
CARTELIZATION OF AIRLINES IN THE INDIAN AVIATION SECTOR

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ABSTRACT

This paper examines cartelization within India's rapidly growing aviation sector, a market characterised by oligopoly. High barriers to entry, homogeneous products, and similar cost structures contribute to this anti-competitive behaviour. The paper explores the legal implications under the Competition Act 2002, analysing cases where the Competition Commission of India (CCI) investigated alleged cartels, including instances of algorithmic collusion facilitated by pricing software. The authors highlight the detrimental effects on consumers, the economy, and overall market integrity, advocating for stricter regulatory mechanisms to detect and prevent future cartels.

INTRODUCTION

The airline industry contributes immensely to the economic growth and connectivity of India by linking various regions and developing both domestic and international trade, as well as making it convenient for people to choose a quick mode of transportation. However, recently, there has arisen an apprehension about the anti-competitive practice developed in the sector at large. This anti-competition is perceived in the form of Cartelization.

Cartelization refers to a secret agreement among competitors for determinate of price, restriction of supply and division of markets, which adversely affects fair competition and consumer interest, especially in the context of India, given that India is the third largest domestic aviation market, right after USA and China.

The following paper goes on to explore the legal economic and technological dimensions of this issue. It also discusses the nature of Indian aviation sector, while analysing the reasons leading up to the cartelization. Furthermore, as algorithms play a role in price setting, especially during the online ticket bookings, there is also the possibility of algorithmic collusion that raises new questions about how modern airlines may be coordinating their pricing strategies without human intervention.

INDIA'S AVIATION SECTOR: CONDUSIVE ENVIRONMENT FOR CARTELS

India's aviation sector can be considered an oligopoly, given that a handful of airlines are dominant here. In economic terms, an oligopoly market is a place of limited competition where a small number of producers or sellers share the market. Usually, an oligopoly market has fewer members, low entrance barriers, and the business environment is unstable-which gives big firms the freedom to conspire to increase prices for consumers.

Such markets are prone to being anti-competitive in nature since it is easier for the firms involved to form an alliance that borders on creating a monopoly. This kind of markets are prone to collusion as well since major firms set prices and control the goods rationed. Cartels benefit from oligopoly since it allows collusion and legal agreement as in the fixing of price and quantity of production. Cartelization enables decisions such as those on production fixation to maximize profit by the participants. However, when all businesses adopt this approach,

oligopoly becomes diluted and a monopolistic market exists, where market participants are favored at the expense of consumers by incorrect asset allocation and price fixing.

There are various reasons as to why India's aviation sector is an oligopoly and as to why is it prone to cartelization:

1. **Barriers on entry and exit-** It is very capital intensive to start an airline in India since a new player has to pay a premium price, mainly for acquiring aircraft, whether buying or leasing them. This can result in mounting debt on the airline and as a result, the airline can go bankrupt, for example, Jet Airways.
2. **Strict Regulations-** There are various regulations that pose significant hurdles to the newcomers in the aviation sector. For example, the route dispersal guidelines which mandates the airlines to provide connectivity to remote regions such as the north east, Andaman etc. These areas are not economically viable for the airlines, thereby restricting the entry of newcomers. Furthermore, the minimum requirement for equity and fleet for domestic operations also increases the entry cost for the new comers.

Furthermore, rules for international operations are quite stringent too. There's a minimum requirement of 5 years of domestic operations and a minimum fleet of 20 aircrafts¹.
3. **Homogeneity of products-** Airline services primarily offer the same basic service of traveling from one place to another. While degrees of services will vary from full-service airlines offering in-flight meals and amusement to low-cost airlines with a much more stripped-back service, the product as a whole is relatively similar in all airlines, which makes it susceptible to collusion.
4. **Similar production costs-** Fuel, particularly Aviation Turbine Fuel (ATF), is the biggest cost for all airlines, and consequently, their cost structures are largely similar. The result is a relatively harmonized cost profile that will make it easier to achieve price

¹ Guidelines for grant of permission to Indian Air Transport Undertakings for operation of Scheduled International Air Transport Services, Circular 8 of 2009, <https://www.dgca.gov.in/digigov-portal/?dynamicPage=aeronauticalInformationCirculars/119/0/viewDynamicRulesReq>

collusion: airlines that face similar increases in fuel prices are more likely to agree upon a coordinated increase in price.

