

# Monopolistic Competition and Advertising

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## ECO 304K: Introduction to Microeconomics

### **Advertising and Product Differentiation are notable features of Monopolistic Competition**

If you drive down a busy street, you will find many competing businesses, often right next to one another. These competing firms advertise heavily; the temptation is to see advertising as driving up the price of a product without any benefit to the consumer. However, in markets where competitors sell slightly differentiated products, advertising enables firms to inform their customers about new products and services. Yes, costs rise, but consumers also gain information to help make purchasing decisions.

Consumers also benefit from added variety, and we all get a product that's pretty close to our vision of a perfect good—no other market structure delivers that outcome.

In this chapter, we will look at ***monopolistic competition***, a widespread market structure that has features of both competitive markets and monopoly. We also explore the benefits and disadvantages of advertising, which is prevalent with monopolistic competition.

### **Big Questions**

- What is monopolistic competition?
  - **Monopolistic competition is a market structure characterized by low barriers to entry and many firms selling differentiated products.**
  - **Differentiation of products takes three forms**
    - *Differentiation by style or type*
    - *Location*
    - *Quality*
- What are the differences among monopolistic competition, competitive markets, and monopoly?

- **Monopolistic competitors, like monopolists, are price makers with downward-sloping demand curves. Whenever the demand curve is downward sloping, the firm is able to mark up the price above marginal cost. The results are excess capacity and an inefficient level of output.**
- **In the long run, barriers to entry enable a monopoly to earn an economic profit. This is not the case for monopolistic competition or competitive markets.**
- Why is advertising prevalent in monopolistic competition?
- **Advertising performs useful functions under monopolistic competition: it conveys information about the price of the goods offer for sale, the location of products, and new products. It also signals differences in quality, however, advertising also encourages brand loyalty, which makes it harder for other businesses to successfully enter the market. Advertising can be manipulative and misleading.**

## What is Monopolistic Competition?

Each fast-food establishment has a unique set of menu items; the different products in fast-food restaurants give each seller a small degree of market power. This combination of market power and competition is typical of the market structure known as monopolistic competition. Indeed, **monopolistic competition** is characterized by low barriers to entry, many different firms, and product differentiation. **Product differentiation** is the process firms use to make a product more attractive to potential customers; firms use product differentiation to contrast their product's unique qualities with competing products. The differences, which we will examine in detail, can be minor and can involve subtle changes in packaging, quality, availability, and promotion; or the difference can be very significant.

How does monopolistic competition compare with other market structures we have studied? As **Table 12.1** shows, monopolistic competition falls between competitive markets and monopoly in terms of the number of sellers, the types of products sold, and competing firms' ability to enter and exit the market.

We have seen that firms in competitive markets do not have any market power, as a result, buyers can expect to find consistently low prices and wide availability; and we have seen that monopolies charge more and restrict the availability of a good or service. In markets that are monopolistically competitive, firms sell differentiated

products; this differentiation gives the monopolistic competitor some market power, though not as much as a monopolist, which controls the entire market.

Monopolistically competitive firms have a small amount of market power that enables them to search for the most profitable price.

Table 12.1

Competitive Markets, Monopolistic Competition, and Monopoly		
Competitive Markets	Monopolistic Competition	Monopoly
Many sellers	Many sellers	One seller
Similar products	Differentiated products	A unique product without close substitute
Free entry and exit	Low barriers to entry and exit	Significant barriers to entry and exit

To understand how monopolistic competition works, we begin with a closer look at product differentiation.

## Product Differentiation

Monopolistically competitive firms create some market power through product differentiation. Differentiation can occur in a variety of ways, including style or type, location, and quality.

### Style or Type

When you're ready for lunch at the mall, you can go to the food court, where many different place to eat offer a wide variety of choices. Where you decide to eat is a matter of your personal preference and the price your willing to pay. Like most consumers, you will select the place that gives you what you want while providing the best value for your money. Consumers' differing tastes make it possible for a wide range of food vendors to compete side by side with rivals who provide many good substitutes.

