

LEGAL AND ECONOMIC REVIEW OF CARTELS IN AIRLINE INDUSTRY – A CRITICAL ANALYSIS**PRITANSHU SHRIVASTAVA¹ AND ANURAG GUPTA²****ABSTRACT**

The Competition Act 2002 prohibits vertical and horizontal agreements that have an appreciable adverse effect on the competition. The Indian Aviation Sector being an oligopoly market has tendency of collusion amongst its players thereby proving detrimental to the consumers and social welfare at large.

In an oligopoly the products may be homogeneous or differentiated. Oligopolies are able to set prices (they have market-making power) but they also compete with other firms in the industry based on product differentiation.

In the present paper the Authors have discussed the law and economics of cartels in an oligopolistic market and the effects thereof. Also, the nature, scope and effect of cartels in airline industry in India and at the end of the article suggested few measures to fight the menace of cartelisation in the Industry.

I. PROLOGUE

“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.”

Adam Smith, The Wealth of Nations, 1776

Airplane, one of the greatest inventions of all times, has given way to the growth of the “Air Industry” or the “Civil Aviation Sector” all over the globe. It is now well recognized that there is a link between civil aviation and economic activity and it has a catalytic impact on general development.

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Every \$100 spent on air transport produces benefits worth \$325 billion to the economy. It generates 100 additional jobs in air transport and 610 related jobs.³

The aviation sector in India is rapidly gaining importance. It is estimated that foreign exchange transactions of \$22.5 billion are directly facilitated by civil aviation and another \$96 billion indirectly through civil aviation services. 95% of tourist arrivals are by air. Airports facilitate growth of high-value and perishable trade; 40% of exports and imports in India by value are carried by air. The sector might one day also serve to routinely provide connectivity to remote areas otherwise inaccessible by other modes of transport.⁴

Airline industry all over the world has been considered as an oligopolistic market i.e. market dominated by a few firms which are large enough to influence the market size, due to their capital intensive nature and policy restrictions⁵. In oligopolistic market there is a natural tendency to collude between enterprises. Since, it is a form of industry (market) structure characterised by a few firms where products may be homogenous or differentiated. The behaviour of any one firm in an oligopoly depends to a great extent on the behaviour of others. So, with collusion, oligopolistic firms can avoid behaviour that is detrimental to their general interest e.g. price war. Therefore, there is a high tendency of oligopolists forming a cartel. Same can be seen in the aviation industry throughout the world. A cartel is a formal organization of similar, independent companies who make joint decisions to fix prices, limit production or to share markets or customers between them. Instead of competing with each other, cartel members rely on each others agreed course of action which reduces their incentives to provide new or better products and services at competitive prices.

According to economists a number of conditions need to be present, for a cartel to work:⁶

- I. The demand for the product for which Cartel is formed in the market must be such that changes in price have a relatively small effect on the quantity of the goods demanded i.e. inelastic. Availability of substitutes in the market makes the increase in the cartel's price self defeating as buyers shift to the available cheaper substitutes.

³ See <http://spsairbuz.net/story.asp?Article=340>. (Last visited September 11, 2013).

⁴ Ministry of Civil Aviation, Government of India, *A Road Map for Civil Aviation Sector*, Report of the Civil Aviation Committee, October, 2004 available at http://civilaviation.gov.in/cs/groups/public/documents/newsandupdates/moca_000741.pdf (Last visited September 11, 2013).

⁵ See <http://www.ukessays.com/essays/economics/market-structure-of-the-airline-industry-economics-essay.php> (Last visited September 8, 2013)

⁶ KARL E. CASE AND RAY C, FAIR, PRINCIPLES OF ECONOMICS, 342 (Prentice Hall Business Publishing).

- II. The members of the Cartel must work within the rules of the group. There are always big incentives for the members to break out, cheat by increasing the output and making huge profits.

The main purpose of forming cartels is to coordinate the policies of member firms to increase the profit.⁷ But such cartels are held to be anticompetitive by competition laws of almost all the countries including Competition Act, 2002 of India (henceforth referred as ‘the Act’). This article will focus on the recent trends in airline industry and will show the tendency to enter into cartels all over the world including India. For example, in October 16, 2005 honchos of 11 airlines met in Mumbai to form the Federation of Indian Airlines (FIA) that will provide a common platform to debate industry issues and lobby the government and hammer out solutions. However, at the very first meeting they were discussing about pricing issues, which was timely brought to the notice of the CCI, and hence the very first step towards cartelization was aborted. Earlier, there had been chances of coordination in prices which might become even higher if the Proposed Alliance between AI and Jet had materialized.⁸

II. ECONOMICS OF INDIAN AIRLINE INDUSTRY: THE OLIGOPOLY MARKET

In the present article, it has been previously mentioned that Indian Aviation sector has an oligopoly market structure, therefore, the authors claim that like all oligopolistic or concentrated industries, the Indian Aviation sector is likely to be inefficient, based on the following economics postulates:

1. The price (P) charged by these firm is above the Marginal Cost (MC)⁹ i.e ($P > MC$), which means there is underproduction from the entire society’s point of view. The society could get more for less, but it does not.
2. Strategic behaviour outcome is not in the society’s best interest.
3. There is always a real danger of waste and inefficiency.

Due to limitation of any authoritative resource which shows that oligopoly is truly similar to monopoly, the authors for the purpose of showing similarity between the oligopoly and monopoly rely on similarities between the two, so as to take forward the proposition that oligopoly market structure is as inefficient as monopoly *vis-a-vis* perfect competition.

⁷ Gallop and Roberts, *Firm Interdependence in Oligopolistic Market*, 10, JOURNAL OF ECONOMETRICS, 1979, 313-331.

⁸ Preeti Mechan, *A Project Report on Cartels In Aviation Industry*, Internship Project Report, Competition Commission of India, New Delhi available at <http://cci.gov.in/images/media/ResearchReports/PreetiInt200711.pdf> (Last visited September 13, 2013).

⁹ Marginal cost (MC) is the increase in total cost that results when an input is increased by one unit; available at <http://thismatter.com/economics/firm-production-and-costs.htm> (Last visited September 11, 2013).

