The factors which determined oligopoly market economics essay

ASSIGN BUSTER

The term Oligopoly is derived from Greek words oligoi, which means ‘ few’, and polien which means ‘ to sell’. So a market where there are only a few sellers or producers of a product and each has considerable influence on the market is called Oligopoly market (Rankin & Stewart, 2008). Cigarettes, Home Appliance, Airlines, Oil, Raw materials, are some of the examples of Oligopoly Market. Oligopoly is almost same as monopoly, in which only one firm exerts control over most of the market. Because of small number of firms involved, any action by an individual firm with respect to price, output or quality, have a noticable impact on the sales of all other firm.

When there are only two firms, the market structurer is known as Duopoly. Intel and AMD in desktop computer microprocessor market, VISA and Mastercard in electronic payment market, Vodafone and Telecom in New zealand telecom market are few of the examples of Duopoly (Putt, 2011).

Oligopolists are more concern on inside industry competition than outside. Each firm keeps close eye on other competitors, specially with Price. Any oligopolistic firm will not increase or decrese the Price as it would destabalize their market share and would give rise to Price war. To avoid this Price War and monopoly, Oligopolists form collusion like Price Leadership, where one firm becomes price leader (one with large market share), Cartel (written aggrement)like OPEC (Organisationof Petroleum Exporting Countries).

Kinked Demand Curve

The Kinked Demand curve was developed by the economist Paul Sweezy. It explaind the dual demand curve for the product based on reaction of other firm in the market to the Price change.

In the below graph demand and revenue curve is drawn with Kink at the equilibrium. The common assumption of the theory is that oligopolistic firm tries to maintain their market share. Rival firms will not follow Price hike above P1 by one firm and hence demand will become Elastic and due to rise in price, revenue will decrease for that firm, but rivals will more likely to follow Price fall by one firm to avoid revenue loss and hence demand becomes Inelastic and total revenue loss due to Price fall. The Elastic and inelastic sections of Revenue curve leads to a gap in the curve.

Below diagram illustartes, an increase in marginal costs will not inavitablily provide Price hike , until the new MC curve (MC2) cuts the MR curve at the same output (Riley, 2006). This depicts that firms with different cost structure can also fit into oligopolist mode and still maximise profit. Increase in cost of a individual firm will not vary the price of the product, but if the Cost change is Industry wide then firm will act in Parallel manner and will adjust price. This is known as ‘ conscious parallelism’.

Product differentiation: Its basically marketing process which persuades that there is difference in products by contrasting its unique qualities with the competition. Product differentiation can be created by:

Advertising: This is most common and most widely used process where merely by creating flashy advertising campaign, sales can be promoted without even making any changes in the product. Sometimes ad can create a negative view for competing product like Coke vs pepsi etc.

Special packaging: Just packaging the product in a creative manner or as elaborate as incorporating new functionlity.

Sponsorship: By sponsoring ar partnership with Movie production house or sports.

But product differentation most often adds up to the cost of the product.

Product variation: This actaully involves minor changes in a product in order to attract new buyers. It could be augmented variations as well. Such as available in different shapes and color or customization.

Rise in Oil post World war II

In twentieth century petroleum gained increasing importance for industrial and commercial power as well as for transportation, for railroads and motor vehicles. US was the world's biggest consumer and producer of Petroleum oil untill 1974 when Soviet Union took the lead.

The below picture depicts oil price rise and its key factors post World War II.

summary_post world war 2. bmp

Post World War II U. S. demand for petroleum products increased 12% between 1945 and 1947 and crude Oil price increased to 80% as People tend to buy more and more motor Vehicles hence resulted in Fuel oil shortages which lead to first recession in US 1948.

In 1952-1953, Korean conflict and Supply disruptions due to world boycott of Iran and US Oil refinery Strike, 30% cut in fuel delivery for civilian flights and when the price control lifted raise the Oil price by 10%.

