

Prices & Markets

CLASS-VIII ECONOMICS

Markets

- ▶ A **market** is an arrangement that enables buyers and sellers to come into contact and exchange goods & services for a price.
- ▶ The market for a certain good or service would consist of the sum total of all the buyers and sellers in the area or region under consideration.
- ▶ For example, the market for Xbox in Dhaka City would consist of the sum total of all the buyers and sellers of Xbox in Dhaka.
- ▶ Markets can be defined locally, like

the market for Xbox in Dhaka City, or be defined nationally, like the market for Xbox in Bangladesh, and might even be defined globally, like the global market for Xbox.

- ▶ In economics we talk about different types of markets, which, broadly defined, would include - goods market, financial market, labour market, money market, foreign exchange market, etc.
- ▶ The prices of most of the things we buy are determined by *market forces*, i.e., the forces of *demand* and *supply*.

Demand

- ▶ **Demand** refers to the *willingness* and the *ability* of customers to pay a given price to buy a good or service.
- ▶ The amount of a good or service demanded at each price level is called the **quantity demanded**.
- ▶ In general, the quantity demanded falls as price rises, while the quantity demanded rises at lower prices.
- ▶ **Law of demand:** inverse relationship between the price of a good or service and the quantity

demanded.

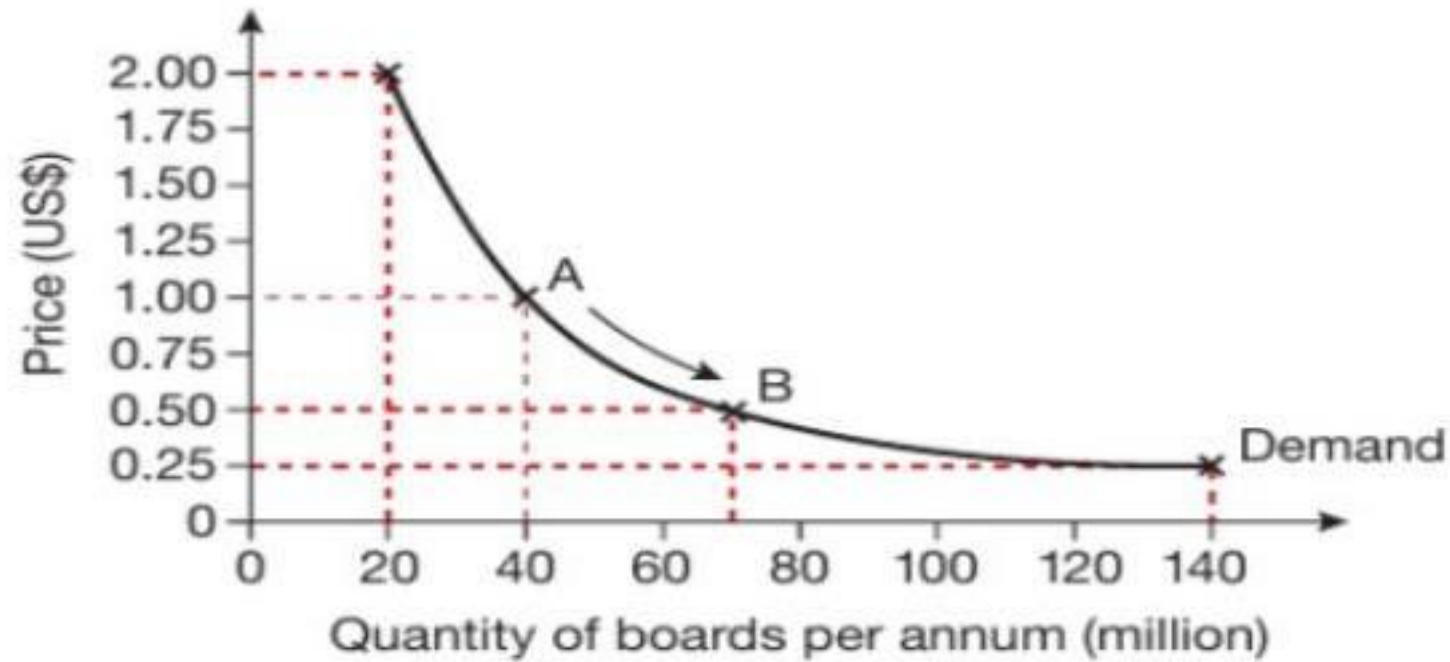
There are two reasons for this inverse relationship between price and demand:

- ▶ As the price of a good or service falls, the customer's real income rises —that is, with the same amount of income, the customer is able to buy more products at lower prices.
- ▶ As the price of a good or service falls, a higher number of customers are able to pay, so they are more likely to buy the product.

