ECO 2220, Principles of Microeconomics - Section 1C

Class Presentation for March 31, & April 5, 2016

Chapter #26

"A few fly bites cannot stop a spirited horse."

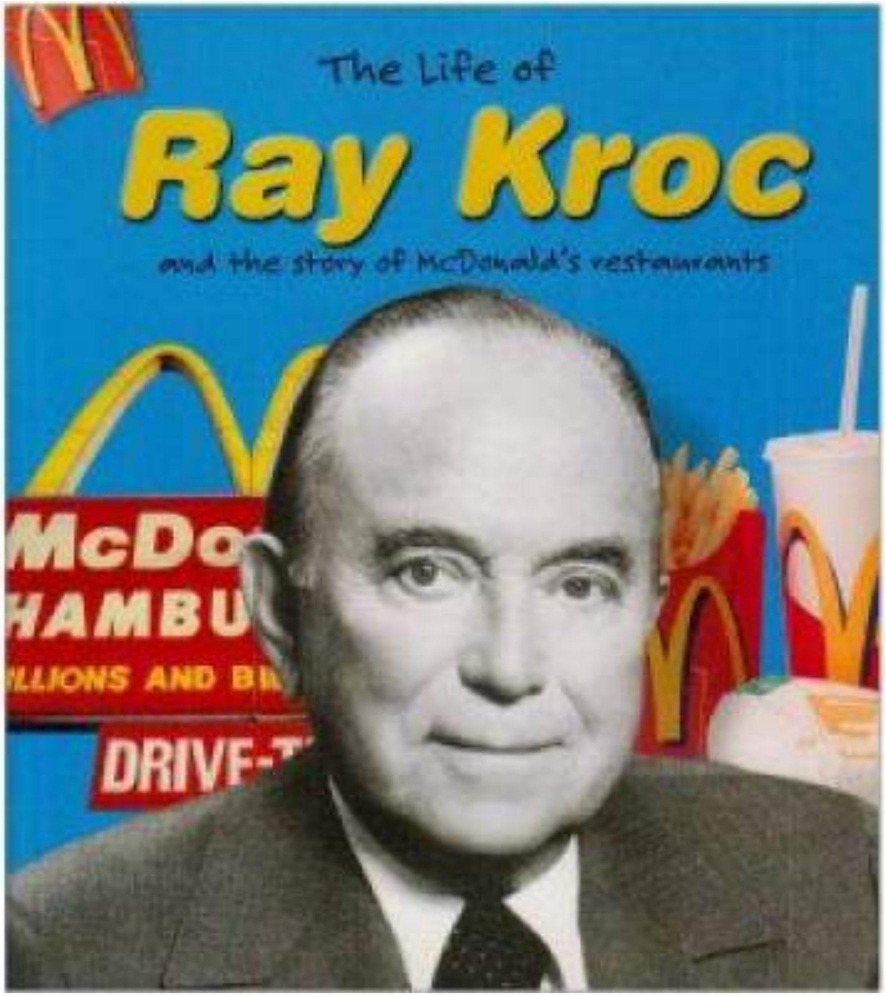
Mark Twain

Looking Forward:

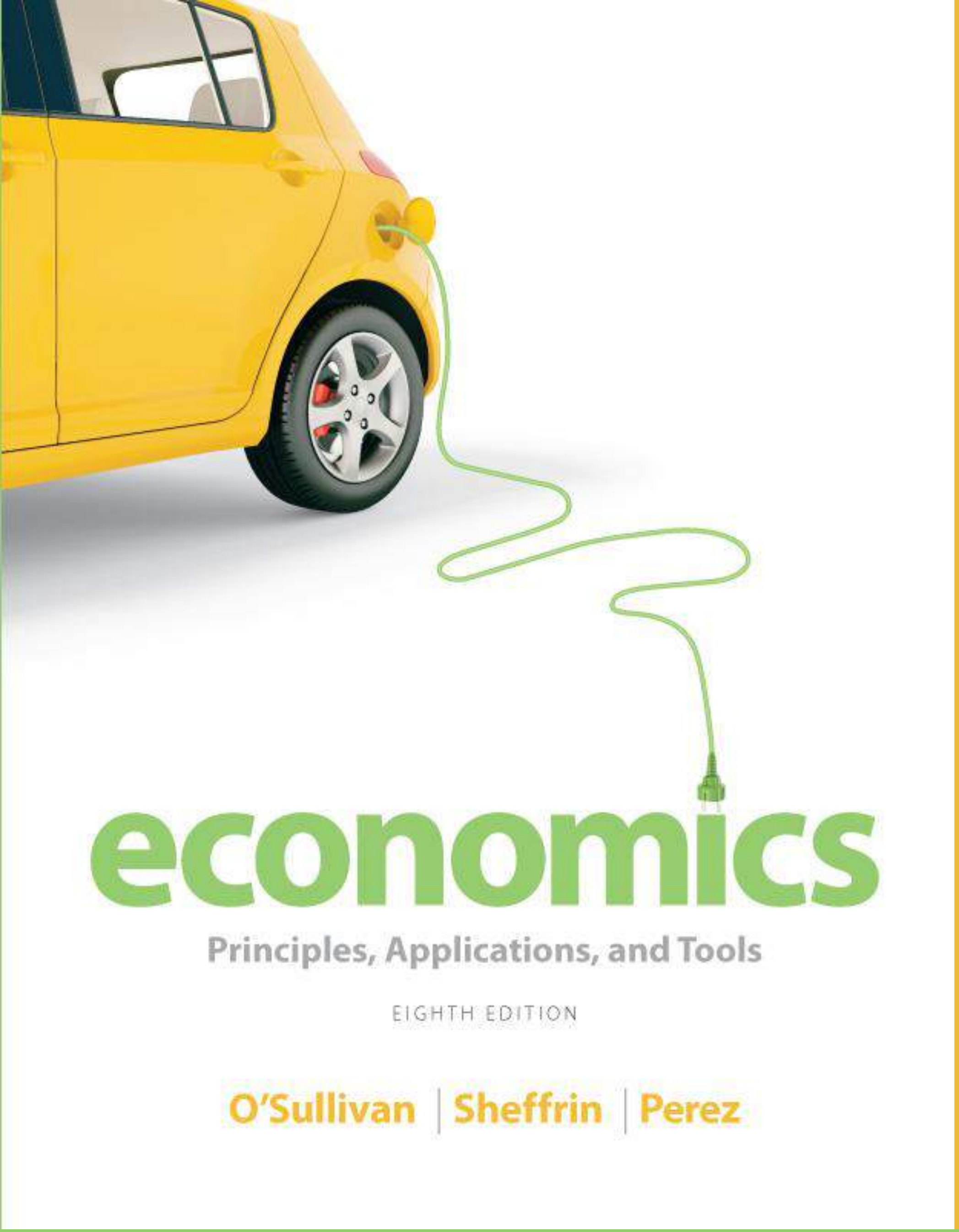
- March 29, 2016 – Journal #8 due.
- April 5, 2016 – Journal #9 due.
- April 7, 2016 – Test #3
  - Chapters # 24, 25, 26, & 27
- April 12, 2016 – Journal #10 due.
- April 19, 2016 – Project Paper Due
- April 28, 2016 – Test #4
  - Chapters # 29, 30, & 32

Ray Kroc was the first businessman to apply the principles of mass production in a service industry.

The quality of a leader is reflected in the standards they set for themselves.



Raymond Albert Kroc
October 5, 1902 – January 14, 1984



Chapter 26

Market Entry and Monopolistic Competition

In the recession that started in 2008, some industries actually experienced increases in demand that caused market entry—new firms entered the markets.

Prepared By Brock Williams

Learning Objectives

1. Describe and explain the effects of market entry.
2. List the conditions for equilibrium in monopolistic competition.
3. Contrast monopolistic competition and perfect competition.
4. Explain the role of advertising in monopolistic competition.

- Real Life Example-
- Proposal for Steak Escape Development
- November 2009
- Location CSU / WU Wilberforce, Ohio

Market Entry and Monopolistic Competition

- **monopolistic competition**
  A market served by many firms that sell slightly different products.

The term monopolistic competition actually conveys the two key features of the market:

- Each firm in the market produces a good that is slightly different from the goods of other firms, so each firm has a narrowly defined *monopoly*.
- The products sold by different firms in the market are close substitutes for one another, so there is intense *competition* between firms for consumers.

26.1 THE EFFECTS OF MARKET ENTRY

MARGINAL PRINCIPLE

Increase the level of an activity as long as its marginal benefit exceeds its marginal cost. Choose the level at which the marginal benefit equals the marginal cost.

