

The background of the slide is a complex network of thin, light blue lines connecting numerous small, semi-transparent blue and black dots, creating a web-like or molecular structure. A large, faint, light blue rectangular frame is centered behind the text.

Price Discrimination

by
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What is Price Discrimination?

- Price discrimination exists when the same product is sold at different prices to different buyers. The cost of production is either the same, or it differs but not as much as the difference in the charged prices.
- The product is basically the same, but it may have slight differences (for example, different binding of the same book; different location of seats in a theatre; different seats in an aircraft or a train).

Condition for Price Discrimination

1. The market must be divided into sub-markets with different price elasticities.
2. There must be effective separation of the sub-markets, so that no reselling can take place from a low-price market to a high-price market. This condition shows why price discrimination is easier to apply with commodities like electricity or gas, and services (like services of a doctor, transport, a show), which are 'consumed' by the buyer and cannot be resold.

Types of Price Discrimination

- First degree price discrimination
- Second degree price discrimination
- Third degree price discrimination

First Degree Price Discrimination

- First-degree discrimination, or perfect price discrimination, occurs when a business charges the maximum possible price for each unit consumed. Because prices vary among units, the firm captures all available consumer surplus for itself or the economic surplus.
- It is also referred as “Take it or Leave it Price discrimination.”

Second Degree Price Discrimination

- Second degree price discrimination is where a firm sells a good or service at different prices, based on quantity. For example, this may include offers such as buy two, get one free, or 20 percent off when you buy six.
- It is a common pricing strategy used by warehouse retailers who are able to use economies of scale to make bulk purchases, and then pass these savings onto the consumer.
- Examples: Coupons, Bulk buy, Offers

Third Degree Price Discrimination

- Third degree price discrimination is where a firm charges the consumer a different price based on which consumer group, they are in. For example, cinema's charge different prices to adults, seniors, and youths – whilst taxi drivers often charge a higher rate during peak hours.
- Third degree price discrimination is the most common of all the types of price discrimination. It is commonly used by restaurants, cinemas, taxis, train tickets, and retailers – among others.

