

Chapter 13

Monopoly – a market with a single firm that produces a good or service for which no close substitute exists and that is protected by a barrier that prevents other firms from selling that good or service

HHI = 10,000 FFCR = 100

Monopoly arises for two key reasons:

- No close substitute exists
- Barrier to entry
 - Barrier to entry – a constraint that protects a firm from potential competitors
 - Three types of barrier to entry are
 - Natural
 - Natural monopoly – a market in which economies of scale enable **one firm** to supply the entire market at the lowest possible cost
 - Examples: firms that deliver gas, water, and electricity to our homes
 - Ownership
 - Occurs if one firm owns a significant portion of a key resource
 - Example: De Beers diamonds
 - Legal
 - A legal barrier to entry creates a monopoly
 - Legal monopoly – a market in which competition and entry are restricted by the granting of a public franchise, government license, patent, or copyright
 - Public franchise – an exclusive right granted to a firm to supply a good or service.
 - i.e. U.S. post service
 - government license – controls entry into particular occupations, professions, and industries
 - i.e. medicine, law, dentistry
 - patent – an exclusive right granted to the inventor of a product or service
 - encourage the invention of new products and production methods
 - copyright – an exclusive right granted to the author or composer of a literary, musical, dramatic, or artistic work

There are two monopoly situations that create two pricing strategies:

- single price
 - single-price monopoly – is a firm that must sell each unit of its output for the same price to all its customers
 - i.e. De Beers sells diamonds to everyone at the same price

- price discrimination
 - price discrimination – when a firm sells different units of a good or service for different prices
 - i.e. people with store members may pay a different price than non-members

Price and Marginal Revenue

- marginal revenue is less than the price because when the price is lowered to sell one more unit, two opposing forces affect total revenue:
 - the lower price results in a revenue loss, and the increased quantity sold results in a revenue gain
 - to calculate marginal revenue, one must deduct this amount from the revenue gain

Marginal Revenue and Elasticity

- a single-price monopoly's marginal revenue is related to the elasticity of demand for its good
- demand is elastic if a 1 percent fall in the price brings a greater than 1 percent increase in the quantity demanded
- demand is inelastic if a 1 percent fall in the price brings a less than 1 percent increase in the quantity demanded
- if demand is elastic, a fall in the price brings an increase in total revenue and marginal revenue is positive
- if demand is inelastic, a fall in the price brings a decrease in total revenue and marginal revenue is negative
- if demand is unit elastic, total revenue does not change and marginal revenue is zero
- In Monopoly, demand is always elastic

A monopoly sets its price and output at the levels that maximize economic profit

Economic profit, which equals $TR - TC$, increases at small output levels, reaches a maximum, and then decreases

When MR exceeds MC , profit increases if output increases

When MC exceeds MR , profit increases if output decreases

When MC equals MR , profit is maximized

Maximum Price the market will bear

- A monopoly produces the profit-maximizing quantity and sells that quantity for the highest price it can get
- Price exceeds both marginal revenue and marginal cost
- Monopolies always incur a profit unless the fixed cost increases

Comparing price and output

- Monopoly maximizes profit by producing the quantity at which marginal revenue equals marginal cost
- When a market is overcome by a single firm, the competitive market's supply curve becomes the monopoly's marginal cost curve
- Compared to a perfectly competitive market, a single-price monopoly produces a smaller output and charges a higher price

Efficiency comparison

- At the competitive equilibrium, marginal social benefit equals marginal social cost; total surplus is maximized; firms produce at the lowest possible long-run average cost; and resource use is efficient
- A monopoly produces Q_M and sells its output for P_M
- Monopolies are inefficient because consumer surplus shrinks
 - Consumers lose by having to pay more for the good. This loss to consumers is a gain for monopoly and increases the producer surplus
 - Consumers lose by getting less of the good, and this loss is part of the deadweight loss
 - Although the monopoly gains from a higher price, it loses some producer surplus because it produces a smaller output; that loss is another part of deadweight loss
- A monopoly produces less, increases the cost of production, and raises the price by more than the increased cost of production

Rent seeking

- Economic rent – any surplus – consumer surplus, producer surplus, or economic profit
- Rent seeking – the pursuit of wealth by capturing economic rent
- The pursuit of economic profit by a monopoly is rent seeking
- Rent seekers pursue their goals in two main ways. They might:
 - Buy a monopoly
 - To rent seek by buying a monopoly, a person searches for a monopoly that is for sale at a lower price than the monopoly's economic profit
 - Create a monopoly
 - Rent seeking by creating a monopoly is mainly a political activity; takes the form of lobbying and trying to influence the political process

Rent-seeking equilibrium

- There is no barrier to entry into rent seeking; rent seeking is like perfect competition
- If an economic profit is available, a new rent seeker will try to get some of it
- Rent seeking and rent seeking costs increase to the point at which no economic profit is made
- The ATC shifts upward until it just touches the demand curve; economic profit is 0
- The deadweight loss from monopoly is larger