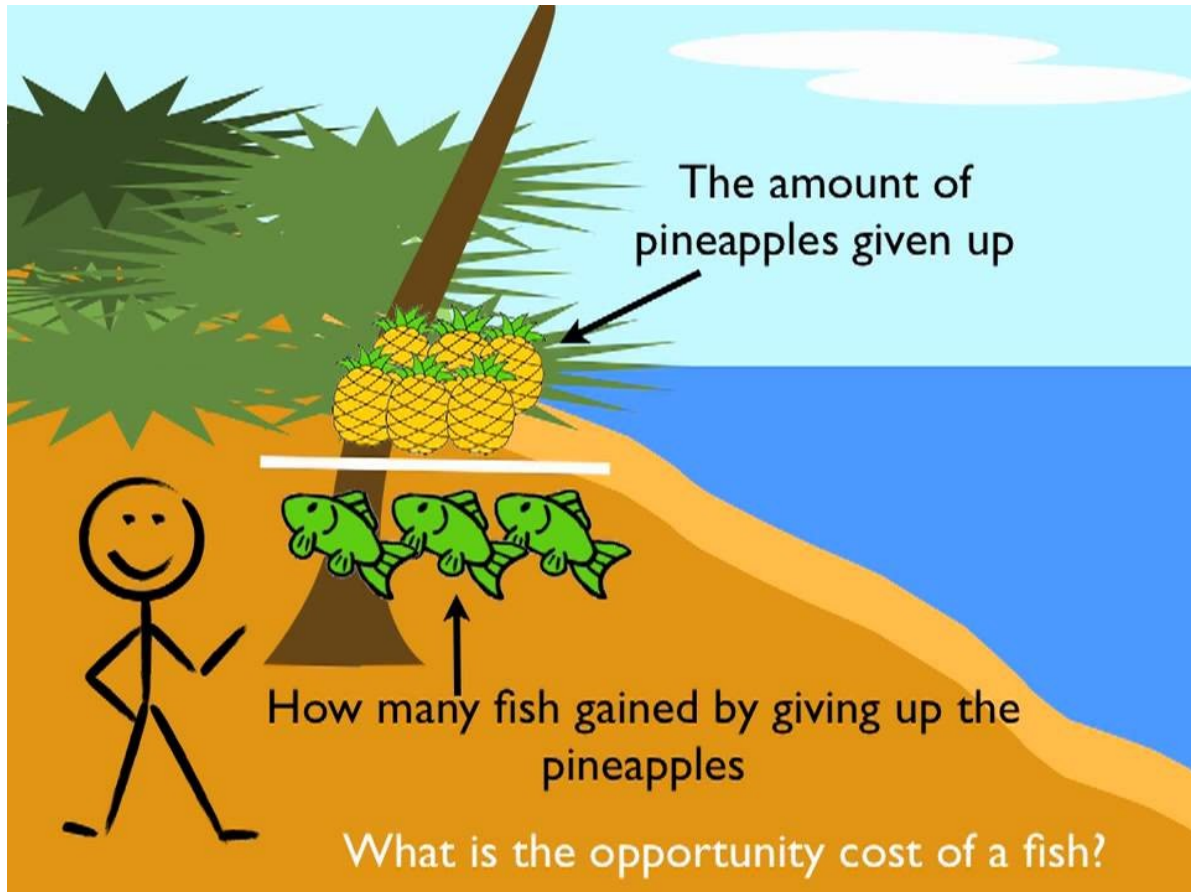


Edexcel Economics (A) Theme 1 (micro) – 2018/19
THE NATURE OF ECONOMICS



Name: Group:

Teacher: Room: AT11....

PLEASE BRING YOUR COURSE COMPANION TO ALL LESSONS!!!

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What is microeconomics?

Microeconomics deals with.....

....the economic behaviour of individuals or groups within society. i.e. the study of the spending decisions of individual consumers or consumers within a particular market such as the market for smart phones (demand theory) or the determination of wage rates (wage theory).

1.1.3 – The Basic Economic Problem: Scarcity, Choice & the Opportunity Cost

- a) The problem of scarcity – where there are unlimited wants and finite resources
- b) The distinction between renewable and non-renewable resources
- c) The importance of opportunity costs to economic agents (consumers, producers and government)

The basic economic problem arises because resources are finite but human wants are infinite

What is Economics Really About?



[Tutor2u article on 'What is Economics'](#)

Scarcity, Choice, Opportunity Cost in the Health Sector



A [dialysis machine](#) is used for patients who have kidneys that don't work properly. Without dialysis the patients would quickly die. They are expensive costing about £65,000. Some patients can get a kidney transplant, which means they won't need dialysis any longer.

A hospital in a town has one dialysis machine that can run for 30 hours per week. As the boss of the hospital, you must decide who gets the treatment.

1	2	3	4	5	6
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30

Justify your decision:

What is the difference between wants and needs – A need is something essential for survival e.g. food satisfies hungry people. A want is something desirable but not essential to survival e.g. ice cream.



What goods and services might we want but not need?

Scarcity is.....

Where wants for a product or factor of production exceed the amount available. In economics, all resources are scarce.



[Tutor2u article on Scarcity & Choices](#)

Scarcity arises because wants are infinite, almost everyone always wants more goods and services, but resources are finite. Our limited resources are insufficient to make all the products consumers want.

What is the basic economic problem? – Unlimited wants and scarce resources mean no society can produce sufficient products to satisfy everyone's wants. Choices have to be made. We have to choose one option between alternatives. Therefore, the economic problem is how to ALLOCATE SCARCE RESOURCES BETWEEN ALTERNATIVE USES.



Over to you!

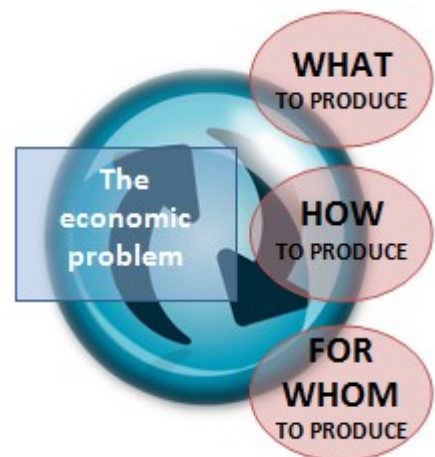
Fill in the gaps exercise – see table of 15 terms on p7

[The Basic Economic Problem](#)

The main purpose of economic activity is to produce _____ and _____ to provide for our _____ and _____. If the latter are met efficiently and effectively then the overall _____ welfare for citizens is increased.

Three key problems/questions are faced by any economic system:

- 1 _____ to produce?
- 2 _____ to produce?
- 3 _____ to produce?



The Basic Economic Problem – cont'd

There are insufficient resources to satisfy our needs and wants which creates _____. Resources are said to be limited or _____ and so we must make _____. The basic economic problem relates to limited resources but _____ wants.

The use of resources for one choice means you cannot use these resources elsewhere. This is called _____. For example, if you have a part time job on Saturdays, you sacrifice doing your economics homework. _____ goods are scarce and involve opportunity cost, whereas _____ goods such as air have no opportunity cost.

wants	finite	what	infinite	needs
scarcity	goods	choices	economic	opportunity cost
for whom	free	how	services	economic

Economic Resources

Goods – physical items (tangible items) e.g. chocolate bar that satisfy wants and needs

Services – activities that other people or businesses do for you, intangible items (can't be touched) e.g. plumbing & hairdressing that satisfy wants and needs



List THREE goods and THREE services that you have bought in the last week:

Goods

- 1.
- 2.
- 3.

Services

- 1.
- 2.
- 3.

What is the difference between a consumer and a capital good?

Consumer goods satisfy wants and needs now such as clothes or a new car.

