Chapter 14

Monopoly and Antitrust Policy

14.1 Is Any Firm Ever Really a Monopoly?

Learning Objective 1 Define monopoly.

A monopoly is a firm that is the only seller of a good or service that does not have a close substitute. A narrow definition of monopoly is that a firm is a monopoly if it can ignore the actions of other firms. A broader definition of monopoly is that a firm is a monopoly if it can retain economic profits in the long run.

14.2 Where Do Monopolies Come From?

Learning Objective 2 Explain the four main reasons monopolies arise.

A monopoly requires that barriers to entry into the market must be so high that no other firms can enter. There are four barriers high enough to keep out competing firms: government blocks the entry of more than one firm into a market; one firm has control over a key raw resource necessary to produce a good; there are network externalities in supplying the good or service; and economies of scale are so large that one firm has a natural monopoly.

A. Entry Blocked By Government Action

Although governments ordinarily try to promote competition, sometimes they take action to block entry into a market. The U.S. government blocks entry by granting a patent or copyright that gives an individual or firm the exclusive right to produce a product, and by granting a firm a public franchise, making it the exclusive legal provider of a good or service. A patent is the exclusive right to a product for a period of 20 years from the date the product was invented. Patents encourage firms to spend money on research and development necessary to produce new products. Books, films, and software can receive copyright protection. A copyright is a government-granted exclusive right to produce and sell a creation. The right is granted for the creator’s lifetime, and his or her heirs retain this exclusive right for 70 years after the creator’s death. A public franchise is a designation by the government that a firm is the only legal provider of a good or service.

B. Control of a Key Resource

Controlling a key resource happens infrequently; examples include the Aluminum Company of America, which until the 1940s had long-term contracts to buy nearly all available bauxite. Another example is the International Nickel Company of Canada.
C. Network Externalities

*Network externalities* is the situation where the usefulness of a product increases with the number of consumers who use it. Some economists argue that network externalities can serve as barriers to entry, but there is considerable debate about the extent to which they serve as barriers.

D. Natural Monopoly

A *natural monopoly* is a situation in which economies of scale are so large that one firm can supply the entire market at a lower average total cost than can two or more firms. In this case, there is room for only one firm. Natural monopolies are likely to occur in markets where fixed costs are very large relative to variable costs.

### 14.3 How Does a Monopoly Choose Price and Output?

*Learning Objective 3*  Explain how a monopoly chooses price and output.

Like other firms, a monopoly maximizes profit by producing where marginal revenue equals marginal cost but, unlike other firms, the monopoly’s demand curve is the same as the demand curve for the product.

A. Marginal Revenue Once Again

A monopolist is a price maker, rather than a price taker. Its demand and marginal revenue curves are downward sloping.

B. Profit Maximization for a Monopolist

It is important to note that though a monopolist can earn economic profits, new firms will not enter the monopolist’s market; the firm can earn economic profits even in the long run.

### 14.4 Does Monopoly Reduce Economic Efficiency?

*Learning Objective 4*  Use a graph to illustrate how a monopoly affects economic efficiency.

To evaluate economic efficiency under monopoly, we can consider a hypothetical case of a market for television sets that begins as perfectly competitive and then becomes a monopoly.

A. Comparing Monopoly and Perfect Competition

A monopoly will produce less and charge a higher price than would a perfectly competitive industry producing the same good.
B. Measuring the Efficiency Losses from Monopoly

Because a monopoly raises the market price, it reduces consumer surplus. The increase in price due to monopoly increases producer surplus compared with perfect competition. By increasing price and reducing the quantity produced, the monopolist reduces economic surplus. The reduction in economic surplus is a deadweight loss and represents a loss of economic efficiency due to monopoly. In contrast to perfect competition, the monopolist charges a price that is greater than its marginal cost.

