

# Basic economic ideas and resource allocation

## Learning summary

After you have studied this chapter, you should be able to:

- define the fundamental economic problem
- explain the meaning of scarcity, opportunity cost and the basic economic questions
- define *ceteris paribus*
- recognise the importance of decision making at the margin
- distinguish between positive and normative statements
- outline the characteristics of factors of production
- distinguish between the rewards and the factors of production
- define specialisation
- assess the advantages and disadvantages of division of labour
- compare different economic systems
- explain the role of the factor enterprise in a modern economy
- draw and interpret production possibility curves
- explain how constant and increasing opportunity cost determine the shape of the production possibility curve
- explain the functions and characteristics of money
- distinguish between money and barter
- define liquidity
- explain free goods, economic goods, private goods and public goods
- distinguish between merit goods and demerit goods

## 1.01 The fundamental economic problem

The fundamental economic problem is that there are never enough resources to produce all the products people would like to have.

Resources are limited in supply (finite) whilst wants are unlimited (infinite).

## 1.02 Meaning of scarcity and the inevitability of choices at all levels

As there is scarcity of resources, choices have to be made. Consumers have to decide what to buy, workers – which jobs to do, firms – what to produce, governments – what to spend tax revenue on.

### Progress check A

Will the economic problem ever be solved?

## 1.03 Opportunity cost

Having to select one option involves an opportunity cost. **Opportunity cost** is the best alternative forgone.

Due to the economic problem of wants exceeding resources, economies have to decide what to produce, how to produce it and who will receive what is produced.

What to produce, how to produce and who will receive what is produced are sometimes referred to as the three basic questions which all economies have to answer.

### TERM

**Opportunity cost:** the best alternative sacrificed when an option is selected.

### TIP

Opportunity cost is a concept that you can use in analysing and evaluating a significant number of topics, e.g. whether a government should spend more on healthcare.

## 1.04 Ceteris paribus

**Ceteris paribus** means other things being equal.

Economists often make use of ceteris paribus to consider the possible effects of a change in one variable on another variable. For instance, an increase in real disposable income would be expected to lead to an increase in demand for gold watches, on the assumption that the other influences on demand for gold watches are not changing.

### TERM

**Ceteris paribus:** other things being equal.

## 1.05 Decision making at the margin

Individuals, households, firms and governments often have to make **marginal decisions**. These involve considering whether to make slight changes. For instance, whether to buy one more apple, produce one more car or to reduce the number of teachers employed in state schools.

## 1.06 Positive and normative statements

A **positive statement** is a statement of fact. It can be tested to assess whether it is right or wrong.

A **normative statement** is a statement based on opinion. It is a value judgement and, as such, cannot be proved right or wrong.

There are both positive and normative statements in economics. 'The unemployment rate in a country is 6%' is a positive statement. In contrast, 'the government's key priority should be reducing unemployment' is a normative statement.

### TIP

Much of what you write will be based on positive statements. In coming to a conclusion in an answer you may, however, be making a value judgement e.g. on what might be the most appropriate government policy measure to reduce unemployment. The conclusion should be based on economic analysis and not on uninformed opinion.

### TERMS

**Marginal decision:** whether to make slight changes.

**Positive statement:** a fact that can be tested.

**Normative statement:** a value judgement based on opinion that cannot be tested.

## I.07 Characteristics of factors of production and their rewards

Factors of production are resources used to produce goods and services:

- Land covers all natural resources – for example, the surface of the earth, the sea, rivers, minerals below the earth. Most land is geographically immobile but occupationally mobile. The reward to land is rent.
- Labour is human effort, mental or physical, used in the production of goods and services. Labour may be geographically immobile due to differences in housing costs and because of family ties. It may be occupationally immobile if workers lack education and training. Spending on education and training increases human capital. Wages are the reward to labour.
- Capital is human made goods used to produce other goods and services. Investment is spending on capital goods. Net investment occurs when firms purchase more capital goods than are needed to replace those capital goods which have become obsolete – gross investment exceeds depreciation. Capital varies in its occupational and geographical mobility. A photocopier, for instance, can be used in most types of industries and can be moved from one part of the country to another. In contrast, an operating theatre is likely to be occupationally immobile and a gold mine is geographically immobile. The reward for **capital** is interest.
- **Enterprise** is the willingness and initiative to organise the other **factors of production** and, crucially, to bear the uncertain risks of producing a product. Entrepreneurs are the people who have the willingness and initiative to make decisions and to take the risks involved in production. In a public limited company, the role of the entrepreneur is divided between the managers (who make the business decisions) and shareholders (who bear the risks). Entrepreneurs tend to be relatively, occupationally and geographically mobile. The reward for enterprise is profit.

