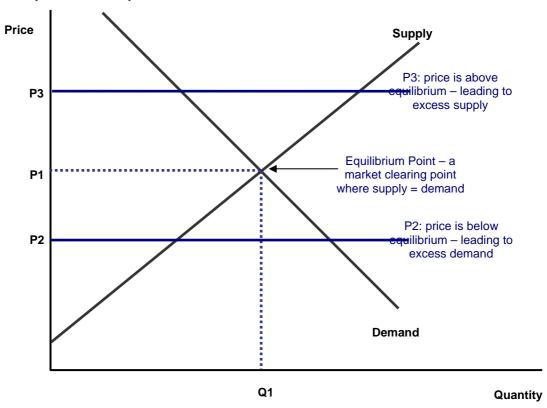
## **6 EQUILIBRIUM MARKET PRICE**

### 6.1 Concept of Market Equilibrium



**Equilibrium** means a state of **equality** between demand and supply. Without a shift in demand and/or supply there will be no change in market price. In the diagram above, the quantity demanded and supplied at price P1 are equal. At any price above P1, supply exceeds demand and at a price below P1, demand exceeds supply. In other words, prices where demand and supply are out of balance are termed points of **disequilibrium**.

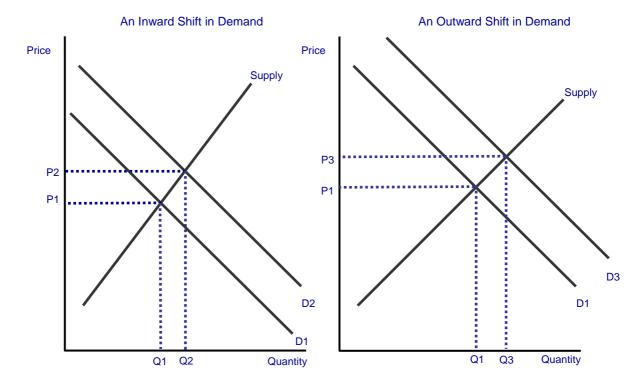
Changes in the conditions of demand or supply will shift the demand or supply curves. This will cause changes in the equilibrium price and quantity in the market.

Demand and supply schedules can be represented in a table. The example below provides an illustration of the concept of equilibrium. The weekly demand and supply schedules for T-shirts (in thousands) in a city are shown in the next table:

Price per unit (£)	8	7	6	5	4	3	2	1
Demand	6	8	10	12	14	16	18	20
Supply	18	16	14	12	10	8	6	4
New Demand (2)	10	12	14	16	18	20	22	24
New Supply (2)	26	24	22	20	18	16	14	12

- ▶ The equilibrium price is £5 where demand and supply are equal at 12,000 units
- If the current market price was £3 there would be excess demand for 8,000 units
- ▶ If the current market price was £8 there would be excess supply of 12,000 units
- ▶ A change in fashion causes the demand for T-shirts to rise by 4,000 at each price. The next row of the table shows the higher level of demand. Assuming that the supply schedule remains unchanged, the new equilibrium price is £6 per tee shirt with an equilibrium quantity of 14,000 units
- ► The entry of new producers into the market causes a rise in supply of 8,000 T-shirts at each price. The new equilibrium price becomes £4 with 18,000 units bought and sold

# 6.2 Changes in Market Demand



The demand curve may shift to the right (increase) for several reasons:

- ▶ A rise in the price of a substitute or a fall in the price of a complement
- An increase in consumers' income or wealth
- ► Changing consumer tastes and preferences in favour of the product
- ► A fall in interest rates (i.e. bank borrowing rates or mortgage interest rates)
- ► A general rise in consumer confidence and optimism

The outward shift in the demand curve causes a **movement (expansion) along the supply curve** and a rise in the equilibrium price and quantity. Firms in the market will sell more at a higher price and therefore receive more in total revenue.

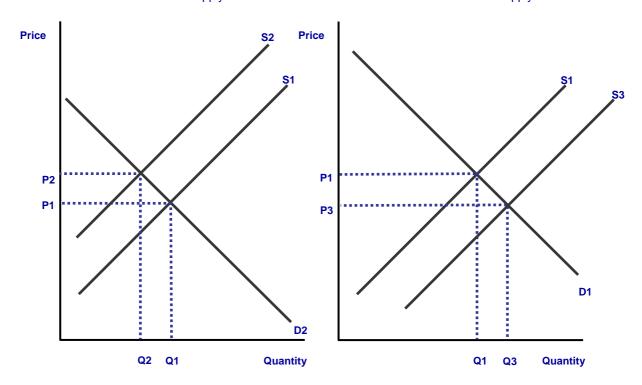
The reverse effects will occur when there is an inward shift of demand. A shift in the demand curve does not cause a shift in the supply curve!

