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PRINCIPLES OF

ECONOMICS

Eight Edition

CHAPTER 16 Monopolistic Competition

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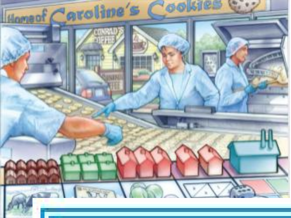
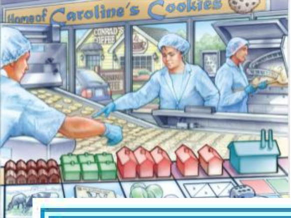


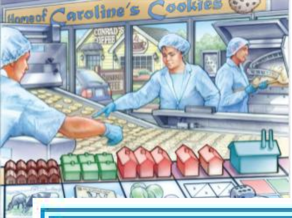
Monopolistic Competition, Part 1

- Imperfect competition
  - Between perfect competition and monopoly
  - Oligopoly
  - Monopolistic competition
- Oligopoly
  - Few sellers
  - Offer similar or identical products



Monopolistic Competition, Part 2

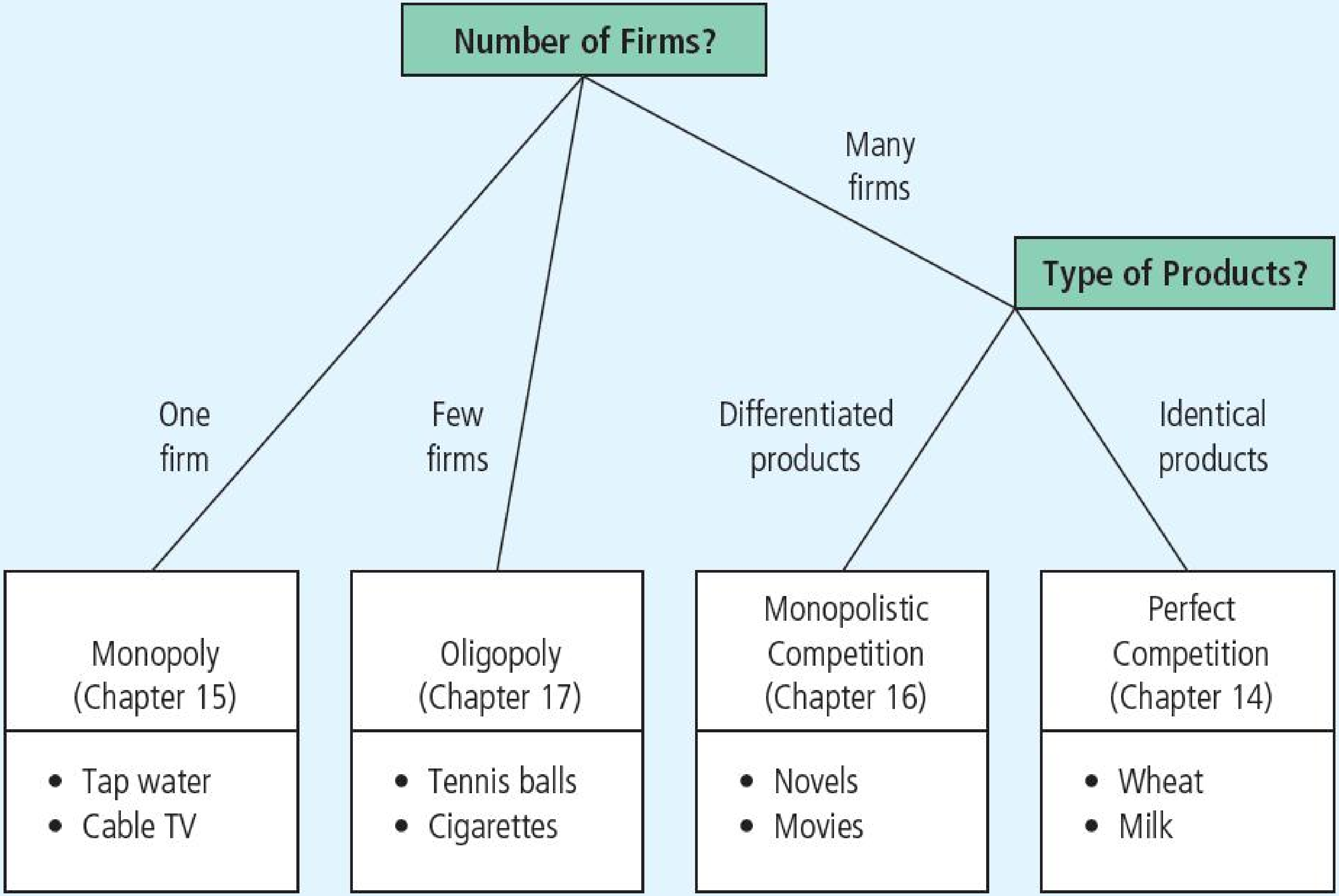
- Concentration ratio
  - Percentage of total output in the market supplied by the four largest firms
- Oligopolies, highly-concentrated industries (concentration ratio %)
  - Major household appliances (90%)
  - Tires (91%), Light bulbs (92%)
  - Soda (94%)
  - Wireless telecommunications (95%)