Features of oligopoly market structure and monopoly are as follows:

Monopoly	Oligopoly
➤ Unique goods of one seller	➤ Similar & unique products of few sellers
<ul style="list-style-type: none"> ➤ High barriers to entry <ul style="list-style-type: none"> • Government regulations • Location of business operations • Resource (capital, expert human resource, etc.) • Technology 	➤ High barriers to entry
➤ Imperfect Information	➤ Slightly Imperfect Information
➤ Little advertising	➤ Uses advertising
➤ Max Profits → Marginal Revenue ¹⁰ (MR) = Marginal Cost (MC)	➤ Always Max Profit when MR = MC
➤ Price Setter	➤ Forms of collusion which reduce competition and lead to higher costs for consumers
➤ Long-run profits can be positive	➤ Retain long run abnormal profits. High barriers of entry prevent sideline firms from entering market to capture excess profits
➤ Inefficient outcome	➤ Inefficient outcome

From the above, we can infer that oligopoly is not much different from the monopoly market structure or in other words oligopoly is a diluted form of monopoly.

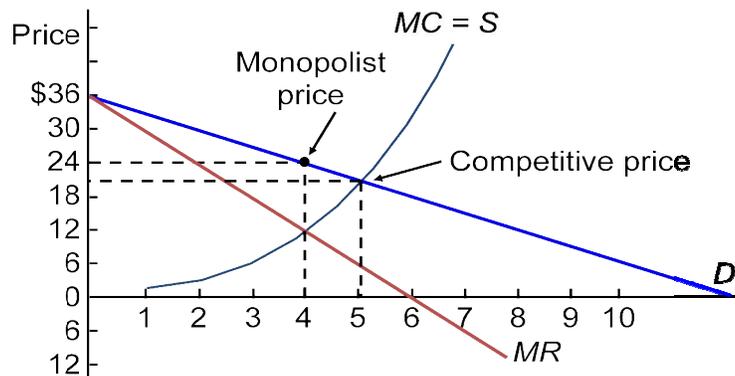
One way to understand collusive oligopoly versus perfect competition is with the aid of graph of monopoly because when the sellers in an oligopoly market come together to form cartel they determine price and behave as a monopolist, thus, it would be useful to compare with equilibrium

¹⁰ Marginal revenue (MR) is the additional revenue that will be generated by increasing product sales by 1 unit, available at <http://thismatter.com/economics/firm-production-and-costs.htm> (Last visited September 11, 2013).

output and price in a perfectly competitive industry with the output and price that would be chosen if the industry were organised as monopoly or a collusive oligopoly.

Figure 3¹¹

Comparing Monopoly and Perfect Competition



The above given figure explains that under a perfectly competitive market, price and output is determined at the level where price is equal to marginal cost. In this case, price is \$21 and output is 5 units. These price and output decisions are determined by the intersection of the competitive supply curve, S and the market demand curve. (MC in a newly organized monopoly is exactly same as the Supply curve, S that represents the behaviour of all the independent firms when the industry was organized competitively).

The monopolist can choose any price/quantity combination along the demand curve. The output level that maximizes profits to the monopolist is 4 units - the point at which marginal revenue intersects marginal cost. Output will be priced at \$24. To increase output beyond 4 units or to charge price below \$24 (which represents the amount consumers are willing to pay) would reduce profits.

Instead of considering a monopoly in the above discussed model, if we consider that the individual firm owners simply decide to work together in an effort to limit competition and increase joint profits, i.e. they decide to collude, then also the outcome would be exactly the same as the outcome of a monopoly in the industry. Thus, firms certainly have an incentive to collude in spite of being illegal.¹²

3.1 Game Theory, Oligopoly & Cartels

¹¹ *Supra* Note 4 at pg 316.

¹² *Ibid*

A cartel is a special case of oligopoly when competing firms in an industry collude to create explicit, formal agreements to fix prices and production quantities. In theory, a cartel can be formed in any industry but it is only practical in an oligopoly where there is a small number of firms. Cartels are more stable if the industry deals in commodities rather than differentiated products because it is easier to fix price and production quantities. In such situations, if there is any change in the market share of one member of the cartel, the member will immediately know that this is potentially because of rise or cut in prices made by another member.

In Game Theory terms¹³, a cartel arrangement *may* have prisoner's dilemma. All the members of the cartel will be better off if they stick to the agreed prices and production quantities. But for each individual member, it is advantageous to cheat by increasing production or reducing price and thereby selling more products.¹⁴

When firms in an oligopoly decide about quantity and pricing, they must consider what the other firms will do, since quantity and price are inversely related. If all the firms produce too much, then the price may drop below their average total costs (ATC)¹⁵, causing them losses. If they can restrict quantity to that which corresponds to where marginal cost equals marginal revenue for the oligopoly as a whole, then they can maximize their profits. However, they do have one advantage over the prisoner's dilemma scenario — they usually know what the other firms did in the past, so they can decide on quantity and pricing based on the assumption that they will act in the same way in the future. But if the firm is wrong in its anticipation, then they can make corrections in its production schedule.

Therefore, firms in an oligopoly try to eliminate guesswork by forming a cartel, where they agree on a particular output, so that they can sell their output at a profit maximizing price. Where firms have a history of working together, they can choose a dominant strategy based on the choices that the other firms have made, which is called a Nash equilibrium.

But cartels often fail because one or more firms will be tempted to cheat, since this will allow them to earn outsized profits, especially if they are a smaller firm that contributes only a small share of the

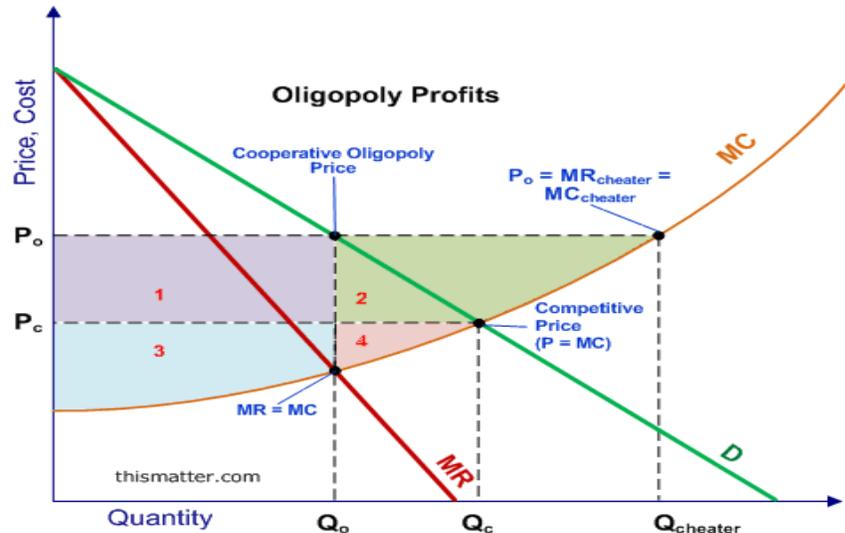
¹³ Game theory is a particularly useful tool for understanding why firms and individuals make the decisions they do, and how the decisions made by one individual affects others, *available at* <http://economics.about.com/cs/studentresources/f/gametheory.htm> (Last visited September 12, 2013).

