

- First in-class exam on Monday, Oct 17
- Exam covers Chapters 7 and 9
- Answers to practice exam will be reviewed in discussion sections between Monday Oct 10 - Friday Oct 14
- A second practice exam can be downloaded from course web page and reviewed on your own

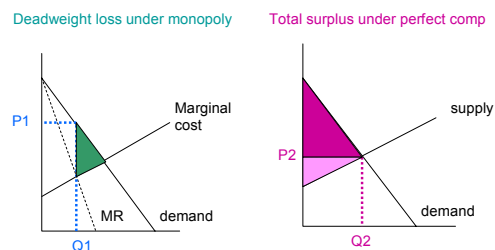
Chapter 9: Monopoly, Oligopoly, and Monopolistic Competition

- A. Total revenue and marginal revenue
- B. Total cost, marginal cost and fixed cost
- C. Profit maximization
- D. Monopoly
- E. Perfect competition
- F. Comparison between perfect competition and monopoly

Under monopoly, price (marginal benefit to consumer of getting more goods) is greater than marginal cost to society of producing one more unit.

Deadweight loss results when these desired goods don't get produced.

Deadweight loss represents goods that should be produced but aren't



Chapter 9: Monopoly, Oligopoly, and Monopolistic Competition

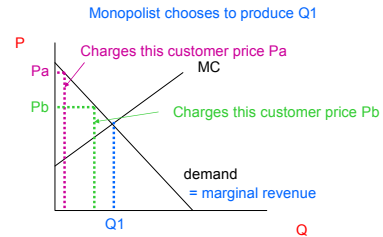
- A. Total revenue and marginal revenue
- B. Total cost, marginal cost and fixed cost
- C. Profit maximization
- D. Monopoly
- E. Perfect competition
- F. Comparison between perfect competition and monopoly
- G. Price discrimination

Our standard model of monopoly assumed that monopolist had to charge all customers the same price

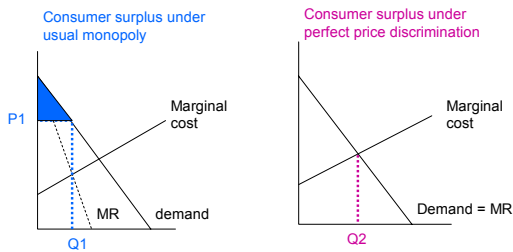
Price discrimination: monopolist has the power to charge different people different prices for the same product

“Perfect price discrimination”: monopolist can charge each customer the maximal amount that customer is willing to pay
 Under perfect price discrimination, marginal revenue would be the price

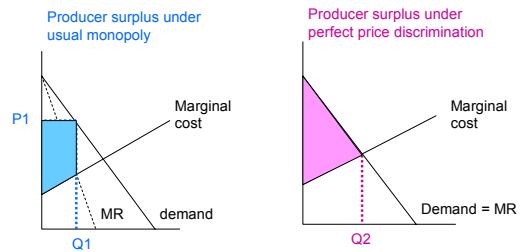
Monopolist that can discriminate perfectly



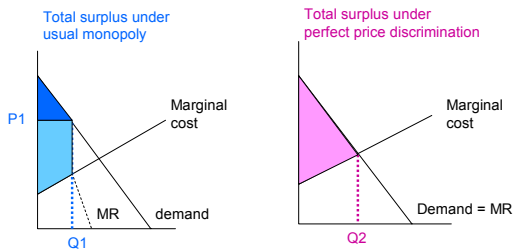
Consumers have zero surplus under perfect price discrimination



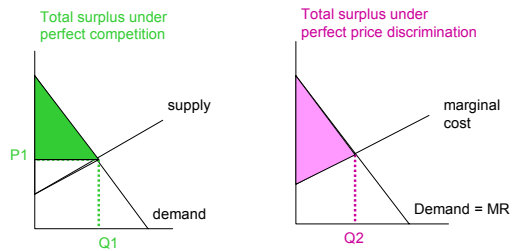
Firm is better off under perfect price discrimination



Value of benefit to firm of price discrimination exceeds loss to consumers



There is no deadweight social loss from perfect price discrimination



Price discrimination is hard to implement:

- (1) It's against the law

Clayton Act of 1914:

"It shall be unlawful for any person engaged in commerce, in the course of such commerce, either directly or indirectly, to discriminate in price between different purchasers of commodities of like grade and quality"



Price discrimination is hard to implement:

- (1) It's against the law
- (2) All customers will try to buy at the lowest price
- (3) Firm doesn't know each customer's maximal price
- (4) Firm must be able to prevent resale

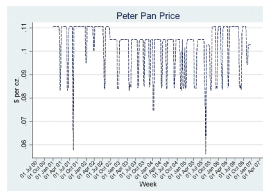
Nevertheless, many firms find ways to implement partial price discrimination:

- (1) Each passenger on this flight may have paid a different price



(2) Sales and promotions

Price per ounce of Peter Pan peanut butter at a supermarket in Chicago



(3) Discounts for seniors, students, children, ...



