

Week 8: Monopoly and Competition

- I. Government Monopoly
 - A. Suppose the government gives one firm the sole legal right to produce a product. Assuming profit-maximization, what happens?
 - B. Simple answer: The monopolist raises price *above* marginal cost (equivalent to: produce *less* than competitive quantity)
 - C. Complicated answer: set Marginal Revenue=Marginal Cost
 - D. Result: Monopolist earns a *monopoly profit* due to the illegality of competition. A monopoly can earn long-run economic profits, with $P > AC$ as long as the monopoly privilege persists.
 - E. What's so bad about government monopoly?
 1. Deadweight costs from $P > MC$.
 2. Deadweight costs if AC probably exceeds minimum average cost. This is an issue unless the lowest-cost firm happens to get the privilege.
 - F. Diagrammatic explanation.
 - G. Most relevant U.S. example: Licensing. While the government usually hands out more than one license, a key goal is to raise prices by reducing the number of suppliers.
- II. Variety and Monopoly
 - A. But isn't every seller of a unique product a "monopolist"?
 1. Only I can write genuine Bryan Caplan books.
 2. Isn't virtually every product unique in some ways?
 3. Remember, *location* is a key property of many products. There's only one McDonald's at University Mall.
 - B. In some ways, markets for unique products look a lot like government monopoly.
 1. Firms set $MR = MC$
 - C. But as long as entry is legal, profits still attract entry, so $P = AC$ in the long-run.
 - D. Imagine regulators could standardize products. $P = MC$, but what do consumers lose?
 - E. In the real world, firms offer a combination of cheap, standardized products and more expensive niche products, so consumers can take their pick.
- III. Preconceptions About Monopoly
 - A. When most people today think about "monopoly," they think about firms gaining a dominant position in an unregulated free market
 1. Standard Oil & Rockefeller
 2. Railroads
 3. Amazon?

- B. Obvious question: How did they *get* the monopoly?
 - C. One possibility: They became the monopoly because they had lower costs (or lower costs adjusting for quality) than their competitors.
 - D. If so, what's so bad about "monopoly"?
- IV. Competition with Few Firms
- A. When we draw supply-and-demand diagrams to represent markets, "the market" sets prices, not individual sellers.
 - B. A seller who sets a price higher than the market price would be unable to sell anything.
 - C. This is a good description of some markets, but in others there are only a few firms, and each seems to set its own prices.
 - D. Many people see markets with few firms, each setting their own prices, as being "less competitive" than markets with many firms who accept whatever price the market sets.
 - E. Are markets with few firms necessarily less competitive? No.
 - F. Consider a market with only TWO sellers. The firm that sets the *lower* price gets the whole market; if their prices are equal they split the market 50/50.
 - G. Suppose you are one of the firms. What is your best response to your competitor's offered price? What is his best response to your offered price?
 - H. Conclusion: So long as the two firms are competing, this two-firm market where firms set their prices is *just as competitive* as if there were thousands of firms taking the market price.
 - I. The same holds in a market with just ONE seller, as long as *potential* competitors exist. Yes, a "monopoly" can act entirely competitively.
- V. Cost Curves and Market Structure
- A. A cost curve just shows a firm's AVERAGE COST of producing a given quantity of output.
 - B. One of the most important features of for-profit production is that there is a strong incentive to minimize costs. Why? Because, holding quality fixed, every dollar saved is another dollar of profit.
 - C. Conversely, one of the biggest problems with non-profits (government and private) is that they lack incentives to cut costs (and sometimes even have incentives to increase costs!).
 - D. The AC curve will normally decline initially, reach a minimum (called the "minimum efficient scale"), and then eventually start increasing. Why?
 - E. When AC falls as quantity rises, there are "economies of scale." If AC rises as quantity rises, there are "diseconomies of scale."
 - F. The shape of the AC curve strongly determines the number of firms in an industry: Combine the INDUSTRY demand curve with the AC curve of one firm.

- G. If this demand curve intersects the AC curve in the declining region, you are likely to have just one firm in the market, a “natural monopoly.” But once again, fear of potential competition can lead such “monopolies” to act competitively!
 - 1. The case of Amazon
 - H. If the demand curve intersects the AC curve in the rising or flat region, there is probably "room" in the market for additional firms.
 - I. How many firms can "fit" in a market? It depends on the *size of the market* compared to the size of the *minimum efficient scale*.
- VI. Collusion
- A. Can firms earn long-run monopoly profits *without* government help? There are two main ways this could happen:
 - 1. Collusion
 - 2. Predation
 - B. Instead of actually competing with each other, maybe firms conspire with each other to keep prices high and output low. This is called “collusion,” with two main variants.
 - C. Open collusion: Firms sign a contract or make a gentleman's agreement with each other to raise prices and slash production. This has been illegal in the U.S. for about a century, but can still be seen on the international level (e.g. OPEC).
 - D. Tacit collusion: Without communicating, firms watch each other's pricing and output decisions. If the other firms raise their prices, you show that you're "in" by doing the same. Big Three automakers are a common example.
 - E. In either case: Firms take advantage of repeated interaction. If you cooperate, I'll cooperate too. If you don't cooperate, I won't cooperate either: "tit-for-tat."
- VII. Problems with Collusion
- A. Problem #1: One dissident (the "hold-out") can ruin the collusion of everyone else. The more competitors there are, the harder it is to reach an understanding with *all* producers.
 - B. Problem #2: "Cheating" - due to imperfect information about competitor's pricing and output. Secret discounts, "kickbacks," and quota violation.
 - C. Problem #3: Division of the spoils. Who has to cut back their production, and by how much?
 - D. Problem #4: Quality competition. Even if you keep the agreement to set the same price, you can still win extra customers by improving your quality, service, advertising, etc. This can reduce or eliminate the monopoly profit generated by collusion.
 - E. Problem #5: New entrants. The monopoly profits attract new entrants, eager for their "fair share."
 - 1. If you let a new entrant into the cartel, you just encourage them and reduce everyone's share of the monopoly profits.