### TERMS

**Factors of production:** resources used to produce goods and services.

**Land:** natural resources both on the surface and beneath the earth.

**Labour:** human effort used in production.

**Capital:** goods used to produce other goods.

**Enterprise:** organising the factors of production and bearing the risks of producing a product.

### Revision activity A

- Identify an example of each factor of production that is employed in the film industry.
- Give an example of a capital intensive industry and a **labour** intensive industry.
- What factors influence the supply of labour to a particular occupation?
- Explain the link between enterprise and opportunity cost.
- Why is the rent on **land** in city centres usually higher than that on land in rural areas?

### TIP

The two factors of production that students most commonly get confused about are land and capital. Remember land is any natural resource and not just land as soil, and capital refers to capital goods i.e. human-made goods and not money.

## I.08 Specialisation

**Specialisation** involves concentrating on particular tasks or products. Workers, firms, regions and countries can concentrate on producing one product.

Specialisation can increase output but there are risks attached. For instance, if a firm makes only one product and demand for that product falls, the firm would be in difficulty.

TERM

**Specialisation:** concentration on a particular task or product.

1.09 Division of labour

Division of labour involves breaking down the production into separate tasks and having each worker concentrate on a particular task.

One of the first economists to describe division of labour was Adam Smith. In his book *An Enquiry into the Nature and Causes of the Wealth of Nations* (often shortened to *The Wealth of Nations*), he described the 18 separate processes involved in producing a pin.

Advocates of division of labour claim that it increases output and reduces the average cost of production. This is because it enables workers to concentrate on what they are best at, increases their skill ('practice makes perfect'), reduces the time it takes to train them, reduces the equipment needed, cuts back on the time involved in moving from one activity to another and makes it easier to mechanise the process.

Critics of division of labour, in contrast, argue that it may reduce output and increase the average cost of production. They claim that workers can get bored, doing the same task time after time. Boredom can lead to workers making mistakes and leaving the firm after a short time. In addition, **division of labour** may mean that a firm does not find out what task a worker is best at and may mean that a firm will find it difficult to cover for workers who are absent from work due to illness or because they are undergoing training.

Progress check B

In what way do schools engage in division of labour?

TERM

**Division of labour:** breaking down production into separate tasks to be carried out by separate workers.

1.10 Different economic systems

An economic system is a way of allocating resources to answer the three fundamental questions of what to produce, how to produce it and for whom.

There are three main types of economic systems:

- a market economy
- a planned economy
- a mixed economy

TERMS

**Market economy:** resources are allocated by the price consumers are willing to pay for products.

**Planned economy:** government decides how resources are allocated.

Market economies

A **market economy** is one in which resources are allocated by means of the price mechanism. Consumers indicate what they are willing and able to buy through the prices they are prepared to pay. Private sector firms respond to changes in consumer tastes by altering what they produce. Property is privately owned and the government's role in the economy is minimal.

Among the advantages claimed for a market economy are consumer sovereignty, incentives for workers and firms to be efficient and innovative, and a lack of bureaucracy.

The possible disadvantages of a market economy include an inequitable distribution of income, a risk of unemployment of resources, under-consumption of **merit goods**, over-consumption of **demerit goods**, lack of provision of **public goods**, information failure, and abuse of market power.

TERM

**Public good:** a product that people cannot be stopped from consuming even if they are not willing to pay for it and once used can still be used by others.

TERMS

- Merit good:** a product the government considers people undervalue.
- Demerit good:** a product the government considers people overvalue.

Planned economies

A **planned economy** is one in which the government makes most of the decisions on how resources are allocated. Property is largely state owned and most workers are employed in state owned enterprises (SOEs). The private sector’s role in the economy is minimal.

The advantages of a planned economy include:

- full employment of resources
- avoidance of wasteful duplication
- an equitable distribution of resources
- consideration of externalities
- provision of merit goods and public goods
- discouragement of demerit goods
- long term planning and support for vulnerable groups

Among the possible disadvantages of a planned economy are slow responses to changes in consumer demand, too much bureaucracy, a lack of incentives, and too much concentration on capital goods.