### Location

When consumers prefer to save time and to avoid the inconvenience of shopping for a better deal, a firm with a more convenient location will have some pricing power. As a result, producers who sell very similar products can generate some market power by locating their businesses

along routes most customers use to go to and from work or in other areas where customers frequently travel.

### **Quality**

Firms also compete on the basis of quality, for example, if you want Mexican food you can go to Taco Bell, which is inexpensive and offers food cooked in advance. In contrast, at Moe's Southwestern Grill the food is freshly prepared and, as a result, more expensive; this form of product differentiation serves consumers quite well. Budget-conscious consumers can feast at Taco Bell, while those with a larger budget and a taste of higher-quality Mexican food can consider Moe's as another option.

## **What are the differences among Monopolistic Competition, Competitive Markets, and Monopoly?**

Monopolistic competition occupies a place between competitive markets, which produces an efficient output at low prices, and monopoly, which produces an inefficient output at high prices. To help explain whether monopolistic competition is desirable or not, we consider the outcomes that individual firms can achieve when facing monopolistic competition in the short run and in the long run. Once you understand how monopolistic competition works, we will be able to compare the long-run equilibrium result with that of competitive markets and then determine if monopolistic competition is efficient.

### **Monopolistic Competition in the Short Run and the Long Run**

A monopolistically competitive firm sells a differentiated product and for this reason has some market power. Recall that in perfect competition, each firm sells the same product, so competitors' products are perfect substitutes, which means that demand is perfectly elastic (flat). In monopolistic competition, each competitor provides a differentiated product, so competitors' products are imperfect substitutes for one another, which means that demand is relatively elastic (less flat), but still flatter (more elastic) than monopoly. Like a monopolist, the monopolistic competitor uses the profit-maximizing rule,  $MR = MC$ , and locates the corresponding point on its demand curve to determine the best price to charge and the best quantity to produce. Whether the firm earns a profit, experiences a loss, or breaks even is a function of other firms entering and exiting the market. Recall that entry and exit do not take place in the short run; in the long run, however, firms are free to enter an industry when they see a

potential for profits or leave if they are making losses. Therefore, entry and exit regulate how much profit a firm can make in the long run.

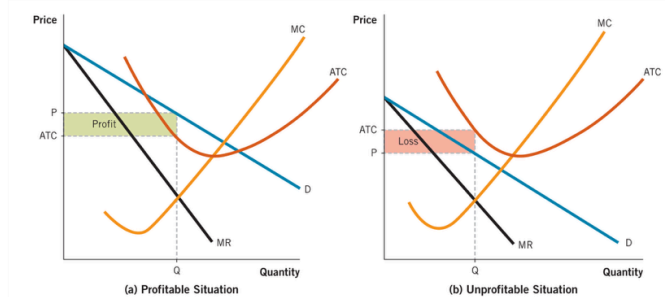
## Monopolistic Competition in the short run

**Figure 12.1** depicts a firm in a monopolistically competitive environment. In panel (a), the firm makes a profit; Panel (b) shows the same firm incurring a loss after a new competitor opens nearby. In each case, the firm uses the profit-maximizing rule to determine the best price to charge by locating the point at which marginal revenue equals marginal cost. This calculation establishes the profit-maximizing output ( $Q$ ) along the vertical dashed line; the firm determines the best price to charge ( $P$ ) by following the dashed horizontal line from the demand curve to the vertical axis.

**FIGURE 12.1**

### The Monopolistically Competitive Firm in the Short Run

In this figure, we see how a single monopolistically competitive firm may make a profit or incur a loss depending on the demand conditions it faces. Notice that the marginal cost curve (MC) and average total cost curve (ATC) are identical in both panels because we are considering the same firm. The only functional difference is the location of the demand curve (D) and marginal revenue curve (MR). The demand in (a) is high enough for the firm to make a profit. In (b), however, there is not enough demand, so the firm experiences a loss.



