

SECTION NOTES 18

Covering material from Lecture on March 16th

CLASS OUTLINE

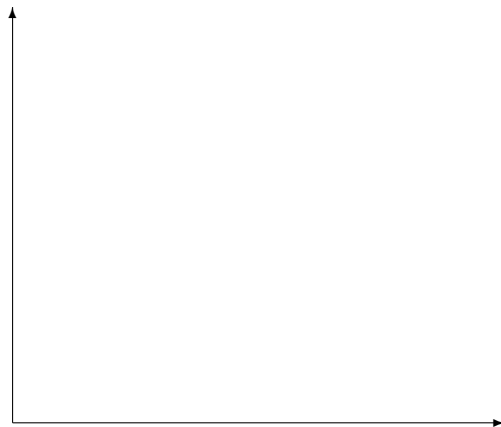
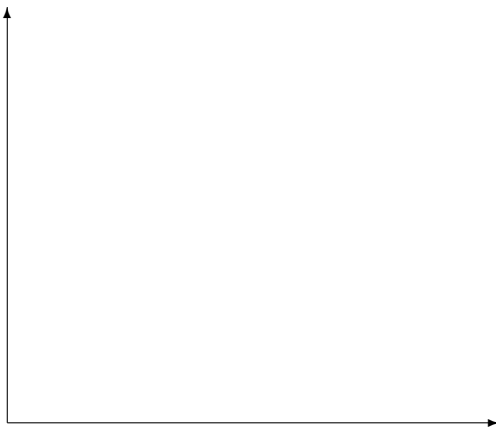
1. The Lerner Index
2. Rent Seeking and Limiting Market Power
3. Monopsony
4. Practice Problems

1 The Lerner Index

As we saw in class, the Lerner Index is a measure of monopoly power given by:

$$L = \frac{P - MC}{P},$$

but what does this really mean? Let's think about it more mathematically and what it implies graphically.

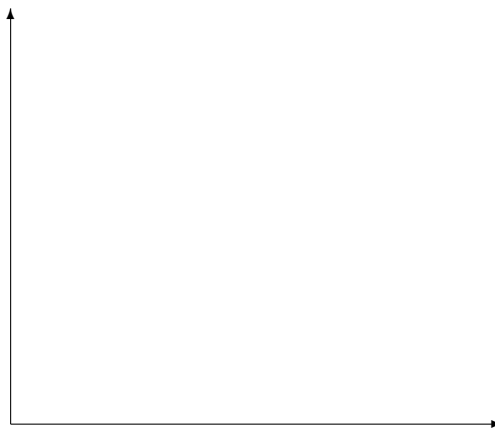


2 Rent Seeking and Limiting Market Power

It is clear that Monopoly power leads to inefficient market outcomes (i.e. overall lower welfare in society), but are the only welfare losses captured by the market in that a monopolist sets a price higher than she could in perfect competition? What are some ways that the government has stepped in to avoid this “social loss” from monopoly power?

3 Monopsony

A monopsony is almost exactly like a monopoly, except now there is a single buyer in the market instead of a single seller. Therefore, the buyer recognizes that the price of the good is a function of how much they want to buy. How does this change our problem?



Problem: (P&R, Chapter 10, Exercise 6)

Suppose that an industry is characterized as follows:

$$\begin{aligned} C &= 100 + 2q^2 && \text{each firm's total cost function} \\ P &= 90 - 2Q && \text{industry demand curve} \end{aligned}$$

- a. Is there *only one firm* in the industry, find the monopoly price, quantity, and level of profit.
- b. Find the price, quantity, and level of profit if the industry is competitive.
- c. Graphically illustrate the demand curve, marginal revenue curve, marginal cost curve, and average cost curve. Identify the difference between the profit level of the monopoly and the profit level of the competitive industry in two different ways. Verify that the two are numerically equivalent.

Problem: (P&R, Chapter 10, Exercise 15)

Dayna's Doorstops, Inc. (DD), is a monopolist in the doorstop industry. Its cost is $C = 100 - 5Q + Q^2$, and demand is $P = 55 - 2Q$.

- a. What price should DD set to maximize profit? What output does the firm produce? How much profit and consumer surplus does DD generate?
- b. What would output be if DD acted like a perfect competitor and set $MC = P$? What profit and consumer surplus would then be generated?
- c. What is the deadweight loss from monopoly power in part (a)?
- d. Suppose the government, concerned about the high price of doorstops, sets a maximum price at \$27. How does this affect price, quantity, consumer surplus, and DD's profit? What is the resulting deadweight loss?
- e. Now suppose the government sets the maximum price at \$23. How does this decision affect price, quantity, consumer surplus, DD's profit, and deadweight loss?
- f. Finally, consider a maximum price of \$12. What will this do to quantity, consumer surplus, profit, and deadweight loss?