

PURE MONOPOLY

- I. AN INTRODUCTION TO PURE MONOPOLY
 - a. CHARACTERISTICS:
 - i. SINGLE SELLER: Firm and industry are synonymous.
 - ii. NO CLOSE SUBSTITUTES
 - iii. PRICE MAKER: Controls the total quantity supplied thus has considerable control over price
 1. Confronts typical downward sloping product demand curve
 - iv. BLOCKED ENTRY: certain barriers keep potential competitors from entering the industry
 1. May be economic, technological, legal or some other type
 - b. Examples of pure monopoly are rare; easier in less pure form.
 - i. Government owned or run utilities
 - ii. Near monopolies such as Intel
 - iii. Professional sports teams are somewhat a monopoly
- II. BARRIERS TO ENTRY: the factors that prohibit firms from entering an industry
 - a. Important to pure monopoly, but are also important to other types of market structures
 - b. ECONOMIES OF SCALE: will serve as an entry barrier and will protect monopolist from competition
 - i. Monopolist can sell at much lower price due to lower per-unit cost associated with economies of scale; prevent other firms in
 - ii. Natural monopoly- were the market demand curve cuts the long-run ATC

curve where average total costs are still declining.

- c. **LEGAL BARRIERS TO ENTRY: PATENTS AND LICENSES:** Government creates legal barriers to entry by awarding these
 - i. **PATENTS:** exclusive right of an inventor to use, or allow another to use his or her invention.
 - 1. Monopoly position for the life of the patent
 - 2. Nations have agreed to uniform life of 20 years.
 - 3. R & D is what leads to most patentable inventions
 - ii. **LICENSES:**
 - 1. Example: FCC licenses only a certain amount of radio and TV stations
- d. **OWNERSHIP OR CONTROL OF ESSENTIAL RESOURCES**
 - i. Monopolist can use private property as an obstacle to potential rivals
 - 1. Example: contracts to professional sports players by Major League Baseball
- e. **PRICING AND OTHER STRATEGIC BARRIERS TO ENTRY**
 - i. Confronted with a new entrant, the monopolist can create a barrier to entry by slashing price, stepping up advertising or take other strategic actions

III. MONOPOLY DEMAND

- a. **THREE ASSUMPTIONS:**
 - i. Patents, economies of scale, or resource ownership secures the firm's monopoly.

- ii. No unit of government regulates the firm
 - iii. The firm is a single-price monopolist: charges the same price for all units of output
 - b. Because the pure monopolist IS the industry, their demand curve is the MARKET demand curve; because the market demand is not perfectly elastic, the slope is downward
 - i. The graph on page 185, figure 8.1a IS the monopolist's demand curve AND the market demand curve
 - c. MARGINAL REVENUE (MR) IS LESS THAN PRICE (P)
 - i. With a fixed downward demand curve, the pure monopolist can only increase sales by lowering price
 - 1. Review graph 8.1a for loss and gain based on lowering price
 - 2. The monopolist's MR curve lies below the demand curve, indicating that MR is less than price at every output quantity except the very first unit (explained in the first paragraph of page 186)
 - d. THE MONOPOLIST IS A "PRICE MAKER"
 - i. Firms with downsloping demand curves are price makers
 - ii. This is most evident when one firm controls total output.
- IV. OUTPUT AND PRICE DETERMINATION
 - a. COST DATA: assumption: although a monopolist, the firm hires resources competitively and employs similar technology as competitive firms

- b. MC = MR RULE: Monopolist uses same rationale; if producing is preferable to shutting down, MR = MC rule applies
 - i. Review figure 8.2 where 5 units is where MR (\$82) is slightly greater than MC (\$70)
 - ii. Review the graph and note economic profit at 5 units (Q_m)
 - iii. Monopolist obtains profit of \$28 per unit and a total economic profit of \$140 (5 units x \$28)
 - c. MISCONCEPTIONS CONCERNING MONOPOLY PRICING
 - i. NOT HIGHEST PRICE: Monopolist seeks maximum total profit, not maximum price: prices higher than P_m on graph
 - ii. TOTAL, NOT UNIT, PROFIT
 - 1. On graph 8.s, 4 units yield \$32 per unit, but 5 (maximum total) yields total of \$140 versus 4 units of \$94
 - iii. POSSIBILITY OF LOSSES
 - 1. A monopolist can suffer a loss due to weak demand and relatively high costs (monopoly of typewriters)
 - 2. Monopolist must obtain a normal profit at minimum in the long run or it will go out of business.
- V. ECONOMIC EFFECTS OF MONOPOLY
- a. PRICE, OUTPUT AND EFFICIENCY
 - i. Figure 8.3 on page 189 graphically contrasts the price, output, and efficiency outcomes of a monopoly and purely competitive INDUSTRY

