Chapter 18 Antitrust Policy and Regulation

QUESTIONS

1. Both antitrust policy and industrial regulation deal with monopoly. What distinguishes the two approaches? How does government decide to use one form of remedy rather than the other? LO1, LO3

   **Answer:** One of the goals of government in a market economy is to promote competition as a way of achieving efficiency. One approach is to maintain competition by using antitrust laws to discourage the creation of excess monopoly power such as through mergers or by taking action against a firm that is abusing its monopoly power. The other approach, particularly in cases where there is a natural monopoly, is for the government to regulate the firm. The government will choose an approach by analyzing the structure of the industry, the cost structure of the firm, the impact of the firm’s actions on its competitors and customers, industry technology, and the likelihood of new competitors entering the industry.

2. Describe the major provisions of the Sherman and Clayton acts. What government entities are responsible for enforcing those laws? Are firms permitted to initiate antitrust suits on their own against other firms? LO1

   **Answer:** Sherman Act: Section 1 prohibits conspiracies to restrain trade; Section 2 outlaws monopolization. Clayton Act (as amended by Celler-Kefauver Act of 1950): Section 2 outlaws price discrimination; Section 3 forbids tying contracts; Section 7 prohibits mergers which substantially lessen competition; Section 8 prohibits interlocking directorates. The acts are enforced by the Department of Justice, Federal Trade Commission, and state attorneys general. Private firms can bring suit against other firms under these laws.

3. Contrast the outcomes of the Standard Oil and U.S. Steel cases. What was the main antitrust issue in the DuPont cellophane case? In what major way do the Microsoft and Standard Oil cases differ? LO2

   **Answer:** In the Standard Oil case the government ruled that Standard Oil has monopolized the petroleum industry through abusive and anticompetitive actions. Standard Oil was divided into several competing firms, but the court decision did not resolve the issue of whether every monopoly was illegal, or just those formed by anticompetitive practices. The U.S. Steel case determined that not every monopoly violated the Sherman Act. U.S. Steel, though large and possessing monopoly power, had not obtained its monopoly power illegally, and therefore had not violated the law. The issue in the DuPont cellophane case was the size of the relevant market. Because it was ruled to be operating in the “flexible wrapping materials” market and only held a 20 percent market share (versus 100 percent in the cellophane market), DuPont was not considered to be a monopoly. The major difference between the Standard Oil and the Microsoft cases was the remedy. Standard Oil was broken up into several firms; Microsoft was ordered to change its behavior, but was otherwise left intact.
4. Why might one administration interpret and enforce the antitrust laws more strictly than another? How might a change of administrations affect a major monopoly case in progress? LO2

**Answer:** One administration might take an *active antitrust perspective*, believing that government intervention is necessary to stop the anticompetitive and sometimes illegal actions of firms. Another administration, believing that competitive forces and the process of *creative destruction* will resolve any monopoly problems, is more likely to take a *laissez-faire perspective*. The former will enforce the laws more strictly than the latter.

If an administration actively pursuing an antitrust case is replaced by one with the *laissez-faire perspective*, the case may end up being dropped.

5. How would you expect antitrust authorities to react to: LO2
   a. A proposed merger of Ford and General Motors.
   b. Evidence of secret meetings by contractors to rig bids for highway construction projects.
   c. A proposed merger of a large shoe manufacturer and a chain of retail shoe stores.
   d. A proposed merger of a small life-insurance company and a regional candy manufacturer.
   e. An automobile rental firm that charges higher rates for last-minute rentals than for rentals reserved weeks in advance.

**Answer:**
(a) They would block this horizontal merger (violation of Section 7 of the Clayton Act).
(b) They would charge these firms with price fixing (violation of Section 1 of the Sherman Act).
(c) They would allow this vertical merger, unless both firms had very large market shares and the resultant merger substantially lessens competition.
(d) They would allow this conglomerate merger.
(e) They would not interfere with this price discrimination.

