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Getting Started

GCE Economics

Edexcel Advanced Subsidiary GCE in Economics (8EC01)

First examination 2009

Edexcel Advanced GCE in Economics (9EC01)

First examination 2010

Issue 3

A PEARSON COMPANY

Contents

Introduction

This Getting Started book will give you an overview of the course and what it means for you and your students. The guidance in this book is intended to help you plan the course in outline and give you further insight into the principles behind it to assist you and your students in succeeding in the qualification. Further guidance and additional material, including example students answers to specimen papers will be added in the Edexcel GCE Economics subject area on www.edexcel.org.uk.

GCE in Economics overview and mapping to units of previous specification (9121)

Unit 1: Competitive Markets — 50% of AS level

- Nature of economics, eg scarcity, opportunity cost etc (Unit 1)
- Determinants of demand and supply, movements along the demand and supply curves and shifts in Demand and Supply (Unit 1)
- Price, income and cross elasticities of demand (Unit 1)
- Price elasticity of supply (Unit 1)
- Market equilibrium (Unit 1)
- Consumer and producer surplus (Unit 1)
- Price mechanism (Unit 1)
- Demand and supply of labour (Unit 5a)
- Market failure (Unit 2)

AS

Unit 2: Managing the Economy — 50% of AS level

- Economic performance measures for developing and developed countries (Unit 3)
- Income and wealth (Unit 5a)
- Aggregate Demand (Unit 3)
- Wealth effect on Aggregate Demand
- Aggregate Supply (Unit 3)
- Equilibrium level of output (Unit 3)
- Causes, costs and constraints on economic growth (Unit 3)
- Government macroeconomic objectives (Unit 3)
- Demand and supply side policies (Unit 3)
- Conflicts resulting from the use of policy instruments

Unit 3: Business Economics and Economic Efficiency — 40% of A2 level

- Business objectives (Unit 4)
- Company growth (Unit 4)
- Revenue, costs, profit (Unit 4)
- Economies and diseconomies of scale (Unit 2)
- Productive and allocative efficiency (Unit 4)
- Barriers to market entry and exit (Unit 4)
- Market concentration ratios (Unit 4)
- Different market structures, eg monopoly, oligopoly (Unit 4)
- Game theory
- Contestability (Unit 4)

A2

Unit 4: The Global Economy — 60% of A2 level

- Causes and effects of globalisation (Unit 6)
- Trade — specialisation, comparative advantage, trade liberalisation, barriers to trade (Unit 6)
- How international trade is recorded and financed eg balance of payments; exchange rates (Unit 6)
- Factors affecting a country's competitiveness (Unit 6)
- Poverty and inequality in developed and developing countries; limits to growth and development; role of the state in promoting growth and development and other ways of promoting growth and development (Unit 5b)

Competitive Markets — How They Work and Why They Fail — Course Outline for Unit 1

BASIC READING

Anderton A — *Economics, 4th Edition* (Causeway Press, 2006) ISBN 1902796926

Cramp P — *Labour Markets: The Economics of Work and Leisure, 3rd Edition* (Anforme ltd, 2006) ISBN 1905504055

ER = *Economics Review magazine* (Philip Allan Updates, www.philipallan.co.uk)

ET = *Economics Today magazine* (Anforme ltd, www.anforme.co.uk)

Tarrant R — *Friday Afternoon Economics* (Philip Allan Updates, to be published 2008)

Timing	Content	Reading/Activities	Comments/notes
2 hours	The basic economic problem and scarcity Production possibility frontiers - opportunity cost - economic growth (causes of shifts inwards/outwards of PPF) Positive and normative economics	Anderton, Unit 1 ER September 2006 page 15 — PPFs — P Smith ER November 2006 page 20 — Positive and normative — P Smith ET September 2006 page 10 — PPFs	Students are likely to be unsure as to what economics entails as a subject — this may be worth a lesson of discussion in itself. PPFs do not need to be used to illustrate absolute and comparative advantage. Students should be aware of the causes and implications of an economy operating inside its PPF. Students should be provided with a list of economic statements and asked to explain why they are either positive or normative.

Timing	Content	Reading/Activities	Comments/notes
1.5 hours (3.5 hours to date)	Specialisation and division of labour - concept - advantages - disadvantages	Anderton, Unit 2	Brighter students could be encouraged to investigate Adam Smith's understanding of division of labour in Wealth of Nations with his Glaswegian pin factory example. There are a number of classroom games that illustrate the principles of specialisation, requiring students to make a number of items individually, before then specialising as a group.
1.5 hours (5 hours to date)	Economic systems - free market (strengths/ weaknesses) - mixed	Anderton, Units 42 and 43	Students should focus on lack of equity being a key reason for mixed economies. A classroom discussion could begin centred on the world described by Charles Dickens in, for example, A Christmas Carol or Oliver Twist, which many students will know — ask them to discuss whether this society was 'fair'.
2.5 hours (7.5 hours to date)	Demand and supply curves - their shape, and reasons for their shape - change in price leads to movement along the curves - causes of shifts right or left in either curve	Anderton, Units 4 and 5 Tarrant, *Changes in demand and supply — play your cards right*	Many students find these concepts quite abstract — use examples that they are able to relate to, such as asking how many times they would visit their local coffee shop per week at different prices of their favourite drink, or how likely they would be to deliver newspapers at different wage rates. A significant number of students find it difficult to remember that a change in price leads to a movement along the curve not a shift — this point needs emphasising.

Timing	Content	Reading/Activities	Comments/notes
4 hours (11.5 hours to date)	Elasticities PED - definition - steep/shallow curves - formula and interpretation of calculation - characteristics of goods with elastic/inelastic supply - link to total revenue and use to businesses YED - definition - normal/inferior goods - formula and interpretation of calculation - use to businesses XED - definition - complementary, substitute and independent goods - formula and interpretation of calculation - use to businesses PES - definition - steep/shallow curves - characteristics of goods with elastic/inelastic supply - formula and interpretation of calculation - use to businesses	Anderton, Units 8 and 9 ER September 2006 page 24 — Elasticities and housing markets — P Smith ET September 2005 page 7 — Should football clubs raise or lower prices to increase revenue? — A Chapman Tarrant, Elasticities crossnumber and elasticities missing words	Students tend to find the concept of elasticity fairly straightforward, but struggle with the interpretation of the numbers generated from calculation — a number line that they keep in the front of their notes will help with this, as will significant calculation practice (this is a good homework to set). A good way to teach the link between PED and total revenue is to get students to work it out themselves with a guided investigative worksheet — give them some questions containing information about the elasticities of various products, and get them to calculate new and old revenue following an increase/ decrease in price.

Timing	Content	Reading/Activities	Comments/notes
1.5 hours (13 hours to date)	The market mechanism — interaction of demand and supply to determine market clearing price Elimination of excess demand and supply through price mechanism Functions of prices: rationing, signalling, incentives	Anderton, Units 6 and 15 ET September 2005 page 14 — What determines the price of coffee? — I Black	Students can get confused between excess demand and excess supply — it is worth emphasising the need to label market diagrams fully and accurately to avoid this. For explaining the solution to excess supply, use examples of local markets that have stock left at the end of the day — ask students what market traders could do to eliminate their stock. For explaining the solution to excess demand, ask students to think of ways of preventing queues at popular attractions.
1 hour (14 hours to date)	Consumer and producer surplus: - definitions - indication of correct area on market diagrams - analysis of change in c.s. or p.s. following changes in demand/ supply	Anderton, Unit 4 ET September 2004 page 14 — Consumer and producer surplus Tarrant, Interpreting market diagrams — matching game	Students need to be able to indicate the correct area on a market diagram, and to identify changes in c.s. or p.s. on a diagram.
1.5 hours (15.5 hours to date)	Application of market principles to various markets: - agriculture - commodities/precious metals - shares - oil	Anderton, Units 6,12, 21, 65 ER February 2007 page 17 — Common Agricultural Policy — S Rickard Tarrant, Agricultural Economics matching	Students should be aware of important features of each market, eg degree of price elasticity of demand/supply and factors that cause demand/supply curves to shift (ie recent increase in demand for oil to fuel Newly Industrialised Countries).
1.5 hours (17 hours to date)	Application of market principles to the labour market: - labour as a derived demand - price of labour = wage rate - factors causing demand for and supply of labour to increase or decrease	Anderton, Units 71-77 Cramp, Units 1, 2, 3, 5, 9 ET September 2006 page 28 — Ageing population and labour markets ET September 2006 page 12 — Government interference in wage determination — A Clarke ET November 2006 page 11 — Migration and the labour market ER November 2006 page 2 — New migration to the UK — S Drinkwater	MRP analysis and monopsony analysis is not necessary (although this could be extension work for more able students). Students should also consider the importance of the participation rate in the labour force, and recognise the concepts of unemployment and underemployment.

Timing	Content	Reading/Activities	Comments/notes
3 hours (20 hours to date)	Externalities (positive and negative) Social costs = private costs + external costs Social benefits = private benefits + external benefits Positive consumption externality diagram, including welfare gain triangle Negative production externality diagram, including welfare loss triangle Cost benefit analysis	Anderton, Units 19, 22, 61, 62, 70 ET November 2005 page 16 — Costs and benefits of air travel — T Allen ET March 2007 page 26 — London Olympics of 2012 ER September 2006 page 7 — Air travel — P Smith ER April 2007 page 2 — Hosting major events — C Jones ER April 2007 page 26 — The economic impact of transport infrastructure investment — R Vickerman Tarrant, Types of market failure wordsearch	Many students find this topic abstract and therefore difficult. Use as many practical examples as possible and get students to identify private and external costs/benefits. eg traffic congestion, building of new airports, improved access to education etc. Good examples to use for the cost benefit analysis work are the London 2012 Olympics, expansion of Heathrow Terminal 5, the Newbury Bypass etc.
1 hour (21 hours to date)	Public goods: - non-rival and non-excludable characteristics - examples - free-rider problem - private goods	Anderton, Unit 20 ET January 2007 page 11 — Public goods — A Chapman	Use examples. Students can get confused between non-rival and non-excludable — it is worth emphasising this.

Timing	Content	Reading/Activities	Comments/notes
1.5 hours (22.5 hours to date)	Imperfect information: - symmetric, asymmetric, incomplete Examples: - healthcare - education - pensions - tobacco/alcohol	Anderton, Unit 16 and 76 Tarrant, Market failure in healthcare and education missing words	Emphasise the importance of perfect information to enable markets to work properly. Discuss the effects of imperfect information in terms of overconsumption (alcohol/tobacco) and underconsumption (healthcare/education).
1.5 hours (24 hours to date)	Labour immobility: - geographical and occupational - reasons for immobility - government measures to tackle the problem (training programmes etc)	Anderton, Unit 75 Cramp, Units 8 and 9 ER April 2007 page 24 — New Deal	Occupational immobility can be introduced using examples such as The Full Monty and Billy Elliot where main characters are unemployed through lack of appropriate skills. Sociology students may be able to contribute some knowledge from their other studies. Students should be aware of the New Deal for Labour.
2.5 hours (26.5 hours to date)	Commodity markets and unstable prices: - causes of unstable prices (time-lag, climate etc) - problems caused by unstable prices (uncertain income, reduced investment, inability to purchase necessities) Solutions: - minimum prices (including diagram) - buffer stocks (including diagram) - evaluation of solutions	Anderton, Units 12 and 21 ET September 2006 page 7 — Buffer Stocks — M Jewell	Students do not need to use the diagrammatic analysis of time-lag causes of unstable prices (cobweb theorem) but should be able to explain verbally why time-lags in production can cause unstable prices. A number of students become confused over minimum prices being a price above the market equilibrium, not below — this needs emphasising. There are a number of approaches to buffer stock diagrams, but all should involve a floor and ceiling price, and a notion of buying and storing excess supply for times when supply is low or demand high. Footage of the original Live Aid could be used to illustrate Bob Geldof's attack on the CAP.

Timing	Content	Reading/Activities	Comments/notes
2.5 hours (29 hours to date)	Definitions of taxation and subsidy Reasons for use of tax/subsidy to tackle market failure Use of market diagrams to show effect of tax and subsidy on supply curve Graphical analysis of incidence of tax/subsidy on consumers and producers, and total revenue gained/lost by government Implications of PED/PES for incidence of tax/subsidy Evaluation of tax and subsidy	Anderton, Units 11, 62, 79 ET September 2004 page 28 — Why do governments tax smoking? — S Earley ET November 2005 page 6 — Tax and household or industrial waste — R Powell ET November 2005 page 21 — National road user charging — C Bamford ER February 2007 page 7 — Environmental tax — A Leicester	This should be linked back to externalities, with negative externalities attracting tax and positive attracting subsidy. Also applicable to imperfect information. For tax, use examples of landfill tax, carbon-offset tax and road pricing (eg congestion charge in London/ Manchester).
4 hours (33 hours to date)	Pollution permits - how they work - strengths/weaknesses - examples Extension of property rights - how it works - strengths/weaknesses Regulation - how it works - strengths/weaknesses - examples State provision - examples (NHS, state schools, emergency services etc) - strengths/weaknesses	Anderton, Unit 62 ET November 2005 page 22 — Tackling depletion of oil reserves — I Black	Much of the evaluation of these alternative methods of correcting market failure looks at the cost of these approaches (including opportunity cost). The idea of problems caused by monopoly could be introduced with respect to state provision of goods with positive externalities or that are public goods. More able students could be introduced to the work of Ronald Coase on property rights. Evaluation of regulation should take into account the cost of a monitoring agency and the application of fines.
1.5hrs (34.5hrs to date)	Definition of government failure Examples of government failure National Minimum Wage	Anderton Unit 20 ET November 2005 page 26 — Effects of increasing the NMW ET March 2006 page 22 — UK universities and government failure — T Hamilton-Jones ER November 2006 page 29 — Assessing the NMW — M Bryan	Examples to be covered include failure in the agricultural sector, transport sector, labour market, and housing. There are many practical examples of these failures.

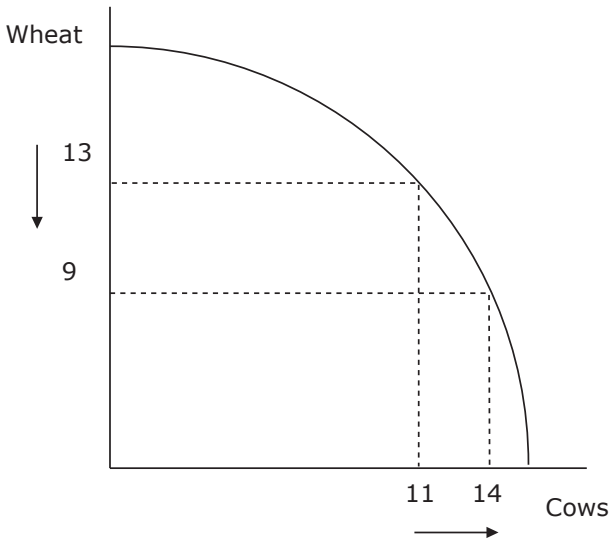
GCE Economics Unit 1 — Competitive Markets — How They Work and Why They Fail Revision Sheets

1.3.1 — What is the nature of economics?

Economics is a social science, which investigates what, how, why, and for whom goods and services are produced. The basic **economic problem** is that there are infinite wants but finite (non-renewable) resources with which to satisfy them. Economics is meant to help us to choose between the competing demands placed on the non-renewable resources that we have. Increasingly, economists are becoming more aware of the need to use renewable resources, such as wind and solar power instead of oil and gas for electricity generation. Following the Bruntland Report of 1987, economists are also increasingly aware of the role of sustainability. This means that we need to consider the needs of future generations as well as our own generation when we make our decisions regarding the use of resources.

Production possibility frontiers

Production possibility frontiers, or PPFs, help us to analyse the trade-offs that we must make as a result of the basic economic problem. They show the possible maximum combination of goods/services that can be produced using the resources that we have available.



PPFs demonstrate the concept of opportunity cost — the cost of the next best alternative foregone. In the diagram above, the production of three more cows incurs an opportunity cost of four tonnes of wheat, ie we have had to *give up* wheat production in order to produce more cows because of our limited resources.

PPFs can also be used to demonstrate the concept of **efficiency**. Any point on the PPF is a productively efficient point — we are using the **factors of production** (resources, including land, labour, capital and enterprise) we have to their maximum potential. Any point inside the PPF is inefficient — some of the factors of production are unemployed or underemployed.

Economic growth (an increase in the productive potential of the country) can be shown by an outwards shift in the PPF. Such a shift can be caused by an increase in the quantity or quality of the factors of production (eg, better educated labour, hi-tech capital, a new oil field discovery etc). Very occasionally, the PPF shifts inwards.

Another way in which economic growth can occur is via **specialisation**, or **division of labour**. Adam Smith wrote about the division of labour in *Wealth of Nations* back in the 18th century. He said that by splitting the production of a good into a number of different tasks, and allocating each task to a different worker, then more could be produced as workers developed greater skill in performing their particular task with the use of specialist tools designed for just that task, thus leading to less wastage of materials and less time spent on their task. However, when this method was put into practice in the early 20th century, for example, with Henry Ford's Model T production line, workers became so bored that they had to be paid high wages as compensation for the monotony of their work.

Economic systems

There are a number of approaches to organising an economy.

Free market economy: an economic system where all resources are allocated through the market forces of demand and supply, with no intervention by the government.

Command, or centrally planned economy: an economic system where all resources are allocated by the government, with no markets (eg ex-Soviet bloc, North Korea).

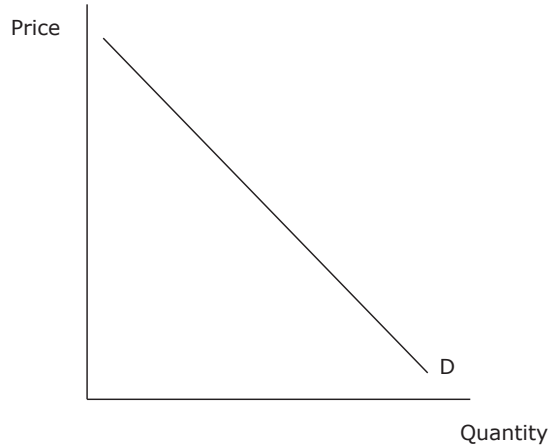
Mixed economy: an economic system where resources are partly allocated by the market and partly by the government (eg, most economies today).

From the point of view of efficiency, most economists would argue that free markets are the most efficient, in terms of using their resources in the best possible way to meet the needs and wants of consumers. However, when equity is considered, most economists would also argue that free markets lead to an unequal distribution of income and wealth, since owners of capital and entrepreneurs tend to accumulate the most income/wealth, and many people, such as the sick or elderly, are unable to work. As a result, most economies today are mixed economies, where markets allocate many resources, but governments intervene to different extents in order to ensure a minimum standard of living. They do this by raising revenue through taxes, and redistributing in the form of benefits and direct provision of services such as healthcare.

The extent to which governments are involved in the economy is a **normative** issue, ie a matter of opinion, requiring a value judgment. Economic analysis tends to be more concerned with positive issues, ie statements of fact that can be tested against real-world evidence. For example, the USA has a predominantly private healthcare system, where people have to pay directly for their treatment, whereas the UK has a predominantly publicly-provided healthcare system (the NHS). To say that the UK's approach is 'fairer' is essentially a matter of opinion, ie a normative issue. To say that the amount spent per head on healthcare in the UK is less than that in the US is a positive issue.

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

Demand refers to the amount that consumers are willing and able to buy at any given price. A demand curve shows this relationship between price and quantity demanded. It slopes downwards from left to right, because as price falls, people are more willing to buy a good.



Factors causing demand curve to shift right:

- an increase in income (for normal goods)
- a fall in income (for inferior goods)
- successful advertising
- fall in price of complementary goods
- rise in price of substitute goods
- good becomes more fashionable.

Factors causing demand curve to shift to the left:

- a fall in income (for normal goods)
- a rise in income (for inferior goods)
- rise in price of complementary goods
- fall in price of substitutes
- good becomes less fashionable.

A very important point: a change in the price of a good does not lead to a movement of the demand curve — it simply leads to a shift **along** the demand curve, since the demand curve shows the relationship between price and quantity demanded.

Key terms:

Normal good — one for which demand increases as income rises

Inferior good — one for which demand falls as income rises, eg bus travel, own-brand supermarket spaghetti sauce

Complementary good — a good that is bought with another good, ie the two go together well, eg cinema tickets and popcorn

Substitute good — a good that is bought instead of another good ie consumers choose between one or the other, eg gold engagement rings or platinum engagement rings.

Elasticities

Price Elasticity of Demand (PED) measures the responsiveness of demand to a change in price. A steep demand curve shows a good that has price inelastic demand ie demand for it is not responsive to a change in price. A shallow demand curve shows a good that has price elastic demand ie demand is responsive to a change in price. Goods with price inelastic demand tend to have few substitutes, are necessities, and/or can be addictive eg petrol, alcohol, cigarettes. PED is always a negative number. A number between 0 and −1 means demand is price inelastic. A number between −1 and −∞ means demand is price elastic.

It can be calculated using the formula:

$$\frac{\%\text{ change in demand}}{\%\text{ change in price}}$$

Income Elasticity of Demand (YED) measures responsiveness of demand to a change in income. A positive number means the good is normal; a negative number means the good is inferior. It can be calculated using the formula:

$$\frac{\%\text{ change in demand}}{\%\text{ change in income}}$$

Cross (price) Elasticity of Demand (XED) measures responsiveness of demand for one good to a change in the price of another good. A positive number means the goods are substitutes; a negative number means the goods are complements. It is measured using the formula:

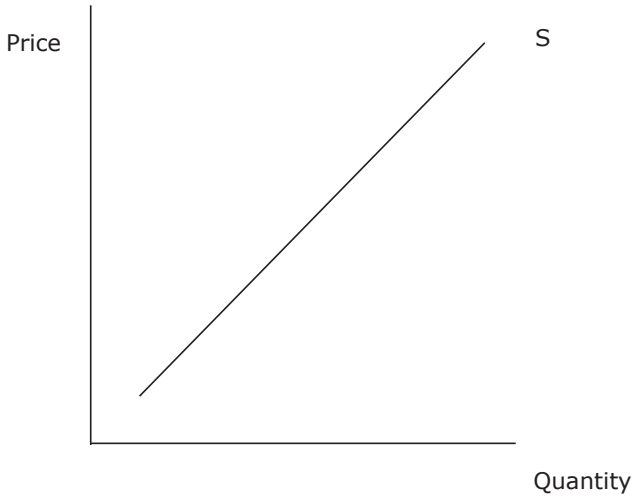
$$\frac{\%\text{ change in demand for good x}}{\%\text{ change in price of good y}}$$

The importance of elasticities

PED is important to businesses because it tells them what their pricing strategy should be in order to increase total revenue: if PED is inelastic, then a rise in price increases total revenue and a fall in price reduces total revenue; if PED is elastic, then a rise in price reduces total revenue and a fall in price increases total revenue. **PED** is also important to governments in terms of understanding the **burden (or incidence) of taxation** on producers and consumers. The more price inelastic the good, a greater proportion of the sales tax is paid by the consumer than the producer. Similarly, for **subsidies** (a government grant given to producers in order to encourage production), the more price inelastic the good, the greater the price fall for consumers. Businesses should also be aware of cross price elasticities, because it will tell them how demand for their own product will change following a price change by their competitors or partners.

1.3.3 — What determines the supply of a good or service in a market?