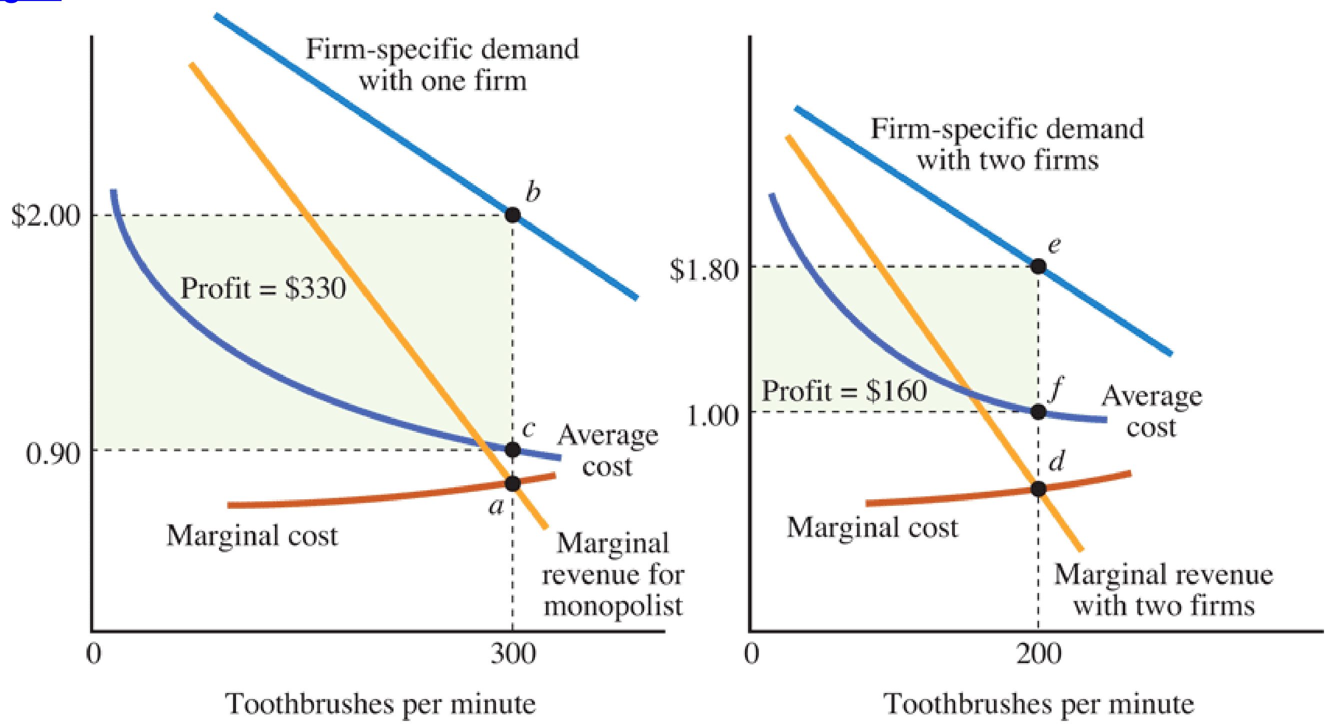
26.1 THE EFFECTS OF MARKET ENTRY (cont.)

▼ **FIGURE 26.1**

Market Entry Decreases Price and Squeezes Profit

(A) A monopolist maximizes profit at point a, where marginal revenue equals marginal cost. The firm sells 300 toothbrushes at a price of $2.00 (point *b*) and an average cost of $0.90 (point *c*). The profit of $330 is shown by the shaded rectangle.

(B) The entry of a second firm shifts the firm-specific demand curve for the original firm to the left. The firm produces only 200 toothbrushes (point *d*) at a lower price ($1.80, shown by point *e*) and a higher average cost ($1.00, shown by point *f*). The firm's profit, shown by the shaded rectangle, shrinks to $160.