¹⁴ *See* Economics of Cartel, *available at* www.tutor2u.net/blog/files/Collusion_Oligopoly.pdf (Last visited September 10, 2013)

¹⁵ Average total cost is the sum of all the production costs divided by the number of units produced, *available at* <http://thismatter.com/economics/firm-production-and-costs.htm> (last visited September 12, 2013).

total output of the oligopoly. For that would allow the firm to sell a greater quantity at the profit maximizing price without lowering demand, and therefore, the price.¹⁶

Figure 5: Game Theory of Oligopolistic Pricing¹⁷



When firms in a cartel cooperate by restricting quantity for higher prices, then each firm gets P_o for its product by restricting its quantity to the agreed amount Q_o (it is assumed that Q_o is equal to each firm's $MR = MC$ output), and each firm earns the revenue above its marginal cost represented by the areas 1 + 3 in the diagram on the left. Hence, *the oligopoly earns what a monopoly would earn*. When none of the cartel members cooperate, then the quantity increases to Q_c and the market price declines to the competitive price P_c , and each firm in the oligopoly earns 3 + 4 above their marginal cost. (Again, the size of the 2 areas will be commensurate with the size of the firms and their corresponding market share.)

If a firm cheats, then it earns: 1 + 2 + 3 + 4 by producing more until $MC = P_o$, which is equal to the quantity, $Q_{cheater}$. This assumes that the firm produces only a small portion of the output of the oligopoly; otherwise, the firm's increased output would cause the market price to decline, and the market demand curve for the oligopoly as a whole would shift to the left.

3.2 Social Cost Of Oligopoly

The economists generally agree that resources should be developed and utilised in such a way so as to maximise total satisfaction or welfare of the people. According to Welfare Economics, "*the maximum total satisfaction is the yard stick for analysing the efficiency of an economy*". Italian Economist

¹⁶ See Game Theory of Oligopoly, available at <http://thismatter.com/economics/oligopoly-game-theory.htm> (Last visited September 14, 2013).

¹⁷ Ibid

Vilfredo Pareto enunciated a straight forward criterion “any change in economic operations which harms no one and which makes some people better off must be considered to be an improvement and hence welfare”.

In oligopoly, there is misallocation of resources and hence reduction in social welfare. Because a dominant firm determines the price and output policy for the entire industry and other market players in tacit collusion follow the leader to yield maximum profit. Hence, this price leadership is similar to a monopolist setting price of the commodity or services.

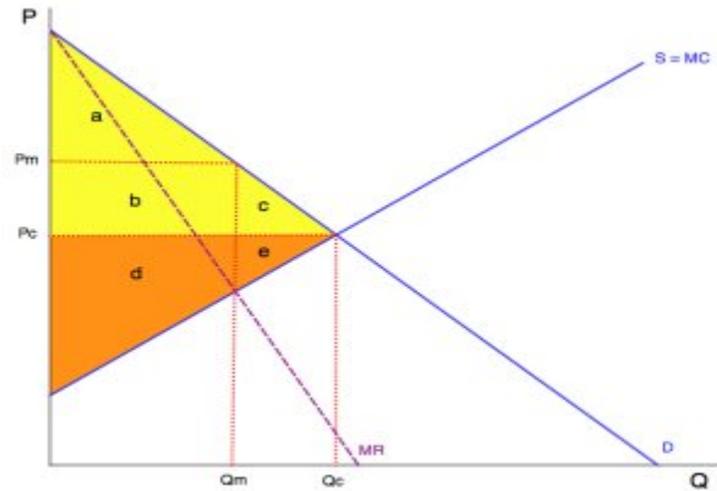
As discussed above, when the sellers in oligopolistic market structure enter in collusion with one another they are just like a monopoly and lead to an inefficient mix of output as consumers face scarce output and high prices. Thus, we can safely assume that social cost of oligopoly market players in collusion is quite similar to that of monopoly.

The below given diagram shows how we might make a rough estimate of the size of the loss to social welfare that arises from a monopoly or collusive oligopoly: in the case of perfect competition, firms simply produce at competitive price (P_c) where the supply and demand curves interact. All firms are identical so will face identical supply curves – if this firm’s supply curve (marginal cost curve) was higher and it was unable to profitably produce at P_c then it would have gone out of business, and if its supply curve was lower and it was able to make profits then other firms would enter the market until all firms were making zero profits. When the firm produces at P_c it will supply quantity (Q_c).

When it has a monopoly, it instead produces at the point where $MR = MC$, i.e. where the marginal revenue curve cuts the supply curve. This is quantity Q_m which will sell for price P_m .

Now first consider the consumer and producer surplus in the case of perfect competition.

Figure 4: Welfare Loss From Monopoly *vis-a-vis*-Perfect Competition¹⁸



The yellow area shows consumer surplus and orange area shows producer surplus. The graph is split into five areas - area a, b, c, d and e. Ignore the purple MR line cutting through areas a, b and d, the areas are just bound by the blue supply and demand curves and the red dotted lines linking price and quantity combinations.

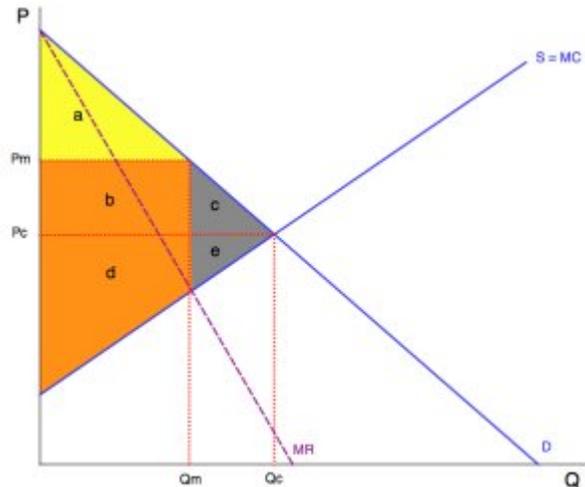
In the *competitive case*:

Consumer surplus = a + b + c

Producer surplus = d + e

Now let us consider the consumer and producer surplus in the case of monopoly.