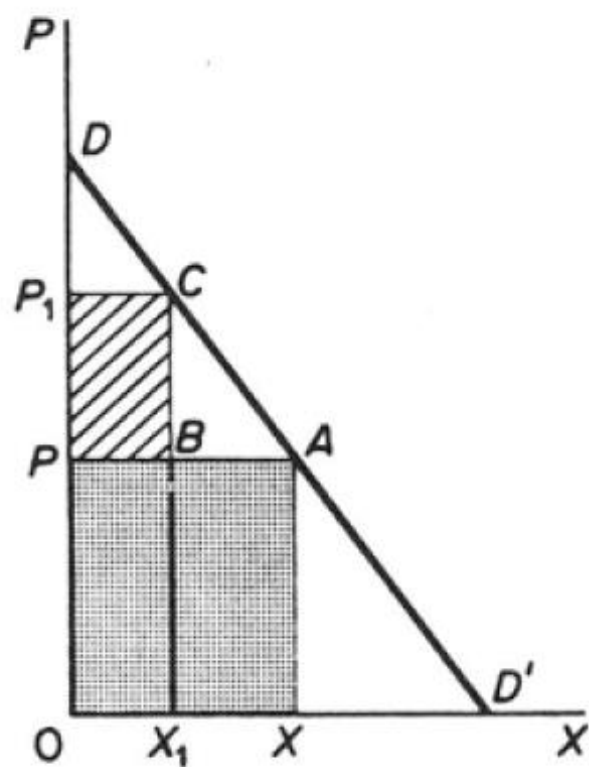


Figure 7.2 Third-degree price discrimination

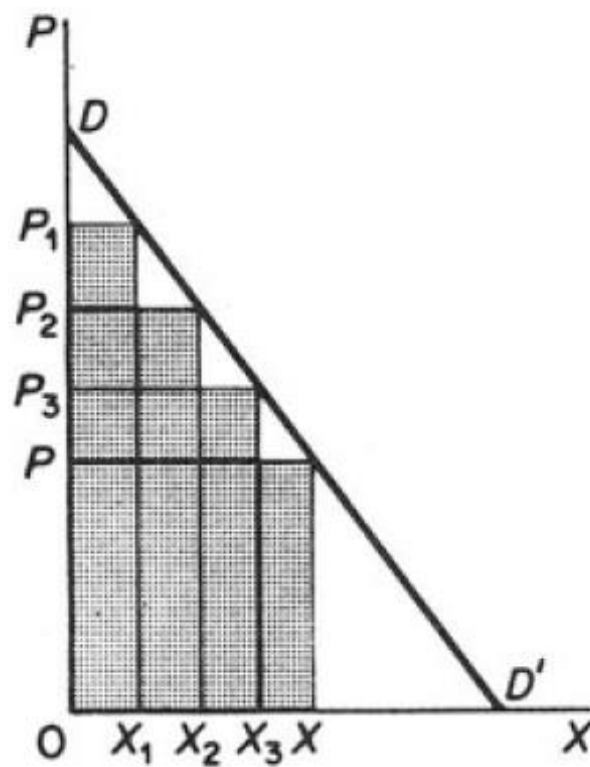


Figure 7.3 Second-degree price discrimination

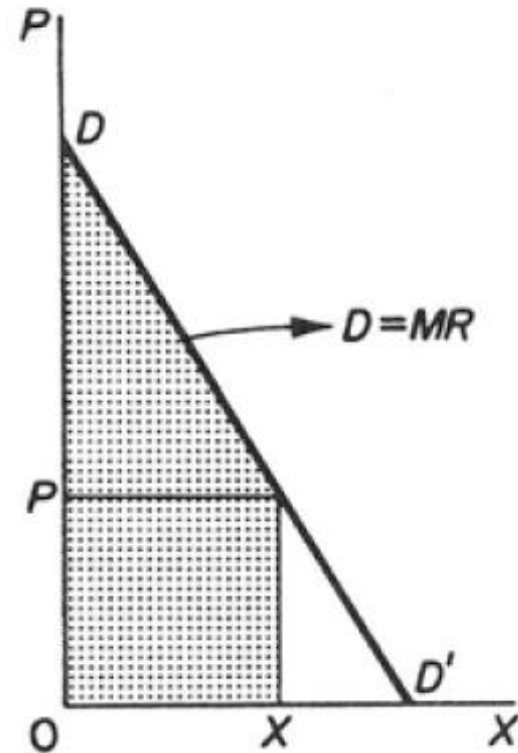


Figure 7.4 First-degree price discrimination

An example

- It is assumed that the monopolist will sell his product in two segregated markets, each of them having a demand curve with different elasticity. In Figure 7.1 the demand curve D_1 has a higher price elasticity than D_2 at any given price. The total-demand curve D is found by the horizontal summation of D_1 and D_2 . The aggregate marginal revenue (MR) is the horizontal summation of the marginal-revenue curves MR_1 and MR_2 . The marginal-cost curve is depicted by the curve MC .
- The price-discriminating monopolist has to decide (a) the total output that he must produce, (b) how much to sell in each market and at what price, so as to maximise his profits.

Equilibrium:

$$MC = MR$$

For each Market:

$$MC = MR_1$$

$$MC = MR_2$$

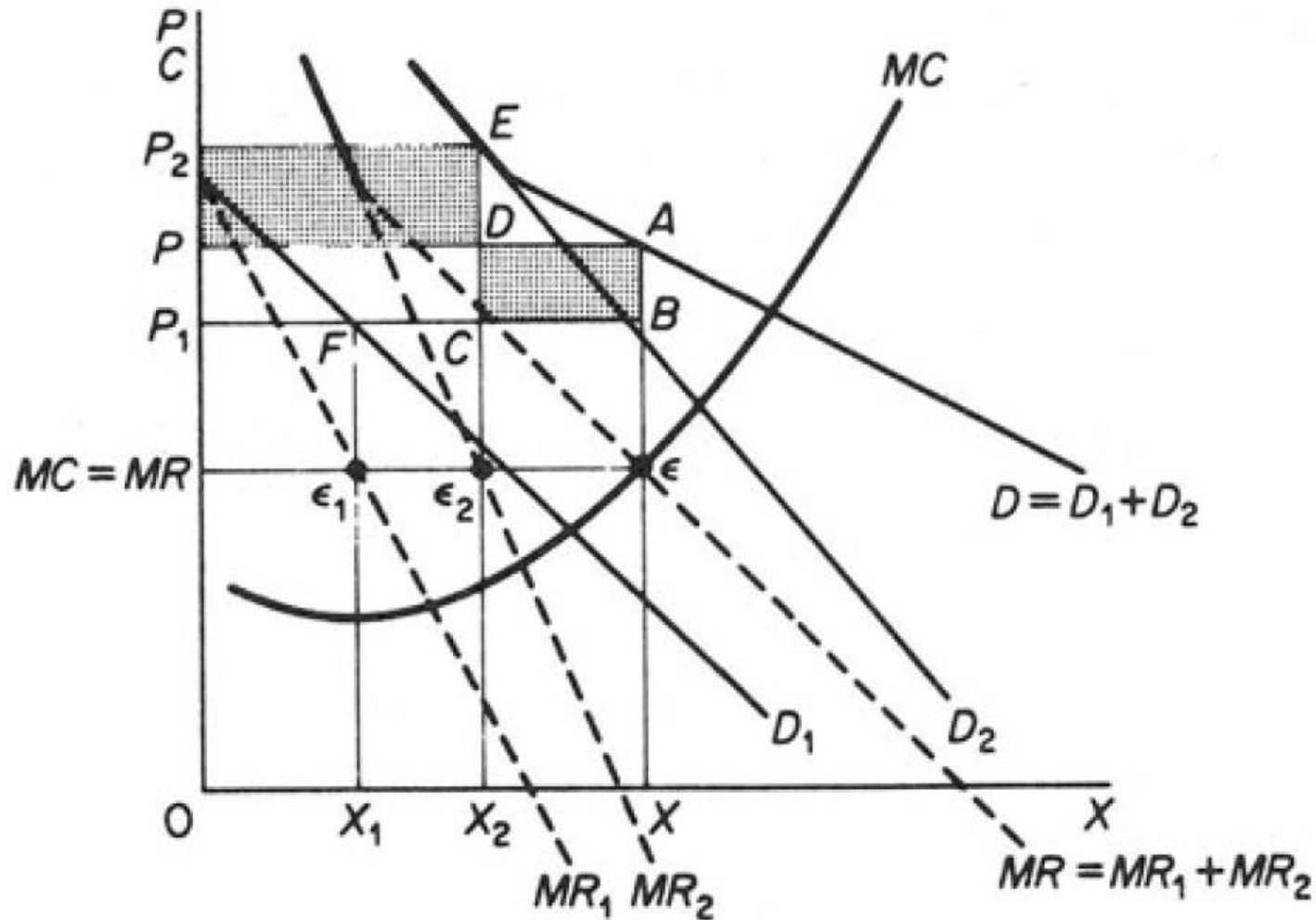


Figure 7.1

Total Revenue (TR)

TR at single price “P” :

$$(OP)(OX) = OXAP$$

TR at Different price:

$$(OP_1)(OX_1) + (OP_2)(OX_2) =$$

$$OP_1FX_1 + OP_2EX_2$$

$$MR = P\left(1 - \frac{1}{e}\right)$$

In the case of price discrimination we have

$$MR_1 = P_1\left(1 - \frac{1}{e_1}\right)$$

$$MR_2 = P_2\left(1 - \frac{1}{e_2}\right)$$

and

$$MR_1 = MR_2$$

Therefore

$$P_1\left(1 - \frac{1}{e_1}\right) = P_2\left(1 - \frac{1}{e_2}\right)$$

or

$$\frac{P_1}{P_2} = \frac{\left(1 - \frac{1}{e_1}\right)}{\left(1 - \frac{1}{e_2}\right)}$$

where e_1 = elasticity of D_1
 e_2 = elasticity of D_2

If $e_1 = e_2$ the ratio of prices is equal to unity:

$$\frac{P_1}{P_2} = 1$$

that is, $P_1 = P_2$. This means that when elasticities are the same price discrimination is not possible. The monopolist will charge a uniform price for his product.

If price elasticities differ *price will be higher in the market whose demand is less elastic*. This is obvious from the equality of the MR 's

$$P_1\left(1 - \frac{1}{e_1}\right) = P_2\left(1 - \frac{1}{e_2}\right)$$

if $|e_1| > |e_2|$, then

$$\left(1 - \frac{1}{e_1}\right) > \left(1 - \frac{1}{e_2}\right)$$

Thus for the equality of MR 's to be fulfilled

$$P_1 < P_2$$

that is, the market with the higher elasticity will have the lower price.