

# The complex market structure of an oligopoly economics essay



One constructive approach of categorizing a market is by dividing it in terms of the number of firms on the supply side of the market and the buyers' concentration on the demand side. Oligopoly represents one of the market structure where there are a very few firms on the supply side and a huge concentration of buyers on the demand side. As the buyers cannot affect the market conditions, they are going to adopt it as such and the supplier will be busy in anticipating the rival behavior.

Oligopoly looms large in industries of steel, petroleum, automobiles etc. Many industries can operate geographically as oligopolies. For example banking in a small town operate as oligopoly since there will be one or two banks in the area and the residents will be forced to take his business to the local banks.( Friedman, 1983)

### **Oligopoly a complex market structure**

Oligopoly is virtually a big business. Under this market structure, the rivalry takes on its worst form. Product innovations, aggressive advertising and innovative marketing tactics are frequently applied to outweigh each other. Oligopolistic market structures are the most difficult to analyze as they are highly interdependent and interwoven, where moves and countermoves are taken rapidly. For example a simple action by Ford may lead to a reaction by General Motors, which in turn cause a readjustment in Ford's plan, thereby modifying GM's response and so on. So anything can happen anytime in oligopoly.

There are few models that highlight oligopolistic behavior. They are:

## **Cartels**

A case arises in monopoly when all the firms attempt to promote interdependence and they all mutually agree to set price and output. The firms through their mutual coordination try to create a giant monopoly. OPEC (Organization of Petroleum Exporting Countries), is an example of a cartel platform.

## **Price leadership and Tacit Collusion**

It is an arrangement in which one or two firms make an arrangement for the pricing for the entire firm. Other firms are forced to follow the same price pattern although no such agreement exists in the industry.

For example: In the infant formula industry, Abbot laboratories, Bristol Myers Squibb and American Home Products deliberately set their prices closer to each other to dominate the industry.

## **The Kinked Demand Curve**

This model elaborates the stickiness in pricing in an oligopolistic structure. It has been hypothesized in this model that if for example, a firm X lowers its price in an oligopolistic market, the rival will be forced to lower its price in order to avoid the loss of its market base. The demand curve  $dd$  is thus the relevant curve in case of a price reduction.

However, if the firm X goes for a price increase, then the case won't be the same. The rivals will not imitate this time, and would continue to enjoy the customer support as they would flee the firm X products. In this case the demand curve would be  $DD$ . The firm then tries to remain in a segment of

the elastic demand curve between dd and DD. The true demand curve is represented by DAd, known as the kinked demand curve which silently points out the fact “ heads you lose, tails you lose” (Baumol and Blinder, 2009)

D

A

Price

8

(Competitors prices are fixed)

7

D

d

(Competitors respond to price changes)

0

Quantity per year

1, 400

1, 100

1, 000

## Game theory and the Oligopoly

Game theory has been formulated to understand the behavior of the firms in an oligopolistic market structure that do not work on a collaborated output and pricing. The underlying assumption is that the large bossy firms are like players in a game of poker. They make the moves of lowering or increasing the price, to advertise or not to advertise, to discount and so on, based on their rivals' move. Understanding the payoffs can put a firm in a better position to compete with its rival and be in a profit maximizing and rational position.

For example the game between two coffee shops is illustrated as below:

C: Documents and SettingsAnumDesktop4th assignmentUnderstanding Oligopoly Behavior - a Game Theory overview Economics in Plain English\_filesgame-theory-1. jpeg

Source: Welker, J. (2009). Understanding oligopoly behavior-A game theory overview. Available from: <http://welkerswikinomics.com/blog/2009/12/15/understanding-oligopoly-behavior-a-game-theory-overview//>

According to the above figure, both San Francisco coffee and Starbucks is following a dominant strategy. They are working up to maximize their outcome through advertising, ignoring what their competitor does. If S. F advertises, Starbucks earns profit (\$12 vs. \$10) through advertising. This means the " pay offs" are the same. Since both firms are enjoying profit through advertising they will do so, though the total profits are less in case when both are advertising, as compared to when they are not advertising. <https://assignbuster.com/the-complex-market-structure-of-an-oligopoly-economics-essay/>

But such a condition would be a condition of instability, as to advertise is likely to be beneficial for both. So we say that advertise/advertise is Nash equilibrium, as at this stage none of the firm is going to change its strategy since it is bringing incentive to both (Jason Welker, 2009).

## **Market failure due to Oligopoly**

Keeping in view the above theories that tries to explain oligopolistic behavior, the market failure due to oligopoly can be attributed to a various causes. Inefficiency, instability and indeterminacy brought about by oligopoly may result in a market crash. The firm's supremacy is established as the capacity is established more and more, but little is produced in order to create artificial barrier to entry. The competitors compete on the basis of non pricing factors such as heavy advertising, which gives more hold up to the artificial barrier to entry. Prices are well above cost and price discrimination prevails. Some of the firms also engage in self-regulation to preserve their own profits and market share that further detoriate the situation (Grewal and Kumnick, 2006). Oligopolistic firms output and prices substantially differ from what is socially accepted from them. It is also believed that the misleading advertisement by the large firms also misleads the consumers and compels them to buy products that they do not want. They impose political and economic power and hover over the mind of the consumers working like an invisible hand.

