Demand

A Level Economics

Demand – the basics

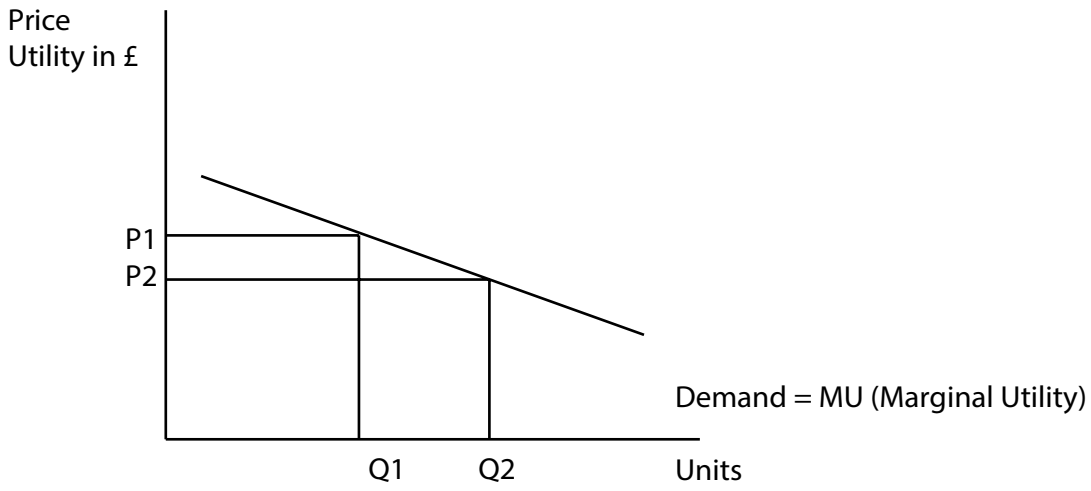
By demand, economists mean effective demand, which is the desire for a product backed up by the willingness and ability to pay. There are many factors which will affect the demand for a product. For example, if you think about the demand for bus travel on a given day, there will be a whole range of influences – the price, the weather, how easy car parking is, the cost of alternatives like cars, whether there is a good network of cycle paths etc.

Generally, however, we are aiming to focus on the relationship between the price of a product and its demand. This is not because price is always the most important factor affecting demand, but rather because the reason that we are looking at demand is to understand how prices are determined. In the first unit on scarcity and choice, we looked in general at how demand and supply would move prices in a market economy. Our goal now is to look at both how price affects demand (for now) and later how demand will affect price.

The demand function therefore shows the relationship between the quantity demanded of a good or service and its price. It shows only the impact of a change in price, and assumes initially that any other factor affecting demand does not alter. Therefore in our example we are looking at what happens if the bus companies increase their prices, assuming that all the other factors that might affect demand – the weather, the price of cars etc. – are exactly the same before the price change as they are after it, ie. they are 'held constant' (this is known as the ceteris paribus assumption). If we didn't do this, then we would not know how much of the change in demand was because of the change in price and how much was because of a change in one of the other factors.

Generally the correlation will be negative – an increase in price will result in a fall in the quantity demanded and a fall in price will result in a higher quantity demanded.

The simplest theoretical way of understanding this is the principle of diminishing marginal utility, first outlined by Alfred Marshall. Utility represents the amount of satisfaction that you get from consuming a product (and will therefore influence how much you are prepared to pay for it). As we consume more and more of a product, each additional unit gives us less extra satisfaction than the one before, because our need has already been met. When you are thirsty, the first glass of water gives you a lot of satisfaction but another glass consumed immediately after would not be so refreshing. Hence you would pay more for the first glass than for the second. Since we value additional units less and less, we will only be prepared to buy them if the price falls:

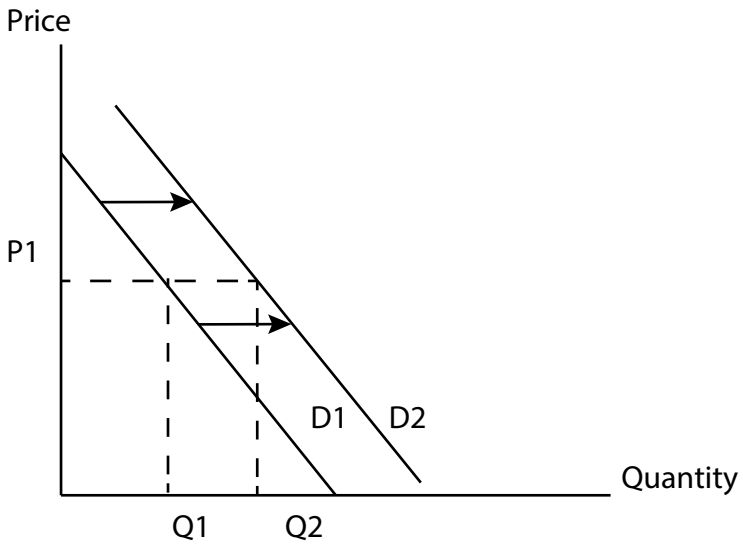


Any change in price will result in a change in the number of units demanded, as determined by the demand function above. A fall in price from P1 to P2 will cause demand to rise from Q1 to Q2 because there are now more units that are worth buying from the consumer's point of view. If the price of water was to fall, you might well buy a second bottle, even though it is not as satisfying as the first.

