DEMAND AND SUPPLY

Assumptions and definitions
The theory of supply and demand usually assumes that markets are perfectly competitive. This implies that there are many buyers and sellers in the market and none of them have the capacity to influence the price of the good.
In many real-life transactions, the assumption fails because some individual buyers or sellers or groups of buyers or sellers do have enough ability to influence prices. Quite often a sophisticated analysis is required to understand the demand-supply equation of a good. However, the theory works well in simple situations.

Demand

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

LAW OF DEMAND

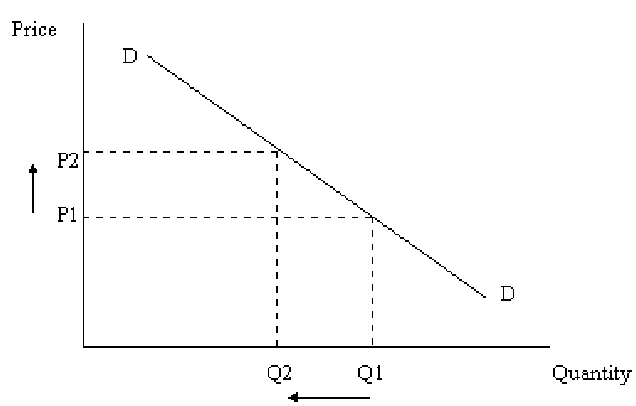
- If the price of foreign package holidays falls – what would you epect to happen to the demand?
- If the government raises the ta on each litre of unleaded petrol how would you predict motorists would react?
- If a bus company cuts fares will motorists leave their cars and decide to use public transport?

The lower the price of a good (or service), the greater the quantity of it that will be demanded by purchasers at any given time, other things being held constant (ceteris paribus) and vice versa.

CETERIS PARIBUS Latin expression for "other things being equal." It is assumption that no other factor that affects consumers' demand changes. Nothing else changes other than price, so only changes in th price of the product can be seen to affect demand.

DEMAND SCHEDULE is a table showing the number of units of a single type of good (or service) that potential purchasers would buy at each of a number of varying prices during some particular time period

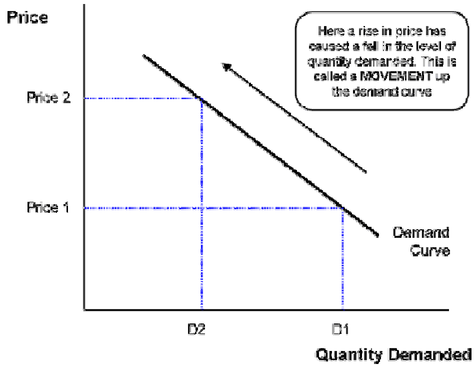
DEMAND CURVE shows the relationship between the prices of an item demanded over a certain period of time. Demand curve is a graphical presentation of a demand schedule.

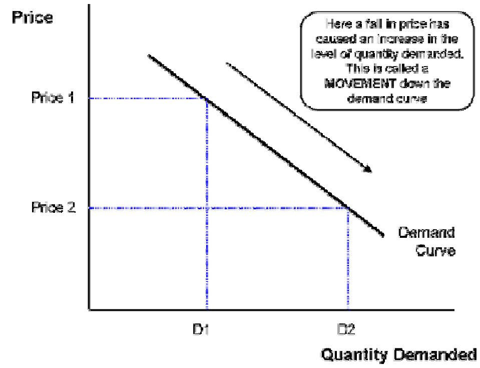


A change in price causes a movement along the demand curve.

As prices fall we see an **expansion of demand**. (consumers buy more)

If prices rise we expect to see a **contraction of demand**. (consumers buy less)





Why does quantity demanded tend to fall as price rises?

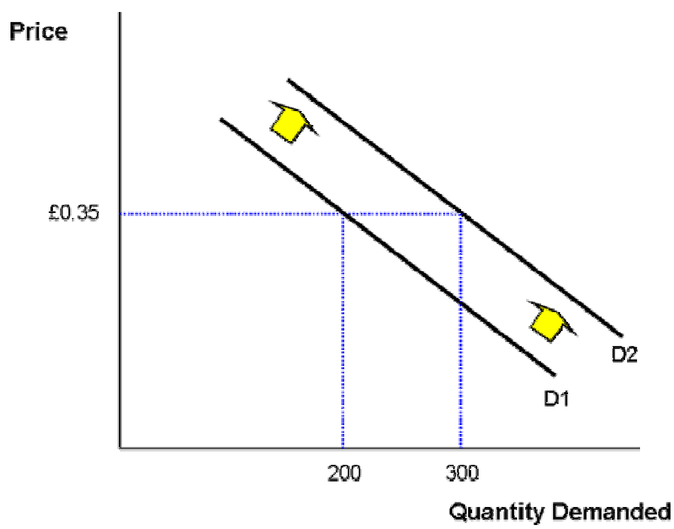
The answer is given by understanding the **law of diminishing marginal utility**.

