# Introduction to Economics I Lecture 12

### Oligopoly

An **oligopoly** is a <u>market form</u> wherein a <u>market</u> or <u>industry</u> is dominated by a small number of large sellers (oligopolists).

Oligopolies can result from various forms of collusion which reduce competition and lead to higher prices for consumers.

#### **Concentration ratios**

Oligopolies may be identified using concentration ratios, which measure the proportion of total market share controlled by a given number of firms. When there is a high concentration ratio in an industry, economists tend to identify the industry as an oligopoly.

#### Example of a hypothetical concentration ratio

The following are the annual sales, in £m, of the six firms in a hypothetical market:

A = 56

B = 43

C = 22

D = 12

E = 3

F = 1

In this hypothetical case, the 3-firm concentration ratio is 88.3%, that is 121/137 x 100.

### The Herfindahl – Hirschman Index (HH index)

- This is an alternative method of measuring concentration and for tracking changes in the level of concentration following mergers.
- The HH index is found by adding together the squared values of the % market shares of all the firms in the market.

### The Herfindahl – Hirschman Index (HH index)

- For example, if three firms exist in the market the formula is  $X^2 + Y^2 + Z^2$ ; where X, Y and Z are the percentages of the three firm's market shares.
- If the index is below 1000, the market is not considered concentrated, while an index above 2000 indicates a highly concentrated market or industry the higher the figure the greater the concentration.

#### **Barriers to entry**

Oligopolies and monopolies frequently maintain their position of dominance in a market might because it is too costly or difficult for potential rivals to enter the market.

These hurdles are called *barriers to entry* and the incumbent can erect them deliberately, or they can exploit natural barriers that exist.

### **Pricing strategies of oligopolies**

Oligopolies may pursue the following pricing strategies:

- 1. Oligopolists may use predatory pricing to force rivals out of the market. This means keeping price artificially low, and often below the full cost of production.
- 2. They may also operate a *limit-pricing* strategy to deter entrants, which is also called *entry forestalling price*.

### **Pricing strategies of oligopolies**

- 1. Oligopolists may collude with rivals and raise price together, but this may attract new entrants.
- 2. Cost-plus pricing is a straightforward pricing method, where a firm sets a price by calculating average production costs and then adding a fixed mark-up to achieve a desired profit level. Cost-plus pricing is also called rule of thumb pricing.

#### **Maximizing profits**

MC = MR is profit maximizing rule.

However, P is set above the MC.

Hence, we can conclude that P>MR=MC.

Output in oligopoly is greater than the monopoly, but lower than the output produced in perfect competition.