Capital goods such as offices, factories and machinery are useful, not in themselves but are valued because they can help produce items in the future. They are used to increase the future productive capacity of the economy

Distinguish between renewable & non-renewable resources

Renewable resources are replenished (replaced) by natural processes e.g. forests that can be replanted or solar energy that does not get used up.

Non-renewable resources are not replaced naturally e.g. oil, coal & natural gas.

In 2013, the UK had more off-shore wind turbines than all other countries of the world combined. The UK government announced plans to close 5 coal burning power stations and to build 5 nuclear power stations to produce electricity. One nuclear power plant at Hinkley Point will take 10 years to be fully operational.



[Tutor2u article on finite and renewable resources](#)

Q: Which one of the following is the correct classification for these energy sources?

Wind turbines

- a) Non-renewable
- b) Non-renewable
- c) Renewable
- d) Renewable

Coal

- Renewable
- Non-renewable
- Non-renewable
- Renewable

Opportunity cost

Due to the **scarcity** of resources there is a need to make **choices**; there is always an alternative use of resources.

Definition:

Opportunity cost measures the value (benefit) of the **next best** alternative use of resources foregone.

More detailed definition from 'The Economist'

The true cost of something is what you give up to get it. This includes not only the money spent in buying (or doing) the something, but also the economic benefits (**Utility**) that you did without because you bought (or did) that particular something and thus can no longer buy (or do) something else. For example, the opportunity cost of choosing to train as a lawyer is not merely the tuition fees, price of books, and so on, but also the fact that you are no longer able to spend your time holding down a salaried job or developing your skills as a footballer. These lost opportunities may represent a significant loss of utility. Going for a walk may appear to cost nothing, until you consider the opportunity forgone to use that time earning money. **Everything you do has an opportunity cost.**



[Tutor2 article on Opportunity Cost](#)

[Opportunity cost practice short questions:](#)

(1) What is the opportunity cost of you going to university?

(2) What is the opportunity cost to the firm of buying a new machine?

(3) In economic terms is a free ticket to watch Southampton FC really free?

(4) The opportunity cost of building a new motorway would be:

- A The financial cost of building the motorway.
- B The other goods and services which the labour employed constructing the road could produce.
- C The other goods and services that would be produced if the motorway were not built
- D The loss of farmland used in order to build the road.

(5) A student spends £150 on giving a birthday party for some of his friends. The opportunity cost of the party to him may be represented by:

- A the presents he receives back from his friends
- B the enjoyment he gets from the party expressed in monetary terms
- C the DVDs on which he would otherwise spend the £150
- D the financial cost he incurs in clearing up after the party

(6) A man bought a car for £8,000 but never uses it. His car would fetch only £3,500 second hand, but a similar car would now cost £9,000 new. His present opportunity cost of owning the car is:

- A £1,500
- B £3,500
- C £6,000
- D £8,000

(7) Extract from *The Guardian* 27 July 2012 - Caring for Britain's growing elderly population could cost up to £106bn a year, equivalent to paying for a second NHS, according to research.

Explain the significance of opportunity cost to the increase in government spending on caring for the elderly (4)



HS2 – Opportunity Costs – exam style question

[\(1:51 promotional video\)](#)

HS2 will see Britain adopt the worldwide standard and finally see the major cities of the Midlands and the North connected to the extensive, Europe-wide high speed network. It will revolutionise our railways, create thousands of jobs, bring major cities closer together, generate investment in neglected areas and provide passengers with an unprecedented travel experience. It will transform Britain's capacity, connectivity, trains, passenger experiences and travel sustainability while driving growth and regeneration.

www.hs2.org.uk/about-hs2

Arguments against: One of the strongest arguments against HS2 is the opportunity cost. Spend £50bn on HS2 and that's £50bn gone from other projects. The UK is heavily in debt, public finances are stretched so spending must be carefully prioritised. But the government has failed to compare the impact of HS2 against spending the money on other projects, sustainability think tank the New Economics Foundation says.

It suggests a £10bn upgrade of the East and West Coast main lines, £6bn on a bus and tram network in four core cities in the Midlands and the North, and £2bn on walking and cycling schemes.

Matt Ridley in the Times noted that for the cost of HS2 you could fix the nation's potholes, upgrade the existing West Coast Main Line, fix other rail bottlenecks, turn busy A-roads into dual carriageways, build a third runway at Heathrow, invest £2bn in cycle networks and provide superfast broadband across the country. Other projects which may be affected include the Sky Cycle scheme in London, a rail tunnel at Welwyn North and a barrage over the Severn estuary.

Counter-argument: Supporters say it's not an either or situation. Some other big schemes like the Northern Hub, which will speed up journeys between Manchester and Leeds, are due to go ahead anyway.

The DfT also points out that it is trebling funding for major road schemes, which could mean as many as 52 major road projects by 2020/21. It will be adding 400 lane miles of capacity to busy motorways. And if HS2 is not given the green light, it's highly unlikely all the £42.6bn would be invested on innovative transport projects. This is a one-off opportunity to do something big and bold to the rail network, they argue.

www.bbc.co.uk/news/magazine-24159571

Question:

HS2 has been supported by successive governments. Using the information above and your own knowledge, assess the likely impact of HS2 on the UK's transport infrastructure (10 marks)

Hint: Undertake some further research & write **THREE paragraphs to answer the above question:**

Arguments for & against HS2 (6 marks for Knowledge, Application Analysis - KAA)

Conclusion – should HS2 go ahead? (4 marks for Evaluation)

Economic goods and free goods

Economic goods are those which are scarce and there is an alternative use (opportunity cost) for them.

A **free good** is...

.....a good that is not scarce, is in unlimited supply and has no 'opportunity cost' to society. **CAREFUL!!!** Goods supplied 'free of charge' are NOT necessarily 'free' goods.



Can you identify examples of free goods? Explain why you consider them to be free goods.

Are roads a free good?

Give 2 examples of situations where we incorrectly treat something as a free good:

1)

2)

Practice MCQs:

- (1) A free good has which one of the following characteristics?
- A It has no opportunity cost in supply.
 - B It is generally supplied by the government because its consumption is considered to be socially desirable.
 - C It has no externalities associated with its consumption or production.
 - D It is in perfectly inelastic supply.
- (2) The existence of scarcity in an economy implies that:
- A there are no free goods.
 - B there are no public goods.
 - C individuals must make choices.
 - D there has been a misallocation of resources.

Factors of Production



[Tutor2u article on Factors of Production](#)

There are 4 types of scarce resource used in the process of production of goods and services.

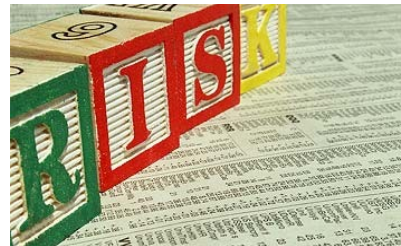


1. **Land and natural resources** includes the land on which production is located and the resources contained within the land, such as metals, minerals, and oil. The *environment* - the air, sea, rivers, and forests – is also a scarce resource. *The reward (or factor*

income) for land is RENT.

2. **Labour** (Human capital) includes the value of human skill and physical effort of people. *The reward (or factor income) for labour is WAGES.*
3. **Capital** includes all man-made goods which help to produce goods and services, such as machinery and equipment as well as stocks of raw materials waiting to be used. The creation of capital is called investment. *The reward (or factor income) for capital is INTEREST.*
4. **Enterprise.** Enterprise is supplied by the entrepreneur who has two crucial roles:
 - i. Combining the other factors in such a way that goods and services can be produced in the most efficient way.
 - ii. Taking risks associated with the potential loss of assets or with making commercial losses.

The reward (or factor income) for enterprise is PROFIT.



Q:

Which of the following is not a factor of production?

- A Money
- B Land
- C Labour
- D Capital

So to summarise – what is the basic economic problem?