5. **High market concentration and alternatives-** In India, the aviation market is highly concentrated with only a handful of airlines dominating the market, despite there being 39 registered airlines, this makes it easy for the well-established airlines to keep a check on the competition and collude. Further, even today a major chunk of Indian population cannot afford air travel, thereby opting for alternatives like railways.

Airline cartels conduct their acts secretly without publicizing their agreements, and hence do not attract any legal action. Such secret activities in turn make it complicated to detect and prove cartel activity. Cartels use many tricks to distort the market. For example, they may collude in secret and agree on a price of airfares that is set at higher-than-natural levels; this eliminates price competition, and consumers cannot do otherwise than pay inflated prices. Moreover, cartels could share profitable routes between themselves, and it would lessen competition between them on those routes, thereby limiting consumer choice. If the prices of fuel do not increase, airlines can collectively increase the fuel surcharge as an organized manner of raising profit.

EFFECTS OF CARTELIZATION

Cartelization of airlines does not only have a severe impact on the newcomers, but also on the consumers, the economy, and the overall market integrity. The cartelization of airlines often involves these airlines dividing profitable routes amongst themselves, limiting the options available to travellers. This can lead to situations where passengers are forced to take less convenient routes, endure longer travel times, or pay a premium for their preferred routes due to the lack of competitive pressure. Furthermore, by colluding to fix prices, the airlines could artificially inflate the prices of the tickets which compels the consumer to pay more, since no other viable option is available for air travel. As discussed before, the Indian aviation sector is an oligopoly; however, the practices followed in the industry are homogenous in nature i.e., the same price of fuel, similar services provided etc. Therefore, colluding on top of that, ultimately makes the Indian aviation sector a sort of a monopoly, wherein the consumers are compelled to buy the tickets at the same price, with almost the same services.

Furthermore, when airlines are in a fair competition, a lot of innovations take place which are not only limited to air travel, but also customer services, etc. For example, airlines such as British Airways, Jetblue, and Delta, use artificial intelligence technology to enhance customer satisfaction and to improve the overall quality of service². However, when they collude to control the market, they face less incentive to innovate, improve service quality, or offer new and attractive routes or amenities. This complacency ultimately harms consumers, who are left with fewer choices and stagnant service quality.

The process of cartelization also has an impact on the economy. It leads to inefficient allocation of resources in the market. Because a cartel restrains output and artificially inflates prices, it generates what is termed "deadweight loss," an economic concept reflecting the loss in welfare that societies endure when markets do not compete competitively. The loss is the potential untapped for such lower price and greater consumer gain that would occur in such a more competitive market, but which are forgone because of the market manipulation by the cartel. For example, if the airlines collude to increase their ticket prices, lesser number of people will buy the tickets. The revenue which is lost because of lesser number of people buying the tickets is essentially the deadweight loss.

Moreover, Cartelization undermines the elementary principles of fair competition and drives down market trust. Long-run adverse effects would be further augured in consumers' disillusionment with the industry and the reluctance of potential investors toward a market perceived as rigged or unfair.

COMPETITION LAW AND CARTELIZATION

The Competition Act 2002 is primarily responsible for regulating competition and keep an eye on anti-competitive practices, that could ultimately harm consumer welfare. Cartelisation is explicitly prohibited under this Act and falls in the category of a horizontal anti-competitive agreement.

Horizontal agreements impact enterprises that are at the same level of the market, such as competing airlines. The Act based on the assumption that horizontal agreements, cartels

² AI Take-Off: 17 Airline Innovations Boosting Experience and Reducing Costs, <https://www.scandit.com/resources/guides/airline-innovations-boosting-experience-reducing-costs/>, (Last visited: 30/01/25)

amongst them, have an appreciable adverse effect on competition (AAEC). The burden of proof thus shifts to the accused enterprises that it will prove that its agreement does not have AAEC³. Section 3 of the Competition act talks about the types of agreements, including cartels, that are presumed to have AAEC. For example, price fixing, Limit or control production, supply, markets, bid-rigging etc. section 19 of the act empowers the CCI to initiate investigations into alleged cartels based on information received from any source, including consumers, their associations, or trade rivals.

In 2005 the first attempt to cartelization was aborted by the CCI when the Federation of Indian Airlines (FIA) came together to unite their efforts to take up the issues and raise them before the government and explore ways and means of resolving the same. Sadly, their first effort was that of discussing price-related matters, which was reported to the Competition Commission of India, CCI, which ultimately took cognisance on the issue.

