Chapter 5. Monopolistic Competition and Oligopoly

5.1 Market Structures

5.1.1 Market Structure Spectrum and Characteristics

Table 5.1 shows the four major categories of market structures and their characteristics.

<table>
<thead>
<tr>
<th>Perfect Competition</th>
<th>Monopolistic Competition</th>
<th>Oligopoly</th>
<th>Monopoly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homogeneous good</td>
<td>Differentiated good</td>
<td>Differentiated good</td>
<td>One good</td>
</tr>
<tr>
<td>Numerous firms</td>
<td>Many firms</td>
<td>Few firms</td>
<td>One firm</td>
</tr>
<tr>
<td>Free entry and exit</td>
<td>Free entry and exit</td>
<td>Barriers to entry</td>
<td>No entry</td>
</tr>
</tbody>
</table>

Perfect competition is on one end of the market structure spectrum, with numerous firms. The word, “numerous” has special meaning in this context. In a perfectly competitive industry, each firm is so small relative to the market that it cannot affect the price of the good. Each perfectly competitive firm is a price taker. Therefore, numerous firms means that each firm is so small that it is a price taker.

Monopoly is the other extreme of the market structure spectrum, with a single firm. Monopolies have monopoly power, or the ability to change the price of the good. Monopoly power is also called market power, and is measured by the Lerner Index.

This chapter defines and describes two intermediary market structures: monopolistic competition and oligopoly.

**Monopolistic Competition** = A market structure characterized by a differentiated product and freedom of entry and exit.

Monopolistically Competitive firms have one characteristic that is like a monopoly (a differentiated product provides market power), and one characteristic that is like a competitive firm (freedom of entry and exit). This form of market structure is common in market-based economies, and a trip to the grocery store reveals large numbers of differentiated products: toothpaste, laundry soap, breakfast cereal, and so on.
Oligopoly = A market structure characterized by barriers to entry and a few firms.

Oligopoly is a fascinating market structure due to interaction and interdependency between oligopolistic firms. What one firm does affects the other firms in the oligopoly.

Since monopolistic competition and oligopoly are intermediary market structures, the next section will review the properties and characteristics of perfect competition and monopoly. These characteristics will provide the defining characteristics of monopolistic competition and oligopoly.

5.1.2 Review of Perfect Competition

The perfectly competitive industry has four characteristics:

1. Homogenous product,
2. Large number of buyers and sellers (numerous firms),
3. Freedom of entry and exit, and
4. Perfect information.

The possibility of entry and exit of firms occurs in the long run, since the number of firms is fixed in the short run.

An equilibrium is defined as a point where there is no tendency to change. The concept of equilibrium can be extended to include the short run and long run.

**Short Run Equilibrium** = A point from which there is no tendency to change (a steady state), and a fixed number of firms.

**Long Run Equilibrium** = A point from which there is no tendency to change (a steady state), and entry and exit of firms.

In the short run, the number of firms is fixed, whereas in the long run, entry and exit of firms is possible, based on profit conditions. We will compare the short and long run for a competitive firm in Figure 5.1. The two panels in Figure 5.1 are for the firm (left) and industry (right), with vastly different units. This is emphasized by using “q” for the firm’s output level, and “Q” for the industry output level. The graph shows both short run and long run equilibria for a perfectly competitive firm and industry. In short run equilibrium, the firms faces a high price ($P_{SR}$), produces quantity $Q_{SR}$ at $P_{SR} = MC$, and earns positive profits $\pi_{SR}$. 
Positive profits in the short run ($\pi_{SR} > 0$) lead to entry of other firms, as there are no barriers to entry in a competitive industry. The entry of new firms shifts the supply curve in the industry graph from supply $S_{SR}$ to supply $S_{LR}$. Entry will occur until profits are driven to zero, and long run equilibrium is reached. In the long run, economic profits are equal to zero, so there is no incentive for entry or exit in the long run. Each firm is earning exactly what it is worth, the opportunity costs of all resources. In long run equilibrium, profits are zero ($\pi_{LR} = 0$), and price equals the minimum average cost point ($P = \text{min AC} = \text{MC}$). Marginal costs equal average costs at the minimum average cost point. At the long run price, supply equals demand at price $P_{LR}$.

### 5.1.3 Review of Monopoly

The characteristics of monopoly include: (1) one firm, (2) one product, and (3) no entry (Table 5.1). The monopoly solution is shown in Figure 5.2.
Figure 5.2 Monopoly Profit Maximization