Demand Schedule & Demand

Curve

Demand can be expressed graphically. This means that the relationship between price and demand can be shown on a graph. Consider the information in Table 3.2. This is a **demand schedule** and shows the demand for an electronic circuit board manufactured by a South Korean electronics company. The circuit boards are used in television production and sold



▲ Figure 3.1 Demand curve for circuit boards sold by a South Korean company

CASE STUDY: AL'S BIG BURGER

Alan Buschwacker makes a living by selling burgers from a van. He parks his van at busy locations in Seattle, Washington, USA, and sells 'gigaburgers', which have become his trade mark in the area. Most of the time his wife assists him. Details of weekly demand for Al's burgers are shown in Table 3.3.

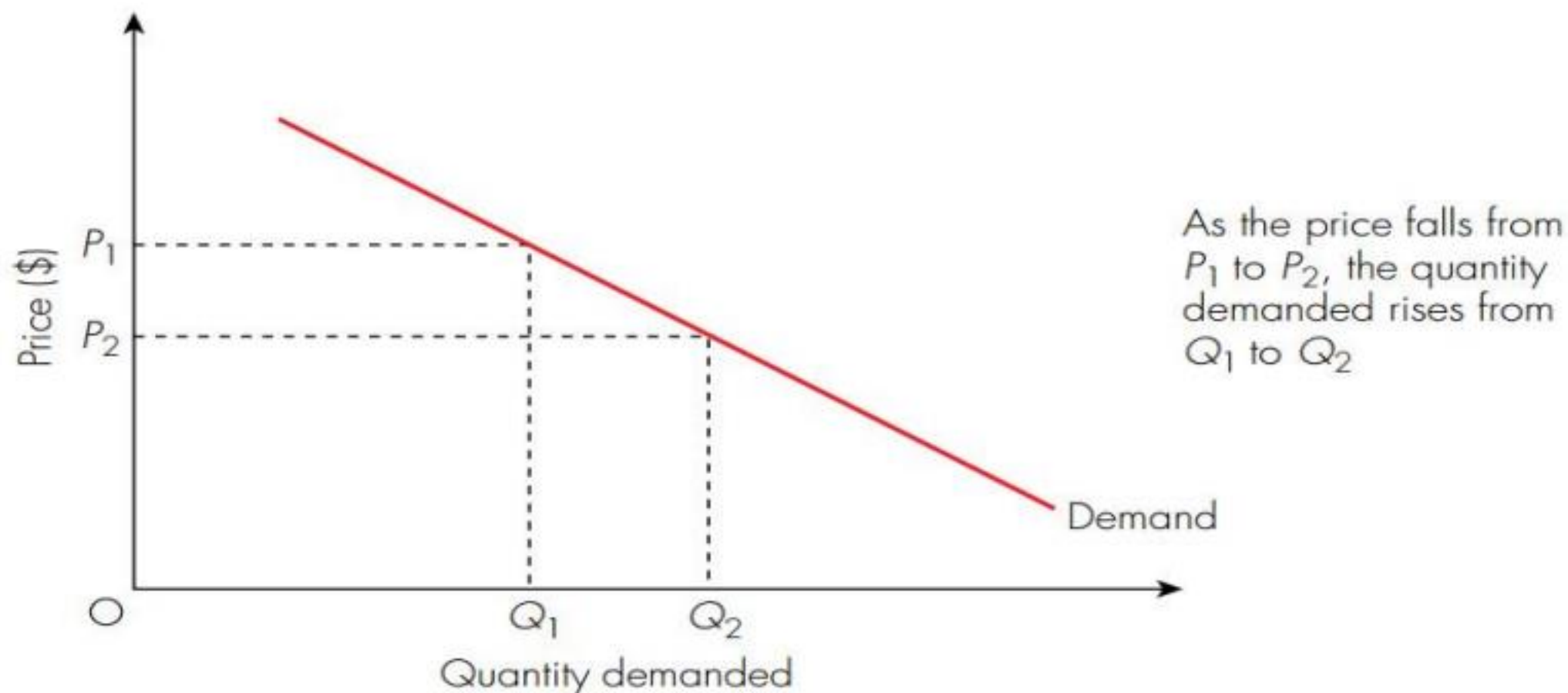
PRICE (US\$)	0.5	1	1.5	2	2.5	3	3.5	4
WEEKLY DEMAND	1600	1400	1200	1000	800	600	400	200

▲ Table 3.3 The demand schedule for Al's Big Burgers

- 2 Draw a demand curve using the information in Table 3.3.
- 3 Al currently charges US\$3 for his giant burgers. How many burgers would he expect to sell at this price?
- 4 If Al wanted to sell 1400 burgers, what price would he have to charge?

