Competitive Scenario in the
Consumer durables aftermarket: the case for Air Conditioners

Internship Project Report

Competition Commission of India

Submitted By

Mayank Arora

M.A. Financial Economics

Gokhale Institute of Politics and Economics, Pune

Under the Guidance of

Mr. Rajinder Kumar

Deputy Director (Economics)

Competition Commission of India
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Introduction

In an endeavour to consider market abuse in the consumer goods industry, I would be considering the Air Conditioner (AC) segment in India. This market can be segregated into two major parts i.e. the fore market or the primary market that deals with the transaction of buying and selling of the good and the aftermarket or the secondary market that deals with the spare parts and services thereof that are required to keep the goods functioning.

The Air Conditioner market in India includes many players. These include both foreign and Indian brands such as LG, Voltas, Samsung, Daikin, Panasonic, Hitachi, Blue star, Godrej etc. The fore market in air conditioners appears to be competitive.

The focus of the research is on the aftermarket of the air conditioners. This includes the servicing and maintenance of the product, availability of spare parts, extension of warranty etc. Here the competitiveness of the primary market may or may not result in the competitiveness of the aftermarket. This would require further consideration of various aspects.

The primary market and aftermarket need to be considered from the point of view of the Competition Act, 2002, primarily, from the point of view of the Sections 3 and 4. These sections deal with the anti competitive agreements and abuse of dominant position in the relevant markets. The practices followed by the companies are considered under the act, not only from the point of view of anti competitiveness, but also by way of promoting and sustaining competition in markets, protecting the interests of the consumers and ensuring freedom of trade carried on by other participants in markets.

The concept that is used in the consumer durables aftermarkets is about tying of products. Tying arrangements generally arise when the seller of one product imposes various sorts of pressure on a buyer to induce the buyer to buy additional products from the seller or the seller's designee. The metaphor is that the buyer is "tied" to one product by his desire for the other ("tying") product. These ways and manners vary with the customer attitudes and substitutability of the products.

The understanding of the air conditioners market is mainly relied upon the information available in the public domain about these companies and various discussions with the dealers of various Air Conditioner brands and Independent Service Organisations (ISOs) and service centres. The market practices in India have been compared with the various practices followed under the Federal Trade
Commission (FTC) of United States, Office of Fair Trade (OFT) in United Kingdom and European Commission (EC), in such cases.

While considering the air conditioning markets of India in terms of various provisions of the law and the practices and rulings abroad, there are various aspects that need to be reviewed.
Primary Markets for Air Conditioners

Air Conditioning Market comprises of Central and Specialty Air Conditioning which comprises 50% of the total market and room air conditioning the other 50%. Room air conditioning consists of both commercial and residential air conditioning.

Air Conditioners can be classified into Window ACs and Split ACs, covered under room air conditioners. However, as the market share for the Window ACs is on a declining trend\(^1\), so, these products have been considered as substitutes of each other and therefore, considered as a single product market.

There are several brands in the Air Conditioning primary markets. It majorly includes LG, Samsung, Voltas, Hitachi, Panasonic, Daikin, Godrej, Bluestar and several others. These companies have sold around 3.2 million units in the year 2011-12 having the market value of Rs 17600 crores app\(^2\). Here the market share of Assembled Air Conditioners has not been considered. The market share among the major players is shown as follows

![Market Share Chart](image)

**Figure 1 Approximate Market Share of Companies in Air Conditioning segment for the period 2012-13**

The market structure seems to be competitive due to large number of players involved. Also, the market share has been distributed evenly among various manufacturers that encourages in fairness in the market. Though it does involve a huge initial capital outlay which may create an entry barrier, it, however, also provides the benefit of economies of scale and thereby reduces such threats. In fact there have been new players entering the market and have been growing at reasonable pace. For example, Godrej entered the air conditioner market in the year

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\(^1\) The market share for window ACs is close to 20 % of the total ACs market in the year 2012-13. Some of the companies have phased out the production of these ACs.

\(^2\) AIACRA, Kanvic Analysis
2005 and carries a reasonable pie of the total market share. Several other players such as Electrolux, Mitsubishi, Croma etc have entered the market. The Air Conditioners has a penetration of 3.8% for air conditioners in urban areas\(^3\). However the air conditioners market has been growing at a rate of more than 17% of Compounded Annual Growth rate (CAGR) and is expected to become a total of Rs 52000 Crores market by 2015\(^4\). This would also raise the penetration levels in the rural markets that were at a 2% level in 2011-12\(^5\). In addition, there has been consistent decline in the prices of the ACs that is the result of striving innovation and increasing competition.

Herfindahl-Hirschman Index (HHI), a measure of the size of the firms in relation to the industry and an indicator of the amount of competition among them, can be used to determine the market structure of the industry. It is defined as the sum of squares of the market shares within the industry where market share is expressed as fractions. The value of the index varies from 0 to 1, where 0 implies perfect competition and 1 implies a monopolistic market structure. For the above market share of the various companies, HHI can be calculated for the 19 firms in the industry as follows-

<table>
<thead>
<tr>
<th>Suppliers</th>
<th>Market Share (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LG</td>
<td>0.173</td>
</tr>
<tr>
<td>Samsung</td>
<td>0.113</td>
</tr>
<tr>
<td>Voltas</td>
<td>0.183</td>
</tr>
<tr>
<td>Daikin</td>
<td>0.12</td>
</tr>
<tr>
<td>Panasonic</td>
<td>0.13</td>
</tr>
<tr>
<td>Bluestar</td>
<td>0.06</td>
</tr>
<tr>
<td>Godrej</td>
<td>0.1</td>
</tr>
<tr>
<td>Others(^6)</td>
<td>0.12</td>
</tr>
<tr>
<td><strong>HHI(^7)</strong></td>
<td><strong>0.122815</strong></td>
</tr>
</tbody>
</table>

Here, the value of 0.122815 implies that the market share does not have a monopolistic power in favour of any firm. The value also suggests that the market structure is not even oligopolistic. This is similar to the interpretation that was deduced on the basis of the understanding of the market mentioned above.