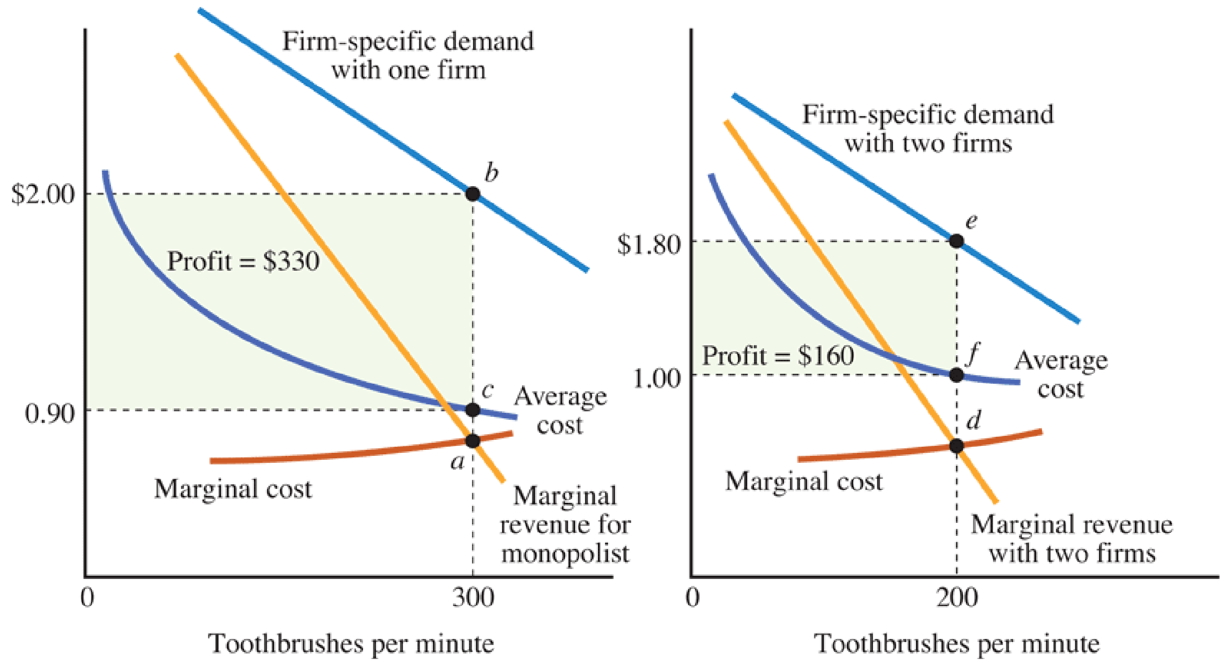
(A) Single Firm

(B) Two Firms

26.1 THE EFFECTS OF MARKET ENTRY (cont.)

Entry Squeezes Profits from Three Sides

Entry shrinks the firm’s profit rectangle because it is squeezed from three directions. The top of the rectangle drops because the price decreases. The bottom of the rectangle rises because the average cost increases. The right side of the rectangle moves to the left because the quantity decreases.



(A) Single Firm **(B) Two Firms**

26.1 THE EFFECTS OF MARKET ENTRY (cont.)

Entry Squeezes Profits from Three Sides

Entry shrinks the firm’s profit rectangle because it is squeezed from three directions. The **top of the rectangle drops** because the price decreases. The **bottom of the rectangle rises** because the average cost increases. The **right side of the rectangle moves to the left** because the quantity decreases.

Examples of Entry: Stereo Stores, Trucking, and Tires

Empirical studies of other markets provide ample evidence that entry decreases market prices and firms’ profits. In other words, consumers pay less for goods and services, and firms earn lower profits.

APPLICATION 1

SATELLITE VS. CABLE

APPLYING THE CONCEPTS #1: How does market entry affect prices?

- Consider the market for television signals provided to residential consumers. How will an existing cable-TV provider respond to the entry of a firm that provides TV signals via satellite?
- In most cases, the entry of a satellite firm causes the cable firm to improve the quality of service and decrease its price, so consumer surplus increases. In some cases, the cable company improves the quality of service and *increases* price.
- Because the service improvement is typically large relative to the price hike, consumer surplus increases in this case too. On average, the entry of a satellite firm increases the monthly consumer surplus per consumer from \$3.96 to \$5.22, an increase of 32 percent.

26.2 MONOPOLISTIC COMPETITION

Under a market structure called ***monopolistic competition***, firms will continue to enter the market until economic profit is zero. Here are the features of monopolistic competition:

- ***Many firms.*** (Small economies of scale small firs can produce at about the average cost of large firms)
- ***A differentiated product.*** (A process used to distinguish their products from those of its competitors)

- **product differentiation**
  The process used by firms to distinguish their products from the products of competing firms.

- ***No artificial barriers to entry.*** (No patients or regulations that could prevent firms from entering the market)

TYPES OF COMPETITION

KIND OF COMPETITION	# OF PRODUCERS & DEGREE OF PRODUCT DIFFERTIATION	PART OF ECONOMY WHERE PREVELENT	DEGREE OF CONTROL OVER PRICE	METHODS OF MARKETING
Perfect Competition	Many producers; identical products	A few agricultural industries	None	Market exchange or auction
Imperfect Competition				
Many differentiated sellers	Many producers; many real or fancied difference in product	Toothpaste, retail trade; conglomerates		
Oligopoly	Few producers: little or no difference in product	Steel, aluminum	- Some	Advertising and quality rivalry; administered prices
	Few producers; some differentiation of products	Autos, machinery		
Complete monopoly	Single producer; unique product without close substitutes	A few utilities	Considerable	Promotional and ”institutional” public-relations advertising

Perfect Competition, Monopoly and the Affordable Care Act

Perfect Competition	Monopoly	Affordable Care Act
There are many sellers.	A single firm sells a product.	Open to all private health insurance providers (HIP) in America
There are many buyers.	There are many buyers.	All citizens who do not currently have health insurance must join exchanges
The product is homogeneous.	The product has no close substitutes.	Act establishes minimum standards for policies
There are no barriers to market entry.	There are many barriers to market entry.	Large barriers for market entry – economies of scale
Both buyers and sellers are price takers.	The seller has market power to affect price.	Act establishes market prices for participating HIP’s

