

ECONOMICS USA
Program #19
"Monopoly: Who's In Control?"

Learning Objectives

PURPOSE:

To help viewers understand that the degree to which a firm controls the market affects prices and economic efficiency, and that the government tries to prevent or regulate monopolies.

OBJECTIVES:

1. Market power is directly related to the producer's ability to control the total production of a product and therefore keep prices and profits high.
 - a) At one extreme monopolists can control total output and therefore keep prices high – they are the price makers.
 - b) At the other extreme, in perfectly competitive markets, sellers have no control over prices – they are price takers.

2. The concentration of market power depends on entry barriers, e.g.:
 - a) ownership of a resource (e.g., oil) or process (e.g., patents on polaroid film) or transportation or marketing outlets.
 - b) economies of scale (e.g., the large fixed costs necessary to start a telephone company). Some markets, such as those for local utilities, have such large economies of scale, they are “natural monopolies.”
 - c) even if entry barriers are high, some firms may try to compete with monopolies because the level of the monopolist's profits are so high.

3. The more concentrated market power is in a given market the higher the likelihood that it is operating in a way which is economically inefficient for society as a whole. Producers with a high degree of market power are likely to set prices at a level which is higher than the level which would prevail in perfectly competitive markets, and produce less than would be produced in a perfectly competitive market. From society's point of view, this is not economically efficient.

4. The government tries to minimize or control monopolies:
 - a) if the market is not a natural monopoly, a monopoly may be dismantled by antitrust action.
 - b) in the case of natural monopolies, the government will regulate the firm.

KEY ECONOMIC CONCEPTS:

pools, trusts	perfectly competitive market
holding companies	mergers
monopoly profits	regulation
economies of scale	natural monopoly
predatory pricing	entry barriers
monopoly power	

ILLUSTRATIVE EVENTS:

The consequences of monopolistic or non-competitive behavior are examined using the formation of the oil monopolies in the late 19th and early 20th centuries, the “natural monopoly” of AT&T, and Kodak’s domination of the film processing market, as examples.

Annenberg/CPB Project (Logo and Music)

TEASER

DAVID SCHOUMACHER: Oil... The black gold which fuels the American economic machine. One man, one company had a monopoly of the American oil industry. Could anything break it? At a time when the Government was breaking up a monopoly in oil, why did it sanction a monopoly in the telephone industry?

Would anti-trust laws still apply in a new economy whose major product is intellectual property?

Monopoly: Who's In Control? With the help of our Economic Analyst Richard Gill, we'll find out on this edition of Economics USA. I'm David Schoumacher

MUSIC

PART I

DAVID SCHOUMACHER: We would like to think of our economy as one that runs on competition. For instance, we can choose the brand of gasoline we buy. If one station sets its prices too high, we can simply go across the street for a lower price.

If enough drivers pass the high-priced station by, sooner or later it goes out of business. Of course, if in order to attract business a station sets its prices too low and can't cover costs, sooner or later it'll go out of business too. But what happens to prices if one company or one person controls all the gas stations? That was what the country faced in 1890. The company was Standard Oil. The man was John D. Rockefeller.

This was the infant oil industry John D. Rockefeller saw after the Civil War. Drilling equipment was hand and foot operated in those days and available cheap. Anybody could join the oil rush and anybody did. With thousands of small-scale prospectors, drillers, and refiners competing, the supply of oil was plentiful. Prices were low, so were profits.

Rockefeller had been doing well as a Cleveland produce wholesaler, but he thought he could do better in oil.

Ruth Sheldon Knowles came from an Oklahoma oil family and her book, The Greatest Gamblers, told the industry's history.

KNOWLES: "Rockefeller stayed out of the drilling end because he didn't want to lose any money. He was the one who always wanted to make the money. And when he saw that there was such a thing as drilling dry holes, and you could lose money, it was obvious to him in the beginning that there was going to be as much money lost in looking for oil as there would be made by finding it."

SCHOUMACHER: Rockefeller bought the oil that other men drilled--refined it and sold it. By 1869, he had the largest refinery in the country and a year later Standard Oil of Ohio was born. When competition squeezed profit margins, Rockefeller squeezed the competition. Willing competitors were bought. Unwilling competitors found themselves cut-off from railroads, pipelines, and credit.

