13 Market Power and Government Regulation

PURPOSE

This chapter provides a fairly nontechnical treatment of the topic of market power and industrial organization, as well as government regulations. Because most of my students at this level have real difficulty with the concept of marginal revenue equaling marginal cost (and because I cannot take the time to teach this important microeconomic principles topic properly in an issues course), I have chosen to present the material without marginal analysis. I also avoid the graph of a perfectly horizontal demand curve for the individual firm, and I use market demand (and market supply) to compare monopoly and competitive outcomes. Students can grasp the essentials just as easily without the excessive graphs. In the same vein, more technical material on elasticity, monopoly profits, and price discrimination is left for the appendix to this chapter.

LEARNING OBJECTIVES

The learning objectives for this chapter are:

1. to acquaint the student with the concept of market power.
2. to help the student understand the contrast between competition, monopoly, and oligopoly.
3. to enable the student to differentiate between market power and firm size.
4. to enable the student to understand the measurement of market power by the concentration ratio, as well as some problems involved in measuring market power.
5. to acquaint the student with the sources of market power, including barriers to entry.
6. to acquaint the student with the implications of market power.
7. to help the student understand the roles of technological change, import competition, and antitrust in lessening market power.
8. to help the student understand the use of economic regulation.
9. to make the concept of market power more real to students by including a discussion of Google, Amazon, Ticketmaster, and Walmart.
10. to provide insight into the international aspects of market power by discussing declining terms of trade with respect to developing countries.
11. to give information on the bailouts, takeovers, and bankruptcies associated with the economic and financial crisis of the Great Recession, along with the issue of "too big to fail" with respect to the auto industry.
12. to illustrate the economic conservative and liberal viewpoints toward market power, antitrust, and economic regulation.
13. to understand the policy of Donald Trump towards government regulations.

LECTURE SUGGESTIONS

- Students often have a hard time differentiating between firm size and market concentration, so take every opportunity to drive home this difference.
- Students often have preconceptions about regulation. It is either, in their opinion, totally good or totally bad. Point out examples of unwise regulation, as well as the problems caused by concentrated markets.
- Students can often come up with more examples pertaining to franchises, licenses, patents, product differentiation, and barriers to entry once they understand the meaning of these terms. And they've often paid attention to topics of market power pertaining to Microsoft, Ticketmaster, and others. These provide a good opportunity to get students involved with discussion.
- Discuss the issue of big box stores such as Walmart and their effects on competition.
- Be sure that discussion of bailouts and bankruptcies stemming from the financial crisis stays focused on economic issues.

(Appendix 13–1 and 13–2)

- Use the appendices for another example of monopoly and to demonstrate how elasticity interacts with market power.

ADDITIONAL DISCUSSION AND ACTION QUESTIONS

Some of the following additional discussion questions may be helpful in preparing lectures.

1. Show how some markets are inherently regional, rather than national (such as bakeries) and discuss the understatement of market power if we refer to the national concentration ratio. Ask students where they shop for groceries, car loans, gasoline, etc., to get a feel for the size of each market.
2. Discuss how inter-industry competition causes concentration ratios to overstate market power. For example, the concentration ratio for coffee and tea is 51, but these products face competition from soda pop, bottled water, and fruit juices.
3. Draw a monopoly firm's downward sloping demand curve and show that the firm can increase price, revenues, and profits by producing less output.

(Appendix 13–2)

4. Discuss the role of elasticity in assuring that revenue will indeed rise in the relevant range.)

SOME ANSWERS AND COMMENTS ON THE TEXT DISCUSSION AND ANSWER QUESTIONS

1. Many independently acting buyers and sellers, a standardized product, and no barriers to either entry or exit. Of course not.
2. Price is higher and output lower than if the market were purely competitive. Price discrimination often occurs where there is market power. Oligopolies often collude to fix the price above the competitive level. Firms are not forced by competition to minimize their costs, and as a result they may become inefficient. Market power may translate into political power (which may conflict with "democracy").
3. Barriers to entry refer to anything that keeps new firms from entering a market where existing firms are making a profit. If there were no barriers to entry, there would be more firms—and less market power—in that market.

