Markets: Understanding Demand

Demand

Demand is the quantity of a good or service that consumers are **willing and able to buy** at a **given price in a given time period**. Each of us has an **individual demand** for particular goods and services and our demand at each price reflects the **value** that we place on a product, linked usually to the enjoyment or usefulness that we expect from consuming it.

Effective demand

Effective demand is when a desire to buy a product is backed up by **an ability to pay**. For example, what price are you willing to pay for a ticket for the opening ceremony of the London 2012 Olympics or for a flight to your summer holiday destination?

There has been a huge growth in demand for live events such as pop festivals. Comedy festivals and other concerts – when people buy tickets for these they **reveal their preferences** for the types of goods and services they are willing and able to buy.

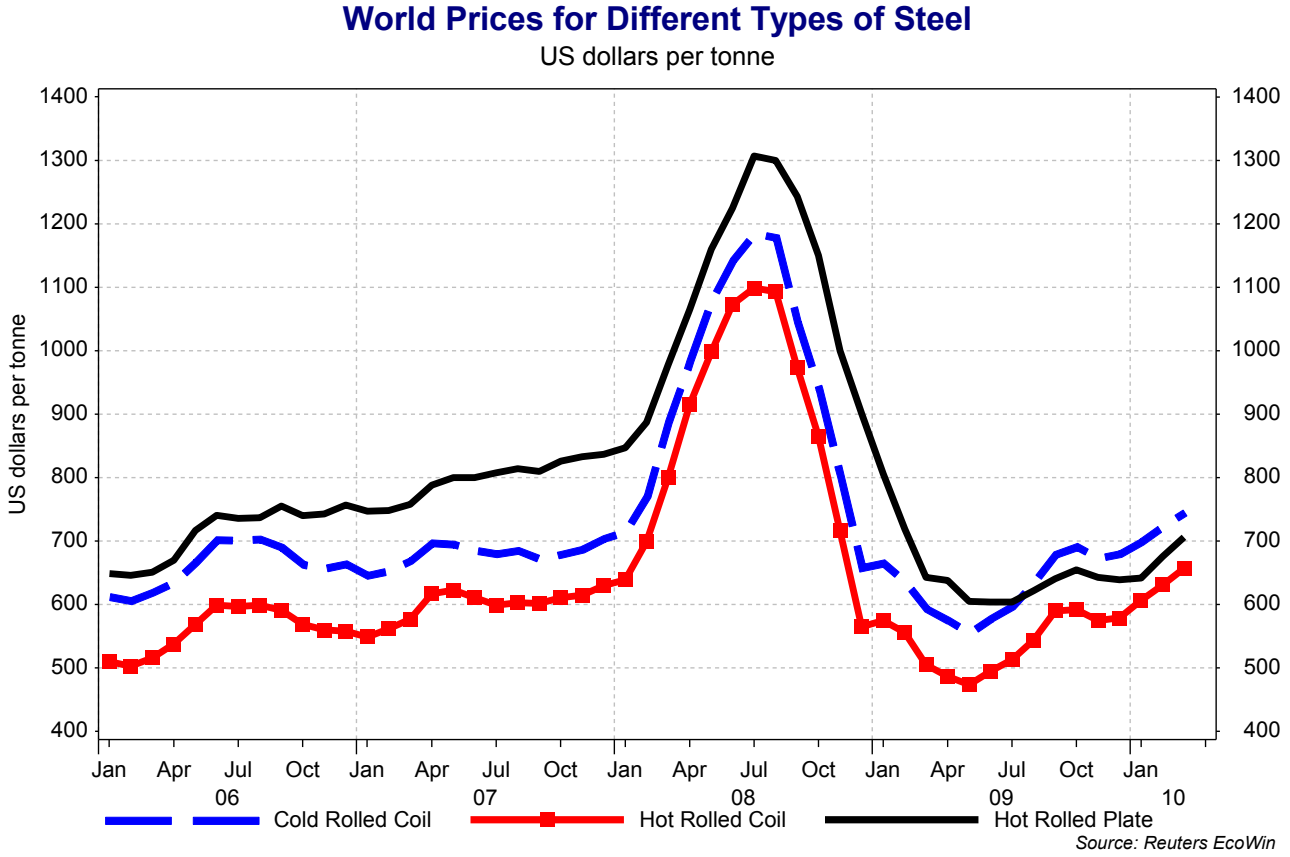
Latent Demand

Latent demand exists when there is willingness to buy among people for a good or service, but where consumers lack the purchasing power to be able to afford the product.