- The basic economic problem is that there are infinite wants but finite resources with which to satisfy them.
- Economic agents are forced to make choices.
- They must allocate their scarce resources between competing uses.
- Rational economic agents will choose the 'best' alternative.
- **Opportunity cost:** The benefits foregone of the next best alternative.



Homework task:



You will find an article on the intranet entitled [Infinity in a Pencil](#). This is an extract from 'Butterfly Economics' by Paul Ormerod. Please download the article, read it and complete the questions at the end. Your teacher will tell you when to bring the completed sheet to the lesson *for peer marking*.

Tasks:

1. **Note below** all the resources used directly or indirectly in the production of the pencil:

Directly

Indirectly

2. Now categorise these resources under the following three headings:

Natural resources	Labour	Capital

3. Explain why '*we can see the whole world economy in a pencil*'.

.....

.....

.....

.....

.....

1.1.4 – Production Possibility Frontiers (PPF) or Curves (PPC)

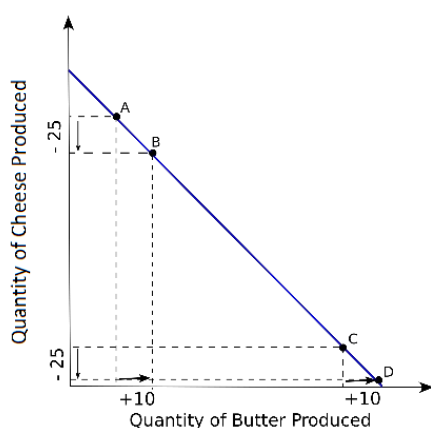
- a) The use of production possibility frontiers to depict:
 - o the maximum productive potential of an economy
 - o opportunity cost (through marginal analysis)
 - o economic growth or decline
 - o efficient or inefficient allocation of resources
 - o possible and unobtainable production
- b) The distinction between movements along and shifts in production possibility curves, considering the possible causes for such changes
- c) The distinction between capital and consumer goods

The PPF shows trade-offs.

i.e. the maximum possible combinations of TWO goods/services that can be produced using all available resources in the most efficient way with a given level of technology.

It shows the ability of a country to make goods and services i.e. its productive capacity and it is used to illustrate opportunity cost.

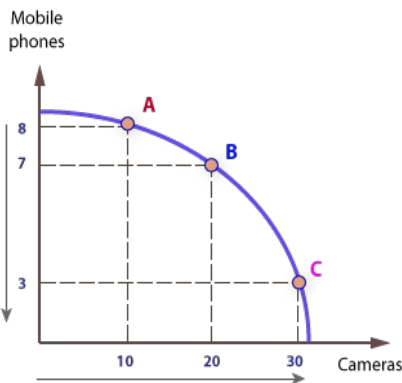
Drawing the PPF – a PPF is drawn assuming a country has a fixed quantity and quality of resources and a constant state of technology.



Most simply, a PPF can be drawn as a **straight line** where resources are equally efficient in the production of both items so there is constant opportunity cost. Every extra unit of X involves the sacrifice of the same amount of good Y.

$$\text{Assume } y = 500 - 2.5x$$

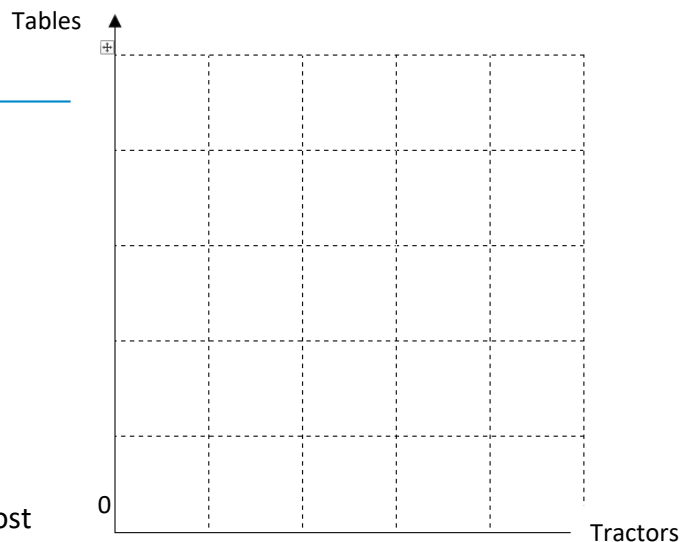
A **concave** (bowed outwards) PPF indicates *increasing* opportunity cost. Some resources are better suited to making one item than another. As more of good X is produced increasing amounts of good Y have to be foregone to produce an extra unit of good X. The gradient of the PPF gets steeper as more good Y is produced, indicating a greater sacrifice in terms of good X foregone.



As an economy tries to increase the production of good X, such as cameras, it must sacrifice more of the other good, Y, such as mobile phones. For example, if an economy initially produces at A, with 8m phones and 10m cameras and then increases output of cameras by 10m, it must sacrifice 1m phones, and it moves to point B. If it now wishes to increase output of cameras by a further 10m (to 30m) it must sacrifice 4m phones, rather than 1m, it moves to point C; hence, opportunity cost increases the more of a good is produced.

Plot the following points on the graph paper provided & draw the PPF:

Tractors	Tables
0	300
1	280
2	240
3	180
4	100
5	0

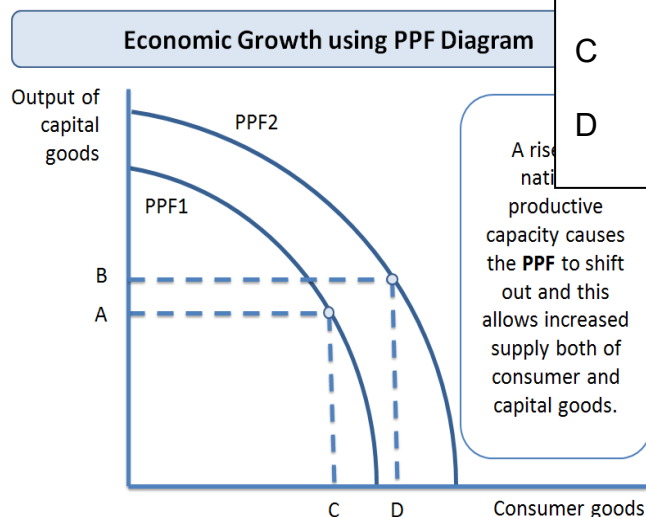


From your chart, what is the opportunity cost of producing the second tractor?

What is the opportunity cost of producing the fourth tractor?

What is the opportunity cost of producing two tractors?

What is the opportunity cost of producing four tractors?



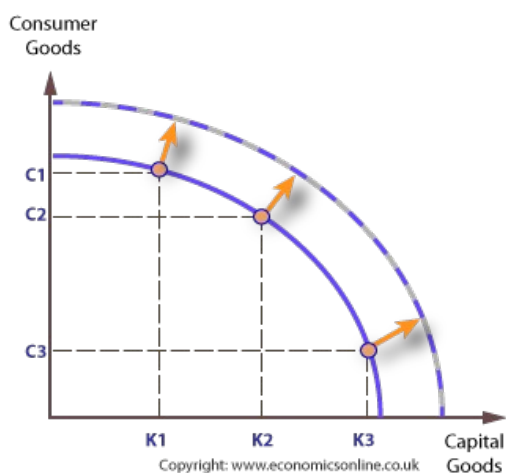
It is possible to produce at any point on, or inside, the frontier. Explain the following points:

- A
- B
- C
- D

The PPF shows that production is efficient

if the economy is producing on the boundary. The only way to produce more of one good is by producing less of another

Any point outside the PPF is impossible with the economy's current scarce resources, but an increase in the quantity or quality of resources increases an economy's productive potential and shifts the PPF to the right.



Consumption vs Investment

The PPF can show the trade-off between the production of consumer goods and capital goods:

If more consumer goods are produced, living standards will be higher at present.