Supply refers to the amount that producers are willing and able to sell at any given price. The supply curve shows this relationship between price and quantity supplied. It slopes upwards from left to right, because, as price rises, producers will supply more because of the potential for higher profit (think about delivering newspapers — if you were paid £1 an hour, you wouldn't do the work, but you might if you were paid £10 an hour).



Factors causing supply to shift right:

- an increase in productivity
- improvement in technology for production
- increased availability of materials
- a fall in price of raw materials
- a fall in labour/capital costs
- introduction of a subsidy
- a rise in the number of firms in the industry.

Factors causing supply to shift left:

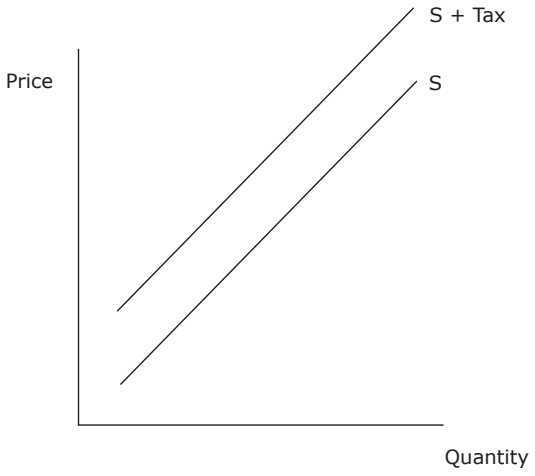
- a fall in productivity
- reduced availability of raw materials
- a rise in price of raw materials
- a rise in labour/capital costs
- imposition of a tax
- a fall in the number of firms in the industry.

A very important point: a change in the price of the good leads to a movement along the supply curve, not a shift in the supply curve.

Taxation

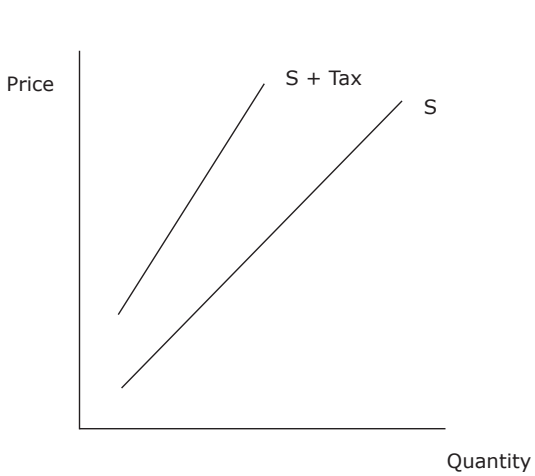
Governments impose taxes on goods for a number of reasons, such as trying to reduce production of a good as it may cause pollution or threaten the health of consumers (eg cigarettes), and the need to raise tax revenue in order to fund public services such as schools and the NHS.

Unit Tax



S+tax is parallel to original supply curve with a unit tax ie 50p tax added to every litre of petrol sold, no matter what the price of petrol

Ad Valorem Tax



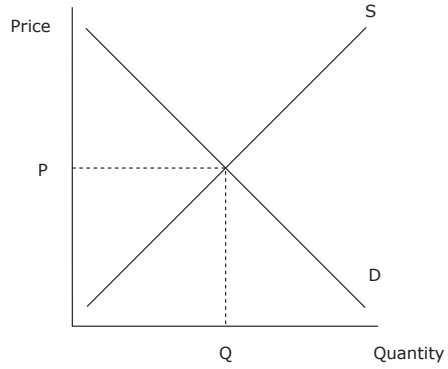
S+tax is steeper the original supply curve with an ad valorem tax ie tax is added at 17.5% of the price at each and every price

Price elasticity of supply (PES) — the responsiveness of supply to a change in price. Like PED, the steeper the supply curve, the more price inelastic (unresponsive) the supply. It is always a positive number. A number between 0 and 1 means the good has price inelastic supply; between 1 and ∞, the good has price elastic supply. A good has price inelastic supply if it is complex to make, raw materials are scarce, the production process is lengthy and we are considering the short-run (the period of time over which the quantity of some factors of production is fixed). Supply is price elastic when the good is quick and easy to make, and we are considering the long run (the period of time over which all factors of production are variable). The formula for PES is:

$$\frac{\%\text{ change in supply}}{\%\text{ change in price}}$$

1.3.4 — What determines the price of a good or service in the market?

In a free market, we combine the forces of demand and supply in order to determine the market price of a good or service.



P is known as the **market clearing price** — the price at which supply exactly meets demand. If the price is too high, then supply > demand, and we have **excess supply**, or **a surplus or glut**. To get rid of the excess supply, producers will have to lower the price, and so the market clearing price will eventually be reached. If the price is too low, then demand > supply, and we have **excess demand or a shortage**. To get rid of the excess demand, the price will rise towards the market clearing price, causing consumers to leave the market as the good becomes more expensive than the price they are willing to pay.

The Functions of Prices

Rationing: because resources are scarce and finite, not everyone is able to buy everything they want; when demand is greater than supply, then prices are bid up so that the good/service is rationed out to those who can afford to pay.

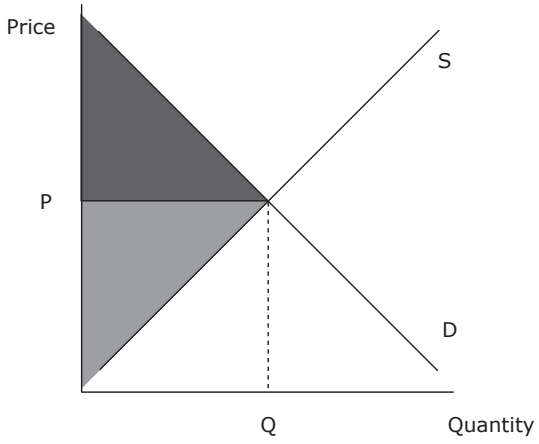
Incentive: when prices are high, then this attracts producers to the market because it can enable higher profits to be earned.

Signalling: prices help to determine where and how resources should be allocated; if prices increase, this signals to producers that demand is probably high and that they should increase production.

Consumer and Producer Surplus

Consumer surplus: the difference between the amount that a consumer is willing to pay and the price that they actually pay; shown by the difference between the demand curve (the amount they are willing to pay) and the market equilibrium price (the amount they actually pay) — the darker shaded area on the diagram.

Producer surplus: the difference between the amount a producer is willing to sell a good for, and the price they actually receive; shown by the difference between the supply curve and the market equilibrium price — the lighter shaded area on the diagram.



Obviously, the level of consumer and producer surplus will change if there is a shift in the demand or supply curve.

1.3.5 — How might the change in the price of a good be explained?

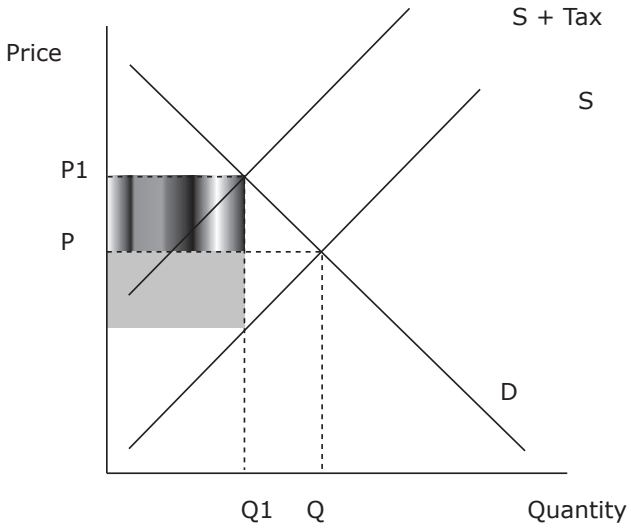
It is easy to see that a shift in demand or supply causes a change in the price of a good. **Prices** will **increase** if **demand increases** (moves to the right) or supply decreases (moves to the left). **Prices** will **decrease** if **demand decreases** (moves to the left) or supply increases (moves to the right).

Demand for **oil** is highly price inelastic, as is supply. Any change in supply of oil will therefore have a very large effect on the price of oil. **Supply shocks** such as the war in Iraq, or the breaking of a pipeline, will cause a dramatic increase in price as supply decreases. Recently, demand for oil from Newly Industrialised Countries such as China has increased, causing the demand curve to shift right, and oil prices to rise. Changes in oil prices have a large impact on the global economy, because oil is used as a raw material in the production of many products and the transport industry. So, if the price of raw materials increases then supply of most goods falls which pushes up prices of most goods.

Demand for **agricultural goods** is also price inelastic, as they are necessities for the majority of people. Supply is also fairly price inelastic, as supply cannot easily be altered once crops are sown etc. Farmers always know the maximum that they can sell, as this equals the amount they have planted. However, in periods of bad weather, supply can be radically reduced, forcing prices up. Demand for agricultural products has increased recently with the rise in importance of **biofuels**, where products such as sugar cane are being used to produce ethanol rather than food. Again, this pushes up the price.

The price of stocks and shares on the **stock marke**t is determined through market forces. **Confidence** is a key determinant of share prices. Demand for shares tends to increase if people are feeling confident about the state of the economy and the future. Demand falls when events occur that shake people's confidence, eg terrorist attacks, revelations of scandals at banks etc. **Speculation** is also an important factor. If people believe that share prices will rise, they will want to buy them at a lower price now and sell them at a higher price in the future. So, if people expect share prices to rise then demand will increase — which causes the price to rise, resulting in a self-fulfilling prophecy!

The Incidence of Taxation



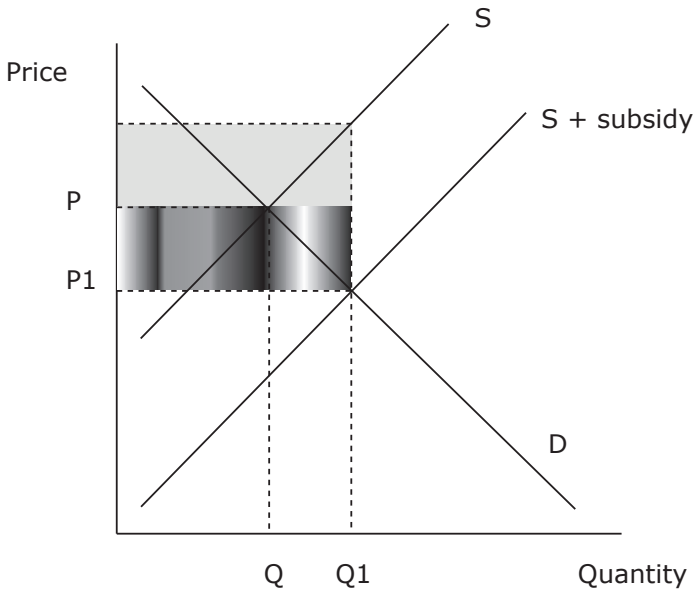
Amount (incidence) of tax paid by the consumer

Amount (incidence) of tax paid by the producer

Sum of areas = total tax revenue received by government

NB: the steeper (more inelastic) the demand curve, the greater the yellow area and the smaller the green area

Incidence of a Subsidy



Benefit of Subsidy to consumer

Benefit of Subsidy to producer

Total cost of Subsidy to government

1.3.5 — What determines the wage rate for labour in a market?

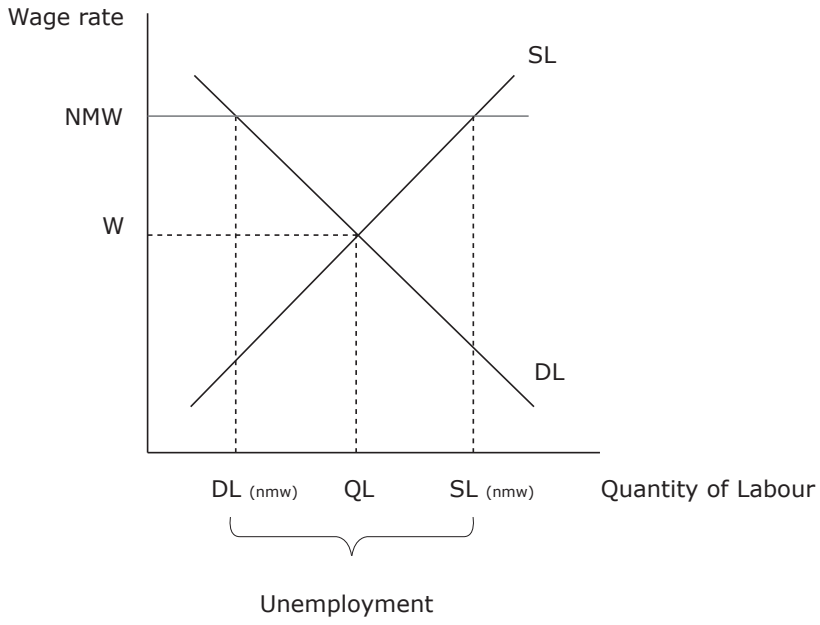
In the labour market, people from households supply labour and businesses **demand** labour. The **demand for labour** is known as **derived demand** — this means that demand for labour is determined by demand for the goods and services that they produce. Businesses will demand more labour if there is a high demand for the goods and services they produce, for example at times of economic boom. Demand for labour also increases if workers are more productive, or if capital becomes more expensive (labour and capital are **substitutes**).

Supply of labour is determined by a number of factors:

- **changes in migration patterns:** when many of the newer member states of the EU joined the EU, countries such as the UK saw an increase in immigrants, and therefore an increase in the labour supply
- **income tax:** when income tax is high, workers may feel that it is not worth working because they take home too little of their pay, and so labour supply may fall ie the value of their leisure time is more valuable than an hour of work, and so they substitute leisure for work. On the other hand, workers may feel that they have to work longer hours to compensate for the reduction in pay, and so labour supply may increase
- **benefits:** if state benefits (eg for sickness, disability, unemployment etc) are generous, then people are more likely to stay at home rather than work, thus reducing the labour supply
- **trade unions:** because trade unions act to increase wage rates through a process of collective bargaining, this may increase the labour supply as more people are encouraged to join the workforce. However, higher wage rates mean reduced demand for labour, so unemployment might result. A similar outcome may occur as a result of a **National Minimum Wage**
- **social trends:** the workforce in the UK had increased female participation compared to a few decades ago, as it has become more acceptable for women to work and childcare has become easier to access.

The price of labour is known as the **wage rate**. **If wages are too high**, then there is more labour supplied than demanded — we have **unemployment**. If this occurs in a free labour market, then workers will have to accept lower wages or go without a job; thus the wage rate will tend to fall to the market clearing rate. If **wages are too low**, then demand for labour will be high but supply will be low so there will be a **labour shortage**, ie workers will not work if they are paid too little (an hour of their leisure time is more valuable than a hour of work). Firms will have to pay workers more as an incentive to work, and so the wage rate will be bid up to the market clearing wage.

The Labour Market Diagram, with the Effects of the National Minimum Wage

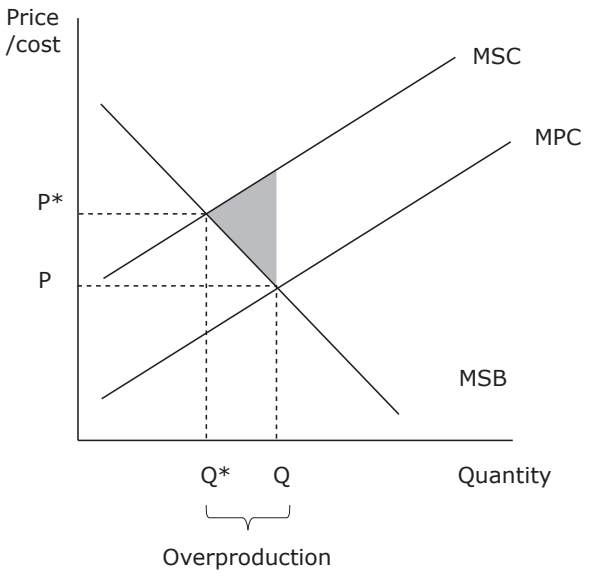


1.3.7 — Why do some markets fail?

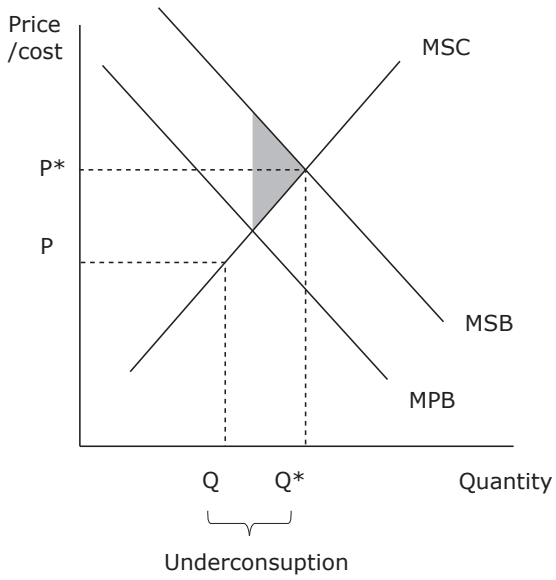
Negative externalities (or external costs) exist when the social costs of an economic action are greater than the private costs. For example, a toy manufacturer located on the banks of a river will incur a number of private costs of production (eg raw materials, labour, running machinery etc) but may also impose costs on third parties, such as noise from delivery lorries and an ugly factory affecting the quality of life of local residents or pollution being pumped into the river. Social costs = private costs + external costs.

Positive externalities (or external benefits) exist when the social benefits of an economic action are greater than the private benefits. For example, the education received by a child means that he or she can get a job which pays a reasonable income (ie there is a private benefit to education); however, that child's education may also benefit wider society if he or she become a doctor and is able to treat people so that they can return to work (ie there is also a social benefit). Social benefits = private benefits + external benefits.

Negative Externalities



Positive Externalities



MSB = marginal social benefit

MSC = marginal social cost

MPC = marginal private cost

MPB = marginal private benefit

P*Q* = ideal, efficient equilibrium, where MSC = MSB

PQ = actual, inefficient equilibrium — market failure

Shaded area = welfare loss/gain

Cost benefit analysis (CBA) is an investment appraisal tool that applies the externalities idea. Major projects, such as staging the London 2012 Olympics, or the building of a new motorway, are often controversial. To decide whether a project should go ahead or not, planners work out the private and external costs (to give social costs), and the private and external benefits (to give social benefits). If social costs exceed social benefits, then the project shouldn't go ahead. If social benefits exceed social costs, then the project might go ahead. In practice, however, it is very difficult to value external costs and benefits because different people have different opinions as to their value (ie it can be normative). It is also very costly to undertake a CBA. Finally, politicians may adopt rent-seeking behaviour, where they decide to press ahead with a project where social costs are high because it might win their party votes.

Public goods

Non-rival means that consumption of a good/service does not prevent another person from also consuming that good/service, eg the provision of a streetlight demonstrates non-rivalry, because if one person uses the light provided by the streetlight it does not prevent another person from also benefiting. However, if a person eats a chocolate bar, then someone else cannot also eat the same chocolate bar.

Non-excludable means that once a good is provided, it is impossible to stop people from using it, eg once a lighthouse is provided, then ships at sea cannot be prevented from benefiting from it. However, if a car manufacturer provides a new model of car, people can be excluded from purchasing one if they do not have enough disposable income with which to buy the car.

Goods that are both non-rival and non-excludable are called **public goods**. Goods that are rival and excludable are **private goods**. Goods that are either non-rival or non-excludable but not both are **quasi-public goods**.

Public goods have to be provided by the government, because since people cannot be prevented from using them, no-one has any incentive to pay to provide them as they cannot make a profit. Thus there is market failure. People who use public goods without paying for them are known as **free-riders**.

Imperfect information

For markets to work, there needs to be perfect and **symmetric i**nformation ie consumers and producers have the same level of knowledge about the products, and they know everything there is to know about them. In many cases, however, information may be **asymmetric** (producers know more than consumers) or **incomplete/imperfect**. In these situations, we have market failure.

In the **private healthcare market**, doctors know more than patients about healthcare and treatments (asymmetric information). There is an incentive, therefore, for doctors to prescribe more expensive treatment than is necessary in order to increase their profits. This is an inefficient use of resources. Many consumers in the healthcare market take out **insurance** to help pay for treatment; this, however, leads to a problem of **moral hazard**, where they take more risks and therefore require more treatment because they are insured. Again, this is a consequence of asymmetric information in the market where consumers know more than insurers about their intended future actions.

In many markets, such as the **tobacco**, **alcohol** or **pensions markets**, providers of these goods and services often **withhold** information deliberately from consumers. For example, many tobacco companies knew of the link between tobacco and lung cancer before consumers were aware of it, and continued to advertise tobacco as being 'healthy' and 'sociable', leading to over-consumption of tobacco, and therefore market failure. In the pensions market, many consumers do not understand the workings of the pensions market, and that the type of fund into which they pay money may result in a loss of money rather than a gain, should stock markets fall. Thus, consumers' information is incomplete, and an inefficient market outcome results.

Labour immobility

The labour market is not very efficient, and market failure results from the inability of workers to easily move between jobs. There are a number of reasons for this. Geographical immobility refers to the inability of workers to move around the country in search of work. This may be due to the high percentage of **home ownership** in the UK (rather than rented accommodation like in continental Europe) and the lengthy process required to sell and buy a house. **High UK house prices** also prevent people from moving. It may also be due to social reasons, such as not wanting to move away from family or not wanting to uproot children from good schools. The UK government provides housing subsidies for Key Workers (nurses, teachers etc) in areas where house prices are high, but many of the available homes are in undesirable areas and waiting lists are long.

Occupational immobility refers to the inability of workers to move between jobs due to lack of appropriate skills or training. As the economy has shifted from having a manufacturing base to a service-sector base, many low-skilled manual workers have found themselves without jobs. Schemes such as the government's **New Deal for Labour** have tried to tackle this by providing training programmes and courses, but many people cannot afford to spend their time in training rather than work.

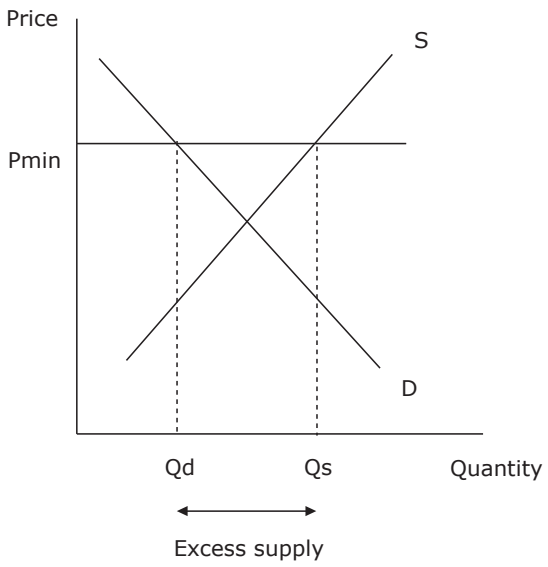
Commodity markets

These are the markets concerned with raw materials, such as precious metals and minerals, and agricultural products. Agricultural markets in particular are prone to strong fluctuations in prices, as **supply can be unpredictable** (owing to the weather and crop diseases). There is also a **time-lag** problem, owing to the fact that crops can take up to a year to grow and animals several years to raise meaning that farmers have to base their decisions on how much to plant or raise, and therefore sell in the future, based on current prices. So, if the price of wheat is very high this year, farmers will plant large wheat crops for reaping next year, but this increased supply will force down the market price, which in turn encourages them to plant less, thus reducing supply and forcing prices back up. These fluctuating prices are bad for producers, because it leads to unstable income, and also bad for consumers, for whom many of these goods are necessities.