Figure 4A¹⁹



¹⁸ See <http://mnmeconomics.wordpress.com/2011/08/15/the-welfare-loss-of-monopoly/> (Last visited on September 14, 2013).

Again yellow is consumer surplus, orange is producer surplus, and third colour is grey to show 'deadweight loss'²⁰ – the area that was surplus to consumers or producers in the competitive case but has now been lost.

In the *monopoly case*:

Consumer surplus = a

Producer surplus = b + d

Deadweight loss = c + e

The effect of going from perfect competition to monopoly is bad for consumers. Consumer surplus has been reduced by (b + c). Area b has gone from consumers to producers, so this is not an overall welfare loss, just a distributional change from consumers to producers.

However the monopoly is good for producers. Producer surplus has increased by (b – e) and as b is a larger area than e, this is a net gain. Areas c and e are deadweight loss. Consumers have lost c and producers have lost e, this is because there is now less output being produced due to the quantity decreasing from Q_c to Q_m .

So overall society loses out thus, there is a net welfare loss when the aggregate welfare of consumers and producers is taken into account, although producers are likely to be happy as they have gained at the expense of consumers. From an economic point of view, here there is an efficiency loss caused by going from perfect competition to monopoly.

III. NATURE OF INDIAN AVIATION SECTOR AND FACTORS CONDUCTIVE TO FORMATION OF CARTELS

As discussed in previous sections, that Indian Aviation sector operates in an oligopoly market, the following qualities contributes to make it a collusive one:

- High Entry and Exit Barriers²¹

Aviation Industry has high entry barriers. The following entry barriers are faced by a new entrant:

¹⁹ *Supra* note 13.

²⁰ Economic Times, *Definition of 'Deadweight Loss'*, available at <http://economictimes.indiatimes.com/definition/deadweight-loss> (Last visited on September 15, 2013).

²¹ Murtuza, *Role of Economic Evidences in Prosecution of Cartels*, available at <http://cci.gov.in/images/media/Reports/MURTUZAIntn240211.pdf> (Last visited September 15, 2013).

1. High capital cost of purchase of aircrafts, this to some extent is tide over by leasing of aircrafts, but leasing too doesn't come very cheap.
2. Regulations governing new entry:
 - a. *Route Dispersal Guidelines*:²² They are constraining the profitability of the carriers. The airlines are expected to serve a fixed percentage of their capacity to routes where passenger traffic is low which is making their operations unviable and in turn making the industry less attractive as far as new entry is concerned.
 - b. *Minimum Equity and Fleet Requirements*²³ for domestic operations is again increasing the entry cost.
 - c. *Minimum 5 years of domestic experience and Minimum fleet size* of 20 aircrafts is restricting entry in International skies.
 - d. *Slot Allotment*²⁴ & *Constraint*: Capacity constraint acts as a major entry deterrent and increases the cost of entry as unavailability of desirable slots will have its impact on the profitability. Allocation of slots have been grand fathered and entails incumbency benefits. In allocation of slots, it is more important to have good quality of slots that are strategically placed than to have a quantum of slots which are oddly timed and result in lower passenger loads and higher costs.
 - *Homogeneity of Products*²⁵

The Airlines typically deliver the same product i.e. transferring scheduled passenger traffic from their origin to the destination. There are 2 sets of Models namely Full Service Carriers and Low Cost Carriers. The full service carriers (FSC) take passengers from origin to destination but in a more luxurious manner. They offer free on board food and entertainment where as Low Cost Carriers (LCC) doesn't go out of the way as far as delivering these amenities are concerned.

- *Similar Production Cost*²⁶

²² Government of India Order No. AV 11012/2/94-A.

²³ Aeronautical Information Circulars No. 08 of 2009.

²⁴ Airport Authority of India and Director General of Civil Aviation (DGCA) allot slots in accordance with the IATA worldwide slot guidelines. IATA Worldwide Slot Guidelines, *available at* IATA August 2011 <http://80.168.119.219/UserFiles/File/w-slot-g.pdf> (Last visited on September 15, 2013).

²⁵ *Supra* Note 17.

²⁶ *Ibid*

The airlines' production costs are more or less similar in the sense that most of their revenue receipts go in paying the fuel bill. The Aviation Turbine Fuel (ATF) is the most costly in India when compared to other nations.²⁷ The liberal taxes imposed on the imports of ATF have made air travel expensive. Of late, airlines have started charging a Congestion Cess of Rs 150 from passengers despite the Government's opposition. Airlines find it justified as they feel that a lot of precious fuel is wasted when the aircrafts circle in the air before they finally get a green signal to land at the congested city airports. However, justification of this cess is highly debatable as consumers bear the maximum brunt. Firstly, it is their trip that is getting delayed and further to add salts to the wounds, they are made to pay for the delay also. The industry players always complained of structural dominance of public sector companies: Indian Oil Corporation; Bharat Petroleum Corporation; Hindustan Petroleum Corporation Ltd.²⁸ as the only Aviation Turbine Fuel (ATF) suppliers at the airports. The government recently has approved demand of airlines to infuse competition in the ATF business by bringing public sector monopoly to an end. In initial stages, government plans to allow private players for marketing ATF at smaller airports. AAI has now approved Reliance Industries to set up ATF business in 25 non-metro airports.

However, a major part of fuel uplift is from major metro airports. Presently, the public sector companies are expected to charge a margin of 20-25% on ATF sold by them. The entry of RIL is expected to bring down fuel prices (margins are expected to reduce by 5-10% with entry of private players) considerably, if only it is permitted to operate in metro airports. Other costs include parking charges; landing fees; hangar charges; maintenance; repair; personnel; entertainment etc.

- *Excess Capacity*²⁹

The sector doesn't have much excess capacity. Carriers need to ascertain their demand a couple of years in advance as the delivery of aircrafts is made with a lag of 3-5 years. However, capacity comes at a cost. There can be excess capacity if airlines charge exorbitant fares. At the same time, there can be full passenger load factors on the carriers if fares are rationally priced. So in a nutshell, capacity comes at a price.

