



Introduction to microeconomics: The basics

1.1 Main economic groups and factors of production

The main economic groups

There are three main economic groups, or 'economic agents', that influence economic activity within an economy.

- **Consumers**
- **Producers**
- **Government**

Each group has different objectives that influence its behaviour.

Consumer: a person or organisation that directly uses a good or service.

Goods and services are 'products'. Consumers are the **buyers** of products, they demand goods and services for their own personal use.

Good: a tangible product, i.e. a product that can be seen or touched.

For example, a can of Coca Cola, a shirt and a mobile phone.

Service: an intangible product, i.e. a product that cannot be seen or touched. For example, financial advice, insurance and legal advice.

Producer: a person, company or country that makes, grows or supplies goods and/or services.

Producers are responsible for production, which relates to the process of making, growing or supplying goods and services (product). Producers supply goods and services, as the sellers of products.

Production: the total output of goods and/or services produced by a firm or industry in a given time period.

Government: a political authority that decides how a geographical area is run and manages its operation.

In the UK there are various levels of government. Reading Borough Council is the local government authority. The UK central government is based in Westminster, London.

Factors of production

Factors of production are the resources in an economy that can be used to produce goods and services.

Capital, enterprise, land and labour are the four factors of production.

Land: all natural resources in an economy that can be used in the production of goods and services. Examples include: farmland, forests, fish, oil, plants, animals (cattle/wildlife), mineral deposits...

Labour: all human effort in an economy, physical and mental*, that can be used in the production of goods and services. Examples include: doctors, nurses, labourers, bricklayers, teachers, cleaners...

*sometimes referred to as 'human capital'

Capital: human-made goods that are used to produce other goods and services. Examples include: factories, offices, warehouses, railways, machinery, equipment...

Enterprise (entrepreneurship): risk takers (entrepreneurs) who organise the other economic resources to facilitate production (those who own and start up firms/businesses). Entrepreneurs are profit-driven risk takers who often innovate. Examples: small business owner or CEO

1.2 The Basic Economic Problem

Scarce resources means that there are insufficient resources (land, labour, capital and enterprise) with which to make goods and services to satisfy all wants.

Unlimited wants refers to the infinite desire for goods and services, irrespective of whether one can pay for it or not.

The Economic Problem is how to best use the scarce resources to satisfy the unlimited wants of consumers. A particular resource may have many possible uses, but once it is used for something, it cannot be used to make anything else. The choice between different uses of resources is called the **allocation of resources**.

In order to meet unlimited wants with limited resources, an economy has to make decisions or choices about:

- **1. What to produce?**

For example: should resources be used to grow crops, build nuclear weapons or build hospitals?

- **2. How to produce?**

For example: should firms produce on a large scale vs. small scale, should they mainly use labour or machinery?

- **3. For whom to produce?**

For example: should goods and services be allocated for those who can pay the most or those who need it the most?

Opportunity cost is the next best alternative foregone when an economic decision is made.

Opportunity cost represents what has been sacrificed (foregone) when each economic choice is made.

For example, any choice or decision that involves the use of scarce resources (factors of production) will mean that a viable alternative use of the scarce resources has been sacrificed.

Q. What is the opportunity cost of you doing A-level Economics?

2.1. The Role of Markets

A market is a means of bringing together buyers and sellers to buy and sell goods and services.

A market can be:

- Stalls / kiosks / any type of shop
- A means of buying and selling things online, by telephone, or by post
- An auction (where an item is sold to the highest bidder)

A market economy is one in which scarce resources are allocated by the market through the forces of supply and demand.

A command (or centrally planned) economy is one where resource allocation is determined by the government.

A much more common system is a **mixed economy**, which is a market economy with some government intervention.

In an economy, goods and services are produced in different **sectors**.

Primary sector: this is the direct use of natural resources through the extraction of basic materials from the land and the sea. Examples: agriculture, forestry, fishing, mining. These goods are either consumed directly (e.g. fish or vegetables) or are raw materials in the production of other goods (wheat for flour, cotton for cloth).

