Demand and Supply in Commodity Markets

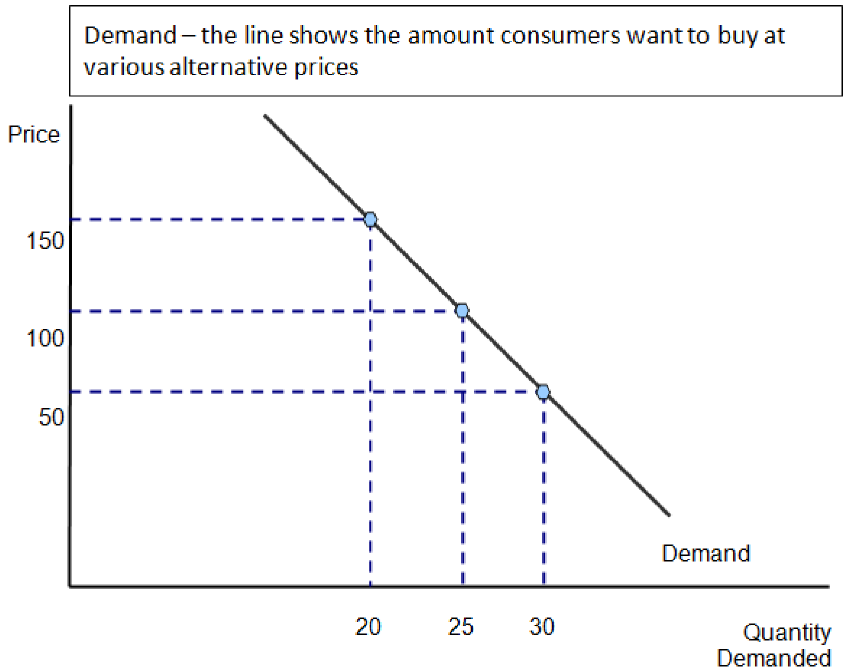
Demand and market demand

Demand

Demand is the quantity of a good or service that consumers and businesses are **willing and able to buy** at a **given price in a given time period**.

Market demand is the **sum of the individual demand for a product from buyers in the market.** If more buyers enter the market and they have the ability to pay for items on sale, then demand at each price level will rise.

In theory, the level of market demand at a range of prices can be shown graphically as a **demand curve**. Here is an example:



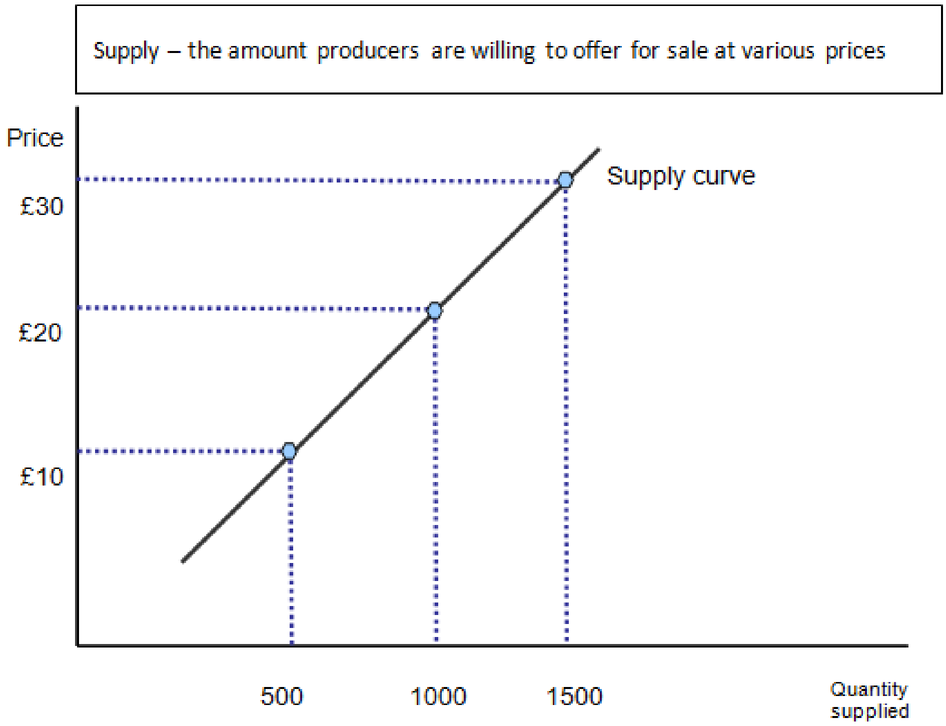
How useful is a demand curve? It is certainly useful for a business to be able to forecast what happens to potential demand from a change in price. However, in reality, a business is restricted in its ability to change prices significantly and often.

Supply and market supply

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

Market supply is the total quantity that all producers in a market are prepared to supply at each price level.

