Market price

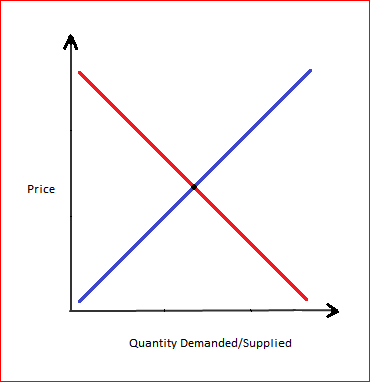
### To recall:

The two market forces that determine price are demand and supply.

# Part 1- Understanding the equilibrium point

* The point at which the quantity supplied is equivalent to the quantity demanded corresponds to the **equilibrium price** and is used as the market price of that product.
* This equilibrium price is found by plotting demand and supply curves (on one graph) and then finding the point where both curves intersect.

## Illustration: The equilibrium point



**KEY:**

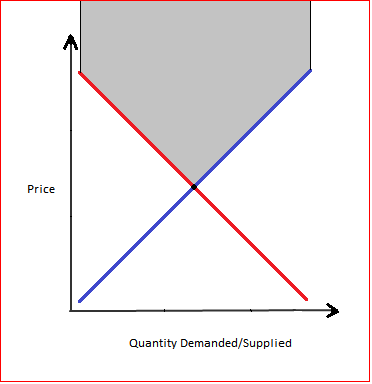
- Demand curve (for a good/service)

- Supply curve (for a good/service)

The **equilibrium point**

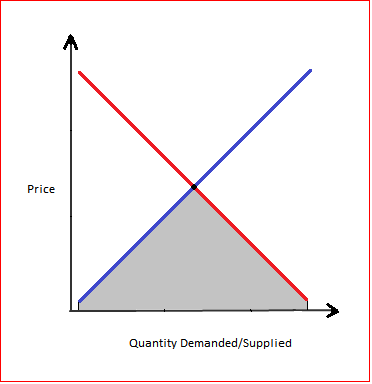
(Where demand = supply)

## Excess Supply Illustration: Excess supply

* **Excess supply** is the condition in which the quantity supplied of a good /service by firms (companies/enterprises) is more than the quantity demanded by consumers.
* Basically, when firms supply more of goods/services than what is demanded by people, this condition is called excess supply.
* The consequence of this is that the current market price of this good/service will have to fall in order the persuade consumers to buy up this excess supply.

The grey area represents the locus (area covered) of market prices at which supply is greater than demand. (Excess supply)

## Excess Demand Illustrations: Excess demand

* **Excess demand** is the condition in which the quantity demanded of a good /service by consumers is more than the quantity supplied by firms (companies/enterprises).
* Basically, when consumers demand more of goods/services than what is supplied by firms, this condition is called excess demand.
* The consequence of this is that the current market price of this good/service will have to rise in order to prevent consumers from demanding more.

The grey area represents the locus (area covered) of market prices at which supply is lesser than demand. (Excess demand)

Like in the above examples, **disequilibrium** is a condition when demand does not equal supply.

# Part 2- Changes in market prices

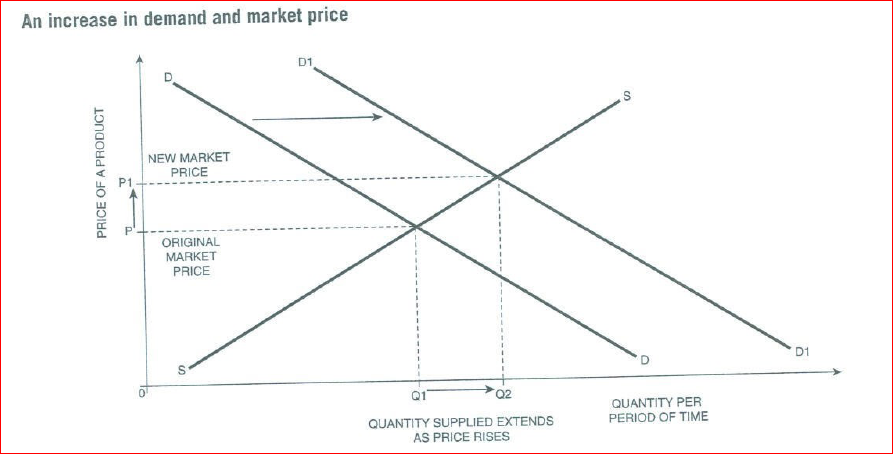
**Changes in market prices will occur as a result of changes (shifts) in demand or supply.**

## Shifts in demand:

An increase in demand for a good/service, because of any positive change in factors affecting demand (i.e. those factors that incur a change, and increase the quantity demanded), will move the demand curve for that good/service outwards (i.e. to the right hand side of the graph).

A decrease in demand for a good/service, because of any negative change in factors affecting demand (i.e. those factors that incur a change, and decrease the quantity demanded), will move the demand curve for that good/service inwards (i.e. to the left hand side of the graph).