Perfect Competition, Monopoly and Monopolistic Competition

Perfect Competition	**Monopoly**	**Monopolistic Competition**
There are many sellers.	A single firm sells a product.	Many firms *(small economies of scale)*
There are many buyers.	There are many buyers.	There are many buyers.
The product is homogeneous.	The product has no close substitutes.	A differentiated products. *(offer different performance level or appearance)*
There are no barriers to market entry.	There are many barriers to market entry.	No artificial barriers to entry. *(no patents or regulations)*
Both buyers and sellers are price takers.	The seller has market power to affect price.	Products are close substitutes – *(there is intense competition between firms for consumers)*

26.2 MONOPOLISTIC COMPETITION (cont.)

When Entry Stops: Long-Run Equilibrium

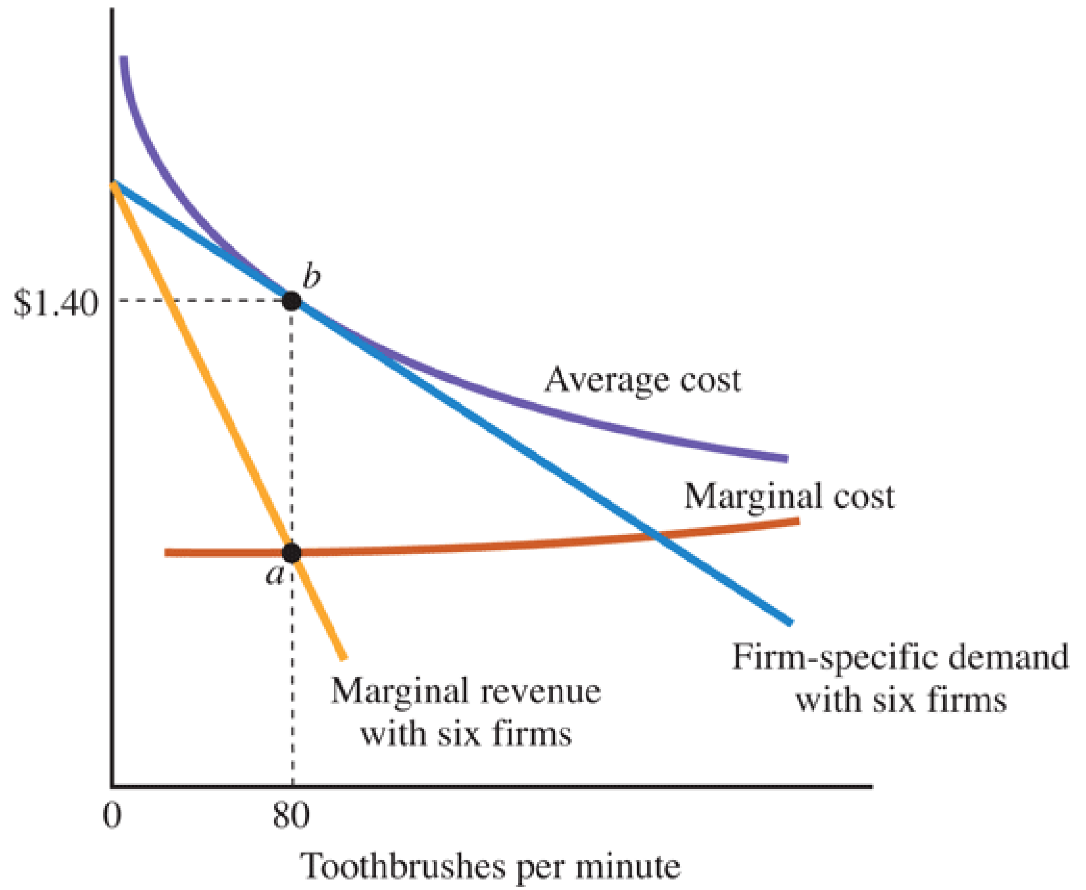
▶**FIGURE 26.2**
Long-Run Equilibrium with Monopolistic Competition

Under monopolistic competition, firms continue to enter the market until economic profit is zero.

Entry shifts the firm specific demand curve to the left.

The typical firm maximizes profit at point *a*, where marginal revenue equals marginal cost.

At a quantity of 80 toothbrushes, price equals average cost (shown by point *b*), so economic profit is zero.



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26.2 MONOPOLISTIC COMPETITION (cont.)