Mixed economies

In a mixed economy, both the private and public sectors play a key role. Resources are allocated using both the price mechanism and state planning.

A mixed economy seeks to gain the advantages of both a market and a planned economy whilst seeking to avoid the disadvantages. How successful it is depends on the effectiveness of government policies and how efficient the private sector is.

In the late twentieth and early twenty-first century, a number of economies moved from a planned towards a market economy.

There are a number of problems that can arise when central planning in an economy is reduced:

- Inflation may rise when price controls are removed.
- It may take time to build up entrepreneurial skills, to develop a financial sector (including a stock exchange) and implement a social welfare network.
- The removal of government support and trade restrictions can result in some enterprises going out of business and can cause unemployment.

1.11 The role of the factor enterprise in a modern economy

In many countries enterprise is playing an increasing role. As the size of the private sector increases relative to the size of the public sector, there is more opportunity for new businesses to be set up.

Enterprise can encourage invention, innovation and competition. Such effects can increase output and improve living standards.

Revision activity B

Complete Table 1.01.

A comparison of a market economy and a planned economy		
Features	Market economy	Planned economy
Allocative mechanism		State directives
Key sector	Private	
Key decision makers	Consumers	
Other names		Centrally planned, collectivist, command, state owned
Example	Hong Kong	
Ownership of means		State owned
Provision of public goods		
The profit motive	Present	

Table 1.01

## 1.12 Production possibility curves

A **production possibility curve (PPC)** shows the maximum output of two types of products that can be produced with existing resources and technology.

A production point on the curve represents full use of resources, a production point inside the curve indicates unemployed resources and a production point outside the curve is currently unattainable.

A shift to the right of a PPC is caused by an increase in the quantity or quality of resources. A change in the slope of a PPC will occur if the ability to produce only one of the two products alters.

### TERM

**Production possibility curve (PPC):** a diagram showing the maximum output of two types of products that can be made with existing resources and technology.

### The shapes of production possibility curves

A straight line PPC indicates a constant opportunity cost.

A PPC which is bowed out indicates an increasing opportunity cost. In this case, as more capital goods, for example, are produced, more consumer goods have to be sacrificed. This reflects the fact that the resources which are most suited to producing capital goods are used first.

### TIP

In drawing PPC curves make sure that you draw the curve/line all the way to each axis – do not leave a gap. Also when drawing the PPC as a curve, make sure it is continuing to rise when it touches the vertical axis – do not have it turning down.

### Revision activity C

Look at Figure 1.01 and answer the questions which follow.

- What does a straight line production possibility curve (PPC) such as AB indicate?
- What does the movement of the PPC from AB to AC show?
- Why may the PPC have shifted from AB to DE?

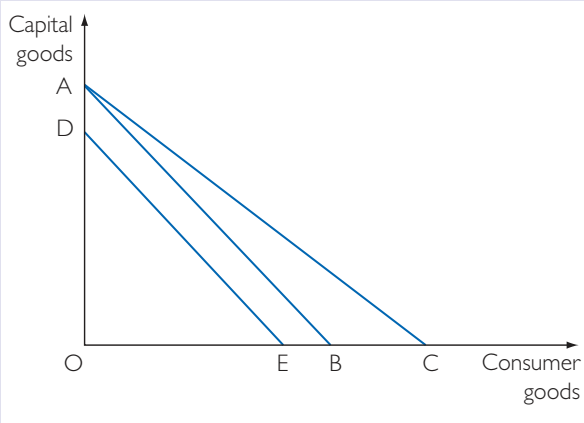


Figure 1.01

## 1.13 The functions and characteristics of money

Money covers any item which carries out the functions of money. The four functions of money are:

- 1 a medium of exchange
- 2 a store of value
- 3 a unit of account
- 4 a standard of deferred payments

Probably the best known function of money is as a medium of exchange. Money makes it easy for people to buy and sell products. In the absence of money, people would have to engage in **barter**.

A store of value means that money enables people to save. Money can be saved in a range of financial institutions to be used in the future.

**Money** acts as a unit of account, or a measure of value, as it permits the value of goods, services and assets to be compared.



A standard of deferred payments allows people to agree prices of future payments and receipts. This enables payments to be made and received in the future and allows people, firms and governments to lend and borrow.

