2001.

The illegal activity included SAS making cash payments to Maersk Air in exchange for withdrawing from certain routes and a 'contract of cooperation' between the two companies in 1999. For instance, the companies' agreement led to the monopolisation by SAS of the Copenhagen-Stockholm route, harming over one million passengers that used that major route every year. The abuse by SAS and Maersk Air was classed as 'very serious' and the Commission fined the companies over € 39 million and over € 13 million respectively. As a result of the Commission action, the companies resumed competition on the affected routes.
CONCLUSION & SUGGESTIONS

A study of different cases shows that there are potential areas of cartels in Airline Industry. Code sharing Agreement are not cartel per se but it can be an anti-competitive mechanism if left unchecked. A trend of cartels in Indian Airline Industry shows that there is need of hour to keep check on activities of airlines and air turbine fuel suppliers to avoid anti-competitive activities in airline industry.

Leniency policy can be helpful in certain cartel cases. Competition laws all over the World and even that of India have a leniency policy for cartels as leniency policy can encourage member of cartels to furnish true information about cartel to avoid larger fines and punishments.

Recommendations:

In the context of a multiplicity of airlines, airport operators (including private sector), and the possibility of oligopolistic practices, there is a need for an autonomous regulatory authority which could work as a watchdog, as well as a facilitator for the sector, prescribe and enforce minimum standards for all agencies, settle disputes with regard to abuse of monopoly and ensure level playing field for all agencies. The CAA was commissioned to maintain a competitive civil aviation environment which ensures safety and security in accordance with international standards, promotes efficient, cost-effective and orderly growth of air transport and contributes to social and economic development of the country.

It is not possible in the limited space to take up the issue of anti-competitive behaviour of airlines in detail. But the evidence from other countries shows that collusive pricing is fairly common. Recently, Martin Holland NV and 10 other airlines were found guilty of coordinating surcharges on cargo to and from the US. All pleaded guilty. Again, the alliance of BA, AA and Iberian Airlines was declared uncompetitive unless it made its landing slots available to competing airlines. There are many such cases of collusive behaviour (even in the last few years). The jurisprudence also indicates what are the most uncompetitive practices of airlines. Price fixing is right on top.

Yet, the most anti-competitive case was surely the mergers of Jet-Sahara and Kingfisher-Deccan some years back. Readers may verify that immediately after fares were raised by the airlines.
Jurisprudence shows that airlines are prone to cartelisation. Yet the action must come after judicial scrutiny and consequent penalties rather than phone calls from the minister and meetings with ministry officials. The fares may come down now but is this a case of winning the battle and losing the war? Or maybe Mr Tata was right in calling India a 'banana republic'? It is time to seriously activate our regulatory institutions.
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