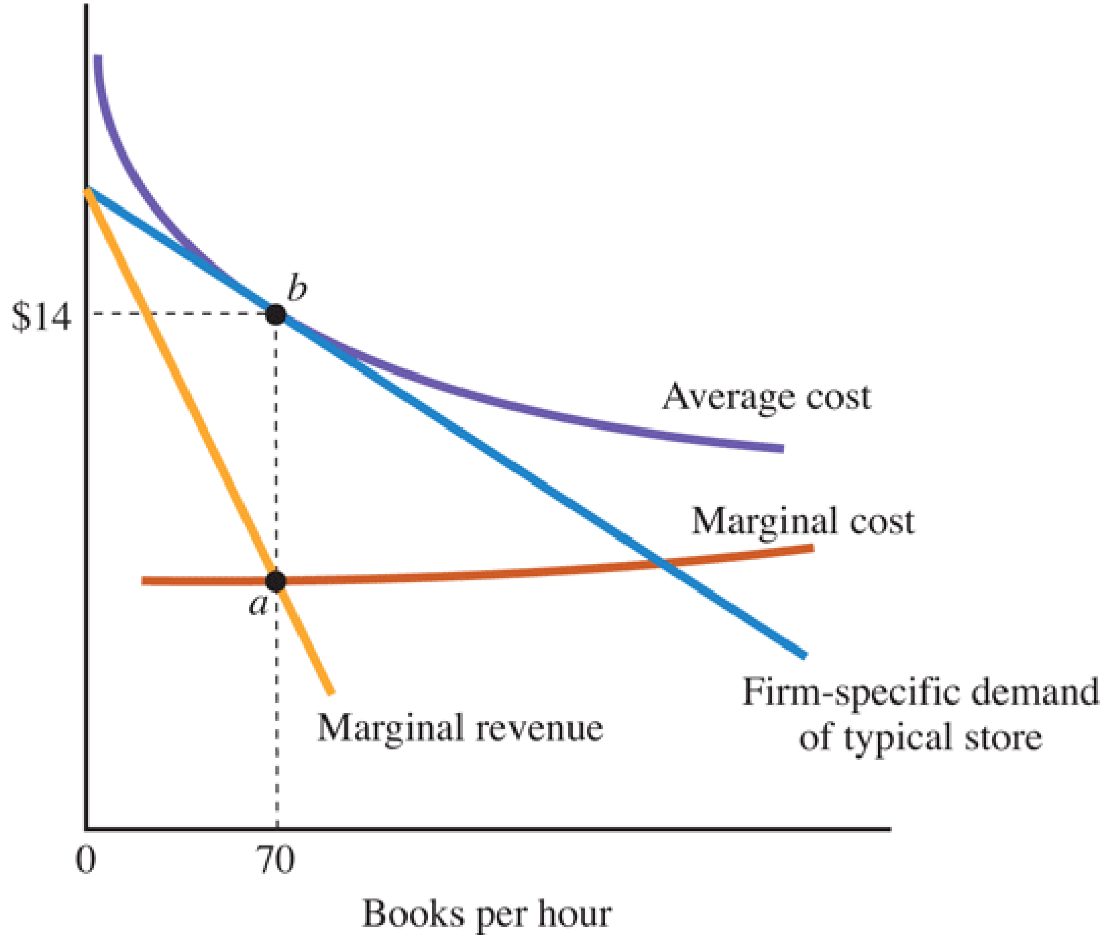
Differentiation by Location

▶ **FIGURE 26.3**
Long-Run Equilibrium with Spatial Competition

Book stores and other retailers differentiate their products by selling them at different locations.

The typical book store chooses the quantity of books at which its marginal revenue equals its marginal cost (point *a*).

Economic profit is zero because the price equals average cost (point *b*).



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APPLICATION 2

OPENING A DUNKIN' DONUTS SHOP

APPLYING THE CONCEPTS #2: Are monopolistically competitive firms profitable?

- One way to get into a monopolistically competitive market is to get a franchise for a nationally advertised product.

- Table 26.1 shows the franchise fees and royalty rates for several franchising opportunities. The fees indicate how much entrepreneurs are willing to pay for the right to sell a brand-name product.

TABLE 26.1 Franchising Fees and Royalties

Brand and Product	Franchising Fee	Royalty Rate
Dunkin' Donuts: Coffee and donuts	$40,000	5.9%
Great Clips: Haircuts	20,000	6
Glass Doctor: Mobile windshield repair	24,000	4–7
Flowerama: Flowers, plants, gifts	35,000	5

SOURCE: Based on data from *www.entrepreneur.com* (accessed October 8, 2010).

26.3 TRADE-OFFS WITH ENTRY AND MONOPOLISTIC COMPETITION

Average Cost and Variety

- There are some trade-offs associated with monopolistic competition. Although the average cost of production is higher than the minimum, there is also more product variety.
  - *Restaurant Meals*
  - *Shoes and clothing*

- When firms sell the same product at different locations, the larger the number of firms, the higher the average cost of production. But when firms are numerous, consumers travel shorter distances to get the product. Therefore, higher production costs are at least partly offset by lower travel costs.

Examples: Miller Lane environment
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26.3 TRADE-OFFS WITH ENTRY AND MONOPOLISTIC COMPETITION (cont.)