2. If you don't let them in, they will greatly expand their production to take advantage of the high price. They become the industry "dissident."
 3. If you buy them out, you encourage people to build new firms just to "blackmail" you.
- F. Due to these problems, collusion probably barely matters in the real world.
1. Even OPEC has done poorly over the long-run.

VIII. Predation

- A. Suppose that an aspiring monopolist makes the following announcement: "I'm going to price at 10 times AC. But, if anyone dares to enter my market, I will give my product away for free until my competition goes bankrupt. Once they leave, prices go back up."
- B. This is usually called predation, or predatory pricing (it's also been illegal for about a century). In international trade, it's called dumping.
- C. The key is that the predator makes pricing decisions conditional upon the behavior of competitors.
1. Drive competitors out of business by selling below cost.
 2. Once all competition is gone, charge monopoly price way above cost.

IX. Problems with Predation

- A. Problem #1: The predator loses as much as the prey, and probably more. If the predator is the market leader, then they must sell a much larger quantity at the same per-unit loss as the competition.
- B. Problem #2: The predator has to increase production to meet demand. With increasing AC, this can get expensive.
- C. Problem #3: The prey can temporarily shut down, and/or build up inventories until the predator gives up.
- D. Problem #4: Large-scale entry. A big firm might bankrupt Mom&Pop stores, but could a big firm credibly threaten to bankrupt another big firm that decided to enter the market?
- E. Problem #5: Banks and financial markets. In a modern economy, even the largest firm is small relative to total liquid capital. If a firm is assured high profits if it only holds out, wouldn't it be a good loan or investment?
- F. Due to these problems, there is little sign that predation matters in the real world at all.
1. The most extreme example: free K-12.

X. Antitrust Laws: Overview

- A. The U.S. has a system of "antitrust" laws supposedly designed to prevent monopolies from arising on the free market. Antitrust laws allow for both government lawsuits and private lawsuits (with triple damages!).

- B. Laws are extremely vague so there is enormous discretion for both judges (how to "interpret the law") and regulators (which cases to pursue).
 - C. Price-fixing: *per se* illegal (*Addyston Pipe & Steel*). Most other practices subject to "rule of reason" (?)
 - D. Monopoly by internal growth (*Alcoa*)
 - E. Horizontal mergers (*Brown Shoe*)
 - F. Vertical mergers (*Ford Motor* spark plug case)
 - G. Simply setting high prices almost never constitutes an antitrust violation.
 - H. Government-created collusion largely immune to prosecution (farm cartels, licensing, taxi medallions, auto import quotas, tariffs, etc.)
 - I. Since collusion and predation rarely work, antitrust laws are basically a tax on efficient, successful firms. Antitrust laws also make it more difficult to take advantage of economies of scale.
 - J. Laws are vague enough that almost any firm is arguably guilty.
 - 1. Charge high price - monopoly
 - 2. Charge low price - predation
 - 3. Charge same price as competitors – collusion
- XI. Why the Standard Story of Monopoly Is Wrong
- A. Most history textbooks tell a story like:
 - 1. Before antitrust laws and other vital regulations, the free market allowed a few big firms to take over most of the economy. They crushed small competitors, strangled production, and charged absurdly high prices.
 - 2. Then government adopted antitrust laws and other regulations, which helped restore and preserve competition.
 - 3. But in recent decades, the market's natural tendency to monopoly has reasserted itself, once again causing grave harm to consumers.
 - B. What's wrong with this standard story?
 - C. It totally ignores government monopolies. Governments routinely deliberately restrict competition with licensing and other regulations.
 - D. Market structure heavily depends on economies of scale. Industries with high minimum efficient scale relative to demand tend to have a small number of large firms; industries with low minimum efficient scale relative to demand tend to have a large number of small firms.
 - E. Consumers *greatly* benefit from allowing firms to respond to these cost differences. This was totally true in the 19th century: Firms got big by dramatically increasing production and slashing prices. And it remains true today: Look at Costco, Walmart, and Amazon.
 - F. Collusion happens without government regulation, but rarely works. Predation on the free market barely happens at all; it's sheer paranoia.

- G. Antitrust laws do almost nothing to “preserve competition.” Instead, they let the government scapegoat successful firms, while drawing attention away from the inefficient monopolies the government itself creates.