

Microeconomics, Module 11, "Monopoly"

*Micro mod 11: Readings for eighth edition*

(The attached PDF file has better formatting.)

Updated: October 17, 2010

{The Landsburg textbook is excellent. We say to read certain sections and to skip others. This does not mean that certain sections are better; it means that the homework assignments and exam problems are based on the sections that you must read for this course. Some of the skipped sections are fascinating, but they are not tested.}

We cover *monopoly* in two modules: Module 11 covers monopoly pricing and Module 12 covers price discrimination. These two modules complete the basic tools for this course; the remaining sections deal with additional topics in microeconomics.

Know the definition of monopoly on the side of page 317; this is the reverse of the definition of a competitive firm. The definition deals with the demand curve facing the firm, not the number of firms in the industry. Monopoly is not good or bad *per se*. Microsoft is a monopoly, either because it provided products at lower cost and higher quality than its peers (good) or because it refused to allow other firms access to its operating systems (bad).

Read section 10.1 on pages 318-323. Know the elasticity formulas on pages 319-321. The formulas on page 319 are the definition of the price elasticity of demand. The formula relating marginal revenue and elasticity on page 321 is tested on the final exam. The exam problem may give the elasticity at a given price and ask for the marginal revenue.

Read the section on welfare on page 323, including Exhibit 10.2, comparing monopoly with competition. Understand the graphical depiction of consumers' surplus and producers' surplus under monopoly. Note how the demand curve for competition is replaced by the marginal revenue curve for monopoly.

Skip the sub-sections on subsidies and price ceilings, and the section on rate of return regulation on pages 324-328. These are theoretical applications of the theory, but no one advocates that the government provide subsidies to monopolists to increase output.

Read section 10.2 on "sources of monopoly power" on pages 328-333. Know the definition of natural monopoly on the side of page 329. From this section, you can skip the sub-section on "the welfare economics of natural monopoly" on page 330 and the sub-section on "the history of photography" on page 331, but read the other sub-sections. That is, know the types and attributes of the sources of monopoly power.

Natural monopoly was a major source of monopoly power until the deregulation of municipal utilities, transportation, and telecommunications in the 1980's; these industries

are more competitive now. Resource monopolies was important before globalization; now it is hard for any firm to control the global supplies of any resource. The closest example we have is the OPEC cartel, though it is not clear how effective OPEC has been in setting oil prices. ALCOA's ownership of U.S. aluminum supplies is the traditional example of a resource monopoly; it is hard to find a similar example in our generation.

*Jacob:* You make it sound as though deregulation of airlines has been good. But the result of deregulation of airlines has been the bankruptcy of many firms; is this good? Doesn't society lose when firms become insolvent?

*Rachel:* The costs of air travel have fallen 50% (in real terms) since deregulation. The major airlines have been unprofitable because they are inefficient. As they go bankrupt and more efficient lower-cost carriers take their place, consumers gain. The same is true for other industries that have deregulated: prices fall, consumers gain, and inefficient firms go bankrupt. This is the benefit of free markets, not a problem with free markets. Economists call this creative destruction: the failure of firms is the result of innovative products for consumers.

Patents are a source of monopoly power, but they are a net social benefit, not a cost. The U.S. is the major innovator for new drugs, because other countries do not provide the same patent protection that the U.S. does.

*Jacob:* If not for patent protection, AIDS drugs would not cost so much.

*Rachel:* One reason we have so few AIDS drugs (and similar medications) is that firms are reluctant to spend the billions of dollars needed for research and development without strong patent protection. If consumer activists rail against drug patents, fewer drugs are developed, and consumers lose. (Suits for medical malpractice and products liability are another reason that development of new drugs has slowed so much in recent years.)

Legal barriers to entry are the major source of monopoly power now. These legal barriers make the salaries of doctors and lawyers the highest professional salaries in the U.S.

*Jacob:* What are the legal barriers to entry for doctors and lawyers?

*Rachel:* Only physicians can prescribe drugs; only lawyers can practice law.

*Jacob:* Do actuaries have any such legal monopolies?

*Rachel:* Only actuaries can sign certain Statements of Actuarial Opinion. But this is legal monopoly on an activity with such low demand that the effect on actuarial salaries is not material. Actuaries would love a legal monopoly, such as a monopoly on the right to set insurance rates, but this is anti-competitive and will probably never happen.

Review question R2 on page 349.

Review Exercise N1 on page 350; it involves taking a derivative.

Review question 10 on page 351. Landsburg uses discrete data; an exam problem may give continuous functions.

Review question 11 on page 351-352. This problem does uses labels for areas. An exam problem may give a linear demand curve, from which you derive the marginal revenue curve. It may give a marginal cost curve and the change in the marginal cost curve from monopoly. You can derive the change in consumers' surplus using the curves.