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\(^3\) Turning up the Cool, Kanvic Analysis, 2011
\(^5\) Turning up the Cool, Kanvic Analysis, 2011
\(^6\) Others consists of 12 firms namely Onida, Videocon, Whirlpool, Carrier, Haier, Sharp, Electrolux, National, Mitsubishi, Sanyo, O General and Hitachi. For the purpose of ease, the share of each of these 12 companies has been kept as 1.2%.
\(^7\) The formula used = \(0.173^2 + 0.113^2 + 0.183^2 + 0.12^2 + 0.13^2 + 0.06^2 + 0.1^2 + 12 * 0.012^2 = 0.122815\)
Review of Air Conditioners Market under Section 3 and 4

**Section 3** - The preamble and Section 3(1) of the Competition Act, 2002 clearly states the prevention of practices having Appreciable Adverse Effect on Competition (AAEC) as one of the aims of the Competition Commission of India (CCI). In addition, Section 3(3) and 3(4) clearly prohibits horizontal and vertical agreements among Enterprises (as defined u/s 2(h)) and persons (as defined u/s 2(l)) that creates anti-competitive cartels. The primary market for ACs can be looked into from the perspective of firms engaged in similar business as defined in Section 3 (3) and as conditions mentioned therein stating that such entities may

(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,

In the context of such provisions, it is clear that as for the same types of ACs, the prices charged by the manufacturers differ across brands and these prices have been falling in the recent years, due to innovations set in by these companies, conditions (a) and (d) stated above would not be possible. Instead, as mentioned earlier, there have been new entrants in the market and competition has been on the rise. Also, the prices for the ACs have been kept uniform across commercial and residential segments of customers for room ACs. So the prices charged are invariably homogeneous across segments. As mentioned earlier, even the cost of buying an AC has come down considerably over the last few years that resulted in its high growth. It, therefore, implies that there were no such practices that were followed which would have an Appreciable Adverse Effect on Competition under Section 3 (3).

In review of Section 3 (4), there is prohibition for any agreement among enterprises or persons at different levels of the production chain in different markets, in respect of production, supply, distribution, storage, sale or price of, or trade in goods or provision of services, including—

(a) tie-in arrangement;
(b) exclusive supply agreement;
(c) exclusive distribution agreement;
(d) refusal to deal;
(e) resale price maintenance,

All such agreements would be considered to have an AAEC and so would be considered void. On further review of the information available in public domain, it might be possible that these manufacturers have entered into exclusive supply agreements with the foreign holding companies or exclusive distribution agreements with the government companies; it is unlikely that these practices would have a severe effect on competition. The effect of competition and even distribution of share with large number of players in the primary market would not allow the company to misuse such agreements. In addition, the innovation in the sector has led the firms to use eco friendly technology, cleaner air, energy efficient ACS etc is likely to keep any competition healthy.

Section 4- This section of the Competition Act, 2002 deals with any such abuse caused by any of the firms that might be dominant in the relevant market in India. The relevant product market under section 2(t) of the act comprises of the products that are substitutable or interchangeable by the consumers, by reason of characteristics of the products or services, their price and intended use. Here the relevant market has been restricted to the relevant product market limited to the buying and selling of Air Conditioners as a single product in the Indian market only. The players deal with the buying and selling of the ACs in the commercial and residential markets. However, it is likely that individual retail customers would not be able to challenge any of the company’s anti-competitive practices on their own. The study is carried out with retail market in mind which has grown to around 60% of the total market for room air conditioners.

Additionally, the dominant position, under the act, means a position of strength, which enables it to-

(i) operate independently of competitive forces prevailing in the relevant market; or
(ii) affect its competitors or consumers or the relevant market in its favour.

In terms of the above statement, it was felt that as the share of market was evenly distributed among the various manufacturers, it was not feasible for any player to operate independently or to indulge in an anti consumer/ competitive practice. Abuse of dominance under section 4(2)(a) of the act is possible, in case, the enterprise, directly or indirectly, imposes unfair or discriminatory conditions or price

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8 Air Coolers do have the same intended use, however their prices and other characters imply that they would be a very weak substitute for the Air Conditioners, hence the relevant product market has been restricted to the single market for Air Conditioners only.
in purchase or sale of goods or services. Since there is no dominance by any manufacturer, the abuse of dominance is likely to cause a distortion of the image of that particular manufacturer which might further lead to losses in the market. Hence, prima facie, it would be not possible for any particular manufacturer to indulge itself in anti competitive practices.

In addition to the above, these manufacturers have a sound financial standing in the electronics market. In fact, there is no relative or absolute market share weighted in favour of any manufacturer. It is a mix of foreign and Indian players that comprise of mix of the technology and innovativeness across countries and thus, there is no dominant player in the market. The HHI is very low (.1225) that suggests that the market is reasonable competitive. Also, competitiveness of markets can be seen from the various schemes such as discounts, exchanges or products such as stabilisers etc available with the air conditioners during the festive seasons, thereby encouraging consumer demand and in turn following pro competitive practices.
Case analysis affecting Aftermarkets

After looking into the fore market of air conditioners, the next step is to ascertain the competitiveness of the aftermarkets. Aftermarkets refer to the market wherein the customers who have purchased one product or service, are likely to purchase a follow-on product or a service. The existence of aftermarkets implies that the manufacturers have an obligation to keep track of the warranty life of the products and then the subsequent repairs and maintenance of the product.