Suez Crisis in 1956-57 due to blocking Canal and intrupting Oil transportation and disrupting Iraq Petroleum company's pipeline created shortage accounting to 10. 1% of total world output. This led to economic consequences for Europe, as they rely in Middle East for most of its petroleum. Production outside Middle East was able to fill the gap as US increaded the export to third of a millon barrel a day. As the Production in Middle East starting getting stable US export declined by 18% over after.

By the end of 60's the Oil price stared growing drastacly due to inflationary pressure, Strike by east coast follwed by nationwide strike of Oil, chemical and Atomic Union. Post settlement raised the Oil price by 7%. But rupture of Trans-Arabian pipeline in syria added 2nd jump by 8% (Hamilton, Feb 2011).

crudeoilprice4774we. bmp

So the Oil price increased from $2. 00/Barrel to nearly $4. 00/Barrel while when viewed in 2008 dollars, crude oil prices fluctuating between $17 and $19 during most of the period. 20% price increase in nominal prices just to kept up with inflation. Prices were stable near $3. 00 per barrel from 1958 to 1970, but actually crude oil price declined from above $19 to $14 per barrel. The decline in the price of crude when adjusted for inflation for the international producer suffered the additional effect in 1971 and 1972 of a weaker US dollar (Williams, 2007).

OPEC

The Organization of the Petroleum Exporting Countries (OPEC) is a permanent, intergovernmental Organization, founded in 1960, by Iran, Iraq, Kuwait, Saudi Arabia and Venezuela. The main function of OPEC is to

regulate oil price and production, with coordination among the member countries. The ultimate goal of OPEC, as stated by the organization, is to stabilize oil prices in their effort to stabilize the geopolitical environment. Currently Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates and Venezuela are the members of OPEC (OPEC, 2003).

Collectively OPEC reserves 75% of global Oil reservers and supply 40% of the world's oil. So the power to control Oil price shifted to OPEC from US. In 1972 crude Oil was $3. 00/barrel by the end of 1974 it increased to$12. 00 by 1974 as Yom Kippur War started and Arab and Iran imposed embargo on the countries supporting Israel like US and other western world.

During Iran and Iraq crisis in 1979, the production of the Oil decreased to 2 million barrels/day which led to agin increase in oil price to more than double from $14 to $35 per barrel by 1981.

oilprice1970. bmp

OPEC fails to control Price

OPEC has been widely criticized as it was unable to control and determine the Production of Crude oil and its Price. OPEC countries were trying to raise the dollar price of Oil to be equitable to the world economy. Ahmed Yamani, Saudi Arabia's Oil minister warned OPEC in 1980 not to increase the price as it would lead to reduce in demand.

Surging in crude oil price forced consumer to find substitutes hence demand reduced and Price fall. Exploration and production outside OPEC increased

and OPEC faced lower demand. Its control on price decreased by discovery and development of Alaska, North Sea, Canada, Gulf of Mexico Oil reserve. OPEC tried to control the production by seting target but failed.

Once again in 1990 Oil price spiked with Gulf War, booming of Asian Pacific region , decline in Russian production and reduction in production by OPEC (Hamilton, Feb 2011).

But largely OPEC combined the major oil production country and became the price leader in the world. They were not able to constantly control the Oil price, but controlled it greatly, which id one of the characteristic of Oligopoly.

Petrol Price in NZ

New Zealand being small country always been best place to study the market response for new product or technology. It reflects typical international markets with price movements

directly related to changes in international price markers. In New Zealand BP, Shell, Gull, Caltex and Mobil are few firms which rule the Petroleum Market. Shell and BP are the major players in NZ with BP has larger market share.

In 1998, Mobil, shell, Caltex and BP dropped their price by 1c saying saying falling world oil prices and not the threat of competition is responsible for the fall. But according to David Russel, Consumer Institute director price drop was a preparatory step for new competition as three companies Challenge, Gull and Liberty showed their interest for NZ market. So in competition service improve and drop in price forces exsisting competitiors to drop the

price too. Usually to enter and get hold in NZ oil market, the new competitor firms may decrease the price below Margin profit as Gull was doing (Gay, 2009). BP is the virtually Price leader in NZ market (Biddle, Why do BP always increase petrol price first ?, 2006), but as NZ has policy of perfect competition and strick laws so Caltex, Mobil and Shell have failed to persuade the High Court to throw out a price-fixing case brought against them by the Commerce Commission (KING, 1998).