If more capital goods are produced, living standards will be lower at present, but the investment in capital goods will enable more production of all goods in the future, i.e. economic growth.

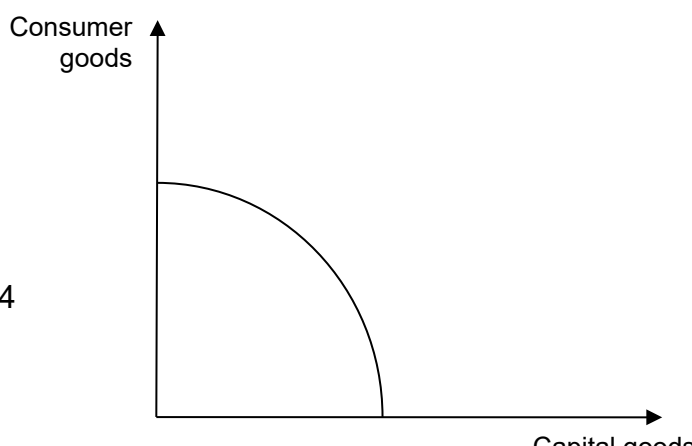
The PPF will shift outwards when:

- There are improvements in productivity and efficiency perhaps because of the introduction of new technology or advances in the techniques of production or an increase in the quality of labour
- Better management of existing resources
- More factors of production are available perhaps due to an increase in the size of the workforce due to inward migration or a rise in the amount of capital available for businesses due to a rise in business investment
- The discovery of new natural resources such as shale gas
- Innovation and technological advances which makes exploration and extraction of known resources more commercially viable

Q: Can a production possibility frontier shift inwards?

A pivot in the PPF

A pivot in the PPF is caused by a change in the productivity of only one good or service (here, capital goods).



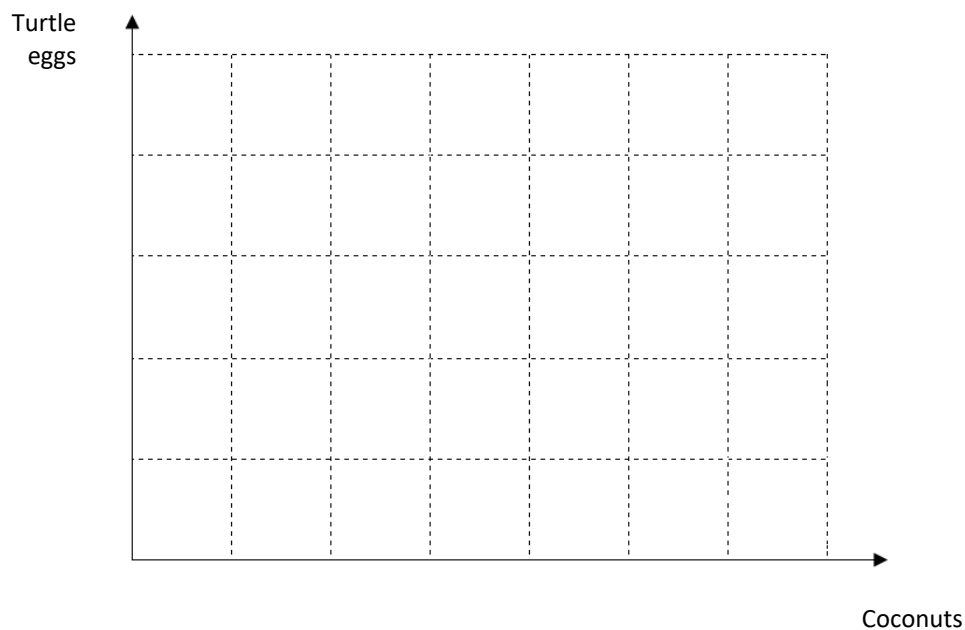


Task 1

A tribe living on a tropical island includes 5 workers whose time is devoted either to gathering coconuts or to collecting turtle eggs. Regardless of how many other workers are engaged in the same occupation, a worker may gather either 20 coconuts or 10 turtle eggs in a day.

Using the graph paper provided and on the same set of axes:

- Draw a straight line production possibility frontier for coconuts and turtle eggs (but first read question b. to ensure you get the correct scale on your axes)
- Suppose that a new climbing technique is invented making the harvesting of coconuts easier. Each worker can now gather 28 coconuts in a day. Draw the new production possibility frontier.



Task 2

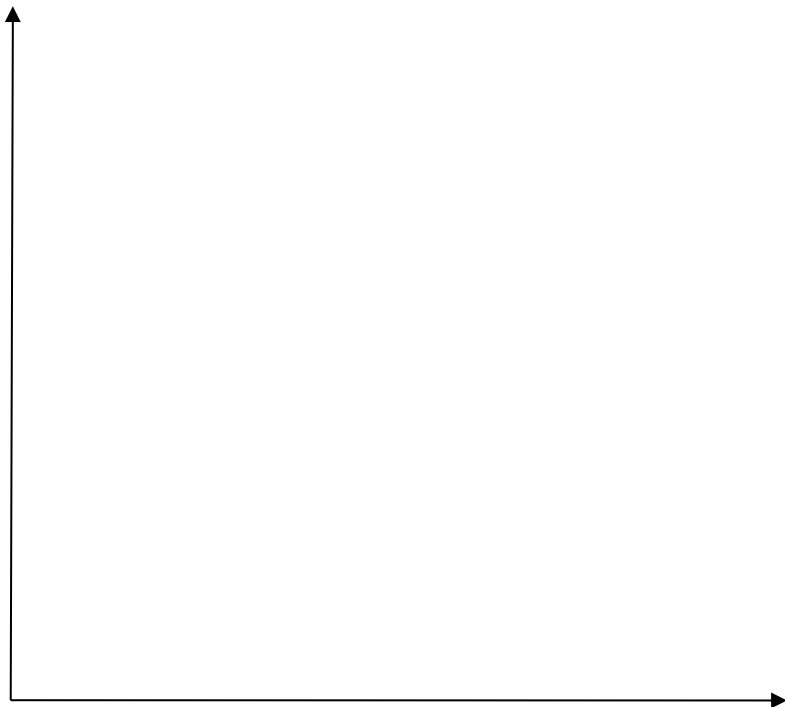
(1) On the axes provided below, draw a (concave to the origin) production possibility frontier – the scale on both axes is the same. The economy is currently producing at **point A** on the frontier which is at the mid-point between the vertical y-axis (showing public sector goods) and the horizontal x-axis (showing private sector goods). **Mark the following points on your drawing:**

- Point B** a point which shows production following the election of a government which privatises many public sector services but maintains full and efficient employment
- Point C** where unemployment is present in the economy
- Point D** where the state takes over production of all goods and services in the economy.

(2) Now draw two new production possibility frontiers....

PP...which shows the position after a devastating war has hit the economy

QQ...where there is an increase in productivity in the economy such that output from the same amount of resources increases by 50% in the public sector but twice that amount in the private sector.