To act as money, an item has to be generally acceptable. An item may have all the other characteristics needed for it to act as money but if people are not prepared to accept it in exchange for products and in its other capacities, it will not act as money. The other characteristics money should possess are durability, recognisability, divisibility, portability, limited in supply, stability in value and uniformity. There are links between the characteristics. For instance, to be stable in value it should be limited in supply.

TERMS

**Money:** any item that acts as a medium of exchange, store of value, unit of account or standard of deferred payments.  
**Barter:** direct exchange of products.

Near money

Near money is a term for financial assets that can be converted into money relatively quickly. While such assets are not currently carrying out the essential function of money, that is acting as a medium of exchange, they have a high degree of liquidity. Examples of near money include treasury bills and short term government bonds. Commercial banks hold a range of these assets as they can be quickly turned into cash and so count in their liquidity ratios.

Money and barter

Barter is the direct exchange of products. Money has a number of advantages over barter. The key one is that it makes it easier and quicker to buy and sell products. As a result, money can encourage specialisation and trade.  
Money also makes it easier for people to save, value products, borrow and lend. A system of barter would involve uncertainty as to which products other people will be prepared to accept and how they will value them.

Progress check C

Why do apples not act as money?

Liquidity

**Liquidity** means the ability to turn an asset into cash quickly and without loss. Cash is obviously the most liquid asset. Current (checking) accounts at commercial banks are more liquid than deposit (savings) accounts.  
A commercial bank keeps some liquid assets to meet their customers' demand for cash.

TERM

**Liquidity:** being able to turn an asset into cash quickly without a loss.

Revision activity D

Fit the following terms into the sentences, using each term only once:

- 1 medium of exchange
- 2 store of value
- 3 unit of account
- 4 standard of deferred payments
- 5 general acceptability
- 6 durability
- 7 liquid
- 8 cheques
- 9 divisible
- a .... are not money. They are a means of transferring a bank deposit from one person to another.
- b The function of money which allows products to be bought on credit is a ....
- c To act as a .... money has to be .... in order that payments of different values can be made and change can be given.
- d A sight deposit (current account) is more .... than a time deposit (deposit account).
- e The .... and .... of money allows it to act as a ....
- f Money acts as a .... when the value of products is compared.

## 1.14 Economic goods and free goods

The vast majority of goods and services are what economists call **economic goods**. An economic good is one which takes resources to produce it. As a result, its production involves an opportunity cost.

**Free goods** are rare. They do not involve the use of resources to produce them and so they do not have an opportunity cost. Examples include sunlight and air.

### Progress check D

A firm gives a present of a free cake to its customers just before a public holiday. Explain whether the cake is a free good or an economic good.

### TERMS

**Economic good:** takes resources to produce.

**Free good:** no resources are used to produce it.

## 1.15 Private goods and public goods

Most products are private goods. A private good is both excludable and rival. It is excludable in the sense that someone who is not prepared to pay for it can be prevented from consuming the product. It is rival in that if one person consumes the product, someone else cannot consume it. As private goods are excludable, they can be sold through the market. Private sector firms have an incentive to produce them as they can charge directly for them.

The two key characteristics of a public good are non-excludability and non-rivalry. It is not possible to stop non-payers from enjoying the product. As a result, people have no incentive to pay for a public good. Once provided, a public good is available for everyone including non-payers. So people can act as free riders, consuming the product without paying for it. When people consume a public good, they also do not reduce other people's ability to consume the product. For

instance, one more person walking down a street will not reduce the benefit other people receive from the street lighting.

Two other characteristics of a public good are non-rejectability and zero marginal cost. It is not possible for people to reject public goods such as defence. It is also often the case that once provided, it will not cost any more to extend the benefit of a public good such as sea defence to another person.

As it is not possible to charge people directly for public goods, private sector firms lack the financial incentive to provide them. As a result, the provision of public goods has to be financed out of taxation. The government can produce them or pay private sector firms to provide them.

A **quasi-public good** is a product which possesses some of the features of a public good. For instance, it may be difficult to restrict entry to a beach, making it non-excludable, but if it is crowded it may be rival. Some economists refer to products which are non-excludable but rival, such as a beach and fish in the ocean in some cases, as common resources.

It can be difficult for a government to determine the quantity of a public good to provide. This is because preferences are not revealed via the price mechanism.

### TERM

**Quasi-public good:** has features of public and private goods, also called common resources.

### Progress check E

Why does the development of electronic road pricing suggest that roads are changing from being a public good into a private good?

## 1.16 Merit and demerit goods

Merit and demerit goods are special categories of **private goods**.