Before discussing and analysing the aftermarkets of the air conditioners in India, there are some important judgements that have a bearing on the functioning of the markets across countries. These can have implications on the Indian market as well.

Eastman Kodak Company versus Image Technical Services

The major antitrust issue relating to the tying in the aftermarkets came to the United States Ninth Circuit Court and then Supreme Court for Eastman Kodak Company versus Image Technical Services. It was alleged that the Kodak, a copywriter manufacturer, having competition in the primary market restricted its sale of spare parts to those who took its services and so, those of the Independent Service organisations (ISOs) were not able to provide these services to the customers. Kodak manufactured, sold and serviced high-volume photocopier and micrographic equipment. Kodak also manufactured some of the parts necessary to service its equipment, arranged with other manufacturers to produce other parts on a proprietary basis and purchased the remaining parts on the open market. Beginning in the early 1980s, Kodak began to face increasing competition from ISOs, for the servicing of its equipment. According to the ISOs, Kodak responded to the competition by ceasing its prior practice of selling repair parts to ISOs, penalizing Kodak equipment owners who hired ISOs and pressuring parts manufacturers not to sell parts to ISOs. Kodak's efforts were alleged to have prohibited ISOs from competing effectively for service business and to have allowed Kodak to maintain at least 80 percent of the service market. In 1987, a group of ISOs sued Kodak, alleging tying and monopolization violations of section 1 and 2 of the Sherman Act. The district court granted Kodak's motion for summary judgment on the ground that Kodak's lack of market power in the sale of new equipment precluded the exercise of any market power in the aftermarket for parts and service. It was argued that Kodak had sufficient power in the parts market to affect the competition in the service

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9 Wikipedia definition of aftermarket
market. This act of tying was not done with the intention of quality control or curbing the inventory costs.

The courts opined that there were information asymmetries between the customers and the Kodak manufacturers. The buyers would not know which brands have the lowest parts/package/service package price over the useful life of the product at the time of purchase. Also the short run costs of switching to another supplier were substantial; buyers were “locked-in” to the Kodak brand, giving Kodak a type of market power that could be exploited at the buyer’s expense. Here switching costs would include inefficient used equipment markets and complementary sunk investments. Also the court felt that Kodak raised prices of its parts that excluded the competition in that market. The ISOs could provide the spare parts at a lower cost or a service with better quality. Court said "Kodak has 220 patents and controls its designs and tools, brand name power and manufacturing capability." These factors, combined with Kodak's contractual arrangements with other parts manufacturers, its high share of the service market and economies of scale, "support a finding of high barriers to entry by new manufacturers and increased output by established suppliers."

A view from European Court of Justice

In the case of Hugin versus Commission, Hugin, a Swedish Cash Register manufacturer, refused to supply spare parts to Lipton, an independent repair and maintenance company. The practice was challenged under article 86 of the Treaty of Rome which prohibits "abuse" of a "dominant position" where the abuse "may affect trade among the member states. Hugin made a much stronger case that the two markets, primary and the secondary markets were inter related, a high price for spares would result in risk of losing customers in the cash registers market to other brands and other substitutes available to the users. Also, Lipton was based out of London and would not have any effect on the trade relations among the member states. The parts would have been provided by the local Hugin office. In defining the relevant market, the Commission and the Court conceded that Hugin did not have a dominant position in the cash register market itself. It had a small percentage of that market and that market was very competitive. It concluded that there was a separate relevant market for parts because there were parts buyers other than cash register owners (namely, the ISOs). "Consequently, the market thus constituted by Hugin spare parts required by [ISOs] must be regarded as the relevant market for the purposes of the application of article 86. It is in fact the market on

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10 William R Andersen, Kodak and Aftermarket Tying Analysis: Some Comparative Thoughts, 1995
which the alleged abuse was committed. "There were no other manufacturer for Hugin spare parts and the secondary market was not significant. The Court rejected the Commission's position and concluded that Hugin's practices did not affect trade between member states.

In Maxicar v Renault Case, Italian automobile parts maker for Renault sought a legal declaration that it could do so without violating Renault’s Intellectual Property Rights in the design of the parts. The Court concluded that IPR created by national legislation could be given effect despite article 86 and would not be considered abuse under article 86. However, in another judgement, Volvo v Erik Vung, the court held that it could be violation of article 86, in case it arbitrarily refused to supply repair parts to independent repairers or if it fixed unfair prices for the parts. The Court made it clear that the doctrine to be followed must be free from arbitrariness and unfairness \(^{11}\).