PPFs and opportunity cost – supported multi choice practice

(1) A production possibility frontier can be used to illustrate the concept of:

- A External cost
- B Producer surplus
- C Opportunity cost
- D Equilibrium price

(2) Opportunity cost arises because

- A the price mechanism may lead to a misallocation of resources
- B resources are scarce
- C the supply of goods and services is infinite
- D supply may exceed demand

(3)

Agricultural goods output (million units)	Manufactured goods output (million units)	
0	90	
10	88	
20	84	
30	78	
40	70	
50	60	
60	48	
70	34	
80	18	
90	0	

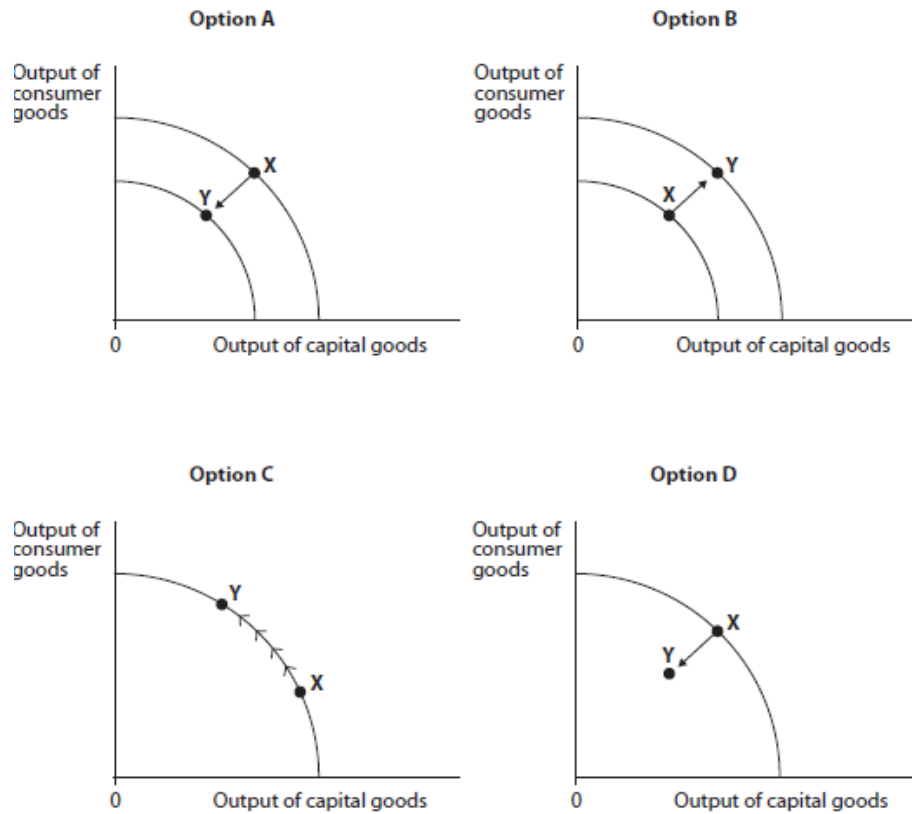
A country has two economic sectors, agriculture and manufacturing. Its production possibilities are shown in the table. (You may use the last column in answering the question.)

It can be deduced that

(1)

- A there is a constant opportunity cost as output changes
- B the opportunity cost of producing manufactured goods decreases, the greater the output of manufactured goods
- C the opportunity cost of producing agricultural goods increases, the greater the output of agricultural goods
- D it is possible to achieve 60 million units of agricultural goods and 60 million units of manufactured goods simultaneously, given the existing technology and full employment of resources in the economy.

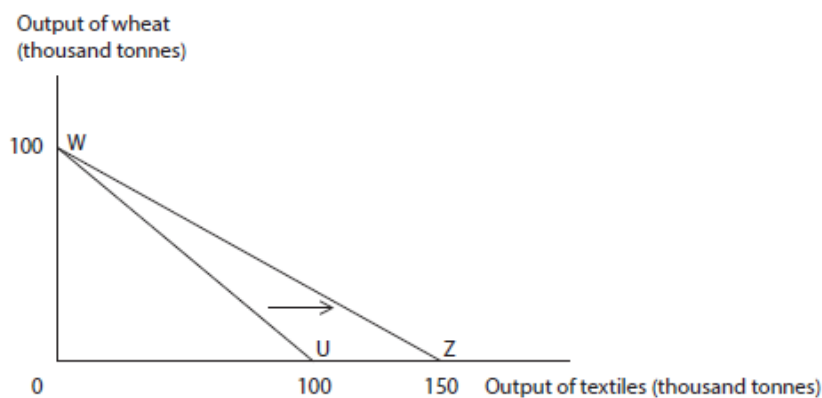
(4)



The diagrams show movements from position X to Y on production possibility frontiers. In which of the above diagrams does the movement from X to Y illustrate economic growth?

(1)

(5)

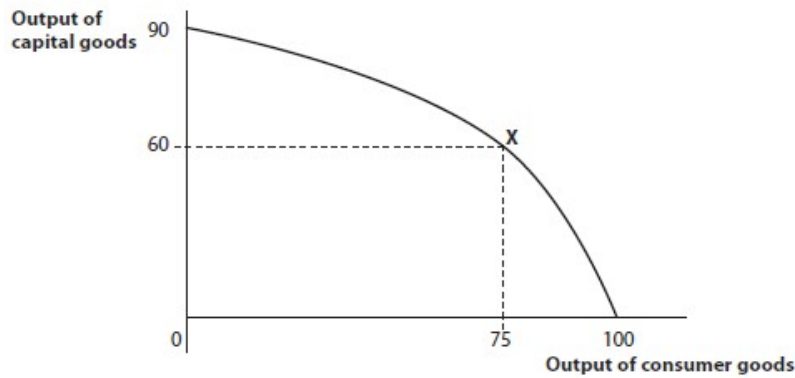


The diagram refers to an economy producing two commodities, wheat and textiles. Initially, the economy has production possibilities shown by WU. The production possibilities then move to WZ. Which of the following does this change show?

(1)

- A Increased demand for textiles
- B A decrease in the production of wheat
- C Increased efficiency in the production of textiles
- D A decrease in the opportunity cost of producing wheat

(6)



The diagram shows a production possibility frontier for an economy operating at point X. The opportunity cost of producing 75 units of consumer goods is:

(1)

- A 25 units of consumer goods
- B 30 units of capital goods
- C 60 units of capital goods
- D 75 units of consumer goods.

(7) **June 2014.** Explain the possible impact on the PPF for the UK economy if the Severn Estuary tidal barrage is constructed. Illustrate your answer with an appropriate diagram (6)

(8) **Jun 2012.** With reference to the information above and your own knowledge, explain the opportunity cost of higher education to students (6)

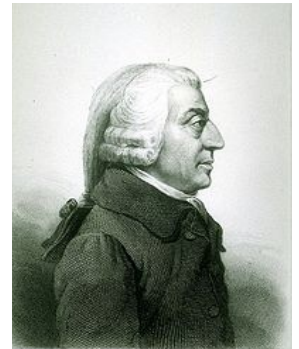
(9) **Jun 2011.** Using examples, explain the significance of opportunity cost to an increase in government spending on the NHS. (4)



[Tutor2u article on PPF](#)

1.1.5 – Specialisation and the Division of Labour

- a) Specialisation and the division of labour: reference to Adam Smith
- b) The advantages and disadvantages of specialisation and the division of labour in organising production
- c) The advantages and disadvantages of specialising in the production of goods and services to trade
- d) The functions of money (as a medium of exchange, a measure of value, a store of value, a method of deferred payment)



[Tutor2u article on Specialisation](#)

Specialisation: A system of organisation where economic units such as households or nations are not self-sufficient but concentrate on producing certain goods and services and trading the surplus with others

Specialisation is when individuals, firms, regions or countries concentrate on a particular product or task. E.g. bakers spend all day baking bread & trade the surplus for items such as milk they have not had time to produce themselves. Economic units such as households or nations are not self-sufficient but concentrate on producing certain goods and services and trading the surplus with others.

Specialisation can occur between nations e.g. Honduras producing bananas and trading them for cars from the US. Specialisation can also occur within economies, for example in the UK, London specialises in financial services and Cornwall specialises in tourism

Specialisation by individuals is called the Division of Labour.