In panel (a), we see that because price is greater than average total cost ( $P > ATC$ ), the firm makes a short-run economic profit; the situation in panel (b) is different. Because  $P < ATC$ , the firm experiences a short-run economic loss; what accounts for the difference? Because we are considering the same firm, the marginal cost (MC) and average total cost (ATC) curves are identical in both panels. The only functional difference is the location of the demand ( $D$ ) and marginal revenue (MR) curves. The demand in panel (a) is high enough for the firm to make profit. In panel (b), however, there is not enough demand; perhaps too many customers have switched to the new firm, so even though the monopolistic competitor

has some market power, if demand is too low, the firm may not be able to price its product high enough to make a profit.

### Monopolistic Competition in the long run

In the long run, when firms can easily enter and exit a market, competition will drive economic profit to zero. This dynamic should be familiar to you from our previous discussions of competitive markets. If a firm is making economic profit, that profit attracts new entrants to the business; then the larger supply of competing firms will cause the demand for an individual firm's product to contract. Eventually, as more firms enter the market, it is no longer possible for existing firms to make an economic profit. A reverse process unfolds in the case of a market experiencing a loss. In this case, some firms exit the industry; then consumers have fewer options to choose from, and the remaining firms experience an increase in demand. Eventually, demand increases to the point at which firms no longer experience a loss.

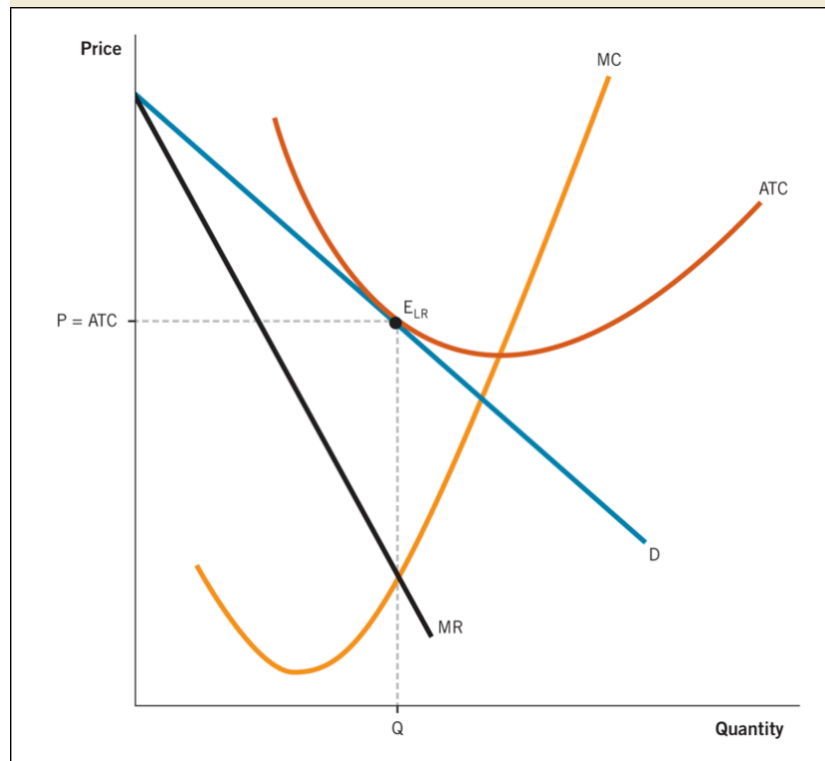
**Figure 12.2** shows the market after the long-run adjustment process takes place. Price ( $P$ ) is just equal to the average total cost of production (ATC) at the profit-maximizing rate of output ( $Q$ ). At this point, firms are earning zero economic profit, as noted by  $P = ATC$  along the vertical axis; the market reaches a long-run equilibrium at the point where there is no reason for firms to enter or exit the industry. Note that the demand curve is drawn **tangent** to the average total cost curve (touching at one place). If demand were any larger, the result would look like panel (a) in **Figure 12.1** and firms would experience an economic profit. Conversely, if demand were any lower, the result would look like panel (b) in **Figure 12.1** and firms would experience an economic loss. Where entry and exit exist, profits and losses are not possible in the long run. In this way, monopolistic competition resembles a competitive market.