Demand and supply factors are assumed to be independent of each other although some economists claim this assumption is no longer valid!

# 6.3 Changes in Market Supply



#### An Outward Shift in Supply



The supply curve may shift outwards if there is

- A fall in the costs of production (e.g. a fall in labour or raw material costs)
- A government subsidy to producers that reduces their costs for each unit supplied
- ▶ Favourable climatic conditions causing higher than yields for agricultural commodities
- ► A fall in the price of a **substitute in production**
- ► An **improvement in production technology** leading to higher productivity and efficiency in the production process
- ► The **entry of new suppliers** (firms) into the market which leads to an increase in total market supply available to consumers

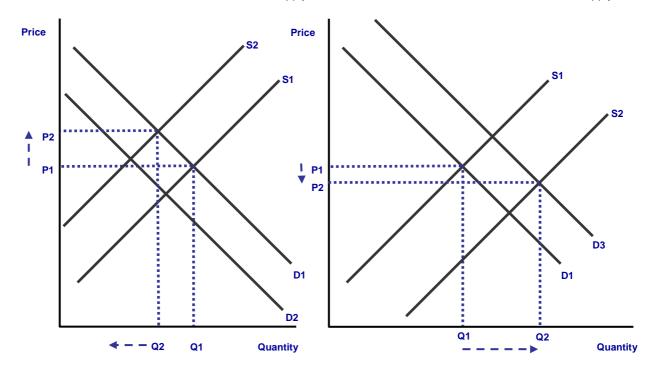
The outward shift of the supply curve increases the supply available in the market at each price and with a given demand curve, there is a fall in the market equilibrium price from P1 to P3 and a rise in the quantity of output bought and sold from Q1 to Q3. The shift in supply causes an expansion along the demand curve.

Important note for the exams: A shift in the supply curve does not cause a shift in the demand curve. Instead we move along (up or down) the demand curve to the new equilibrium position.

The inward shift in supply shown in the left-hand diagram above would be caused by the reverse of the factors listed above, for example a rise in production costs, the introduction of a government tax on producers or difficult climatic conditions that reduce production for farmers.

A fall in supply might also be caused by the **exit of firms from an industry** perhaps because they are not making a sufficiently high rate of return by operating in a particular market.

The equilibrium price and quantity in a market will change when there shifts in **both** market supply and demand. Two examples of this are shown in the next diagram:



In the left-hand diagram, we see an inward shift of supply (caused perhaps by rising costs or a decision by producers to cut back on output at each price level) together with a fall (inward shift) in demand (perhaps the result of a decline in consumer confidence and incomes). Both factors lead to a fall in quantity traded, but the rise in costs forces up the market price.

The second example on the right shows a rise in demand from D1 to D3 but a much bigger increase in supply from S1 to S2. The net result is a fall in equilibrium price and a sharp increase in the equilibrium quantity traded in the market.

### 6.3.1 Moving from One Equilibrium to Another

Changes in equilibrium prices and quantities do not happen instantaneously. The shifts in supply and demand outlined in the diagrams in previous pages are reflective of changes in conditions in the market.

So for example, an outward shift of demand will (depending upon supply conditions) leads to a short term rise in price and a fall in available **stocks**. The higher price then acts as an **incentive** for suppliers to raise their output (termed as an expansion of supply) causing a movement up the short term supply curve *towards* the new equilibrium point.

We tend to use these diagrams to illustrate movements in market prices and quantities – this is known as comparative static analysis. The reality in most markets and industries is much more complex. For a start, many firms have **imperfect knowledge** about their demand curves – they do not know precisely how demand reacts to changes in price or the true level of demand at each and every price level. Likewise, constructing accurate supply curves requires detailed information on production costs and these may not be available.

That said – you need to become familiar with using basic supply and demand analysis to show the dynamics of market situations and how the **price mechanism** goes about allocating scarce resources among competing ends in a market-based economic system.

We now move on to discuss the importance of **elasticity of demand and supply** in different markets and industries.