KNOWLES: "By having the monopoly that he had originally, which was in refining and pipelining, he was able to control the price of oil for the producers. And the independents hated Rockefeller. For example, there was an incident of a farmer who stubbed his toe on a rock and he said, 'Damn the Standard Oil Company!' Everybody blamed the Standard Oil Company for anything that happened."

SCHOUMACHER: Under Rockefeller's guidance, the industry quickly became less crowded. As competition dropped, then disappeared, Rockefeller set prices where Standard could make the highest profits. Standard Oil and other monopolies like U.S. Steel, General Electric, AT&T, and International Harvester became price makers, but their methods left some bruises. Georgetown University Law Professor Thomas L. Krattenmaker:

KRATTENMAKER: "The Standard Oil Trust was formed in 1882 and that led to widespread public concern, and it was that public reaction to the trusts that led to the passage of the Sherman Act in 1890. The Sherman Act made it illegal for any one firm to obtain a monopoly--that is, to get complete control over the production of all the goods in one market. And secondly, the Sherman Act made it illegal for firms to get together and agree on the way in which they would compete, for example, by setting prices or dividing markets or determining which customers they would deal with. The Sherman Act was one of only several choices that could have been made in 1890. Congress could have chosen to nationalize the Trust. It could have chosen to set up a large government department to oversee the behavior of the Trusts. Or even to run the Trusts in cooperation with private enterprise and those are devices that are widely adopted in other countries around the world. Instead, what they did is they harkened back to the American belief in leaving power in private hands but dispersing that power."

SCHOUMACHER: Changing economic and historical trends is like turning around a huge ocean liner: it's not something you do quickly. Congress many have set the course when it passed the Sherman Anti-Trust Act, but it was twenty years and four presidents later before the Supreme Court finally broke up Standard Oil. Even then the Court didn't outlaw all monopolies, just those that were unreasonably anti-competitive. The so-called "rule of reason."

But by the turn of the century mighty Standard was under attack on another flank. The enemy, a ragged band of Texas and Oklahoma wildcatters and

roughnecks. Their ammunition, vast new southwestern oil discoveries. The first battle ground, Spindletop. The year was 1901. Dallas oil man, Robert Goddard:

GODDARD: "My father, Charles Goddard, moved down there from Ohio in 1901 when Spindletop opened up. Well, he was a driller at first, you'd call him tool-pusher, I guess. He was the one that ran the rig, and that knew how to drill for oil, and there were very few people in those days that drilled. The oilmen had to move where the oil was, and usually there was no city there. Tent cities sprung up and little communities with dirt streets and maybe some board sidewalks, but it was a rough place to live in."

SCHOUMACHER: What difference did Spindletop really make?

GODDARD: "The biggest difference was the amount of production that they found they could obtain out of one well. If you can make 100 barrels a day or 1,000 barrels a day, now you're in an economic viable business. You really have a product to sell. Once you had real production, I would say that was the end of any monopoly."

SCHOUMACHER: By 1911, Rockefeller's command of the market was shattered. Competition from Western Oil, from refiners like Gulf and Texaco had broken the Standard monopoly, and the Sherman Act had ended the era of the big trusts. The market and the people had delivered the same message: free enterprise dependent on competition for resources like oil and for consumers' dollars. Monopoly power over production and prices couldn't be tolerated.

Economic Analyst Richard Gill explains why monopolies like Standard almost always result in low production, high prices, and high profits:

(MUSIC PLAYS-- COMMENT & ANALYSIS I)

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RICHARD GILL: The complaints against Standard are based on the central economic critique of monopolies: they keep output too low, and their prices and profits are too high. When Rockefeller went into the oil industry in the 1860's, it was competitive. Thousands of competing firms, each of which was too small to affect the price of its product, oil. They were price-takers, as economists call them, meaning that their price was set in the market by supply and demand.

If the economy-wide demand curve for oil looked like this, and the supply curve looked like this, then price would end up at this level, \$9.50 a barrel and output would be here, say, 2 million barrels. Because of competition, each firm would be able to make only ordinary profits. That is to say, just to cover its costs.

Now the thing about monopolists, like Rockefeller in the late 19th century, is that they happily take control of the whole market. Faced with the power of such a giant firm, like Standard Oil, competitors find entry into the industry virtually impossible.