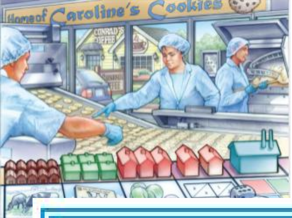
Monopolistic Competition, Part 3

- Monopolistic competition
  - Many sellers
  - Product differentiation
    - Not price takers
    - Downward sloping demand curve
  - Free entry and exit
    - Zero economic profit in the long run

Figure 1 The Four Types of Market Structure



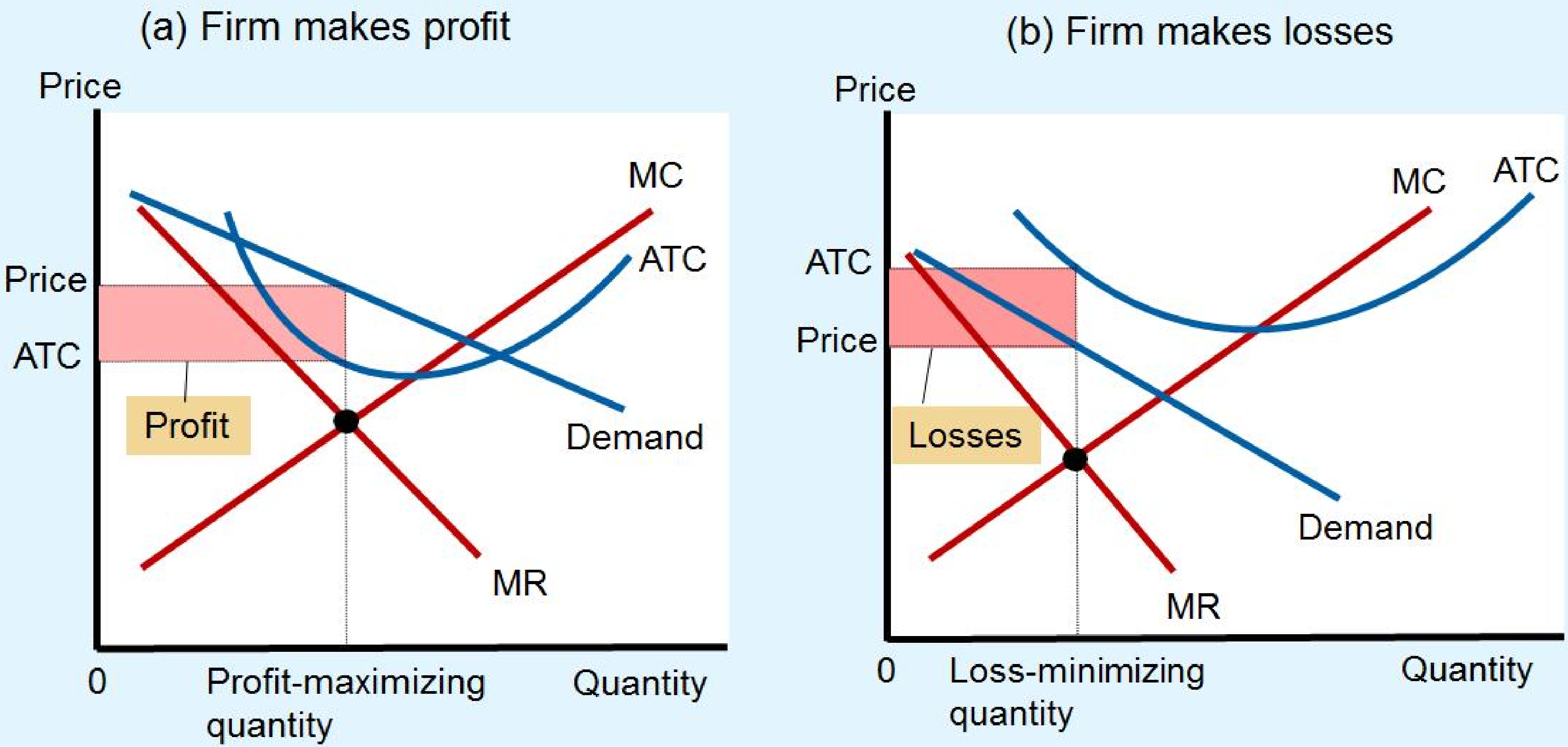
Economists who study industrial organization divide markets into four types—monopoly, oligopoly, monopolistic competition, and perfect competition.



