

1.3.1 What is the nature of economics?

Scarcity – the basic economic problem that there are infinite wants but limited resources

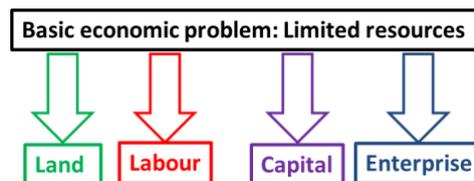
Limits the amount that can be produced however the amount of goods and services that consumers need and want are infinite e.g. computers, food and cars.

Limited resources, Limited production

+ *Unlimited amount of goods and services that consumers desire*
= *Scarcity*

Resources/ Factors of Production (FOP) are inputs used in the production of goods and services. There are two types;

1. A renewable resource – one whose stock level can be maintained over a period of time e.g. solar energy, wind power, water, oxygen, timber and soil. These may decline over time if they are consumed at a faster rate than the environment can replenish them, They require careful management to avoid such things as soil erosion and deforestation
2. A non-renewable resource – The stock level is decreased over a period of time as it is consumed including not only fossil fuels e.g. gas, oil and coal but also commodities such as steel, copper, aluminium. The rate at which they decline can be changed through careful management of resources e.g. recycling and the development of substitutes. The price mechanism can help to reduce the rate of consumption through higher prices.



The **four factors of production** are categorized as:

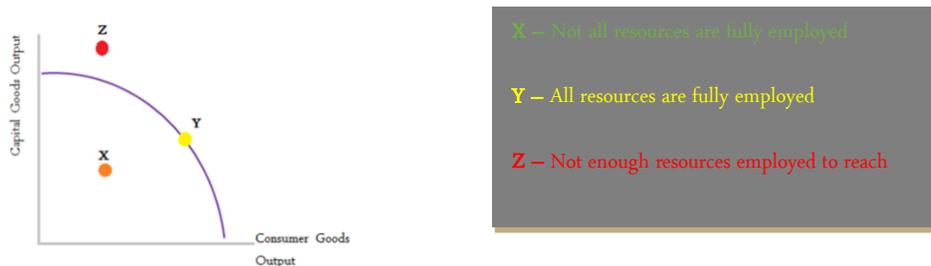
- a) Land: Any natural resource used to produce goods and services is called land. This includes not just land but anything coming from land. These resources may be renewable such as forests or non renewable such as oil and natural gas.
- b) Labour: it is the mental or physical effort that people contribute to the production of goods and services. Mental effort can be services of a teacher, lawyer etc where as physical effort can be the work done by a carpenter or a plumber.
- c) Capital: any man made resource used to produce other goods and services is called capital. Examples can be offices, factories, machinery etc.
- d) Entrepreneur: is a person who combines the other factors of production: land, labour and capital, to earn profit. He is the one bearing risk and managing decision making.

Scarcity means that choices have to be made in society; consumers, producers and government must all decide on the opportunity cost.

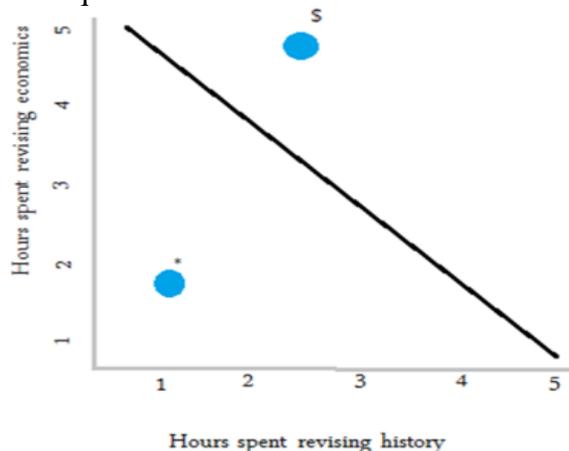
Opportunity cost is next best alternative foregone when making a decision. e.g. A consumer may have £20 to spend on a meal at a restaurant or the next best thing – a T-shirt- , the individual cannot buy both at the same time. Choosing the new t-shirt then the opportunity cost is foregoing the meal. A firm may have £50,000 available to reinvest in a new machine or a training programme for employees, the managers have to decide which the best use of funds is. A government might have an extra £100 million tax revenue. It might use this to build a new hospital but in doing so forgoes the building of a large motorway considered to be the next best alternative.

