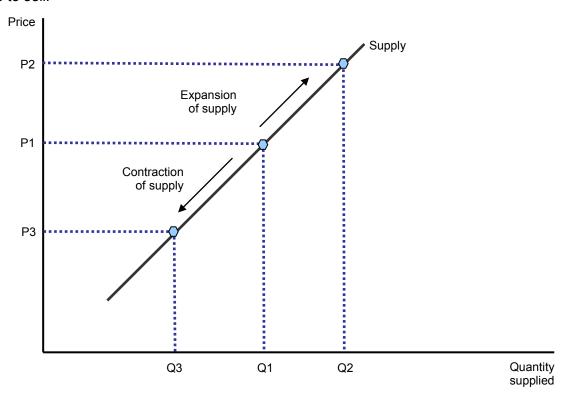
# **Markets: Understanding Supply**

# **Definition of Supply**

Supply is defined as the quantity of a product that a producer is <u>willing and able to supply</u> onto the market at a given price in a given time period.

The basic **law of supply** is that as the price of a product rises, so businesses expand supply to the market. A <u>supply curve</u> shows a relationship between the price and how much a firm is willing and able to sell.



A supply curve is drawn assuming ceteris paribus - if the price of the good varies, we move along a supply curve. In the diagram above, as the price rises from P1 to P2 there is an **expansion of supply**. If the market price falls from P1 to P3 there would be a **contraction of supply** in the market. Businesses are responding to market **price signals** when making their output decisions.

#### **Explaining the Law of Supply**

There are three main reasons why supply curves are drawn as sloping upwards from left to right giving a **positive relationship between the market price and quantity supplied**:

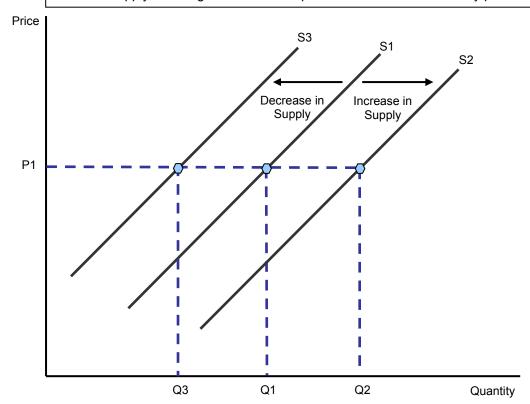
- 1. **The profit motive:** When the market price rises following an increase in demand, it becomes more profitable for businesses to increase output.
- 2. **Production and costs:** When output expands, a firm's production costs tend to rise, therefore a higher price is needed to cover these extra costs of production. This may be due to the effects of diminishing returns as more factor inputs are added to production.
- 3. **New entrants coming into the market:** Higher prices may create an incentive for other businesses to enter the market leading to an increase in total supply.



### Shifts in the Supply Curve – Factors affecting supply

The supply curve can <u>shift position</u>. If the supply curve shifts to the right (from S1 to S2) this is an increase in supply; more is provided for sale at each price. If the supply curve moves inwards from S1 to S3, there is a decrease in supply meaning that less will be supplied at each price

Changes in any of the factors other than price cause a shift in the supply curve
A shift in supply to the left – the amount that producers offer for sale at every price will be less
A shift in supply to the right – the amount producers wish to sell at every price increases



## Changes in the costs of production

- Lower costs of production mean that a business can supply more at each price. For
  example a magazine publisher might see a reduction in the cost of its imported paper and
  inks. These cost savings can then be passed through the **supply chain** to wholesalers and
  retailers and may result in lower market prices for consumers.
- If the costs of production increase, for example following a rise in the price of raw materials or a firm having to pay higher wages to its workers, then businesses cannot supply as much at the same price and this will cause an inward shift of the supply curve.

A **fall in the exchange rate** causes an increase in the prices of imported components and raw materials and will lead to a decrease in supply. For example if the pounds falls 10% against the Euro, it becomes more expensive for British car manufacturers to import their rubber and glass from Western European suppliers, and higher prices for paints imported from Eastern Europe.