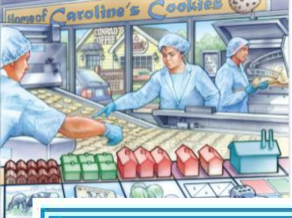
Short Run Equilibrium

- Profit maximization
  - Produce the quantity where marginal revenue = marginal cost
  - Price: on the demand curve
  - If P > ATC: profit
  - If P < ATC: loss
  - Similar to monopoly

Figure 2 Monopolistic Competitors in the Short Run



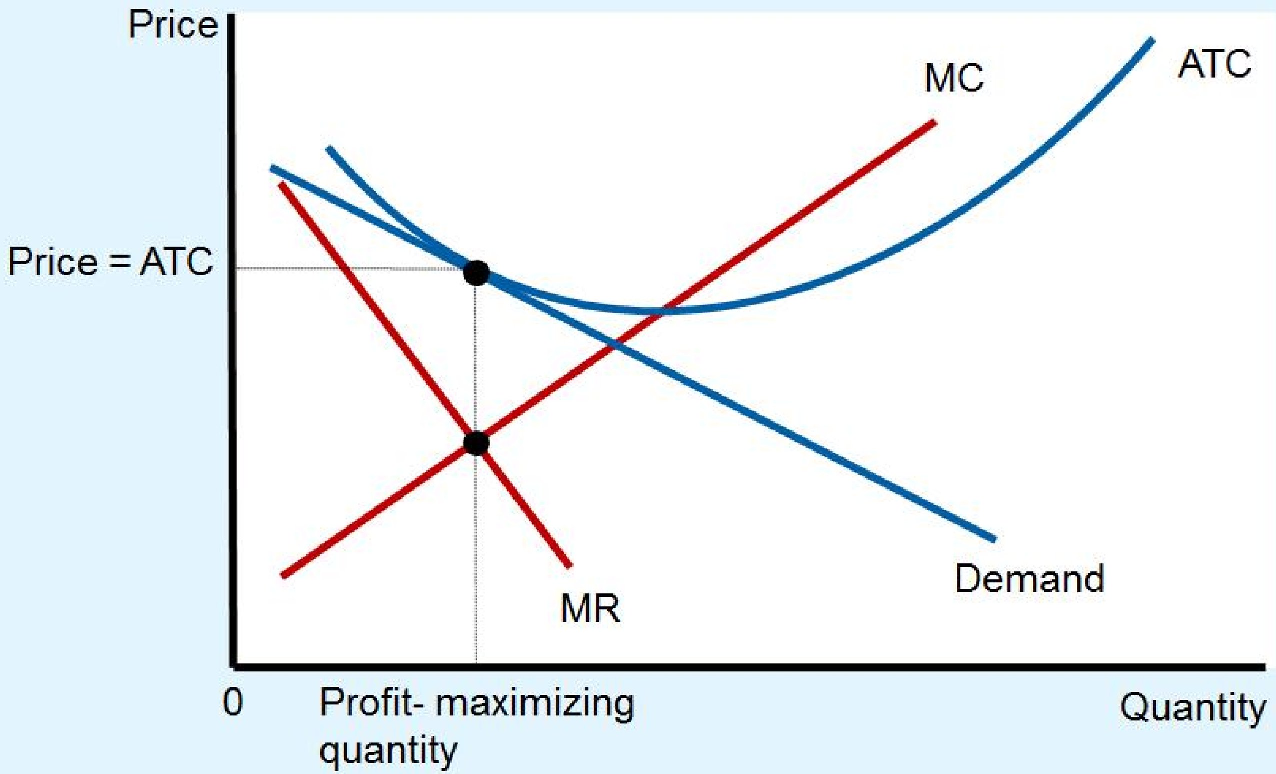
Monopolistic competitors, like monopolists, maximize profit by producing the quantity at which marginal revenue equals marginal cost. The firm in panel (a) makes a profit because, at this quantity, price is greater than average total cost. The firm in panel (b) makes losses because, at this quantity, price is less than average total cost.