The firm's success will attract attention and encourage rivals to enter the market. As a result, the short-run profits that the firm enjoys will erode; as long as profits occur in the short run, other competitors will be encouraged to enter, while short-run losses will prompt some existing firms to close. The dynamic nature of competition guarantees that long-run profits and losses are not possible.

**FIGURE 12.2**

### The Monopolistically Competitive Firm in the Long Run

Entry and exit cause short-run profits and losses to disappear in the long run, which means that the price charged ( $P$ ) must be equal to the average total cost ( $ATC$ ) of production. At this point, firms are earning zero economic profit, as noted by  $P = ATC$  along the vertical axis. The market reaches a long-run equilibrium ( $E_{LR}$ ) at the point where there is no reason for firms to enter or exit the industry.



## Monopolistic Competition and Competitive Markets

We have seen that monopolistic competition and competitive markets similar; both market structures drive economic profit to zero in the long run, but monopolistic competitors enjoy some market power, which is a crucial difference. In this section, we compare pricing and output decisions in these two market structures, then we look at issues of scale and output.

## The relationship between price, marginal cost, and long-run average cost

Monopolistically competitive firms have some market power, which enables them to charge slightly more than firms in competitive markets.

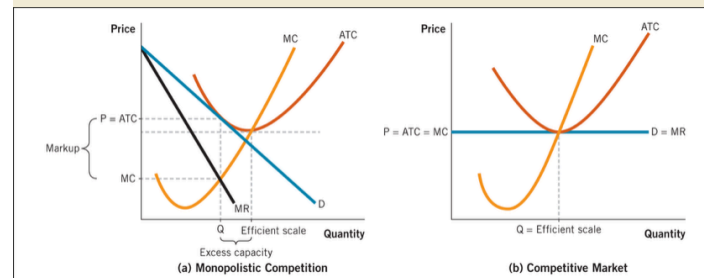
**Figure 12.3** compares the long-run equilibrium between monopolistic competition and a competitive market; turning first to the firm in a market characterized by

monopolistic competition, show in panel (a), notice that the price ( $P$ ) is greater than the marginal cost ( $MC$ ) of making one more unit. The difference between  $P$  and  $MC$  is known as the markup. **Markup** is the difference between the price the firm charges and the marginal cost of production.

**FIGURE 12.3**

### The Long-Run Equilibrium in Monopolistic Competition and Competitive Markets

There are two primary differences between the long-run equilibrium in monopolistic competition (a) and a competitive market (b). First, monopolistic competition produces markup, because  $P$  is greater than  $MC$ . In a competitive market,  $P = MC$ . Second, the output in monopolistic competition is smaller than the efficient scale. In a competitive market, the firm's output is equal to the most efficient scale.



A markup is possible when a firm enjoys some market power; products such as bottled water, cosmetics, prescription medicine, eyeglass frame, brand-name clothing, restaurant drinks, and greeting cards all have hefty markups...other companies use special packaging, while the marketing of the item is unquestionably a successful business strategy, the markup means consumers pay more. You can observe this result in panel (a) of Figure 12.3, where the price under monopolistic competition is higher than the price in a competitive market, shown in panel (b).

Next, look at the ATC curves in both panels because a monopolistic competitor has a downward-sloping demand curve, the point of tangency between the demand curve and the ATC curve is different from the point of tangency in a competitive market. The point where  $P = ATC$  is higher



under monopolistic competition, panel (b) shows the demand curve just tangent to the ATC curve at the ATC's lowest point in a competitive market. Consequently, we can say that monopolistic competition produces higher prices than a competitive market does. If this result seems odd to you, recall that entry and exit do not ensure the lowest possible price, only that the price is equal to the average total cost of production; in a competitive market, where the demand curve is horizontal, the price is always the lowest possible average total cost of production. This is not the case under monopolistic competition, however, the price in monopolistic competition often reflects quality; cheap food is cheap for a reason. Firms may charge more for higher-quality food, but there will still be zero economic profit.