The CCI had examined a code-sharing agreement entered by Jet Airways and Kingfisher Airlines⁴, who held 60 percent of the total aviation market, wherein dominant operators could coordinate both price and route allocation. The CCI, although acknowledging the fact that these two airlines could form a monopoly⁵, had found it not to be an infringement of the Competition Act and determined that the agreement was not a cartel created with the intention of fixing airfares. This case shows the CCI's approach of applying the 'rule of reason' while dealing with the agreements. It seeks to balance consumer benefits and scrutinises the agreements that have dominant players as such players pose a higher risk for creating anti-competitive behavior.

Further, In IATA v Air Cargo Agents Association of India (ACAAI) and Others⁶, the informant accused the members of ACAAI and the association itself under Section 3 of the Act of alleged boycott practice of airlines implementing the cargo accounts settlement system in India. It was also said that such conduct limited the supply of air cargo services, negatively affecting competition and consumers. However, these efforts on the part of the competitors did not result in an agreement in restraint of trade and thus a shutdown ended the case with a ruling that the

³ Preeti Mechan, A Project Report on Cartels In Aviation Industry, Internship Project Report, Competition Commission of India, 2011.

⁴ M.P. Mehrotra v. Kingfisher Airlines Ltd. & Ors, 2009 (http://164.100.58.95/sites/default/files/JetAirDissemOrder180811_0.pdf)

⁵ Tae Hoon Oum, The Effects of Airline Code Sharing Agreements on Firm Conduct and International Air Fares, JOURNAL OF TRANSPORT ECONOMICS AND POLICY, 102 (1996).

⁶ International Air Transport Association (IATA) vs Air Cargo Agents Association of India (ACAAI), CCI Case No. 29 of 2017.

individual choice of a firm to offer or abstain from rendering services does not violate the antitrust.

ALGORITHMIC COLLUSION

With the advent of technology, collusion can happen even without people meeting with each other in the form of algorithmic collusion. Algorithmic collusion takes place when companies begin using algorithms to set the price or otherwise reduce competition. An algorithm is a set of instructions that is followed by the computer to accomplish a specific task. For instance, while one is dealing with pricing, algorithms can take into account a host of elements such as demand, competitor price, and history of sales that they can automatically adjust the prices.

Algorithms enhance efficiency and lower prices for consumers, but can also facilitate collusion between firms. They react more quickly to market changes, allowing companies to track competitors' prices and maintain a competitive edge, preventing undercutting for market share. The first question of algorithmic collusion was raised in the case of *Samir Agrawal vs ANI Technologies*⁷, wherein the drivers of Ola and Uber allegedly colluded using the algorithm of the app. However, the CCI dismissed the instant matter.

In the landmark case of *Shikha Roy vs Jet Airways*⁸, the CCI acknowledged the use of algorithmic collusion by the airlines. In this case, 5 prominent airlines allegedly colluded and increased the prices of tickets during Jat agitation of 2016 using algorithm. CCI, in this case could not find concrete evidence as to constitute that there was any collusion. The instant case adopts the two-step test for algorithmic collusion. The first stage is evidence of a traditional cartel, explicit agreements (like mails) or tacit agreements, and economic evidence of collusion. The court even held that even a blink of an eye is enough to prove collusion. If all this evidence is not found, the second stage will be to check if algorithms were used to facilitate collusion. Among such factors are the use of algorithms by an airway to decide their price, the use of common pricing software, and the maximum rate of human intervention in final decisions on prices.

The commission in the instant case found out that since all the 5 airlines were using different

⁷ *SamirAgrawal v ANI Technologies Pvt. Ltd.*, CCI Case No. 37 of 2018.

⁸ *Shikha Roy v Jet Airways (India) Limited and Others*, CCI, Case No. 32 of 2016.

software or variations of the same software, there was no evidence of collusion.

CONCLUSION

The aviation industry is rapidly growing in India, and with the advent of new technology, the chances of the airlines colluding is enhanced. The software used by these airlines to set ticket prices, uses data from the previous years and then accordingly sets the prices. The case of Shikha Roy, however, raises concerns as to how all the airlines increase the prices at the same time, given that the agitation had no relation to the past data.

The instant case was although dismissed due to lack of evidence, it did set up the 2-step test to prevent cartelization of airlines in the future. At the same time, however, the CCI needs to adopt vigilant mechanism to keep an eye on not only traditional form of cartelization, but also collusions based on algorithms. This can be done by adopting and applying innovative techniques and the principles of artificial intelligence and machine learning, in order to keep a check on cartelization of airlines.

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