Long Run Equilibrium, Part 1

- If firms are making profit in short run
  - New firms - incentive to enter the market
  - Increase number of products
  - Reduces demand faced by each firm
    - Demand curve shifts left
  - Each firm's profit declines until: zero economic profit

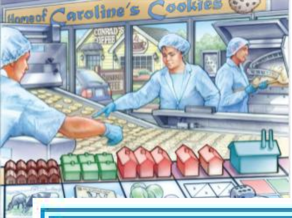
Figure 3 A Monopolistic Competitor in Long Run



In a monopolistically competitive market, if firms are making profits, new firms enter, causing the demand curves for the incumbent firms to shift to the left. Similarly, if firms are making losses, some of the firms in the market exit, causing the demand curves of the remaining firms to shift to the right. Because of these shifts in demand, monopolistically competitive firms eventually find themselves in the long-run equilibrium shown here. In this long-run equilibrium, price equals average total cost, and each firm earns zero profit.

Long Run Equilibrium, Part 2

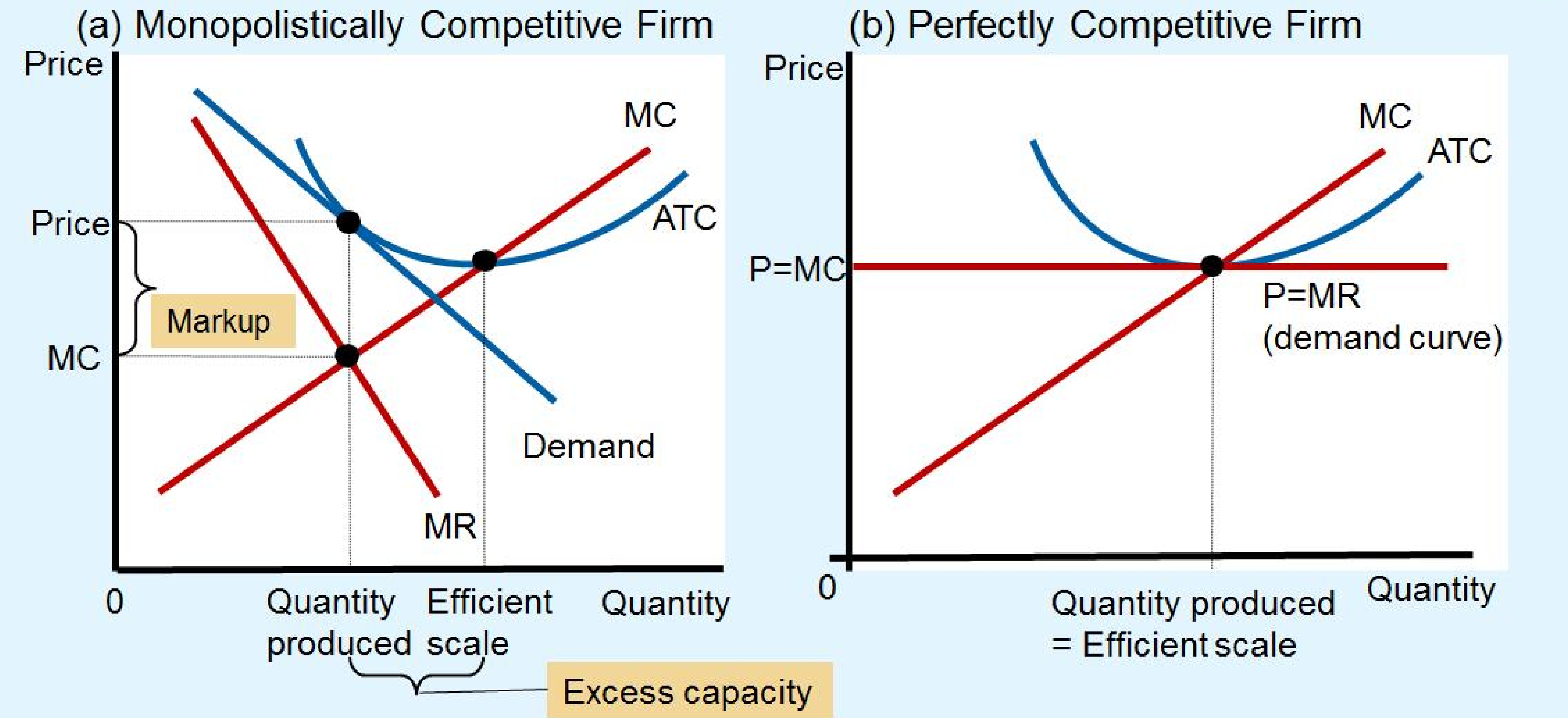
- Zero economic profit
  - Demand curve
    - Tangent to average total cost curve
    - At quantity where marginal revenue = marginal cost
  - Price = average total cost
  - Price exceeds marginal cost



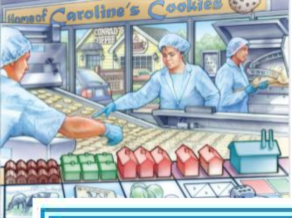