This means that this single monopolist faces the same economy-wide demand curve as all those thousands of competitive firms have. The only difference is that he doesn't have to take the market price as given: he is the price-setter and not a price-taker. And he will certainly find it in his interest to set this price well above the competitive supply and demand level. He does this, say, by restricting output to here and selling at this price of \$14.00 a barrel, well above the competitive level and well above his costs. This means he will be making not just ordinary or normal profits, but "excess" profits. But why does he stop at \$14.00? Why doesn't he raise the price up to \$15, \$16, perhaps way up here?

One fairly obvious reason is that, after a time, the loss in sales may hurt him even more than the higher price gains him. He is ultimately trying to maximize profits, not to take the consumer for all he's worth. Still there is no doubt that the consumer will be gouged pretty well, that output will be restricted and that profits will be abnormally high. On all three counts, the robber barons of the old

days stand convicted. Though, as we shall see, there is a bit more to the monopoly story than just this.

PART II

(Music: "Hello Central")

DAVID SCHOUMACHER: Perhaps more than any other company, the phone company made the connections that pulled us together. But Ma Bell was a monopoly. On the other hand, is there such a thing as a good monopoly, and if there is, how do you control it, and if the government allows a monopoly, is it committed to it forever? Well, for more than 60 years, the government gave the telephone company one set of answers.

Alexander Graham Bell's original patents expired around the turn of the century. Almost every city had two or three telephone systems, so callers needed two or three phones to be sure of being able to call around town. Competition meant lower prices and lower profits.

Bell fought back. It slashed rates to undercut some competitors and bought others out. Others were cut off from equipment, or from the long distance network which Bell controlled and which only Bell could afford. Wounded independents began asking the government to take Bell to court under anti-trust laws, the way it had Standard Oil.

Then in 1914, AT&T President Theodore Vail sent AT&T vice-president, Nathan C. Kingsbury, to Washington. He set up a deal that would create what Vail called a "NATURAL" monopoly. We asked Picard Wagner of AT&T, what was in the Kingsbury Commitment?

WAGNER: "The key part of it, of course, was the commitment to refrain from buying up any more independent telephone companies, that it would provide

long-distance connections to the independent, which means the non-Bell companies which then existed."

SCHOUMACHER: Mr. Wagner, what do you think prompted Theodore Vail to give up the fight, so to speak, and decide to go into an agreement with the federal government?

WAGNER: "AT&T got the government off its back and, with the Kingsbury commitment, we were able to go ahead and set up the long distance network, and we were assured that the government was not going to come in and take away from us that long distance network.

SCHOUMACHER: Henry Geller, former General Counsel of the Federal Communications Commission, was one of the government's key telephone policy makers.

"Well, I can understand what was in it for the phone companies, but why did the government buy this arrangement?"

GELLER: "The government bought it because what he promised them was universal service. He was going to have reasonable rates. He was going to, as a monopoly he could expand, give this integrated end-to-end service. It was good service. Remember, it's not a cliché. The U.S. had the best telephone service, and still has the best telephone service in the world."

SCHOUMACHER: "When you consider back then with the muckrakers and all of the trust busting that was going on, this almost seemed to run counter to the currents of those times."

GELLER: "Well, but even then, I want to go back to something. Vail may have actually been right. Remember that the only technology then is the wire. How many of them are you going to string? It's very expensive to string it. You're not

going to string two down the street. There are economies of scale and you will end up with one company buying out the other."

SCHOUMACHER: "How did the other side of the Kinsbury Commitment work? How effectively did the government regulate the phone company?"

GELLER: "If you get on to that, the Bell System got so big that regulations of the Bell System became very difficult to do, extremely difficult. In a nutshell, I think the regulation failed at all times."

SCHOUMACHER: This was the AT&T we grew up with, the benevolent Ma Bell holding families together.

ADVERTISEMENT: "And why are you crying?" "Cause Joey said, 'I called just 'cause I love you Momma'."

SCHOUMACHER: But by the 1970's and 80's, not everybody thought that mother knew best.

ADVERTISEMENT: "What on earth are you crying for?" "Have you seen our long-distance bill?"

"If your long-distance bills are too much, call MCI. Sure, reach out and touch someone. Just do it for a whole lot less."