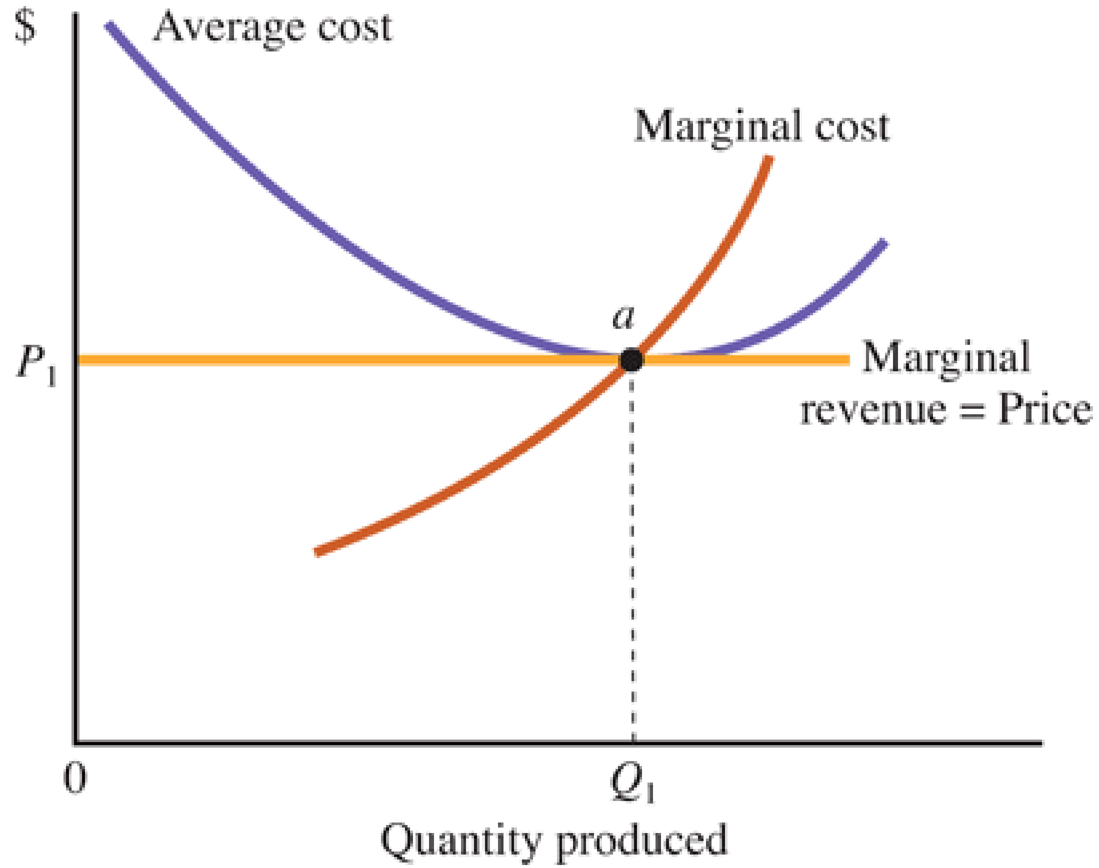
Monopolistic Competition versus Perfect Competition

▶ **FIGURE 26.4**
Monopolistic Competition versus Perfect Competition

(A) In a perfectly competitive market, the firm-specific demand curve is horizontal at the market price, and marginal revenue equals price.

In equilibrium, price = marginal cost = average cost.

The equilibrium occurs at the minimum of the average-cost curve.