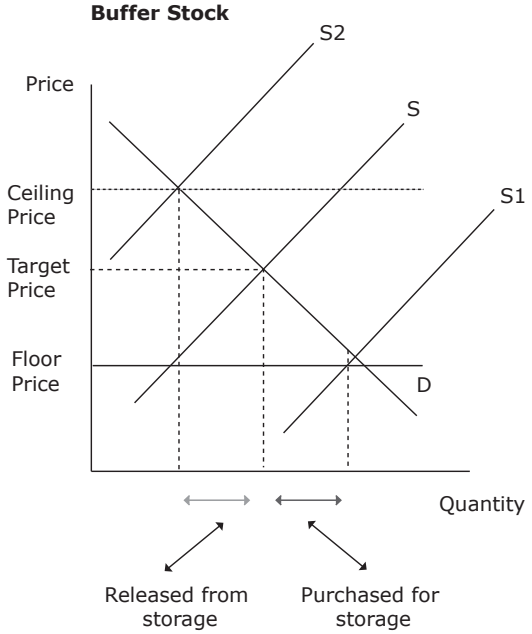
Governments can tackle these problems in a number of ways. Firstly, they could introduce a **minimum price**, where goods cannot be sold at a price below this. Minimum prices are set above the market price. This means that supply will exceed demand, and so there will be a glut or surplus. Secondly, they could use a **buffer stock**, which entails a price ceiling and a price floor. If the price of the commodity drops too low (probably through high supply), then the government or buffer stock authority purchases large quantities of the good and stores it, in order to reduce the supply available to the market and raise the market price. If the price becomes too high, the government or buffer stock authority release the good onto the market from storage, thus increasing supply and lowering price. However, there are a number of problems with buffer stock schemes:

- storage is expensive
- transport to and from storage is expensive
- it works only if goods are non-perishable
- it is nearly impossible to ensure that the amount kept in storage will equal the amount required for release in the future to lower prices (many buffer stock schemes end up storing too much, creating butter mountains, grain mountains and wine lakes).

Minimum price



Buffer Stock



1.3.8 — How do governments attempt to correct market failure

Type of intervention	How it works	Strengths	Weaknesses
Taxation	Reduces supply and therefore increases price, to discourage production /consumption of a good that has negative externalities.	Works through the price mechanism. Easy to understand.	Can be expensive to collect. Difficult to know the correct level of tax to set, as it should equal the external costs (= difficult to measure). Ineffective if PED is inelastic, as tax will have to be very high to reduce equilibrium quantity. Can be regressive.
Subsidy	Increases supply and therefore reduces price, to encourage production /consumption of a good with positive externalities.	Works through the price mechanism. Easy to understand.	Expensive for government — incurs an opportunity cost. Difficult to know correct subsidy to provide as it should equal external benefits. Producers may pocket the money and not increase supply.
State provision	Government directly provides a good or service, funded through tax revenue, in order to provide goods which have positive externalities or are public goods.	Increases fairness of access to services such as healthcare and education, which have many positive externalities attached. Without Government provision, public goods wouldn't be provided. Trustworthy provided with common standards.	Expensive for Government — incurs opportunity cost. State monopoly can result in inefficiency (eg through bureaucracy etc). Difficult to maintain consistent standards.
Buffer stocks	Government purchases commodities if a floor price is reached and sells commodities if a ceiling price is reached.	Ensures fair income for producers and fair prices for consumers.	See section 1.3.7
Regulation	Government imposes rules regarding the production, sale or use of a good/service, and backs this up legally by fines/ prison sentences etc. Aims to tackle negative externalities.	Easy to understand and often easy to monitor/police.	Expensive to monitor/police. Firms may ignore fines if they are not large enough. Can be anti-competitive. Often difficult to 'pin the blame' on the appropriate person, therefore unfair.
Pollution permits	An efficient amount of pollution is agreed, and a corresponding number of permits released — these can be traded amongst firms so that low polluters can sell to high polluters and make a profit. Aims to tackle negative externalities.	Uses the market mechanism, therefore efficient. Requires little Government intervention, therefore cheap to run.	Difficult to set correct amount of pollution and therefore right number of permits.

Type of intervention	How it works	Strengths	Weaknesses
Extended property rights	Aims to identify who is responsible for paying for external costs, therefore reducing negative externalities. The economist Ronald Coase argued that it didn't matter whether the producer or the consumer took responsibility — either would be an efficient outcome.	Once property rights are allocated, no more Government intervention needed in theory, therefore cheap.	Difficult to allocate property rights when they have never existed before. Some property rights cannot be allocated, eg carbon emissions cause global warming, but no-one 'owns' the world and it would be politically undesirable for this to happen.

1.3.9 — What is government failure?

Government failure exists when the government intervenes to correct a market failure but this can result in a more inefficient allocation of resources.

Example 1: Mexico City and emissions from cars — tackling transport market failure

A good example of government failure is Mexico's approach to reducing CO2 emissions in Mexico City. Their policy was very simple — cars with even/odd number plates were allowed into the city on alternate days, which in theory should have reduced the number of cars entering the city by a half. However, the reality was very different. Car-owners sold their nice cars, and bought two, older and more polluting cars — one with an even number plate and one with an odd plate. Result: an increase in CO2 emissions and Government failure.

Example 2: The Common Agricultural Policy (CAP) — tackling agricultural market failure

The aim of CAP is to stabilise agricultural prices and provide a satisfactory level of income for farmers in the European Union (EU). However, the outcome is inefficient. Farmers produce too much, and excess supply is bought by the EU and stored (causing 'wine lakes' and 'butter mountains'). So, the EU has to pay subsidies to farmers AND pay for warehouses and storage. Result: an inefficient use of Government money and Government failure.

Example 3: The National Minimum Wage — tackling labour market failure

This was introduced to protect workers who received low pay, by making it illegal for employers to pay a wage below the NMW. However, those workers who managed to retain their job ended up with higher pay, but some workers would lose their jobs and therefore be worse off. Result: a more inefficient market outcome and government failure.

Example 4: Rent controls — tackling housing market failure

Many people in the UK struggle to pay for ever-more-expensive housing, especially with the increasing housing shortage in the South-East. If the government were to consider the level of rent to be unacceptably high, then they could impose a maximum rent. Maximum prices are set below the market equilibrium price, so that in this case demand for houses exceeds supply of houses, causing a housing shortage — some people will be worse off. Result: Government failure.

Managing the Economy — Course Outline for Unit 2

BASIC READING

Unit 2 Student Guide Edexcel Series — Philip Allan updates www.philipallan.co.uk

Anderton A — *Economics, 4th Edition* (Causeway Press, 2006) ISBN 1902796926.
There will soon be a 5th edition.

Begg D et al — *Economics, 8th Edition*, with free website resources at www.mcgrawhill.co.uk/textbooks/begg

Cole R and Brewer Q — *Economics for You* — the four unit guide (Tatchley Books)
ISBN 13: 978 0955177712 www.economics4u.co.uk

Moynihan D and Titley B — *Economics A Complete Course* (Oxford University Press, February 2001)
ISBN 13 978 0199134137 and other standard textbooks at www.amazon.co.uk

Sloman J — *Economics, 5th Edition* (Financial Times/Prentice Hall, December 2002)
ISBN 0273655744

Smith P — *Advanced Economics* (www.philipallan.co.uk, 2005) ISBN 13: 978 1844892099

Useful websites for Unit 2

For daily and weekly developments in Economics:

www.dailytelegraph.co.uk

www.economist.com

www.ft.com

www.guardian.co.uk

www.timesonline.co.uk

www.independent.co.uk

For models of the UK economy, virtual tours of other economies, practice papers and guidance notes aimed at AS level try:

www.bized.ac.uk

www.economics4u.co.uk

www.tutor2u.net

For development indicators and starting to look at the issues involved in development economics

www.oxfam.org

www.unctad.org

www.undp.org

www.worldbank.org

www.wto.org

Scheme of Work — One Teacher

Kindly submitted by Nick Maloney of Wellington School

Outline Scheme of Work

Principles

- In each term, do a mixture of micro and macro. Macro knowledge often comes late in the day and some basic concepts early on will allow students to follow events in the media.
- The scheme assumes an even split between the two.
- Aim to have the covered all the concepts in the syllabus by Easter so that the Summer term can be used for revision and exam preparation.
- Primarily use past Edexcel exam questions from January onwards for written work to prepare students for assessment.

Examination programme:

This scheme of work assumes no exams are to be taken in January except for Unit 1 retakes.

Lower Sixth — AS Economics

First Term

Concepts to cover by half term

Micro	Macro
Scarcity Opportunity cost PPF Factors of production, specialisation and division of labour Objective and value judgements Demand and related elasticity measures Supply and elasticity Price determination and simple curve shifts	Measures of the economy: • GDP, inflation, unemployment/employment, current account, HDI, other structural and quality of life indicators • real and nominal • index numbers and basic data interpretation. PPF: introduce investment (capital) and consumption, introduce output gap and illustration of unemployment Circular flow and multiplier: • look at effect of an increase in G on AD • introduce idea of 'fiscal stance'

Concepts to cover after half term

Micro	Macro
Consumer and producer surplus: • Basic welfare analysis — why free market maximises welfare? Role of price mechanism: • Mixed economies — advantages and disadvantages of a pure free market economy Application of demand and supply framework to a variety of markets including labour, commodity and asset markets: • indirect taxes and per unit subsidies • price floors and ceilings eg national minimum wage • effect of tax and benefits on the supply of labour (introduction of income and substitution effects)	AD and its components (C+I+G+X-M): • briefly look at factors influencing each • introduce idea of transmission mechanism — 'cause' and 'effect' • shifts in AD • relate to circular flow model. AS: • bring in concept of Phillips Curve to explain shape • shifts in AS. AD/AS equilibrium Trend growth rate Output gap analysis Monetary policy: • introduce current UK framework • look at how an interest rate change effects the UK economy (transmission mechanisms). Fiscal policy: • Look at effect of government spending and tax changes using AD/AS analysis.

Second Term

Concepts to cover by half term

Micro	Macro
Market failure — definition: • look at assumptions of a 'perfect market' Externalities • examples of government intervention • tax, subsidy, prohibition, property rights, tradable permits, regulation (C&C). Information failure: • merit and demerit goods • solutions: tax and subsidy, prohibition and promotion. Public Goods: • look at pure and quasi public goods • free-rider problem.	Causes and constraints on growth. Look at recent UK economy and identify causes and constraints — use AD data as a starting point: • discuss 'unbalanced' versus 'balanced' growth. Costs and benefits of growth. Macro objectives of government: • Look at simple conflicts between objectives.

Concepts to cover after half term

Micro	Macro
Information failure: • asymmetric information • moral hazard and principal-agent problem — solutions such as incentives and observation • adverse selection and lemon theory — solutions such as signalling and collective provision Volatile prices: • causes — inelasticity, uncertainty and time lags • effects on producers and consumers • solutions — buffer stocks, minimum prices Cost benefit analysis Government failure — definition: • evaluation of various government attempts at solving market failure • look at current policies such as: congestion charge, carbon emissions trading, smoking ban, extension of compulsory education to 18, etc.	Supply side policy: • focus on productivity — shifting the PPF • government spending (fiscal) vs. changes in regulation. Evaluation of macro policies: • time lag between implementation and outcome • uncertainty of outcome • conflicting objectives: equity, environment, inflation, unemployment, growth, current account Analysis of Budget statement: • look at fiscal stance, supply side impact, assessment of government forecasts.

Third Term

Before exams

Systematic revision of syllabus using exam questions to frame discussion. Do a mixture of short definition, diagram and supported choice tests and written responses to exam questions.

After exams

There are a variety of approaches possible here. Tackling an interesting part of the A2 syllabus may help alleviate pressure next year. For example, game theory or differences between developed and developing economies. A project-based approach may allow students to pursue their own interests.

2.1 Unit description

About this unit

This unit is very similar to the 2000 to 2008 *Unit 3 6353 Managing the Economy*, in terms of content and expected teaching style. There have been some clarifications in terms of expectations in the analysis, and some flexibility in the use of definitions to allow for changes in line with ongoing economic developments. There is a very basic introduction to the definitions required for the economic development component of the new Unit 4.

2.2 Assessment information

The assessment model is very similar to that used in the 2003 (revised 2000) specification, with three main exceptions.

- The marks are doubled, to make more differentiation possible by examiners, and so that changes at remark stage will be closely reflected by changed in UMS marks. This will allow more steps in the mark scheme (half marks had not been allowed with the mark base of 40, and odd numbers out of 80 effectively provide half marks). It will also allow more differentiation in the mark scheme, and a fanning out of the marks.
- The timing and weighting of this unit has increased, and is now equal to the weighting of the microeconomics unit. This is an encouraging development, not least in that many students find macroeconomics more challenging than the microeconomics side and a greater step from GSCE in terms of conceptual development.
- The assessment objectives are equally weighted, with 25% of the marks each for knowledge, application, analysis and evaluation. This is a change from 30:30:20:20 and will allow little more scope for testing analysis and evaluation. This was one of the main reasons for increasing the length of the exam by 50%.

2.3 Unit content

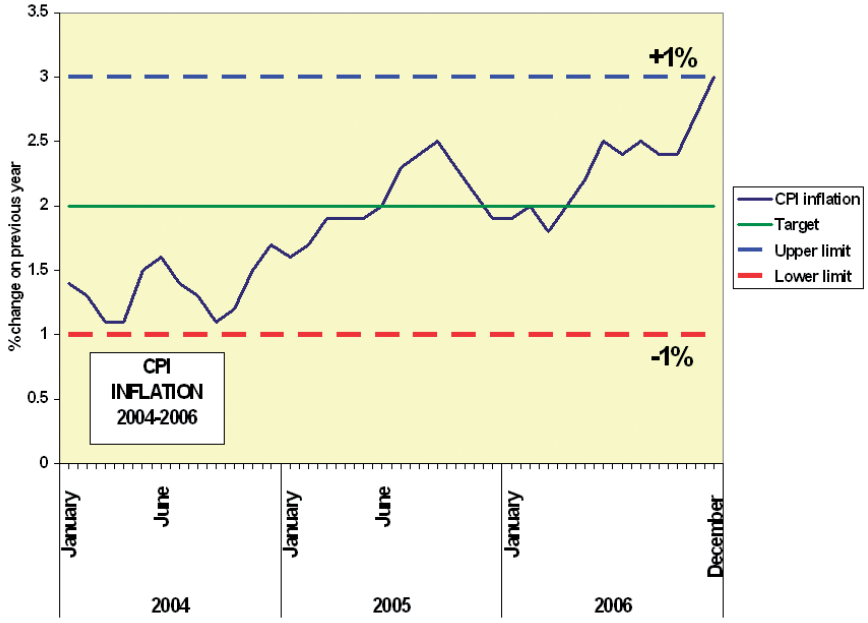
Where definitions are required these are indicated in bold. Please refer to the glossary at the end of this section for Unit 2 for an acceptable definition.

Please note that this is not intended as a teaching guide to the full content, but instead highlights points which are frequently raised by teachers at Inset meetings. If you have further points to raise please don't hesitate to email me at coler@cheltladiescollege.org.

GCE Economics Unit 2 — Managing the Economy Revision Sheets

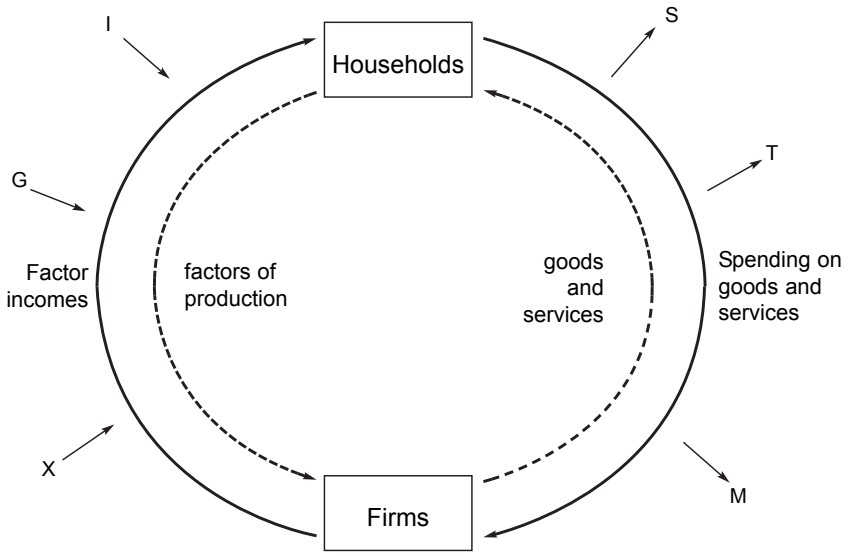
2.3.1 — How do we measure the economic performance of developed and developing countries?

Economic growth	Economic growth is measured in two main ways — as an *increase in real GDP* or as an *increase in potential GDP*. The first is easy to measure, and is the most readily available data on websites such as www.imf.org/external/country. By contrast, the increase in potential GDP is a very useful measure of how the economy is performing relative to its capacity constraints and its use of resources, and ignores the possibility that some of the resources might be unused at the time of measurement. Figures relating to spare capacity are usually available on the Bank of England website www.bankofengland.co.uk — go to the link providing the latest inflation report. It is of major importance to measure growth accurately, one reason being that growth is an indicator of the success of current economic policies and a guide to future ones. Growth figures also influence consumer borrowing or saving and business investment, so inaccurate figures might mean that inappropriate levels are chosen. Growth figures also influence the confidence in the domestic economy held by the global economy, and therefore affects flows of investment funds (known as foreign direct investment) and 'hot money' (short term speculative flows of cash chasing high interest rates and potential currency changes). However there are many problems with the growth measures that we use. An economy might be growing quickly but this may mean that the **income gap** is widening and causing problems of relative poverty. There maybe increases in other problems alongside economic growth. There maybe more pollution, congestion, number of hours worked, stress levels — all these can contribute to worsening living standards even for those whose incomes are rising. Another problem is the difficulty of comparing growth in different countries and over different time periods. Some economies consume much of what they produce meaning that the true value of the output is not reflected in the GDP figures. This is important if we are trying to measure which countries need economic assistance.

Inflation	The key idea is that two different surveys are undertaken, one which indicates price changes and one the changes in the weighting of expenditure (Expenditure and Food Survey). The use of indices is intended to make comparisons easier over time and between countries, and a base year is chosen to make effective comparisons. At the time of writing, the inflation target is 2% +/- 1% CPI. Clearly in setting questions the data chosen will make use of the target currently in use by the body in charge of monetary policy, currently the MPC. These factors may change and it is important that the students will have a good working knowledge of monetary targets, preferably relating to targets within the most recent five year period. 
Employment and unemployment	Employment and unemployment are not the opposite sides of the same issue — in fact the number of people in work in the UK is often increasing at the same time that unemployment rises. This might be owing to increased immigration, for example, so there are more people in the labour market, some of whom get jobs and some who don't or replace others already working. The two main methods of measuring unemployment in the UK are currently the International Labour Organisation (ILO) method, and the claimant count measure. While the ILO method of measuring unemployment is fairly inclusive and internationally comparable, there are problems in data collection and in the definition of unemployment — for example, there are many out of work who now receive incapacity benefit (which might get more generous benefit than those claiming for unemployment). It may be that the claimant count, which measures those actually claiming Job Seeker's Allowance, is in a way a better measure of hardship. There are again problems in this measurement, but these are of a different nature, so it is worthwhile to have sets of data to gain an overall picture of unemployment. In times of economic prosperity the measures tend to move apart, with the ILO measure higher than the claimant count, and the trend moves in the opposite direction in an economic slowdown. The study of the reasons for these changes give a deeper understanding of how the measures are made, and much of the information is available at www.statistics.gov.uk

	There are various names for different types of unemployment. **Cyclical** or **demand deficient** — the idea that unemployment levels might be related to the *business cycle*. **Classical** — that unemployment might be positively related to wage pressures especially when wages are deliberately maintained above equilibrium level. The relative importance of some types might be considered, for example that **structural** unemployment might have long-term detrimental effects, whereas **frictional** unemployment might not. Other types should also be considered: for example **seasonal** — where there are factors over which the government has little control, and **regional** unemployment. Each type of unemployment has different implications for government policy.
Balance of Payments with emphasis on the current account of the Balance of Payments	The four elements of the current account (trade in goods, trade in services, investment income and transfers) should be understood, and their relative importance to the UK. Changes in the balance of payments on current account should be understood, from the viewpoint of cause and effect. Time series data should be used to show the context of an imbalance. It should be stressed that it is not the job of the Monetary Policy Committee to correct an imbalance, although they may use the state of the Balance of Payments as an indicator of the state of the economy. The issue of '*who pays for the imbalance?*' might be discussed in class and whether the costs of trying to correct an imbalance are worthwhile in terms of damage to other measures.
Measures of development — Human Development Index (HDI)	There are three equal weights within the HDI: education (years of schooling and literacy), health (mortality) and real GDP per head at PPPs. These are ranked 0 (best) to worst (1) in an ***index***. This index does not take account of poverty or other measures of deprivation, and in that respect is regarded by some as being of limited value. The advantage of HDI is that it does combine the effects of increased growth with other quality of life indicators, and in that respect is an important measure of development. It might be worth comparing the HDI with other measures, some of which contain a GDP element and some that don't. PPPs are a way of measuring exchange rates using the idea of how much a basket of goods would cost in various countries. Rather than using nominal exchange rates, the PPP shows how much can be bought in another country with a unit of another currency — much like the 'Big Mac Index' (see www.economist.com) which shows relative exchange rates based on the uniform (if distasteful) currency unit of a McDonald's burger. It measures the real exchange rate, in terms of the cost of buying a fairly standard product that can be bought in almost every country of the world, and where the ingredients are approximately the same. It can be used to measure the ***cost of living*** of a standard basket of goods.
Other measures of development	The important issue is that economic growth is not the same as increases in standards of living, but the latter is difficult to achieve without the former. Measures of economic development incorporate the concept of the quality of life, which is of course almost impossible to measure, but there are indications of quality in life expectancy, access to mobile phone technology and so on. Some measures of economic development do not grow in direct proportion to economic growth (eg GDP per head if infant mortality is falling dramatically with small increases in income), and some far outpace it (increase in life expectancy with the advent of inoculations).

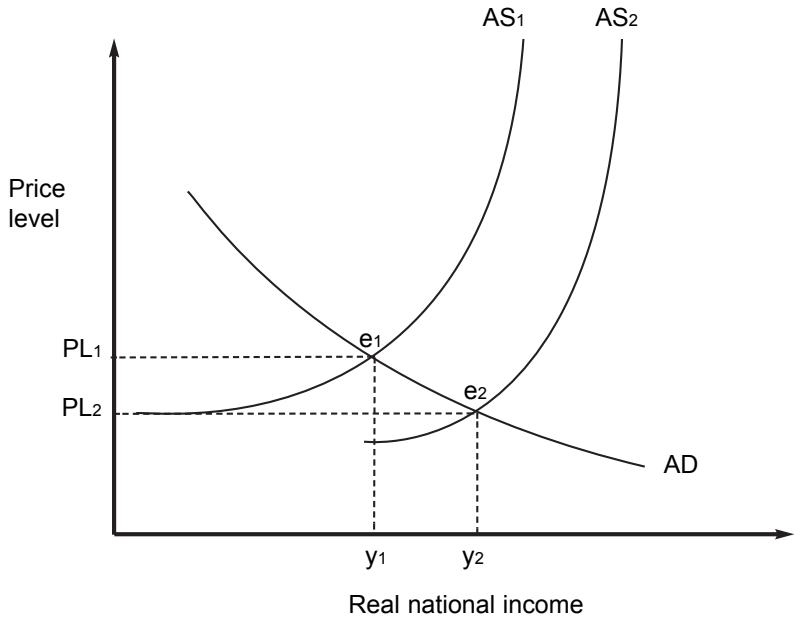
2.3.2 — Is income the same as wealth?