Derived Demand

The demand for a product X might be linked to the demand for a related product Y – giving rise to the idea of a **derived demand**. For example, the demand for steel is strongly linked to the demand for new vehicles and other manufactured products, so that when an economy goes into a recession, so we would expect the demand for steel to decline likewise.

Steel is a **cyclical industry** which means that the total market demand for steel is affected by changes in the economic cycle and also by fluctuations in the exchange rate. Recently the world price of steel has been surging to new heights as our chart indicates below. This is because of rising global demand for steel which itself is **derived** from the demand for new buildings and the rapid growth of manufacturing especially in far-east Asian emerging countries. As we shall see, the sharp rise in the price of steel will affect demand for **substitutes to steel**.



The demand for new bricks is derived from the demand for the final output of the construction industry- when there is a recovery in the British building industry, so the market demand for bricks will increase

The Law of Demand

There is an **inverse relationship between the price of a good and demand**.

1. As prices fall, we see an **expansion of demand.**
2. If price rises, there will be a **contraction of demand**.

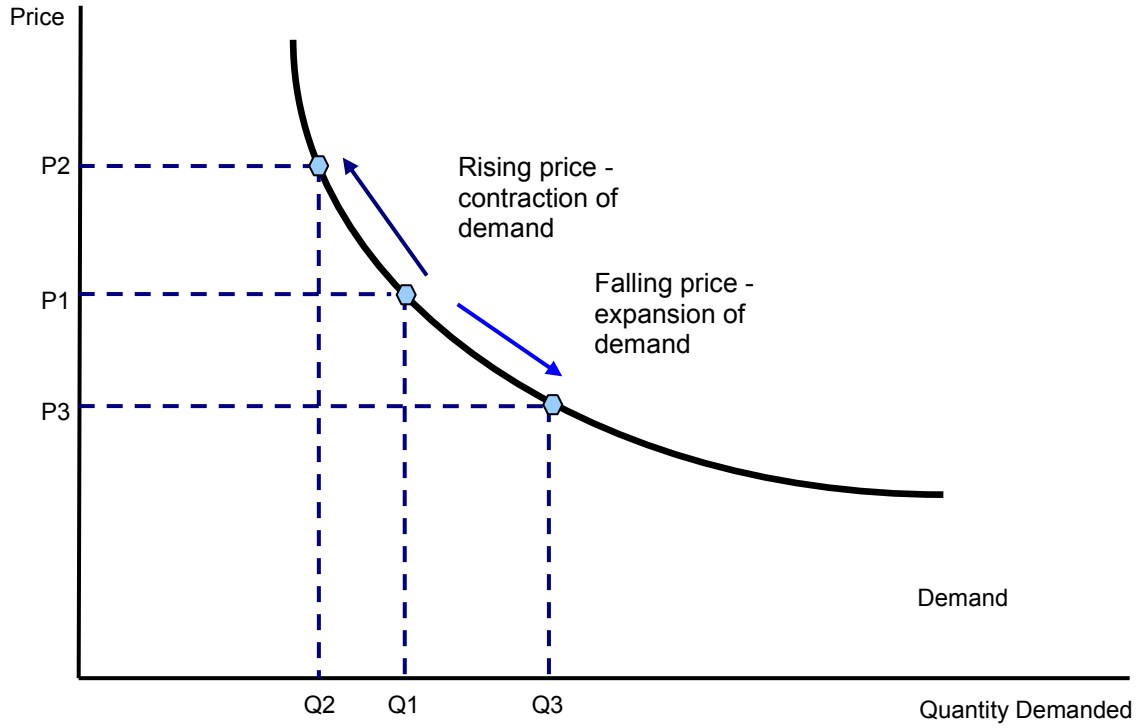
Ceteris paribus assumption

Many factors affect demand. When drawing a demand curve, economists assume all factors are held constant except one – *the price of the product itself*.

