

Semester - 2 (II)

Economics Honours

Paper C-3 (Microeconomic Theory - II)

Theory of Oligopoly:

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An oligopoly exists when a few sellers of a commodity or service deal with a large number of buyers. In the case of oligopoly a small number of companies supply the major portion of an industry's output. In effect, the industry is composed of a few large firms which account for a significant share of the total production. Thus the actions of the individual firms have an appreciable effect on their competitors. However, the presence of only a few sellers does not imply that competition is absent.

Although there are few firms in an oligopolistic industry, competition is often very intense. With few firms in an industry, each takes into account the likely repercussions of its actions. One feature of markets with few sellers is that prices of oligopolist industries generally fluctuate less widely than in purely competitive markets.

The most important point about oligopoly is that an oligopolist

is a price searcher. No firm under oligopoly can take decisions on price independently. Each firm has to take into account the behaviour of rival firms while taking a decision on price.

In oligopoly various diverse behaviour patterns are observed. This is why there are several models of oligopoly behaviour. Each model is based on or more assumptions. But none is fool-proof in the sense that there is no grand model which captures many different behaviour patterns which are observed in the real world.

### The Case of Duopoly (with Homogeneous Product)

For simplicity, we consider market situations involving two firms, called duopoly. The object is to show different types of strategic interactions among firms.

### Conjectural Variations and Reaction Functions

The most important point about oligopoly is the interdependence in the

decision-making of the various firms. If an industry consists of a few dominant firms, every firm knows that at least some of its rivals' decision depend on its own behaviour and it must take this fact into account in its decision-making. In oligopoly we find conjectural variation which refers to the assumed response of each firm to its rivals' output.

Moreover, oligopolistic interdependence has made the systematic analysis of oligopoly difficult. For this reason a very wide variety of behaviour patterns can be thought of. Rivals may decide to get together (collude) and cooperate to create a win-win situation and try to maximise profits jointly or they may fight each other out. Even if they enter into an agreement, it may last or it may break down. And such agreements can take various forms.

As a result, the literature of oligopoly is full of different models.

Most such models describe, at most, one particular arrangement - a price leadership or a quantity leadership agreement.

Another problem, which is of a more serious nature is that a firm has to take into account the reaction patterns of its competitors. When a firm makes the best possible guess about its competitors' likely response to some move which is considering, it must recognise that its competitor, too, is likely to take this interdependence phenomenon into account.

There are three ways of solving this problem of taking into account the reaction of rival firms:

- (i) Ignoring interdependence,
- (ii) Predicting competitors' counter moves,
- (iii) Preparing against optimal moves by competitors.