Chapter 12 Exercises

Self-Check Questions

1. Is it true that both the four-firm concentration ratio and the Herfindahl-Hirschman Index can be affected by a merger between two firms that are not already in the top four by size? Explain briefly.

2. Is it true that the four-firm concentration ratio puts more emphasis on one or two very large firms, while the Herfindahl-Hirschman Index puts more emphasis on all the firms in the entire market? Explain briefly.

3. Some years ago, two intercity bus companies, Greyhound Lines, Inc. and Trailways Transportation System, wanted to merge. One possible definition of the market in this case was “the market for intercity bus service.” Another possible definition was “the market for intercity transportation, including personal cars, car rentals, passenger trains, and commuter air flights.” Which definition do you think the bus companies preferred, and why?

4. As a result of globalization and new information and communications technology, would you expect the definitions of markets used by antitrust authorities to become broader or narrower?

5. Why would a firm choose to use one or more of the anticompetitive practices described in Lesson 12.2?

6. Urban transit systems, especially those with rail systems, typically experience significant economies of scale in operation. Consider the transit system whose data is given in the following table. Note that the quantity is in millions of riders.

   Draw the demand, marginal revenue, marginal cost, and average cost curves. Do they have the normal shapes you would expect for these curves?

Quantity	Price	Marginal Revenue	Marginal Cost	Average Cost
1	10	10	9	9.0
2	9	8	6	7.5
3	8	6	5	6.7
4	7	4	3	5.8
5	6	2	2	5.0
6	5	0	3	4.7
7	4	−2	4	4.6
8	3	−4	5	4.6
9	2	−6	7	4.9
10	1	−8	10	5.4

7. From the graph you drew to answer the previous question, would you say this transit system is a natural monopoly?

   Use the following information to answer the next three questions.

   In the years before wireless phones, when telephone technology required having a wire running to every home, it seemed plausible that telephone service had diminishing average costs and might need to be regulated like a natural monopoly. For most of the twentieth century, the national U.S. phone company was AT&T, and the company functioned as a regulated monopoly. Think about the deregulation of the U.S. telecommunications industry that has happened over the last few decades. (This is not a research assignment but rather a thought assignment based on what you have learned in this chapter.)

8. What real-world changes made the deregulation possible?
9. What are some of the benefits of the deregulation?
10. What might some of the negatives of deregulation be?

Review Questions

11. What is a corporate merger? What is an acquisition?
12. What is the goal of antitrust policies?
13. How do we measure a four-firm concentration ratio? What does a high measure mean about the extent of competition?
14. How is a Herfindahl-Hirschman Index measured? What does a low measure mean about the extent of competition?
15. Why can it be difficult to decide what a "market" is for purposes of measuring competition?
16. What is a minimum resale price maintenance agreement? How might it reduce competition, and when might it be acceptable?
17. What is exclusive dealing? How might it reduce competition, and when might it be acceptable?
18. What is a tying sale? How might it reduce competition, and when might it be acceptable?
19. What is predatory pricing? How might it reduce competition, and why might it be difficult to tell when it should be illegal?
20. If public utilities are a natural monopoly, what would be the danger in deregulating them?
21. If public utilities are a natural monopoly, what would be the danger in splitting them up into a number of separate competing firms?
22. What is cost-plus regulation?
23. What is price cap regulation?
24. What is deregulation? Name some industries that have been deregulated in the United States.
25. What is regulatory capture?
26. Why does regulatory capture reduce the persuasiveness of the case that regulating industries benefits consumers?

Critical Thinking Questions

27. Does either the four-firm concentration ratio or the HHI directly measure the amount of competition in an industry? Why or why not?
28. What would be evidence of serious competition between firms in an industry? Can you identify two highly competitive industries?
29. Can you think of any examples of successful predatory pricing in the real world?
30. If you were developing a product (like a web browser) for a market with significant barriers to entry, how would you try to get your product into the market successfully?
31. In the middle of the twentieth century, major U.S. cities had multiple competing city bus companies. Today, there is usually only one, and it runs as a subsidized, regulated monopoly. What do you suppose caused the change?
32. Why are urban areas willing to subsidize urban transit systems? Does the argument for subsidies make sense to you?
33. Deregulation, like all changes in government policy, always has pluses and minuses. What do you think some of the minuses might be for airline deregulation?

34. Do you think it is possible for government to outlaw everything that businesses could do wrong? If so, why does government not do that? If not, how can regulation stay ahead of rogue businesses that push the limits of the system until it breaks?

Problems

35. Use the following table to calculate the four-firm concentration ratio for the U.S. car market. Does this indicate a concentrated market or not?

GM	19%
Ford	17%
Toyota	14%
Chrysler	11%

36. Use the previous and following table to calculate the Herfindal-Hirschman Index for the U.S. car market. Would the FTC approve a merger between GM and Ford?

Honda	10%
Nissan	7%
Hyundai	5%
Kia	4%
Subaru	3%
Volkswagen	3%

Use the table with data on a transit system to answer the following questions.

Quantity	Price	Marginal Revenue	Marginal Cost	Average Cost
1	10	10	9	9.0
2	9	8	6	7.5
3	8	6	5	6.7
4	7	4	3	5.8
5	6	2	2	5.0
6	5	0	3	4.7
7	4	–2	4	4.6
8	3	–4	5	4.6
9	2	–6	7	4.9
10	1	–8	10	5.4

37. If the transit system was allowed to operate as an unregulated monopoly, what output would it supply, and what price would it charge?

38. If the transit system was regulated to operate with no subsidy (i.e., at zero economic profit), what approximate output would it supply, and what approximate price would it charge?

39. If the transit system was regulated to provide the most allocatively efficient quantity of output, what output would it supply, and what price would it charge? What subsidy would be necessary to ensure this efficient provision of transit services?