Chapter 8

REVIEW CONCEPTS

**Allocative Efficiency:** The part of social efficiency concerned with producing the right quantity of each good. Absent externalities and collective goods (which are discussed in Chapters 13 and 14), the allocatively efficient quantity results where the marginal benefit (height of the demand curve) equals the marginal cost.

**Bertrand–Nash Model:** A duopoly model where organizations compete by simultaneously choosing prices.

**Bilateral Monopoly:** A market structure consisting of a monopsonist buying from a monopolist, such as a firm in a company town renting workers represented by a labor union.

**Cartel:** An organization of sellers designed to coordinate supply decisions so that the joint profits of the members will be maximized.

**Contestable Market:** A market is contestable when entry and exit of new competitors is costless. Potential competition, rather than the number of competitors at a point in time, determines the behavior of incumbent firms when a market is contestable.

**Cournot–Nash Model:** A duopoly model where organizations compete by simultaneously choosing quantities.

**Deadweight Loss:** A measure of allocative inefficiency. It represents the reduction in social value that occurs when mutually beneficial trades do not take place. In Chapter 14, this concept is more precisely defined in terms of consumer and producer surplus.

**Duopoly:** A market structure in which two producers of a good or service compete.

**Imperfect Competition:** Any market structure other than perfect competition.

**Marginal Cost of Labor:** The additional cost to an employer when it rents an additional unit of labor. Approximated by the wage rate when factor markets are perfectly competitive, but higher than the wage rate in monopsony markets.

**Market Power:** The ability of a firm to profitably raise the market price of a good or service above marginal costs.

**Mixed-Sector Duopoly:** A market where a single for-profit firm competes with a single nonprofit organization. Other "mixes" are also covered by this term, such as when a single government agency competes with a single nonprofit organization.

**Monopolistic Competition:** A market structure with many sellers, each producing a different version of the good or service in question, with low barriers to entry and exit.

**Monopoly:** A market where there is only one seller of a good or service with no close substitutes. For monopoly to be sustainable, there must be barriers to entry or exit of other firms, including economies of scale or scope (see Natural Monopoly below).

**Monopsony:** A market structure with a single buyer and many sellers. The buyer has market power.

**Natural Monopoly:** A firm with decreasing costs (downward-sloping ATC) up to the quantity that serves the entire market. Such firms can outcompete any smaller firms so that they eventually become the sole provider. The shape of the cost curve provides a barrier to entry.

**Oligopoly:** A market structure characterized by few sellers and interdependent price/output decisions.

**Price Discrimination:** The practice of charging different consumers different prices for the same product.
EXERCISES

1. The gift shops in both the art museum and the natural history museum in Museum Park in Centralville, USA sell identical sweatshirts featuring Museum Park logos. The managers of the gift shops see themselves as competitors and both institutions rely on gift shop revenues to support their programs. These managers make their decisions independently according to the same fiscal year calendars.

(a) What model of duopoly is most likely to apply to this situation? What can you say about the resulting prices and sales levels of the sweatshirts?

(b) Suppose the museums decided to put their own individual logos on their sweatshirts? What impact would this have on prices and quantities sold? Explain.

(c) Suppose the managers of the two gift shops were instructed by their chief executives to collaborate on their sweatshirt sales? What model of imperfect competition would apply in this case, and what impact would the collaboration have on resulting prices and quantities sold?

2. Several optometrists in Buena Vista fashion themselves as social entrepreneurs who provide eyeglasses at a low cost to needy patients. Each of their enterprises faces a constant marginal cost of $10 per pair of eyeglasses. An economist on the faculty of Buena Vista University estimates that the demand for low cost eyeglasses in this market can be modeled as:

\[ P = 140 - 2Q. \]

(a) If there are many competing optometrists in this market, what price would be charged if the marginal cost of production is equal to $10? What if the marginal cost was equal to $20? What quantity would be produced in each case?

(b) If, instead, there were only one such optometrist social entrepreneur, what can we say about the quantity that will be produced and the price that will be charged, relative to your answers to (a)?

(c) If there are two such optometrists sharing the market, what price and output decisions would they make, under the various assumptions of the Cournot, Cartel, Bertrand and Stackelberg models? Which model seems most appropriate in this situation? What can we say about deadweight loss in this situation?

3. Suppose Healthy General Hospital (HGH) is the only place of employment in town for people trained to interpret MRIs.

(a) What can we say about the number of MRI health specialists that HGH will hire, relative to the amount they would hire if there were many local hospitals where such people could find work.

(b) What can we say about the wage HGH will pay such employees?

(c) Suppose the minimum wage is increased. How might the result in this market be different from what we would expect from an increase in the minimum wage in a perfectly competitive labor market? (Hint: see discussion in Chapter 9).