### Illustration: How a positive change in factors of demand increases the quantity demanded (for good/service ‘x’), because of which the market price also increases



In the above diagram, two demand curves are seen:

* One before there was a positive change in the factors of demand (represented as curve ‘D’)

And

* One after the positive change in factors of demand (represented as curve ‘D1’)

Two market prices are seen:

* One before there was a positive change in the factors of demand (represented as ‘P’, where curve ‘D’ and curve ‘S’ meet)

And

* One after the positive change in factors of demand (represented as curve ‘P1’, where curve ‘D1’ and curve ‘S’ meet)

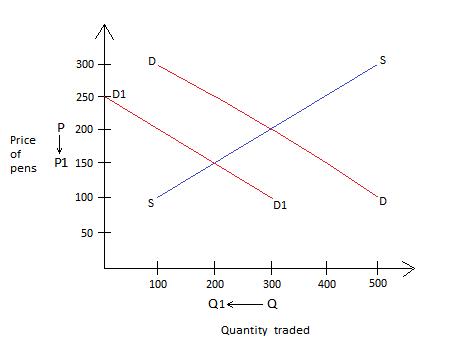
In this example; because of a positive change in one of the factors that affect demand (For example, an increase in income), people are able to afford to buy more of good/service ‘x’ at the same price. Therefore, the demand curve for good/service ‘x’ shifts outwards. This new demand curve after the positive change that occurred (because of the rise in income) is shown in the above diagram as curve ‘D1’.

Now, when the demand curve shifts outwards, the equilibrium point (market price) for both the curves also shifts upwards (shown in the diagram above). For demand-supply equilibrium, two things need to change:

* The market price has to increase (from P to P1)
* The quantity supplied has to increase (from Q1 to Q2)

### Textbook exercise 9- A fall in demand and market price

|  |  |  |  |
| --- | --- | --- | --- |
| **Price per pen (pence)** | **Original demand per week** | **Original supply per week** | **New demand per week** |
| 300 | 100 | 500 | -100 |
| 250 | 200 | 400 | 0 |
| 200 | 300 | 300 | 100 |
| 150 | 400 | 200 | 200 |
| 100 | 500 | 100 | 300 |



5) There is a decrease in quantity supplied because the demand curve for ball-point pens has shifted inwards and the market price has fallen.

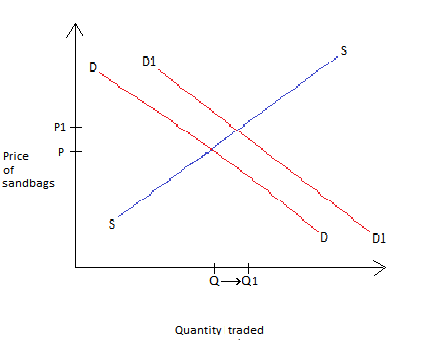
6) The demand of ball-point pens may fall due to:

* A decrease in consumers’ disposable income, which may lead to less affordability.
* A decrease in the price of gel pens (a substitute good), which would result in an increased demand for gel pens and less demand for ball point pens.
* A decrease in the population of the country (especially, student population)
* Increasing development and usage of technology in schools, universities, offices, etc.

### Case study: Bangkok flooding

In the following diagram,

* curve (SS) = Supply curve for sandbags
* curve (DD) = Demand curve for sandbags before the flood
* curve (D1D1) = Demand curve for sandbags during the flood
* P = Price of a sandbag before the flood
* P1 = Price of a sandbag during the flood
* Q = Quantity Supplied before the flood
* Q1 = Quantity Supplied during the flood



The huge increase in the quantity demanded of sandbags in Bangkok is due to expectations of possible flooding in the capital. Sandbags are being bought to protect shops and buildings from the flood water.

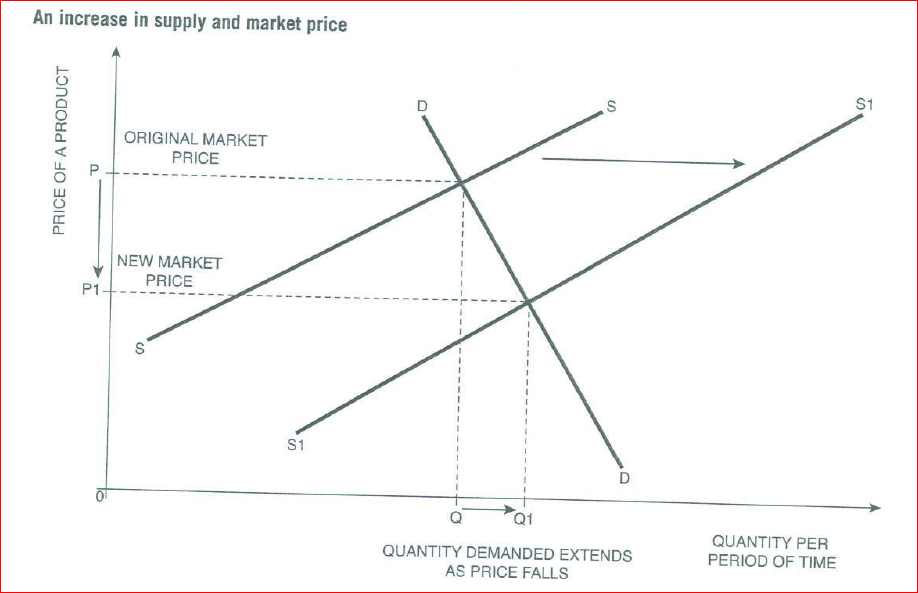
Now the demand curve for sandbags would shift outwards (from curve DD to curve D1D1) because of an increase in the quantity demanded of sandbags. Consequently, the market price of sandbags has also increased dramatically.