Secondary sector: all activities in an economy which are concerned with manufacturing or construction. It involves taking raw materials – either directly or after some processing – from the primary sector and then using it to produce a good. Finished goods from the secondary sector can then be used to produce more complex goods. Examples: Rubber for making shoes, cocoa for making chocolate, materials used to make high-tech components, handmade crafts, construction of houses, roads, bridges.

Tertiary sector: all activities in an economy where services are produced. These are then purchased by households, firms and governments. Examples: retail, transport, tourism, finance, hospitality, entertainment, health, education. The tertiary sector usually requires interaction amongst individuals.

Quaternary sector: industries dealing with knowledge and information. Examples: ICT, scientific research, biotechnology, academia, consultancy, media

Two types of markets

A product market is one in which final goods and services are sold to households, firms and governments. It involves selling finished products and not raw materials. Examples: shops selling school uniform, car dealers selling cars

A factor market is one where the services of a factor of production are bought and sold. For example, the market for raw materials, the labour market, the capital market.

Households are the buyers in product markets, while firms are sellers.

But in factor markets, the households are the sellers of factors of production (they supply labour) while firms are the buyers (they pay wages/salaries to households).

Division of labour

This means dividing the production process into different stages to enable workers to focus on specific tasks. If workers can concentrate on one small aspect of production, this increases overall efficiency (as long as a sufficient quantity is produced).

This concept is also due to Adam Smith (1776). Adam Smith used the example of a pin factory. He noted how the efficiency of production was vastly increased because workers were split up and given different roles in the making of a pin.

What might be the benefits of breaking a job down into smaller tasks?

1. Workers need less training as they only have to master a small number of tasks
2. It is more efficient to use one particular tool and focus on one task.
3. No time is wasted switching between tasks and there is no need to move around the factory.
4. Workers can concentrate on those jobs which best suit their skills.
5. Workers gain loyalty and a sense of achievement from their branch of production.

Specialisation and trade

- Specialisation makes better use of scarce resources and we can produce more as a result.
- When individuals specialise, they produce a surplus beyond their needs, which they can exchange for the surpluses of others.
- In order to specialise, they have to give up producing other goods and services, this involves the idea of opportunity cost.
- By giving up these products the individual/firm/region/country has to rely on **exchange**. Domestic (internal) or international (external) trade thus takes place.

2.2 Demand

Demand is the willingness and ability to purchase a particular good or service at a given price at a given point in time.

Individual demand: demand for a good or service by an individual consumer

Market demand: total demand for a product created by adding together all the individual demands

The Law of Demand

The quantity demanded of a good or service will usually fall as its price increases, while the quantity demanded will increase as its price falls, *ceteris paribus* (all else being equal).

This **inverse relationship** between price and quantity happens for two reasons:

- If the price of a good rises, quantity demanded is likely to fall as consumers switch to buying substitute products.
- If the price of a good rises, quantity demanded is likely to fall as consumers are now worse off and have less money to buy the product.

Note that the same reasons also work in reverse, for a fall in price.