Production Possibility Frontiers (PPF) – shows the maximum combination of goods or services that an economy can produce when all its resources are fully and efficiently employed given the level of technology available in a given period of time. It can be used to illustrate scarcity and opportunity cost.

Capital goods are produced to create more consumer goods in the future, otherwise known as investment. Overtime Capital goods depreciate so in order to maintain an economy’s production potential they must produce more capital goods to replace them. However, this will be achieved at a sacrifice of consumer goods.



Along the PPF - Society can move along the PPF. \uparrow Consumer goods = \downarrow Capital goods
 For the frontier to be straight the two goods have to have a perfect trade off. They do not have to have a 1:1 ratio but an equivalent.



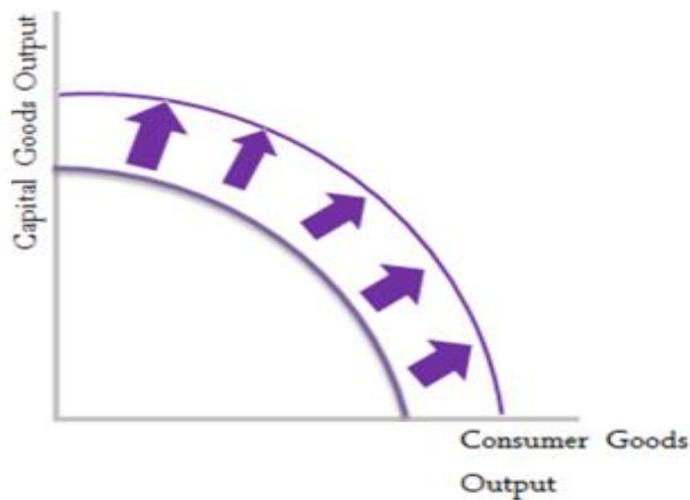
As per the graph the maximum combination of revision hours e.g. 5 hours of history = 0 economics revision hours

\$ = Point Outside of the Frontier – requires a change e.g. more resources

*= Point Inside the Frontier – not being efficient enough, not working at full capacity.

Economic Growth – An increase in the productive capacity of the economy e.g. ↑in productive potential;

1. ↑resources = more capital goods and ↑workers
2. Improved technology= Better quality, higher level technology (more efficient) and improved technique

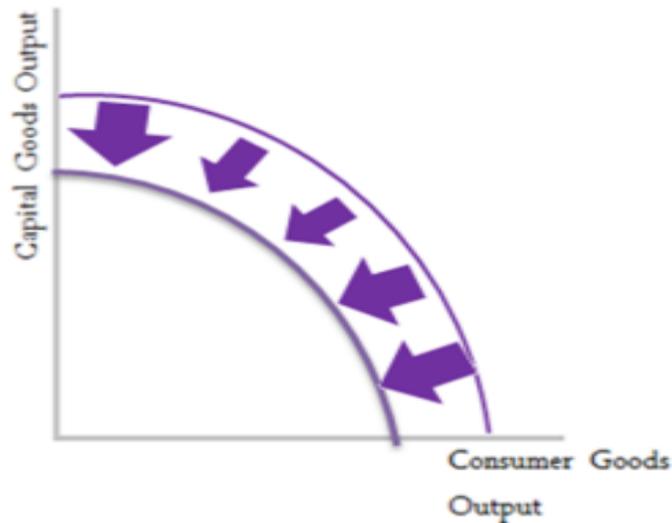


Inefficiency is when resources are not being used to their maximum potential;

1. Unemployment
2. Resources unused
3. Inefficient use of resources or services

Inward shift – The PPF can shift inwards to indicate a decrease in productive capacity.