- *High Dependence of Consumers on the Product*³⁰

²⁷ See <http://travel.financialexpress.com/200801/aviationworld09.shtml> (Last visited on September 8, 2013)

²⁸ See <http://www.ilntoday.com/2013/03/structural-dominance-of-public-sector-undertakings-psusnational-oil-companies-nocs/> (Last visited on September 12, 2013)

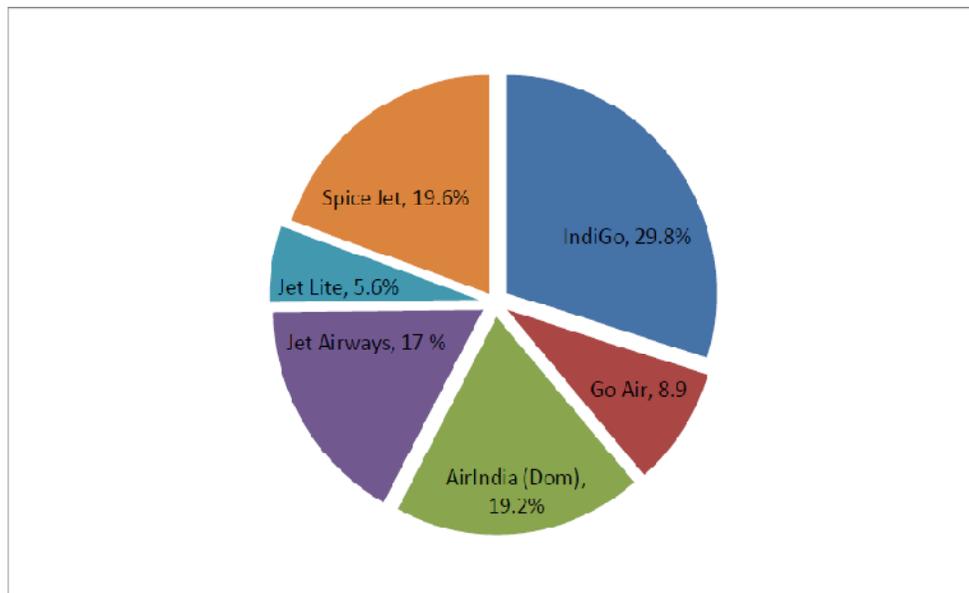
²⁹ *Supra* note 17.

Consumers are addicted to this mode of transportation as there is no existence of other mode in India that can make a passenger reach his destination within a couple of hours.

- *Seller Concentration*³¹

Cartels and cooperative behaviour are more likely in industries where there are a few firms. This is because the costs of forming a cartel and coordinating and monitoring its members' actions are lower, with less number of firms. Also, according to principles of economics in an oligopoly market, the firms with similar market shares and/or cost structures are less likely to divert and leave the cartel and hence a reduced risk that some firms will defect. The figure below shows that the market shares of different airlines are approximately the same.

Figure 5: Market Share of Players in Indian Aviation Sector³²



- **Higher Concentration**³³

In order to calculate the potential monopoly power from a merger, a commonly accepted measurement is the Herfindal-Hirschman Index (HHI). The HHI of a market is calculated by summing the squares of the percentage market shares held by the respective firms.³⁴ In fact, this index is a measure of industry concentration. According to U.S Merger

³⁰ *Ibid.*

³¹ *Supra* note 8.

³² See, <http://www.dgca.nic.in/reports/mar-ind.htm> (Last visited on September 13, 2013).

³³ *Supra* note 26.

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.³⁵

To illustrate above, the following data³⁶ is borrowed from the source mentioned in the footnote as to how HHI is used:

Firms	Market Share 2006	Square of Market Share	Market Share 2007	Square of Market Share	After Merger
Kingfisher Airlines	10	100	13	169	748
Deccan	19	361	15	225	
Spice Jet	7	49	10	100	100
Jet Lite	9	81	8	64	961
Jet Airways	27	729	23	529	
Indigo	4	16	9	81	81
Go Air	4	16	4	16	16
Indian	19	361	17	289	289
Paramount	1	1	1	1	1
HHI		1714		1474	2232

With respect to the HHI ratios, we can conclude 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 easily traceable and deviation is less unlikely. Cartels are universally recognized as harmful type of anticompetitive conduct. It is condemned in all competition laws of the world. No legitimate economic and social benefit is derived out of it. So, the CCI must keep an eye on such tendencies.

³⁴ See, <http://www.unclaw.com/chin/teaching/antitrust/herfindahl.htm> (Last visited September 13, 2013).

³⁵ See, http://www.justice.gov/atr/public/guidelines/horiz_book/15.html (Last visited on September 13, 2013).

³⁶ Administrative Staff College of India (ASCRI), *Competition Issues in the Domestic Segment of the Air Transport Sector in India*, 12, (2006).

IV. NATURE AND IMPACT OF CARTELS

Cartels are universally recognized as the most harmful type of anticompetitive behaviour. As they offer no legitimate economic or social benefits that would justify the losses that they generate to the society and consumers.³⁷ Thus, they are condemned in all competition laws and in some countries are classified as a crime.³⁸ Sophisticated cartel operators know that their conduct is unlawful and so they conduct their business in secret, sometimes taking great pains to keep their agreements disclosed from the public and from law enforcement officials.³⁹

Cartels have inherent characteristics that adversely affect the economy. The artificial price rise seen in the cartel cases, endorses this fact. The ultimate victims of cartelization are the consumers and the business houses. Cartels not just have monopoly over price of a product but also restrict other private market players to enter in the market. Cartel formation will be difficult and unsustainable if effective competition persists in the market.⁴⁰

As discussed earlier, cartels are kind of horizontal anti-competitive practice. The operation of cartels has a tendency to be very complex and may be varied according to the number of participants and the nature of the market. There can also be situations wherein there is no overt collusion between cartel members but they act in a manner which seems to be a collusive behaviour in line with the existing market forces.⁴¹

Such agreements are not prohibited *per se* instead rule of reason needs to be applied, but they are prohibited when the cartels' sole motive is profit maximisation through- fixing of prices, sharing/dividing of market, etc. and in turn causing a negative impact on prices, output, innovation or quality of products and services.⁴²

5.1 Price Transparency & Tacit Collusion

There is a high degree of transparency over prices and volumes in the Aviation sector. All the airlines have their present and future fares available over Computer Reservation Systems (CRS), which can be

³⁷ Baxter, *Private Cartel Goes Public*, 22, STAN. L. REV. 675.

³⁸ OECD Report, *Nature and Impact of hard core Cartels and Sanctions Against Cartels Under Competition Laws of Nations*, 5 (2006).

³⁹ *Supra* note 31.

⁴⁰ *Supra* note 13.

⁴¹ ABIR ROY, *COMPETITION LAW IN INDIA*, . 68 (Eastern Law House, 1st edn, 2008).