The Demand Curve

A demand curve shows the relationship between the price of an item and the quantity demanded over a period of time. There are two reasons why more is demanded as price falls:

1. **The Income Effect:** There is an income effect when the price of a good falls because the consumer can maintain the same consumption for less expenditure. Provided that the good is normal, some of the resulting increase in real income is used to buy more of this product.
2. **The Substitution Effect:** There is a substitution effect when the price of a good falls because the product is now relatively cheaper than an alternative item and some consumers switch their spending from the alternative good or service.



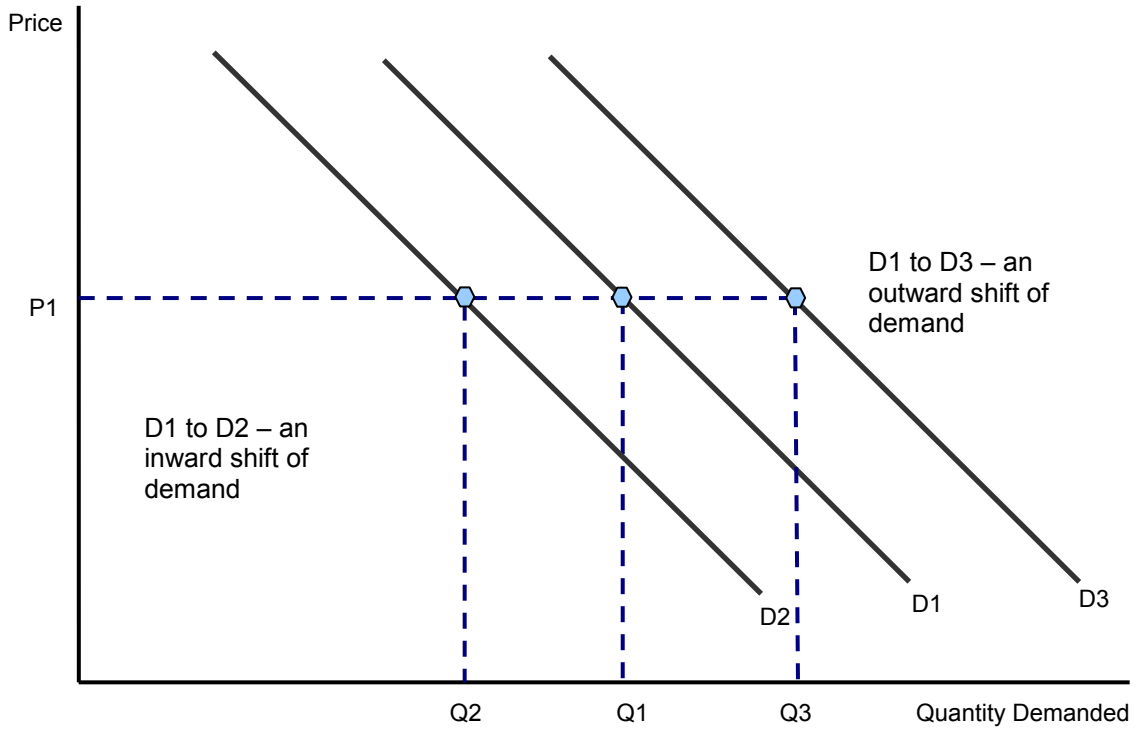
Please note that many demand curves are drawn as straight lines – this is to make the diagrams easier to interpret.

Many other factors can affect demand - when these change, the demand curve can shift. This is explained below.

Changes in the Conditions of Demand – Shifts in Demand

There are two possibilities: either the demand curve shifts to the right or it shifts to the left.