Division of labour: Specialisation by workers where the production of a good is broken up into many separate tasks each performed by one person

Adam Smith: *'The Wealth of Nations' (1776)* described the division of labour among pin workers:

"A workman not educated to this business...could scarce...make one pin in a day, and certainly could not make twenty. But the way in which this business is now carried on,...it is divided into a number of branches...One man draws out the wire, another straightens it, a third cuts it, a fourth points, a fifth grinds it at the top for receiving the head; to make the head requires two or three distinct operations; to put it on is a peculiar business, to whiten the pins is another; it is even a trade by itself to put them in the paper." Outside the pin factory, one worker working alone could have made 20 pins. Ten workers could therefore

make 200. In the pin factory, workers were making 48,000 pins a day. How was this possible?

Key terms

- ✱ **Productivity:** output per unit of input employed over a given time period (e.g. one hour), which is increased by the division of labour
- ✱ **Labour productivity:** output per worker per time period (e.g. one hour)
- ✱ **Capital productivity:** output per unit of capital employed per time period (e.g. one hour)

Labour productivity is concerned with the amount (volume) of output that is obtained from each employee in a given time period. It is a key measure of business efficiency, particularly for firms in which the production process is **labour-intensive** – ever heard of Foxconn? <https://youtu.be/CvBsbyUWdg>

Why does labour productivity matter?

- Labour costs are usually a significant part of total costs
- Business efficiency and profitability closely linked to productive use of labour
- In order to remain competitive, a business needs to keep its unit costs down

Achieving high (or higher) labour productivity is not a simple task. Several factors influence how productive the workforce is: e.g.

- Extent and quality of fixed assets (e.g. equipment, IT systems)
- Skills, ability and motivation of the workforce
- Methods of production organisation
- External factors (e.g. reliability of suppliers)



What impact does specialisation and the division of labour have on labour & capital productivity?

State FOUR benefits for organising production using specialisation & the division of labour:

State FOUR problems for organising production using specialisation & the division of labour:

Specialisation and the division of labour – multiple choice questions:



- (1) Which of the following is the most likely consequence of an increase in the division of labour in the production of beauty products?
- A a decrease in the total revenue of beauty product manufacturers
 - B decreased use of specialised manufacturing equipment
 - C a decrease in the cost per unit of beauty products
 - D a shift in demand for beauty products
- (2) One disadvantage a sandwich making firm may experience from the division of labour on its production line is an increase in:
- A the range of workers' skills
 - B training costs per worker
 - C staff turnover
 - D productivity
- (3) The most likely consequence of an increase in the division of labour in the construction of new houses is an increase in:
- A output per unit of labour
 - B the price of houses
 - C the production cost of each house
 - D the range of skills required by each worker
- (4) One reason why specialisation raises labour productivity is because:
- A specialisation shifts the PPF to the left
 - B labour replaces capital to produce goods and services
 - C specialisation allows an economy to produce on its own PPF
 - D the division of labour makes it cost effective to provide workers with specialist equipment
- (5) To benefit from specialisation, it is necessary:
- A to have an effective means of exchanging goods and services
 - B for labour productivity to be high
 - C for the PPF to be moving outwards over time
 - D for significant economies of scale to be gained in all industries

1.1.6 – Economic systems

- a) The distinction between free market, mixed and command economies: reference to Adam Smith, Friedrich Hayek and Karl Marx
- b) The advantages and disadvantages of a free market economy and a command economy
- c) The role of the state in a mixed economy

Markets



What is meant by the term market?



Why are markets important?

Money and Exchange

Barter economies are inefficient because you need to find someone who wants what you have and who has what you want – a double coincidence of wants.

If this problem were to be faced by a whole economic system, undertaking transactions would be so inefficient as to be impossible. This is why money is important as a medium of exchange.



What functions does money perform?

- 1) Medium of exchange –
- 2) Measure of value –
- 3) Store of value –
- 4) Method of deferred payment –

Types of Economic Systems



[Tutor2u article on Economic systems](#)

An **economic system** is a complex network of individuals, organisations and institutions and their social and legal interrelationships. The function of an economic system is to resolve the basic economic problem. It must determine:

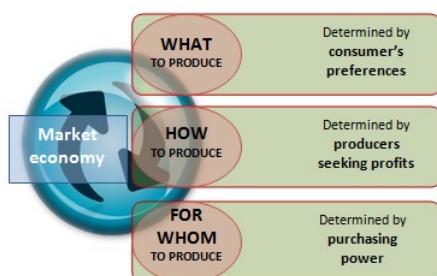
- **What** is to be produced
- **How** production is to be organised
- **For whom** production is to take place

The main economic actors (or agents):

- **Consumers:** Assumed to want to maximise their own economic **welfare, utility** or satisfaction.
- **Factors owners:** Assumed to want to maximise returns (**workers:** pay & benefits, **land owners:** rent).
- **Producers (firms)** assumed to want to maximise profit.
- **Government:** Traditionally assumed to want to maximise social welfare for citizens. Establishes/influences relationships between groups e.g. by passing laws.

Free Market Economy / Market Economy / Capitalism

An economic system where resources are allocated by the price mechanism i.e. demand and supply.



- Nearly all factors of production owned by private

individuals/organisations.

- The forces of market demand and supply, without any government intervention, determine how resources are allocated. This is known as the working of the price mechanism.
- Consumers/producers/owners of private property motivated by pure self-interest.
- Owners of factors of production & producers free to buy/sell with few government limits.

Adam Smith (1723 – 1790)

The founder of classical economics concluded in his book, 'The Wealth of Nations' that by pursuing their own self-interest, individuals would be led 'as by an invisible hand.' This would lead to an efficient allocation of resources (which would benefit the whole of society) and would be the result of countless decisions by individual economic actors following their own self-interest.



Smith believed that competition in markets ensures that firms, whose main objective is to maximise profits, produce their goods at the lowest possible cost. This benefits society and ensures markets will use resources efficiently. He argued that economies function most efficiently and fairly when individuals are allowed to pursue their own interests; the great threat to economic growth is government intervention.

Friedrich Hayek (1899 – 1992)

Hayek was a key supporter of the free market & deeply critical of socialism (state planning). He believed that governments should not intervene in resource allocation decisions, except in the provision or protection of public goods. He argued that intervention would be damaging because governments are faced with imperfect information. Markets would be more effective because they rely on people responding to signals and incentives.

Price movements will occur as individuals and firms participate in the market. These price movements will be observed, and individuals and firms can choose how they wish to act in terms of their demand or supply decisions, with the information they each have. The price mechanism acts as a communication network. The market will aggregate

all these individual decisions, so ultimately the market will reflect all the information available to society as a whole. This means the outcome in terms of resource allocation will be the best that it can be.

If government officials made decisions on how resources should be allocated, this would not be successful since these officials lack sufficient information about markets to be able to make informed decisions.

With the real-world failings of communism and the questioning of the effectiveness of Keynesian demand-side management, free market advocates such as Hayek have had more prominence again since the late 20th century.



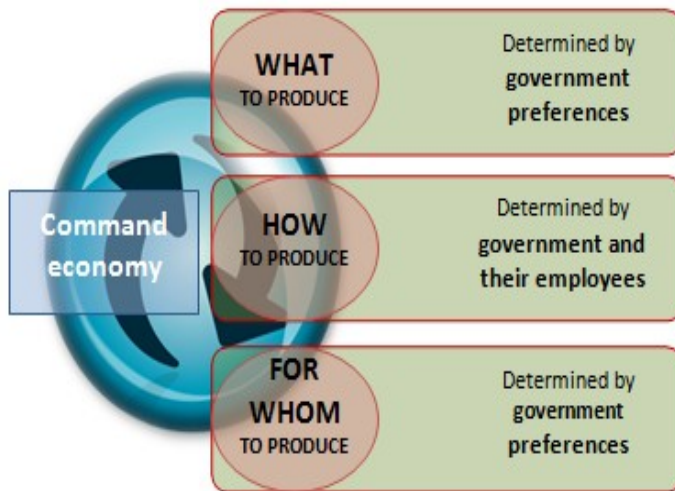
Characteristics of free market economies: Complete the missing words from the list below