4. (a) Economies of scale are declining average costs, which ensure that large-scale producers have a cost advantage over smaller potential entrants into the market. If the small firms enter the market, they will be at a pronounced cost disadvantage and not able to compete. If they are able to enter at the same level as the existing firms, the great increase in market output will cause the price to fall, and the business will be less profitable and therefore less attractive for the new firms. (b) The exclusive franchise granted by the government to natural monopolies is the most difficult barrier to entry of all. It makes the firm the only legally operating firm in the market. (c) Control over essential raw materials (such as raw diamonds or bauxite) means that other firms cannot produce the final product. (d) Patents keep other firms from making the product or using the process. (e) Product differentiation increases the cost of entry into the market. New firms have to overcome the established product image of the existing firm. (f) Licenses are often required in the trades and professions. If the number of licenses is limited, this acts as a barrier to entry. (g) Price cutting makes it difficult for smaller, less profitable firms to compete.
5. Student answers will vary. Be sure that students define the terms correctly and that the examples fit the concepts.
6. Student answers will vary.
7. Student answers will vary.
8. The key is price consciousness. Adults have more income and highly value entertainment; therefore, they will be less price conscious and will pay more for a movie ticket. Children have little or no income and have many alternatives for the use of time; therefore, they will be (or their parents will be on the children's behalf) more price conscious and will not pay more for a movie ticket. Students who have read the appendix will use elasticity to answer this question.
9. They decrease the quantity or increase the price of imports, thereby decreasing competition and increasing market power of domestic firms (which allows domestic firms to restrict output in order to drive up prices, which also reduces employment).
10. Student answers should demonstrate understanding of the issues presented in ViewPoint.
11. There will be some variation in student answers. Look for mastery of the implications of market power and the forces that decrease market power.
12. Student activity.
13. Student activity.
14. Student activity.
15. Student activity.

SUGGESTED TEST QUESTIONS

Multiple-Choice Questions

1. A monopoly will not only charge a higher price, it will also produce ____________ output than a competitive market would produce.
   a. more
   b. less
   c. better
   d. poorer

2. The United States automobile industry is a good example of:
   a. a monopoly.
   b. a competitive market.
   c. an oligopoly.
   d. an unconcentrated industry.

3. A monopoly:
   a. charges higher prices than competitive firms, all other things equal.
   b. produces more output than competitive markets, all other things equal.
   c. is one of several firms in the market.
   d. All of the above

4. Compared to competitive markets, monopolies charge:
   a. higher prices, produce more output, but make lower profits.
   b. higher prices, produce more output, and make higher profits.
   c. higher prices, produce less output, and make higher profits.
   d. lower prices, produce more output, and make higher profits.

5. What do patents, economies of scale, and exclusive franchises have in common?
   a. They are all barriers to entry.
   b. They are all granted by the government to monopoly firms.
   c. They guarantee that a market will be competitive.
   d. All of the above

6. If, shortly after Kellogg's Company has announced price increases on its ready-to-eat cereals, the other cereal manufacturers announce identical price increases on their products, this is likely to be:
   a. the essence of competition.
   b. a cartel.
   c. price leadership.
   d. a coincidence.

7. All other things equal, compared to a competitive market, a monopoly will have:
   a. higher profits and greater efficiency.
   b. lower profits and greater efficiency.
   c. lower profits and lower efficiency.
   d. higher profits and lower efficiency.

8. Compared to a firm in a competitive market, a monopoly has:
   a. more pressure to reduce costs.
   b. less pressure to reduce costs.
   c. lower profits.
   d. greater output.

9. Which of the following serves to limit market power?
   a. patents
   b. economies of scale
   c. import competition
   d. limit pricing

10. Price discrimination is:
    a. charging different prices to different customers because it costs the firm more to serve some customers than others.
    b. changing the firm's price frequently to respond to market conditions.
    c. charging different prices to different customers when the price differences are not based on cost differences.
    d. charging different prices to different customers based on their race or ethnicity.

11. Economies of scale over a wide range of output:
    a. are a barrier to entry.
    b. mean that cost per unit of output is lower at high levels of output.
    c. mean that cost per unit of output is higher at low levels of output.
    d. All of the above

12. Monopolies and oligopolies are:
    a. price takers, as are competitive firms.
    b. price takers, in contrast to competitive firms that are price makers.
    c. price makers, in contrast to competitive firms which are price takers.
    d. price makers, as are competitive firms.

13. The essence of market power is:
    a. product differentiation.
    b. lack of pressure to raise prices.
    c. the firm's ability to influence the market price of its product.
    d. having an exclusive franchise.

14. When we say that the competitive firm is a price taker, we mean that:
    a. the output of the firm is too small to influence the market price of the product.
    b. the firm's management doesn't know what price to set, so it just charges what other firms are charging.
    c. the firm is following a price leader.
    d. the firm produces less output to set a higher price.

15. An industry has a concentration ratio of 85. We would call this industry a(n):
    a. competitive industry.
    b. monopoly.
    c. oligopoly.
    d. very competitive industry.

16. If the concentration ratio for an industry is 80:
    a. the four largest firms account for 20 percent of total output of the product.
    b. the four largest firms account for 80 percent of total output of the product in the U.S. market.
    c. the industry is a monopoly.
    d. the industry is competitive.

