Economics oligopoly

Economics

Main economic features of an Oligopoly and key economic theories of price fixing. This part of the coursework aims to identify and explain the main economic features of an Oligopoly and also the key economic theories which influence the price of a product or service. This part deals with the theoretical aspects of Oligopoly and the later part emphasizes on the practical applications of the theories and oligopoly features.

According to Pass et al (2000), " Oligopoly, a type of market structure is characterised by a few firms and many buyers, where the bulk of market supply is in the control of relatively few large firms who in turn sell to many small buyers". To describe the degree of oligopoly, concentration ratio is often utilized. Concentration ratio is the measure of the market share of the largest four firms in the industry expressed as a percentage. A low concentration ratio suggests a high level of competition and vice versa for.

As there are few players dominating the industry, each player or an oligopolist is said or likely to be aware of others course of actions. The decision taken by one player seems to affect the decision taken by others and strategic planning by the firms needs to take into account the likely response of other participants (Wikipedia, 2010). For example, a proper game of chess depends on how well you read your opponent's moves, similarly in oligopoly; strategies are devised based on the moves of competing market firms.

The reason for existence oligopoly as stated by Maunder et al (1991) is for the achievement of economies of scale. Firms tend to reduce their average cost of production by increasing their scale of operation and since the small firms have higher average costs, they tend to go out of business or be absorbed by the larger ones. The features of oligopoly are:- a. Number of Firms:-The very important feature of an oligopoly is the number of firms. Even though there are a large number of firms operating in a particular industry, only a handful of firms hold the major share between them. . Interdependence: - A very distinctive feature of an oligopoly is interdependence. When a very few large firms operate in a particular industry, their activities or strategy cannot be independent of each other. Unlike monopoly, where the monopolist need not worry about the reaction of its rivals as there are none, an oligopolist takes into consideration the possible reactions of all rival firms. For example, a company considering a price reduction of its products may wish to estimate the chances of price reduction bythe rivalcompany and hence starting a price war. . Profit Maximization Condition: - The firms in an oligopoly generally agree to co-operate and act as one monopolist as it generates high profits (Begg and Ward 2007). This kind of formal collusive agreement is called a cartel. An oligopoly maximises profits where the marginal revenue equals the marginal cost. This is also known as profit maximization condition. Price ELASTIC UNIT ELASTIC P MC, AC PROFIT MAXIMIZING OUTPUT O MR Quantity (Source: Begg and Ward 2007) d.

Perfect Knowledge: - Oligopolists are said to have a perfect knowledge about their cost and demand functions but a lesser information about other firms (Wikipedia, 2010). e. Entry Barrier: - One of the main important features of oligopoly also is the entry barrier. There are high entry barriers that restrain a new firm from entering a market. For example, the barriers can be the economies of scale, access to expensive and complextechnology, lower costs for an established firm, brandloyalty, patented production process and strategic action by incumbent firms etc.

The table below gives the market concentration in different industries. As discussed earlier, the large few firms form a cartel and set a price. Once the members of the cartel agree on the price, they compete against each other using non price competition in order to gain the maximum revenue. There are other various ways in which the firms fix the price. One of them being tacit collusion, where the firms agree on a price set by an established leader. This is also known as dominant firm priceleadershipas the price setting firm is the dominant firm in the industry.

The other way is the barometric firm price leadership, where the price leader is the one whose prices reflect the market conditions in the most stable form (Sloman et al, 2010). To fix prices, the producers must be able to control the market supply. The other forms of price fixing in tacit collusion is average cost pricing, where producers add a certain percentage of profit on top of average costs and price benchmarking, where firms raise the price only up to a benchmark already set.

Price fixing is achieved by the competing firms coming together on a platform where they can agree on a common pricing and production strategy thus acting in a manner in which a monopoly operates. This kind of collusion is known as cartelisation. Cartels although banned in many countries, is difficult for the enforcement agencies to gather evidence and penalise the participants. The quantity for the cartel and the individual firm will not be the same as one firm individually will have the scope for further increase in productivity to achieve a situation where the marginal cost equals the marginal revenue.