1. Decrease in resources =
 - i) fall in population e.g., migration or lower birth rate
 - ii) Destruction of infrastructure e.g. war or natural disaster
 - iii) global warming?



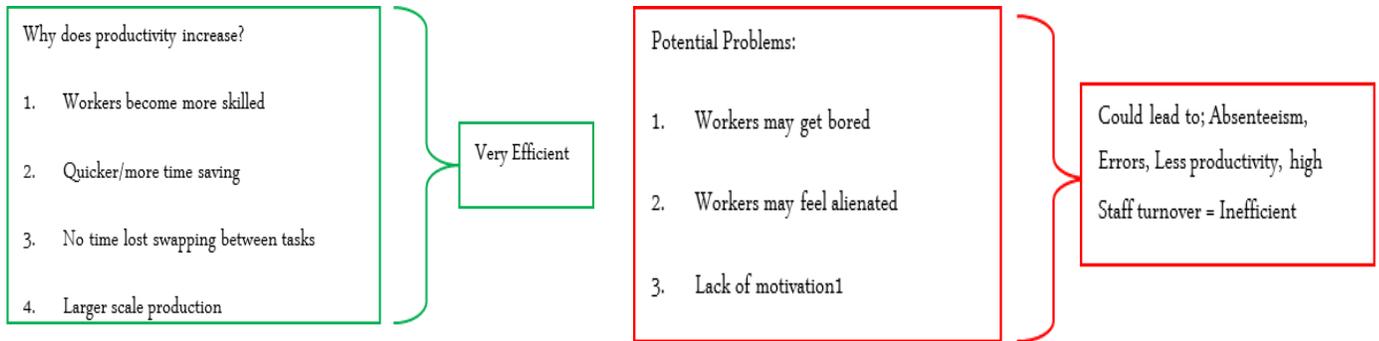
Specialisation and the division of labour

Adam Smith (1723-1790) wrote a book “The wealth of nations” – his head is on the £20 note as he promoted;

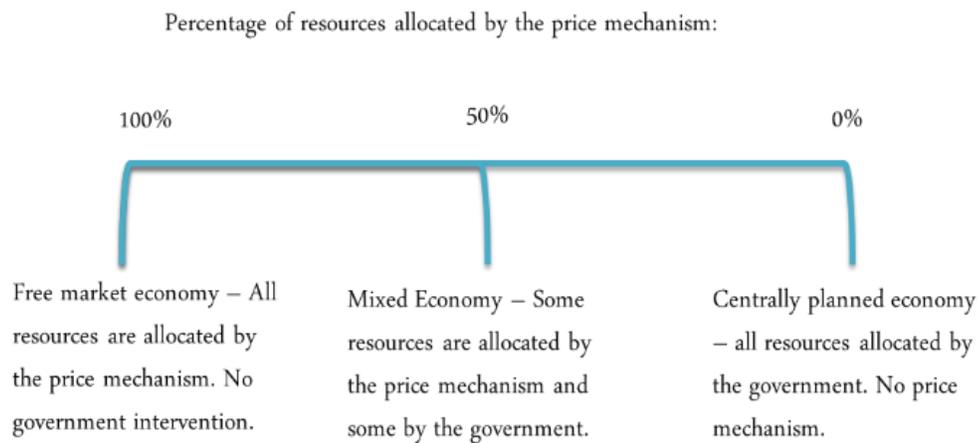
1. The Free market
2. “Invisible hand theory”
3. Trade
4. Division of labour

Adam Smith’s Pin Factory Study: The process of making pins could be broken down into over 18 separate tasks. He observed that each worker could produce 20 pins. By specialising on one task each worker could average over 4,000 pins a day. **The division of labour** – a process where production is broken down into a separate sequence of tasks and workers specialise in a particular one in order to ↑ productivity.

As you specialise more you start to take across equipment or resources that were equally suited to both consumer and capital goods. **The more specialisation, the greater the opportunity cost.** As society dedicates more resources to producing more of one good, these additional resources contribute less to the output of another good (diminishing returns).



