Price: Further pricing methods

Dynamic, competitive and contribution pricing

Further to the pricing methods discussed in Section 4.5.3 (/study/app/y12-business-management-a-hl-may-2024/sid-351-cid-174702/book/pricing-methods-id-39007), businesses can decide to implement the following additional pricing methods:

- dynamic pricing
- competitive pricing
- contribution pricing

Dynamic pricing

Dynamic pricing, also called price discrimination, means to sell the same product to different customers at different prices. Dynamic pricing can be used under the following circumstances:

- **Dynamic price based on a group of customers.** This is implemented by businesses that can predict, using an algorithm or statistics, where or in which demographic segment customers are willing and able to pay more. The company offers different prices to different groups of customers; the prices of goods are changed based on their customer profile. An example of this is the way airlines are able to charge business travellers higher air fares than leisure travellers, based on information entered in the booking.
- **Dynamic price based on time.** This method might involve changing the price of goods and services for one or more days per month. Or it might involve changing the price throughout a

single day. Petrol prices, for example, can increase at times of day when consumers are less likely to shop around for low prices, such as during the morning rush to work. Another example is electricity, which costs more during the day (when demand is higher) than at night (when demand is lower).

Additionally, dynamic pricing can be applied according to the following variables: competitors' prices, the service time, the demand and if the business is launching a new product or service.

One advantage of dynamic pricing is its flexibility, which allows the business to achieve higher profit and sales. However, customers who pay the higher prices may feel as though the business is taking advantage of them.

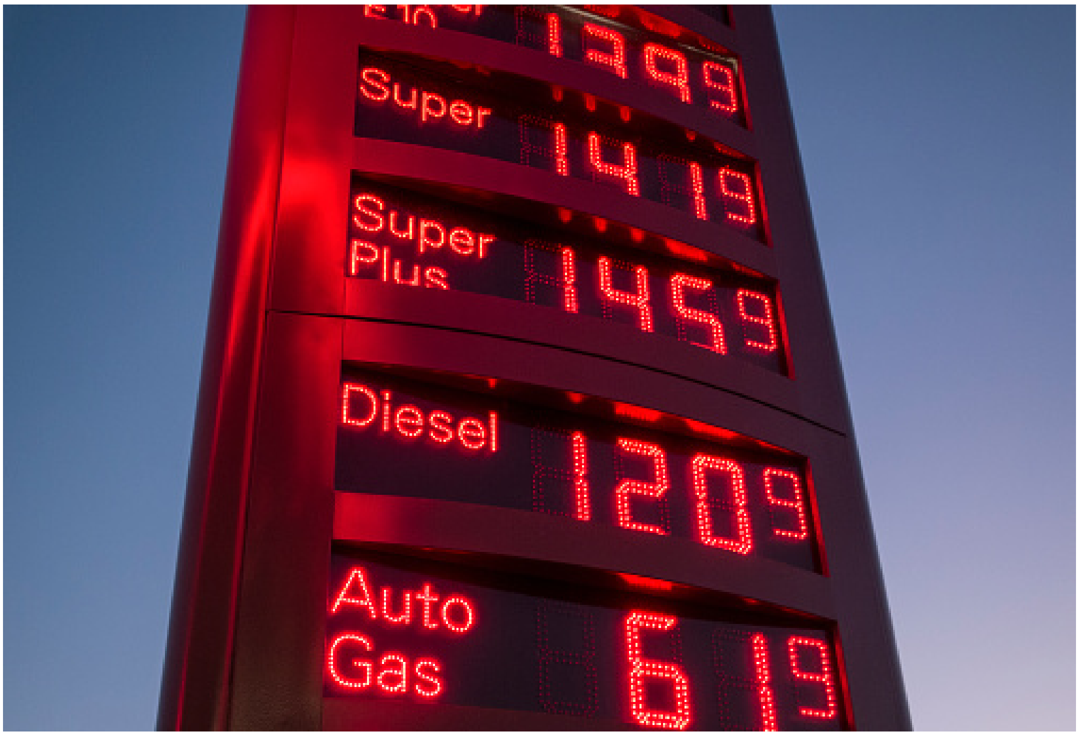

Figure 1. The daily changes in petrol prices is an example of dynamic pricing.

Credit: Thomas Winz, Getty Images

Concept

Ethics

Pricing methods sometimes raise ethical questions. Clearly, predatory pricing (discussed in Section 4.5.3 (/study/app/y12-business-management-a-hl-may-2024/sid-351-cid-174702/book/pricing-methods-id-39007)) is not ethical. It is also usually illegal. However, other forms of pricing can also create ethical problems.