Price and demand

Diagrammatically, the demand curve is shown as a downward-sloping curve that indicates the inverse relationship between price and quantity demanded (Figure 7.1).



▲ **Figure 7.1** The demand curve

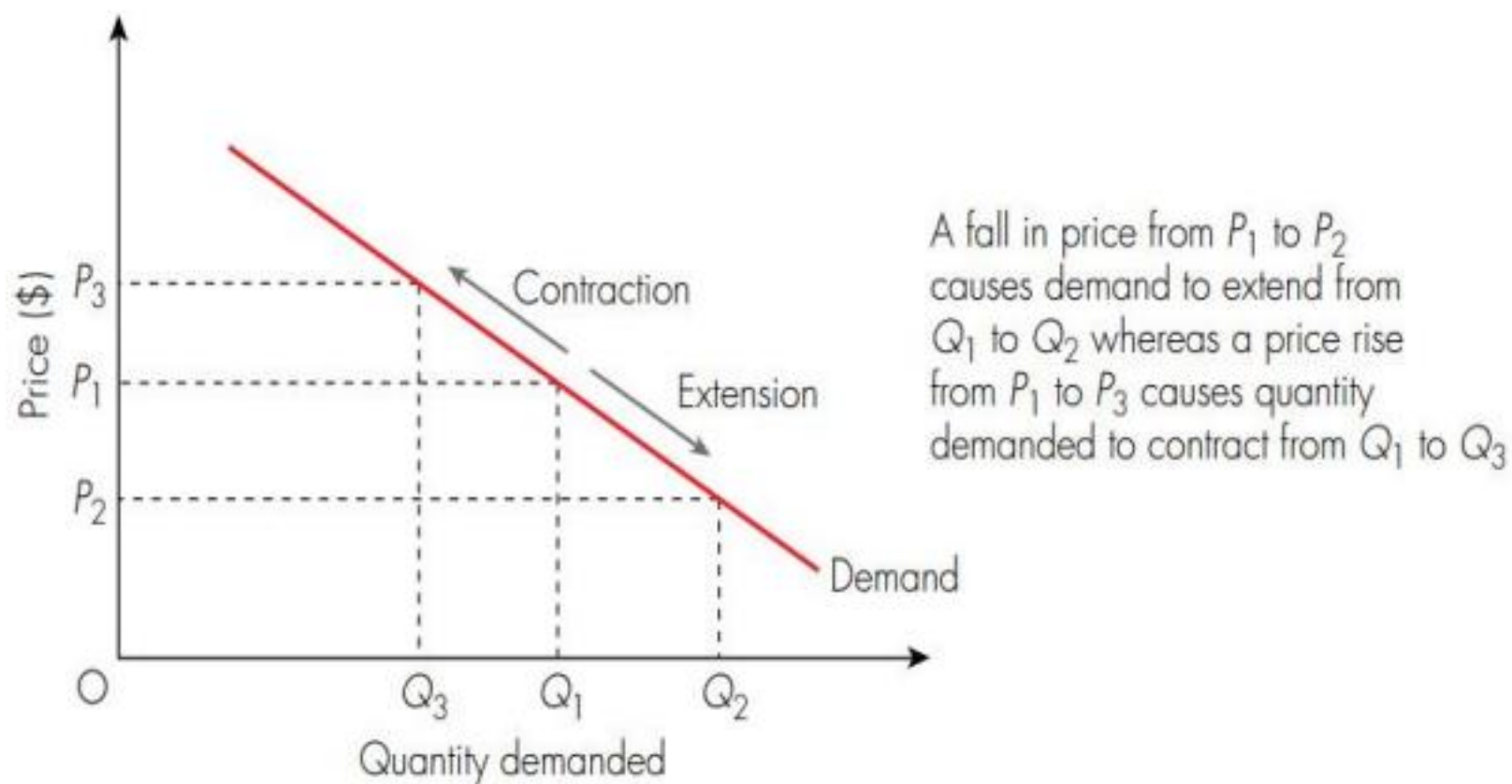
Definitions

A **contraction** in demand means a fall in the quantity demanded for a product following an increase in its price.

An **extension** in demand means an increase in the quantity demanded for a product following a fall in its price.