17. Concentration ratios may:
    a. overstate the extent of competition because they ignore imported products.
    b. understate the extent of competition because they ignore imported products.
    c. either overstate or understate the extent of competition because they ignore imported products.
    d. None of the above

18. Which of the following has market power?
    a. Google
    b. Apple
    c. Amazon
    d. All of the above

(Appendix 13–1)

19. The example in this appendix that is used to demonstrate monopoly behavior uses the example of:
    a. water.
    b. dishwashers.
    c. anti-age.
    d. opioids.

(Appendix 13–2)

20. To successfully raise its price in order to increase its profits, the monopolist must have:
    a. an inelastic demand curve.
    b. an inelastic supply curve.
    c. an elastic demand curve.
    d. an elastic supply curve.

21. In order to successfully use price discrimination to increase its profits, a monopolist must:
    a. be able to segment groups of consumers from one another.
    b. have groups of consumers with different elasticities of demand.
    c. have market power.
    d. All of the above

True-and-False Questions

1. Monopolies can charge any price they want and still be highly profitable because they have no competition. **(F)**
2. Monopolies produce more output than competitive markets. **(F)**
3. The monopolist's demand curve is the market demand curve. **(T)**
4. In order to receive a higher price, the monopolist reduces output. **(T)**
5. Monopolies are more efficient than competitive markets. **(F)**
6. Economies of scale occur when cost per unit of output is lower for higher levels of output. **(T)**
7. Whenever a firm charges different prices for its products, it is practicing price discrimination. **(F)**
8. An agreement among producers to limit output and increase the market price of the product is called a cartel agreement. **(T)**
9. Technological change is a major force limiting market power. **(T)**
10. A natural monopoly does not have economies of scale. **(F)**
11. Concentration ratios understate the actual extent of industry competition because they do not consider inter-industry competition. **(T)**
12. Concentration ratios understate the actual extent of competition if the appropriate market is regional, instead of national. **(F)**
13. An oligopoly is a market with only a few dominant firms. **(T)**
14. Import competition limits the market power of domestic (U.S.) firms. **(T)**
15. The actions of existing firms in the industry can never act as a barrier to entry for new firms. **(F)**
16. The monopolist can increase output and price simultaneously. **(F)**
17. The first antitrust law passed was the Clayton Act of 1914. **(F)**
18. U.S. tariffs and import quotas increase the market power of domestic (U.S.) producers. **(T)**

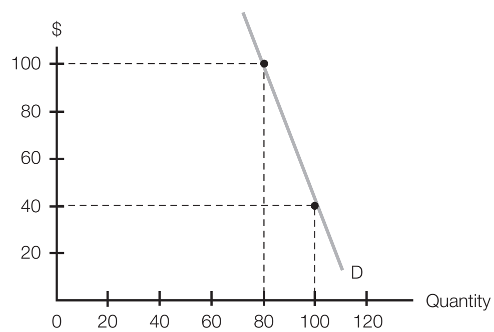
19. When the government grants a public utility an exclusive franchise, it also usually regulates the firm's prices and services. **(T)**
20. An exclusive franchise is a monopoly grant from the government. **(T)**
21. Cigarettes and breweries have relatively high concentration ratios. **(T)**
22. Conservatives generally view antitrust or economic regulations as creating inefficiency. **(T)**
23. Some countries listed in the text have a percent of senior management time spent on complying with government regulations as high as 80%. **(F)**
24. Donald Trump has made it his mission to increase the number of government regulations that protect workers, consumers, and the environment. **(F)**

(Appendix 13–2)

25. The responsiveness of consumers (in terms of their buying decisions) to changes in the price of the product is measured by the elasticity of demand. **(T)**

Short-Answer Questions

1. A market demand curve is shown below. If the only firm in the market sells 100 units, what price can it charge? (**<u>$40</u>**) If it wants to raise the price to $100, what would it do? (**<u>reduce output to 80</u>**) Show on the graph.



2. Suppose the whozit industry consists of six firms, each producing the following shares of total whozit output. What is the concentration ratio for the whozit industry? (**<u>95</u>**)

Firm	**Share of Total Output**
1	50
2	30
3	10
4	5
5	3
6	2

Critical Thinking Question

Economists have analyzed antitrust cases involving collusion. Their conclusion is that firms in *moderately* concentrated markets usually collude by making a cartel agreement, but firms in *extremely* concentrated markets more commonly collude by practicing price leadership. Discuss this phenomenon and give a possible reason for this difference.

INTERNET RESOURCES

http://www.usdoj.gov/atr/
(This is the Department of Justice's antitrust page.)

http://www.law.com
(This site is very well indexed. It has links to articles on various aspects of the law, including antitrust.)

http://www.census.gov/epcd/www/concentration.html
(This site includes concentration ratios.)

http://www.antitrustinstitute.org
(This site of the American Antitrust Institute supports its pro-competition mission.)