6. Suppose a proposed merger of firms would simultaneously lessen competition and reduce unit costs through economies of scale. Do you think such a merger should be allowed? LO2

**Answer:** Abstracting from other issues (for example, the relative sizes of the two firms in the market), such a merger should only be allowed if it can be shown that price reductions associated with the decrease in unit costs will outweigh the probable increase in price associated with the reduced level of competition in the industry.
7. In the 1980s, PepsiCo Inc., which then had 28 percent of the soft-drink market, proposed to acquire the Seven-Up Company. Shortly thereafter the Coca-Cola Company, with 39 percent of the market, indicated it wanted to acquire the Dr Pepper Company. Seven-Up and Dr Pepper each controlled about 7 percent of the market. In your judgment, was the government’s decision to block these mergers appropriate? **LO2**

**Answer:** The government’s decision was justified. Each of the proposed merged companies would have resulted in a Herfindahl index of well over 1800, the guideline used by the federal government for horizontal mergers. Furthermore, the mergers would have significantly increased the level of concentration in the soft-drink industry, with only two firms effectively controlling four-fifths of the market. Proponents of the merger might argue that economies of scale in the industry necessitate the formation of large firms such as Pepsico and Coca-Cola, but this is unlikely. (Note: Later Dr. Pepper and Seven-Up merged and in 1995 were in turn purchased by a Canadian firm.)

8. Why might a firm charged with violating the Clayton Act, Section 7, try arguing that the products sold by the merged firms are in separate markets? Why might a firm charged with violating Section 2 of the Sherman Act try convincing the court that none of its behavior in achieving and maintaining its monopoly was illegal? **LO2**

**Answer:** Section 7 of the Clayton Act prohibits the acquisition of stocks of competing corporations when the outcome would be less competition. By arguing that the products are sold in separate markets, the firm is arguing that the acquired firm is not a competitor, and that the acquisition will not reduce competition.

Based on the ruling on the U.S. Steel case, not every monopoly is in violation of Section 2 of the Sherman Act. Only those that behave inappropriately by attempting to “monopolize, or combine or conspire … to monopolize” are in violation.

9. “The social desirability of any particular firm should be judged not on the basis of its market share but on the basis of its conduct and performance.” Make a counterargument, referring to the monopoly model in your statement. **LO2**

**Answer:** Market share is a good indication of a firm’s monopoly power. A firm with substantial monopoly power will likely use the power to restrict output, charge high prices, generate excessive profits, and act in predatory ways toward competitors and potential competitors. The mere fact that a firm has significant monopoly power is a strong indication that it is violating antitrust laws. Even if it is not, the inefficiencies of monopoly firms warrant action against them.
10. What types of industries, if any, should be subjected to industrial regulation? What specific problems does industrial regulation entail? **LO3**

**Answer:** Industries composed of firms with natural monopolies conditions are most likely to be subjected to industrial regulation. Regulation based on “fair-return” prices creates disincentives for firms to minimize costs since cost reductions lead regulators to force firms to change a lower price. Regulated firms may also use “creative” accounting to boost costs and hide profits. Because regulatory commissions depend on information provided by the firms themselves, and commission members are often recruited from the industry, the agencies may in effect be controlled by the firms they are supposed to oversee. Also, industrial regulation sometimes is applied to industries that are not, or no longer are, natural monopolies. Regulation may lead to the conditions of a cartel, conditions that are illegal in an unregulated industry.

11. In view of the problems involved in regulating natural monopolies, compare socially optimal (marginal-cost) pricing and fair-return pricing by referring again to Figure 10.9. Assuming that a government subsidy might be used to cover any loss resulting from marginal-cost pricing, which pricing policy would you favor? Why? What problems might such a subsidy entail? **LO3**

**Answer:** Many of the regulatory problems associated with fair-return pricing also apply to a policy of marginal-cost pricing. In the unlikely case that a marginal-cost pricing policy does not entail public subsidies, it is subject to fewer regulatory problems. While there is an incentive for firms to artificially inflate marginal-cost estimates, there is no disincentive to contain costs and efficiency-enhancing substitutions of capital for labor are not encouraged. Some of these conclusions do not hold in the more likely case where public subsidies are required.