For example, a business may use dynamic pricing to charge two different people a different price for the same product. The higher price is usually charged to the person that is willing and able to pay more. But the systems or algorithms set up to determine willingness and ability to pay can be flawed. Sometimes those who are least able to pay face high prices because of these errors.

Dynamic pricing can also result in discrimination that raises ethical questions. You may ask whether it is generally right for a business to use a person's circumstances to extract as much money from them as possible.

Competitive pricing

Competitive pricing involves a business setting the price at the same level as its competitors. This pricing method is based on the idea that competitors have studied the price of the products and services, so any company selling a similar product charges the same price. You might see this in businesses selling ice cream in a city centre. They may all sell one scoop of ice cream for a very similar price.

Charging the same price, especially for new businesses in the market, can indicate to customers that the quality of the product offered is similar to the quality of products sold at the same price by other businesses.

However, one of the limitations of this method is that businesses using competitive methods might have another cost structure and, as a result, the pricing method can reduce the profit. If prices are similar, then using other methods for differentiating the product will become more important too.

Contribution pricing

In contribution pricing, the direct cost of production for each product is calculated and the price is then set at a higher level. The difference between the direct costs per unit and the price is called the contribution, so-called because this is not profit, but a contribution to the unpaid indirect or fixed costs of production. Each product sold will contribute a proportion to the payment of the company's overall fixed costs.

For instance, suppose a business is selling its product at 10 USD and direct costs are 3 USD per unit. The contribution is 7 USD for each unit. This means that for every single unit that is sold, 7 USD contributes to pay the fixed costs of production. If the total fixed costs of a business are 700 USD, the company would need to sell 100 units to cover the fixed costs.

This pricing method allows the business to set a price for each product, based on the level of contribution, bringing more flexibility when it is compared with the cost-plus pricing method, where the markup is the same for all the products. On the other hand, it could be difficult to classify costs as direct or indirect.

Table 1 summarises the benefits and limitations of the different pricing methods studied in this section:

Table 1. Benefits and limitations of some further pricing methods.

Pricing method	Benefits	Limitations
Dynamic pricing	Higher profit and sales. Adjusting to the competition. Flexibility. Better inventory management.	Customer dissatisfaction leading to loss of sales. Not applicable to all markets.
Competitive pricing	Aligned with rivals.	Pricing is not low enough to attract customers.
Contribution pricing	Allows flexibility in the pricing of individual products. Demand factors can be taken into consideration.	Difficult to classify the costs as direct and indirect.

Price elasticity of demand (PED)

Demand can be defined as the quantity of a good or service that consumers are willing and able to purchase at various prices during a specific time period. The law of demand states that the higher the price of a product, the lower the demand tends to be. This is why pricing methods should be properly analysed when the business is charging the price of the good or the service.

A tool that helps to analyse how the quantity demanded is modified by changes in the price is the price elasticity of demand (PED). The PED can be calculated as it follows:

$$\text{PED} = \frac{\%\text{ change in the quantity demanded of good X}}{\%\text{ change in the price of good X}}$$

Table 2 outlines how the PED can be classified in three different ways, according to its value.

Table 2. PED classifications.

Values of PED	Classification	Explanation
PED > 1	Price elastic demand	A change in price leads to a **proportionately greater** change in the quantity demanded.
0 < PED < 1	Price inelastic demand	A change in price leads to a **proportionately smaller** change in the quantity demanded.
PED = 1	Unitary elastic demand	A change in price leads to a **proportionately equal** change in the quantity demanded.

There are a number of factors that determine the PED for a product. Being aware of these factors can help businesses or governments predict how consumers may react to price changes. The two more important elements are:

- The number and closeness of substitute goods available. This is an important determinant of PED. For example, if there are many

different types of vegetables available, then an increase in the price of tomatoes – for instance – will lead some consumers to change their consumption to other vegetables that have now become relatively cheaper. Thus, the demand for goods with many substitutes will be more responsive to price changes and, therefore, demand will be more elastic. On the other hand, demand for products with few substitutes – such as crude oil – will be relatively inelastic since consumers do not have many options to replace this product with another.
- The time period under consideration also affects the responsiveness of consumers to price changes in goods and services. In the immediate term, consumers do not have any time to react to find alternatives for those goods whose prices have increased. However, when they have more time to look for substitutes, the demand for those products will become more elastic.

The PED gives businesses and stakeholders key information about the sales revenues of the company and how they could change if there is a modification in the price or if another pricing method is used.

Exam tip

You will not be expected to calculate price elasticity of demand (PED) in the exam. However, recognising when demand might be elastic or inelastic can help you evaluate whether a change in price is likely to increase sales revenues or not.