The below data has been derievd from a report by Edward Gay in NZ herald Feb, 2009 about the petrol price drop by the key players of NZ oil market. From the data I refer that Gull has decreased its price below the other competitors for all of its product to gain a share of the oil market whereas Shell, BP and others are selling petrol a cent higher as they are strong in market and earning profit compare to Gull, the new entrant.

All the firms in Petroleum market need to follow unwritten cartel to be in market and to eliminate other new enterants into the Oil Market. No firm alone can increase or decrese the price to get a get share in Market, also they need to keep close eye on the government also. In Mar2005, Mobil increase the Petrol price by 6c a litre to about $1. 25 cents a litre for unleaded 91 but Shell, BP and Caltex didnot follwed, so Mobil backed down on the same day. Again BP tried to move price upto $1. 25 but also forced to backtrack, because driver group the Automobile Association expected petrol prices to head up about 12 cents to a record price above $1. 30 a litre soon, with a double whammy of higher oil prices and rising taxes, as petrol tax would increase by 5c + GST from new finnacial year (WEIR & WATKINS, 2005) (NZPA, 2008).

Even with Same selling price and no price war the profit and Market share can be increased by either reducing the cost price or by Product differentiation and product variations. Jim Law, Mobil managing director said the decision by competitors to cut prices was due to Mobil's " dollar voucher offer". Discount of $1 on $20 petrol and if customers redeem 4 Vouchers, chance to win a 4-wheel-drive vehicle in a lucky draw. Mobil extremely successful discounting offer throughout New Zealand caused its competitors to cut costs. (Dominion Post, The, 1997). Caltex redeem Voucher issued by Pak n Save, although not fully. Carwash and small convininece store also attracts consumer towards a particular gas station. So Market share can be increase by adding these non price value to the Product.

BP has largest number of retail gas station in NZ which is 256, followed by shell 236 (second largest)and then by Caltex and mobil to 214 and 215 respectively, whereas Gull has only 33 gas station , so location and presence of the gas station affects the sales of petrol and market share gain greatly. BP has largest number of retail gas station were able to maximize market share with large volume of sale (Development, 2008). The figure below shows the retailer and its retail in NZ.

Few of the firms create variations in product to attract consumer and increase sale such as Shell has V-power, Gull has 91 Plus which has biofuel blend, which stands there product out the competition and attracts new consumers.

no of stations. bmp

Frequent fluctuation of price and promotions affects the other industry dependent on Oil industry such as Airlines, Automobiles (Roeland, 2011).

Conclusion

In the 20th Centuary the price of Oil has increased drastically with increase in demand by commertial Industry, transportation and Motor vehicle usage. After World War II the price spiked drastically due to various world events such as Korean war, suez crisis, OAPEC embargo, Iran and Iraq war and so on.

With the formation of OPEC which is group of oligopolist firm in Oil Market, Oil price was controlled but not fully as there were conflicts between the oligopolist firm and easy entry by other firm due to shortage of suppy. In late 80's the control became very firm as the market realised the consequences and after effect of conflict, War and recession on the Oil price and demand.

NZ being prototype of the international market have few Oil market oligopolist like BP, shell, Mobil, cartel, gull etc. NZ market behaves ideally like oligopoly Market with price leadership buy few firms such as BP or Shell and then follwed by others to cope up with the demand and supply constrain of NZ Petrol Market. Even though the Selling price are almost same for all the Oil firms, but due to product differentiation and product variation the market share differes for different firm. Various promotional offer and augmneted product offered by few firms and Grand Ad campaingn raise the Non-price competition in the Oil market of NZ. In near future with awareness of illeffect of Oligopoly and increase in oil price consumer have started looking for better alternative for the oil and hence in future the oil price

would be very dramatically with presence of better substitute and decrease in resource. With this I conclude the Oil Price Market bahaves almost like olipoly market.