Because marginal-cost pricing fosters allocative efficiency, it is preferable to fair-return pricing. However, if the firm requires public subsidies to produce at the socially optimal point, the same disincentive exists to minimize actual and estimated unit costs as with fair-return pricing, since cost reductions will simply lead to a lower subsidy. Efficiency-enhancing substitutions of capital for labor are not encouraged, since regulators are not attempting to enforce a stipulated rate of return. While public subsidies to ensure allocative efficiency can be worthwhile from an economic perspective, they are usually politically unpopular, since voters are reluctant to provide large monopolistic firms with scarce public funds.

12. How does social regulation differ from industrial regulation? What types of benefits and costs are associated with social regulation? **LO4**

**Answer:** Industrial regulation is concerned with prices, output, and profits in specific industries, whereas social regulation deals with the broader impact of business on consumers, workers, and third parties. Benefits: increased worker and product safety, less environmental damage, reduced economic discrimination. Two types of costs: administrative costs, because regulations must be administered by costly government agencies, compliance costs, because firms must increase spending to comply with regulations.
13. Use economic analysis to explain why the optimal amount of product safety may be less than the amount that would totally eliminate risks of accidents and deaths. Use automobiles as an example. LO4

Answer: To produce an automobile that would totally eliminate the risk of accidents and death would be extremely expensive in terms of materials. Additionally, the cost of operating such a vehicle would likely be expensive because of the weight of the car. As additional design changes are considered, engineers should balance the marginal cost of providing the extra units of safety with the expected marginal benefit received from the design change.

14. LAST WORD Under what law and on what basis did the Federal district court find Microsoft guilty of violating the antitrust laws? What was the initial district court’s remedy? How did Microsoft fare with its appeal to the court of appeals? Was the final remedy in the case a structural remedy or a behavioral remedy?

Answer: Microsoft was found guilty of violating Section 2 of the Sherman Act. The court ruled that Microsoft had taken unlawful actions to maintain its Windows monopoly by tying the Internet Explorer to Windows at no charge. Also under license from Sun, Microsoft developed Windows-related Java software that made Sun’s own software incompatible with Windows. The district court’s remedy was to break Microsoft into two companies that were prohibited from entering into joint ventures. The court of appeals upheld the lower court ruling that Microsoft had violated Section 2, but altered the remedy. The final remedy is behavioral, as Microsoft is not required to split into two companies, but they must alter their business practices.

PROBLEMS

1. Suppose that there are only three types of fruit sold in the United States. Annual sales are 1 million tons of blueberries, 5 million tons of strawberries, and 10 million tons of bananas. Suppose that of those total amounts, the Sunny Valley Fruit Company sells 900,000 tons of blueberries, 900,000 tons of strawberries, and 7.9 million tons of bananas. LO2
   a. What is Sunny Valley’s market share if the relevant market is blueberries? If a court applies the “90-60-30 rule” when considering just the blueberry market, would it rule that Sunny Valley is a monopoly?
   b. What is Sunny Valley’s market share if the relevant market is all types of berries? Would the court rule Sunny Valley to be monopolist in that market?
   c. What if the relevant market is all types of fruit? What is Sunny Valley’s market share, and would the court consider Sunny Valley to be a monopolist?

Answers: (a) Sunny Valley’s market share in blueberries is 90%; yes.
(b) If the relevant market is all berries, then Sunny Valley’s market share is 30.0%; no.
(c) If the relevant market is all fruit, then Sunny Valley’s market share is 61%; likely.
Feedback: Consider the following example. Annual sales are 1 million tons of blueberries, 5 million tons of strawberries, and 10 million tons of bananas. Suppose that of those total amounts, the Sunny Valley Fruit Company sells 900,000 tons of blueberries, 900,000 tons of strawberries, and 7.9 million tons of bananas.

Part a:
What is Sunny Valley’s market share if the relevant market is blueberries? If a court applies the “90-60-30 rule” when considering just the blueberry market, would it rule that Sunny Valley is a monopoly?
Courts often decide whether or not market power exists by considering the share of the market held by the dominant firm. They have roughly adhered to a “90-60-30 rule” in defining monopoly: If a firm has a 90 percent market share, it is definitely a monopolist; if it has a 60 percent market share, it probably is a monopolist; if it has a 30 percent market share, it clearly is not a monopolist. The market share will depend on how the market is defined.
Sunny Valley’s market share is 90% if the relevant market is blueberries. Annual sales of blueberries are 1 million tons and Sunny Valley sells 900,000 tons of blueberries in the market. \( \left( \frac{900,000}{1,000,000} \right) \times 100 = 90\% \). Based on the 90-60-30 rule, Sunny Valley would be ruled a monopolist.