- 1) The first characteristic of free market economies is the assumption that consumers, producers and owners are motivated by (the profit motive). The owners of the factors of production aim to maximise wages, rent, interest and profit. The government is assumed to be motivated by the good of the community, i.e. to maximise social welfare.
- 2) The second characteristic is ownership, meaning that nearly all of the factors of production are owned by individuals and firms. The government ensures the system works through the le.g.al system. E.g. by upholding the rights of citizens to own property.
- 3) A third characteristic is meaning that the government does not have restrictions on what can be bought and sold, who workers can work for and who can go into business. Homeowners are free to sell their houses if they wish. Consumers can buy whatever they wish and producers can sell whatever they wish.
- 4) A fourth characteristic is firms need to compete with each other for workers and customers.
- 5) A fifth characteristic is - consumers face a wide range of choice and better quality (due to competition) of goods and services.
- 6) Decentralised decision making – there is no single body which allocates resources within the economy. Instead, resources are allocated by the countless decisions of ‘economic actors’. This is Adam Smith’s of the market. He argued that although economic actors pursued their own self-interest, the result would be an allocation of resources in the economy, which would be in everyone’s interest.

private	competition	invisible hand	efficient	self - interest	free enterprise	choice
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Command or planned economy

An economic system where government, through a planning process, allocates resources in society.



Goods allocated through rationing

- Workers given jobs by the state
- State decides what is produced, how and for whom. Market prices play little or no part in informing resource allocation decisions and queuing rations scarce goods.
- From the 1980s, many command economies, such as the Soviet Union & China began making the transition towards a mixed economy. North Korea currently remains a command economy.



<https://www.youtube.com/watch?v=euNK6h95pGg>

What evidence is there of a command economy?	
Comment on the standard of living?	
What evidence is there of a market economy?	

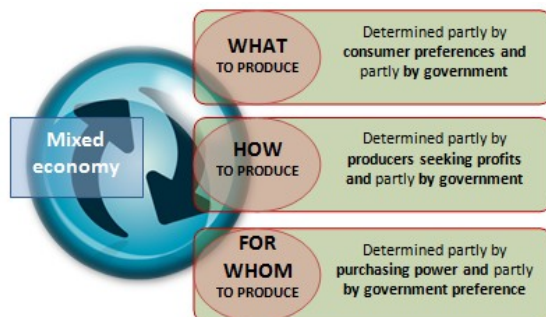
Karl Marx (1818 – 1883)

Marx criticised capitalism as being a system where a small minority, the bourgeoisie (the owners of capital) are the ruling class and the masses, the proletariat (the labourers) provide the labour to produce goods and services. The owners of capital's objective is to make a profit and in order to achieve this, they end up exploiting the workers meaning workers earn wages lower than their true value.

Marx believed that capitalism is weak with many crises which negatively impact on the proletariat. He believed that the inherent contradictions within the system would eventually lead to it self-destructing leading to revolution among the proletariat. Capital would be seized, economic planning would direct economic activity, private property would be abolished and replaced by common ownership of resources.

With the global financial crisis and growing inequality, Marx's ideas have recently had a resurgence.

Mixed economy: An economic system where resources are partly allocated by the price mechanism / market and partly by the government /state. Most countries have mixed economies



- **Markets allocate** many resources but **governments intervene** to different extents in order to ensure a minimum standard of living and to correct market failure.
- **Private sector** with private ownership of factors of production, competition, consumers/producers motivated by self-interest.
- **Public sector:** State owned/run, resources allocated through planning process. Governments intervene by raising revenue through taxes and redistributing income in the form of benefits and direct provision of services such as healthcare



Characteristics of mixed economies:

- Choice & consumers and producers are motivated by s..... i.....
- P..... ownership of factors of production
- Public sector – state owned/run, resources allocated through planning, e.g.
- Competition – in the private sector. In the state sector, there is no real competition.
- Government regulates private sector, e.g. competition policy, property laws & provides public goods. It may own 'natural monopolies' i.e. postal services.
- The mix varies in different countries depending on tax and welfare systems

Summarise the advantages / disadvantages of free market, command and mixed economies:

Free Market Economy

Advantages

Disadvantages

Command Economy

Advantages

Disadvantages

Mixed Economy

Advantages

Disadvantages

Questions

- (1) One reason for the existence of mixed economies is that
- A the profit motive is always undesirable
 - B the free market economy always allocates resources efficiently
 - C competition between firms ensures consumer welfare is maximised
 - D the free market economy may lead to market failure.
- (2) The main economic objective of firms in a market economy is most likely to be the
- A achievement of economies of scale.
 - B maximisation of consumer satisfaction.
 - C achievement of an efficient allocation of resources.
 - D maximisation of profits.

Read through the following statements and decide which type of economic system is being described – market, mixed or planned

Statement	Market, mixed or planned economy
1. Reliant on the price system	
2. Also known as command economy	
3. Consumer is sovereign	
4. Includes most contemporary economies	
5. There is freedom of consumer choice	
6. Sweden is an example	
7. Competition is a main characteristic	
8. Government decides what to produce, how to produce it and who to produce for	
9. The state plays little or no part in economic activity	
10. Also known as capitalist system	
11. Producers respond to consumers' demands	
12. Associated with communism	
13. Self- interest is a dominating motive	
14. Referred to as free enterprise	
15. UK in Second World War is an example of this	
16. Also known as laissez-faire	
17. Economic resources are controlled by the state	
18. Public and private sector exist	

1.1.1 – Economics as a Social Science

- a) Thinking like an economist: the process of developing models in economics, including the need to make assumptions
- b) The use of the *ceteris paribus* assumption in building models
- c) The inability in economics to make scientific experiments

Economics is the scientific study of the *ownership, use, and exchange of scarce resources* - often shortened to the *science of scarcity*. Economics is regarded as a social science because it uses scientific methods to build theories that can help explain the behaviour of individuals, groups and organisations. Economics attempts to explain *economic* behaviour, which arises when scarce resources are exchanged.

Economists formulate theories and collect evidence to test these theories against alternative ideas. Economic research involves asking questions about the social world and addressing those questions with data and clear-headed logic, employing mathematical and statistical tools whenever possible to aid the analysis.

It is argued that economics cannot be a science because it studies human behaviour and human behaviour cannot be reduced to scientific laws. Economists, like other social scientists, are not able to undertake controlled experiments in the way that chemists and biologists are. An economist cannot conduct an experiment to determine the impact of a 10% increase in VAT. Therefore, economists have to employ different methods, based primarily on observation and deduction and the construction of models to look at the impact of such an increase.

A model describes the behaviour of economic variables (influencing factors). A model is a simplified view of complex relationships and processes. Economists use models to make predictions about empirical (real world) behaviour. An example is the PPF model, a much simplified version of reality. In a real economy, many different goods and services are produced by a wide range of factors of production – but it is not possible to draw diagrams to show all of them

Questions

1. Why is economics regarded as a social science?
2. Why is it argued that economics cannot be a science?
3. What research methods can economists use?
4. What is meant by an economic 'model'?

Q:

An economist puts forward a hypothesis which is assessed against evidence. As a result of this, the hypothesis is accepted, rejected or modified.

This is an example of

- A how normative but not positive economic statements are tested. ☐
- B how value judgements influence economic decision making. ☐
- C the methodology used to test economic theories. ☐
- D why economics is a social not a natural science. ☐

[1 mark]

The Ceteris Paribus Rule - meaning all other things being equal / remaining constant

When building models, we make assumptions that nothing has changed except the one variable we are studying. This allows us to isolate the effect of one variable on another variable. Making assumptions allows the scientist to simplify a problem to make it manageable to solve.

The concept of ceteris paribus is important in economics because in the real world it is usually hard to isolate all the different variables. Economics is a social science, and, unlike the physical sciences, cannot engage in controlled experimentation to demonstrate how variables are connected.