National income and the circular flow of income **Injections and withdrawals**	An acceptable simple diagram of the circular flow of income might be sketched as follows:  The purpose of the diagram is to stress the concept of money flows, which are changed, with multiplied effects, when there is a change in injections or leakages. It is of course possible to add the government and overseas market in this diagram, and to show repeated rounds of spending, if these are helpful in the student's understanding. It is very unlikely that the diagram will be requested as a diagram — rather it is useful in gaining an understanding of the central concepts of macroeconomics.
Income and wealth	If income increases are going to have a direct impact on ***wealth*** then a decision must be made to forego current consumption in order to enjoy increased welfare in the future — a '*jam tomorrow not jam today*' principle. Clearly many people with high incomes do not build up their personal wealth, and the same is true for firms and governments. The decision to increase productive resources, that is, build up wealth, is one of the most significant economic decisions made in an economy.

2.3.3 — What is aggregate demand (AD)?

The components of aggregate demand: **C + I + G + (X — M)** **Movements along and shifts of the AD curve**	Aggregate demand may be drawn as a straight downward sloping line at AS level, although this does rather omit the concept to the real balance effect — that the total amount spent is likely to be fairly constant along the AD, and therefore the area under the AD is likely to remain fairly constant, as in the rectangular hyperbola. Other reasons for drawing a downward sloping AD are that at higher average prices an economy is less likely to export more likely to import (increasing the M component of AD and therefore decreasing AD overall) — the international competitiveness argument. Another argument for the downward sloping AD is that at higher prices the interest rate is likely to be higher, meaning that investment (a component of AD) is lower. They might also save more. Whichever argument is used to explain the downward sloping AD, the vital point is that the AD does NOT slope downwards because people spend more at lower prices. There must be something else on which consumers choose to spend their money on at higher prices — eg imports — or the argument does not make sense in a macroeconomics context.
Consumption (C)	Consumer spending is often the main driver of growth or a recession. The amount that consumers spend is largely influenced by the attitude of the consumer — is he or she worried about losing a job, confident that shares and house prices are growing, or saving because of worries about a hopeless pension. Actual changes in the economy (such as rises in the FTSE) can cause real spending increases, if people decide to trade in their increases wealth, or may simply increase confidence in spending. By contrast, a worrying stock market in, say, the USA, might cause people in the UK to reign in on their spending plans, whether or not the stock market in the UK reacts immediately or convincingly.
Investment (I)	The interest rate, as the cost of borrowing, is likely to have an inverse relationship with the amount of investment — only a few projects will be viable if the cost of credit is high. Increasingly business confidence is seen as a major influence on the decision to invest, and it may be that this contradicts the impact of interest rates. For example the MPC might raise rates because there are signs of consumer spending accelerating, which might encourage firms to invest more.
Government expenditure (G)	Government spending is by central and local government on goods and services. While to some extent this spending is determined by the fiscal policy of the government, it is also largely dependent upon the business cycle. In a boom, tax receipts increase and the demands on government spending will fall, and vice versa in an economic slowdown. Changes in G are likely to have a large multiplier effect, in that the spending changes have a direct impact upon the spending in the economy.
Exports — Imports (X-M)	X — M is the current account balance. If our main trading partners are suffering a slowdown in growth then this is likely to worsen our current account balance, as X falls and M increases (our imports become more competitive). As AD falls we would expect a multiplied fall in UK national income but less inflationary pressure in the economy. By contrast, if our main trading partners are growing quickly then this might stimulate the UK economy. If the exchange rate strengthens (ie the pound gets stronger) then exports will become relatively expensive and imports relatively cheap. This would worsen the current account position. However, this depends on the elasticity of demand for exports and imports; if the competition is based on quality rather than price, then the changes in demand might not be significant, and the current account might not suffer at all.

2.3.4 — What is aggregate supply (AS)?

Aggregate supply Movements along and shifts of the AS curve	Movements along the AS curve occur when there is a shift in AD, as a new equilibrium point is established. A short-run AS curve might be shown as a static backward-bending-L-shape (Keynesian), and a shift in AS might be seen as the long run AS situation. Other interpretations are acceptable. This diagram shows a possible analysis of a successful supply-side shift. 

2.3.5 — What determines the price level and equilibrium level of real output?

Equilibrium level of output	Equilibrium income or output occurs where planned AD equals planned AS, and many economists argue that this point can occur even if there is unemployment. The implication is that the unemployment does not act as a force to clear the market, that is, wages do not keep falling until everyone is employed. One real-world example is that people with very low skills can find it hard to get a job when the economy is not growing very fast. There might be seasonal work, for example in agriculture, but there are lean times of the year when casual workers find it hard to get jobs. It might be that these workers are too expensive to take on — but it might also be that there is no incentive for employers to take on workers whatever the going wage.
The multiplier	An injection such as an increase in exports means that there is an immediate increase in AD. But the extra income raised by selling goods abroad will raise incomes of those making the goods and services, and this income will be spent in the economy. Whatever is not spent on ***withdrawals*** (see glossary) will cause second round increases in AD, which leads to further rounds of income and spending. These *knock on* effects are the multiplier effects of an increase in injections, and the process work in reverse when injections fall — a reverse multiplier, or multiplied contraction of AD.

2.3.6 — What are the causes, costs and constraints on economic growth?

Actual and potential growth	Actual growth is measured as increases in real GDP, and potential growth is an increase in the capacity in the economy. Trends in growth rate are shown by changes in real GDP over time; these may be compared to changes in capacity over time, or compared to the trend or sustainable rate of growth — the vertical difference between the trend and actual being shown as the output gap. The gap signifies whether the economy is operating with spare capacity and therefore worries about unemployment, or by contrast at over capacity, with worries about inflation.
Causes and constraints on growth	Growth can be achieved by increases in the components of aggregate demand, for example an increase in consumer spending. The size of this increase depends on the size of the multiplier, and therefore any changes in injections and leakages will have an impact on the degree of change in growth. Growth can be achieved by increases or improvements in any of the factors of production, eg productivity growth or immigration. The effect is to shift the aggregate supply curve to the right. It is important to be able to compare and contrast the causes of growth, and to be able to illustrate them with an AD/AS diagram.
Benefits of growth	Increased wealth and income is no doubt a factor determining living standards, but the impact should not be considered without evaluation of the issues. Increased income resulting from growth is likely to increase income inequality, and there might be structural unemployment as some industries re replaced by new ones but workers' skills are not transferable. Understand the benefits of growth to citizens of increased standards of living, to firms (increased profits) and to government (for example, increasing tax revenues). Students may consider whether an increase in income necessarily increases living standards.
Costs of growth	Costs of growth are well documented, most particularly by political pressure groups such as Friends of the Earth www.foe.org.uk. The following should be considered, but there are many other valid factors: the adverse consequences of growth for the environment; the balance of payments problems; income distribution and the opportunity cost of growth.

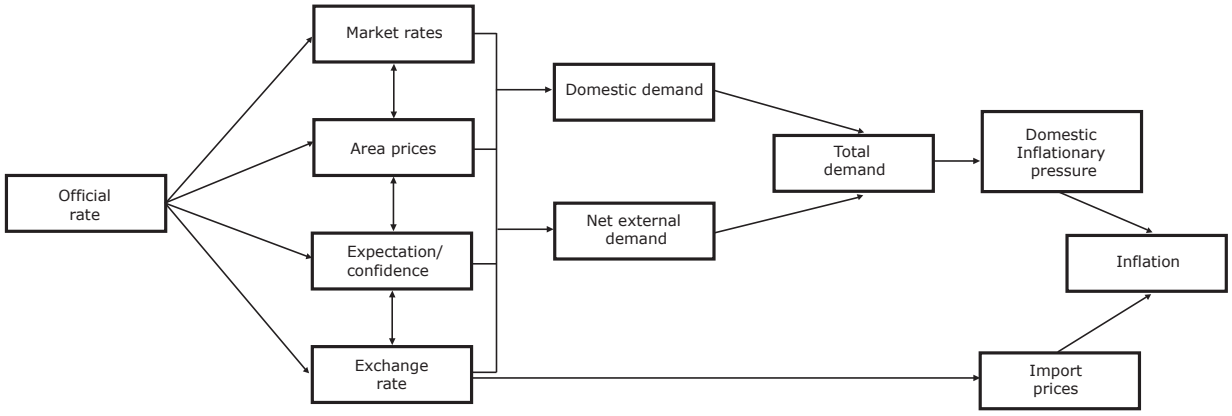
2.3.7 — What are the macroeconomic objectives of governments? Do they conflict?

Current macroeconomic objectives	Students should have a sense of the trends in macroeconomic measures over the past five to ten years, and the stage at which governments might become concerned about them. The side effects of macroeconomic problems could be considered, and the changing importance of objectives as other factors change might be used as ways of weighing up which objectives are the most important to a government.
Conflicts between objectives	The Phillips Curve, an empirical observation in 1958, comments that a shortage of labour might set off an increase in wages. The implication is that there might be a trade off between unemployment and increases in inflation. This is set against the classical view that there is only unemployment if wages are too high — that is, if the supply of labour is greater than the demand for labour — in which case if more people are allowed to become unemployed the pressure on wages will fall. The student should come to a view as to whether unemployment exists because wages are high or because there are other factors in the economy causing deficiencies in the labour market. Another trade off which may be considered is that between economic growth and the current account of the balance of payments. If an economy is growing quickly, as in India, it is likely to suck in many imports and exporters have reduced incentive to export if the output can be sold at home. However if the growth is export led, as in China, the economic growth may *improve* current account, as the exports are bringing in the spending power in the economy. (Note that country specific data is not required.) Growth may damage the environment, if it involves increased manufacturing, but if service based it may not. Indeed the increased incomes from growth might enable a country to 'clean up', convert to cleaner or renewable fuels or tighten legislation.

2.3.8 — What are the main macroeconomic policy instruments? Web guide

Demand-side policies	The diagram below illustrates the transmissions mechanisms involved with monetary policy in the UK, and it is fully described on the Bank of England website. For the effects of fiscal policy consider changes in ***government spending*** and the rate of ***taxation (****see glossary)*.

The transmission mechanism of monetary policy



Note: for simplicity this figure does not show all interactions between variables, but these can be important.

Supply-side policies	A supply side policy is a government scheme to promote market forces, cut costs and to raise the full employment level of output. See diagram at 2.3.4 to show the effects of successful attempts to shift the supply curve. The main categories for a supply side policy are: • improve price flexibility and signalling within a market • increase competition • improve incentives. Now that many firms have been privatised, the standard argument that a government can sell off state-owned businesses is losing its potency. It is better to argue that competition between firms can be improved, with descriptions and examples of how this might be achieved, or discuss effects of flexibility and incentives.

2.3.9 — Do macroeconomic policies conflict when they are used together?

Conflicts resulting from the use of policy instruments	An increase in government spending (part of fiscal policy) is likely to have a direct impact on the supply side of the economy — namely health, education or through the impact of changes in taxes and benefits. The increased spending might cause problems in supply — see the term ***bottlenecks*** in the *glossary* — but in the long run it is thought that spending in these areas would help to improve the supply side conditions in an economy. The investment by a government on the infrastructure of an economy, the educational establishments or the health infrastructure will also have a direct impact on the costs of production of firms. However overspending by governments may mean that there is a shortage of credit in the financial markets, and the shortage of liquid assets will push up the cost of credit — that is the *interest rate*. An increase in interest rates, while intended to control inflation, might have the effect of attracting ***hot money*** into the economy. This may make the exchange rate stronger, or simply destabilise it. While a stronger currency might help to control AD (exports become less competitive and imports relatively cheaper) these effects are not guaranteed. Increasing interest rates are often seen as being damaging to the ***supply side*** of the economy.

Unit 2 Glossary

These are definitions which must be understood for Unit 2. Please note that these are acceptable definitions, and teachers and textbooks may well teach more complete or more erudite versions (please email your suggestions to coler@cheltladiescollege.org). Cross references within the glossary are shown in ***bold italics***.

Aggregate Demand — *total spending on goods and services in an economy; components are* ***Consumption*** (C) + ***Investment*** (I) + ***Government Spending*** (G)+(***Exports*** (X)– ***Imports*** (M)).

Aggregate Supply — the total amount of output in an economy.

Balance of Payments — record of a country's transactions with the rest of the world.

Base year — a year chosen as a good comparison in a series of data, when building an ***index***.

Bottlenecks — *a* constraint on the supply side of the economy which causes costs of aggregate supply to rise as the economy grows. An example is the effect of the Olympics in East London. The use of fully-qualified builders for the Olympics creates a shortage elsewhere, making costs more generally rise in the region.

Business cycle — the tendency of economic activity to rise above and below the trend rate of economic growth.

Budget — the annual statement by the Government of its intentions to tax and spend in future years. It usually comes in March, just before the start of the new tax year in April. In recent years a 'pre-budget report' has been delivered in December so that the budget is more predictable.

Budget surplus — the amount by which tax revenue exceeds government spending.

Budget deficit — the amount by which government spending exceeds tax revenue.

Claimant Count — a measure of those claiming unemployment benefits (not all those who are eligible — many do not claim). For more information go to www.statistics.gov.uk

Circular flow of income — a simple model of the economy which shows the movement of goods and services between households and firms, and their corresponding payments in money terms.

Constant prices — where the effects of inflation have been taken out.

Consumer Price Index (CPI) — the measure of the average level of prices. Increases in the CPI are known as inflation, and this is used as a target for ***monetary policy*** since 2003. It excludes housing costs. For information on how it is calculated go to www.statistics.gov.uk

Consumption — total planned household spending.

Cost of living — a measure of how much has to be spent to maintain living standards. It is usually measured by comparing the prices of a selection of items known as the 'basket of goods', and persistent increases in this cost is measured in an ***inflation*** index.

Current account of the balance of payments — a record of a country's trade of ***exports***, ***imports***, investment income and current transfers with the rest of the world.

Current Prices — the effects of inflation have been left in.

Decile — when data is presented in a serial order, a decile marks boundaries between 10% band widths. Deciles are used for comparison between sets of data, and have the advantage that they are not distortions on the extremes of a distribution.

Demand-side policies — policies used by government to shift aggregate demand. The main policies are ***monetary policy*** and ***fiscal policy***.

Economic Growth — a measure of the increase in either real GDP or potential GDP.

Equilibrium National Income or Equilibrium Level of Output — the level of income or output at which aggregate demand equals aggregate supply.

Employment rate — the percentage of those in the workforce (those able and willing to work) who are in employment.

Exchange Rate — the price of one currency in terms of another.

Exports — the value of goods and services sold abroad. These are shown in the ***circular flow of income*** as money coming into the country, that is, an ***injection***.

Family Expenditure Survey — a survey collecting personal diaries of expenditure by families and individuals in the UK. The data is collected using computer assisted interviewing and a paper questionnaire. The response rate is around 63%.

Flow — a movement of goods and services OR the money used to pay for them, over a period of time.

Fiscal deficit — an inflationary fiscal policy, where government spending is greater than tax receipts.

Fiscal policy — the government's manipulation of its spending and taxation in order to affect aggregate demand.

Fiscal surplus — a deflationary fiscal policy, where government spending is less than tax receipts.

Government expenditure — spending by central and local government.

Gross Domestic Product (GDP) — the total output in an economy, measured by total production by firms OR total incomes by the factors of production OR by total spending. All three measurements in theory are equal; they represent the circular flow at various points.

Hot Money — short term, speculative flows of money between countries. These may distort the exchange rate so that they do not reflect ***purchasing power parity***. The motivation for these movements is changes in relative interest rates or expected exchange rate changes.

Human Development Index (HDI) — a measure of economic development or quality of life, composed of three equally weighted index numbers, comprising health, education and GDP per head (adjusted for exchange rate differences and inflation).

ILO (International Labour Organisation) measure of unemployment — a measure of unemployment used in most rich countries, which surveys 51 000 households (covering 101 000 people) by phone and other surveys, asking whether people have been looking for work in the past four weeks and are ready to start within the next two weeks.

Imports — the value of goods and services bought from abroad. These are shown in the ***circular flow of income*** as money leaving the country, that is, a ***withdrawal income***. The reward paid for the use of a factor of production: rent, wages, interest or profit.

Income gap or Income inequality — a measure of the gap between the incomes of various groups within an economy often shown by plotting the average incomes of the between the lowest and highest decile (see www.statistics.gov.uk). The wage difference between these two tends to widen in periods of economic growth, and can be altered by changes to taxes and benefits.

Index — a simple way to compare data with a ***base year***.

Inflation — a general and persistent increase in the price level — or, sustained increase in the cost of living.

Inflation Targeting — a narrowly focused monetary policy which seeks to keep the rate of inflation within a certain band, ignoring other monetary objectives.

Injections — where money flows into the circular flow, specifically investment, government spending and exports.

Interest rate — the cost of borrowing money. ***The Monetary Policy Committee*** sets the rate for very short-term loans to the commercial banks, at which they will borrow as a last resort — sometimes called the 'bank rate' or 'repo rate', and it becomes the 'base rate' on which banks will set their lending and borrowing rates.

Investment — an increase in the capital stock. It is determined by interest rates, confidence and the availability of credit.

Labour productivity — output per worker, or output per hour worked.

Monetary policy — decisions made using monetary instruments such as the interest rate.

Monetary Policy Committee — a group of nine economists and industrialists who meet at least once a month to set the Bank of England's main interest rate, which, since 1997 has been responsible for UK ***monetary policy***.

Multiplier — the number of times a rise in incomes exceeds the rise in ***injections*** that caused it. It measures the knock on effects when an injection or withdrawal changes.

National income — the total earnings in the economy of individuals, firms and government, including money earned from exports.

Net exports (X-M) — the difference between the money earned by exports less the money spent on imports. It is a component of ***aggregate demand***.

New Deal for the unemployed — measures introduced in 1997 which aims to link unemployment benefits to attempts to get back into the job market.

Nominal values — where the effects of inflation are still incorporated in the data.

Output gap — the difference between actual real GDP growth and the potential real GDP growth.

Per capita per head — GDP per head measures the average amount that each person contributes to the economy including those who contribute nothing.

Phillips Curve — this is an empirical observation that there is a possible trade off between inflation and unemployment — that is that less of one means more of the other.

Productivity — output per unit of input. See ***labour productivity***.

Productivity Gap — a measure of the difference between productivity levels in one country compared to others.

Real values — where the effects of inflation have been taken out.

Spare Capacity — a situation where there are unemployed resources in an economy.

Standard of living — a measure of welfare of people living in an economy.

Stock — a physical amount of goods or services that exist at a point in time, or the money that might be used to pay for them.

Supply-Side Policies — actions by government designed to promote market forces in order to increase economic growth to its potential rate. These can be achieved by increasing price flexibility, increasing competition or improving incentives in the market.

Unemployment rate — the percentage of the workforce (that is, able and willing to work) that is not currently employed.

Volume and Value — volumes measure quantities eg the number of goods sold on the export market, and values measure the price times quantity eg the value of exported goods is £245bn (in 2006).

Wealth — a stock of assets, eg property, shares.

Withdrawals — where money flows out of the circular flow, specifically savings, taxation and imports.

Business Economics and Economic Efficiency — Course Outline for Unit 3

BASIC READING

Anderton A — *Economics, 4th Edition* (Causeway Press, 2006) ISBN 1902796926

Ellis B — *Microeconomics Teacher Resource Pack* (Hodder Arnold H and S, 2002) ISBN 0860032663

ER = *Economics Review magazine* (Philip Allan Updates, www.phillipallan.co.uk)

ET = *Economics Today magazine* (Anforme Ltd, www.anforme.co.uk)

Griffiths A and Wall S — *Applied Economics, 10th Edition* (Financial Times/Prentice Hall, 2007) ISBN 0273708228

Nutter R and Cramp P — *Industrial Economics* (Anforme Ltd, 2002) ISBN 0907529690

Powell M, Matthews K and Parkin M — *Economics, 3rd Edition* (Financial Times/Prentice Hall, 2005) ISBN 0273681257

Sloman J — *Economics, 5th Edition* (Financial Times/Prentice Hall, 2002) ISBN 0273655744

Timing	Content	Reading/Activities	Comments/notes
2 hours 1.5 hours (total to date 3.5 hours)	1. The role of firms in a capitalist society: – different types (by legal structure) – different types (by size) – a brief introduction to the motives of firms(refer to costs, revenue and profit). 2. How firms grow: – internal expansion – external growth, mergers, take-overs etc.	Anderton, Unit 51 Cramp, Section A, Units 1–3 Griffiths and Wall, Chapter 4 Ellis, pages 71-77 Parkin et al, pages 203–205 and page 208 Anderton, Unit 64 Griffiths and Wall, Chapters 5 and 7 Ellis, pages 52–57	To act as an introduction to the unit. Link back to the micro concepts with which they are already familiar, particularly supply. Mention the potential drive to monopolisation as an example of market failure. Review of concentration ratios

Timing	Content	Reading/Activities	Comments/notes
4.5 hours (total to date 8 hours)	4. Costs, Revenue and Profit: a. Costs –S-R, L-R –average, marginal, total etc –link to the law of DR - link to supply curve b. Revenue –average, marginal, total etc –link to the D curve c. Profit and profit maximisation d. Barriers to entry and exit.	Anderton, Units 46, 47, 48, 49 Cramp, Unit 4 Sloman, Chapter 5 Parkin et al, Chapter 10 ET Volume 10 No 1 'Economies of Scale' pages 23–27 ET Volume 10 No 2 'U- shaped Cost Curves' pages 27–29 ER 'Total, marginal, average' November 2004 ER 'Long run costs and output' September 2003 ER 'Short-run costs' September 2003 Anderton, Unit 52, Cramp Unit 5 Sloman Chapter 5.6 Anderton, Unit 17	It is important to establish these as preconditions for studying the 'theory of the firm'.
2 hours (total to date 10 hours)	5. Alternative motives of firms: –revenue maximisation –sales –behavioural theories	Anderton, Units 17, 18, 50 Cramp, Unit 12 Griffiths and Wall, Chapter 3	
2 hours (total to date 12 hours)	6. The goal of efficiency –productive –allocative	Ellis, pages 79–87 ER 'Competition and Productive efficiency' April 2004	Use this to bring together much of the previous study of, eg costs and revenue.