As a person increases consumption of a product – while keeping consumption of other products constant – there is a decline in the marginal utility that person derives from consuming each additional unit of that product.

For example say you go to a buffet and the first plate of food you eat is very good. On a scale of ten you would give it a ten. Now your hunger has been somewhat tamed, but you get another full plate of food. Since you're not as hungry, your enjoyment rates at a seven at best. Most people would stop before their utility drops even more, but say you go back to eat a third full plate of food and your utility drops even more to a three.

What causes a shift in the demand?

A shift in the demand curve means that either more or less will be demanded at each and every price in the market.



We now consider the factors that cause an increase or a decrease in demand for a good or service.

These factors are called the **determinants** of demand.

1. Price of the good

2. Prices of related items
    a) Changing price of a substitute – substitutes are goods in competitive demand and act as replacements for another product. Classic examples of substitute goods include margarine and butter
    b) Changing price of a complement – complement tends to be bought together with another good. Two complements are said to be in joint demand. Examples include fish and chips, DVD players and DVDs.

       For example a decrease in the cost of flights from London Heathrow to NY would cause an increase in the demand for hotel rooms in NY and also an increase in the demand for taxi services both in London and NY.
3. Change in the income of consumers

   Most of the things we buy normal goods, that is, more is bought when income rises. When an individual's income goes up, their ability to purchase goods and services increases, and this causes an outward shift in the demand curve. When income falls, there will be a decrease in the demand for most goods.
4. The size of population and age structure
5. Change in tastes and preferences

   Tastes can often be volatile leading to a change in demand. An example would be demand for British beef during the BSE crisis. Advertising is designed changes the tastes and preferences of consumers and thereby causes a change in demand.

   This also represents a variety of cultural, historical and religion influences.
6. Changes in interest rates

   Many goods are bought on credit using borrowed money and therefore the demand for them may be sensitive to the rate of interest charged by the lender. Therefore if the Central Bank decides to raise interest rates, the demand for many goods and services may fall.
7. Government legislation – taxation
8. Fear of future rise in price
9. Changes in fashion

If the price of any item is originally $1.00 and people are buying 100, they may change to 90 for two reasons. One reason is that the price may rise to $2.00. The other reason is that one of the factors that are assumed to be constant may change, so that even though the price has not changed, quantity will. Economists distinguish these two cases. In the first case the demand relationship or schedule has not changed, but there has been movement within the relationship. Economists call a change of this sort a **change in quantity demanded.** The second sort of change is an alteration of the relationship. The original pairing of price and quantity is destroyed and replaced by a new pairing. Economists call this sort of change a **change in demand.**

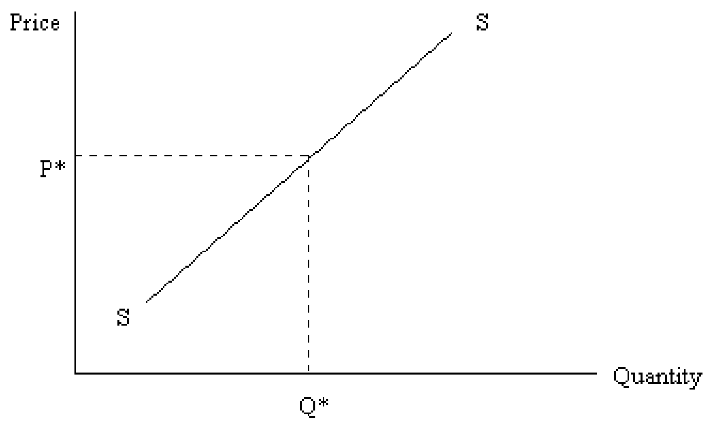
Supply

Supply is defined as the willingness and ability of potential sellers to offer various specific amounts of a good or service for sale at each of a variety of alternative prices during a particular time period.

