Programme: Bachelor of Arts (First Year) Subject: Economics Paper Code: ECC 102 Paper Title: Micro Economics II Unit: Monopolistic Competition and Oligopoly Module Name: Price Rigidity and Kinked Demand Curve Module no-20 Name of the Presenter: Mrs. Harshala Patil Borkar Assistant Professor in Economics, Government College of Arts, Science and Commerce, Quepem – Goa.

Sweezy's Kinked Demand Curve and price rigidity

Oligopoly is a market structure with a small number of firms, none of which can keep the others from having significant influence. The concentration ratio measures the market share of the largest firms. A monopoly is one firm, a duopoly is two firms and an oligopoly is two or more firms.

Under oligopoly, prices and output are indeterminate. Moreover, organizations are mutually dependent on each other in setting the pricing policy.

Therefore, economists found it extremely difficult to propound any specific theory for price and output determination under oligopoly.

In the words of Maurice, "there is no theory of oligopoly in the sense that there is a theory of perfect competition or of monopoly. There is no unique general solution but merely many different behavioral models, each of which reaches a different solution." Thus, the economists have developed various analytical models based on different behavioral assumptions for determining price and output under oligopoly.

Sweezy's Kinked Demand Curve Model:

The kinked demand curve of oligopoly was developed by Paul M. Sweezy in 1939. Instead of laying emphasis on price-output determination, the model explains the behavior of oligopolistic organizations. The model advocates that the behavior of oligopolistic organizations remain stable when the price and output are determined

This implies that an oligopolistic market is characterized by a certain degree of price rigidity or stability, especially when there is a change in prices in downward direction. For example, if an organization under oligopoly reduces price of products, the competitor organizations would also follow it and neutralize the expected gain from the price reduction.

On the other hand, if the organization increases the price, the competitor organizations would also cut down their prices. In such a case, the organization that has raised its prices would lose some part of its market share.

The kinked demand curve model seeks to explain the reason of price rigidity under oligopolistic market situations. Therefore, to understand the kinked demand curve model, it is important to note the reactions of rival organizations on the price changes made by respective oligopolistic organizations.

There can be two possible reactions of rival organizations when there are changes in the price of a particular oligopolistic organization. The rival organizations would either follow price cuts, but not price hikes or they may not follow changes in prices at all.

A kinked demand curve represents the behavior pattern of oligopolistic organizations in which rival organizations lower down the prices to secure their market share, but restrict an increase in the prices.

Following are the assumption of a kinked demand curve:

i. Assumes that if one oligopolistic organization reduces the prices, then other organizations would also cut their prices

ii. Assumes that if one oligopolistic organization increases the prices, then other organizations would not follow increase in prices

iii. Assumes that there is always a prevailing price

A kinked demand curve model is explained with the help of Figure



The slope of a kinked demand curve differs in different conditions, such as price increase and price decrease. In this model, every organization faces two demand curves. In case of high prices, an oligopolistic organization faces highly elastic demand curve, which is dd' in Figure-2.

On the other hand, in case of low prices, the oligopolistic organization faces inelastic demand curve, which is DD' (Figure-2). Suppose the prevailing price of a product is PQ, as shown in Figure-2. If one of the oligopolistic organizations makes changes in its prices, then there can be three reactions of rival organizations.

Firstly, when the oligopolistic organization would increase its prices, its demand curve would shift to dd' from DD'. In such a case, consumers would switch to rivals, which would lead to fall in the sales of the oligopolistic organization. In addition, the dP portion of dd' would be more elastic, which lies above the prevailing price.

On the other hand, if price falls, the rivals would also reduce their prices, thus, the sales of the oligopolistic organization would be less. In such a case, the demand curve faced by the oligopolistic organization is PD', which lies below the prevailing price.

Secondly, rival organizations will not react with respect to changes in the price of the oligopolistic organization. In such a case, the oligopolistic organization would face DD' demand curve.

Thirdly, the rival organizations may follow price cut, but not price hike. If the oligopolistic organization increases the price and rivals do not follow it, then consumers may switch to rivals. Thus, the rivals would gain control over the market. Thus, the oligopolistic organization would be forced from dP demand curve to DP demand curve, so that it can prevent losing its customers.

This would result in producing the kinked demand curve. On the other hand, if the oligopolistic organization reduces the price, the rival organizations would also reduce prices for securing their customers. Here, the relevant demand curve is Pd'. The two parts of the demand curve are DP and Pd', which is DPd' with a kink at point P.

The MR curve would take the discontinuous shape, which is DXYC, where DX and YC correspond directly to DP and Pd' segments of the kinked demand curve. The equilibrium point is attained when MR = MC. In Figure-2, the MC curve intersects MR at point Y where at output OQ.

At point Y, the organization would achieve maximum profit. Now, if cost increases, the MC curve would move upwards to MC. In such a case, the oligopolistic organization cannot increase the prices. This is because if the organization would increase the prices, the rival organizations would decrease their prices and gain the market share. Moreover, the profits would remain same between point X and Y. Thus, there is no motivation for increasing or decreasing prices. Therefore, price and output would remain stable.