1. D1 – D3 would be an example of an **outward shift** of the demand curve (or an increase in demand). When this happens, more is demanded at each price.
2. A movement from D1 – D2 would be termed an **inward shift** of the demand curve (or decrease in demand). When this happens, less is demanded at each price.



The conditions of demand for a product in a market can be summarised as follows:

Changing prices of a substitute good

Substitutes are goods in **competitive demand** and act as **replacements** for another product. For example, a rise in the price of Esso petrol should cause a substitution effect away from Esso towards competing brands such as Shell. When it is easy and cheap to switch, then demand will be sensitive to price changes.

Changing price of a complement

Two complements are in **joint demand** – e.g. DVD players and DVDs, iron ore and steel.

- A rise in the price of a complement to Good X should cause a fall in demand for X. For example an increase in the cost of flights from London Heathrow to New York would cause a decrease in the demand for hotel rooms in New York and also a fall in the demand for taxi services both in London and New York.
- A fall in the price of a complement to Good Y should cause an increase in demand for Good Y. For example a reduction in the price of the new iPhone should lead to an expansion in demand for the iPhone and a complementary increase in demand for download applications.

Changes in the income of consumers

Most of the things we buy are **normal goods**. When income goes up, our ability to purchase goods and services increases, and this causes an outward shift in the demand curve. But when incomes fall there will be a decrease in the demand, except for **inferior goods**

The effects of advertising and marketing

Heavy spending on advertising and marketing can help to bring about changes in consumer tastes and fashions. In 2009, online advertising spending in the UK overtook television expenditure for the first time. Online spending grew 4.6% to £1.752bn in the first half of 2009, while TV spending shrank 16.1% to £1.639bn.

Discretionary income is disposable income less essential payments like electricity & gas and mortgage repayments. An increase in interest rates often means an increase in monthly mortgage payments reducing demand. In recent years we have seen a sharp rise in the cost of **utility bills** with a series of hikes in the prices of gas and electricity. This has eaten into the discretionary incomes of millions of households across the UK. The discretionary incomes of people suffering from **fuel poverty** have become a major current issue.

Interest rates and demand

Many products are bought on credit using borrowed money, thus the demand for them may be sensitive to the **rate of interest** charged by the lender. Therefore if the Bank of England decides to alter interest rates – the demand for many goods and services may change. Examples of "**interest sensitive**" products include household appliances, electronic goods, new furniture and motor vehicles. The demand for housing is affected by changes in mortgage interest rates.

Market demand

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

Exceptions to the law of demand

There are two possible reasons why more might be demanded even when the price of a good or service is increasing. We consider these briefly – ostentatious consumption and the effects of speculative demand.

(a) Ostentatious consumption: Some goods are **luxurious items** where satisfaction comes from knowing the price of the good and being able to flaunt consumption to other people! The demand for the product is a direct function of its price. A higher price may be regarded as a **reflection of product quality** and some consumers are prepared to pay this for the **"snob value effect"**. Examples might include perfumes, designer clothes, and top of the range cars. Goods of ostentatious consumption are known as **Veblen Goods** and they have a **high-income elasticity of demand.** That is, demand rises more than proportionately to an increase in income or an increase in price.

(b) Speculative Demand: When there is speculative demand buyers are interested not just in the satisfaction they may get from consuming the product, but also the **potential rise in price** leading to a **capital gain or profit**. The speculative demand for housing and for shares might come into this category and we have also seen, in the last few years, strong speculative demand for many of the world's essential commodities.