### Scale and Output

When a firm produces at an output level smaller than the output level needed to minimize average total cost, we say it has **excessive capacity**. Turning back to panel (a) of **Figure 12.3**, we see excessive capacity in the difference between  $Q$  and the efficient scale.

This result differs from what we see in panel (b) of **Figure 12.3** for a competitive market. In a competitive market, the profit-maximizing output is equal to the most efficient scale of operation. This result is guaranteed because each firm sells an identical product and must therefore set its price equal to the minimum point on the average total cost curve. Under monopolistic competition, the profit-maximizing output is less than the minimum efficient scale; monopolistically competitive firms have the capacity to produce more output at a lower cost, but if they produced more, they would have to lower their price because a lower price decreases the firm's marginal revenue, it is more profitable for the monopolistic competitor to operate with excess capacity.

## Monopolistic Competition, Inefficiency, and Social Welfare

Monopolistic competition produces a higher price and a lower level of output than a competitive market does. Recall that we looked at efficiency as a way to determine whether a firm's decisions are consistent with an output level beneficial to society. Does monopolistic competition display efficiency?

In **Figure 12.3**, panel (a), we observed that a monopolistic competitor has costs slightly above the lowest possible cost, so the average total costs of a monopolistically competitive firm are higher than those of a firm in a competitive market. This result is not efficient; to achieve efficiency, the monopolistically competitive firm could lower its price to what we would find in competitive markets. However, because a monopolistic competitor's goal is to make a profit, there is no incentive for the firm to lower its price. Every monopolistic competitor has a downward-sloping demand curve, so the demand curve cannot be tangent to the minimum point along the average total cost curve, as seen in panel (a).

Markup is a second source of inefficiency; we have seen that, for a monopolistically competitive firm at the profit-maximizing output level,  $P > MC$  by an amount equal to the markup. The price reflects the consumer's willingness to pay, and this amount exceeds the marginal cost of production. A reduced markup would benefit consumers by lowering the price and decreasing the spread between the price and the marginal cost. If the firm did away with the markup entirely and set  $P = MC$ , the output level would benefit the greatest number of consumers. However, this result would not be practical, at the point where the greatest efficiency occurs, the demand curve would be below average total cost curve and the firm would lose money. It is unreasonable to expect a profit-seeking firm to pursue a pricing strategy that would benefit its customers at the expense of its own profit.

What if the government intervened on behalf of the consumer? Increased efficiency could be achieved through government regulation. After all, the government regulates monopolists to reduce market power and restore social welfare. Couldn't the government do the same in monopolistically competitive markets? Yes and no! It is certainly possible, but not desirable; monopolistically competitive markets have a limited amount of market power, so they cannot make a long-run economic profit like monopolists do. In addition, regulating the prices that firms in a monopolistically competitive market can charge would put many of them out of business, bear in mind we are talking about firms in markets like the fast-food industry...doing away with a significant percentage of these firms would mean fewer places for consumers to grab a quick bite, etc.

Regulating monopolistic competition through marginal cost pricing, or setting  $P = MC$ , would also create a host of problems like those we discussed for monopoly. A good proportion of the economy consists of monopolistically

competitive firms, so the scale of the regulatory effort would be enormous; and because implementing marginal cost pricing would result in widespread losses, the government would need to find a way to subsidize the regulated firms to keep them in business. The only way to fund these subsidies would be higher taxes, the inefficiencies present in monopolistic competition do not warrant government action.

## Varying degrees of product differentiation

We have seen that products sold under monopolistic competition are more differentiated than those sold in a competitive market and less differentiated than those sold under monopoly. At one end of these two extremes we have competitive markets where firms sell identical products, have no market power, and face a perfectly elastic demand curve. At the other end we have a monopolist that sells a unique product without good substitutes and faces a steep downward-sloping demand curve indicative of highly inelastic demand. What about the firm that operates under monopolistic competition?