Part b:
What is Sunny Valley’s market share if the relevant market is all types of berries? Would the court rule Sunny Valley to be monopolist in that market?
Sunny Valley’s market share is 30% if the relevant market is all berries. Annual sales of blueberries are 1 million tons and annual sales of strawberries are 5 million tons. Sunny Valley sells 900,000 tons of blueberries in the market and sells 900,000 tons of strawberries in the market. \( \left( \frac{900,000\text{ blueberries} + 900,000\text{ strawberries}}{1,000,000\text{ blueberries market} + 5,000,000\text{ strawberries market}} \right) \times 100 = (1,800,000\text{ berries} / 6,000,000\text{ berries market}) \times 100 = 30\% \). Based on the 90-60-30 rule Sunny Valley would not be ruled a monopolist.

Part c:
What if the relevant market is all types of fruit? What is Sunny Valley’s market share and would the court consider Sunny Valley to be a monopolist?
Sunny Valley’s market share is 61% if the relevant market is all types of fruit. Annual sales of blueberries are 1 million tons, annual sales of strawberries are 5 million tons, and annual sales of bananas are 10 million tons. Sunny Valley sells 900,000 tons of blueberries in the market, sells 900,000 tons of strawberries in the market, and sells 7.9 million tons of bananas. \( \left( \frac{900,000\text{ blueberries} + 900,000\text{ strawberries} + 7,900,000\text{ bananas}}{1,000,000\text{ blueberries market} + 5,000,000\text{ strawberries market} + 10,000,000\text{ bananas market}} \right) \times 100 = (9,700,000\text{ fruit} / 16,000,000\text{ fruit market}) \times 100 = 60.63\% \text{ or } 61\% \). Based on the 90-60-30 rule Sunny Valley would likely be ruled a monopolist.

2. Carrot Computers and its competitors purchase touch screens for their handheld computers from several suppliers. The six makers of touch screens have market shares of, respectively, 19 percent, 18 percent, 14 percent, 16 percent, 20 percent, and 13 percent. LO2
a. What is the Herfindahl index for the touch screen manufacturing industry?
b. By how much would a proposed merger between the two smallest touch screen makers increase the Herfindahl index? Would the government be likely to challenge that proposed merger?
c. If Carrot Computers horizontally merges with its competitor Blueberry Handhelds, by how much would the Herfindahl index change for the touch screen industry?

Answers: (a) 1706
(b) The Herfindahl index would rise by 364; yes, the government would likely challenge the proposed merger.
(c) Zero

Feedback: Consider the following example. Carrot Computers and its competitors purchase touch screens for their handheld computers from several suppliers. The six makers of touch screens have market shares of, respectively, 19 percent, 18 percent, 14 percent, 16 percent, 20 percent, and 13 percent.

Part a:
What is the Herfindahl index for the touch screen manufacturing industry?
The Herfindahl index for an industry is found by squaring the market share of each firm in the industry and adding these together.
The Herfindahl index for the firms above equals 1706 (= 19² + 18² + 14² + 16² + 20² + 13²).

Part b:
By how much would a proposed merger between the two smallest touch screen makers increase the Herfindahl index? Would the government be likely to challenge that proposed merger?
The two smallest firms make up 13% and 14%, thus if they merge they will make up 27% of the market.
The Herfindahl index after the merger is 2070 (=19² + 18² +16² + 20² +(13 + 14)²)
The increase in the Herfindahl index is 364 (= 2070 (after merger - 1706 (prior to merger))
The government would likely challenge this merger because a Herfindahl index above 1800 suggests that the market is too concentrated.

Part c:
If Carrot Computers horizontally merges with its competitor Blueberry Handhelds, by how much would the Herfindahl index change for the touch screen industry?
The answer is zero (no change) because the market shares for the touch screen industry have not changed, therefore the Herfindahl index won’t change for the touch screen industry.