**Supply of Extended Warranties on Domestic Electrical Goods Order, 2005**

The Director General of the Office of Fair Trading (OFT) in exercise of the power conferred to him by Section 47 (1), 49 (1), and 50(1) of the Fair Trading Act, 1973 did an investigation on the Extended Warranties on Domestic Electrical Goods in the aftermarket in UK. The report made a monopoly reference to the electrical manufacturers. It mentioned that the similar behaviour of the electrical retailers' limits consumers’ ability to make accurate assessments of the value of buying extended warranties. The sales tactics of the retailers appeared to exploit the limited nature of consumer information and caused an imbalance in the information available to the retailer and to the consumer on electrical product reliability. Moreover extended warranty pricing appeared not to be cost reflective. For example, a standard fee typically charged for extended warranties for goods of the same general type within the same broad price banding despite differing failure rates of electrical goods. In addition, there was lack of effective competition in the extended warranty market. Electrical retailers’ point of sale advantage presented a significant barrier to alternative suppliers wishing to enter the market, thereby limiting consumer choice. Based on the low claims ratio for extended warranty products, there was reason to believe extended warranties may be typically sold at considerable profit. Extended warranties represent a secondary market, being bought as an additional purchase to an electrical good, with consumers typically not planning to buy or shopping around for extended warranties – thus these expensive

\(^{11}\) William R Andersen, Kodak and Aftermarket Tying Analysis: Some Comparative Thoughts, 1995
purchases were, in many cases, literally an afterthought. Here Consumers were largely unaware of the options regarding where they can buy extended warranties. Even Consumer protection in the market was inadequate. Vulnerable consumers in particular could be susceptible to sales pressure and it seemed that consumers were not effectively protected against unfair behaviour. Certain contracts, notably those relating to ‘cash back’ extended warranties might have contained potentially unfair terms and conditions, imposing unrealistic requirements on consumers. The British Retail Consortium Code of Practice did not seem to be working, and there was no comprehensive regulatory framework governing both extended warranties and service agreements. There was no legislation specifically applicable to the sale of extended warranties, and the consumer legislation might not have significantly improved the position of consumers in this area.

In reference to the above report, Competition Commission made a report entitled “A report on the supply of extended warranties on domestic electrical goods within the UK”(c) in December 2003. After the report, Secretary of State, under section 56 of the Act, for the purpose of remedying or preventing the adverse effects specified in the Competition Commission Report, made an Order. It made it mandatory for the suppliers to give the extended warranty details adjacent to the price of the goods. It further made it obligatory for the suppliers to advertise the price of the extended warranties in the newspapers and other printed materials. The consumers were permitted to cancel or terminate the warranty with a pro rata refund of the price paid\(^\text{12}\).

\(^{12}\) Office of Fair Trading, Extended Warranties on domestic goods, 2002 and Supply of Extended Warranties on Domestic Electrical Goods, 2005, Order No. 37
Aftermarkets or the secondary markets are the follow on for the primary market. It comprises of the warranties and extended warranties, spare parts, repairs or services and the Annual Maintenance Contracts (AMCs) for a product or a service. The companies dealing in the primary market provide these services in the aftermarket. These services are provided on the products or services sold in the fore market. In the air conditioners market, most companies provide either AMC or an extended warranty in addition to the on the call repair or servicing of the product. Besides analysing each of these from the point of view of the Competition Act, 2002 and various case studies that were discussed, there was also information collected through sources available in the public domain such as inquiring product information and after sale services and warranties available with the dealers, company customer care, ISOs etc. The answers were sought promptly from these sources so as to avoid any cover up. The questions raised were as follows:

- What are the types of models available for a given size?
- What are the different AMCs available for each of the sizes?
- What are the new products available in the market and how are they different?
- What are the schemes available at the time of purchase?
- Which company has a better service available?
- What are the major after sale problems that are likely to arise?
- What are the spare parts that are generally replaced?
- What are the AMC charges required to be paid?
- Are the original spare parts available in the market?
- What is the average time taken to get AC repaired?
- When is the extended warranty available?
- What are the costs available of each of the extended warranties?

**Types of Warranties**

A warranty has various meanings but generally means a promise which provides assurance by one party to the other party that specific facts or conditions are true or will happen.
There are different kinds of warranties available in the market at different points in time during the life of the product. The major kinds of warranties that are available in the market could be categorised as follows.

1. **Manufacturer’s Warranty** is the warranty that is available at the time of purchase of the product or service. It is the assurance given by the manufacturer that the product would be repaired or serviced or exchanged during the specified period of time for free. However, it is possible that the warranty would exclude some of the parts or service from such a warranty. However, it forms an important consideration in the buyer’s eyes to ascertain the product quality.¹³

2. **Express warranties** are specific promises made by the seller and include oral representations, written representations, and descriptions of the goods or services, representations in samples and models, and proof of prior quality of the goods or services. Puffing, or the seller’s exaggerated opinion of quality, does not constitute a warranty. For example, if a car salesperson says, "This car will last you a lifetime," a court would likely consider such a statement puffing and not an express warranty. Express Warranty may or may not be implied as well.

3. **Implied warranties** are unwritten promises that arise from the nature of the transaction, and the inherent understanding by the buyer, rather than from the express representations of the seller. These are mentioned as a part of the Sale of Goods Act, 1930. In addition, the following two warranties are considered implied unless they are explicitly disclaimed (such as an "as is" statement):

   - **The warranty of merchantability** is implied unless expressly disclaimed by name, or the sale is identified with the phrase "as is" or "with all faults." To be "merchantable", the goods must reasonably conform to an ordinary buyer's expectations. For example, a fruit that looks and smells good but has hidden defects may violate the warranty if its quality does not meet the standards for such fruit "as passes ordinarily in the trade".

   - **The warranty of fitness** for a particular purpose is implied unless disclaimed when a buyer relies upon the seller to select the goods to fit a specific request. For example, this warranty is violated when a buyer asks a mechanic to provide snow tires and receives tires that are unsafe to use in snow.¹⁴

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¹³ Devavrat Purohit, Joydeep Srivastav, Effects of Manufacturer Reputation, Retailer Reputation and Product Warranty on Consumer Judgments of Product Quality, 2001

¹⁴ Wikipedia
A seller may disclaim the warranty of merchantability either orally or in writing, but a seller cannot orally disclaim a warranty of fitness for a particular purpose. A disclaimer of the warranty of fitness for a particular purpose must be in writing, and the disclaimer must be conspicuous to the buyer. Express warranties made by a seller may not be disclaimed. However, if a disclaimer and an express warranty can be construed as consistent, a court may uphold the disclaimer.