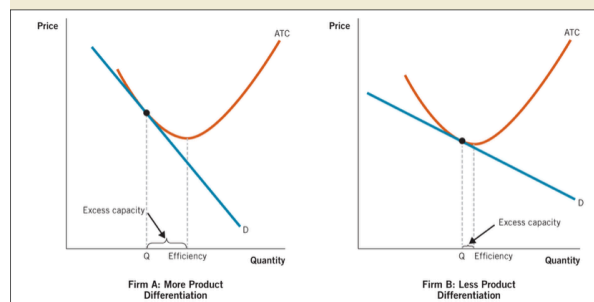
**Figure 12.4** illustrates two monopolistic competitors with varying degree of product differentiation. High levels of differentiation occur when the firm has an especially attractive location, style, type, or quality of product that is in high demand among consumers and that competitors cannot easily

replicate. Consumers have strong brand loyalty for the clothes these firms sell, so the demand curve is quite inelastic, the relatively steep slope of the demand curve means that the point of tangency between demand curve ( $D$ ) and the total average at a high price; which produces a large amount of excess capacity. In contrast, firm B sells a product only slightly different from its' competitors.

**FIGURE 12.4**

### Product Differentiation, Excess Capacity, and Efficiency

The difference in product differentiation is represented by the steepness (elasticity) of the demand curve, since the demand curve for firm A enjoys more product differentiation. As a result, it has more excess capacity and is less efficient. Firm B sells a product that is only slightly different from its competitors'. In this case, consumers have only weak preferences about which firm to buy from, and consumer demand is elastic. The results are a small amount of excess capacity and a more efficient result.



## Why is advertising prevalent in monopolistic competition?

Advertising is a fact of daily life; it is also a means by which companies compete and therefore a cost of doing business in many industries. In the United States, advertising expenditures account for approximately 2% of all economic output annually.

Worldwide, advertising expenses are a little less—about 1% of global economic activity; while the percentages are small in relative terms, in absolute terms worldwide advertising costs are over half a trillion dollars each year. Is this money well spent? Or is it a counterproductive contest that increases cost without adding value for the consumer? In this section, we will find that the answer is a little of both. Let's start by seeing who advertises.

### Why firms advertise

No matter the company or slogan, the goal of advertising is to drive additional demand for the product being sold. Advertising campaigns use a variety of techniques to simulate demand.

Advertising and Demand		
Company/Product	Advertising slogan	How it increases demand
<b>Convention and Visitors Authority/Las Vegas</b>	"What happens here, stays here."	The slogan attempts to convince travelers that they will have a better vacation in Las Vegas than anywhere else
<b>Red Bull/energy drink</b>	"Red Bull gives you wings"	The tagline promises energy and concentration to get things done and meet the deadlines.
<b>Frito-Lay/potato chips</b>	"Betcha can't eat just one."	The message that one potato chip is not enough to satisfy your craving appeals to chip buyers who choose better taste over lower-priced generics.
<b>Apple Computers Inc/ Electronics</b>	"Think different"	The slogan subtly hints that competitors' products are all pretty much the same—and boring.
<b>Twitter/Social Media</b>	"It's What's happening."	The suggestion is that not using the service means being out of touch with the world.
<b>Visa/Debit Card</b>	"It's everywhere you want to be..."	Widespread acceptance and usability are two of the major reasons for carrying a credit card.
<b>Skittles/candy</b>	"Taste the rainbow"	The emphasis is on taste and a variety of flavors.

A successful advertising campaign will change the demand curve in two dimensions: it will shift the demand curve to the right and alter its shape. Turning to **Figure 12.5**, we see this change; **first**, the demand curve shifts to the right in response to the additional demand created by the advertising. **Second**, the demand curve becomes more inelastic, or slightly more vertical; this change in shape happens because advertising has highlighted features that make the product attractive to specific customers who are now more likely to want it. Because demand is more elastic after advertising, the firm increases its market power and can raise its price.