The basic **law of supply** is that as the price of a product rises, so businesses expand their supply onto the market. A **supply curve** shows a relationship between the price and quantity a firm is willing and able to sell. Here is an example:

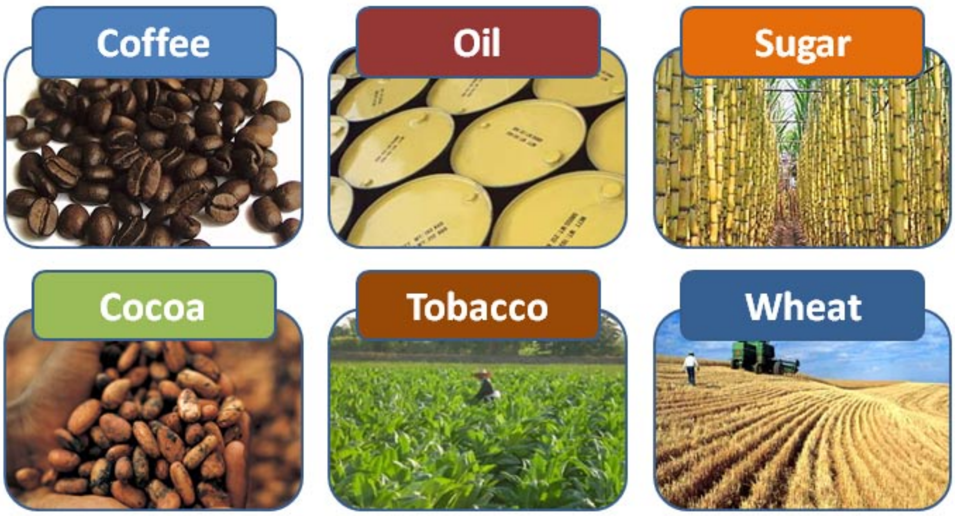


Commodities and commodity prices

A commodity is a product for which there is demand and which is supplied without any clear difference in product quality or standard.

An important feature of a commodity is that its price is determined as a function of its market as a whole – by the interaction of market demand and market supply.

Examples of commodities include:



Commodities are widely **traded** on specialist **commodity markets**.

The **suppliers** to those commodity markets are the farmers and other producers who grow, harvest or extract the commodity.

The **demand** for commodities comes from the manufacturers, wholesalers and other businesses that want to use the commodity in their production processes.

Commodity markets are generally seen as very efficient. The markets quickly respond to changes in supply and demand to find an **equilibrium** price and quantity. That is how price is determined – by the interaction of demand and supply.

Commodities are good examples to use as a way to consider the factors that affect the level of demand in a market.

Take the example of **oil**. Oil is one of the most heavily traded commodities in the world. Fluctuating prices have important effects for oil producers/exporters and the many countries and businesses that depend on oil as a key raw material.

What factors affect the demand for oil?

Economic growth

There is a strong link between the demand for oil and the rate of global economic growth because oil is an essential input into many industries. When an economy is expanding, the demand for oil rises. The best recent example of this is the growth of the Chinese economy which led to a surge in demand for crude oil from China.

Similarly, a downturn in economic activity (such as that experienced during 2009) results in lower demand for oil.

Prices of substitutes

Demand for oil is affected by the relative prices of oil substitutes (e.g. the market price of alternatives such as gas or bio-fuels). If, in the longer term, reliable and relatively cheaper substitutes for oil can be developed, then we might expect to see a reduction demand away from oil towards the emerging substitutes.

Changes in climate

It is often said that if the winter in North America is fierce, then the global oil price rises as the USA and Canadian economies raise their demand for oil to fuel household heating systems and workplaces

Market speculation

There is always a **speculative demand** for oil (i.e. investors hoping for a rise in prices on world markets).

How changes in commodity prices affect businesses

A change in commodity prices has too main possible effects on a business:

(1) An effect on sales revenue
(2) A change in raw material and other operating costs

For some businesses, a change in commodity prices directly affects sales revenue. Take the example of a dairy farmer whose revenue is directly linked to the price that he/she can obtain at the farmgate for a litre of milk or a kilogramme of cheese.

The cocoa farmer in Ghana too is concerned with the selling price that can be obtained per tonne of cocoa beans – particularly if the farmer does not benefit from Fairtrade schemes where a **minimum price** is available.

However, for most businesses, the main effect of changes in commodity prices is on their **operating costs**.

For manufacturers, commodity price changes can be particularly significant, since a large proportion of costs will arise from buying raw materials or using energy in the production process. Businesses have relatively little control over the price that they for their raw materials – they are exposed to changes in commodity prices which can often move up or down significantly over a short period.

One important thing to consider is the proportion of total costs that are accounted for by raw materials.

For many service businesses, the main operating costs will by employment-related (e.g. wages & salaries), marketing-related (e.g. advertising, commission) or arising from the choice of business location (e.g. rent, rates). Raw material and energy costs are likely to be relatively insignificant. So changes in commodity prices for these businesses are not likely to be significant.

Another consideration is whether a business is able to pass on increases in its costs to customers. Imagine that a carpenter experiences an increase in the price of his raw material – wood. However, because his service is a specialist (niche) one, the carpenter may find he is able to persuade customers to accept a higher selling price which takes account of higher wood prices. In this example, the change in commodity price does not turn out to be significant.

In most cases, businesses look to absorb small or temporary changes in raw material costs, rather than look to increase the selling price charged to customers. However, if they choose to do this in the medium/long-term, then the result is likely to be lower profit margins.