A merit good is a product that a government considers people undervalue. It has two key characteristics. As well as people underestimating the benefit they



receive from consuming the product, the consumption also provides external benefits. As a merit good is undervalued, it will be under-consumed and so under-produced if left to market forces. Output will be below the allocatively efficient (socially optimum) level. The existence of information failure and external benefits results in market failure.

To encourage greater consumption of a merit good a government may:

- provide it for free
- subsidise it
- set a maximum price combined with some state provision
- provide some information about its benefits

If the government thinks it is very important for people to consume the product, it may make its consumption compulsory.

A demerit good is a product that the government considers people overvalue. As with a merit good, a demerit good has two key characteristics. People fail to appreciate the harmful effects they experience from consuming the product and consumption of the product generates external costs. As a demerit good is overvalued, it will be over-consumed and over-produced if left to market forces. Output will be above the allocatively efficient level. The existence of information failure and external costs results in market failure.

To discourage consumption of a demerit good a government may: tax it, set a minimum price or provide information about its harmful effects. If the government thinks the product is very harmful, it may ban its consumption.

Governments differ as to what they consider to be merit and demerit goods. The US government, for instance, believes that people are fully and accurately informed about the benefits and risks of owning guns and so does not impose many restrictions on gun ownership. In contrast, the UK government makes it more difficult to own a gun as it thinks information failure and the negative externalities involved are more significant.

### TERM

**Private good:** a product that people can be stopped from consuming and where one person's consumption does not reduce other people's ability to consume it.

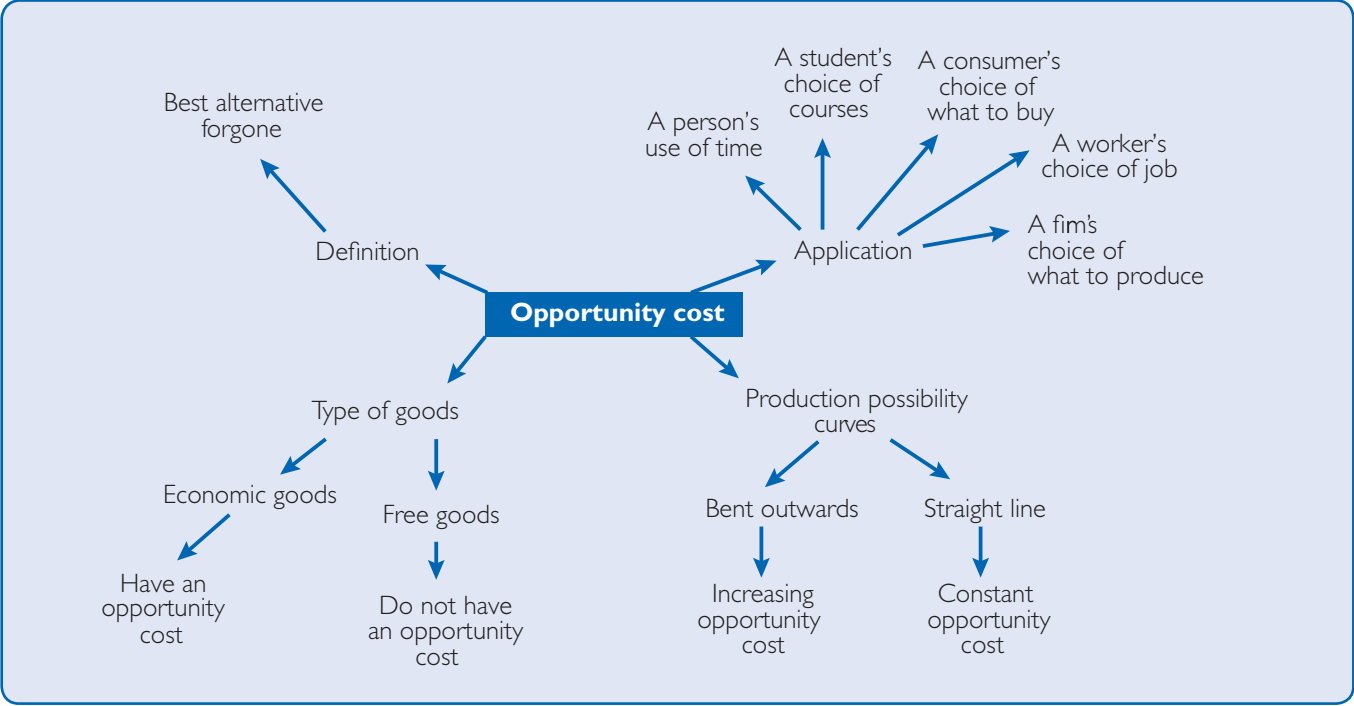
### Progress check F

Why may a product be treated as a demerit good in one country but not in another country?