Timing	Content	Reading/Activities	Comments/notes
7 hours (total to date 19 hours)	7. Market structures: –perfect competition –monopoly –comparisons and contrast with PC –price discrimination –oligopoly –monopolistic competition –monopsony	Anderton, Units 53-57 Cramp, Units 7-10 Sloman, Chapters 6 and 7 Parkin et al, Chapters 11, 12 and 13 Ellis, pages 44–50 Griffiths and Wall, Chapter 6 and Ellis pages 18–22 ET Volume 11 No 3, 'Perfect Competition v Monopoly' pages 2–4 ET Volume 12 No 3 'Monopoly', pages 22–25 ER 'The market for Oil' November 2004 ER 'Cartel Problems' November 2003 ER 'Price Discrimination' February 2003 ER 'Games and Markets' September 2002	Much of the groundwork for this has already been done in topics 4, 5 and 6. Use comparisons between perfect competition and monopoly to highlight efficiency issues. Use oligopoly to look at firms' motivation. Note: focus in Specification on Game Theory and Prisoners' Dilemma
2 hours (total to date 21 hrs)	8. Pricing strategy and contestability	Anderton, Unit 58 Cramp, Unit 11 Sloman, page 212-215 Griffiths and Wall, Chapter 9 Ellis, pages 24–31 and 33–42 Ellis, pages 59–69 ET Volume 12 No 2 'Pricing strategies', pages 26–29	Make reference here to practical pricing strategies, eg cost-plus pricing etc, if not done so previously.

Timing	Content	Reading/Activities	Comments/notes
1.5 hours (total to date 22.5 hours)	9. Competition policy a) Institutions, legislation and underlying principles	Anderton, Unit 63 Cramp, Unit 15 Ellis, pages 89–98 Sloman, pages 342–350 ER 'A stronger UK Comp policy' February 2004	
1.5 hours (total to date 24 hours)	10. Privatisation and the Regulation of Privatised Industries	Anderton, Unit 67 Cramp, Unit 14 Griffiths and Wall, Chapter 8 Ellis, pages 100–107 Sloman, pages 351–363 Parkin et al, Chapter 19 ER 'Rail privatisation revisited' February 2003	Stress the overlap between competition policy and regulation.

GCE Economics Unit 3 — Business Economics and Economic Efficiency Revision Sheets

3.3.1 — Motives of a Firm

What motivates a firm?

Who are the main participants in a firm's daily decision-making process?

a) **Directors and Managers:** Shareholders in a PLC will elect directors to look after their interests in the company for them. Directors in turn appoint managers to manage and run the company. The only way owners can influence decisions is through the AGM.

b) **The workers:** don't have the power to run the company, but collectively may be able to influence decisions. Trade Unions may exert influence over wages (and therefore costs), job losses and health and safety.

c) **The consumers:** can influence the work of businesses through their demand patterns. If a firm fails to provide goods that consumers demand they will eventually cease trading as in the case of Rover Cars in 2005.

Short-run profit maximisation

Shareholders will be motivated by maximising their profits from the company, in other words — dividends. Thus it is assumed that the firm will want to maximise its profits. However not all firms are able to operate at a profit. Some will be faced with making a loss.

Long-run profit maximisation

Keynesian economists believe that firms will seek to maximise their long run rather than their short-run profits. This is based upon the belief that firms will use cost plus pricing. In other words, the price of the product is worked out by calculating the average cost, when the firm is operating at full capacity and adding a mark-up.

Short-run profit maximisation suggests that firms adjust price and output in response to changes in market conditions. However, most economists agree that rapid price changes may affect a firm's position in the market. Consumers dislike rapid price adjustments, and often view price cuts as signs of desperation and distress.

This theory suggests that a firm might continue to operate in the short run even if it were making a loss. The management would hope to be able to turn the business around and make profits in the long run.

Managerial theories

Some managers would seek to maximise sales rather than profits. It is often the case that increased sales go hand in hand with increased salaries for top executives.

Other managers are said to be motivated by factors, such as high salaries, the number of people under their control, the power they can yield over investment decisions and the availability of fringe benefits. This idea originates from the concept that managers in large firms will have enough discretion to pursue policies giving them personally most satisfaction.

However, profit remains a shareholder's best measure of success. Managers and directors are prone to shareholder revolts, and may even get voted out of office. Managers will therefore **profit satisfice**, in other words, satisfy the demands of shareholders. Once those demands have been met, managers would be free to maximise their own rewards from the company.

3.3.7 — Introduction to market structures

Market structure

Market structures are based on the characteristics of a market. Economists identify a number of characteristics which determine the market structure a firm is said to operate in:

- the **size** and **number of firms** in the market
- the **ease** or **difficulty** with which these new firms might enter the market (barriers to entry and exit)
- the extent to which goods in the market are similar (**homogeneity**)
- the extent of **knowledge** shared by firms in the market
- the extent to which the actions of one firm will affect another firm (**interdependence**).

The number of firms in an industry

The number of firms in an industry may vary from one to many. For example, Thames Water is the sole supplier of water in the London area, ie a monopoly. In agriculture, on the other hand, there are tens of thousands of farms supplying eggs to the market.

1. ***Monopoly*** is said to exist where there is only one supplier in the market.
2. ***Oligopoly*** is said to exist in a market dominated by a few large producers alongside a large number of small and relatively unimportant firms.
3. ***Perfect Competition or Monopolistic Competition***. In this market structure there are a large number of small firms, none of which are large enough to influence price.

Barriers to entry

Market structures are also affected by the ease with which new entrants can access the market. Firms that are in an industry, which is unlikely to experience many new entrants, may behave differently to those operating in an industry which has low barriers to entry.

Product homogeneity and branding

In some industries, such as gas and oil extraction and agriculture, the product is essentially the same whoever produces it. These identical goods are known as homogenous goods. This means that no producer has a monopoly over production.

Firms find it much easier to maximise profits if they are able to differentiate their product by creating brand loyalty and reducing the elasticity of demand for the good. This also creates barriers to entry reducing the competitiveness of the market.

Knowledge

Buyers and sellers are said to have perfect knowledge if they are fully informed about price and output. Therefore, if one producer puts its prices up, then that producer will lose all its customers because they will buy the good from elsewhere in the industry.

Perfect knowledge does not mean that all firms or consumers possess all the knowledge, but instead that this information is freely available; it is up to firms and consumers to access this.

Imperfect knowledge exists where there are patents protecting a particular process, such as the recipe for Coca Cola. Individual firms may not be aware of all the new innovations to be introduced. A lack of information acts as a barrier to entry, preventing or discouraging new firms from entering the market.

Interrelationships within markets

Firms may be independent of each other, in other words the actions of one firm will have no significant impact on any other firm in the industry.

If firms are interdependent then the actions of one firm will have an impact on others. For example, when one firm advertises it is hoping to take consumers away from their current purchases. This will necessarily have an impact on other producer's level of demand.

3.3.9 — Perfect competition

The model of perfect competition describes a market where there is a high degree of competition.

Assumptions

A perfectly competitive market must possess four characteristics.

1. There must be **many buyers and sellers** in the market, none of whom is large enough to influence price. Buyers and sellers are said to be price takers.
2. There is **freedom of entry and exit** to the industry. Firms must be able to establish themselves in the industry quickly.
3. Buyers and sellers possess **perfect knowledge** of prices. Thus if one producer charges higher prices than its competitors for a good, consumers will buy from elsewhere in the market and demand will fall to zero.
4. Firms produce a **homogenous product**. There is no branding of products.

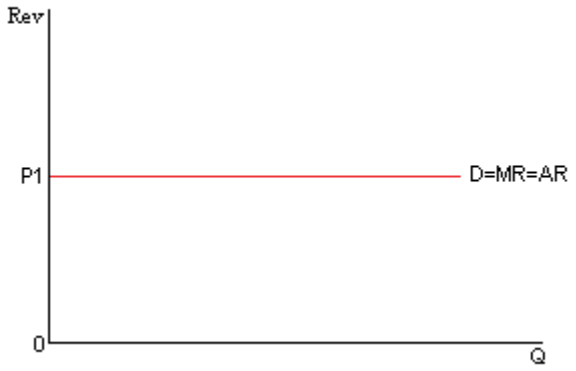
There are only a few industries in the world which approximate to this model. However the foreign exchange market is a close approximation. There are a large number of foreign exchange dealers supplying the market, none of whom is large enough to influence the exchange rate. It is relatively easy to establish a bureau-de-change and thus enter the industry, and equally easy to leave. A foreign exchange dealer will know the market determined exchange rate. Currencies are homogenous — US dollars are indistinguishable from other US dollars sold by another bureau-de-change.

Demand and revenue

The model of perfect competition assumes that there are a large number of suppliers in the market. A firm in perfect competition can expand output or reduce output without influencing price. In other words a bureau de change cannot put up the exchange rate for US dollars and expect to sell anything. It may decide to lower the exchange rate, but there is no gain by doing this, as the foreign exchange dealer may sell all his output at the original higher price.

As can be seen in Figure 1, the demand curve for the foreign exchange dealer is horizontal, in other words perfectly elastic.

Figure 1: The perfectly competitive firm's demand curve



The horizontal demand curve as depicted in Figure 1, is also the firm's average and marginal revenue curves. If a firm sells all its output at the market price, then this price must be the average price or revenue. In addition if a firm sells an extra ie marginal unit, it will receive the same price for each additional unit as it did for each preceding unit sold, and therefore marginal revenue will be the same as average revenue.

Total Revenue = Price x Quantity *therefore*

$$\text{Average Revenue} = \frac{\text{Total Revenue}}{\text{Quantity}} \quad \textit{or} \quad \frac{\text{Price x Quantity}}{\text{Quantity}}$$

if the quantity cancel each other $\dfrac{\text{Price x } \cancel{\text{Quantity}}}{\cancel{\text{Quantity}}}$ AR = Price

Cost and supply curves

In the perfectly competitive market, the supply curve of the firm is the marginal cost curve above the average variable cost in the short run and the average total cost in the long run.

The marginal cost of production ie the change in total cost resulting from the sale of one more unit, represents the lowest price a firm would be prepared to supply an extra unit of output for.

If the price of a good was £8, and the marginal cost £5, then the firm would produce the good and gain £3 super normal profit. If the price was £5 and marginal cost £5, then the firm would still produce the product, as the revenue gained will contain an element of normal profit. If the price fell to £4, and marginal cost remained at £5, then the firm would make a loss of £1 per unit. The firm would not supply the good in this case.

In the short run a firm will not necessarily shut down if it is making a loss. It will remain open as long as it covers the average variable cost. The firm will only stop supplying if average revenue or price is less than average variable cost.

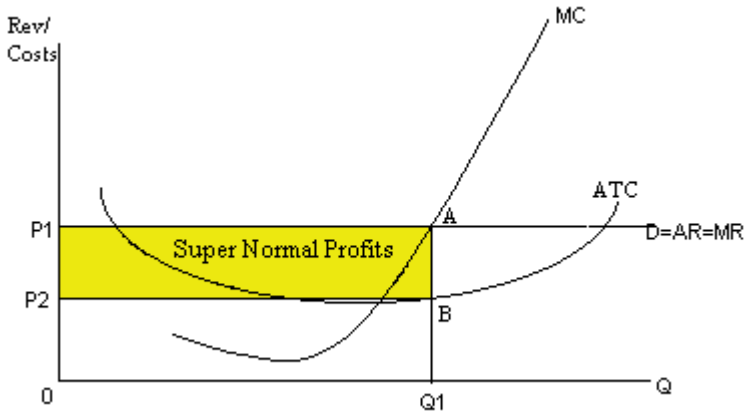
3.3.9 — Perfect competition equilibrium

Short-run equilibrium

In perfect competition firms are assumed to be profit maximisers. Firms will therefore produce where marginal cost is equal to marginal revenue (MC=MR). The price the firm charges is determined by the market because the individual firm is too small to influence price and is therefore a price-taker.

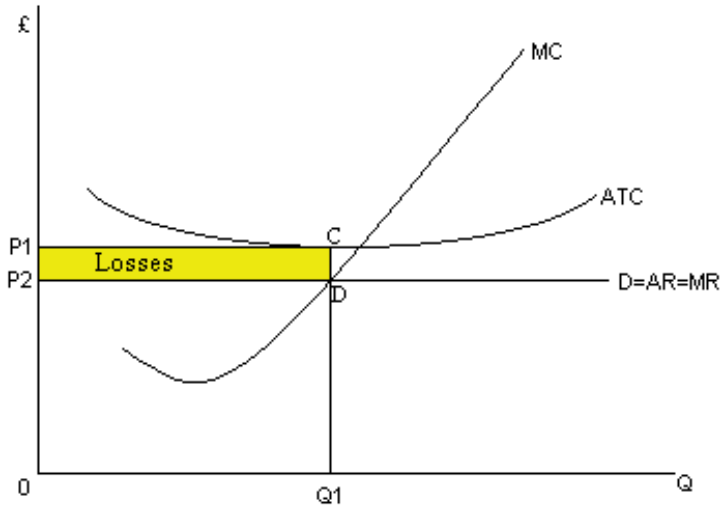
Perfectly competitive firms can make super-normal profits in the short-run as shown in Figure 1. In this diagram the horizontal average revenue curve is shown to be above the average total cost at the point where MC=MR (point A). At Q1 the firm charges P1, but faces only average costs of P2, therefore it makes super-normal profit as indicated by the shaded area (P1, P2, A, B).

Figure 1: Short-run profit maximisation



In Figure 2 the firm is making a loss at its equilibrium, profit maximising or loss minimising output, where MC=MR. The price charged per unit of output P2 is lower than average total cost, P1 and hence the firm makes a loss of P1P2CD.

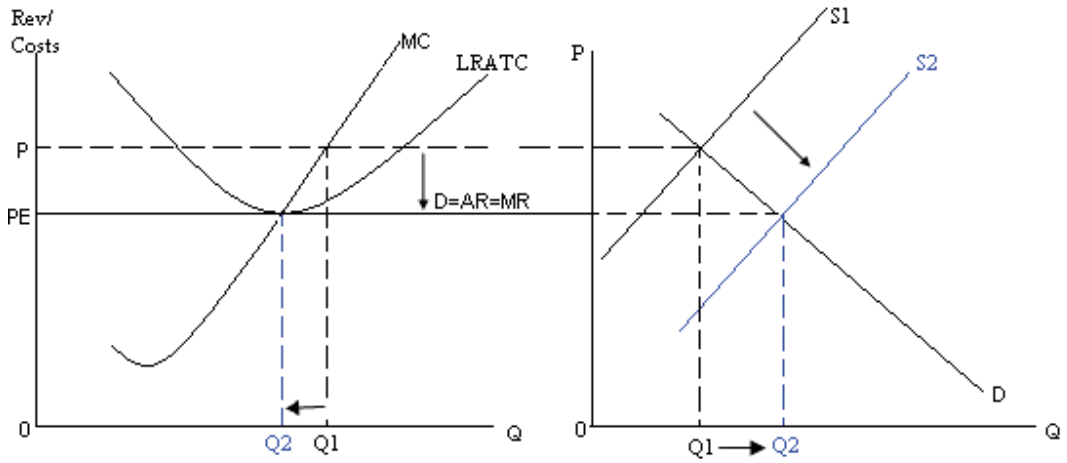
Figure 2: Short-run firm making losses



Long-run equilibrium

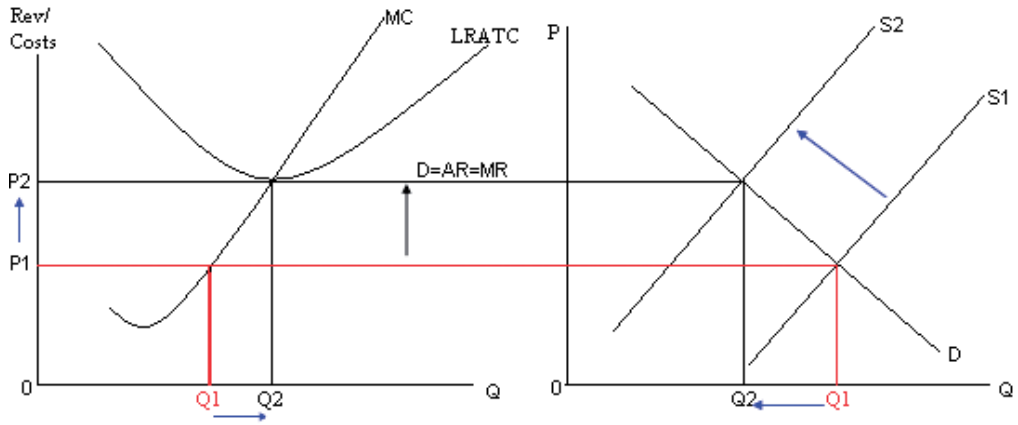
If a firm were making super normal profits in the short-run, other firms would enter the industry eager to share these high profits. They would be able to do this as there are no barriers to entry in perfect competition. The entry of new firms stimulates an increase in supply from S1 to S2 establishing a price just low enough for firms to make normal profits.

Figure 3: Long-run equilibrium position of a firm in an industry facing short-term super normal profits



If a firm were making losses, in the long-run, some firms would leave the industry as there are no barriers to exit. As a result of these departures total supply would fall from S1 to S2. Firms would continue to leave the industry until the whole industry returns to profitability. This can be seen in Figure 4. When the supply curve is at S1 the firm is making a loss. At S2 the supply curve is high enough to make normal profits.

Figure 4: Long-run equilibrium position of a firm in an industry facing short term losses



In the long-run, competition ensures equilibrium occurs where the firm neither makes super-normal profits or losses. This means in equilibrium average cost equals average revenue.

3.3.9 — Monopoly

Assumptions

A monopoly is assumed to:

- be the **only** firm in the industry
- have **high barriers to entry** preventing new firms from entering the market
- be a **short-run profit maximiser**.

In the UK gas, electricity and water supply, telecommunications and the railway track are all monopolies. These industries are often referred to as natural monopolies because economies of scale are so large that any new entrant would find it impossible to match the costs and prices of the established firm. There are many industries in the world economy which possess most if not all of the characteristics identified.

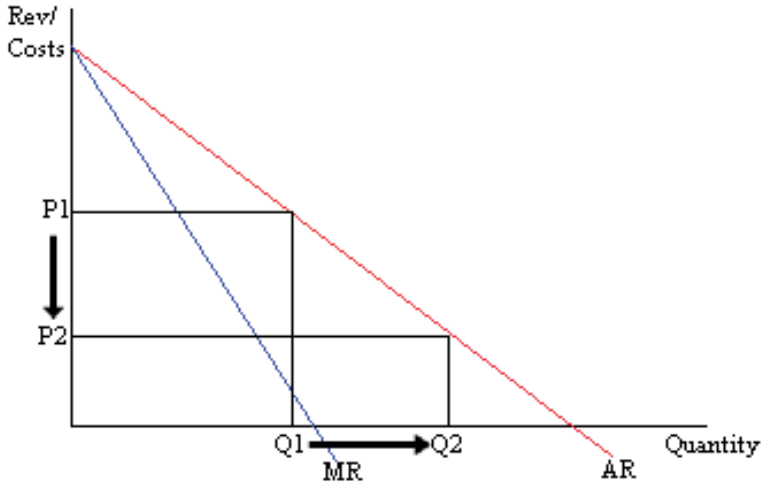
Some monopolies, such as the water companies have considerable monopoly power because there are no good substitutes for their product. BP does not possess a monopoly in oil production or supply but might be said to possess a local monopoly if it had the only petrol station in a village.

A monopoly is able to maintain its position as the sole supplier of a good or service because it is able to establish high barriers to entry. Barriers to entry include legal barriers such as patents, marketing barriers such as advertising, restrictive practices and access to specific technology or raw materials.

Revenue curves

A monopoly firm is the same as the industry as it is the only firm that is operational in the industry. The industry faces a downward sloping demand curve, meaning the monopolist also faces a downward sloping demand curve. The monopolist can therefore only set the level of price or output. If it wishes to sell more units it must lower price or if it wishes to increase price then it must reduce output as shown in Figure 1.

Figure 1: The monopolist's average revenue and marginal revenue curves



Equilibrium output

A monopolist is assumed to profit maximise, in other words, aims to achieve an output equal to the point where MC=MR. Figure 2 shows:

- the equilibrium profit maximising level of output at Q1, where MC=MR
- the monopolist is able to supply Q1 at a price of P1
- super-normal profits of P1C1BA will be made. The super-normal profit per unit (AB) is the difference between the average revenue received (P1) and average cost of C1.

The price is determined by establishing the output level where MC = MR and then identifying the average revenue for this — ie the monopolist sets price using the AR or demand curve.

Figure 2: Profit-maximising monopolist

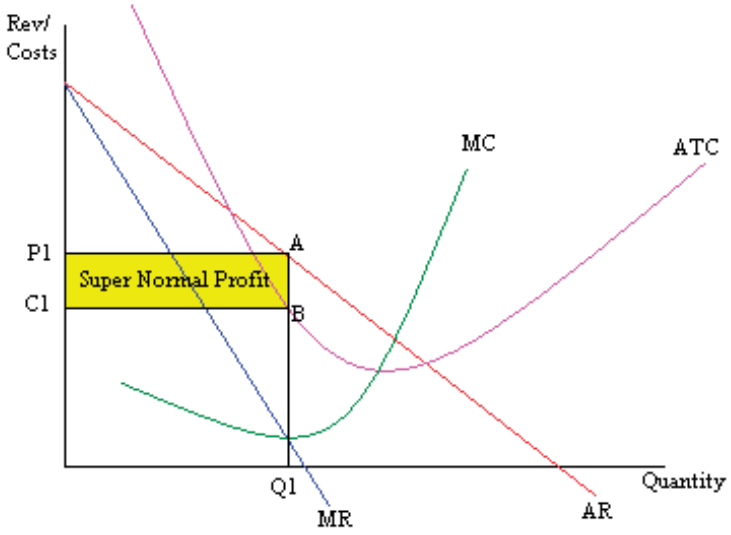
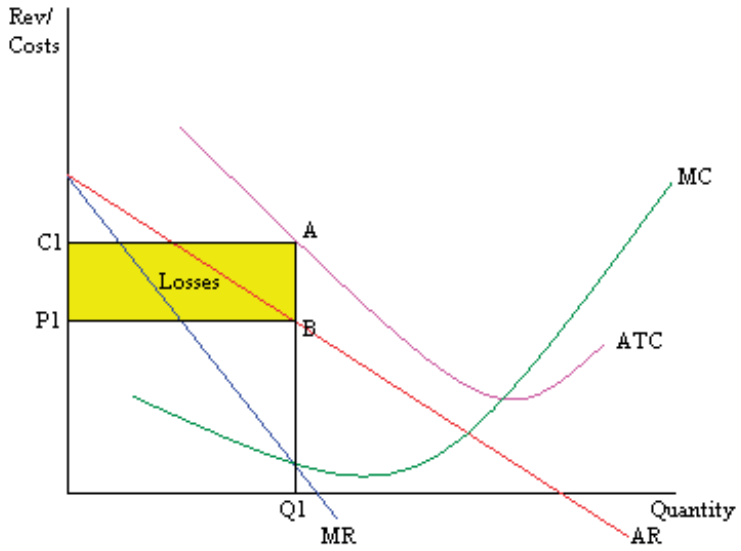


Figure 3 shows a loss making monopolist. A monopolist may decide to remain operational whilst it makes a loss in the short-run as long as it is covering its variable costs and therefore making a contribution to its fixed costs. The monopolist may feel that in the long run super-normal profits might be achieved.