In such cases firms may decide to go ahead with excess supply which can lead to a price war and inconsistent revenues to the industry. Even without overt collusion firms in an oligopoly are able to reach a point of profit maximisation when they behave in a manner reflected in “ Nash Equilibrium” (Begg and Ward 2007). 2B) Direct to Home (DTH) television industry in India acting as an oligopoly. India has a total television population of about 135 million of which about 108 million have an access to cable and satellite television (Plugged in, 2010).

The total DTH sub base at the end of first quarter in the year 2010 was 23 million (Dish TV India Ltd, 2010) which was about just 1 million in the year 2006. Indian DTH industry has seen a flurry of activities in the recent years after a monopolistic reign by Dish TV for a couple of years. It is currently in a state of Oligopoly with the top four operators controlling nearly 80% of the total market. The major players in the market are Dish TV by Zee group, TataSky- a joint venture by Tata and Star TV, Big TV by Anil Dhirubhai Ambani Group, Digital TV by Bharati Telemedia and SUN Direct from Sun TV.

Since there are only 3 major players in the DTH market, Indian DTH industry is an oligopoly. (Indiadth, 2010) The product offering by the rival firms are more or less similar in nature with little or no product differentiation. Amongst all the players, Sun Direct has essentially remained a regional operator who made a late debut in the national scene. The content or the channels are same with all the operators barring few omissions and additions. The DTH industry market share is as follows. BRAND| MARKET SHARE| Dish TV| 30%|

TataSky| 22%| Sun Direct| 25%| Big Tv| 13%| Airtel| 8%| D2H| 2%| (Source: http://www. pluggd. in/dth-industry-in-india-analysis-297/) From the data above we can see that Dish TV, TataSky and Sun Direct together hold the maximum market share with over 75%. (Source: http://www. slideshare. net/) To confirm the oligopoly, we can use the Herfindahl-Hirschman index or the HHI. It measures the size of the firms in relation to the industry and also indicates the amount of competition between them. Mathematically, (Adapted from Pass et al, 2000)

Here Si = market share of firm i in the market and N is the number of firms. Hence H = 302 + 222 + 252 + 132 + 82 + 22 H = 2246. With this value of H we can conclude that this industry is an oligopoly. Although there is no indication of an overt collusion in the industry, a closer look at their price plan (fig 1. 1) can lead us to a strategic or tacit understanding between the players. The market is abuzz with marketing drives to garner market share and the customer is currently loaded with freebies like free installation, free channels and the like.

Going by the level of investment and infrastructure the operators need to garner as much subscriber base as possible to be in a profitable proposition. They are however aware of the competition and are refraining from a price war. Such behaviour of the operators is characteristic of a non-price competition in Oligopoly. This is due to the interdependency of firms in the oligopoly and the strategic behaviour can also be referred to the “ Nash Equilibrium” (Begg and Ward 2007). (Source: Slideshare.

net/researchonIndia) Brand Name| PricePlan(inINR)/month| Dish TV| 135. 0| TataSky| 150. 00| Sun Direct| 115. 00| Videocon| 136. 00| Fig: 1. 1 (Source: Company websites, 2010) Now as in any oligopoly, it has to be supported by entry barriers, both endogenous and exogenous. The natural barrier of entry in this particular industry is primarily associated with government licensing and also the intensity of capital investment required. Given that all the DTH operators are already established players in related sectors such as telecom, media it gives them a strategic advantage in terms of distribution and content.

For any new entrant it could pose as a strategic entry barrier. Indian DTH market has constantly been attracting different players over the years given the increasing number of television subscribers. Although there have been entry barriers, companies like Videocon along with its cutting edge technology entered into the market in the presence of established players. The cutting edge technology proved to be a barrier breaker. Videocon managed to build television sets with set top boxes which helped it develop its own customer base.

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