C. How Large Are the Efficiency Losses Due to Monopoly?

Since there are few monopolies, the loss of economic efficiency from monopoly is small. But many firms have market power. Market power is the ability of a firm to charge a price greater than marginal cost. The only firms that do not have some market power are firms in perfectly competitive markets. Because few markets are perfectly competitive, some loss of economic efficiency occurs in the market for nearly every good or service. The first economist to measure the dollar value of the loss of economic efficiency in every industry was Arnold Harberger. Other economists have confirmed his conclusion that the total loss of economic efficiency in the U.S. economy from market power is small. According to Harberger, if every industry in the United States were perfectly competitive, the gain in economic efficiency would equal less than 1 percent of the value of total production. In most industries, competition keeps price much closer to marginal cost that would be the case in a monopoly.

D. Market Power and Technological Change

Joseph Schumpeter is closely associated with the argument that the economy may benefit from firms that have market power. Schumpeter argued that economic progress is dependent on technological change in the form of new products. Those who support Schumpeter’s view argue that the introduction of new products requires expenditures on research and development and that firms with market power that can fund research are more likely to earn economic profits than are perfectly competitive firms. Others disagree with Schumpeter’s views and point out that many new products are developed by small firms.

14.5 Government Policy toward Monopoly

**Learning Objective 5** Discuss government policies toward monopoly.

Most governments have policies that regulate the behavior of monopolies. U.S. antitrust laws make illegal any attempts to form a monopoly or to collude. Collusion is an agreement among firms to charge the same price or otherwise not to compete. Governments also regulate firms that are natural monopolies.

A. Antitrust Laws and Antitrust Enforcement

The first important law regulating monopolies in the United States was the Sherman Act (1890), which was designed to promote competition and prevent the formation of monopolies. The Sherman Act targeted firms that had combined to form trusts. Trusts enabled firms to collude. After the Sherman Act was passed, trusts disappeared, but the term antitrust laws continues to be used to refer to laws aimed at eliminating collusion and promoting competition among firms. To address loopholes in the Sherman Act, Congress passed the Clayton Act (1914) and the Federal Trade Commission Act. Under the Clayton Act,
a merger was illegal if its effect was “substantially to lessen competition, or to tend to create a monopoly.” The Federal Trade Act established the Federal Trade Commission (FTC), which was given power to police unfair business practices. Congress divided the authority to police mergers between the FTC and the Antitrust Division of the U.S. Department of Justice.

B. Mergers: The Trade-off between Market Power and Efficiency

The federal government regulates mergers because if firms gain market power by merging they may use this power to raise prices and reduce output. The government is most concerned with horizontal mergers, which are mergers between firms in the same industry. Vertical mergers are between firms at different stages of production of a good. Regulating horizontal mergers is complicated by two factors. First, what is the relevant market for the merged firm? Second, there is a possibility that the newly merged firm might be more efficient than the merging firms were individually.

C. The Department of Justice and Federal Trade Commission Merger Guidelines

In 1973, the Economics Section of the Antitrust Division of the Department of Justice was established and staffed with economists who were entrusted with evaluating the economic consequences of proposed mergers. In 1982, merger guidelines were developed by the Department of Justice and the FTC. The guidelines made it easier for firms considering a merger to understand whether the government would allow the merger. The guidelines have three main parts. The first part is market definition. A market consists of all firms making products that consumers view as close substitutes. The second part of the guidelines concerns the measure of market concentration. A merger between firms in a market that is already highly concentrated is likely to increase market power. The guidelines use the Herfindahl-Hirschman Index (HHI) of concentration, which squares the market shares of each firm in the industry and adds up the values of the squares. The third part of the guidelines consists of merger standards. The Department of Justice and the FTC used the HHI calculations to evaluate proposed horizontal mergers.

D. Regulating Natural Monopolies

If a firm is a natural monopoly, competition will not play its role of forcing prices down to the level where the company earns zero economic profit. Local and state regulatory commissions usually set prices for natural monopolies. To achieve economic efficiency, regulators should require that the monopoly charge a price equal to its marginal cost. But this strategy has a drawback when the firm’s average total cost curve is still falling when it crosses the demand curve. If the firm charges a price equal to marginal cost, price will be less than average total cost and the firm will suffer an economic loss. Most regulators will set the price equal to the level of average total cost so that the firm will break even.