⁴² *Supra* note 24.

accessed by the customers as well as by the rival airlines.⁴³ Such transparency can be an instrument for collusion as it facilitates the detection of cheating on a cartel agreement. It is a common practice for an airline to announce, through the CRS's that its price on a certain route will increase by some amount beginning on a certain date in the future.⁴⁴

The colluding parties take advantage of this transparency and enter to a tacit collusion. A collusion occurs when price and quantity - fixing agreements among producers are explicit. Tacit collusion occurs when such agreements are implicit.

If the other carriers match the behaviour, 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.⁴⁵

This transparency has its own advantages and disadvantages. Though it is important to have transparency in pricing for the consumers to make choice keeping in mind the cost, schedule. At the same time chances of cartelisation cannot be ignored either.

Thus, as mentioned earlier 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.

V. CARTELS UNDER COMPETITION ACT, 2002

Anti-competitive Agreements are those agreements which cause or are likely to cause Appreciable Adverse Effect on Competition (AAEC). The Act provides for two kinds of anti-competitive Agreements viz. **horizontal agreements and vertical agreements**. Vertical restraints are agreements or concerted practices entered into between two or more companies each of which operate, for the purposes of the agreement, at a different level of the production or distribution chain, and relating to the conditions under which the parties may purchase, sell or resell certain goods or services.⁴⁶

⁴³ See <http://www.oecd.org/competition/abuse/2535975.pdf> (Last visited September 15, 2013).

⁴⁴ Nancy Shah, *Competition Issues in the Civil Aviation Sector*, Internship Project Report, Competition Commission of India, New Delhi available at http://cci.gov.in/images/media/ResearchReports/F1_NancyShah_20080411102237.pdf (Last visited September 15, 2013).

⁴⁵ See, <http://www.econ.jhu.edu/People/Harrington/Rome.ppt> (Last visited September 24, 2013).

⁴⁶ See, the European Commission's Guidelines on Vertical Restraints (2000/C 291/01)

However, horizontal agreement is an agreement for co-operation between two or more competing businesses operating at the same level in the market. Horizontal Agreement is presumed to have AAEC and vertical agreements having AAEC which is to be determined by rule of reason.⁴⁷ Cartels are included in the category of horizontal agreements presumed to have AAEC. Establishing AAEC is the key factor before any agreement is termed to be anti-competitive and declared void. In case of horizontal agreements that are presumed to have AAEC, the burden of proof shifts on the enterprise or person against whom the charge is framed.⁴⁸

As per Section 3 of the Act, *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, which –*

- a) *Directly or indirectly determines purchase or sale prices;*
- b) *Limits or controls production, supply, markets, technical development, investment or provision of services;*
- 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;*
- d) *Directly or indirectly results in bid rigging or collusive bidding, shall be presumed to have an appreciable adverse effect on competition.*

Cartelization is one of the horizontal agreements that shall be presumed to have an appreciable effect on competition under Sec. 3 of the Act. Cartel busting requires certain specialized skills which differ from the skills required for investigation and prosecution of other infringements of competition law. An increasing number of Competition Authorities apply leniency programmes to detect the cartel infringement.

Section 46 of the Act empowers Competition Commission of India (henceforth CCI) to impose lesser penalty if disclosure is made by the member of the cartel before submission of investigation report by Director General with CCI.

available at http://europa.eu/legislation_summaries/other/126061_en.htm (Last visited September 24, 2013)

⁴⁷ Somya Suman, *Competition Law and Cartelization*, Internship Project Report, Competition Commission of India, New Delhi available at http://www.lawyersclubindia.com/articles/print_this_page.asp?article_id=543 (Last visited September 24, 2013).

⁴⁸ *Supra* note 39.

Section 19 of the Act, provides that CCI may inquire into any alleged cartel on receipt of any information from any person, consumer or their association or trade associate. To avoid furnishing of false information, the Act prescribes for payment of very high fee, for the information furnished to be entertained by CCI, hence, making the probability of receiving wrong information is almost nil.⁴⁹

Cartelisation is very difficult to detect and investigate for its inherently secretive nature.⁵⁰ The fight against cartels is legally and practically an uphill task. Firstly, cartelists are by definition secretive about their illicit behaviour, and therefore agencies have to undertake great efforts to detect cartels. Secondly, agencies need additional powers and skills to collect sufficient evidence to mount a viable case against non-cooperative defendants. Thirdly, only in the cartel area, do agencies operate sophisticated leniency programmes to destabilize such conspiracies. Fourthly, the investigation of international cartels tests the limits of agency's jurisdictional reach. Last but not the least, the growing trend to criminalize cartel behaviour obliges many agencies to work to a particularly high standard of procedure and proof.⁵¹

Special skills are required for cartel busting which are different from the skills required for investigation and prosecution of other infringements of competition law. The focus is on proving the existence of an arrangement itself rather than establishing its impact on the market in economic terms.⁵²

Section 41(2) of the Act, confers upon the Director General, in the discharge of his duties, the powers as are vested in a Civil Court under the Civil Procedure Code, 1908. By virtue of this section, the Director General is empowered to summon, demand production of documents, receive evidence on affidavit and issue commissions for the examination of witnesses or documents. The Director General or any person investigating under his authority has the powers as are vested in the Inspector in terms of sections 240 and 240A of the Indian Companies Act, 1956. Thus, the Director General or any person investing under his authority also has the power to demand production of documents and evidence which are in the custody of a body corporate and power to search and seizure with the approval of the First Class Magistrate having jurisdiction where he has reasonable grounds to believe that books, papers or documents may be destroyed.⁵³

⁴⁹ Competition Act, 2002.

⁵⁰ Brander, *Dynamic Oligopoly Behaviour in Airline Industry*, 11, INTERNATIONAL JOURNAL OF INDUSTRIAL ORGANISATION, 407-436 (1993).

⁵¹ *Supra* note 13.

⁵² *Ibid.*

⁵³ *Ibid*

The following are some illustrative cases to explain the aforementioned:

- *Kingfisher-Jet Airways Agreement on Code Sharing*

The Competition Commission of India has begun investigation in the alleged case of airline cartelization in the form of code sharing agreement between the two airlines. Jet Airways and Kingfisher together control a market share of close to 60 percent.⁵⁴ Apart from this combination there are only small market share holding airlines excluding Air India. So this combination may prove to be detrimental to the interest of the consumers and to the very spirit of the competition law. Also, the DG report has found that the code sharing agreement has breached sections 3 and 4 of the Competition Act, 2002. These sections deal with anti-competitive pacts regarding production, storage, distribution and supply and abuse of dominant position. The CCI has reached a final determination in the case and found that there was no anti-competitive practice or a cartel to increase air fares in this case.

