A **monopoly** is a market:

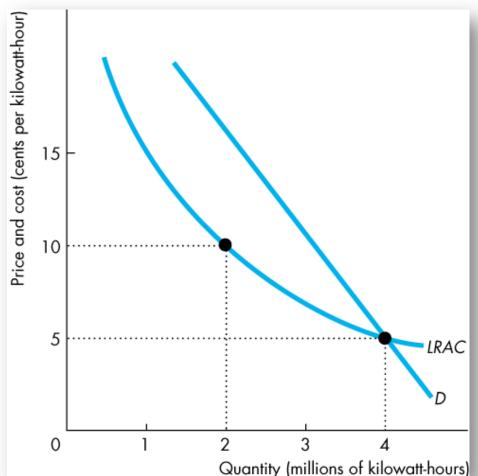
- That produces a good or service for which no close substitute exists
- In which there is one supplier that is protected from competition by a barrier preventing the entry of new firms.

A **natural monopoly** is an industry in which economies of scale enable one firm to supply the entire market at the lowest possible cost.

One firm can produce 4 millions units of output at 5 cents per unit.

Two firms can produce 4 million units—2 units each—at 10 cents per unit.

the demand for the monopoly's output is the market demand.



Ownership Barriers to Entry

An ownership barrier to entry occurs if one firm owns a significant portion of a key resource.

During the last century, De Beers owner 90 percent of the world's diamonds.

A **legal monopoly** is a market in which competition and entry are restricted by the granting of a

 Public franchise (like the Canada Post, a public franchise to deliver first-class mail)

Monopoly Price-Setting Strategies

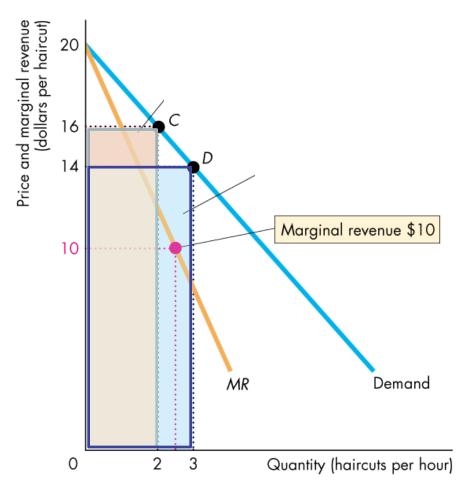
There are two types of monopoly price-setting strategies:

A **single-price monopoly** is a firm that must sell each unit of its output for the same price to all its customers.

Price discrimination is the practice of selling different units of a good or service for different prices. Many firms price discriminate, but not all of them are monopoly firms.

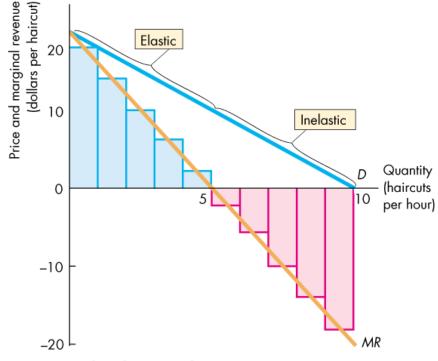
The marginal revenue curve, *MR*, passes through the at \$10.

You can see that *MR* < *P* at each quantity.



If demand is elastic, a fall in price brings an increase in total revenue.

If demand is inelastic, a fall in price brings a decrease in total revenue.



(a) Demand and marginal revenue curves

Output and Price Decision

In Monopoly, Demand Is Always Elastic-A single-price monopoly never produces an output at which demand is inelastic.

Q- The monopoly selects the profit-maximizing quantity in the same manner as a competitive firm, where MR = MC.

P- The monopoly sets its price at the highest level at which it can sell the profit-maximizing quantity.

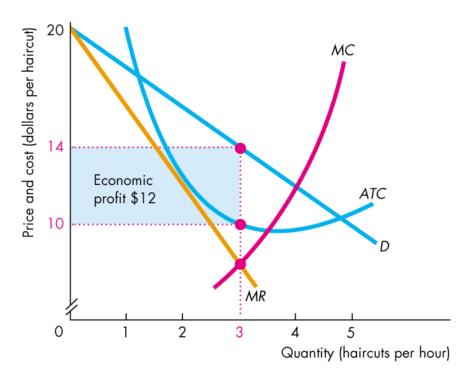


firm produces the output at which MR = MC and sets the price at which it can sell that quantity.

The *ATC* curve tells us the average total cost.

Economic profit is the blue rectangle.

The monopoly might make an economic profit, even in the long run, because the barriers to entry protect the firm from market entry by competitor firms.