## Shifts in supply:

An increase in supply for a good/service, because of any positive change in factors affecting supply (i.e. those factors that incur a change, and increase the quantity supplied), will move the supply curve for that good/service outwards (i.e. to the right hand side of the graph).

A decrease in supply for a good/service, because of any negative change in factors affecting supply (i.e. those factors that incur a change, and decrease the quantity supplied), will move the supply curve for that good/service inwards (i.e. to the left hand side of the graph).

### Illustration: How a positive change in factors of demand increases the quantity demanded (for good/service ‘x’), because of which the market price also increases



In the above diagram, two supply curves are seen:

* One before there was a positive change in the factors of supply (represented as curve ‘D’)

And

* One after the positive change in factors of supply (represented as curve ‘D1’)

Two market prices are seen:

* One before there was a positive change in the factors of supply (represented as ‘P’, where curve ‘D’ and curve ‘S’ meet)

And

* One after the positive change in factors of supply (represented as curve ‘P1’, where curve ‘D1’ and curve ‘S’ meet)

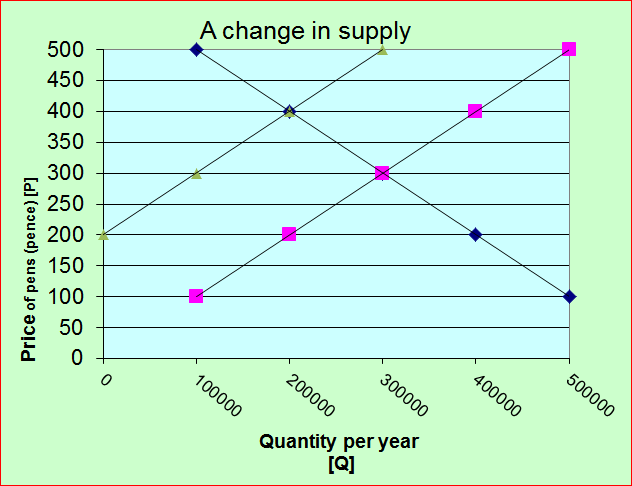
In this example; because of a positive change in one of the factors that affect supply (For example, a decrease in the cost of labour (factor of production)), entrepreneurs are able to employ more labour at the same price, which increases the amount supplied of good/service ‘x’. Therefore, the supply curve for good/service ‘x’ shifts outwards. This new supply curve after the positive change that occurred (because of the fall in price of labour) is shown in the above diagram as curve ‘D1’.

Now, when the supply curve shifts outwards, the equilibrium point (market price) for both the curves also shifts downwards (shown in the diagram above). For demand-supply equilibrium, two things need to change:

* The market price has to decrease (from P to P1)
* The quantity demanded has to increase (from Q to Q1)

### Textbook exercise 10- A fall in supply and market price

|  |  |  |  |
| --- | --- | --- | --- |
| **Possible price per tonne (dollars)** | **Original demand per year** | **Original supply per year** | **New supply per year** |
| 500 | 100000 | 500000 | 300000 |
| 400 | 200000 | 400000 | 200000 |
| 300 | 300000 | 300000 | 100000 |
| 200 | 400000 | 200000 | 0 |
| 100 | 500000 | 100000 | -100000 |



Q1

P1

Q

P

D

D

S1

S1

S

S

5) There is a decrease in quantity demanded because the supply curve for ball-point pens has shifted inwards and the market price has risen.

6) The supply of wheat may fall due to:

* A decrease in decrease in the cost of factors of production, which may lead to less affordability.
* An increase in the price of rice (another good), which would result in higher investment and supply in rice and lower supply for wheat.
* Unfavourable conditions would also lead to decreased supply of wheat.
* Fears of an economic downturn in the market of rice, which would result in firms moving resources into the production of other goods they feel will be less affected.

### Exercise question on Thailand flood case study:

Why has the price of some food stuffs (e.g. eggs) increased dramatically in Thailand in recent weeks?

Initially there was a decrease in the quantity supplied of eggs because of the flooding. Therefore, the supply curve for eggs moves inwards (from curve S to curve S1). When the quantity supplied is not able to satisfy people’s demand there is a shortage (i.e. quantity demanded is higher than quantity supplied). Therefore, the equilibrium market price of eggs will increase (from P to P1) to decrease the quantity demanded by people. The diagram below shows what happened to the supply and market price of eggs in Thailand during the flood crisis.

**Key:**

D – Demand curve for eggs

S – Supply curve for eggs (before flood crisis)

S1 – Supply curve for eggs (during flood crisis)

P – Market price of eggs before floods

P1 - Market price of eggs after floods

Q – Quantity traded of eggs before floods

Q1 – Quantity traded of eggs after floods