Free market and mixed economies – An economy can be organised in different ways to produce goods and services



In reality the vast majority of economies comprise a mixture of both private enterprise (the private sector) and state intervention (the public sector). In the UK (approx.) 60% are allocated by the private sector and 40% by the public sector. In European economies e.g. France, Germany and Sweden the size of the public sector is greater while in North America (U.S.A and Canada) it is lower. North Korea is a centrally planned economy

Free market Economy	
Advantages	Disadvantages
Economic efficiency: Productive efficiency – competition = firms aim to minimise average costs	Income & Wealth distribution uneven = No government support many may live in poverty
Allocative efficiency – goods and services are produced to meet exactly what we want.	Public goods not provided – street lighting, defence, roads fixed
Quality – firms try to compete = ↑Quality	Demerit goods – drugs, alcohol and tobacco
Choice – wide variety of goods and jobs	Monopolies= higher prices , less choice
Financial Incentives	Externalities ignored – cost of pollution, benefits of education

Mixed economy – balance between resources that are allocated by the government and market forces (price mechanism):

- i) Private sector -> Owned by individuals and firms
- ii) Public sector -> Owned by government
- iii) Ration of private ownership
- iv) Mixed have a varying levels of state and private sector healthcare

Other types:

Centrally planned economy – An economy in which decision on resource allocation are guided by the government e.g. old Eastern Europe, North Korea and Cuba.

Transition economy – An economy which is in the motion of changing from one economy to another economy.

Positive and Normative economics:

Positive statement is a scientific, non-value judgement, based on fact that can be tested as true or false.*

Normative statement is a non –scientific, value judgement, which cannot be tested as true or false. It often contains the phrases ‘ought to’, ‘should’ and ‘fair/unfair’. *

***In the exam for positive statement include how it can be tested and for an example of normative take phrases out of the text.**

1.3.2 What determines the demand for a good or service in a market?

A market is where buyers and sellers come into contact for the purpose of exchange;

i) A product market refers to goods and services from which the consumer derives utility – wanted for their own sake e.g. chocolate, wine and fast food

ii) A commodity market refers to raw materials or minerals used in the production of goods and services e.g. wheat, sugar, gold and oil

iii) A labour market refers to the buying and selling of labour time for the production of goods and services e.g. plumbers, teachers and accounts.

Downward sloping demand curve

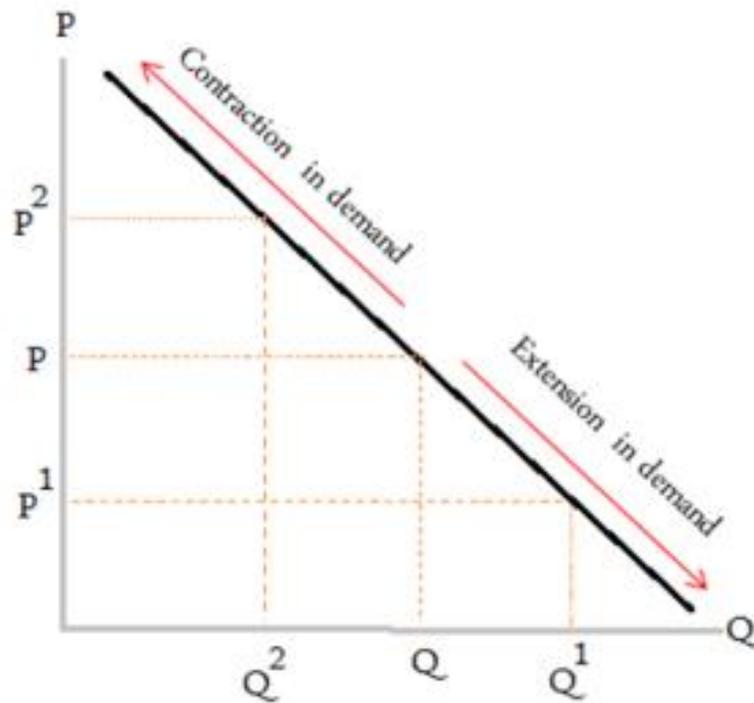
Demand = the amount of goods and services that consumers are willing and able to purchase at a specific price.

