# MODULE 10

# MONOPOLISTIC COMPETITION AND OLIGOPOLY

**Monopolistic competition** is what economists call industries that consist of many firms competing against each other, but selling products that are distinctive in some way. Examples include stores that sell different styles of clothing; restaurants or grocery stores that sell different kinds of food; and even products like golf balls or beer that may be at least somewhat similar but differ in public perception because of advertising and brand names.

When products are distinctive, each firm has a mini-monopoly on its particular style or flavor or brand name. However, firms producing such products must also compete with other styles and flavors and brand names. The term "monopolistic competition" captures this mixture of mini-monopoly and tough competition.

## Differentiated Products

A firm can try to make its products different from those of its competitors in several ways: physical characteristics of the product, location from which the product is sold, intangible aspects of the product, and perceptions of the product.
Products that are distinctive in these ways are called differentiated products.

## How a Monopolistic Competitor Determines How Much to Produce and at what price?

The process by which a monopolistic competitor chooses its profit-maximizing quantity and price resembles closely how a monopoly makes these decisions process. First, the firm selects the profit-maximizing quantity to produce.
Then the firm decides what price to charge for that quantity.

**Step 1.** The monopolistic competitor determines its profit-maximizing level of output. In this case, the Authentic Chinese Pizza company will determine the profit-maximizing quantity to produce by considering its marginal revenues and marginal costs. Two scenarios are possible:

If the firm is producing at a quantity of output where marginal revenue exceeds marginal cost, then the firm should keep expanding production, because each marginal unit is adding to profit by bringing in more revenue than its cost. In this way, the firm will produce up to the quantity where **MR = MC**.

If the firm is producing at a quantity where marginal costs exceed marginal revenue, then each marginal unit is costing more than the revenue it brings in, and the firm will increase its profits by reducing the quantity of output until **MR = MC**.