Market Form

Number of firms in the market

Frequency in Reality

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Entry Barriers

Public Interest Results

Long Run Profit

Equilibrium Conditions

Oligopoly

Few

Produces Large share of GDP

Varies

Varies

Varies

Varies

Source: Economics: Principles and Policy By William J. Baumol, Alan S. Blinder

MC= MR applies for a profit maximizing firm, under equilibrium. However, in oligopoly, MC is usually unequal than MR mainly because in oligopoly the firms are seeking to adopt strategies in accordance with the game theory, or they look for techniques such as increasing sales for profit maximization as their ultimate goal.

## **Conclusion**

In a perfectly competitive market place the behavior of the firms automatically lead to a maximization of consumer benefits through an efficient allocation of resources. In oligopoly however, resource allocation is usually is not well set, more focused is paid on restricting output in an attempt to maneuver prices and profits. In an oligopoly everything is possible, can happen anytime anywhere, so the economists are still unable to clearly predict its behavior. Besides, its ability to lead the market down, some economists are of the belief that oligopoly has made a significant contribution towards the economic growth in the past two decades resulting in an increase in the average income of the rich countries.(Baumol and Blinder, 2009).

## **Question two**

### **What are the implications for management of businesses in such structures?**

#### **Introduction**

Oligopoly is a market characterized by few firms. Managers of a firm in such a structure know that their firm enjoys a market power. But the other players also have their share of power too. If the managers take the right course of action, properly assessing the behavior of their rivals in the industry, they are likely to make a profit.

#### **Strategic behavior**

Strategic behavior refers to the firm's ability of proper consideration of their market power and awareness of their rival's move. Strategic behavior occurs



in oligopolistic structures where there is less product differentiation and a competitive industry exists (Taylor and Weerapana, 2009)

## **Implication for the managers**

The most important implication for the managers regarding oligopoly is the pricing practice on the basis of mutual interdependence. In case of monopoly, the absence of competition enables the managers to follow the  $MR = MC$  rule to maximize its profit. Simply following the  $MR = MC$  isn't just enough.

## **Example**

Consider, for example the case of Procter and Gamble, where the manager hires a consultant for the thorough analysis of the cost, structure and demand. After a detailed analysis of the structure of the body soap products, the manager follows the  $MC = MR$  rule and sets the retail price at \$1.99. In a sudden move, the competitors Colgate-Palmolive, Lever Brothers etc set the price of the comparable product 10 to 15% below that of Procter and Gamble. What the manager is likely to do? Either he can go for advertising and heavy promotion to compete against the lower prices of the competitors or can lower its prices down. Or he can simply do nothing if he is confident enough of the strong loyalty that his brand enjoys among consumers. The point is that, that pricing in oligopolistic structure cannot be done without taking into account your competitor. This is the essence of mutual interdependence (Young and McAuley, 1994)

The second implication for the managers is to understand that it can be extremely difficult to make money in a competitive market. Firms are

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required to be as much cost efficient as possible because they cannot control the prices.

The managers are supposed to be vigilant enough to be able to spot opportunities and enter the market before the others could enter. They should be able to make their place before the demand gets high enough to support an above normal price.

A situation could arise in oligopoly, where the managers in a firm become so successful in beating up the competition that the firm turns into a monopoly, or the one that can exercise monopolistic power. Such a case happened with IBM when In 1969, the firm dominated the computer market so much so, that the department of Justice had to issue an antitrust suit against it (Keat, Young and Benerjee, 2009)

### **Global implication for managers**

The managers should keep in mind that the process of benchmarking in an oligopolistic structure strategy formulation should be done keeping in view both domestic as well as the global competitors.

For example AT & T communications not only took into account Northern telecom but also Siemens, Ericsson and NEC and Fujitsu.

Many of the firms that refuse to take challenge from the foreign firms are likely to face consequences. Like many American firms got a serious blow from their Japanese competitors in the past 20 years. Companies like IBM and Caterpillar enjoys success because they established a strong hold in the Japanese market well before time.

The oligopolistic structure also highlighted the importance of alliance for the managers. Alliances enable the firm to acquire technology from the rival firm. Whilst the acquisition of the technology can be a source of benefit for the firm, the firm giving up the technology can face causalities ( Yoffie, 1993)

## **Conclusion**

The managers of an oligopolistic market structure have to take into account several aspects in their decision making. The managers are plunged into complex pricing decision. They take into consideration the three C's of Cost, customers and competition in their decision making. Price wars were common in an oligopolistic market, but they are becoming less frequent with the passage of time, mainly due to the realization of the managers.

Managers have understood, through their bitter experiences, that the price wars are costly and do not bring any benefits. They chose to compete on the advertising and on product variations. So they have chosen not to compete on prices and have found for themselves a path of mutual advantage.