

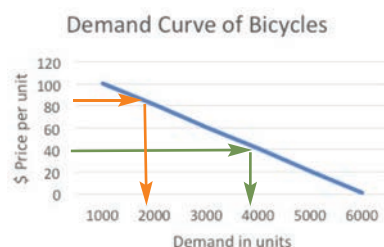
# Micro-economics 101

## Demand Curves

### A change in the price

The basic concept is simple enough: if the price of goods increases consumers don't want to (or can't afford to) buy as much as before. Therefore the total demand for those goods decreases. The opposite is true if the price decreases, because consumers can now afford to buy a greater quantity (although there are limits to this!).

For example, if we plotted the price and demand of bicycles on a graph, we would get a downward sloping curve, something like this:

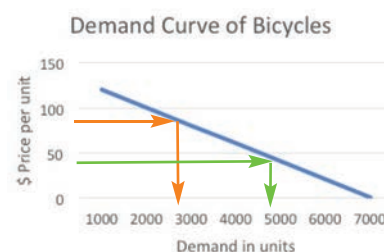


We can see that at a price of \$80 per bicycle, the total demand is 2,000 units. But if the price were to decrease to \$40 each, demand would double to 4,000 units.

The blue line hasn't moved at all, we are just hitting it in a different place as the price falls.

### A change in other things

Now let's consider other things which might change the demand for bicycles. Perhaps the Government launches a campaign encouraging people to start riding bicycles as an alternative to driving their cars to work. This campaign hasn't changed the price of bicycles at all, but the demand is likely to increase, in which case, the whole demand curve will move.



Now, at the original price of \$80 per bicycle, the demand has risen to 3,000 units, without having to change the price at all. The whole demand curve has shifted up/right.

The same might happen if cycling becomes more fashionable after the Olympic games, as happened in 2012.

Alternatively, the demand curve would shift down/left if the overall demand fell. Perhaps there is a period of very bad

In the latest of our occasional Back to Basics series, Cat Hill looks at demand and supply curves, and gives advice on tackling conceptual questions

weather, or cycling accidents are often reported in the press, which discourages the activity.

So the golden rule to remember is: a change in the price doesn't move the curve. A change in anything other than the price, does move the curve.

Now let's try to apply this rule to an example question, to see how it might be tested in an exam.

### Example 1

Which of the following would cause the demand curve of train tickets to move up/right?

- A. A fall in the price of train tickets.
- B. Motorway tolls being scrapped.
- C. Sales tax on train tickets increasing from 0% to 20%.
- D. The price of petrol increasing by 10%.

Firstly, we know we are looking for something which moves the curve itself. Therefore, we can eliminate anything which changes the price of the train tickets themselves.

That rules out A, which is clearly the price changing, but also rules out C as the increase in sales tax charged on the tickets would increase their price.

So we are left with B and D as our two possible options. We are looking for something which makes the demand curve move up/right so, it must be something which increases demand.

Motorway tolls would make the cost of motoring lower, so the public are likely to drive instead of take the train. That would decrease demand for train tickets and shift the demand curve down/left.

We are now left with D as the only option. If the price of petrol increased, fewer people would want to drive, therefore they are more likely to take the train. Demand for train tickets increases and the demand curve shifts up/right.

Therefore the correct answer is D.

## Supply Curves

These are similar to demand curves, but from the supplier's point of view.

This time, if the price rises, the supplier wants to supply a lot of units because they can make a lot of money. If the price falls, they will reduce their supply and probably sell something else instead. This gives an upward sloping curve.

However, the supply can still be

affected by things other than price e.g. material shortages, costs which can't be passed on to the customer and new technology which improves efficiency, so the same golden rule still holds true:

A change in the price doesn't move the curve. A change in anything other than the price, does move the curve.

### Example 2

Which of the following would NOT move the supply curve of supermarket own brand bread?

- A. Consumers are willing to pay more for bread because it is fashionable.
- B. A new piece of more efficient bread making machinery.
- C. Poor harvests making flour expensive. The extra costs can't be passed on to the consumers.
- D. The supermarket can make bread or bagels but not both. The bagel profit margin is increasing.

This time we are looking for something that doesn't move the curve. That could be either because the price of bread has changed, or it's something which won't affect the supply of bread at all.

Option A doesn't directly mention bread prices, but if the consumers are willing to pay more for bread, then the price can be increased and the supermarket will want to supply more. However, the supply curve itself hasn't moved.

A new piece of machinery should increase productivity and the extra efficiency improves margins, therefore increasing the amount the supermarket wants to supply. However, this doesn't change the price which can be charged, so the supply curve will shift down/right and we can eliminate B.

If the price of flour increases but the supermarket can't pass on this cost, the profit margin will be squeezed. The supermarket would want to supply less bread, so the supply moves up/left and we can eliminate C.

If the supermarket could make a larger profit margin on bagels, they would prefer to make these rather than bread. This moves the supply curve of bread up/left but doesn't change the price, so we can eliminate D. Therefore, the correct answer is A, as it's the only option which wouldn't shift the supply curve.

**Top tip:** if you have scrap paper in the exam room, you might find it easier to visualise what happens to the curve if you draw it. **PQ**

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