Long Run Equilibrium, Part 3

- Monopolistic versus perfect competition
  - Monopolistic competition
    - Quantity: not at minimum ATC (excess capacity)
    - P > MC, markup over marginal cost
  - Perfect competition
    - Quantity: at minimum ATC (efficient scale)
    - P = MC

Figure 4 Monopolistic versus Perfect Competition

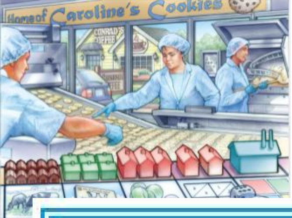


Panel (a) shows the long-run equilibrium in a monopolistically competitive market, and panel (b) shows the long-run equilibrium in a perfectly competitive market. Two differences are notable. (1) The perfectly competitive firm produces at the efficient scale, where average total cost is minimized. By contrast, the monopolistically competitive firm produces at less than the efficient scale. (2) Price equals marginal cost under perfect competition, but price is above marginal cost under monopolistic competition.



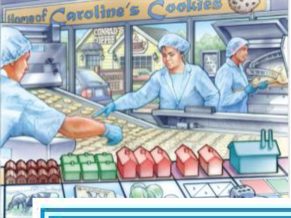
Welfare of Society

- Sources of inefficiency
  - Markup of price over marginal cost
    - Deadweight loss of monopoly pricing
  - Too much or too little entry
    - Product-variety externality (positive externality on consumers)
    - Business-stealing externality (negative externality on existing firms)