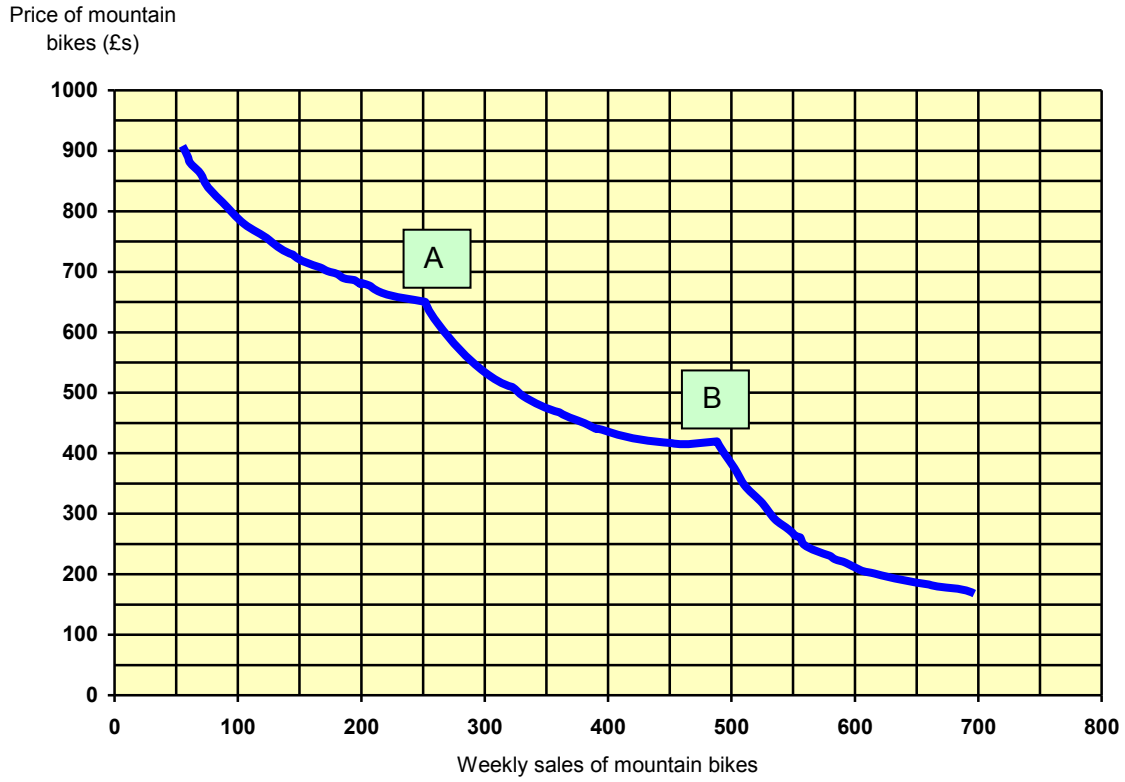
Speculation drives the prices of commodities to fresh highs

World commodity prices have reached new highs this year helped by an increase in the rate of economic growth in the global economy. Among the metals that have achieved record price levels are copper, zinc, gold and platinum; prompting sceptics to question how much longer prices can continue rising. Many market experts believe that the demand for commodities has been spurred by heavy speculator activity. For example, pension funds and hedge funds have been investing in commodity mutual funds over recent years leading to increased demand for precious metals. Prices have risen quickly because commodity producers are unable to raise output sufficiently to meet unexpectedly strong demand.

Source: Adapted from news reports, July 2006

Price points

In many markets an assumption of a linear relationship between price and quantity demanded is not realistic. Many price-demand relationships are **non-linear** and an example of this is provided in the previous chart, used to illustrate the idea of **price-points**.



Price points are points on the demand curve where a small change in price may cause a sizeable contraction in demand leading to a loss of total revenue for the producer. Consider price point A where raising the selling price of the mountain bike above £650 causes demand to decline quite quickly. From selling 250 bikes per week increasing the price to £700 leads to sales dipping to 175 per week. In technical terms we say that the price elasticity of demand is higher at a price just above the price point. Another price point might exist at B. Looking at this in a slightly different way, cutting the price below £400 leads to a large expansion of demand.

Price points can be justified in a number of ways:

1. A price rise at the price point may make the product more expensive than a close substitute causing consumers to change their preferences.
2. Customers may have become used to paying a certain price for a type of product and if they see a further price rise, this may cause them to revalue how much satisfaction they get from buying and consuming something, leading to a decline in demand.
3. There may be psychological effects at work, supermarkets for example know the importance of avoiding price points - £2.99 somehow seems cheaper than £3.00 despite the tiny price difference.