4. **Extended Warranty** is the extension of time on a warranty against defects. It is an additional warranty that some manufacturers provide repair and maintenance for a specified period of time after the termination of the manufacturer’s warranty. Also, it may be provided by retailer or an ISO. These warranties may be for multiple years of duration. It is also possible that the warranty does not cover the entire product and may leave out some of the parts from the coverage. However, the extended warranties are a close substitute for the AMCs available. These can be considered as similar to an AMC.

**Warranties in the Air Conditioner Market in India**

There is a time bound warranty provided by each of the suppliers of the air conditioners after the sale of the product. The warranty provided by each of the manufacturer lasts for the period of 1 year. In addition, the compressor used has a warranty for a period of 5 years from the date of purchase of the product. On review of the sample warranty cards available in the public domain, it was found that the warranty terms and conditions mentioned by these manufacturers in the warranty cards were found to be similar to one another. These are written as follows:

<table>
<thead>
<tr>
<th>Warranty Terms and Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. All transportation and handling charges incurred while repairing will be payable in advance</td>
</tr>
<tr>
<td>2. The company is under no obligation to provide services in specified period of time.</td>
</tr>
<tr>
<td>3. Warranty is not applicable in case of repairs by unauthorised persons</td>
</tr>
<tr>
<td>4. The warranty is not applied even when defects are caused while in transit to service centre or purchaser’s residence</td>
</tr>
<tr>
<td>5. The to and fro travelling for repair in case of a purchaser situated beyond the Municipal limits of the representative, shall be borne by the said purchaser</td>
</tr>
</tbody>
</table>

Source: Warranty Cards for Samsung, Panasonic, Godrej, Onida, Videocon, Whirlpool, Carrier and Sanyo
The warranty conditions that have been mentioned above have been restricted to the ones that were found, prima facie, to be anti consumer. Though, to ascertain their anti competitiveness traits, one needs to analyse and review each of them under sections 3 and 4 of the Competition Act, 2002. In addition, there are findings based on the information available in the public domain. The analysis below appears to be a reasonable one to prose on the evidence available. Also, the work has been based on facts and information available, even though it is a preliminary one.

**Analysis of Warranty terms**

- The duration of the warranty is common for all the suppliers of air conditioners. In fact, all the companies exclude the coil and the plastic parts from the warranty. This appears to be common among these companies from the outset. It reduces the choice available with the customer to determine the product based on the warranty period.
- Even during the warranty period, the transport charges are required to be paid extra. The condition, though has a limited impact in terms of the cost, appears to affect those customers that live away from the service centres, which are situated primarily in the urban parts of the country. Such conditions do create geographical market divide. Though there might be a dealer for the sale of the air conditioners in the semi urban areas, the lesser number of service centres would create additional burden on the buyer.
- Depriving themselves of any time specific liability to provide service during the period of warranty, the companies seem to be utilising a monopoly benefit knowing that the buyer is tied to the product. This leaves the customer of no manner of seeking time based remedy from the supplier.
- The company by declining to continue with the warranty for repairs done by independent repairer can misuse such terms to its own advantage. The term appears on the warranty cards for all the suppliers checked. So the buyers do not have the options of choosing the supplier based on the warranties available in the aftermarket.
- Another important concern appears to be that the consumers are unaware of such warranty terms at the time of buying the air conditioners. They are also not informed about the repair cost and product reliability data, making it extremely difficult for them to ascertain the fairness of the warranty terms. The retailers do not communicate such details to the buyers effectively. There appears to be information asymmetry and problem of moral hazard between the buyer and the seller.
Another fact to be considered is that the warranty terms are not linked with the features of the product. The product with different prices, energy efficiency, sizes etc may have different repair cost and possibility of failure of the product. However, the warranty terms are kept same for all kinds of models of the product available in the primary market.

Another important finding was in regard to Sanyo, who disclaimed any warranty in regard to the law in terms of merchantability and fitness. It implies that the manufacturer does not acknowledge the implied warranty under the Sales of Goods Act, 1930. This term, though, cannot be directly covered under the Competition Act, 2002, it does have appear to be highly anti consumer and unfair and unjust.

Following issues were of concern arising after the review and analysis carried out for the warranties of the various suppliers. These can be mentioned as follows

- Consumers are left with additional burden after purchase of the product in aftermarket.
- The buyers are not fully informed of the terms of the warranty at the time of purchase.
- The consumers do not have adequate choice to make an effective decision due to the commonness of the terms and practices among suppliers.

This implies that the consumers are led into buying the product by the dealers and suppliers based on incomplete information and lack of enough choice to choose from. These practices appear to be anti competitive and limit the welfare of the customers.

**Review of Warranty terms under Section 3 and 4**

**Section 3**- These warranty conditions need to be considered in the context of the competition law. In regard to the Section 3(3) which deals with the horizontal agreements that are anti competitive in nature, it implies that the warranty conditions are common to the manufacturers that were checked for their warranty cards. During the warranty period, all the manufacturers have imposed these conditions that the consumer cannot bargain for. The duration is the same for the air conditioners of varying prices and features and is predetermined by the supplier. The customers cannot ask for reduced prices of air conditioners for stricter conditions during the warranty period. The warranty conditions are informed to the consumers at the time of purchase of the air conditioners. However at the time of market survey with dealers, as mentioned earlier, it was felt that such conditions were not shared.
with the buyers. In addition, it is also important to consider, that the buyer cannot choose the product among the manufacturers based on the warranty as most of them have common duration period, restrictions on independent repairers, additional transport charges, no time adherence etc. This further restricts the provision of services under section 3(3)(b).

