

When we talk about economics, the first thing that comes to mind is usually the demand and supply of the market. Why are demand and supply significant in the study of economics? Well, it determines the prices of goods that you buy out there! So, how exactly do both the demand and supply affect the prices and quantity of goods? We will discuss that later, together with demand and supply, in detail. However, we must first talk about the price mechanism.

## What is the Price Mechanism?

When we mention the price mechanism, we refer to the coordinating mechanism that allocates scarce resources in a free market economy. This mechanism allocates resources based on the independent choices of producers and consumers in the economy.

As resources are limited, choices must be made to allocate resources efficiently. As such, we must decide for whom, how what, and how much goods and services should be produced. The price mechanism answers these questions. In a free-market economy, the price mechanism can signal vital information regarding producing goods and services to producers.

## Free Market Economy

We have been talking about free-market economies without explaining what they are. Well, free-market economies are economies that the government does not control. Instead, producers and consumers are given the liberty to pursue what they want - producers aim to maximise their total profits, whereas consumers aim to maximise their net benefits.

We also mentioned that producers and consumers decide on their economic activities independently. This means that nobody coordinates anything in the economy. As such, the price mechanism will move the economy to produce a particular good and the amount of that good to be produced. This also results in competition between firms.

## Demand

In economics, the demand for a good or service is the quantity of the good or service that consumers are willing and able to buy at different prices within a given time. There is also an inverse relationship between the price and quantity demanded, *ceteris paribus*. This is the law of demand. *Ceteris paribus* means that the rest of the demand factors remain constant.

To further explain the law of demand, we can also look into diminishing marginal utility. The marginal utility here means the additional satisfaction gained by consumers from consuming an additional unit of the good or service. As such, beyond a certain level of consumption where more units of a good or service are consumed, the additional utility gained from successive units of the good or service decreases.

It is hard to understand this concept based on its definition alone. Imagine that burgers are sold at \$3 each. When you buy your first burger, your satisfaction increases a lot. However, as you buy more burgers after that, you will feel that the additional burgers become less satisfying to eat. This explains the law of diminishing marginal utility.

As we have mentioned earlier, consumers aim to maximise their net benefits. Therefore, rational consumers will consume more units of the goods or services based on marginalism if the marginal benefits exceed the marginal costs. This continues until the marginal utility equals the price of that good or service. We call this the consumer equilibrium point. This explains why the marginal utility is the maximum price that consumers are willing to pay to consume an additional unit of a good or service.

## Demand curve

Due to the law of demand and the law of diminishing marginal utility, the demand is a downward-sloping line with a negative gradient. In some cases, the curve is, well, a curve. However, the demand curve is drawn as a straight line in others.



When the demand increases, the curve shifts right. Conversely, when the demand decreases, the curve shifts left. This is due to  $\Delta$  in the non-price factors affecting demand.  $\Delta$  in the price of the good or service will result in the movement along the demand curve. This represents the quantity demanded of the good and service. In this case, the demand curve does not shift.

## Factors affecting demand

- $\Delta$  Availability of related goods ([Cross-price Elasticity of Demand](#), XED)
- $\Delta$  Government policies
- $\Delta$  Income levels (Income Elasticity of Demand, YED)
- $\Delta$  Interest rates
- $\Delta$  Population

- $\Delta$  Price of related goods (Cross-price Elasticity of Demand, XED)
- $\Delta$  Tastes and preferences
- Expectations of  $\Delta$  in future prices

## Supply

In economics, the supply for a good or service is the quantity of the good or service that producers are willing and able to offer for sale at different prices within a given time. There is also a direct relationship between the price and quantity supplied, *ceteris paribus*. This is the law of supply.

Similar to that of demand, producers aim to maximise their total profits. Based on the marginalism, rational produce will produce more units of the goods or services if the marginal benefits exceed the marginal costs. This continues until the marginal revenue is equal to the marginal cost. This is the law of diminishing marginal returns.

### Supply curve

Due to the law of supply and the law of diminishing marginal returns, the demand is an upward-sloping line with a positive gradient. This is the opposite of the demand curve. Like the demand curve, the supply curve can be drawn as either a straight line or a curve.



When the supply increases, the curve shifts right. Conversely, when the supply decreases, the curve shifts left. This is due to  $\Delta$  in the non-price factors affecting supply.  $\Delta$  in the price of the good or service will result in the movement along the supply curve. This represents the quantity supplied of the good and service. Likewise, the supply curve does not shift as well.

### Factors affecting supply

- $\Delta$  Marginal cost of production
- $\Delta$  Number of producers
- $\Delta$  Price of related goods
- $\Delta$  Production of related goods
- Expectations of  $\Delta$  in future prices
- Unpredictable events (e.g. natural disasters and random shocks)

# Interactions between the Demand and Supply

## Market equilibrium

The market equilibrium is where the demand curve cuts the supply curve. At that point, the price of the good or service is known as the equilibrium price. At the same time, the quantity of the good or service is known as the equilibrium quantity. This is because the quantity demanded and the quantity supplied of the good or service are also equal.



## How does a change in demand affect the price and quantity?

If there is a shift in the demand curve, there will be a movement along the new demand curve and the supply curve. As such, there is a new equilibrium point.

Now, let us assume that there is an increase in demand. As a result, the demand curve will shift right, resulting in a surplus. There will be downward pressure on the prices of the good or service. As a result, producers will produce a smaller quantity of the good or service, resulting in a new equilibrium point.

## How does a change in supply affect the price and quantity?

Similarly, if there is a shift in the supply curve, there will be a movement along both the demand curve and the new supply curve. This results in a new equilibrium point as well.

Since we have talked about surpluses, let us discuss shortages. Assuming a decrease in supply, the supply curve will shift left and cause a shortage. As such, there will be upward pressure on the prices of the goods or services. As a result, producers will produce a larger quantity of the good or service, resulting in a new equilibrium point.

## Conclusion

[Demand and supply](#) go beyond what we have just covered. In macroeconomics, there is also the aggregate demand and the aggregate supply. This is similar to what we have discussed today. However, with all that we have talked about, I am confident that you now understand how the free market economy works.

Note:  $\Delta$  (the Greek alphabet Delta) refers to the change in a variable.