In addition to increasing demand, advertising conveys information that consumers may find helpful in matching their preferences. Advertising tells us about the price of the goods offered, the location of products, and the introduction of new products. Firms also use advertising as a competitive mechanism to underprice one another. Finally, an advertising campaign signals quality; firms that run expensive advertising campaigns are making significant investment in their product, it is highly unlikely that a firm would spend a great deal on advertising if it did not think the process would yield a positive return. So a rational consumer can infer that firms spending a great deal on advertising are likely to have a higher-quality product than a competitor who does not advertise.

## Advertising in different markets

Many firms engage in advertising, but advertising is not equally productive in all market structures. In our continuum from competitive markets to monopoly, markets that function under monopolistic competition invest the most in advertising.

### Advertising in competitive markets

As you know by now, competitive firms sell nearly identical products at an identical price. For this reason, advertising raises a firm's costs without directly influencing its sales. Advertising for an undifferentiated good functions like a public good for the industry as a whole: the benefits flow to every firm in the market through increased market demand for the product. Each firm sells essentially the same good, so consumers can find the product at many competing locations at the same price. An individual firm that advertises in this market is at a competitive disadvantage because it will have higher costs that it cannot pass on to the consumer.

This does not mean that we never see advertising in competitive markets, although individual firms do not benefit from advertising, competitive industries as a whole can.

### Advertising under monopolistic competition

Advertising is widespread under monopolistic competition because firms have differentiated products. Each firm's advertising increases the demand for its product and changes the slope of

the demand curve. In short, the gains from advertising go directly to the firm spending the money; these benefits generate a strong incentive to advertise to gain new customers or to keep customers from switching to other products because each firm feels the same way. Advertising becomes the norm among monopolistically competitive firms.

### Advertising as a monopolist

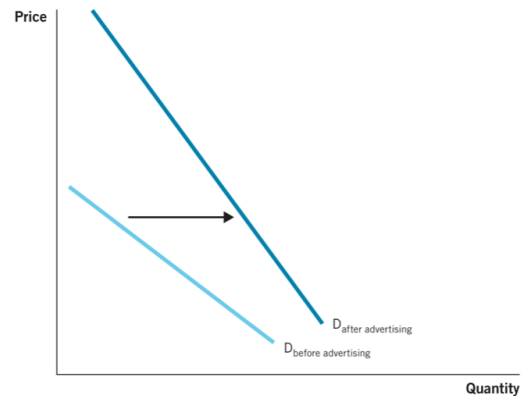
The monopolist sells a unique product without close substitutes. The fact that consumers have few, if any, good alternatives when deciding to buy the good makes the monopolist less likely to advertise than a monopolistic competitor. When consumer choice is limited, the firm does not have to advertise to get business. In addition, the competitive aspect is missing, so there is no need to advertise to prevent consumers from switching to rival products. However, that does not mean that the monopolist never advertises.

The monopolist may wish to advertise to inform the consumer about its product and stimulate demand. This strategy can be beneficial as long as the gains from advertising are enough to cover the cost of advertising.

FIGURE 12.5

### Advertising and the Demand Curve

A successful advertising campaign increases demand. Advertising also makes the demand curve more inelastic, or vertical, by informing consumers about differences they care about. After advertising, consumers desire the good more intensely, which makes the demand curve for the firm's product somewhat more vertical.



## The Negative Effects of Advertising

We have seen the benefits of advertising, but there are also drawbacks. Two of the most significant drawbacks are that advertising raises costs and can be deceitful.

### Advertising and costs

Advertising costs are reflected in the firm's average total cost curve.

**Figure 12.6** shows the paradox of advertising for most firms. When a firm advertises, it hopes to increase demand for the product and sell more units—say from point 1 at  $Q_1$  to point 2 at the higher quantity  $Q_2$ . If the firm can sell enough additional units, it will enjoy economies of scale, and the average total cost will fall from  $ATC_1$  to  $ATC_2$ . This return on the advertising investment looks like a good business decision.