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G. Price discrimination

H. Natural monopoly

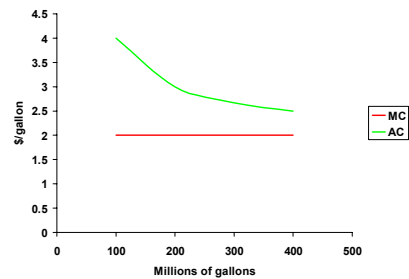
Definition:

An industry in which an increase in the quantity produced leads to a decrease in average cost per unit is called a “natural monopoly”

This property is sometimes referred to as “increasing returns to scale”

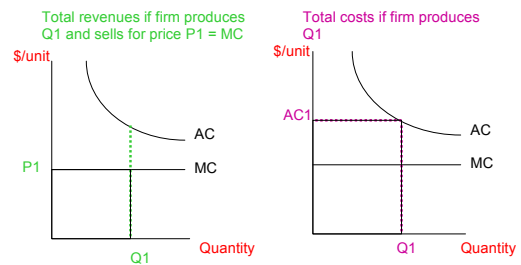
Note: fixed costs together with constant marginal costs would create a natural monopoly

Marginal and average cost

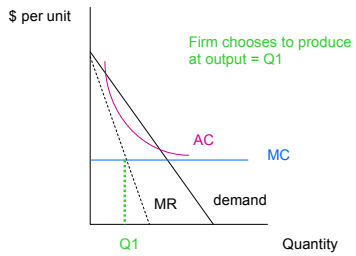


Note that if the perfect competition condition ($P = MC$) held in this industry, the firm would make a loss

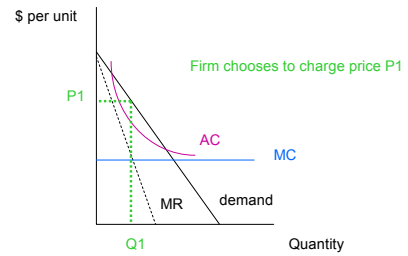
Firm would make a loss if $P = MC$



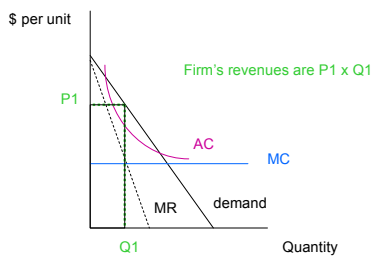
Price and output decisions for natural monopoly



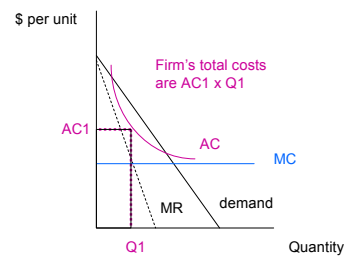
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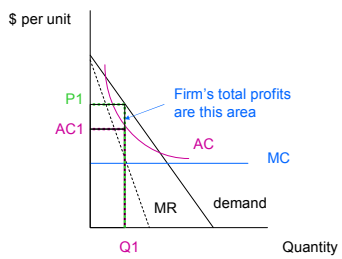
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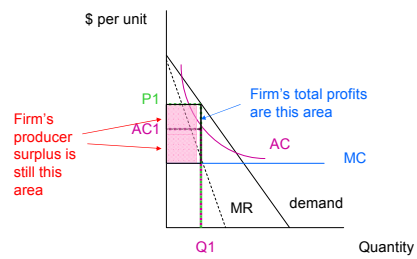
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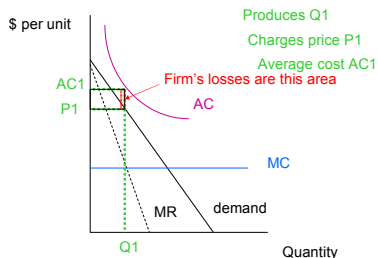
Price and output decisions for natural monopoly



Price and output decisions for natural monopoly



Even a monopolist can still make a loss



Chapter 9: Monopoly, Oligopoly, and Monopolistic Competition

- G. Price discrimination
- H. Natural monopoly
- I. Where does monopoly or oligopoly come from?
 1. Cartels or producer co-operatives

Definition:

A *cartel* is a group of producers who agree to restrict output in order to raise the price

Obstacles to running a cartel:

- (1) They're illegal in the United States

Sherman Antitrust Act (1890):

"Every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations, is declared to be illegal. Every person who shall make any contract or engage in any combination or conspiracy hereby declared to be illegal shall be deemed guilty of a felony, and, on conviction thereof, shall be punished by fine not exceeding \$10,000,000 if a corporation, or, if any other person, \$350,000, or by imprisonment not exceeding three years, or by both said punishments, in the discretion of the court."

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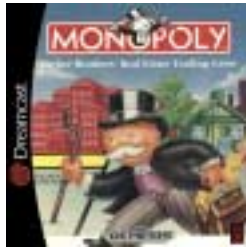
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Amended to: \$100 M and 10 years under H.R. 1086 (signed into law June 2004)

Go To



Jail



Prosecution of cartels is taken seriously.