Figure 3: Loss-making monopolist



The advantages and disadvantages of monopoly

Disadvantages of monopoly power	Advantages of monopoly power
Abnormal profit means: • less incentive to be efficient and to develop new products. • efforts are directed to protect market dominance.	Abnormal profit means: • finance for investment to maintain competitive edge. • reserves to overcome short-term difficulties and provide funds for research and development.
Monopoly power means: • higher prices and lower output for domestic consumers.	Monopoly power means: • powers to match large overseas organisations.
Monopolies may waste resources by undertaking cross-subsidisation, using profits from one sector to finance losses in another sector.	Cross-subsidisation may lead to an increased range of goods or services available to the consumer.
Monopolists may undertake price discrimination to raise producer surplus and reduce consumer surplus.	Price discrimination may raise total revenue to a point, which allows survival of a product or service. It is often said that economy class flights are funded by those flying business and first class.
Monopolists do not produce at the most efficient point of output (ie at the lowest point of the average cost curve.)	Monopolists can take advantage of economies of scale, which means that average costs may still be lower than the most efficient average of a small competitive firm.
Monopolists can be complacent and develop inefficiencies.	There are few permanent monopolies. Super-normal profits act as an incentive to break down the monopoly through a process of creative destruction ie undermining the monopoly through product development and innovation.
Monopolies lead to a misallocation of resources by setting prices above marginal cost, so that price is above the opportunity cost of providing the good.	Monopolists avoid undesirable duplication of services and therefore a misallocation of resources.

3.3.9 — Oligopoly and game theory

Oligopoly

Firms operating in oligopoly industries tend to keep prices stable. They know that the actions of one firm will impact on the other firms in the industry, in other words they are interdependent. If one firm were to raise its prices then others would not follow and because the goods traded are similar, customers will move to the lower cost option. If a firm were to lower prices then other firms would follow suit and a price war would result, with no real gain for any of the firms in the industry.

Instead, oligopoly firms will tend to work together through collusive agreements, whether they are tacit or overt or engage in non-price competition. Non-price competition can take the form of advertising, issuing of loyalty cards, branding, packaging and other measures to reduce the closeness of substitutes.

Game theory

Game Theory can be used by economists to predict how firms will react in a number of given scenarios. It is used mainly when dealing with oligopoly to explain why firms may collude and furthermore why they may later decide to abandon any agreement to collude. The prisoner's dilemma can explain the way that game theory can be used by firms.

Prisoner's dilemma

Assumptions

- The model assumes a zero sum game — there will be a winner and loser.
- The prisoners have been kept separate and so do not know what each is doing, but they do know the outcome of each action.

		Rixy	
		Not Confess	**Confess**
Franky	Not Confess	A Each get 1 year	C Franky gets 10 years *Rixy gets 3 months*
	Confess	B Franky gets 3 months *Rixy gets 10 yrs*	D Each gets 3 years

What should they do?

Confess — If one of them was to confess then they should get a 3 month prison sentence, but as they cannot trust each other, and cannot be sure that the other party has not also confessed (which would result in a 10 year sentence for the prisoner who did not confess), they will act selfishly therefore both confessing to get the best solution for themselves. Thus they will tend to D, where both confess.

Not Confess — if they could trust each other and be sure of each other's response this would be the best option. By not confessing both prisoners would get one year each — ie option A.

Maximax — maximising the maximum benefit for the individual, ie B and C which would mean that Rixy should confess and would get 3 months, but only if Franky could be trusted not to confess, otherwise both will get 3 years.

Maximin — minimum benefit, ie D, which is where the prisoners will tend to because they cannot trust each other.

Game theory suggests that firms don't trust each other and although they know that it is mutually beneficial for them to collude to set the price at £2, they will tend to an option where they will both set price at £1.80 as neither firm can be trusted to keep to any agreement.

Dominant strategy — in this case the same policy is suggested by different strategies. This is a dominant strategy game because both strategies encourage a cut in price, ie Maximax (where each firm in isolation would set the price at £1.80 hoping that the other firm has gone for £2) and Maximin (where both firms will eventually end up at because they have set price at £1.80).

		Firm X	
		£2	**£1.80**
Firm Y	**£2**	A Each get £10m	C Firm Y £5m ***Firm X £12m***
	£1.80	B Firm Y £12m ***Firm X £5m***	D Each gets £8m

A Collude

B Firm X

C Firm Y

} Maximax

D Nash Equilibrium ie Maximin

Both strategies suggest a Nash Equilibrium.

Nash Equilibrium — is the position resulting from everyone making their optimal decision, ie setting price at £1.80, by attempting, independently, to choose the best strategy for whatever the other is likely to do, ending up in a worse position than if they had colluded to set price at £2.

3.3.9 — Monopolistic competition

Imperfect competition

Perfect competition assumes that there are many small firms and all goods are homogenous, and in monopoly it is assumed there is only one supplier. However in reality neither of these conditions is exactly met and therefore often industries fall in between these two extremes.

In most industries some competition exists because there are at least two firms, but competition is imperfect because firms sell products which are not homogenous.

Assumptions

The assumptions made for monopolistic competition are almost the same as perfect competition minus one important assumption. Goods don't have to be homogenous. The assumptions made are:

1. There are a large number of small firms
2. There are low barriers to entry or exit.
3. Firms produce similar but differentiated products.

What is meant here is that the products are similar but differentiated in terms of packaging, colour, design, specification, marketing or price from rival products.

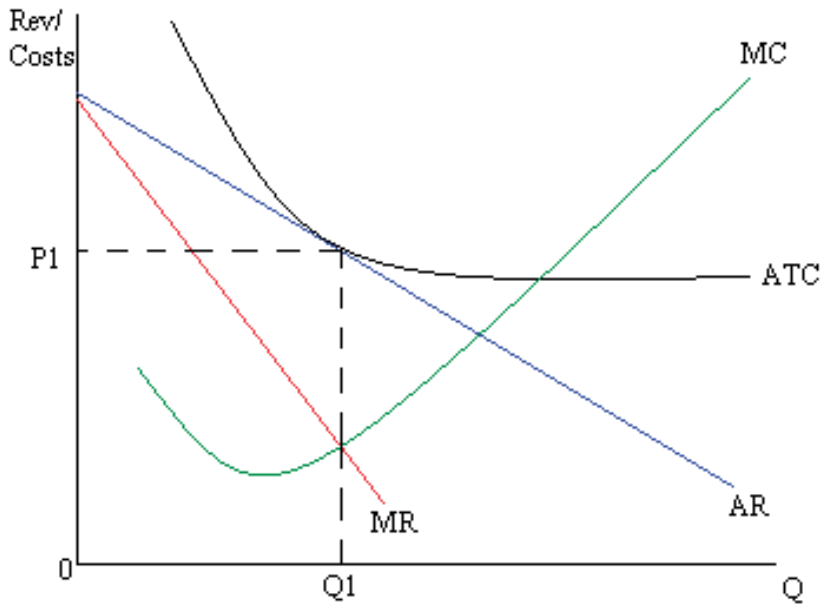
The downward sloping demand curve

Firms producing a product which is slightly different from their rivals will have a certain amount of market power. They will, for instance, be able to raise price without losing all of their customers to those firms who have maintained stable prices. Therefore the firm's demand curve is downward sloping.

It is not a price-taker like a firm operating in a perfectly competitive environment. Yet because there are a large number of firms producing close substitutes, its market power is likely to be relatively weak.

If one examines the case of Chinese restaurants operating in Chinatown in London, because the consumer has a great deal of choice the prices which are set by the individual restaurants will be similar. If one restaurant were to drastically raise prices then it is likely they would lose many customers unless they were able to brand their product in such a way as to differentiate it from the rivals.

Figure 1: The monopolistically competitive firm in long-run equilibrium



Long-run equilibrium

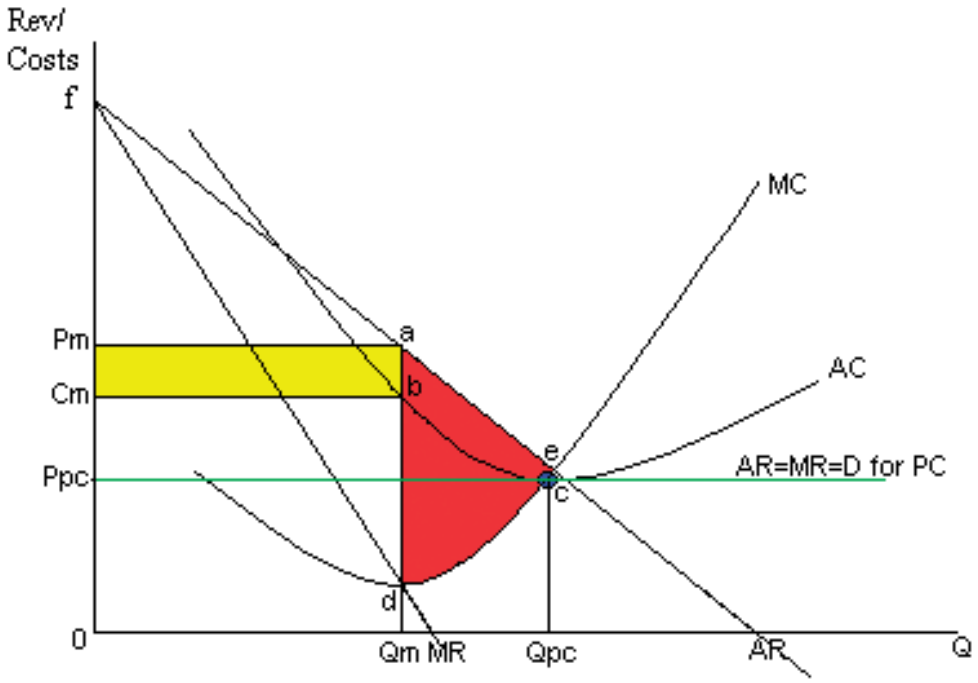
The firm will produce where MC=MR so as to profit maximise. In Figure 1, this means that it will produce at an output level of Q1. It will charge a price based on its demand or average revenue curve, in this case P1.

In the long-run the firm will not be able to obtain super-normal profits, because new firms will enter the industry if they see profits to be made exploiting the lack of barriers to entry. The entry of new firms will increase supply, shifting the average revenue curve downwards to the point where average revenue is just equal to average cost, as in Figure 1.

If the firm were making a loss, firms would leave the industry, reducing supply and shifting the AR curve upwards again to a point where average revenue is equal to average cost.

Therefore in the long-run a monopolistically competitive firm can make neither super-normal profits nor losses.

3.3.9 — Comparing the monopolist and perfect competition



If we assume that the perfectly competitive firm and the monopolist share the same cost curves (average cost and marginal cost) we can compare the output and efficiency levels of the two firms.

- The monopolist makes super-normal profit equal to the area PmCmba, by operating at the profit maximising point.
- The monopolist is not productively efficient as the profit maximising level of output (Qm) does not maximise economies of scale, which occur at the minimum point of the AC curve ie the point C.
- The monopolist is not allocatively efficient because P (AR) is not equal to MC (necessary condition for allocative efficiency). Note: AR is greater than MC at an output of Qm.
- Perfectly competitive firms operate where AC=AR and where MC=MR. This occurs on the AR curve marked for the perfectly competitive firm, (AR=MR=D for PC). At the point C the firm is profit maximising.
- A perfectly competitive firm is also allocatively efficient because P=MC.
- A perfectly competitive firm is also productively efficient, operating at the lowest point of its average cost curve.
- Consumer surplus is reduced by the monopolist. A perfectly competitive firm will have consumer surplus equal to Ppcfc whilst the monopolist by raising price is able to reduce consumer surplus to Pmfa.
- Under perfect competition output is greater at Qpc and price is lower at Ppc than if the firm were to operate as a monopoly (Qm & Pm), allowing them to make normal profits.
- Deadweight welfare loss from the firm operating as a monopolist is equal to ade.

3.3.11 — Government intervention to promote competition

Office of Fair Trading and the Competition Commission

The Competition Commission replaced the Monopolies and Mergers Commission on 1 April 1999. The Commission conducts in-depth inquiries into mergers, markets and the regulation of the major regulated industries such as water, electricity and gas. Every inquiry is undertaken in response to a request made by the Office of Fair Trading (OFT).

Mergers

The Enterprise Act 2002 introduced new regulations for assessing whether a merger should be allowed to proceed. In allowing most mergers the Commission must determine whether the merger will impact adversely on competition, in other words if it 'prevents, restricts or distorts competition' then the merger is likely to be blocked.

Cartels

The Enterprise Act identifies certain situations which would result in prosecutions for unlawful behaviour if the actions of at least two firms (A and B).

- directly or indirectly fix a price for the supply in the United Kingdom of a product or service by firms A and B
- limit or prevent supply in the United Kingdom of a product or service by both firms A and B
- limit or prevent production in the United Kingdom of a product or service by both firms A and B
- divide between firms A and B the supply in the United Kingdom of a product or service to a customer or customers
- divide between firms A and B customers for the supply in the United Kingdom of a product or service
- fix the terms of a bid in such a way that prevents the normal operation of the bidding process.

The punishment for the operation of a cartel can include imprisonment for up to a maximum of five years and/or a fine.

Europe and USA

In the European Union the European Competition Commission investigates anti-competitive behaviour issuing fines where appropriate.

Recent fines issued by the European Competition Commission include:

- April 2007 Dutch brewers: Heineken €219m, Grolsch €31.7m and Bavaria €22.9m for sharing prices
- February 2007 European escalator and lift manufacturers: Kone €142m, Otis €225m, Schindler €144m and Thyssen Krupp €480m for price fixing
- January 2007 manufacturers of gas insulators operating in the EU: Hitachi €52m, Toshiba €91m, Mitsubishi €119m, and Siemens €419m.

In the United States of America the Antitrust Commission seeks to promote competition in market places. Individuals who undertake anti-competitive behaviour in the United States can be fined up to $1m and jailed for a maximum of 10 years. In addition, firms may be fined up to $100 m for each violation.

In 1999, over $850 million in fines was imposed on members of the vitamins cartel, including a record $500 million fine imposed on Hoffmann-La Roche and a $225 million fine imposed on BASF AG. This was in addition to a number of top executives being sentenced to terms in jail.

The Global Economy — Course Outline for Unit 4

BASIC READING

Anderton A — *Economics, 4th Edition* (Causeway Press, 2006) ISBN 1902796926

Bamford C and Grant S — *Studies in Economics and Business: The UK economy in a global context* (Heinemann, 2000) ISBN 0435330462

ER = *Economics Review magazine* (Philip Allan Updates, www.phillipallan.co.uk)

ET = *Economics Today magazine (*Anforme Ltd, www.anforme.co.uk)

Smith C — *International trade and globalisation, 3rd Edition* (Anforme Ltd, 2007) ISBN 1905504101

Tarrant R — *Friday Afternoon Economics* (Philip Allan Updates, to be published 2008)

Timing	Content	Reading/Activities	Comments/notes
2 hours	Definition of globalisation and characteristics Causes of globalisation Implications of globalisation — costs and benefits	Anderton, Unit 97 Bamford, Units 5 and 8 Smith, Units 8 and 9 Tarrant, Globalisation wordsearch ET January 2005 page 2 — Has globalisation been a benefit to the UK economy? — C Smith ET January 2007 page 6 — Impact of MNCs on LDCs — A Hodge ER February 2007 page 2 — African exports and globalisation — O Morrissey ER February 2007 page 29 — Globalisation and the environment — P Smith	Global branding and global sourcing should be considered in the light of activity by MNCs/TNCs. Students should be aware of environmental problems caused by globalisation, eg rising greenhouse gases from cheaper transport, as well as cultural issues. Students should also be introduced to the idea that globalisation is not a new phenomenon.

Timing	Content	Reading/Activities	Comments/notes
4 hours (6 hours to date)	Patterns of trade, including between developed and developing nations Law of comparative advantage: – results – evaluation Costs and benefits of trade Nature of trading blocs and role of WTO	Anderton, Units 14, 40, 98 Bamford, Unit 4 Smith, Units 1 and 2 ET March 2006 page 12 — Effect of China on trade — C Smith	Students should be encouraged to look at how patterns of trade have changed, particularly with reference to the growing importance of trading blocs. They should know the characteristics of the various types of trading bloc (eg Free Trade Areas, Customs Unions), and understand the idea of trade creation and trade diversion (which links to the conflict between blocs and the WTO). PPFs should be used to illustrate comparative and absolute advantage.
3 hours (9 hours to date)	Reasons for protectionism Understanding of tariffs, quotas, subsidies to domestic producers and other non-tariff barriers Tariff and quota diagrams Evaluation of tariffs, quotas, subsidies, and protectionism in general	Anderton, Units 40, 103 Smith, Units 10 and 11 Tarrant, Free trade and protectionism matching ER September 2006 page 2 — US protectionism and China — J Whittock ET March 2007 page 6 — Implications of the rise in protectionism — B Reeves	Arguments for protectionism should include infant industries and employment protection. Students should be aware of current examples of protectionist measures, and consequent retaliation. Deadweight welfare loss triangles should be used on tariff/quota diagrams as part of their evaluation. Able students could be introduced to the ideas of David Ricardo regarding the benefits of free trade versus protectionism.

Timing	Content	Reading/Activities	Comments/notes
2.5 hours (11.5 hours to date)	Components of the Balance of Payments Account Causes and effects of imbalances on the current account Evaluation of measures to correct imbalances on the current account	Anderton, Units 30, 94, 96 Smith, Unit 3 Tarrant, Balance of payments missing words	Students should understand the components within the current account, and should be aware of which components record deficits or surpluses on the UK's Balance of Payments. Students should consider the size of deficits or surpluses on the current account in a global context, and examine the implications of large imbalances between countries. Measures to correct imbalances on the current account include expenditure-reducing, expenditure switching and supply-side policies; each of these should be evaluated and students should be encouraged to reach their own conclusions as to the most appropriate measure. Students should consider the option of doing nothing, in light of theory on floating exchange rates.

Timing	Content	Reading/Activities	Comments/notes
2.5 hours (14 hours to date)	Determination of floating exchange rates The impact of appreciation/ depreciation on an economy European Monetary Union — costs/ benefits	Anderton, Units 93 to 96 Smith, Unit 6 Tarrant, Exchange rates cross out and exchange rate systems matching ET November 2003 page 2 — The value of the £ and the UK economy — R Loxley ET November 2005 page 2 — The effect of a depreciation of the £ on the UK economy — M Mikdadi ET January 2007 page 2 — Exchange rates	Students should use foreign exchange market diagrams, and should understand causes of movements in the demand and supply curve. The Marshall-Lerner condition and J-Curve effect could be applied to analysis of impacts of exchange rate changes.
1.5 hours (15.5 hours to date)	Measures of competitiveness Influences on competitiveness Policies to improve competitiveness	Anderton, Unit 97 Bamford, Units 4 and 8 Smith, Units 4 and 5 ET January 2004 page 25 — Productivity of the UK compared to its international rivals ET March 2007 page 11 — Effect of productivity growth — A Threadgould	The falling competitiveness of the UK and other 'developed' economies in comparison to the Newly Industrialised Countries could be considered. Students should be aware that competitiveness does not solely relate to price — quality is also important. This would be a good opportunity to recap supply-side policies from Unit 2.

Timing	Content	Reading/Activities	Comments/notes
2 hours (17.5 hours to date)	Definitions of absolute and relative poverty Lorenz Curves and Gini coefficients Causes and consequences of poverty	Anderton, Units 27, 68, 69, 99 ET November 2003 page 30 — Relative living standards between EU and accession countries ET September 2005 page 36 — Poverty and inequality in the UK ET January 2006 page 27 — Even distribution of income and economic performance — C Riches	Students should be introduced to the characteristics of LDCs. The different causes and consequences of poverty in light of developed and developing countries should be considered. Students' understanding often benefits from actually drawing Lorenz curves from a data set.
2.5 hours (20 hours to date)	The difference between growth and development Causes of low rates of growth and development	Anderton, Unit 100 Tarrant, Economic growth triominoes and economic development dominoes ET January 2005 page 16 — How well does the HDI measure development? — A Hodge	Students could be introduced to the Human Development Index, and asked to consider other measures that they think are important in measuring quality of life. The specification provides a detailed outline of the causes of low growth rates — students should understand the nature and consequences of each of these. Case studies are important — it might be useful to analyse causes of rapid growth in countries such as China and India as a contrast.

Timing	Content	Reading/Activities	Comments/notes
4 hours (24 hours to date)	Evaluation of the use of fiscal policy to achieve macroeconomic objectives Evaluation of the use of monetary policy to achieve macroeconomic objectives (especially inflation control) Evaluation of the use of supply-side policy to achieve macroeconomic objectives (especially economic growth)	Anderton, Units 36-40, 79-92 Tarrant, Macroeconomic Policies unit ET September 2004 page 6 — Effectiveness of supply side policies — A Clarke ET November 2006 page 6 — Is tackling inflation the most important macroeconomic objective? — B Kulcsar ET January 2007 page 22 — Impact of the increased tax burden in the UK — M Mikdadi	This builds on the work on macro policies covered in Unit 2 — students should be asked to recap this AS work in preparation for their A2 lessons. Students should be aware of global causes of national macroeconomic problems, and therefore be aware of the limitations of national macroeconomic policies in correcting these problems. This would be a good opportunity to discuss the differences between Keynesian and Monetarist approaches, using LR and SR aggregate supply curves.
3 hours (27 hours to date)	Reasons for, and consequences of, budget/public sector deficits and surpluses Types of taxation The use of taxation and benefits to tackle poverty	Anderton, Units 79-81 ET September 2004 page 2 — The effect of an income tax cut — C Riches ET September 2006 page 22 — Balanced budget — R Cole ET November 2006 page 30 — Should the government use the tax and benefit system to redistribute income? — R Cobb	Students should be encouraged to consider the direct consequences of public sector deficits/surpluses (eg deficits can be inflationary and provide an incentive to leave the workforce to live on benefits), rather than secondary effects (eg deficits mean that G>T, so taxes need to be increased to tackle the deficit). The switch from a direct tax system to one focused on indirect taxes (which are considered regressive) should be considered in the light of tackling poverty. The Laffer Curve should be introduced (this could be introduced using the appropriate clip from Ferris Bueller's Day Off).

Timing	Content	Reading/Activities	Comments/notes
8 hours (35 hours to date)	Evaluation of measures to promote growth and development Theories of growth and development	Anderton, Units 102–104 Smith, chapters 13–15 ET January 2006 page 2 — Should economic development be left to the market? — A Hodge ET November 2003 page 22 — Arguments for and against foreign aid — H Mapplebeck ET September 2006 page 11 — Economic development and the environment — G Mallard ER April 2007 page 14 — Fiscal policy to eradicate child poverty — J Shaw	An extensive list of measures to promote growth and development is provided in the specification. Students should understand the nature of each of these, and be able to evaluate them, remembering that different measures will be valid depending on the nature of the country requiring assistance (for example, degree of political stability/ corruption, or sophistication of transport and communication links). There is significant debate regarding the impact of Fair Trade schemes, particularly with respect to the coffee market — much of the literature on this is available on the internet. Students could be introduced to some of the theories of growth and development, such as Harrod-Domar, Solow, Rostow's Stages of Growth, and the Lewis 2 — sector model. The role of institutions such as the IMF could be considered, and the World Bank's Structural Adjustment Programmes (with reference to Uganda as the first 'success'). Able students could also consider whether growth and development is actually desirable, since it may be accompanied by a number of negative externalities. The activities of pressure groups such as Jubilee 2000 could be examined. The dependence of countries such as Ethiopia on aid hand-outs and humanitarian relief could be evaluated as an example.

GCE Economics Unit 4 — The Global Economy Revision Sheets

4.3.1 — What are the causes and effects of globalisation?

Definition of globalisation (from Peter Jay):

'The ability to produce any goods (or service) anywhere in the world, using raw materials, components, capital and technology from anywhere, sell the resulting output anywhere, and place the profits anywhere.'