SCHOUMACHER: The Bell monopoly began with technology. Technology maintained it and then technology from the Bell labs finally ended it. During World War II, the Bell labs had developed microwave technology... the ability to send sound 20-30 miles through the air. But then in the 1960's a couple of men named Jack Goeken and Bill McGowan came up with an idea on how to use those microwaves.

GOEKEN; "I came up with this idea to put this microwave from Chicago to St. Louis, not to compete with AT&T but to expand our two-way radio business, find more customers. So, we filed an application with the FCC and within a few weeks AT&T, Illinois Bell, Southwestern Bell, General Telephone and Electronics, and Western Union all filed petitions to deny our applications. So, to get the money to build this thing, in '68 we brought Bill McGowan in to do the financing."

McGOWAN: "When I investigated it I thought that the concept, if it was changed, could make sense; not individual ones, but a nationwide system hooked together... the ability to be able to provide the then existing technology microwave as a competitive service to what had been up to then a monopoly: AT&T, the Bell System, in long distance communication services."

GELLER: "What you had was a revolution in how telecommunications went about its business of switching and of communicating between points. And the revolution, the computer, the microwave, the satellite, were really available to everybody. It wasn't like stringing a wire. And that made possible the competition."

SCHOUMACHER: But if the Bell long distance monopoly is dead, the idea of a natural monopoly lives on. Across the country, when cities and states decide to set up the ground rules for local phone service or electric power, they generally decide that under the circumstances a regulated monopoly is their best buy. Our economic analyst Richard Gill can tell us how he and his colleagues view this term, "NATURAL" monopoly.

(MUSIC PLAYS--COMMENT & ANALYSIS)

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RICHARD GILL: Basically what we're talking about here is a fall in cost as we produce more and more of a product, what economists call Economies of Scale.

In most industries, after a certain level of production is reached, a business firm's costs per unit of output tend to rise. But they may not do so.

Because telephone customers need to be connected to each other, it may be very expensive to have several small-scale telephone networks servicing a region instead of just one larger one. For the same kind of reason, a small power plant may have higher costs per kilowatt-hour in producing electricity for a metropolitan area than a much bigger one would. That is to say that, over the relevant range of production, the costs per unit--the average cost of production--might look like this, sloping downward as one company produces more and more units of telephone service or electric power. When we have falling average costs like this, we have a "natural" monopoly. It doesn't make sense to bring in competitors since then everyone will have to produce not here but at low levels of output, that is, up here, where costs are high.

Incidentally, although natural monopolies, like AT&T in the old days, are often huge firms covering the entire nation, they need not be so. It really depends on the size of the market involved. Thus, you could have falling average costs for local telephone service in a given region or for an electric utility serving a particular city.

Where natural monopolies exist, as in these cases, some form of regulation does seem to be the correct answer, indeed the only way to insure that necessary services are available at reasonable prices and fair rates of return.

PART III

DAVID SCHOUmacher: Chances are if you're using a computer anywhere in the world, it's running on a Microsoft operating system. Microsoft Corporation is the World's largest software company.

BILL GATES: It's in these last five or six years, technology has really swept the world.

DAVID SCHOUMACHER: Every year for the last decade, Microsoft's share of the market for personal computer operating systems has stood above 90 percent. Was Microsoft's unprecedented success due to its superior innovation and marketing prowess? Or was it abusing its monopoly power to stifle competition? Some of Microsoft's business practices raised serious questions with its competitors and with the government.

The United States government decided to file an antitrust lawsuit against the Microsoft Corporation. The Standard Oil case in 1911 defined the rules of competition in the Industrial Age. But could the government apply 20th Century law to the 21st Century economic order?

It all started in 1975 when Bill Gates and his friend Paul Allen formed a partnership.

BILL GATES: ... new software. We can do anything.

DAVID SCHOUMACHER: The software and operating systems created by two young men in a garage and the company they founded played a major role in the information revolution. Microsoft realized early on that the internet had become a major inducement for consumers to buy personal computers. Access to the internet was controlled by a browser, first successfully developed by the Netscape Corporation in 1994. This posed a threat to Microsoft and that a browser had the potential to replace its operating system. Microsoft decided to develop its own browser, Internet Explorer, and incorporate it into the Windows operating system.

JOEL BRINKLEY

Microsoft was pursuing the strategy that was intended to drive Netscape out of business by co-opting the browser business and pulling it into the operating

system so that an independent browser could not possibly remain on sale. And that's in fact what happened.