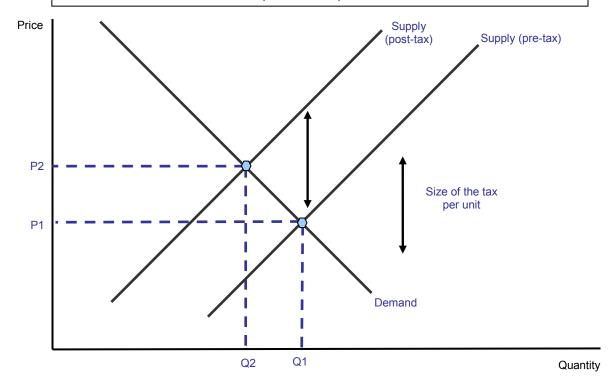
#### Changes in technology



Production technologies can change quickly and in industries where change is rapid we see increases in supply and lower prices for the consumer.

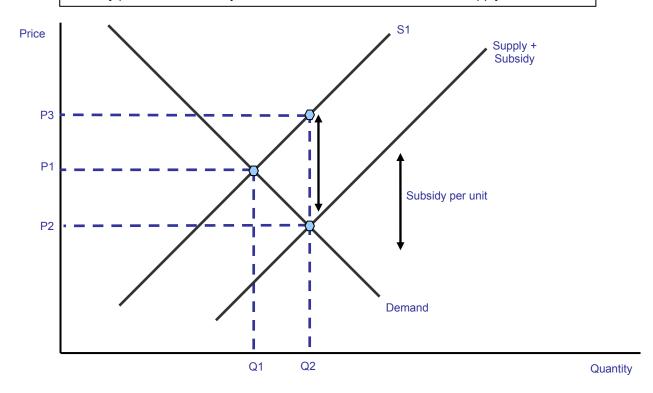
### Government taxes and subsidies

A tax increases the costs faced by producers. The amount of the tax is shown by the vertical distance between the two supply curves. Because of the tax, less can be supplied at each price level. The result is an increase in the market price and a contraction in demand to a new equilibrium output of Q2





A government subsidy encourages an increase in supply at each price level because the subsidy provides a reduction in a firm's costs of production. The extent of the subsidy per unit is shown by the vertical distance between the two supply curves.



# Changes in climate

For commodities such as coffee, oranges and wheat, the effect of **climatic conditions** can exert a great influence on market supply. Favourable weather will produce a bumper harvest and will increase supply. Unfavourable weather conditions including the <u>effects of drought</u> will lead to a poorer harvest, lower yields and therefore a decrease in supply.

Changes in climate can therefore have an effect on prices for agricultural goods such as coffee, tea and cocoa. Because these commodities are often used as ingredients in the production of other products, a change in the supply of one can affect the supply and price of another product. Higher coffee prices for example can lead to an increase in the price of coffee-flavoured cakes.

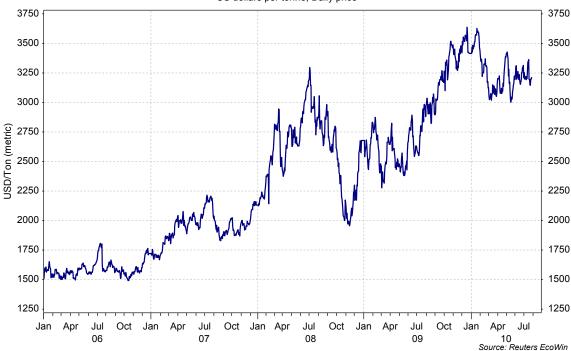
# Change in the prices of a substitute in production

A **substitute** in **production** is a product that could have been supplied **using the same resources**. If cocoa prices rise for example this may cause some farmers to switch from other crops and invest money in establishing new cocoa plantations.



#### **World Cocoa Prices**

US dollars per tonne, Daily price



#### The number of producers in the market and their objectives

The **number of sellers in an industry** affects market supply. When new businesses enter a market, supply increases causing downward pressure on price. If the existing businesses decide to move away from maximising their profits towards seeking a higher share of the market, then total supply available at each price will increase – the market supply curve will shift outwards.

### Competitive supply

Goods and services in **competitive supply** are alternative products that a business could make with its factor resources of land, labour and capital. An example is the diversion of land used in supplying food to producing <u>bio-fuels</u> and the impact this has had on global food prices.