Movements along a demand curve

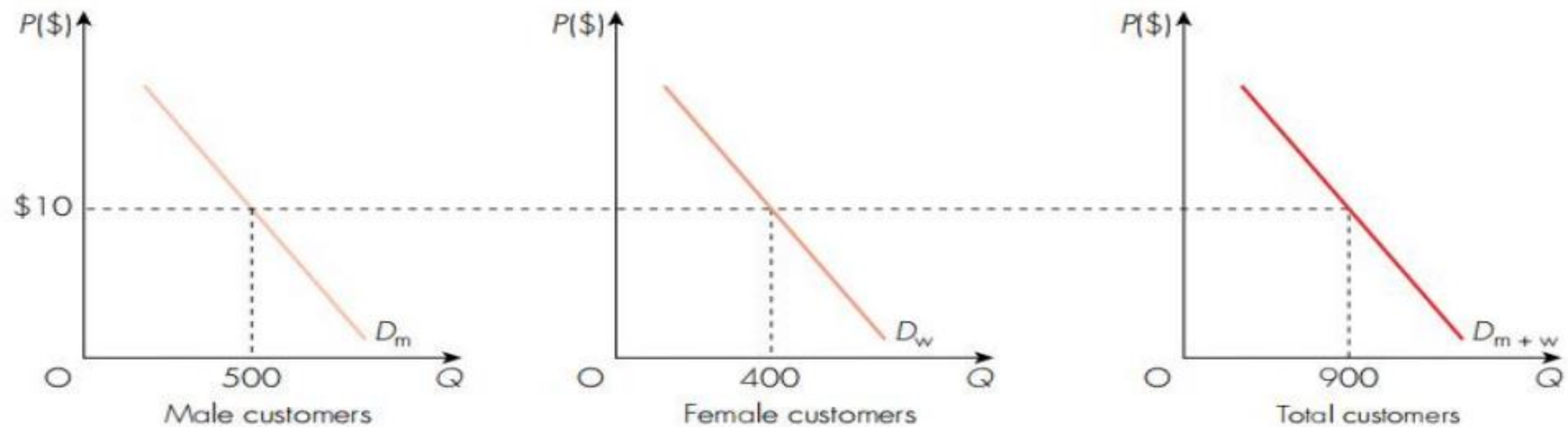
A change in the price of a good or service causes a **movement along** the demand curve. A price rise will cause a **contraction** in demand for the product — that is, the quantity demanded falls. By contrast, a reduction in price will cause an **extension** in the quantity demanded, as shown in Figure 7.2.



▲ **Figure 7.2** Movements along the demand curve

Individual demand and market demand

The **market demand** refers to the aggregation of all individual demand for a product. It is found by adding up all individual demand at each price level (Figure 7.3). For instance, suppose that a cinema charges \$10 for its movie tickets and the demand from male customers totals 500 per week while 400 females purchase tickets at that price per week. The market demand for cinema tickets at \$10 per ticket is therefore 900 tickets per week.



▲ **Figure 7.3** The market demand curve

Supply

- ▶ **Supply** is the *ability* and *willingness* of firms to provide goods and services at given price levels.
- ▶ The amount of a good or service supplied at each price level is called the **quantity supplied**.
- ▶ Firms will have more incentives to supply their products at higher prices –the higher the price, the greater supply tends to be.
- ▶ **Law of supply:** positive relationship between the price of a good or service and the quantity supplied.

There are two reasons for this positive relationship between price and supply: ▶ Existing firms can earn higher profits if they supply more.

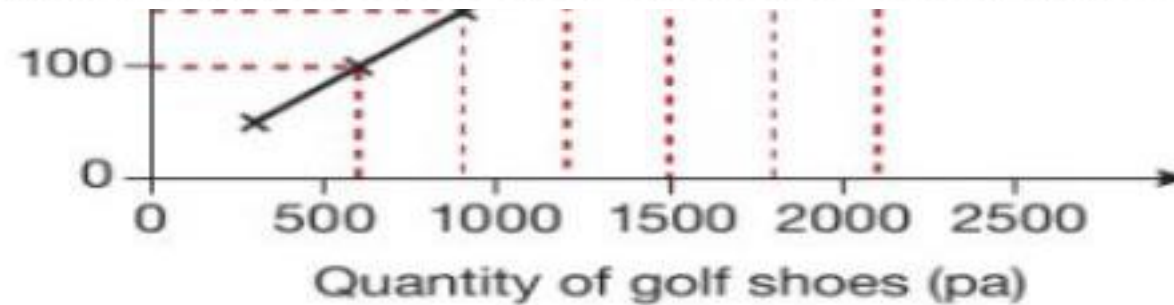
- ▶ New firms are able to join the market if the higher price allows them to cover their production costs.

Supply Schedule & Supply Curve

The supply of any product can be expressed graphically. This means that the relationship between price and the quantity supplied can be shown on a graph. Consider the information in Table 5.2. This is a schedule showing the supply of handmade golf shoes by M. Crammer and Son, a family business in Florida, USA.