- ii. Curve S for the purely competitive industry is the sum of all the marginal cost curves in the industry; assume 1000
- iii. In the purely competitive industry $P=MC=ATC$
 - 1. Productive efficiency is achieved due to free entry and exit, where they operate when ATC is at a minimum
 - 2. Allocative efficiency occurs where price (marginal benefit to society) = MC
- iv. Based on the graph on figure 8.3, the monopolist finds it profitable to sell a SMALLER output at a HIGHER price than do competitive producers
- v. Monopoly yields NEITHER productive nor allocative efficiency.
- vi. The monopolist's profit-maximizing output results in an underallocation of resources. The monopolist finds it profitable to restrict output and therefore employ fewer resources than are justified from society's standpoint
- vii. P exceeds MC
- viii. P exceeds minimum ATC
- b. INCOME TRANSFER
 - i. Monopolists transfer income from consumers to the stockholders who own the monopoly
 - ii. Due to market power, monopolists charge a higher price than would a purely competitive firm with the same costs.
 - iii. The owners of monopolistic enterprises tend to benefit at the expense of

consumers who “overpay” for the product.

c. COST COMPLICATIONS

- i. Inferior results are the results of entry barriers rooted in monopolies
- ii. FOUR REASONS WHY COSTS MAY BE LARGER OR SMALLER THAN PURELY COMPETITIVE FIRMS

1. ECONOMIES OF SCALE: In certain industries one or two firms might have a lower average total cost than many firms; why? New information technologies

a. SIMULTANEOUS

CONSUMPTION: satisfying a large number of consumers at the same time: example: Dell computers (one at a time) vs. Microsoft (delivery by internet or disk)

b. NETWORK EFFECTS: value to each user, including existing users, increases as the total number of users rise; examples: cell phones, social networking software

- i. Tends to move towards monopoly due to standardization of product everyone feels comfortable using.

2. X-INEFFICIENCY: a firm produces output at higher than the lowest possible cost of producing it.

- a. Principal-agent issue;
managers have goals different
than cost minimization: big
planes, easier work life

3. RENT-SEEKING

EXPENDITURES: activity
designed to transfer income or
wealth to a particular firm or
resource supplier at someone else's
or even society's expense.

- a. Example: government
legislation or exclusive license
agreement
- b. Add nothing to firm's output,
but can increase cost

4. TECHNOLOGICAL ADVANCE

- a. In very long run, firms can
reduce cost through discovery
and implementation of new
technology.
- b. Economist's view is
monopolist will not be
technologically progressive.

- i. No external pressure to
have technological
progression
- ii. Caveat: creative
destruction (typewriters)
- iii. Review DeBeers
example on page 193

VI. PRICE DISCRIMINATION: charging different
prices of the same product to different buyers
when not justified by cost differences

a. CONDITIONS:

- i. MONOPOLY POWER

- ii. MARKET SEGREGATION: must be able to segregate buyers into different and distinct classes.
- iii. NO RESALE: the original purchaser cannot resell the product or service.
 - 1. Means that service industries are candidates for price discrimination
 - 2. Examples: Airlines to business travelers (inelastic demand) vs. vacationers (elastic)
 - a. Discount coupons, movie theatres, golf courses; senior discount fares

b. GRAPHICAL ANALYSIS:

- i. Figure 8.4 on page 196 graphically depicts price discrimination
 - 1. 8.4a for small business software; inelastic demand; high price lower quantity
 - 2. 8.4b for students; elastic demand; lower price and higher quantity.
 - 3. Review Price Discrimination at the Ballpark (page 196)

VII. MONOPOLY AND ANTITRUST POLICY

- a. NOT WIDESPREAD: Monopolies not widespread in U.S.
 - i. Over time, creation of new technologies may work to destroy monopoly positions – CREATIVE DESTRUCTION
- b. ANTITRUST POLICY;
 - i. Government needs to look at a case-by-case basis
 - ii. Government may want to file charges under antitrust laws if monopoly was achieved through anticompetitive actions,

creates significant economic inefficiencies, or appears to be long-lasting:

1. Sherman Act of 1890: 2 provisions
 - a. Standard Oil case of 1911 (page 198); divided into several companies: “Bad Trust”
 - b. 1920 U.S. Steel: RULE OF REASON: size is not an offense; “Good Trust”
 - c. Treble damages; award three times the amount of monetary damages
- iii .Review Microsoft case on page