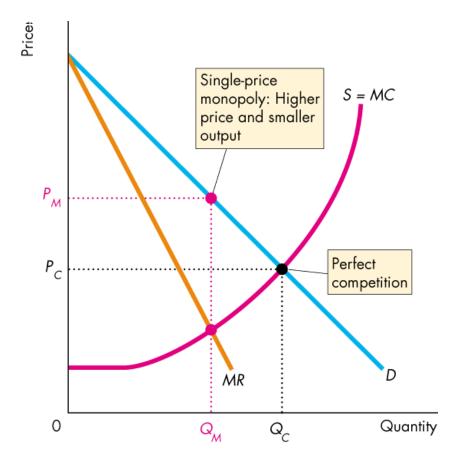


Single-Price Monopoly and Competition Compared

Monopoly

Equilibrium output, Q_M , occurs where marginal revenue equals marginal cost, MR = MC.

Equilibrium price, P_M , occurs on the demand curve at the profit-maximizing quantity.

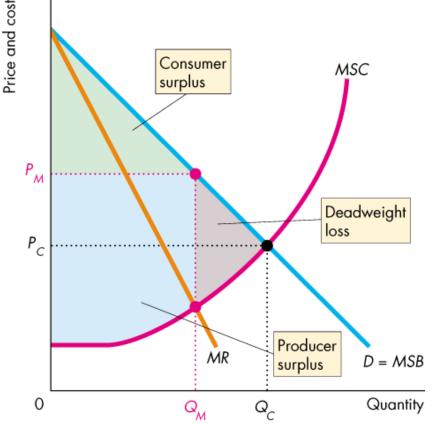


Single-Price Monopoly and Competition Compared

Figure 13.6(b) shows the inefficiency of monopoly.

Because price exceeds marginal social cost, marginal social benefit exceeds marginal social cost,

and a deadweight loss arises.



(b) Monopoly



Price discrimination is the practice of selling different units of a good or service for different prices.

To be able to price discriminate, a monopoly must:

- 1. Identify and separate different buyer types.
- 2. Sell a product that cannot be resold.

Price differences that arise from cost differences are not price discrimination.

DIVIDE AND CONQUER PRICE DISCRIMINATION FOR HIGHER PROFITS



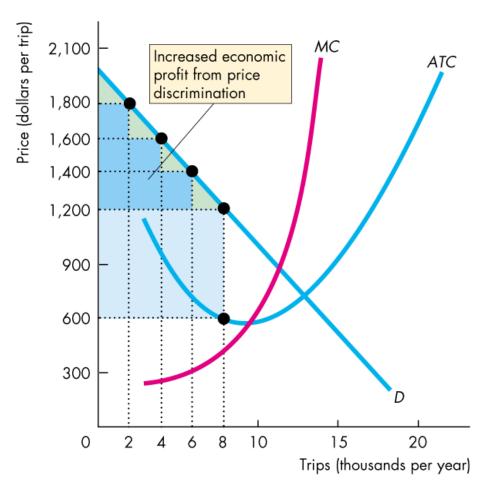
Price discrimination divides customers into groups. Businesses increase profits by lowering price to attract price-sensitive customers (elastic demanders), without lowering price to others (inelastic demanders).





By price discriminating, the firm can increase its profit.

In doing so, it converts consumer surplus into economic profit.

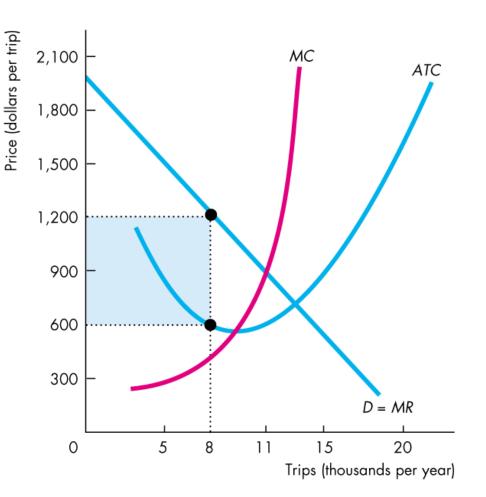




Perfect Price Discrimination

Perfect price discrimination occurs if a firm is able to sell each unit of output for the highest price anyone is willing to pay.

Marginal revenue now equals price and the demand curve is also the marginal revenue curve.



Price Discrimination

With perfect price discrimination:

The profit-maximizing output increases to the quantity at which price equals marginal cost.

Economic profit increases above that made by a single-price monopoly.

Deadweight loss is eliminated.