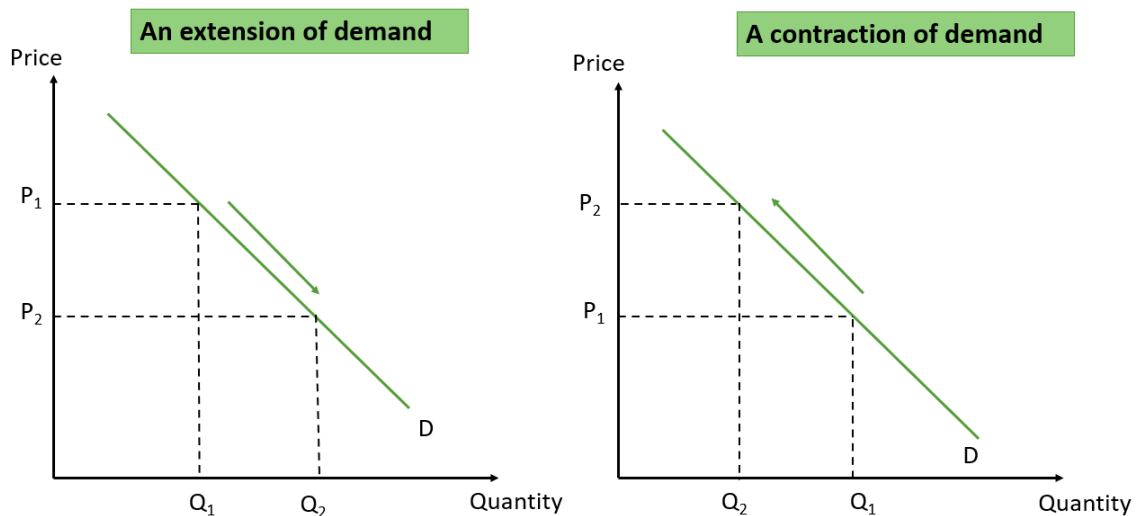
A demand curve is a graphical representation of the relationship between the price of a good or service and the quantity demanded for a given period of time.

Movement along a demand curve

A change in the price of a good leads to a movement along a demand curve.

An increase in price leads to a fall in the quantity demanded – this is known as a **CONTRACTION** of demand.

A fall in price leads to an increase in the quantity demanded – this is known as an **EXTENSION** of demand.



A shift of the demand curve

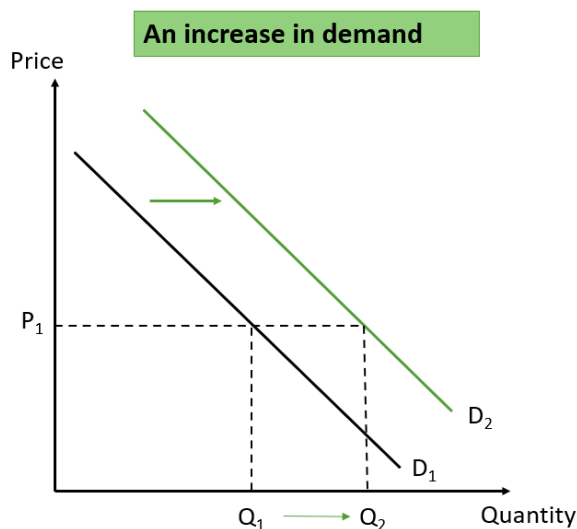
If there is a change in any factor other than price, this will cause the entire demand curve to shift to the left or to the right.

An **increase in demand** means that a greater quantity is demanded at each and every price; this is shown by the **demand curve shifting to the right**.

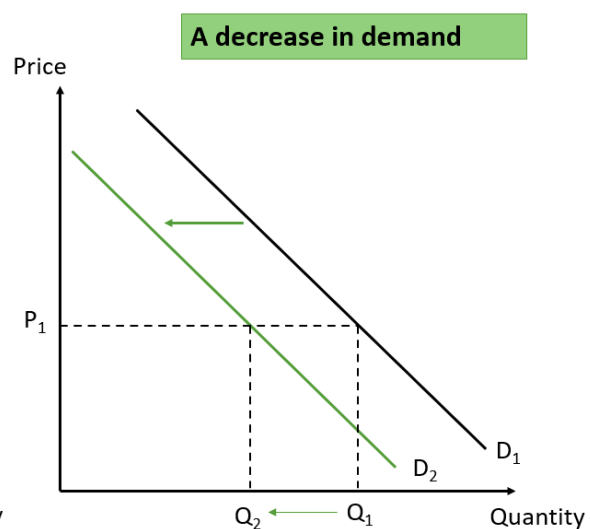
A **decrease in demand** means that less is demanded at each and every price; this is shown by the **demand curve shifting to the left**.