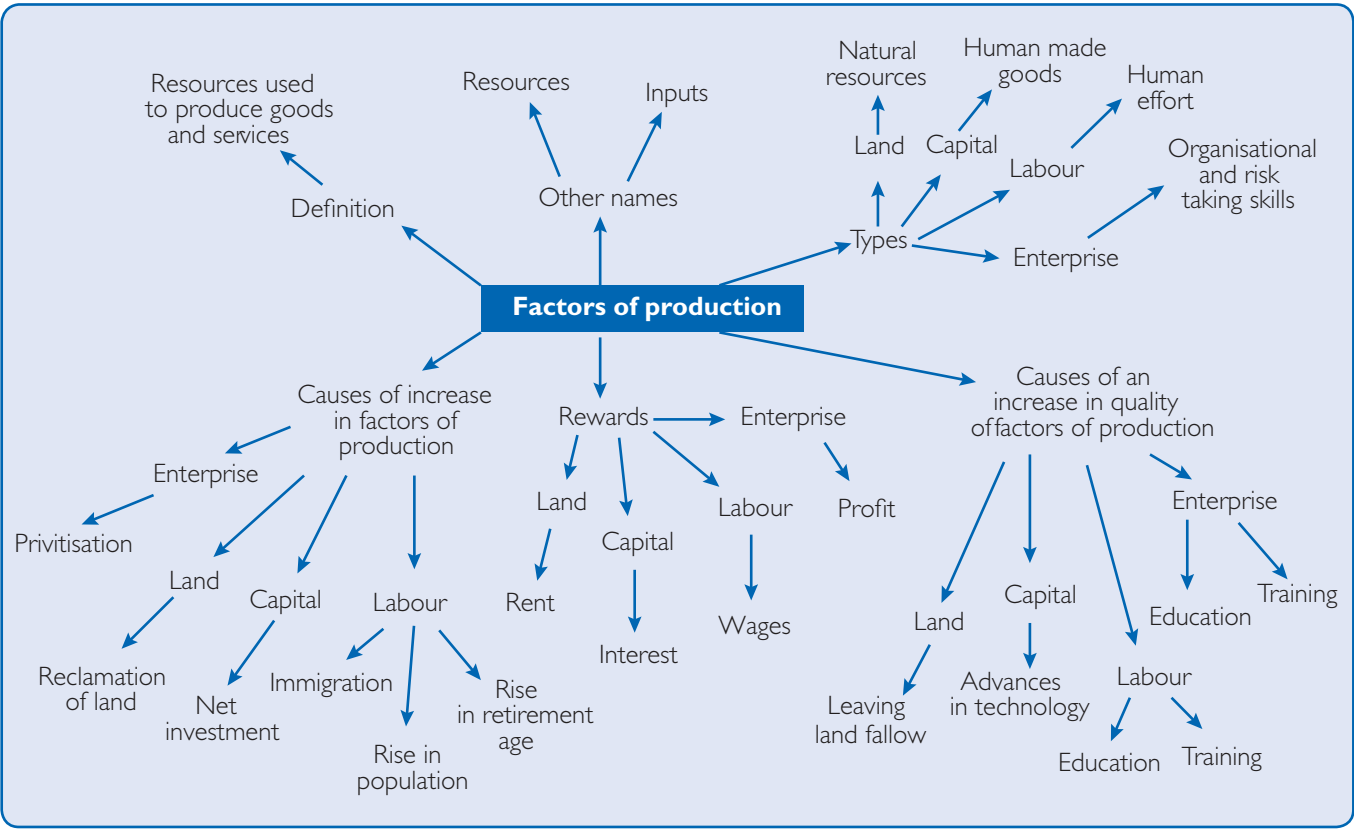
### TIP

Take care not to confuse public goods and merit goods. To decide whether a good is a public good, the key question is not whether people have to pay to consume it but whether it would be possible to charge for them.

Mind maps



Mind map 1.01: Opportunity cost



Mind map 1.02: Factors of production