In addition, it is clear that such practices hinder the entry of any other supplier or independent repairer into the warranty market. It also tries to create accrual of benefits to the customers. The customers are uncertain about the use of the warranty at the time of purchase of the product. Thus the suppliers also try to promote the technical distribution of their services. Based on the analysis carried out for the warranties and their review under the act, it appears to have an appreciable adverse effect on competition.

*The act defines the tie in agreement as any agreement requiring the purchaser of goods, as a condition, of such purchase, to purchase some other good.* By treating air conditioner in the primary market as one product and the warranty thereof as another, it would imply that the buyer in some cases has been forced to buy the warranty from the same manufacturer at the time of buying of the product. However it is not possible for different suppliers to provide such a warranty service for another supplier. Hence, the tie in agreement, that harms competition, cannot be established.

Also, the warranty terms under section 3(4)(d) clearly restricts the purchaser from using independent services and creates a refusal to deal agreement. Under the act, “refusal to deal” includes any agreement which restricts or is likely to restrict, by any method the persons or classes of persons to whom goods are sold or from whom goods are bought. The warranty terms do not allow for repair from any unauthorised person. It implies that no repairer other than the company sponsored representative can provide any service to the product during the warrant period. Even though company service provider would charge additional visiting fee, it is not possible for customer to get it repaired at a lower cost from a local serviceman. This condition does create anti competitive agreement in the market.

**Section 4-** On review of Section 4, the relevant market is the aftermarket for air conditioners. *The relevant product market as defined in the act is the market of all those products or services which are regarded as interchangeable or substitutable by the consumer, by the reason of characteristics of the products or services, their prices and intended use.* In this context the relevant product market is the warranty market for air conditioners. The warranty market for each of the players is 100 % of the
products sold in the market. This implies a dominant position of the suppliers in the warranties market under section 4 of the act. The term dominant position has been defined as a position of strength enjoyed by an enterprise in the relevant market, in India, which enables it to:

1. Operate independently of the competitive forces prevailing in the relevant market, or
2. Affects its competitors or consumers or the relevant product market, in its favour

As stated above, the warranty terms allow the manufacturer to operate independently of the other suppliers in the market during the warranty duration of the product. This also creates dependence of customers on the company. It further creates entry barriers due to restrictions imposed on the use of services of other suppliers. The supplier has a relative advantage over other firms in terms of restrictions imposed due to technical entry barriers. Also such conditions restricting the customers from using any other service agent than the company’s products service centre, the supplier clearly has a dominant position in the suppliers market. This implies that these suppliers have a dominant position in this market.

In addition to dominant position, there has been an abuse of dominant position under section 4(2)(a) and 4(2)(c). Condition (a) relates to the unfair or discriminatory conditions in purchase or sale of goods. The suppliers have clearly abused their position of dominance as per the condition (a). It implies that since they have kept such warranty conditions that are being forced onto the customers, there is an abuse of dominance in this context. These conditions cannot be negotiated by these buyers. In addition, condition (c), states that it indulges in practice or practices resulting in denial of market access (in any manner). The warranty conditions are such that it does not allow any other independent service organisation to repair the air conditioner during the tenure of warranty. This implies that there is an abuse of dominant position by these suppliers.

**Annual Maintenance Contracts (AMC)**

Annual Maintenance Contract (AMC) is a contract between a customer and the air conditioning manufacturer or servicing company to ensure efficient and proper maintenance of air conditioning system so as to ensure early location of the problem and reducing the risk of sudden breakdown. These contracts that might be taken by the customers after the expiry of the manufacturers’ warranty period. These are the contracts that provide the customer with the repair or service of the air conditioner.
It generally includes the cost for labour charges and spare parts. As the name suggests, it is provided for the period of one year and it can be renewed at the end of the period. The price for an AMC is paid at the beginning of the period.

**AMC for Air Conditioners in India**

AMCs for air conditioners are available from the manufacturers of the air conditioners as well as from the independent service providers. These AMCs are also agreements between the consumers and the service providers.

As discussed earlier, AMCs are close substitutes for extended warranties. Both have the same characters and similar prices with the same intended use. The AMC conditions have been reviewed for a sample available in the public domain. The AMC charges were found to be different for the first 5 years in comparison to the time period after 5 years due to warranty being enforced\(^ {15} \). On a prima facie review, following conditions have been found to be anti consumer-

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<tr>
<th>AMC Conditions</th>
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<td>1. The equipment brought to the service centre will remain there at customer risk and the company will not be responsible for any damages caused due to the factors beyond its control.</td>
</tr>
<tr>
<td>2. Transportation for taking appliance to the Authorized Service Centre for repairs shall be borne by the customer as per the applicable rates.</td>
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<tr>
<td>3. Any damage to the aesthetic component will not be covered</td>
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Source: AMC for LG

The above mentioned conditions need to be further analysed based on the market surveys and the information available in the public domain.

**Analysis of AMC market for Air Conditioners in India**

- The AMCs do not include cases of breakdown in transit which are very subjective in nature. However, goods might be carried to the centre by the company personnel. This can hold companies to misuse these terms to their own benefits and put burden on the buyers.
- Another important thing to be considered is that there is no spread of the prices for AMCs or extended warranties at the time of the purchase of the product. Further there are no advertisements for the same in the printed or published materials regarding such prices.