Characteristics

Globalisation refers to the **increasing** interdependence of economic actors (producers, consumers, governments, entrepreneurs). Key phrases include global branding and global sourcing, although it is not just about the activity of multinational companies (MNCs). Globalisation is characterised by increasing foreign ownership of companies, increases in trade in both goods and services, de-industrialisation in developed countries, and increasing global media presence.

Causes:

- improvements in transport infrastructure and operations
- improvements in communications technology and IT (especially the Internet, allowing a global media presence)
- reduced protectionism (although this is debatable, with the increase in trading blocs' power)
- development of international financial markets
- increasing number and influence of multinational companies
- end of the Cold War.

Consequences:

- increased dependency of economies on the output of other economies
- greater consumer choice
- lower prices, through specialisation according to comparative advantage
- increasing environmental destruction and other negative externalities
- 'Footloose' companies (which can cause unemployment as they move from Place to place)
- possible loss of culture/national identities.

Other issues:

- some people argue that **globalisation is not a new phenomenon** and that we have been in a continual process of globalisation since the time of the first humans — this is supported by the fact that the rate of increase in exports has not really changed recently.
- **de-industrialisation** in developed countries, combined with a global search for new sources of energy (especially oil/gas reserves) and the growth of economies such as China and India has left many 'Western' countries concerned about their future and their future power in the global economy.
- **trading blocs** are seen as both a contributor to globalisation, with their emphasis on **creating trade** within their boundaries, and also an inhibitor to globalisation, since they **divert trade** away from economies not within their boundaries.

4.3.2 — Why trade?

International trade can be defined as the buying and selling of goods across international boundaries.

Why do countries trade?

The basic reason is that countries are not able to produce everything that they want in today's society — gone are the days when people lived off local produce and owned very few assets. This is associated with economic development and increases in income. Trade allows countries to specialise in producing the goods/services that can be produced efficiently — receipts from exports can then be used to buy goods that would be inefficient for that country to make. We buy goods from abroad because of their:

- ***availability***, eg we cannot grow coconuts in the UK so we import them from the Caribbean
- ***price***, eg other countries may be able to produce much more cheaply than we can in the UK, because of lower labour costs or easier access to raw materials
- ***product differentiation***, eg a car is not just a car — many British people now want to own large American SUVs.

Patterns of trade

The UK's share of world trade in manufacturing has fallen significantly over the past century; this is true of all G7 countries, but the fall in the UK's share has been the largest. In global terms, trade flows with Newly Industrialised Countries and the **Tiger Economies** have radically increased. Trade within trading blocs, such as the EU, has also significantly increased (**trade creation**), but at the expense of trade with more traditional trading partners, such as between the UK and the Commonwealth countries (**trade diversion**). Trade has also been influenced by the increase in outsourcing over the past decade or so.

Arguments FOR free trade (advocated by the World Trade Organization, WTO, who act to reduce trade barriers and settle trade disputes):

- increased consumer choice
- lower prices, through existence of economies of scale
- reduced domestic monopoly power
- increasing world output as a result of comparative advantage.

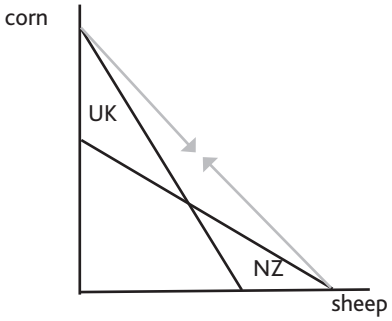
Comparative advantage

Is the ability to produce a good or service at a lower opportunity cost than another country, ie a country has a comparative advantage in production of a good if it has to forego the production of fewer other products in order to make it. This differs from absolute advantage, which is the ability to produce a good or service at a lower cost than another country. **The Law of Comparative Advantage** states that countries should specialise in the production of a good in which they have a comparative advantage and then trade, causing global output to increase.

Problems with comparative advantage and specialisation:

- ignores transport costs (ie it may be cheaper to produce sheep in the UK rather than pay for shipping from New Zealand (NZ))
- ignores external costs of production (eg environmental degradation)
- ignores gains from economies of scale
- assumes factors of production can easily be switched from producing one good to producing another (which they can't)
- assumes perfect knowledge (which doesn't exist)
- reduces self-sufficiency.

Using PPFs to illustrate comparative advantage



New Zealand has a comparative advantage in production of sheep, and the UK in corn (the country with the 'shallower' PPF has the competitive advantage in production of the good on the x-axis). NZ should make only sheep and UK only corn, and then trade (shown by red line) to reach a point outside their PPF

Using numerical examples to illustrate comparative advantage

Devoting 50% of resources to corn and 50% to sheep, UK can produce 16 tonnes of corn and 8 sheep, and NZ 8 tonnes of corn and 12 sheep (so world production is 24 tonnes of corn & 20 sheep). To produce one more tonne of corn, the UK must give up production of ½ sheep and NZ 1½ sheep. To produce one more sheep, the UK must give up production of 2 tonnes of corn and NZ ¾ tonne. Because the UK gives up fewer sheep to make more corn it has a comparative advantage in corn (similarly NZ for sheep). If the UK uses 100% of its resources for corn production, it will produce 32 tonnes of corn. NZ will produce 24 sheep, thus world production has increased!

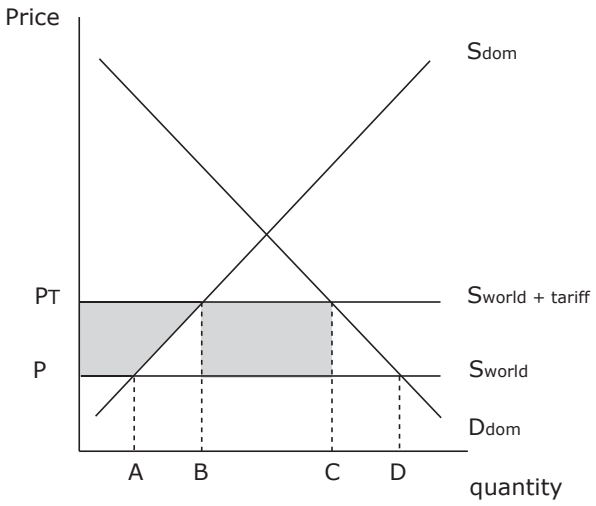
Why protectionism?

- protect infant industries and sunset industries
- employment protection
- retain self-sufficiency
- tackle balance of payments current account problems
- retaliation
- prevent dumping
- prevent competition from countries with cheap labour and poor Labour/environmental laws
- protect strategic industries, eg defence, essential foodstuffs, electricity generation.

Types of protectionism

Tariffs are taxes on imported goods. They are also known as import or customs duties. They raise prices to consumers and restrict imports.

Diagram:



Before tariff

Domestic suppliers supply OA, total demand is OD, so imports are AD.

After tariff

Domestic suppliers supply OB, total demand is OC, so imports are BC.

Green area shows tariff revenue raised by gov't. Blue area shows additional domestic producer surplus. Yellow triangles show deadweight welfare loss

Quotas are a physical limit on the quantity of imports. They:

- have a similar effect to tariffs but no tax revenue is raised, therefore there is larger domestic welfare loss
- create shortages.

In the Uruguay Round of WTO negotiations, the abolishment of quotas on textiles/clothing was achieved from 2005.

Domestic subsidies: are grants given to domestic producers to enable them to lower production costs, thus lowering prices and should make the country's products more competitive internationally. It:

- is difficult for WTO to tackle because not overt protectionism
- incurs an opportunity cost.

Non-tariff barriers: protectionist measures that do not necessarily result in price increases; these might include restrictions on quality (eg Kite Marks) or product specifications etc.

Trading blocs

There are several types. Free Trade Areas are blocs in which groups of countries agree to abolish trade restrictions between themselves but maintain their own restrictions with other countries. Customs Unions have free trade internally and a common set of protectionist measures. Examples include the EU, NAFTA, and ASEAN. They comply with the aims of the WTO in terms of creating trade between members, but they contradict the aims by causing trade diversion, where non-members are excluded from trade in favour of less efficient producers within the bloc.

4.3.3 — How is international trade recorded and financed?

The **Balance of Payments** is a record of all a country's financial dealings with the rest of the world over the course of a year. It has three parts: the current account, the capital account and the financial account.

The current account has three parts.

1. **Balance of Trade** — this looks at the value of imports and the value of exports. **Exports** are goods/services that are made by UK companies and sold abroad. They appear as a **positive entry** into the Balance of Payments because they bring money into the country. **Imports** are goods/services made abroad and sold to people in the UK. They appear as a **negative entry** into the Balance of Payments because money **leaves** the country. We can split the Balance of Trade up even further by looking at trade in goods, or **visible trade**, and trade in services, or **invisible trade**.
2. **Income** — this is made up of income earned by UK citizens who own assets overseas. It includes profits, dividends on investments abroad (payments made to shareholders by companies who earn a profit) and interest. Growth in investment income has increased significantly since 1999.
3. **International transfers** — these are usually money transfers between central governments (who lend and borrow money from each other) or grants, such as those that we receive as part of the CAP from the EU. However, our transfers to the EU are normally in deficit — we give the EU more money than we receive.

If we have a **current account deficit**, then **value of money leaving the country > value of money entering the country**. We usually abbreviate this to value of imports > value of exports. If we have a **current account surplus**, then **value of money entering the country > value of money leaving the country**, or value of exports > value of imports.

The capital account refers to transactions in fixed assets and is relatively small. The largest aspect of the capital account refers to flows of capital associated with migration. As immigration into the UK increases, this increases the surplus on the capital account, as immigrants' assets become part of the UK's assets. This account has been in surplus now for 20 years or so.

The financial account refers to transactions in financial assets, or what is more commonly known as Foreign Direct Investment (lots of older textbooks refer to this as the capital account — don't get confused, the name changed a few years ago!). This has shown a significant surplus over the past 6 or 7 years.

The Balance of Payments must always balance

If we have a current account deficit, we must have a surplus on the capital and financial accounts. This is because we have to pay for everything we consume and fund it in some way — to fund our current account deficit, we must be selling assets to foreign investors. It is debatable whether this is sustainable in the long run, since if people invest in the UK, at some point they will require a return on their investment, and this will cause a deficit on the financial account.

Additionally, because the data is never completely accurate, the accounts also incorporate a 'net errors and omissions' item, which makes sure that everything will balance.

Correcting problems on the balance of payments current account

Governments tend not to be as concerned with correcting surpluses or deficits on the current account as they used to be, but there is evidence of global imbalance, with some countries running the largest (persistent) deficits they have ever seen and others (particularly oil-producing counties and China) running enormous surpluses. Theoretically, under a floating exchange rate regime, current account imbalances will be self-correcting. In practise, this tends not to happen for a multitude of reasons. there are essentially three ways of correcting a deficit: expenditure-reducing, expenditure-switching and supply-side policies.

Expenditure reducing policies require the government to cut the income of its citizens, so that they spend less on imports (for example, through deflationary fiscal policy); however, a side-effect of this is that spending on domestic goods also decreases, so AD falls. This can reduce economic growth and cause recession. It is an unpopular policy, especially politically, and therefore unlikely to be used.

Expenditure switching policies require the government to find ways of reducing its citizens' spending on imports, using protectionist measures such as tariffs or quotas, or even a devaluation of the currency under a fixed exchange rate regime. However, since this often leads to retaliation, exports will also fall, and the current account deficit may not be corrected.

Supply-side policies, such as spending on education and training in order to improve the quality and therefore competitiveness of exports, aim to boost export demand rather than reduce import demand. Whilst they can incur an opportunity cost, they contribute positively to economic growth and can be anti-inflationary in the long run.

Are persistent imbalances on the current account a cause for concern?

Traditionally, deficits have been seen as 'worse' than surpluses. However, a small imbalance should not be cause for concern; persistent large imbalances are more worrying. Large and persistent deficits can be a problem because there is a need to finance the increasing expenditure on imports, usually through loans from abroad (which show as a surplus on the financial account); having large debts, especially with creditors abroad, can be problematic when those creditors want their money back or decide to discontinue lending. Large and persistent surpluses can be a problem because resources are focused on producing to meet export demand rather than domestic demand, so consumer choice and resulting living standards could actually be low.

Exchange rates: are the price of one currency in terms of another. Exchange rates are determined much like any other price in a free market, via demand and supply.

The demand curve for sterling

1. Demand for the pound comes from demand for our exports from abroad. We want to be paid in pounds, no matter where our customers come from, and so people abroad have to purchase pounds on the foreign exchange market. **If demand for exports increases, then demand for the pound on the foreign exchange market increases.**

2. Demand for the pound also comes from demand for saving in UK bank accounts — if the UK interest rate goes up compared to interest rates abroad, then people abroad will want to save their money in UK bank accounts. Because you can save only pounds (rather than dollars or euros) in UK banks, **demand for the pound on the foreign exchange market will rise if the interest rate rises.** The stocks of funds that move around the world in search of the best return is called hot money.

3. Long term capital movements are also important. So, **inwards investment into the UK increases demand for the pound.**

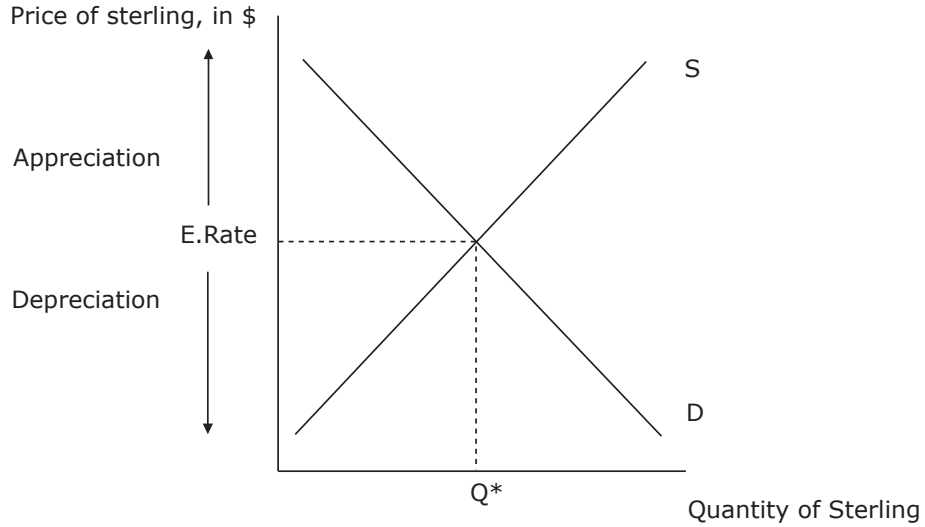
The supply curve for sterling

1. Supply of the pound onto the foreign exchange market comes from our demand for imports. People abroad want to be paid in their own currency, so we take our pounds along to the foreign exchange market, releasing them on to the market in return for other currencies. **So, supply of the pound on the foreign exchange market increases if demand for imports increases.**

2. If the interest rate abroad increases relative to the interest rate in the UK, then funds will move from the UK to overseas bank accounts, increasing the supply of the pound on foreign exchange markets.

3. If there is net outwards investment from the UK economy, then the supply of pounds will increase.

The exchange rate is determined at the point where the demand curve and supply curve for sterling on the foreign exchange market meet.



Depreciation means that the value of the £, in terms of other currencies, goes down. For example, £1 = $1.60 to £1 = $1.40 — in the second example, it takes fewer dollars to buy £1. With a depreciation, even though a good may still be priced at £10, it now costs Americans only $14 instead of $16 — demand will increase.

Appreciation means that the value of the £, in terms of other currencies, goes up. For example, £1 = $1.50 to £1 = $1.70 — in the second example, it now takes more dollars to buy £1. With an appreciation, even though a good may still be priced at £10, it now costs Americans $17 instead of $15, therefore reducing demand for our exports.

The effect of speculation

The minute-to-minute fluctuations in the exchange rate are caused by speculation, ie people trying to earn profit from buying and selling currencies by predicting which way market forces will move. Speculation actually causes a self-fulfilling prophecy. Think about this scenario — imagine that traders in the City of London expect the value of the pound to rise. In order to make a profit, they should buy pounds while they are cheap and then sell them once they have risen in price. So, they start to buy pounds on the foreign exchange market. This increases demand for the pound, and therefore increases the price — exactly as they anticipated! Until about 30 years ago, many developed economies imposed exchange controls on their currency movements in order to prevent speculation. Under a strict exchange control, currency could only be bought and sold through a country's central bank. China is one country that still has some degree of exchange control.

European Monetary Union: adoption of the European single currency, the euro, and the centralisation of monetary policy for the Eurozone.

The criteria for joining the euro were set out in the Maastricht Treaty. There are five main criteria that countries must meet before being allowed to move towards EMU.

1. The government's **budget deficit** must be below 3% of GDP.
2. The **public debt** must be below 60% of GDP.
3. The rate of inflation in a country must be within 1.5% of the average of the best three performing EU member states.
4. Long term interest rates must be within 2% of the average interest rate in the three economies with the lowest inflation.
5. The exchange rate must be within the bounds set by the exchange rate mechanism.

Assessment of EMU	
Pros	**Cons**
Reduces transactions costs	Irreversible decision to join
Reduces exchange rate risks of trading with European partners	'One size fits all' monetary policy unlikely to be appropriate for the different member states
Protection against damaging effects of currency speculation	Restricts use of fiscal policy (and therefore supply side policy) through Growth and Stability Pact
Can encourage FDI	Possible loss of national identity and sovereignty
Increased trade and FDI may result in higher employment and economic growth	Poorer/weaker countries may see increased unemployment as their goods are not demanded internationally
Lower inflation from strong monetary policy control by ECB	Asymmetric inflation target may limit economic growth

4.3.4 — How does a country compete?

Competitiveness refers to the ability of a country to sell its goods/services abroad. Competitiveness is usually determined by the price and/or quality of the good or service.

Measures of competitiveness

The price of a good abroad depends on **both** its **cost of manufacture** and the **exchange rate**.

Cost of manufacture:

- unit labour costs compared to competitors
  - o productivity
    - measured by GDP per capita
    - influenced by level of education/training, trade union activity, labour laws, level of investment
  - o wages
    - depends on cost of living, productivity, trade union activity, labour laws etc
- costs of capital
  - o depends on cost of finance eg interest rates
- transport costs compared to competitors
- rate of inflation.

Exchange rate:

- real, rather than nominal, exchange rate is important
  - o the exchange rate adjusted for inflation
- terms of trade: index of export prices/index of import prices

Improving competitiveness

Competitiveness can be improved by influencing any of the factors outlined above. Supply-side policies are the most likely to be used in most developed countries — these will improve productivity, reduce 'red-tape' surrounding businesses, reduce trade-union activity and so on. It is impossible for countries with floating exchange rates to manipulate the exchange rate to improve competitiveness (although countries such as China, with fixed exchange rates, have been accused of deliberately keeping their exchange rates undervalued in order to maintain competitiveness). Governments want to improve competitiveness in order to boost AD (exports are a component of AD), thus reducing unemployment and causing economic growth, and therefore an increase in living standards.

4.3.5 — What is poverty and inequality in developed and developing countries?

Relative poverty exists when a person is poor compared to others in their society. Most poverty in developed countries tends to be relative poverty. Absolute poverty exists when a person's continued daily existence is threatened. Much of the poverty in developing countries tends to be absolute poverty.

Inequality can occur in terms of either income or wealth. Income is a flow concept — people earn income, either through paid work or through dividends on financial assets. Wealth is a stock concept — it is a measure of the value of people's assets.

Causes of unequal income distribution include:

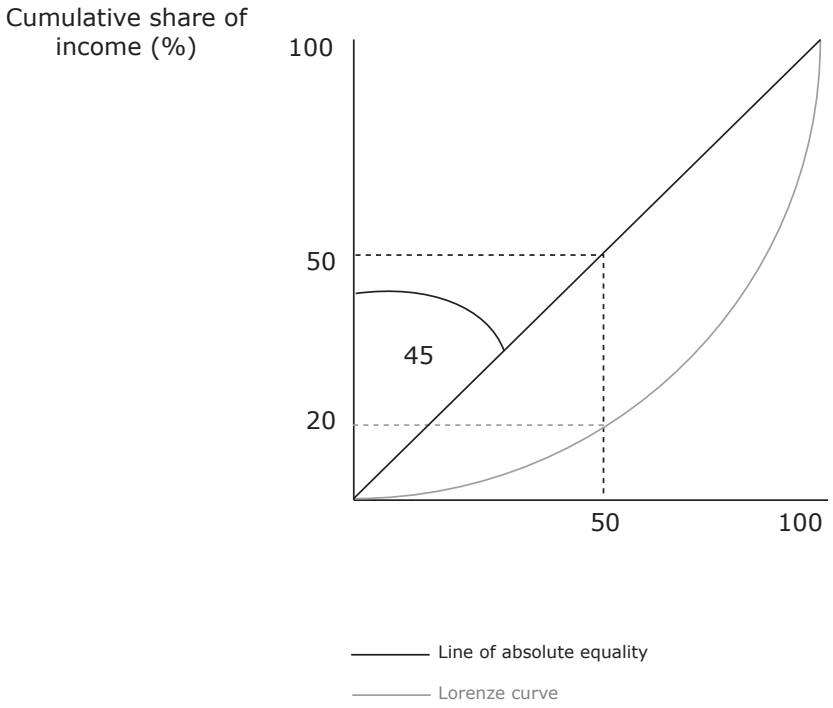
- receipt of different wages
    - o different abilities/skills resulting in differing levels of productivity and therefore differing wages
    - o discrimination
    - o compensating differentials, eg some jobs are considered intrinsically rewarding and therefore attract lower pay
    - o regional differences in pay
- unemployment
- varying ownership of financial assets, since these generate income
    - o people on higher income are able to afford to purchase assets, which in turn then generate more income, leading to a virtuous cycle.

Inequality in a free market economy is inevitable, since people with higher skill and ability will attract higher wages, and some people, perhaps with disabilities or poor skill levels, will earn nothing. This is one of the strongest arguments in favour of a mixed economy with government intervention to redistribute income through the tax system.

Causes of unequal wealth distribution include:

- different levels of income
- inheritance.

Measures of inequality include the Lorenz curve and the Gini coefficient. Lorenz Curves plot cumulative share of income (or wealth) against the cumulative share of the population with that income (or wealth). The Gini coefficient is a numerical measure between 0 and 1 of the degree of inequality in a society; it can be measured using areas on a Lorenz curve. 0 denotes absolute equality; 1 is absolute inequality.



This Lorenz curve shows that 50% of the population earn 20% of the income.

Call the area between the line of equality and the Lorenz curve 'A' and the area under the Lorenz curve 'B'. The Gini coefficient = A/(A+B)

4.3.6 — What are the limits to growth and development in developed and developing countries?

Economic growth: an increase in real GDP/an increase in the productive potential of a country. Measured by assessing growth in GDP, or sometimes GDP per capita.

Economic development: an increase in living standards — this could relate to income per head, levels of education, healthcare, access to housing etc. Measured in many ways, usually using composite measures such as the Human Development Index (HDI), which provides a score between 0 and 1 based on GDP per capita, literacy rates and life expectancy.

Classification/characteristics of countries

Developed countries:

- 'First World Countries', or 'Most Developed Countries' (MDCs)
- tend to be those countries thought of as 'Western'
- many have entered a phase of de-industrialisation, and have developed their service sectors (including financial and IT services)
- high GDP per head
- high levels of education and healthcare
- reliable and safe transport infrastructure and operations
- non-corrupt democratically-elected government
- high productivity and investment.