Factors that can shift the demand curve:

1. **Income** (or disposable income, which means after-tax income): if income goes up, the demand for most goods increases. This means that if people buy the same quantity as before, they have some money left over, which they can use to purchase more units of that good.
2. **Advertising** that makes goods seem more desirable or “must have” increases demand for the good.
3. **Tastes and preferences**: if something becomes more fashionable or popular (due to general trends or greater awareness), the demand for it increases. *Can you think of some examples?*
4. **Price of substitutes** (alternative goods) and **complements** (goods that are consumed together). If the price of a substitute goes up, the demand for a good will increase. If the price of a complement goes up, the demand for a good will decrease. *Can you think of examples of substitutes and complements?*
5. **Seasonal changes**: the demand for certain products increase or decrease according to the season; for example, winter clothing, Christmas presents, ice cream.
6. **Population size and demographic**: an increase in the size of the population or a particular age group (university students, young families, elderly people) increases the demand for certain goods which those groups are more likely to consume.
7. **Expectations of future price changes**: if consumers expect prices to rise in future, they are likely to increase their demand for a product now; this applies especially to large purchases.
8. **The state of the economy** as a whole: during an economic downturn (recession), the demand for most goods will decrease; people become reluctant to spend as they are uncertain about their income prospects and lose general confidence in the economy.



For every price level, the quantity demanded increases.



For every price level, the quantity demanded decreases.

2.3 Supply

Supply is the quantity of a good or service that a producer is willing and able to provide at a given price in a given time period.

Individual supply is the supply of a good or service by an individual producer.

Market supply is the total supply of a good or service which is found by adding up the supply of all the individual producers of that good or service.

A supply curve shows a relationship between the price and quantity a firm is willing and able to sell over any given time period. A supply curve is usually upward sloping.

Why does the quantity supplied increase when price goes up?

1. Production cost: When output expands, a firm's production costs tend to rise, therefore a higher price is needed to cover these extra costs of production.

2. The profit motive: When the market price rises, it becomes more profitable for businesses to increase output.

3. New Firms: New firms may be attracted to the market because higher prices means they can cover their higher production costs.

Any change in price leads to a movement along the supply curve.

An increase in price leads to an **extension** of supply.

A decrease in price leads to a **contraction** of supply.

A change in a factor OTHER THAN PRICE leads to a shift in the supply curve.

An **increase** in supply is shown by a shift of the supply curve to the **right**.

A **decrease** in supply is shown by a shift of the supply curve to the **left**.

Factors that can cause the supply curve to shift

1. Changes in the availability of factors of production: if there is a decrease in the supply of raw materials, labour or capital, there will be a decrease in the supply of the good or service that is made by these factors of production.

2. Changes in the costs of production: this can happen due to an increase in the cost of raw materials or an increase in the wage rate. This will cause a decrease in supply.

3. Technological progress: this lowers the cost of production or increases the amount that can be produced with a given amount of inputs; for example, mechanization of farming, automation in manufacturing, more highly skilled labour.

4. New firms entering the market: if the number of firms increases, the total amount of the good supplied will also increase for every price level.