But it can be said that such alliances may prove detrimental to competition in the relevant market as the main objective of an alliance is to strengthen or expand the aligning member's market presence and to redefine or consolidate their position in aggressively competitive global environment.

Airline alliances benefit the consumer by offering seamless travel and services between a more extensive range of city pairs, reduction in traveling time, joint lounges and co-ordination of Frequent flier programs. But on other hand, alliance can significantly reduce competition on overlapping non-stop routes and overlapping connecting routes where the allied airlines were once main competitors.

The two airlines could form a monopoly, virtually killing all kinds of competition in the aviation sector.⁵⁵ This code sharing agreement would result in formation of a cartel and may also result in an abuse of dominance.⁵⁶ But as said before that rule of reason⁵⁶ needs to be applied rather than just a theoretical doctrine or principles of cartelisation that prohibit industry practice such as code sharing *per se*.

- *Air India's Involvement in Fuel Surcharge Raising Cartel*⁵⁷

⁵⁴ See, <http://www.dnaindia.com/report.asp?NewsID=1111855> (Last visited September 25, 2013).

⁵⁵ See, <http://businesstoday.intoday.in/story/probe-into-airfare-hikes/1/11681.html> (Last visited September 25, 2013).

⁵⁶ 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).

⁵⁷ See, <http://www.thehindubusinessline.in/2010/06/23/stories/2010062350180900.htm> (Last visited September 25, 2013).

It was found that the airlines had conspired to raise fuel surcharge rates for air cargo to-and-from Korea between 1999 and 2007 in a concerted manner. The case included summoning 54 airline executives from all over the world for investigation and conducting a joint investigation with foreign competition authorities for the first time. The regulator found that the conspiracies took place on outbound shipments from Korea and inbound shipments to Korea from Hong Kong, Europe and Japan.

The case showed that the airlines overcharged by \$5.71 billion in the local market by imposing or increasing fuel surcharges during the eight-year period. The uncovering of airline cartels on fuel surcharge actually began in 2006, when European and US authorities investigated few airlines including British Airways. The investigation came at a time when the airlines were facing high fuel costs and competition from low-cost carriers.

The situation deteriorated further in 2007, as more airlines were inspected and charged for various anti-competitive practices. European Commission charged several airlines for fixing freight service prices. British Airways had to pay billions of dollars as fine as the UK and the US competition authorities denounced it for price fixing during the period 2006-07.

Korean Federal Trade Commission (KFTC) found that 21 airlines had conspired to raise the fuel surcharge rates for air cargo to and from Korea including Air India. Flag carrier Korean Air was fined the largest amount of KRW 48 billion, though the actual fine paid will be around KRW 22 billion as it was granted leniency for providing crucial information during the investigation.

India's national carrier although escaped from being prosecuted by Korean Fair Trade Commission in the present case and a class action against 21 airlines followed the issuing of a combined \$ 98.9 million as fine.

From this case, we can see that Korean Air even after being a flag carrier and founded by South Korean Government in 1962 was penalised, and Air India despite escaping the penalty from KFTC was not brought to book or penalised by the Indian Antitrust Authorities even when there was a conclusive proof of Air India's involvement. Just because it is acting as government instrumentality (i.e. if Air India Ltd.'s corporate veil is pierced we can see the government officials are involved in the business decisions) so, it should be exempted from investigation of such conduct by CCI shows lackadaisical attitude of the Indian Antitrust Authorities.

As Air India by virtue of Aeronautical Information Circulars No. 08 of 2009 and the Air Corporation Act of 1953 gets preferential treatment in few matters, this creates disincentives for the national carrier to become a more efficient and financially leaner service provider. In order to level out the competitive

field between private service providers and national carrier, preferential treatment legislation needs to be revised.

Because poor business decisions of Air India are not punished by the market in the same way as poor decisions of other private air carriers. Bad business decisions of all private air carriers are punished by holders of the firm's debt whereas Air India is only accountable to the Indian government. This social safety net reduces Air India's incentive to compete in the same way as other private Indian carriers. Maintaining the viability of the national carrier is very important, however preferential treatment reduces the national carrier's incentive to compete and make sound business decisions.

Furthermore, in order to incentivize Air India to become a leaner and more competitive service provider, the national carrier may be partially privatized. Also, to show India's commitment and law abiding attitude towards Declarations/Memorandum of Understanding (MoU) signed by India with BRICS and other countries for international cooperation in anti-trust issues.

- *Cartels For Charging High Ticket Pricing*

CCI received a fresh complaint in September 2013 from the Air Passengers Association of India (APAI), which has alleged that airlines were acting as cartels to push the ticket prices. Chennai-based APAI had approached CCI after a recent hike of as much as 25 per cent in air fares by most carriers.⁵⁸

CCI Chairman Mr. Chawla said that CCI would need more information from APAI to proceed further, as the price movements were found to be a function of supply and demand during its earlier probes. CCI Chief also said that this matter has been looked into again and again, because the upward and downward movements in ticket prices have indeed been found to be in tandem. At the same time, the prices had also been found to be moving in tandem with the forces of demand and supply, which is how a market should function and therefore no evidence could be seen of any cartelization.

In the first week of September, all domestic carriers hiked their respective fares by about 25 per cent after a steep rise in fuel prices. The hike was first announced by low-cost carrier Spice Jet and followed by other players like Jet, Air India, Indigo and Go Air followed suit.

Although this matter has merely begun and not even close to its final determination, it is difficult to comment conclusively on the likelihood of cartel formed among the airlines to hike the ticket prices

⁵⁸See, <http://beta.livemint.com/Companies/xJ1ocj3GvXDmP15aBU5DSK/CCI-to-probe-high-airfares-for-5th-time.html> (Last visited September 25, 2013).

because it would need rational economic evidences to make sure that cartel exists and thereby satisfy rule of reason.