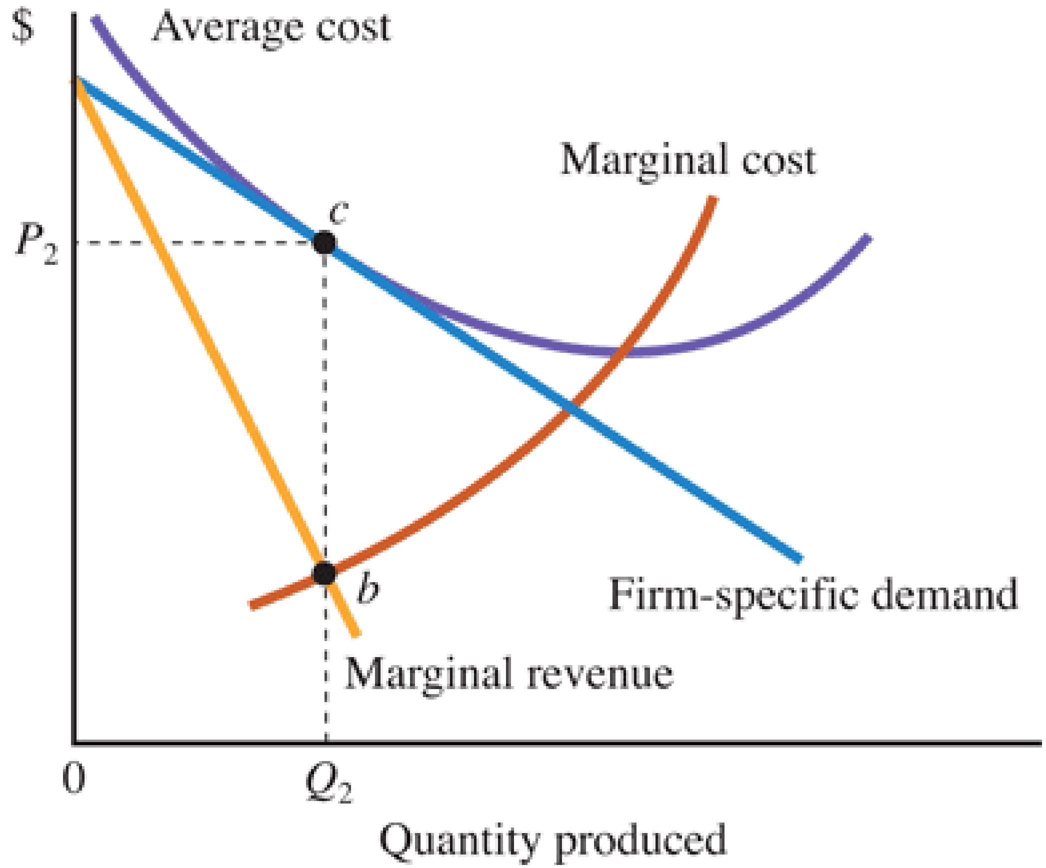
26.3 TRADE-OFFS WITH ENTRY AND MONOPOLISTIC COMPETITION (cont.)

Monopolistic Competition versus Perfect Competition

▶ **FIGURE 26.4 (cont'd.)**
Monopolistic Competition versus Perfect Competition

(B) In a monopolistically competitive market, the firm- specific demand curve is negatively sloped and marginal revenue is less than price.

In equilibrium, marginal revenue equals marginal cost (point *b*) and price equals average cost (point *c*).



APPLICATION 3

HAPPY HOUR PRICING

APPLYING THE CONCEPTS #3: How does monopolistic competition compare to perfect competition?

- Consider the phenomenon of "happy hour." Many bars and restaurants near workplaces face an increase in demand for food and drink around 5:00 p.m., and many cut their prices for an hour or two. According to the model of perfect competition, an increase in demand will lead to higher, not lower prices. What explains the happy-hour combination of higher demand and lower prices?

- Bars are subject to monopolistic competition. Each bar has a local monopoly within its neighborhood, but faces competition from other bars outside its neighborhood. For an individual consumer, the higher the demand for food and drink, the greater the incentive to consider alternatives to the nearest bar. If you expect to purchase large quantities of bar food and drink, the savings achieved by finding a lower price at an alternative bar will be relatively large. In other words, when individual demand increases, each bar faces a more elastic demand for its products.

- In a market subject to monopolistic competition, the bar's rational response to more elastic demand (more sensitive consumers) is to decrease its price. In graphical terms, the demand curve facing each bar becomes flatter, and the demand curve will be tangent to the average-cost curve at a larger quantity and a lower price and average cost.

APPLICATION 4

PICTURE OF MAN VS. PICTURE OF WOMAN

APPLYING THE CONCEPTS #4: How does advertising affect consumer choices?

- A South African consumer lender decided to use a mass mailing of 53,000 loan offers to test the sensitivity of consumers to variations in interest rates and other features of loan offers. The interest rates in the offer letters ranged from 3.75% to 11.75% *per month*.

- As expected, the uptake rate (the number of consumers who accepted a particular loan offer) was higher for offer letters with low interest rates. The elasticity of the uptake rate with respect to the interest rate was -0.34: a 10% decrease in the interest rate (from say an interest rate of 7.0% to 6.3%) increased the uptake rate by 3.4%.
- More surprising was the finding that the uptake rate among men was much higher when the offer letter included a picture of a woman rather than a picture of a man. Replacing a male model with a female model was equivalent to cutting the interest rate by 25 percent, for example, from 7.0 percent to 5.25 percent. In contrast, the uptake rate for women consumers was unaffected by the gender of the model.

26.4 ADVERTISING FOR PRODUCT DIFFERENTIATION

An advertisement that doesn't provide any product information may actually help consumers make decisions.

TABLE 26.2 Advertising Profitability and Signaling

Product	Number of Consumers Who Try the Product	Number of Repeat Customers	Profit per Repeat Customer	Profit from Repeat Customers	Cost of Advertisement
Energy bar A	10 million	5 million	$4	$20 million	$10 million
Energy bar B	10 million	1 million	4	4 million	10 million

KEY TERMS

monopolistic competition

product differentiation

Econ 2220 November 4 & 6, 2013

"A few fly bites cannot stop a spirited horse."

Mark Twain