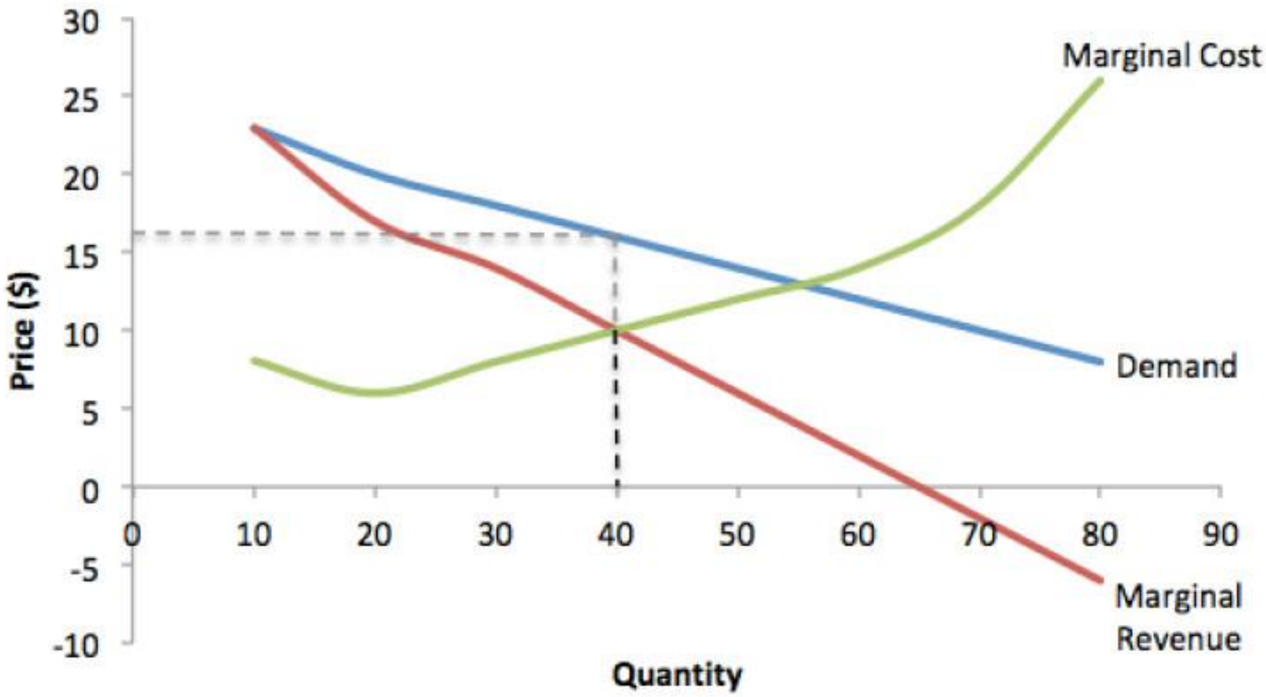


**Figure 1. How a Monopolistic Competitor Chooses its Profit Maximizing Output and Price?**

To maximize profits, the Authentic Chinese Pizza shop would choose a quantity where marginal revenue equals marginal cost, or Q where MR = MC. Here it would choose a quantity of 40 and a price of $16. In this example, MR and MC intersect at a quantity of 40, which is the profit-maximizing level of output for the firm.

**Step 2.** The monopolistic competitor decides what price to charge. When the firm has determined its profit-maximizing quantity of output, it can then look to its perceived demand curve to find out what it can charge for that quantity of output. On the graph, this process can be shown as a vertical line reaching up through the profit-maximizing quantity until it hits the firm's perceived demand curve. For Authentic Chinese Pizza, it should charge a price of $16 per pizza for a quantity of 40.

## Oligopolies

Most of the firms that get talked about as "monopolies" today or that regulatory authorities pursue antitrust activities against are actually oligopolies, firms that have only a limited number of competitors. There are quite a few industries in the U.S. that are oligopolistic. Think about rental cars, or car manufacturers, or newspapers, or internet service providers.

## Why Do Oligopolies Exist?

Many purchases that individuals make at the retail level are produced in markets that are neither perfectly competitive, monopolies, nor monopolistically competitive. Rather, they are oligopolies.

**Oligopoly** arises when a small number of large firms have all or most of the sales in an industry. Examples of oligopoly abound and include the auto industry, cable television, and commercial air travel.

Oligopolistic firms are like cats in a bag. They can either scratch each other to pieces or cuddle up and get comfortable with one another.

If oligopolists compete hard, they may end up acting very much like perfect competitors, driving down costs and leading to zero profits for all. If oligopolists collude with each other, they may effectively act like a monopoly and succeed in pushing up prices and earning consistently high levels of profit.

Oligopolies are typically characterized by mutual interdependence where various decisions such as output, price, advertising, and so on, depend on the decisions of the other firm(s).
Analyzing the choices of oligopolistic firms about pricing and quantity produced involves considering the pros and cons of competition versus collusion at a given point in time.

A combination of the barriers to entry that create monopolies and the product differentiation that characterizes monopolistic competition can create the setting for an oligopoly. For example, when a government grants a patent for an invention to one firm, it may create a monopoly. When the government grants patents to, for example, three different pharmaceutical companies that each has its own drug for reducing high blood pressure, those three firms may become an oligopoly.

Similarly, a **natural monopoly** will arise when the demand in a market is only large enough for a single firm to operate at the minimum of the long-run average cost curve. In such a setting, the market has room for only one firm, because no smaller firm can operate at a low enough average cost to compete, and no larger firm could sell what it produced given the quantity demanded in the market.

The demand may also only be limited to two or three times the quantity needed to produce at the minimum of the average cost curve—which means that the market would have room for only two or three oligopoly firms (and they need not produce differentiated products). Again, smaller firms would have higher average costs and be unable to compete, while additional large firms would produce such a high quantity that they would not be able to sell it at a profitable price.

This combination of economies of scale and market demand creates the barrier to entry, which led to the Boeing-Airbus oligopoly for large passenger aircraft.

The product differentiation at the heart of monopolistic competition can also play a role in creating oligopoly. For example, firms may need to reach a certain minimum size before they are able to spend enough on advertising and marketing to create a recognizable brand name.

The problem in competing with, say, Coca-Cola or Pepsi is not that producing fizzy drinks is technologically difficult, but rather that creating a brand name and marketing effort to equal Coke or Pepsi is an enormous task.