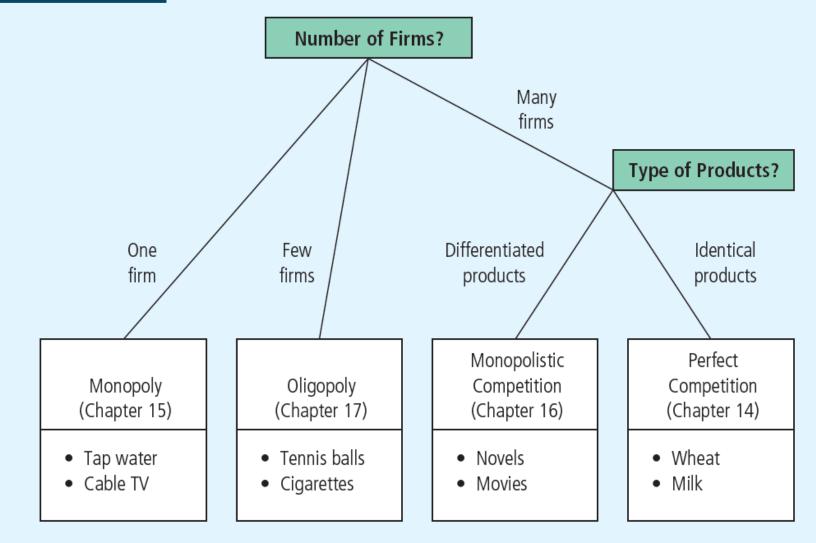
Chapter 16

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

- 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
 - 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.

Professor Galvez-Soriano lecture notes. Based on N. Gregory Mankiw, Principles of Microeconomics, 9th Edition.

Short Run Equilibrium

Profit maximization

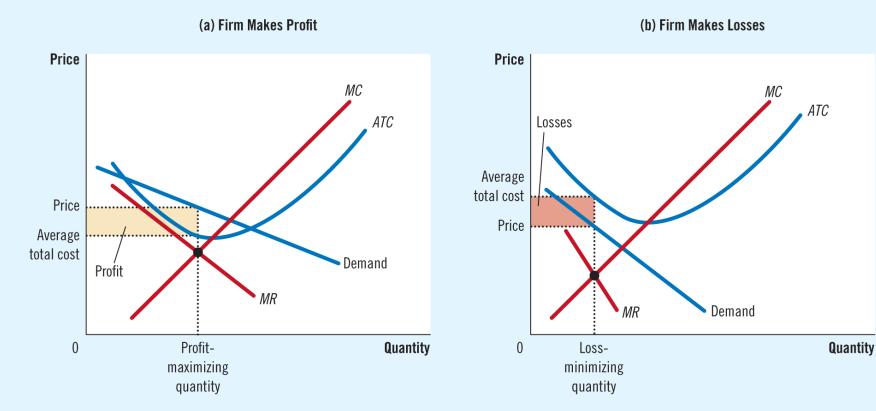
- Produce the quantity where marginal revenue = marginal cost
- Price: on the demand curve
- -If P > ATC: profit
- -If P < ATC: loss
- Similar to monopoly

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.

FIGURE 2

Monopolistic Competitors in the Short Run



Long Run Equilibrium

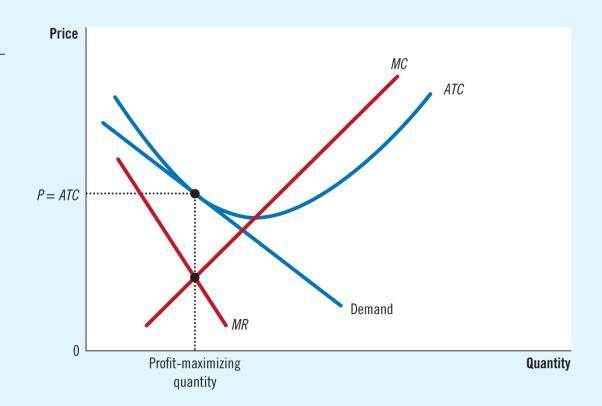
- If firms are making profit in short run
 - -New firms incentive to enter the market
 - Increase number of products
 - Reduces demand faced by each firm
 - Demand curve shifts left
 - Each firm's profit declines until: zero economic profit

Figure 3 A Monopolistic Competitor in Long Run

FIGURE 3

A Monopolistic Competitor in the 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 incurring 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

- 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

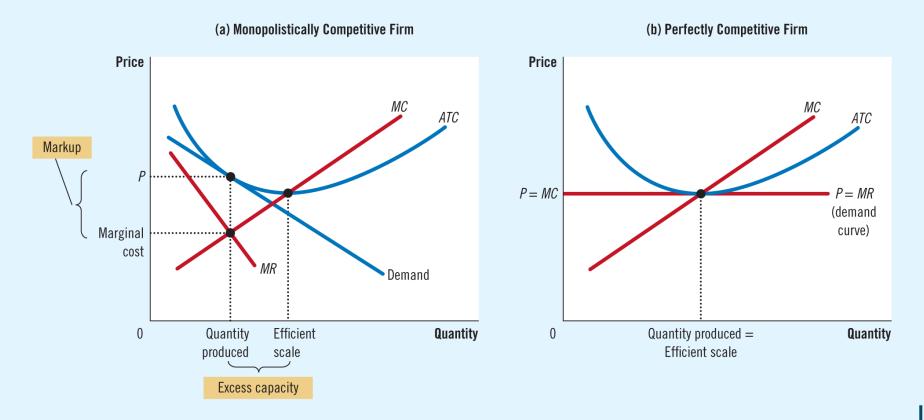
- Monopolistic versus perfect competition
 - Monopolistic competition
 - Quantity: not at minimum ATC (excess capacity)
 - P > MC, markup over marginal cost
 - Perfect competition
 - Quantity: at minimum ATC (efficient scale)
 - P = MC

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.

FIGURE 4

Monopolistic versus Perfect Competition



Professor Galvez-Soriano lecture notes. Based on N. Gregory Mankiw, Principles of Microeconomics, 9th Edition.

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)

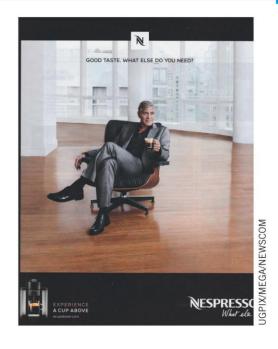
- Incentive to advertise
 - When firms sell differentiated products and charge prices above marginal cost
 - Advertise to attract more buyers
- Advertising spending
 - Highly differentiated goods: 10-20% of revenue
 - Industrial products: Little advertising
 - -Homogenous products: No advertising

- 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

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

- 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

- 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



Is it rational for consumers to be impressed that George Clooney is endorsing this product?

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



- 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

<u>Fable 1</u> Monopolistic Competition: Between Perfect Competition and Monopoly

	Market Structure		
	Perfect Competition	Monopolistic Competition	Monopoly
Features that all three market structures share			
Goal of firms Rule for maximizing profit	Maximize profits $MR = MC$	Maximize profits $MR = MC$	Maximize profits $MR = MC$
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? Can earn economic profits	Yes	Yes	No
in the long run?	No	No	Yes

TABLE 1

Monopolistic Competition: Between Perfect Competition and Monopoly