\(^{15}\)The price range of the AMC is between Rs 1500 to Rs 3000 depending upon the years and size of the usage.
• Operation Costs may affect the replacement costs of the air conditioners. This further has an effect on the AMCs that the customers would be entering into. Also, higher electricity rates may increase the replacement rates for electric equipment. A higher cooling capacity may delay the replacement of air conditioners. Climatic differences across regions may also affect households’ replacement decision. The operations cost of the air conditioners reduces with the rise in the energy efficiency\textsuperscript{16}. However the AMC pricing does not take into effect all these considerations and is restricted to the concerns of the suppliers.

• One significant supplier Samsung, holding around 11% of the market share, provides only extended warranty in the aftermarket. This is further limited to the buyer being forced to take the extended warranty in the first year itself. Also the extended warranty is available for the first 5 years from the date of purchase of the product\textsuperscript{17}. This further implies that the buyer does not have the option of taking AMC services from Samsung after the period of 1 year. In such a case buyer would be forced to using their service based on the call charges or else rely on other independent repairmen. If the product market is itself characterized by vigorous competition, then tying in the secondary market for extended warranties may lead to a decrease in welfare\textsuperscript{18}. Thus such a practice even reduces the consumer welfare in the market.

• Also the AMC or the extended warranties provided by the companies are not model specific. In most cases, they are differentiated based on split or a window AC and then based upon size of the AC. However in case of LG, there is no division based on the tonne size of the AC as well. Also, in most cases, the AMC is not dependent upon its energy efficiency, price of the model etc. Also once the AMC has been booked, there is no option of cancelling it in the initial few days.

• Another important issue that was observed during the research carried out, according to market survey done in Tamil Nadu, Customers suggest that they avoid AMC due to poor quality of service and the time taken to attend the complaint. The customers prefer to get the repairs done from the local manufacturers at a low cost. (An Empirical Study on Factors Influencing Marketing of Annual Maintenance Contract of Air-conditioners in Tamil Nadu, India during April to June 2011) This reflects the poor quality of services


\textsuperscript{17} Most of the suppliers provide AMC services for at least 7 years from the date of purchase.

\textsuperscript{18} Aidan Hollis, Extended Warranties, Adverse Selection and Aftermarkets, 1999
provided by the companies during the AMC period. The amount of money is taken in advance by these companies.

Thus, the review and analysis of the AMC conditions suggests that there have been instances of inefficient consumer services and unwarranted delay in providing these services. Also, the prices of the AMC do not vary with the models of the AC purchased. Even the information is not available to the customers at the time of purchase. Also, Samsung has been restricting the choices available to the consumers.

In addition, to understand their competitiveness character, one needs to review and analyse the same form the point of view of the Competition Act, 2002.

**Review of AMC terms under Section 3 and 4**

The AMC that was reviewed appears to have conditions that are similar to the conditions mentioned in a warranty card. However, the AMCs differ from the warranties due to the right to choose that is available for the AMCs but missing in the case of warranties, as discussed earlier. However, AMCs for different suppliers were not available in the public domain. There is limited information available as to whether the AMCs would have the same conditions for all the suppliers or not. These AMC prices are not informed to customers during the purchase of the product. It does create information asymmetry and accrual of benefit to the customers. However, section 3(3) would not be used, though the conditions explicitly appear to be anti consumer and have an effect on competition. There is an option for the buyer to take the AMC from the ISOs, thus it would not lead to dominance for most of the suppliers in the market under Section 4 of the Competition Act, 2002. However, for Samsung, who is providing the option of extended warranty, it has the power to affect the relevant market in its favour, thereby, dominant player in the extended warranties market. Under Section 4 (2)(a) of the act, it is mentioned that the enterprise tries to put unfair restrictions in the sale of extended warranty services. This does result in abuse of the dominant position by Samsung.

**Spare Parts for Air Conditioners in India**

Consumer choice for spare parts of a product get locked in, once the primary product has been purchased. In such cases, the probability of the firms supplying the spare parts to indulge in anti competitive behaviour rises by pricing it at excessively high levels. Before delving into such issues, it is pertinent to know the major spare parts for air conditioners. Spare Parts for an air conditioner primarily include a compressor, cooling coil, condenser coil, thermostat sensor, filter, blower, motor, starter, valves, accumulator etc. The spare parts market for air conditioners consists of company
sponsored parts as well as parts supplied by the independent service organisations. The independent service providers may or may not have the parts that the company has used in the product. The information regarding such issues was based upon the market survey carried out and then analysed the spare parts market.

**Analysis of Spare parts for Air Conditioners in India**

- Spare parts available with the company sponsored service centre can be provided to the buyer of the tied services for that part in majority of the cases. Since it is difficult for the buyer to ascertain the part which has the problems that arise in the functioning of the air conditioner, the services of the company sponsored repair man would have to be taken. Also, the company person pushes for the person visiting the location and then charging for both the labour and the spare parts.
- The prices of the spare parts of various companies at the time of purchase by the customers are not taken into consideration. Such information is not available to the buyer to make a comparison for each of the supplier. The spare parts can be overpriced by these companies. The companies directly determine the sale price of these spare parts without any consideration for the competitive forces. Too high gap in the spare parts provided by the company and the independent repairer may force the customer to shift to the independent repairer. This may further result in the spread of the low quality of goods in the market detrimental to the health, safety and even the economic interest of the consumer.
- The information regarding the service centres at the time of purchase of the products would not be available to the buyer. The dealers and retailers are not informed about the service centres of the company. The service centres details can be obtained by way of calling up the customer care of the company and then finding the addresses of the service centres in the close by area. In addition, some brands have service centres details on their websites. However these details are not updated. This results in information asymmetry between buyers and these companies. Without such information, incentive to compete on price, quality and other terms gets reduced. It even raises the aftermarket power of the suppliers and creates an anti competitive environment in the market.
- Even for an informed buyer, there is a cost involved of finding the best deal. Complexity and variation in product description and slight difference in product specification creates product comparison difficult. This creates a problem of shopping around the best deal for the consumers.
• Also, the spare parts of the company are not easily found with the ISOs. It implies that the major spare parts such as the compressor, motor, condenser etc are not available in the market at ease. The ISOs in the major towns claim that in comparison to the low quality parts, original parts take time to deliver. Though these original parts could not be checked and verified. At the same time, the company repairers declined that such parts are available with the independent repairers.