Developing countries

- 'Third World Countries' or 'Less Developed Countries' (LDCs)
- tend to be located in Africa, South America and Asia
- wide range of levels of development
    - o Newly Industrialised Countries (NICs) include South Korea, Taiwan and other Tiger Economies — are industrialised, with good education, transport and other infrastructure
    - o Low Income ('Fourth World') — generally less than $1000 income per head
    - o Middle Income ('emerging economies') — generally less than $10 000 income per head
- often led by corrupt, non-democratically elected governments
- may have had recent civil war
- agriculture-based or subsistence economy with small industrial sector (not true for NICs)
- poor financial infrastructure
- poor education, healthcare, transport, and communications infrastructure
- high unemployment and underemployment
- low productivity and investment
- high birth/death rates

Reasons for different levels of development

Reason	Explanation/examples
Different availability of natural resources	Countries such as Nigeria have significant oil wealth — if used wisely, this could improve growth and development. Other natural resources would include precious metals/ minerals. However, control of these are often fought over in **civil war**. Many LDCs have subsistence or **primary-sector** economies, which produce low-value-added goods and therefore low income. Consequently, people cannot save any excess income, and funds for investing in the secondary sector are not available.
Differing geographical terrain	Highly mountainous regions may struggle to develop transport infrastructure and primary/secondary sector economies, eg Himalayan communities. However, Switzerland is a counter-example.
Climate	Many sub-Saharan economies are severely affected by droughts followed by flooding, making it difficult to establish any industry and attract any investment.
Political stability	**Democratically-elected**, non-military governments tend to have less corrupt economies that are more able to develop. This is perhaps because of the ability to raise taxes and spend on public services.
Education	Countries which place an emphasis on education and provide some state funding are more likely to grow and develop eg 'Tiger' economies and China take education seriously. This improves **human capital** and shifts the PPF outwards.
Investment	Low investment means that economic growth is unlikely. Low investment could be due to lack of confidence by businesses/consumers/MNCs, **low savings rates** leading to lack of finance (Harrod-Domar model), poor availability and trustworthiness of financial institutions (this may be heightened by poor transport infrastructure, reducing access to banking). Low public sector investment in education, healthcare, transport or communications could be due to corruption or inability to raise taxes (due to low incomes and poor infrastructure). This is true of many African economies.
Population	Many LDCs are characterised by **high birth and death rates** — families aim to have many children in order to increase family income, but these children are often underemployed in the informal sector in low value-added jobs — result: low development. There is also significant **urbanisation** in many LDCs as people search for better jobs in the cities; however, healthcare and sanitation is severely reduced in the resulting slums, and unemployment increases (**Lewis two-sector model**). Some of the biggest slums in the world are Kibera (in Nairobi, Kenya) and Dharavi in India.
Finance	Many LDCs are laden with **international debt**, on terms that they cannot afford to repay. Many people blame the IMF for making poor lending decisions, others blame incompetence on the part of the borrowing government. Due to corruption in some LDCs, loans have been used to fuel extravagant lifestyles of those in office rather than to improve their country. Pressure groups such as **Jubilee 2000** are trying to persuade governments and the IMF to cancel third world debt. Another problem is **capital flight**. The owners of any extra income that could be saved and therefore used for investment often leave the country in search of higher return for their money; this reduces the growth of capital and therefore economic growth.

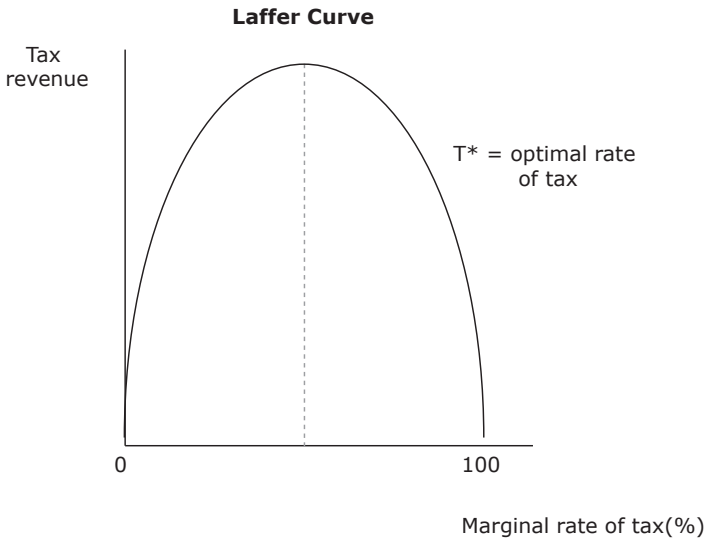
4.3.7 — What is the role of the state in promoting growth and development?

Fiscal policy — any policy concerned with government spending, taxation or government borrowing. If government spending = taxation, there is a balanced budget. An increase in government spending/ a fall in tax, causes an increase in AD (expansionary fiscal policy). In the short-run, this can be inflationary, reduce unemployment and increase GDP. In the long run, depending on what the government spends its money on, it can be anti-inflationary, raise employment and cause sustained economic growth (if the LRAS increases due to spending on education for example). The opposite is true of a restrictionist or deflationary fiscal policy.

Budget deficit:

- government spending exceeds tax revenue
- caused by
  - economic recession or slump
  - increase in supply side policy
  - economic shock requiring government response
- funded by rise in current borrowing, to be repaid by increasing future taxes, or issue of gilts
- consequences can include:
  - rise in productive potential of country if spending improves education
  - increased dependency on benefits
  - inflation (and resulting loss in international competitiveness and rise in inequality) although this may be wiped out if the supply side improves and LRAS increases
  - reduced attractiveness for FDI if government seen as incompetent, although could raise FDI if the deficit has led to an improvement in the supply-side etc.

A **budget surplus** is essentially the opposite. Governments are able to pay back loans, raising their creditworthiness. If taxes become too high, governments need to be aware of the **Laffer curve effect**, where tax revenue may begin to fall as people decide that work is not worth the effort to simply pay high taxes.



More key terms:

Automatic stabilisers/automatic fiscal policy — government spending/taxation vary automatically over the course of the economic cycle (eg G rises in a slump due to increased benefit payments and T falls as less people work and spend).

Discretionary fiscal policy — deliberate alteration of G and T.

Progressive taxation — as income rises, a larger % of income is paid in tax (eg UK income tax).

Regressive taxation — as income rises, a smaller % of income is paid in tax (eg VAT).

Proportional taxation — the same % of income is paid in tax, no matter what the level of income.

Direct tax — a tax taken directly from a person's or business' income (eg income tax and corporation tax).

Indirect tax — a tax paid as a result of the purchase of goods or services (eg VAT, excise duties).

The UK's tax system has become more regressive as there has been a shift away from using direct taxes to raise revenue to indirect taxes. This may increase inequality in society. It is difficult to say whether this is the case, however, due to the provision of benefits (particularly means-tested rather than universal). The UK government does very little to manipulate taxes now as it can prove to be very politically unpopular. It is also nearly impossible to 'fine-tune' the economy effectively using fiscal policy.

Reasons for taxation:

- reduce consumption/production of goods with negative externalities
- raise funds to provide public goods eg defence, roads
- fund government
- provide goods with positive externalities such as education and healthcare
- redistribute income, reducing inequality.

The size of the public sector has a direct bearing on the use of fiscal policy. Many developed European countries have 'leftist' governments, and the involvement of the state in provision of services is large. This is also true, however, of China, with its Communist political regime. Many LDCs, however, have a relatively small public sector, and thus fiscal policy is not a significant factor in improving growth or development.

Adam Smith's comments on what makes a good tax:

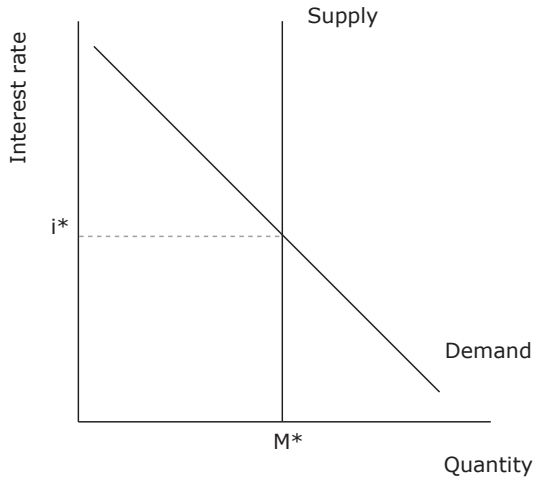
1. The cost of collection should be low relative to the yield of the tax.
2. The timing of collection and the amount to be paid should be clear.
3. The timing of collection and the means of payment should be convenient to the taxpayer.
4. Taxes should be imposed according to the ability of the taxpayer to pay.

As globalisation increases, we may also want to add the idea that domestic tax systems should be compatible with foreign ones, so that people and businesses are not tempted to move between countries in search of lower tax rates.

Monetary policy — any policy concerned with manipulation of interest rates, the money supply or exchange rates. The UK, Europe and a number of other countries have independent central banks — this means that they set interest rates in order to control inflation rather than to satisfy political whims. This independence gives their policy more credibility — if people believe that the changes are permanent and correct, then they will adjust their spending more quickly.

Firms and households choose to keep hold of some of their money in order to make transactions more quickly. However, if they keep hold of cash, they are unable to use that money to purchase financial assets which would provide them with interest. So, the opportunity cost, or the price of money, is the interest rate.

The money market



The government cannot control both the money supply and the interest rate. If the government wanted the money supply to be M*, it could either control the money supply and allow the interest rate to adjust automatically to i*, or it could control the interest rate and allow the money supply to adjust automatically to M*.

Control of the money supply itself is extremely difficult, as it is nearly impossible to actually measure the amount of money. So, in the UK, we choose to control the interest rate in order to control inflation.

However, control of inflation is becoming more difficult as the influence of globalisation increases. Domestic causes of inflation include increased government spending, low domestic interest rates (increasing availability of credit), increased business/consumer confidence (perhaps through increased house prices, trust in the government etc. There are also a number of international causes of inflation, which domestic central banks can do less to correct, for example the growth of China has pushed up prices (due to increased demand) of raw materials such as copper and oil — this causes cost-push inflation in the domestic economy. This makes the decisions of policy-makers all the more difficult, as the level of complexity increases, causing more uncertainty about the future.

Evaluation of monetary policy

Strengths	Weaknesses
Stable inflation increases consumer/business/investor confidence, thus allowing economic growth to be more easily achieved	It can take up to two years for the effects of interest rate changes to fully affect the CPI — this is not helpful if there are significant external shocks to the economy
The implications of changes in the interest rate are clear to understand	Just because the Bank of England changes the base rate, doesn't mean that interest rates change for everyone in the economy
It has effects on both AD and AS, so can have short-term and longer-term effects	Affects the exchange rate, which can alter the competitiveness of the economy (although this could be a strength!)
There is clear framework and remit for the MPC, removing political bias	If inflation is primarily cost-push, rather than demand-pull, then a rise in interest rates will increase the costs of businesses as the interest to be paid on their debt increases, which could make inflation worse
Initial effects on consumer and business spending can be fairly rapid, so long as the MPC's decision is credible	In the UK, many poorer people currently face significant debt problems, and already face high interest rates — monetary policy may therefore worsen the distribution of income
Evidence — since 1997, the rate of inflation has been low and steady	We can't calculate the exact effect of a rise in interest rates — data is uncertain and incomplete
Particularly effective in the UK as there is high household debt (high house prices, high borrowing) so changes in interest rates are felt quickly	We cannot attribute the low inflation rates solely to effective monetary policy from the MPC — much of the recent low inflation reflects recession abroad (reducing demand for exports) and falling worldwide commodity prices (with the exception of oil)
	Many businesses borrow their funds overseas, where interest rates are lower, so a rise in interest rates in the UK will have relatively little effect
	Goodhart's Law — this states that economic variables often lose their relationship with other variables once we try to control them

Supply-side policies — any policy concerned with increasing the quantity or improving the quality of a country's factors of production, in order to increase the productive potential of the country and increase LRAS. Such policies might include improving education so that it is appropriate to the skills required in the modern economy, reducing 'red-tape' for new business start-ups, improving healthcare so that people take less time off sick, teaching entrepreneurship, reducing access to benefits, encouraging increased labour force participation (this latter point is one of the major reasons behind Ireland's growth since joining the EU).

These policies are usually funded through tax revenues — there is therefore a close link between fiscal policy and supply-side policies. Supply-side policies can take several years to have an effect on the economy, and may be inflationary in the short-run as government spending increases. Governments also need to ensure that they are not spending their money on training people in skills that will soon be outdated, since this will then contribute to future structural unemployment.

Key evaluative points for supply-side policies

There is an opportunity cost of spending on education and training. Additionally, how do we know what sort of skills will be needed in several years' time? By the time education programmes have been developed, they may be out of date and inappropriate.

Labour market flexibility is not necessarily desirable from the point of view of many workers — it makes it easier to lose jobs and increases competition for jobs, which can cause stress.

Taking away unemployment benefits does encourage people into work, but care must be taken to protect the vulnerable, who really are not able to work. In addition, benefits must not be so low that people choose to stay in jobs they do not like rather than become frictionally unemployed for a short period in the hope of finding a better job — this would be inefficient.

Care must also be taken not to make the tax system too progressive, as this will discourage highly skilled workers from working harder or being more productive. However, there is a need to prevent high inequality. This is a difficult trade-off to make.

4.3.8 — What other measures can be used to promote growth and development?

Models/theories of growth and development

Harrod-Domar	Now considered an 'old' theory that focuses on the role of investment for growth, this theory states that the rate of growth equals the marginal propensity to save (which provides funds for investment) divided by the capital-output ratio. A problem with this theory is that it doesn't help LDCs to establish a financial system in which savings and investment are possible in the first place.
Rostow's 5 stages of development	The 5 stages of development are: traditional society, precursor to take-off (high savings), take-off, drive to maturity, mass consumption. Again, savings and investment are key. To help LDCs gain enough funds for investment, Rostow suggested that foreign aid could be used.
Lewis 2-sector	This is a structural change model. Lewis said that growth would be achieved by the migration of workers from the rural primary sector to the modern industrial urban sector — this would occur through higher wage incentives. However, despite evidence from current developed economies, this model often seems inappropriate for LDCs, where the population in the urban slums is often unemployed, and would be more productive in the rural sector. This theory also assumes that secondary sector production would be labour-intensive, whereas it is often capital-intensive.
Dependency theory	Lack of growth and development is not the fault of LDCs, but by the conditions under which they operate as a result of their links to MDCs ie ex-colonial rule forcing specialisation in the primary sector, the constraints placed on LDCs as a result of accumulation of debt from 'Western' institutions. However, India's recent growth rates are contrary to this theory.
Market liberalisation/neo-classical theory	The idea here is that by opening up markets (by reducing protectionism etc) and encouraging FDI (MNC activity), LDCs will grow and develop as their goods can be sold on the international market and they benefit from infrastructure development by MNCs. However, many economists argue that this will lead to growth but not necessarily development, as only some people in the LDCs will benefit. The environmental degradation and other negative externalities caused as a result may reduce living standards. The success of this approach also depends on the political climate in the LDC being stable.

Role of tourism

Many LDCs are increasingly highly dependent on tourism from the developed world as incomes rise. Most LDCs positively encourage tourism because it allows foreign currency to be earned and it is not capital-intensive (therefore not reliant on high investment). However, there may be significant negative externalities resulting from tourism growth, eg use of clean water for tourists not locals, expansion of airports causing pollution and loss of farmland etc. The Kingdom of Bhutan, in the Himalayas, aims to tackle this problem by taxing tourists heavily for every night they spend in the country.

Microfinance

The lack of extensive financial infrastructure in many LDCs is an inhibitor to development. Microfinance allows people in LDCs to borrow small amounts of money from local lenders — much of this business is now conducted using mobile telephones, which have leapfrogged landlines in many LDCs. The idea is that local but poor entrepreneurs will be able to set up small businesses, and go on to employ other local people — a sort of 'grassroots' approach to development. Debtors must be sure, however, that their micro-creditor does not charge extortionate interest — given a lack of education in many LDCs, this may prove difficult.

Debt relief

Many LDCs hit a 'debt crisis' in the 1980s and 1990s, as they could not afford to pay the interest on their large debts to international financial institutions. This was a combination of interest rates rising and the value of the dollar rising (and most loans were agreed in terms of US dollars). Latin American countries and many African countries were amongst the worst hit — Mexico defaulted on its loans first, and others followed suit. This meant that these countries were then unable to borrow. The massive debts that they had to repay meant that governments of these countries were unable to invest in human capital or other infrastructure necessary for growth and development. Initially, the IMF set up Structural Adjustment Programmes, where it would lend the debtors money to pay off their original debts, but on strict conditions with respect to fiscal policy and trade policy. These were very unpopular. One solution is debt forgiveness, where the loans are essentially cancelled — many lenders do not want to do this. An alternative is debt rescheduling, where the repayment terms are altered. Jubilee 2000, a pressure group, actively campaigns for debt cancellation.

Foreign aid

This is increasingly multilateral (between many countries), rather than bilateral (between two countries), which reduces the restrictions under which aid is provided. There are different types of aid, ranging from humanitarian aid (such as food and shelter, in times of emergency), to grants (sums of money that do not need to be repaid) and loans (money that should be repaid). Whilst many in the developed world see aid as a positive thing, much of the aid is squandered on projects that will not contribute to development, or are duplicated by different aid agencies who do not communicate with each other, or even spent by corrupt governments on themselves in the LDCS. If humanitarian aid is continued for a long period, then people become overly dependent on it, and forget their own skills — this has happened in Ethiopia. Many of the most needy do not get any aid; much of it is channelled into those projects which have captured the global media interest. As mentioned earlier, dependency theory suggests that provision of aid can reduce the level of development in an LDC.

Fairer trade

The WTO works towards reducing protectionist policies. Many LDCs argue that they need to protect their economies however, as they cannot afford to compete with the subsidies provided to the agricultural sectors in developed economies, such as the CAP in the EU. Many LDCs are unable to sell their mainly primary sector products abroad because of protectionism in the developed world. The Fair Trade movement is one way in which farmers in LDCs are supposed to benefit, thus improving development. This guarantees farmers a certain income, so that they are not subject to monopsony purchasing power from developed countries, particularly with respect to coffee, cocoa and cotton. However, there are often a significant number of 'middle men' involved, reducing the benefits that fair trade farmers receive. Additionally, not every farmer in every LDC benefits — many are unaware of the scheme, and many are not able to afford the membership fees that are required. Some cynical people argue that the Fair Trade movement is just a means of making people in the developed world 'feel better' about their position in relation to those in LDCs.

Student Guide — GCE in Economics

What do I need to know, or be able to do, before taking this course?

Some students may have studied a GCSE in Economics, GCSE in Business and Economics or GCSE in Business before studying this course, although this is not an essential requirement for studying Economics A level. What is likely to be much more important is your attitude to Maths, as you will be required to interpret data and make assumptions from it. Some teachers will look for a good grade in Maths GCSE and some universities will look for the combination of Maths A level and Economics A level before allowing you to study for an Economics Honours degree.

What will I learn?

Unit 1: Competitive Markets provides an introduction to the nature of economics and examines how the price mechanism allocates resources in markets. It analyses the nature of market failure, its causes and possible policy remedies. At the end of this unit, you should be able to apply supply and demand analysis to real world situations; to understand why markets might not allocate resources efficiently and the methods of dealing with market failure, together with an evaluation of their effectiveness.

Unit 2: Managing the Economy provides an introduction to the key measures of economic performance and the main objectives and instruments of economic policy. You should be able to use a basic Aggregate Demand/Aggregate Supply model to understand why demand and/or supply side policies may be seen as appropriate ways of managing an economy; predict the possible impact of such policies and to recognise the assumptions involved; argue for different approaches and identify criteria for success.

Unit 3: Business Economics and Economic Efficiency develops the content of Unit 1 and examines how the pricing of and nature of competition between firms is affected by the number and size of market participants. At the end of this unit, you should be able to analyse the pricing and output decisions of firms in different contexts. You should also be capable of making an appraisal of government intervention aimed at promoting competitive markets. Where appropriate, you should be able to relate the theoretical framework to real world examples.

Unit 4: The Global Economy develops the knowledge and skills gained in Unit 2 so that they can be applied in a global context. The application, analysis and evaluation of economic models is required as well as an ability to assess policies which might be used to deal with economic problems. An awareness of trends and developments in the global economy over the last 10 years is required.

Throughout the course you are expected to interpret data presented in different forms, for example tables, graphs and index numbers; carry out simple calculations, for example involving percentages and percentage change and distinguish between real and nominal data. You will also be required to interpret diagrams and construct simple graphs.

Is this the right subject for me?

This course is suitable if you:

- have an interest in learning how businesses and the government create benefits and economic wealth and conversely, how they may create costs which society has to pay, such as those associated with pollution or new house building projects
- enjoy assessing and presenting the merits of alternative courses of action
- are interested in playing a full part in society: understanding why government pursues certain actions and how it may use the tax system to influence peoples' actions
- want to learn how to analyse data and economic models in order to suggest solutions to real-world problems or forecast future trends.

How will I be assessed?

Unit number and unit title	Level	Assessment information
Unit 1: Competitive Markets How the price mechanism allocates resources in markets; supply and demand analysis; market failure.	AS	Examination length: 1 hour 30 minutes Supported multiple-choice questions where candidates write a short justification of why they chose that answer and/or why the other answers are incorrect. Worth 32 marks. One data response question out of a choice of two questions. Worth 48 marks.
Unit 2: Managing the Economy Measures of economic performance and main objectives and instruments of economic policy.	A2	Examination length: 1 hour 30 minutes One data response question out of a choice of two questions. Worth 50 marks. Last question of data response will be open ended. Worth 30 marks.
Unit 3: Business Economics and Economic Efficiency Nature of competition between companies; different market structures; government intervention to promote competition in markets.	A2	Examination length: 1 hour 30 minutes Supported multiple-choice questions. Worth 32 marks. One data response question out of a choice of two questions. Worth 40 marks.
Unit 4: The Global Economy Application, analysis and evaluation of economic models in a global context; assessment of policies which might be used to deal with economic problems.	A2	Examination length: 2 hours One essay answer with two parts from a choice of three topic areas. Worth 50 marks. One data response question out of a choice of two questions. Worth 50 marks.

What can I do after I've completed the course?

This qualification should enable you to progress on to a straight economics degree with a focus on theory, or a degree in applied economics such as environmental economics, labour economics, public sector economics or monetary economics. Alternatively students may like to study a business economics or mathematical economics degree. Economics can also be combined with another subject as a joint degree or with other subjects, eg politics, philosophy or history as a combined degree.

Post university employment rates of economists are among the highest for graduates. An economics degree enables students to gain transferable skills in problem solving, quantitative analysis and communication. They are likely to find employment in finance, banking, insurance, accountancy, management and consultancy. Some become professional economists.

Next steps!

You should:

- Find out what grade you are likely to get in your GCSE Maths.
- Ask your Careers Advisor if an Economics A level will assist you in progressing on to the degree course or in getting the job you want to do?
- Familiarise yourself with the specification and additional support material for each economics unit which can be found under the GCE Economics subject heading at www.edexcel.org.uk.

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This specification is Issue 3. Key changes are sidelined. We will inform centres of any changes to this issue. The latest issue can be found on the Edexcel website: www.edexcel.org.uk.

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