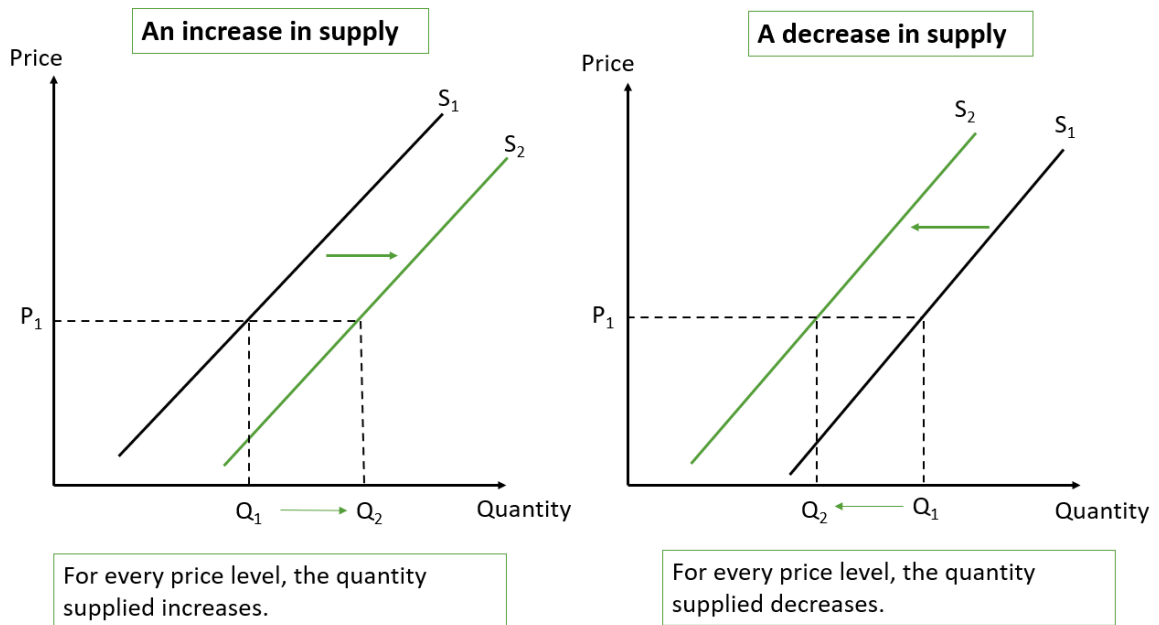
Factors that can cause the supply curve to shift

5. Increase in the size of existing firms: for example, a firm building more factories will lead to an increase in supply.

6. Government taxes and subsidies: an increase in indirect taxes such as VAT will lead to a smaller quantity being supplied at the same price. Government subsidies will reduce the costs of production and lead to an increase in supply.

7. Natural disasters or seasons: this is especially important for agriculture (for example, crops may be destroyed by drought). Natural disasters such as earthquakes or tsunamis can disrupt the supply of many goods and services.

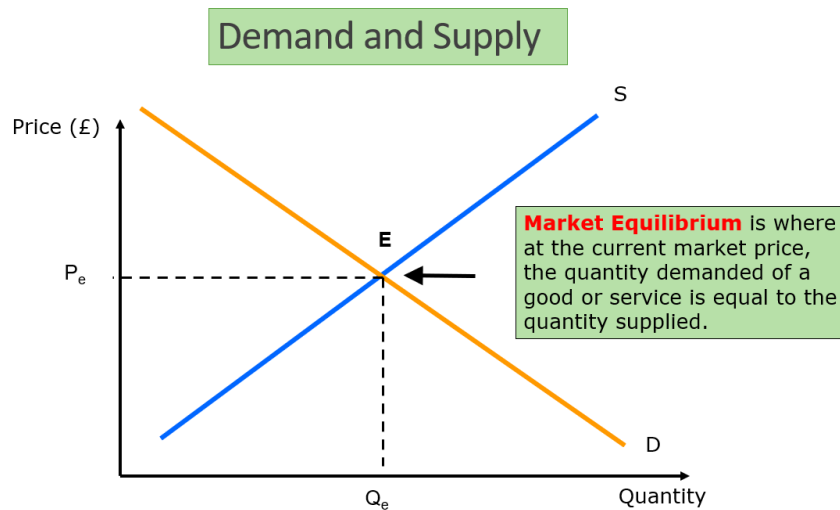
8. More government regulations on health and safety standards or on consumer protection will raise the costs of production for firms and lead to a decrease in supply.



2.4 Price

Price is the sum of money one has to pay for a good or a service. In a market economy, price is determined by the interaction of demand and supply.

Allocation of resources: this refers to how scarce resources are allocated amongst producers, and how scarce goods and services are allocated among consumers. The price mechanism plays a key role in the allocation of resources.