PRICE (US\$)	0	50	100	150	200	250	300	350
QUANTITY OF GOLF SHOES (PER ANNUM)	0	300	600	900	1200	1500	1800	2100

▲ Table 5.2 Supply schedule for handmade golf shoes by M. Crammer and Son



▲ Figure 5.1 Supply curve for golf shoes made by M. Crammer and Son

CASE STUDY: FOTHERGILL & SONS

Fothergill & Sons manufacture a range of wooden products – mainly h furniture, such as large tables, benches and beds. One of its profitable lines is park benches, which are often sold to local governments. Many Fothergill's benches are to be found in local council parks. The number park benches that Fothergill & Sons is prepared to offer for sale at different prices in a year is shown in Table 5.3.

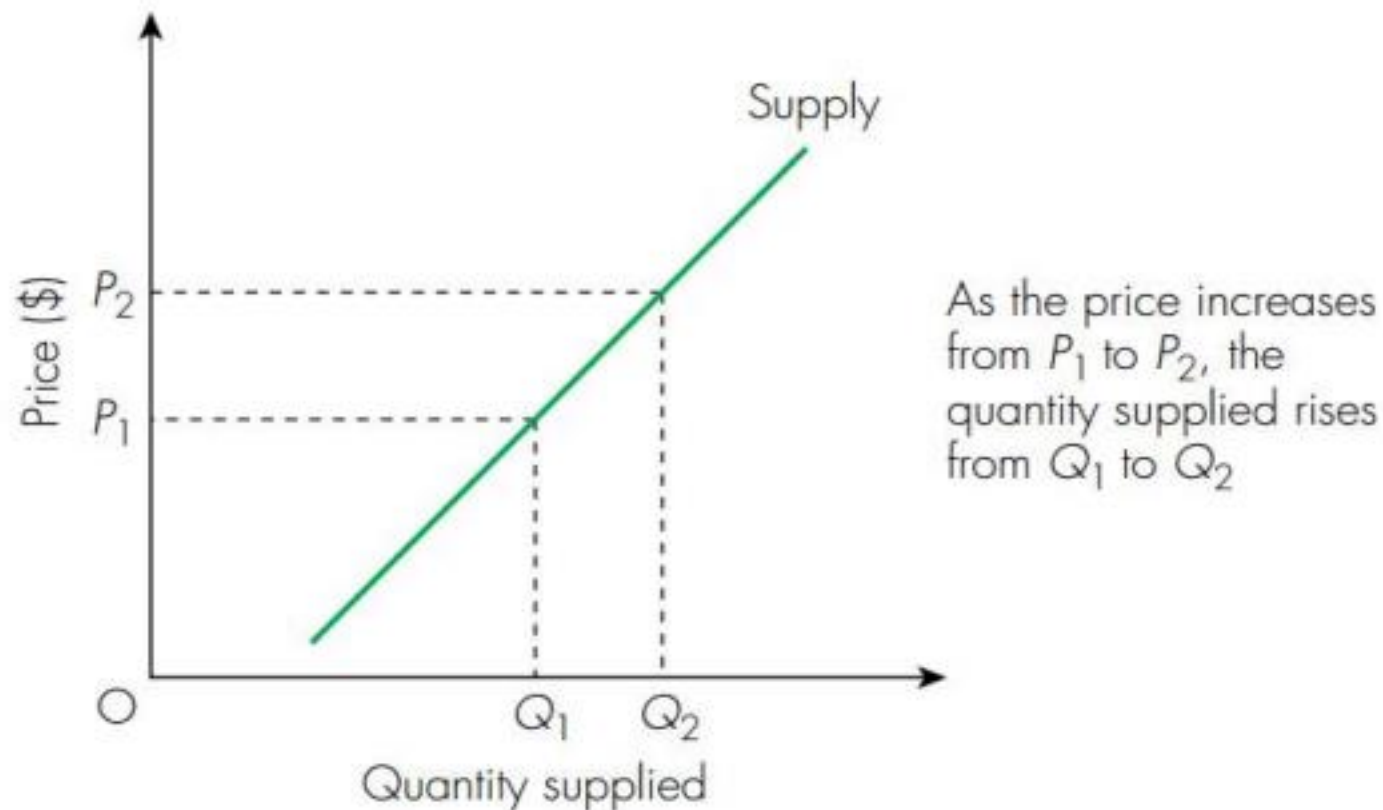
PRICE (£)	20	40	60	80	100	120	140	160
NUMBER OF BENCHES P.A.	0	200	400	600	800	1000	1200	1400

▲ Table 5.3 Supply schedule for park benches made by Fothergill & Sons

- 1 Draw the supply curve for park benches using the data in Table 5.3.
- 2 How many park benches would be supplied if the price was £110?
- 3 If Fothergill & Sons wanted to supply 1300 park benches per annum, how much would it expect to sell them for?
- 4 Why is supply 0 at a price of £20?