LAW OF SUPPLY
Other things being held constant, the higher the price of a good (or service), the larger the quantity of that good (or service) that will be offered for sale in a particular time period.

SUPPLY SCHEDULE
A table or listing showing the exact quantities of a single type of good (or service) that potential sellers would offer to sell at each of a number of varying prices during some particular time period

SUPPLY CURVE is a graphical presentation of a supply schedule.



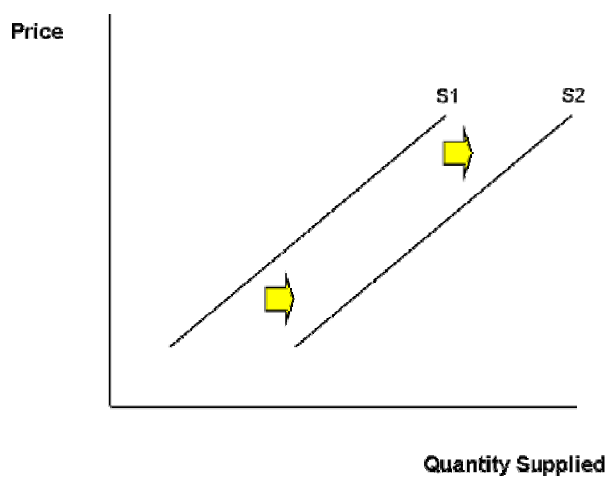
An extension of supply refers to how supply changes with a rise in a price of commodity, ceteris paribus.
A contraction of supply refers to how supply changes with a fall in the price of a commodity, ceteris paribus

Factors Influencing Supply
1. The price of the good – when the market price rises, it becomes more profitable for businesses to increase their output
2. The cost of making the good a fall in the costs of production leads to an increase in the supply of a good because the supply curve shifts downwards and to the right. Lower costs mean that a business can supply more at each price. In production costs increase, a business will not be able to supply, as much at the same price – this will cause an inward shift of the supply curve.
3. State of technology - Technology can change very quickly and in industries where the pace of technological change is rapid we expect to see increases in supply
4. The supply and prices of alternative goods the producer could make with the same resources

5. Government legislation
   A tax on producers causes in increase in costs and will cause the supply curve to shift upwards. Less will be supplied after the tax is introduced.

   A subsidy has the opposite effect as a tax cut. A subsidy will increase supply because a guaranteed payment from the government.
6. Unexpected events that affect supply.
7. Climatic conditions – for agricultural commodities such as coffee, fruit and wheat the climate can exert a great influence on supply. Favorable weather will produce a bumper harvest and will increase supply. Unfavorable weather conditions such as a drought will lead to a poor harvest and decrease supply. These unpredictable changes in climate can have a dramatic effect on market prices for many agricultural goods.
8. Number of producers in the market – the number of sellers in a market will affect total market supply. When new firms enter a market, supply increases and causes downward pressure on the market price. Sometimes producers may decide to deliberately limit supply by controlling production through the use of quotas. This is designed to reduce market supply and force the price upwards.
   The entry of new firms into a market causes an increase in market supply and normally leads to a fall in the market price paid by consumers. More firms increases market supply and expands the range of choice available.

Shift in the supply curve
- Cheaper (more expensive) raw materials – profitable (les profitable)
- More efficient (less efficient) production
- Better (poor) productivity
- New technology
- Poor weather / harvest



History of supply and demand

Attempts to determine how supply and demand interact began with Adam Smith's *The Wealth of Nations*, first published in 1776. In this book, he mostly assumed that the supply price was fixed but that the demand would increase or decrease as the price decreased or increased. David Ricardo in 1817 published the book *Principles of Political Economy and Taxation*, in which the first idea of an economic model was proposed. In this, he more rigorously laid down the idea of the assumptions that were used to build his ideas of supply and demand.

During the late 19th century the marginalist school of thought emerged. This field mainly was started by Stanley Jevons, Carl Menger, and Léon Walras. The key idea was that the price was set by the most expensive price, that is, the price at the margin. This was a substantial change from Adam Smith's thoughts on determining the supply price.
Finally, most of the basics of the modern school theory of supply and demand were finalized by Alfred Marshall and Léon Walras, when they combined the ideas about supply and the ideas about demand and began looking at the equilibrium point where the two curves crossed. They also began looking at the effect of markets on each other. Since the late 19th century, the theory of supply and demand has mainly been unchanged. Most of the work has been in examining the exceptions to the model (like oligarchy, transaction costs, non-rationality).