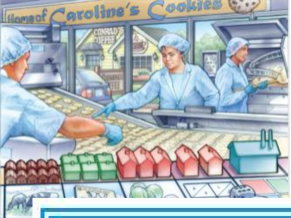
Advertising, Part 1

- Incentive to advertise
  - When firms sell differentiated products and charge prices above marginal cost
  - Advertise to attract more buyers
- Advertising spending
  - Highly differentiated goods: 10-20% of revenue
  - Industrial products: Little advertising
  - Homogenous products: No advertising



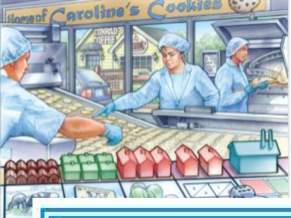
Advertising, Part 2

- Debate over advertising
  - Wasting resources?
  - Valuable purpose?
- The critique of advertising
  - Firms advertise to manipulate people's tastes
    - Psychological rather than informational
    - Creates a desire that otherwise might not exist



Advertising, Part 3

- The critique of advertising
  - Impedes competition
  - Increase perception of product differentiation
    - Foster brand loyalty
  - Makes buyers less concerned with price differences among similar goods



Advertising, Part 4

- The defense of advertising
  - Provide information to customers
    - Customers - make better choices
    - Enhances the ability of markets to allocate resources efficiently
  - Fosters competition
    - Customers - take advantage of price differences
  - Allows new firms to enter more easily

CASE STUDY Advertising and the price of eyeglasses, Part 1

- What effect does advertising have on the price of a good?
  - Consumers – view products as being more different than they otherwise would
    - Markets less competitive
    - Firms’ demand curves less elastic
    - Higher prices

Advertising and the price of eyeglasses, Part 2

CASE STUDY

- What effect does advertising have on the price of a good?
  - Consumers – easier to find firms with the best prices
    - Markets – more competitive
    - Firms' demand curves more elastic
    - Lower prices

CASE STUDY

Advertising and the price of eyeglasses, Part 3

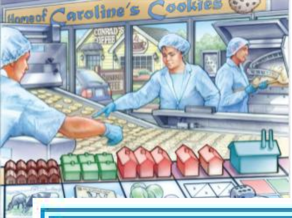
- 1972, economist Lee Benham
- States that prohibited advertising
  - Average price = \$33 (\$248 in 2012 dollars)
- States that did not restrict advertising
  - Average price = \$26 (\$196 in 2012 dollars)
- Advertising
  - Reduced average prices
  - Fosters competition

Advertising, Part 5

- Advertising as a signal of quality
  - Little apparent information
  - Real information offered – a signal
    - Willingness to spend large amount of money
    - = signal about quality of the product
  - Content of advertising = irrelevant

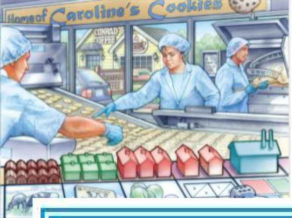
IMAGE COURTESY OF THE ADVERTISING ARCHIVES

Is it rational for consumers to be impressed that Jennifer Aniston is endorsing this product?



Advertising, Part 6

- Brand names
  - Spend more on advertising and charge higher prices than generic substitutes



Advertising, Part 7

- Critics of brand names
  - Products – not differentiated
  - Irrationality: consumers are willing to pay more for brand names
- Defenders of brand names
  - Consumers – information about quality
  - Firms – incentive to maintain high quality

Table 1 Monopolistic Competition: Between Perfect Competition and Monopoly

	Market Structure		
	Perfect Competition	**Monopolistic Competition**	**Monopoly**
Features that all three market structures share			
Goal of firms	Maximize profits	Maximize profits	Maximize profits
Rule for maximizing profit	M R = MC	M R = MC	M R = MC
Can earn economic profits in the short run?	Yes	Yes	Yes
Features that monopolistic competition shares with monopoly			
Price taker?	Yes	No	No
Price	P = MC	P > MC	P > MC
Produces welfare-maximizing level of output?	Yes	No	No
Features that monopolistic competition shares with perfect competition			
Number of firms	Many	Many	One
Entry in the long run?	Yes	Yes	No
Can earn economic profits in the long run?	No	No	Yes