Disequilibrium:

Excess supply occurs when, at a given price, the quantity supplied is greater than the quantity demanded. Thus, some goods are left unsold.

Excess demand occurs when, at a given price, the quantity demanded is greater than the quantity supplied. Thus, some buyers are unable to purchase the good.

In a **free market** (one without government intervention), if there is excess demand, the price of a good will rise until equilibrium is reached. If there is excess supply, the price of a good will fall until equilibrium is reached. If there is excess demand, the price of a good will rise until equilibrium is reached.

Introduction to Macroeconomics: the basics

Back to basics...

What is the “economic problem”?

- Limited resources, but unlimited wants

What are the three main economic questions?

- What to produce
- How to produce
- How to allocate what has been produced

Answer?

- Let the market decide (as opposed to a central planner)

Microeconomics vs. Macroeconomics

- Microeconomics looks at **decision making** by consumers and producers
- In a market economy, the price mechanism – through the interaction of demand and supply – determines the **allocation of resources**.
- We can think of a **fourth question** to add to the three basic economic questions – *how to produce MORE and how to do this smoothly?* In other words, **how can our economy grow over time without too many fluctuations?**

Macroeconomics studies the economy as a whole, as well as its interaction with the rest of the world.

Several macroeconomic indicators are used to gauge how an economy is doing and to compare countries.

The most commonly used ones are:

- Real GDP (per capita) and the growth rate of real GDP
- Unemployment rate
- Inflation rate
- Current Account balance

The four macroeconomic indicators

1. Real GDP and economic growth rate

GDP (Gross Domestic Product) measures the total value of final goods and services produced within an economy, in a given time period of time.

Real GDP: Nominal GDP adjusted for inflation to allow comparisons over time

Real GDP per capita: Real GDP per head of population

Economic growth: change in real GDP over time

2. Unemployment rate

This measures the percentage of the labour force that is out of work, but is able to work and is actively seeking employment.

Unemployment is an important indicator because it shows that the economy has unused (labour) resources and spare capacity

3. Inflation rate

Inflation is the sustained increase in the general price level over a period of time.

Inflation is measured by changes in a price index (CPI) – it tracks price changes of a basket of goods and services

Inflation is an important indicator because it reduces the purchasing power of savings and creates uncertainty.

4. The Current Account (of the BOP)

The **Balance of Payments** (BOP) is a summary of all economic transactions between a country and the rest of the world.

The Current Account of the BOP *mainly* focuses on the flow of goods and services out of and into a country (in other words, exports and imports).

A trade deficit means we import more than we export.

The Current Account is an important indicator because it shows if the country is internationally competitive, and also if it has foreign debt.

Government policy objectives

For classical (19th century) economists, the emphasis was very much on 'leaving it to the market'.

However, several developments in the 20th century have meant that government intervention in the economy is now not only commonplace, but also expected.

Examples: The Great Depression, post-World-War II reconstruction, setting up of the welfare state, the oil crisis of the 1970s, the global financial crisis, the pandemic....

Key Policy Objectives

1. Positive, steady and sustainable ECONOMIC GROWTH
2. A low and stable level of UNEMPLOYMENT
3. Price stability (low INFLATION)
4. Long term stability (small deficit or surplus) on the CURRENT ACCOUNT of the Balance of Payments

Key Policy Tools

Fiscal Policy: the use of government spending and taxes to influence economic activity. The focus of fiscal policy is to reduce unemployment and create short term economic growth.

Monetary Policy: the use of interest rates and money supply (and sometimes the exchange rate) to influence economic activity. The main focus of monetary policy is price stability (keep inflation low)

Supply-side Policy: policies designed to improve the quantity and quality of factors of production and to increase the efficiency of product and factor markets. The goal is higher long-run economic growth and an improvement in productivity.

Check out the latest figures for economic indicators for the UK and other economies.

Good places to look are:

Office of National Statistics <https://www.ons.gov.uk/>

World Bank Open Data <https://data.worldbank.org/topic/economy-and-growth?view=chart>