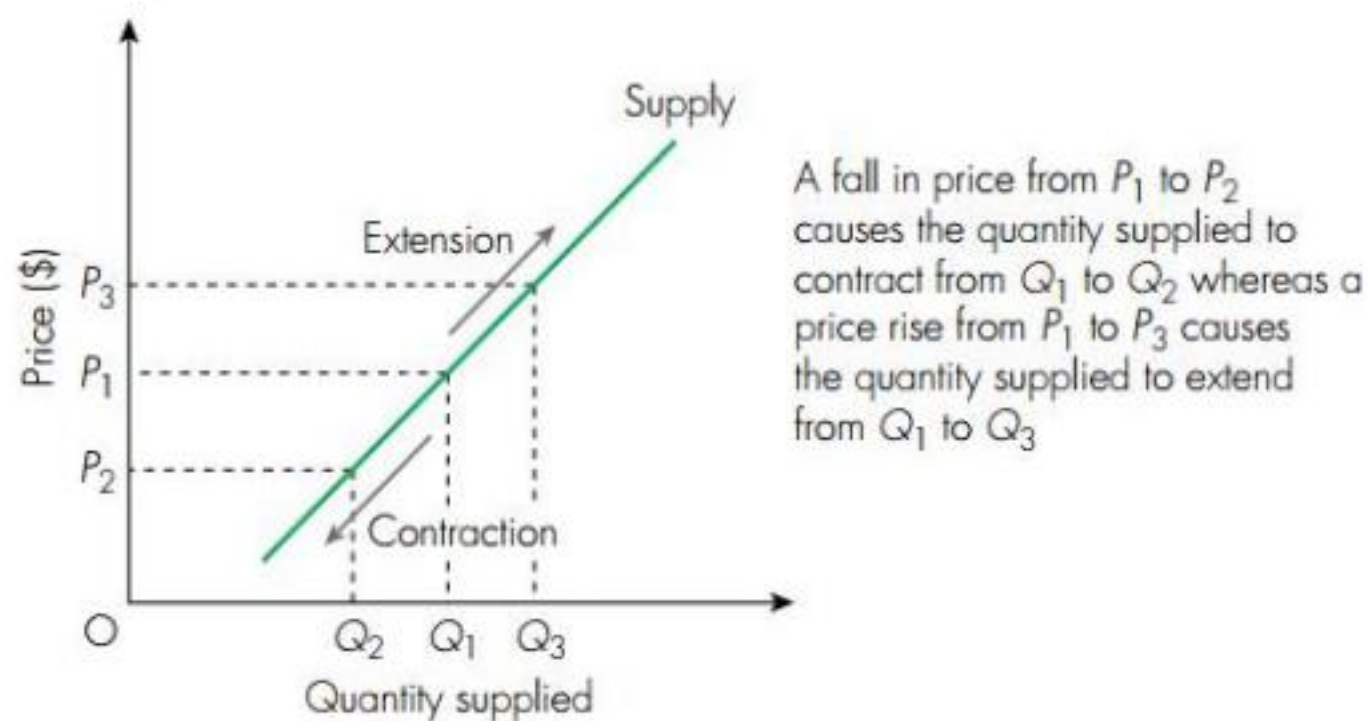
Price and supply

The **law of supply** states that there is a positive relationship between price and the quantity supplied of a product. Hence, a supply curve is drawn as upward sloping from left to right. In Figure 8.1, as the price increases from P_1 to P_2 , the quantity supplied rises from Q_1 to Q_2 .



▲ **Figure 8.1** The supply curve

Apple's iPhone in China led to an extension in supply as the company opened its 40th Apple Store in China in 2017.



▲ **Figure 8.2** Movements along the supply curve

Removing Excess Demand

Removing Excess Supply

Did you know?

In order for firms to get rid of their excess supply they will need to reduce price until it comes down to the equilibrium price. This is a key reason why leftover stocks of Christmas cards are reduced in price after 25 December and why unsold summer clothes go on sale during the autumn.

Review - Equilibrium & Disequilibrium

- ▶ Market equilibrium refers to the position where the demand for a product is equal to the supply of the product.
- ▶ At the equilibrium price, there is neither excess quantity demanded nor excess quantity supplied.
- ▶ Market disequilibrium occurs when the quantity demanded for a product is either higher

or lower than the quantity supplied.