A demand curve = a curve showing the quantity of goods and services that consumers would be willing and able to buy at any given price over a given period of time. It slopes downwards for two reasons:

1. The substitution effect – when the price of a good falls, it becomes cheaper relative to its substitutes and some consumers switch their purchases from a more expensive substitute to the good.
2. The income effect – when the price of a good falls, the real income of a consumer may rise = the purchasing power of the consumer’s nominal income has increased and so more goods can be bought.

Movement along the demand curve

There is movement along the demand curve **only** when there is a change in its price. A fall causes an **EXTENSION** in demand and a rise in Price causes a **CONTRACTION** in demand.



Shifts in the Demand Curve

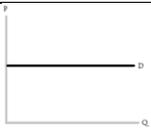
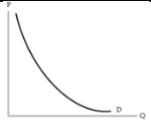
An \uparrow in demand = demand curve shift right (outwards)

A decrease in demand = demand curve shift left (inwards)

Various factors that shift the demand curve of a good:

1. $\downarrow P$ complementary good e.g. PS3 and PS3 games
2. $\uparrow P$ Substitute goods e.g. Xbox 360 and PS3
3. Δ Fashion/tastes e.g. It is cool to own the latest iPhone
4. \uparrow Advertisement e.g. Xbox 360 adds on television shows
5. $\uparrow Y$ (for normal goods) e.g. Play Station becomes more affordable
6. $\downarrow Y Tax = \uparrow Y$
7. \uparrow Credit facilities = easier to obtain funds to pay for PS3
8. Government legislation e.g. legal age limits
9. 'Acts of God' e.g. natural disasters = destruction and demand falls

Price Elasticity of Demand:

	Demand Curve	Value of PED	Example of a good	What effect does a change in price have? [in words]
Perfectly Elastic		$PED = \infty$	Perfect substitute e.g. Granny Smith Apples for Granny Smith Apples	Any change in price has a total change in demand
Elastic		$PED = < -1$	Could be a luxury; -Have many substitutes - Some could be good substitutes e.g. a Holiday in Spain instead of a Holiday to Italy.	The percentage in quality is greater than the percentage change in price. $\% \Delta Qd > \% \Delta P$
Unitary Elastic		$PED = -1$ at all points [otherwise known as a rectangular hyperbola]	=	The percentage change in quantity is equal to the percentage change in price. $\% \Delta Qd = \% \Delta P$

Inelastic		$PED \Rightarrow -1$ e.g. $-0.5, -2.7$	A good that could be inelastic always, a necessity e.g. petrol	<p>The percentage change in quantity is less than the percentage change in price.</p> $\% \Delta Qd < \% \Delta P$
Perfectly Inelastic		$PED = 0$	No substitutes	The percentage change in quantity is <i>not affected</i> by the change in price.

Determinants of PED:

1. Availability of substitutes – More substitutes available = more elastic demand as consumers can switch to another substitute if the Price increases
2. Luxury and necessity goods – A necessity will be inelastic as consumers are still likely to buy it e.g. petrol (small % consumers may stop) -> Luxury tends to be elastic as the price increases people who don't need it may stop buying it.
3. Proportion of income spent on the good – the smaller the % = more inelastic ~> a large % = less inelastic (more elastic) = will have a relatively small impact on the spending of consumers
4. Addictive and habit forming goods – very inelastic ~likely to keep buying despite $\uparrow P$ e.g. cigarettes
5. The time periods – the shorter the time period the more inelastic demand as consumers have little time to switch their demand choice to a cheaper good.
6. Brand image – stronger the brand image = more price inelastic the good becomes e.g. Coca Cola as consumers are often willing to pay a premium price for the good.