VI. COMBATING CARTELS IN OTHER JURISDICTIONS

Unlike India, that doesn't have many cases where airline cartels are prosecuted or discovered. In other jurisdictions there are many decided cases from which CCI can draw lessons and learn from their experiences. To illustrate cases from other jurisdictions, the authors have selected following countries:

- Europe Union (EU): On November 9th, 2010, the European Commission fined 11 air cargo carriers nearly €800m for operating a global cartel that had affected air cargo services within the European Economic Area between December 1999 and February 2006. The airline carriers had initially introduced a co-ordinated flat rate surcharge per kilo for all shipments, and then extended their co-operation by introducing a security surcharge.⁵⁹ Thereafter, due to the carrier's refusal to pay a commission on surcharges to their freight forwarder clients, the carriers ensured that the surcharges did not become subject to competition through the availability of discounts to customers. Ultimately, this cartel fell within the purview of cartelization in terms of regulatory fines and exposure to civil damages claims.⁶⁰
- United States (USA): Department of Justice (DoJ) had raided the offices of several carriers on 11 February 2006, seizing thousands of documents, following a tip-off from whistleblower Lufthansa. Lufthansa thereafter, pleaded guilty to participation in the cartel and has provided cooperation in the subsequent DoJ investigations against other participants in the conspiracy. In return, the DoJ reduced the amount of the fine it sought against Lufthansa. To date, the DoJ has levied fines of around US\$1.8bn on a number of carriers and a number of airline executives have also faced fines and prison sentences in the US for their participation in the cartel.⁶¹

The 16 companies which had pleaded or agreed to plead guilty to the DoJ's investigation into this cartel, including Air France-KLM, British Airways, Cathay Pacific, El Al, Japan Airlines, Korean Airlines, LAN Cargo, Martinair, Northwest Airlines Qantas and SAS Cargo. According to the DoJ, the "*co-conspirators entered into and engaged in a combination and conspiracy to*

⁵⁹ Scott Campbell and Tristan Feunteun, *The Air Cargo Cartel - Counting the cost of Conspiracy*, COMPETITION LAW INSIGHT, 18 September 2012, available at <http://www.stewartslaw.com/article-on-the-air-cargo-cartel-by-scott-campbell-and-tristan-feunteun-of-stewarts-law.aspx> (Last visited September 26, 2013).

⁶⁰ *Supra* note 51. See, <http://www.bbc.co.uk/news/business-11719507> (Last visited September 27, 2013).

⁶¹ See, *United States of America v. British Airways PLC*, Criminal No.: 07-183-JDB, 15 U.S.C. § 1, available at <http://www.justice.gov/atr/cases/f224900/224943.htm> (Last visited September 27, 2013).

suppress and eliminate competition by fixing the cargo rates charged to customers for international air shipments, including to and from the United States”.

Thus, in a cartel case, under the US law, each individual cartel member is liable for all the damages caused by the cartel and which is estimated to be equivalent to the damages caused to the affected country, which in this case was the US. During trial, when found guilty, the carriers were also sought to be fined three times the actual amount of damages caused by the conspiracy as a deterrent to violations of US competition laws.⁶²

At the time of settlement, American Airlines decided to provide information and evidence in the form of witnesses, documents, electronic data and meetings with counsel, all of which was used in the prosecution of non-US based claims totalling to a total figure up to \$485.8m being settled by 11 carriers.⁶³

- Australia: Australian Competition & Consumer Commission (ACCC) had recently asked its airline industry to cough up the largest penalties for cartel conduct in its history. In 2006, the ACCC had started investigating collusion on fuel surcharges for air cargo services for the period between 2000 and 2006.

After the proceedings were launched between 2008 and 2010, 13 of 15 international airlines have paid a total of \$98.5m to the end of last year. Qantas paid \$20m, and most recently Emirates, Singapore Airlines, Cathay Pacific and Thai Airways International have, respectively, paid penalties of \$10m, \$11.75m, \$11.25m and \$7.5m.⁶⁴ However, Garuda airlines of Indonesia, which has not been included in the class action, has been a holdout, along with Air New Zealand, with both contesting the ACCC's findings in the Federal Court.⁶⁵ The ACCC has, till date, fined nine airlines AU\$58m.

- South Africa: Competition Commission announced in March 2012 a settlement with South African Airways and Singapore Airlines. The settlement, which involves a combined fine of \$5.8m, encompasses the air cargo surcharges as well as other price-fixing, such as escalating

⁶² *Ibid.*

⁶³ *Ibid.*

⁶⁴ *Supra* note 51. *See*, <http://www.theaustralian.com.au/business/opinion/stakes-rise-high-in-air-cargo-cartel-case/storye6frg9wx-1226726471455> (Last visited September 27, 2013).

⁶⁵ *Ibid.*

prices on particular routes during the 2010 FIFA World Cup. This probe followed a leniency application by SAA in December 2009.⁶⁶

VII. CONCLUSION AND SUGGESTIONS

After analysing working of Indian Airline Industry and different case studies, it can be safely concluded that there are potential areas of cartels in airline industry like code sharing which is not cartel *per se* but can be a mode of anti competitive practice. Secondly, Air Turbine Fuel (ATF), dividing of routes, air ticket price manipulation, etc are some areas on which competition law has to keep a check on cartel formation.

After having a bird's eye view of different airline cartel cases in different jurisdictions it can be seen that whether an airline is national airline or a private airline that countries have not only dealt with them harshly but also imbued them with criminal liability in worst cases. Another point of observation is that the jurisdictions have not only taken the damage to their economy alone but also the damage that occurred in other countries where the cartel operated.

A large number of Competition Authorities operate '*Leniency Policy*' as a key tool to detect cartel infringements. The law empowers the CCI to extend the benefit of lesser penalty to party in cartel for disclosing the facts and information of cartel operation. The preliminary evidence of mergers and acquisitions along with code-sharing agreement compelled to conclude that there is possibility of cartels to exist in Indian airline industry.

Civil Aviation Minister Ajit Singh had also proposed an economic cell in his Ministry to monitor the pricing mechanism and said " *The airfare monitoring cell is ready and will soon be commissioned under the aegis of the ministry. The economic cell would analyse data on tickets sold by airlines under different price buckets and make the information public to bring in transparency in airfare pricing. In case there are discrepancies, it would be referred to the CCI,*"⁶⁷

Under Competition Act, 2002, Commission is empowered to determine whether the combination would have or is likely to have an Appreciable Adverse Effect on the competition (AAEC) and therefore, CCI will have to play a proactive role in the maintenance and observations of fair competition rules and prevent any anti competitive agreements from taking place. With the passage of time a number of players would certainly attempt to improve their market share and profitability. If

⁶⁶ See, <http://mg.co.za/article/2012-03-26-saa-agreest-to-r188million-price-collusion-settlement> (Last visited September 21, 2013).

⁶⁷ See, http://www.business-standard.com/article/companies/fare-hike-passengers-association-takes-airlines-to-cci-113090800267_1.html (Last visited September 23, 2013)

cartels are not destroyed at incipiency it will take us back to the era of monopoly or dictatorship enjoyed by the State air carriers and consequently there will be dearth of low cost airlines in India. There's urgent need to formulate sector specific competition rules and policy according to the needs of industry in India.