- ▶ Excess demand refers to a situation where the market price is below the equilibrium price. This results in shortages.
- ▶ Excess supply refers to a situation where the market price is above the equilibrium price. This results in surpluses.

Changes in Demand

There is a difference between **change in demand** and **change in quantity demanded**:

- ▶ **Change in demand:** *A shift of a demand curve* caused by changes in non-price determinants (factors) that affect demand.
- ▶ **Change in quantity demanded:** *A movement along a demand curve* caused by

changes in the price of the product.

(Non-price) Determinants of Demand

- **Income** — higher levels of income mean that customers are able and willing to buy more goods and services. Hence, an increase in income raises consumers' purchasing power. For example, the average person in the USA will have a higher level of demand for goods and services than the average person in Colombia. However, a few products have a negative relationship with income. For these products, as income of a consumer rises, demand falls as consumers switch to better quality products.

Definition

a product whose demand increases when income increases and demand decreases when income falls.

Type of good Examples Normal goods: Chocolates, Biryani, etc.

Inferior goods: a product whose demand decreases when income increases Poor quality clothes,
and demand increases when income falls. Living in slums, etc.

(Non-price) Determinants of Demand - contd.

- ▶ **Advertising** — marketing messages are used to inform, remind and persuade customers to buy a firm's products. Companies such as McDonald's, Apple and Samsung spend hundreds of millions of dollars each year on their advertising budgets in an attempt to increase the demand for their products.
- ▶ **Fashions and tastes** — changes in fashions and tastes can affect the demand for all types of goods and services. When products become fashionable (such as smartphones) this leads to an increase in demand for them, whereas those that become unfashionable (such as last season's clothes) have a reduced level of demand.
- ▶ **Weather** — changes in the weather (or season) can affect the demand for ice-cream, beach resort holidays, winter jackets and umbrellas.
- ▶ **Population (size and demographics)** — The size and the demographics of the population (such as age, gender, ethnicity and religious beliefs) can also have an effect on the level of demand for goods and services. For example, adults and children have different buying habits.

(Non-price) Determinants of Demand - contd.

- ▶ **Substitutes** — substitutes are goods or services that can be used instead of each other, such as Coca-Cola or Pepsi and tea or coffee. If the price of one product falls, then it is likely the demand for its substitute will also fall.
- ▶ **Complements** - Complements are products that are jointly demanded, such as tennis balls and tennis racquets or bread and butter. If the price of one product increases, then the demand for its complement is likely to fall.

Substitutes - Graphical Example

Complements - Graphical Example

Increase

in

Demand

Decrease
in
Demand
Changes
in
Demand
- Activity

Review - Demand

- ▶ Demand refers to the *willingness* and the *ability* of customers to pay a given price to buy a good or service.
- ▶ The amount of a good or service demanded at each price level is called the quantity demanded.

- ▶ The law of demand states there is an inverse relationship between the price of a good or service and the quantity demanded.
- ▶ The determinants of demand are: Income; Advertising; Tastes & fashions; Weather; Population size and demographics; Price and availability of substitutes & complements.
- ▶ The demand curve is drawn as downward sloping from left to right, showing the inverse relationship between price and quantity demanded.
- ▶ A change in the price of a good or service causes a movement along the demand curve.
- ▶ A price rise causes a contraction in demand whereas a reduction in price causes an extension in demand for the product.
- ▶ The market demand refers to the sum of all individual demand for a product. ▶ A change in other (non-price) factors affecting demand will cause a shift in demand.

Homework

Changes in Supply

There is a difference between **change in supply** and **change in quantity supplied**:

- **Change in supply:** *A shift of a supply curve* caused by changes in non-price determinants (factors) that affect supply, such as taxes and adverse weather.

- **Change in quantity supplied:** *A movement along a supply curve caused only by changes in prices.*

(Non-price) Determinants of supply

- **Production costs** — if the cost of raw materials and other factors of production falls, then the supply curve will shift to the right, *ceteris paribus*. Hence, there is an increase in supply at each price level. A rise in production costs will reduce supply at each price.
- **Innovations** — technological advances such as automation and wireless internet technologies mean that there can be greater levels of output at every price level. Hence, innovations will tend to shift the supply curve to the right.
- **Taxes** — taxes imposed on the supplier of a product add to the costs of production. Therefore, the imposition of taxes on a product reduces its supply, shifting the supply curve to the left.
- **Subsidies** — subsidies are a type of financial assistance from the government to help encourage output by reducing the costs of production for firms. Subsidies are usually given to reduce the costs of supplying goods and services that are beneficial to society as a whole, such as education, training and healthcare.