DAVID SCHOUMACHER; May 18, 1998. The Justice Department brought Microsoft to court.

MAN BEING INTERVIEWED:

Those facts show a monopolist engaged in predatory and anti-competitive behavior that was not simply its intent, ladies and gentlemen, that was its effect. They set out to accomplish what they wanted to do which was to make sure that no one came near eroding their monopoly position on the Windows desktop operating system.

DAVID SCHOUMACHER: Was this the antitrust case that would define the rules of competition in the information age?

DAVID BOIES: Competitors may get hurt. Competitors may fall by the wayside. But as long as that is in the service of good, hard competition for consumers, the antitrust laws not only tolerate that, but celebrate that. It is when companies engage in conduct that is bad for consumers in order to distort the competitive process that the conduct is labeled anti-competitive.

RICK RULE: All the testimony was that Netscape Navigator worked wonderfully on windows. There was no proof that Microsoft did anything to prevent PC manufacturers from installing Netscape Navigator on computers.

DAVID BOIES: Both Microsoft and Standard Oil used its power to require its suppliers—their suppliers—to give special deals to them that they did not give to competitors. Both required some of their suppliers not to do business with their competitors. Both tied one product to another in order to restrict competition.

ROBERT LITTON: The law that was developed 50 or 100 years ago against Time is still valid today. But what makes it so hard in the computer industry to apply

is that we don't know in the case of the new computer software program whether the program is one product or two. And that is the guts of the question.

ROBERT HAHN: I don't necessarily want to install a spell checker into my word processing program. I don't necessarily want to install a calculator into my operating system. So the firm does it for you and that way economizes on your time and better suits your needs.

DAVID SCHOUMACHER; The court battle went on for three years. Microsoft was found to have violated section two of the antitrust law. The court ordered the breakup of Microsoft. But that was overturned on appeal. Finally the U.S. Court of Appeals ordered both parties to settle and in October of 2001 the government and Microsoft reached an agreement.

JOHN ASHCROFT: With the proposed settlement being announced today, the Department of Justice has fully and completely addressed the anti-competitive conduct that was outlined by the Court of Appeals against Microsoft.

RICK RULE: It makes sure that those practices that the government feels that could harm consumers are proscribed, are prohibited, while allowing Microsoft to continue to innovate and design its own products.

DAVID BOIES: One of the things the Microsoft case established is the antitrust laws can be applied to high-tech industries. That means that consumers in a wide variety of industries will be better off because of the Microsoft case. Because now they'll get the benefit of competition.

DAVID SCHOUMACHER:

For more analysis of Monopoly, we hear from Nariman Behravesh:

COMMENT AND ANALYSIS:

NARIMAN BEHRAVESH:

The U.S. government's case against Microsoft in the end will be seen as the opening salvo in a broad-based attempt to curb the software maker's monopolistic practices. AOL Time Warner, the current owner of Netscape and Sun Microsystems have launched separate private suits against Microsoft. European antitrust authorities have also geared up to curtail the anti-competitive behavior of the software giant. However the biggest check on Microsoft's monopolistic behavior could well be the rapid pace of technological change in the computer software and online industries. Already Microsoft has had to transform itself a couple of times to keep pace with the sea changes in the information technology markets. One goal of the government's antitrust case was to prevent Microsoft from suppressing either the development of new technologies or denying access to these new technologies as competitors. This type of a lock on technology is one of the most damaging types of anti-competitive behavior and can perpetuate a monopoly.

Monopolistic practices are alive and may even be thriving in the 21st century. But fortunately so are the market and legal forces that can curb them. As in the past, the trick is to remain vigilant against these practices.

CLOSING STAND-UP:

DAVID SCHOUMACHER: What Robert Frost said about walls is true of monopolies too. Something there is that does not love a monopoly, that wants it down. If a monopoly is required to guarantee the availability of an essential service such as telephones or electricity at an affordable price, then most people will agree to the kinds of regulations needed. But almost a century after Spindletop and Standard Oil, economists and most of the rest of us feel pretty much the same about monopolies as people did back then. One company controlling an industry gives that company too much power to control output

and set prices. Too much power to earn higher profits than competition would allow. This is David Schoumacher.

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Closing Credits