Shifts and movements along a demand curve

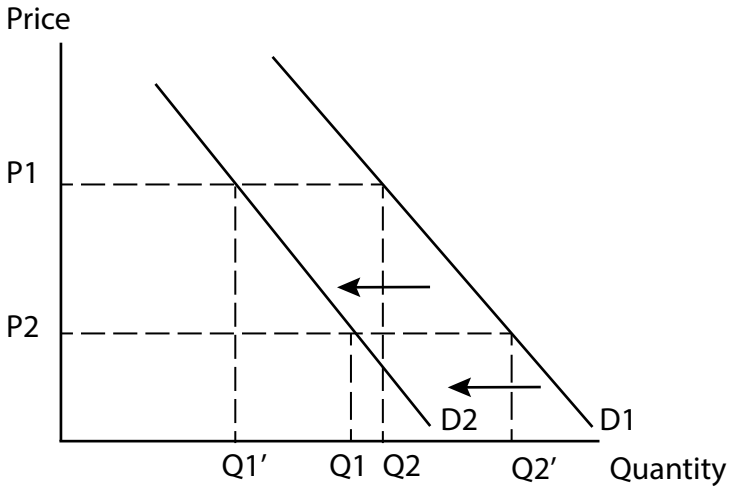
The demand curve is drawn for all prices given a certain set of conditions. For example, the demand curve above would show the demand at every possible different price for a sunny day with petrol at £1.20 per litre, 7 operational cycle paths, parking at £3 for 2 hours etc.). Therefore if price changes, we simply find the new price, read across until we hit the curve and that will then tell us (by looking down to the quantity axis) how many units/bus journeys will be taken at the new price.

If one of the **other** factors apart from price was to change, then the whole relationship would shift. If we now look at a day when it was pouring down with rain, then demand for bus travel would be higher **at every price**. As a result, the whole demand function would shift to the right, showing that at the same price as before, more is now being demanded. Hence the demand function on the diagram below would shift from D1 to D2.



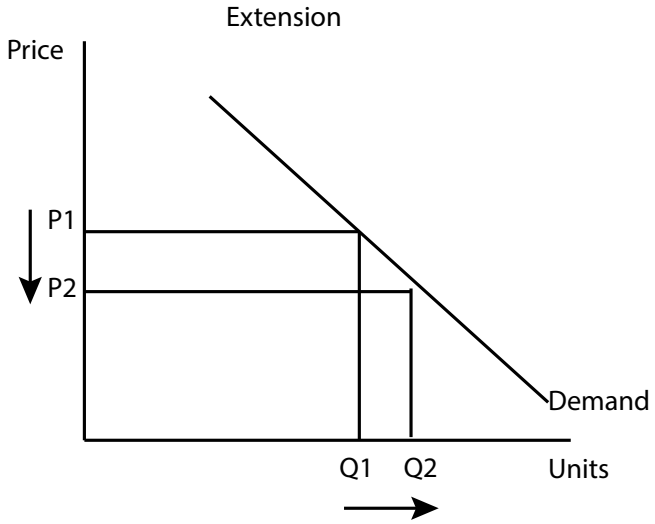
Therefore, a change in price cannot cause the demand curve to shift – only a change in one of the other factors that we have held constant can do that.

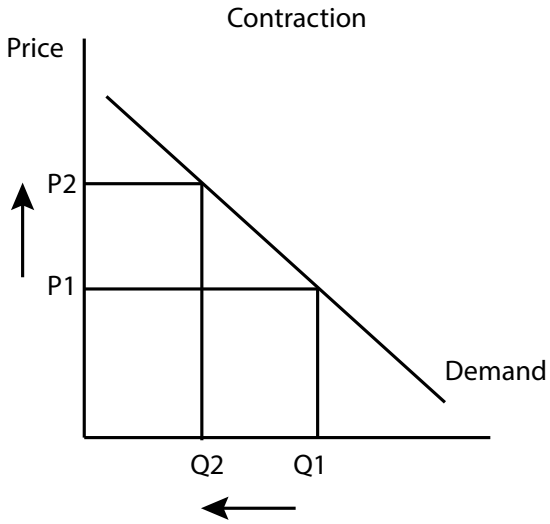
To take another example, a fall in the price of a substitute would cause a reduction in demand for the product **regardless of its current price**. Whatever the current price, some people would switch away, so therefore demand falls at every price shown, meaning that the whole curve shifts:



Whether the price is P1 or P2, a fall in the price of a substitute causes demand to fall, so therefore the whole curve shifts.

Consequently, a change in price leads to a movement along the demand curve – an extension if the quantity demanded is rising (ie. we are moving to a higher/more rightward point on the quantity axis) or a contraction if quantity demanded is falling (ie. we are moving to a lower/more leftward point on the quantity axis).





A change in any other factor (not the price of the product itself) will lead to a shift in the whole demand curve – leftwards for a fall in demand and rightwards for a rise in demand. This is likely to have an effect on price, but what this effect is will depend on supply. If supply is limited, then a shift in demand is likely to push up the price, but if supply is plentiful, then it might not. This will be what we move towards when we look at the next topic – supply.