In the real world, economic variables, such as *price* and *income*, are constantly changing, and this creates a problem in demonstrating the relationship between variables. For example, a fall in price is likely to lead to a rise in consumer demand if we assume nothing else changes. Of course, for independent reasons, income could also fall while demand does not rise. The fall in price could have been counteracted by a fall in income.

The ceteris paribus rule, that *all other things remain the same*, is used whenever attempting to demonstrate the link between economic variables. So despite many factors affecting demand, when drawing a demand curve, economists assume all factors are held constant except one – *the price of the product itself*.

Example of Ceteris Paribus in Economics - An increase in prices for apples will 'ceteris paribus' cause demand for apples to fall. Higher prices will reduce consumption so there will be less demand for apples. However, if incomes are rising, people might still want to buy apples. Ceteris paribus assumes variables like income remain the same.

Question: Why is the ceteris paribus assumption often used by economists when using models?

1.1.2 – Positive and normative statements

- a) Distinction between positive and normative economic statements
- b) The role of value judgements in influencing economic decision making and policy

Economists give advice and comment on a whole range of issues- they can be seen on TV and commenting in newspapers on the prospects for unemployment or inflation, the likely effects of changes in interest rates or the case for or against privatisation of an industry. They might be saying that the government **ought** to take action to reduce unemployment, or suggesting that an increase in the rate of interest **will** cause the value of the £ to rise and exports to fall.

A Positive statement.....

Is a statement of fact which can be tested by looking at evidence and either proved or refuted.

It is about looking at issues **objectively** and suggesting that an economic relationship can be **tested**. It is 'what is, was or will be' and may be a statement based on **economic theory**. Such statements about economics can be proven to be true or false. Statements can be supported or refuted by evidence. Economic analysis tends to be more concerned with positive statements.

Examples of positive statements might include:

- A rise in the rate of interest will cause a rise in the exchange rate
- The UK economy now has lower unemployment than Germany
- Inflation is 2.4% in the UK

A Normative statement.....

Is a statement which cannot be proved or tested using evidence. It is a value judgement.

It is a non-scientific approach to economics and is a **subjective** statement which **cannot** be tested by looking at the facts. It may contain indicator words like 'should', 'ought', 'better', 'worse', 'good' and 'bad'. Don't use 'opinion' as an explanation of a normative statement. Be sure to always use the term '**value judgement**'. Economic decisions made by individuals and the policy decisions made by governments are based on value judgements because different political parties have different views about what is desirable for society, and are therefore normative.

Examples of normative statements might include:

- Trade unions should be abolished.
- The government ought to reduce the amount of benefit given to the unemployed.
- Economics is a more interesting subject than geography.



Tutor2u article on [Positive & Normative Statements](#)



Identify the positive & normative statements in the passage below

In 2014 it was reported that Britain's Crime Prevention Minister had questioned whether police should respond to calls from petrol retailers whose customers drive off without paying. Norman Baker suggested that petrol stations encouraged crime by refusing to insist on prepayment at the pumps. They did this because they wanted more business in their shops. One of the fastest-growing offences is motorists filling their cars with petrol and driving off without paying. In London, the practice increased nearly sevenfold between 2010 and 2012, according to official statistics. However, Brian Madderson, Chairman of the Petrol Retailers' Association, disagreed. 'The police have no right whatsoever to interfere with our business model. We only live as forecourt retailers these days by dint of our shop sales. The (profit) margin on fuel has almost disappeared and the reason is the supermarkets selling at or below cost.' Neil Saunders, managing director at research group Conlumino, dismissed the minister's comments as 'wholly ignorant'. 'Retailers spend millions each year to try and combat shoplifting. Short of turning their stores into prison camps, retailers cannot prevent this.' Source: adapted from © the Financial Times 2.8.2014, All Rights Reserved.

Positive

1)

2)

Normative

1)

2)

Use of Positive & Normative Statements by Economists

Economists tend to be interested in both positive and normative economics. They want to find out how economies work. But they also want to influence policy debates. Normative economics also typically contains positive economics within it. Take the normative statement 'The government should increase the state pension'. Economists putting forward this value judgement are likely to back up their opinion with positive evidence. They might state that 'The average pensioner has a disposable income of 40 per cent of the average worker'; and 'The average pensioner only goes on holiday once every four years'. These are positive statements because they are capable of proof or disproof. They are used to build up an argument which supports the final opinion that state pensions should be raised.

Positive analysis is often called upon to inform normative judgements. If the aim of a government policy is to stop people from smoking (which reflects a normative judgement about what ought to happen), then economic analysis may be used to highlight the strengths and weaknesses of those alternatives in a purely positive fashion.



Your turn!

(1) Which of the following statements are positive and which are normative?

- a) The average pensioner has a disposable income of 40% of the average worker
P/N
- b) The government ought to provide financial subsidies to companies manufacturing and developing wind farm technology
P/N
- c) Climate change is the most serious problem facing society
P/N
- d) Cut-price alcohol has increased the demand for alcohol among teenagers
P/N

(2) Now make up a statement based on a current economic issue and identify whether it is positive or normative:

(3) Statement 1: The London Congestion Charge on motor vehicles has reduced air pollution in the city

Statement 2: The plan to introduce a higher congestion charge for motor vehicles with a large engine is unfair

- A Statement 1 is positive and statement 2 is normative
- B Both statements are normative
- C Statement 1 is normative and statement 2 is positive
- D Both statements are positive

(4) Statement 1: In the March 2010 budget the Chancellor of the Exchequer announced a tax increase on a packet of cigarettes of 2% above the rate of inflation for each year between 2011 and 2014

Statement 2: Tax now forms more than 75% of the price of a packet of cigarettes.

- A Statement 1 is positive and statement 2 is normative
- B Both statements are positive
- C Statement 1 is normative and statement 2 is positive
- D Both statements are normative

(5) Why does the distinction between a positive and a normative statement matter for economics?

(6) Statement 1: University tuition fees increase up to a maximum of £9000 a year

Statement 2: Higher university fees are unfair to students from low income families
With reference to the above statements, distinguish between positive and normative statements (4)

(7) Statement 1: In the UK, a 50% tax rate applies on taxable earnings over £150 000 a year.

Statement 2: The 50% tax rate is unfair to high income earners since it reduces their living standards.

Which of the following best describes the two statements above?

- A Statement 1 is normative and statement 2 is positive
- B Both statements are positive
- C Statement 1 is positive and statement 2 is normative
- D Both statements are normative

(8) June 2015

Statement 1: London Crossrail is Europe's largest infrastructure project

Statement 2: London Crossrail is unfair to taxpayers

With reference to the above statements, distinguish between positive and normative statements (4)

(9) Which one of the following is a positive economic statement?

- A The pattern of wealth ownership in the UK is unfair.
- B There are too many poor people in the UK today.
- C The distribution of income in the UK is unequal.
- D The rich should be taxed more than the poor.

Remember!

Whenever you are reading articles on current affairs it is important to be able to distinguish where possible between **objective statements** and **value judgements**. Very often the person writing an article has a particular argument to make and will include what they think **ought** to or **should** be happening. Their articles are trying to persuade you of the merits or demerits of a particular policy decision or issue. These articles may be lacking in objectivity.

Focusing on the evidence is called an empirical approach – evidence-based work is becoming more important in shaping different government policies and how much funding to allocate.



Computer exercise: Access your intranet and find the online test entitled 'Positive and Normative Statements'. Complete the test. Your first attempt will be scored out of 10 and the result will be recorded in the online markbook.



Glossary of Key Terms – self-study exercise

Command economy	
Division of labour	
Free market economy	
Mixed economy	
Money	
Normative statement	
Opportunity Cost	
Positive statement	
Production Possibility Frontier (PPF)/Curve (PPC)	
Renewable resources	
Resources	
Scarcity	
Specialisation	
Sustainable resource	