• Generally the Kodak case suggests that the aftermarket becomes anti competitive when the consumers do not have information about the parts at the time of purchase of equipments. However, in general, consumers are imperfectly informed about the aftermarkets at the time of buying the equipment. Besides, it is possible that the sellers are not fully informed about the future market conditions and would not be able to estimate the cost of parts accurately. This would result in an aftermarket hold ups\textsuperscript{19}.

• Another concern that had surfaced during the review was about the patent parts. With the innovation and new technology, more and more parts are being patented by the supplier to avoid any cheap imitation. Such patents would result in monopolising the company in the spare parts market. These include Sharp’s Inverter series for airflow control and fresh air\textsuperscript{20}, LG’s new range of Inverter V series, Godrej’s Eon Green Balance ACs and Daikin’s next generation refrigerant HFC32. The number of patents by these companies has been on the rise in the recent few years. It would mean that the spare parts on any damage to such parts would not get replaced by the ones available with the independent repairers.

\textbf{Review of spare parts market for air conditioners under section 3 and 4}

\textbf{Section 3} The spare parts as analysed above can be reviewed under the purview of the Competition Act, 2002. Under section 3(3) of the act, there is a possibility of a horizontal agreement among the firms of restricting the supply of the spare parts to their respective service centres. The companies do not supply the major original spare parts such as compressor, condenser, motor etc to independent repairers in an authorised way. The company personnel clearly mention that the original parts would not be provided by the independent repairer. In addition, in case the parts are found provided by these ISOs, it was informed that there would be no warranty.

\textsuperscript{19} Benjamin Klein, Market power in Aftermarkets, 1996

\textsuperscript{20} COANDA and Plasmaduster technology have been patented by the company.
provided in such cases by the company. This restricts the supply of these products in the market under section 3(3b) of the act. This would hinder entry of new independent repairs into the market. Also, with the rise in the number of patents held by these companies, it would restrict the supply of the spare parts to even higher levels in the future.

**Section 4**-Under section 4 of the act, it is important to evaluate the position of the firms as dominant in the spare parts markets. Here the relevant product market is not different for each of the spare parts. Instead, it must be considered the same based on the intended use of repairing the same product and having the ability to keep the same product functioning, thereby sharing one common character for all the spare parts. Thus the relevant product market is the spare parts for air conditioners available in the market. Also In terms of the spare parts, each of the companies has the original spare parts such that the other would not be having with the same specifications. This makes these companies operate independently of the competitive forces prevailing in the relevant market. This makes each of them a dominant firm with a position of strength enjoyed by them in the spare parts market. Further, by way of patents, the companies are restricting the parts with newer technology to the sale in the open market. Such parts are not available with the independent repairers as well. This is a case of use of dominant position enjoyed by the firms to restrict the market access to the outsiders. It implies an abuse of dominance under section 4(2c) of the act. This has a bigger impact on the market with the rise in patents and higher innovation by these companies and would result in technical barriers to entry. This would also give each firm a relative advantage to the other firm. Since most of the countervailing forces would be small retail buyers, they would enjoy a very limited buying power so as to put restrictions on such practices.
Conclusion

In the end, it is important to consider the primary and secondary markets together to make an overall assessment of the competition that the market is facing. Though the primary market with very limited barriers to entry and evenly distributed market share appears to be competitive, the same cannot be said about the secondary market. The competitor in the primary market has the possibility of becoming a monopolist in the aftermarket due to the customers getting tied in to availing services from the buyer. This may lead to falling primary market prices and rising aftermarket prices creating a ‘waterbed effect’. The identical warranty conditions including a condition to withhold the services thereof for repair by unauthorised persons, appears to be abuse of dominant position. In addition, the terms of the warranty are not communicated to the buyers effectively. Even the prices of the AMC not varying based on the price of the product and its features needs to be looked into thoroughly. Again, there is no practice for the AMC related advertisements to be published in the newspaper and prices for these AMCs are not disclosed at the time of purchase. Further, the sale of spare parts with the rising innovation and growth of patented technology is even results in an abuse of the dominant position and so restricting the supply of the spare parts would have anti competitive ramifications. These practices have an impact especially when the consumers are not taking consideration of the aftermarket prices at the time of purchase of the product. The result of information asymmetry raises the possibility of abuse by the companies. This may also lead to reduction of the competition in these markets. Hence, there is a possibility of an abuse in such cases.

21 When complementary products are sold together it is well known to tend to keep both products’ prices low. The reason is that increasing either price will reduce the demand for the other complementary product. In primary and secondary product markets, the complementarity is asymmetric or one-way. While the prospect of future secondary product sales tends to keep primary product sales low, increasing secondary product price may not reduce demand for the primary product greatly. Thus the nature of primary and secondary product complementarity means that reducing one price tends to make another price go up – just as pushing down on an actual waterbed moves the water and in doing so makes other areas of the bed rise.
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