(Non-price) Determinants of supply - contd.

- ▶ **Weather** — the supply of certain goods & services can depend on the weather: for example, favorable weather conditions will shift the supply of agricultural output to the right. Some service providers, such as airline carriers, may also limit or close their operations during adverse weather conditions, thereby shifting the supply curve to the left.
- ▶ **Jointly supplied goods:** If one goods' supply increase other's supply will also increase. E.g. If supply of cattle increases, supply of cattle hide (leather) will also increase.
- ▶ **Disasters and wars:** During *World War I*, the supply of food significantly decreased in Germany but the supply of arms and ammunitions was drastically increased.
- ▶ **Discoveries and depletion of commodities:** Supply of mineral resources are greatly influenced by new discovery of mineral deposits or depletion of mines.
- ▶ **Prohibition and sanction:** Banning any commodity by the government or imposing sanction (trade restrictions) on any country will decrease supply of such commodity in that country but may increase its supply in black market.

Increase
&

Decrease in Supply
Practice Work

Review - Supply

- ▶ Supply refers to the ability and willingness of firms to provide goods & services at given price levels.
- ▶ The determinants of supply are: Production costs, Innovations, Taxes, Subsidies, Weather, Sanctions etc.

- ▶ The law of supply says there is a positive relationship between price and the quantity supplied of a product.
- ▶ A movement along a supply curve is caused by a change in price. ▶ A contraction in supply means a lower quantity supplied due to a fall in price.
- ▶ An extension in supply means a higher quantity supplied due to an increase in price.
- ▶ The market supply curve is the sum of all supply at each price level.
- ▶ A change in non-price factors affecting the supply of a good or service will cause a shift in the supply curve.

Changes in Equilibrium

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Decrease
in Supply

Changes in Equilibrium

-

Increase
in Supply

Changes in Equilibrium

-

Increase
in Demand

Changes in Equilibrium

-

Decrease
in Demand

Changes in Equilibrium- Activity

Change	Equilibrium Shift	Activity of Fe^{3+}	Activity of SCN^{-}	Activity of FeSCN^{2+}
1. Addition of Fe^{3+}	Right	Increases	Decreases	Increases
2. Addition of SCN^{-}	Right	Decreases	Increases	Increases
3. Addition of FeSCN^{2+}	Left	Increases	Increases	Increases
4. Addition of H_2O	Left	Increases	Increases	Decreases
5. Addition of H^{+}	Left	Increases	Increases	Decreases
6. Addition of OH^{-}	Left	Increases	Increases	Decreases
7. Addition of Cl^{-}	Left	Increases	Increases	Decreases
8. Addition of F^{-}	Left	Increases	Increases	Decreases
9. Addition of CN^{-}	Left	Increases	Increases	Decreases
10. Addition of S^{2-}	Left	Increases	Increases	Decreases
11. Addition of CO_3^{2-}	Left	Increases	Increases	Decreases
12. Addition of HCO_3^{-}	Left	Increases	Increases	Decreases
13. Addition of H_2CO_3	Left	Increases	Increases	Decreases
14. Addition of H_2O (dilution)	Left	Increases	Increases	Decreases
15. Addition of H^{+} (acid)	Left	Increases	Increases	Decreases
16. Addition of OH^{-} (base)	Left	Increases	Increases	Decreases
17. Addition of Cl^{-} (salt)	Left	Increases	Increases	Decreases
18. Addition of F^{-} (salt)	Left	Increases	Increases	Decreases
19. Addition of CN^{-} (salt)	Left	Increases	Increases	Decreases
20. Addition of S^{2-} (salt)	Left	Increases	Increases	Decreases
21. Addition of CO_3^{2-} (salt)	Left	Increases	Increases	Decreases
22. Addition of HCO_3^{-} (salt)	Left	Increases	Increases	Decreases
23. Addition of H_2CO_3 (salt)	Left	Increases	Increases	Decreases

Review - Changes in Equilibrium

- ▶ Changes in non-price factors that affect demand or supply will cause a change in the equilibrium price and quantity.
- ▶ Price changes can occur due to shifts in supply, such as changes in costs of production.
 - ▶ Lower supply causes equilibrium quantity to fall and equilibrium price to rise.

- ▶ Higher supply causes equilibrium quantity to rise, thus causing equilibrium price to fall.
- ▶ Price changes can also occur due to shifts in demand, such as changes in incomes. ▶ Lower demand causes equilibrium quantity to fall and the price to fall. ▶ By contrast, higher demand causes both equilibrium price and quantity to rise.

THE END -

ALL THE BEST!