However, the reality of advertising is much more complex; under monopolistic competition, each firm is competing with many other firms selling somewhat different products. Rival firms will respond with advertising of their own; this dynamic makes advertising the norm in monopolistic competition...each firm engages in competitive advertising to win new customers and keep the old ones, as a result, the impact on each individual firm's demand largely cancels out. This result is evident in the movement from point 1 to point 3 in **Figure 12.6**. Costs rise from  $ATC_1$  to  $ATC_3$  on the higher LRATC curve, but the quantity demanded may remain at  $Q_1$ . The net result is that advertising creates higher costs but no change in quantity produced and a decrease in profit, in this case, we can think of advertising as causing negative **business-stealing externality** whereby no individual firm can easily gain market share but feels compelled to advertise to protect its customer base.

We have seen that advertising raises costs for the producer. It also raises prices for consumers, in fact, consumers who consistently favor a particular brand of a product have more inelastic demand than those who are willing to switch from one product to another. Therefore, brand loyalty often means higher prices.

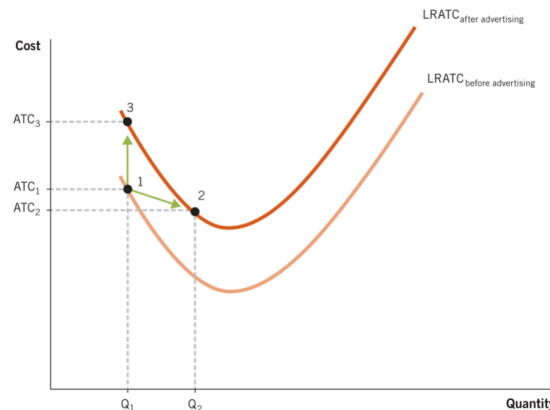
### Truth in advertising

Finally, many advertising campaigns are not just informative—they are designed to produce a psychological response. When an ad moves you

FIGURE 12.6

**Advertising Increases Cost**

By advertising, the firm hopes to increase demand (or quantity) from point 1 to point 2. In this scenario, the increase in demand from  $Q_1$  to  $Q_2$  is large enough to create economies of scale even though advertising causes the long-run average total cost curve (LRATC) to rise. Because monopolistically competitive firms each advertise, the advertising efforts often cancel one another out. As a result, long-run average total costs rise without demand increasing much, so the firm may move from point 1 to point 3 instead.



to buy or act in a particular way, it becomes manipulative; because advertising can be such a powerful way to reach customers, there is a temptation to lie about a product. To prevent firms from spreading misinformation about their products, the Federal Trade Commission (FTC) regulates advertising and promotes economic efficiency.

Of course, even with regulatory oversight, consumers must still be vigilant, at best, the FTC can remove products from the market and levy fines against companies that make unsubstantial claims. However, the damage is often already done—the Latin phrase **caveat emptor**, or “buyer beware”, sums up the dangers of false information.

Sometimes the way a product is advertised is not illegal but is still borderline unethical. Firms often engage in price deception, or tricks to make you think a price is lower than it really is.

## Conclusion

Firms willingly spend on advertising because it can increase demand, build loyalty, and provide consumers with useful information about differences in products. Monopolistic competitors advertise and mark up their products like monopolists, but, like firms in a



competitive market, they cannot earn long-run profits. While an economic profit is possible in the short run in all three types of market structure (perfect competition, monopolistic competition, and monopoly), only the monopolist, whose business has significant barriers to entry can, earn an economic profit in the long run; entry and exit cause long-run profits to equal zero in competitive and monopolistically competitive markets.

Monopolistic competitors are price makers who fail to achieve the most efficient welfare-maximizing output for society, but this observation does not tell the entire story. Monopolistic competitors do not have as much market power or create as much excess capacity or markup as monopolists. Consequently, the monopolistic competitor lacks the ability to exploit consumers. The result is not perfect, but widespread monopolistic competition generally serves consumers and society well.

In the next chapter, we continue our exploration of market structure with oligopoly, which produces results that are much closer to monopoly than monopolistic competition.