Zig Zag Education

Economics AS & A Level | Edexcel A | 8EC0 / 9EC0

Theme 2: UK Economy: Performance & Policies

Course Companion for AS and A Level Edexcel Economics A

Second Edition, 23rd June 2016, Endorsed for Edexcel

endorsed for edexcel

zigzageducation.co.uk

POD 5863

Contents

Edexcel Economics A Theme 2 Course Companion: Marketing & People

A Note Regarding Endorsement

In order to ensure that this resource offers high-quality support for the associated Pearson qualification, it has been through a review process by the awarding body. This process confirms that; this resource fully covers the teaching and learning content of the specification or part of a specification at which it is aimed. It also confirms that it demonstrates an appropriate balance between the development of subject skills, knowledge and understanding, in addition to preparation for assessment.

Endorsement does not cover any guidance on assessment activities or processes (e.g. practice questions or advice on how to answer assessment questions), included in the resource nor does it prescribe any particular approach to the teaching or delivery of a related course.

While the publishers have made every attempt to ensure that advice on the qualification and its assessment is accurate, the official specification and associated assessment guidance materials are the only authoritative source of information and should always be referred to for definitive guidance.

Pearson examiners have not contributed to any sections in this resource relevant to examination papers for which they have responsibility.

Examiners will not use endorsed resources as a source of material for any assessment set by Pearson.

Endorsement of a resource does not mean that the resource is required to achieve this Pearson qualification, nor does it mean that it is the only suitable material available to support the qualification, and any resource lists produced by the awarding body shall include this and other appropriate resources.

Unit 3 Greenway Business Centre
Doncaster Road
Bristol
BS10 5PY

www.zigzageducation.co.uk

Teacher's Introduction

This resource is designed to supplement and enhance your teaching of the 2015 linear Economics A Level. It has been written to cover every aspect of Theme 2 of the Edexcel Economics A course as well as options for further research and study for keen and interested students. As 15–20% of the exam will be quantitative, this resource has ensured all the relevant maths is covered; however, it is assumed the students have a basic GCSE-level understanding.

These notes can be given to students before a lesson (to allow students to read ahead in preparation) or after a lesson (as a revision tool to strengthen and build on current knowledge), or students can work through the resource in class.

At the **beginning** of every section is a list of content that the students will be learning. This is designed to prepare them for the lessons that follow and it can also be used as a checklist, either after learning the section or during revision, to remind students of the content they have studied and ensure they have learnt the points on the specification. Questions and answers are provided at the **end** of each section; these consolidate and develop pupils' learning.

Each specification point has complete notes with all the relevant diagrams clearly explained and examples given where possible to help students relate their theoretical knowledge to real-life situations. Any key terms are defined either at the beginning of a topic or in key-term boxes throughout.

Other boxes include:

- ***Further Your Economic Knowledge***: These boxes are designed for students who may want to expand their studies and learn more about certain topics. The content in these boxes is relevant to the course and although not essential, they can be used in the exam to gain A* points.
- ***Activity!*** These boxes include a wide range of interactive or visual activities to secure and recap on knowledge, or provide materials for reading around the topic. These can be used to break up lessons and to support various types of learners.
- ***Learn More!*** These boxes provide links to extra materials such as articles and videos, which will enable students to read around a topic.
- ***Evaluation Point*** Edexcel will reward marks to students who exhibit AO3 and AO4 skills. These boxes provide tips to students that will allow them to analyse and evaluate topics.
- ***Be careful!*** These boxes highlight common mistakes that pupils make and explain why they often occur.
- ***Link circles:*** The exam board wants students to be able to make connections across themes and sections, for example using PPFs from Theme 1 to evaluate an economy when talking about migration in Theme 2. These circles link students forward to topics they will study or backwards to topics they have already studied that will relate to their current lessons. The numbering used relates to the specification numbering.

Specification note:

The order of the specification has been mirrored as much as practical, with just a few notable exceptions:

- 'Causes of inflation', 2.1.2e, is covered at the end of Aggregate Supply (2.3), after AD and AS have been introduced.
- Some sub-topics have been reordered within the larger specification topics in order to give what I hope is one logical teaching approach (for example, in 2.1 'Measures of Economics Performance', economic growth has been dealt with third rather than first).

The specification requires the students to have knowledge of the UK economy over the last 10 years. The main aim of this companion has been to provide student-friendly explanations of often-complicated theory. While up-to-date information about the UK economy has been provided in this companion, coverage of this element should be supplemented by further UK-based case studies and examples to consolidate learning.

July 2015

Second Edition, Endorsed for Edexcel, 26th April 2016

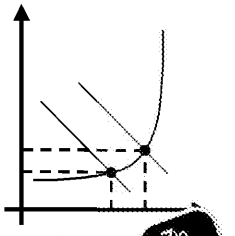
Minor corrections and additions to meet Edexcel endorsement standards:

- Page 3: Clarified that economic growth is growth in *real* GDP.
- Page 6 and 62: Added more recent UK data to the graphs.
- Page 16: Clarified that QS make up 20% of A Level exams and 15% of AS.

A webpage containing all the links listed in this resource is conveniently provided on ZigZag Education's website at ***zzed.uk/5863***

Introduction to Macroeconomics

In Theme 1 we looked at ***microeconomics*** which focuses on individual ma
We thought about the supply and demand of goods and services: how mu
more will companies produce if they can get a higher price for their goods?
How will consumers respond? We looked at decision making at the level o
individual people and firms. Does the demand for apples change if pears
become more expensive?



***On the macr
supply and de
look quite different***

We now turn our attention to ***macroeconomics*** and tal
things. Macroeconomics ex a m . the economy *as a w*
a firm's output, we th a t the *national* output of a
becomes *aggregate* supply and *aggregate* demand, wh
acr s e economy.

In microeconomics we looked at how the government might intervene to
failure in a single market. Macroeconomics considers the role of the gover
in the entire economic system. We think about what causes an economy t
why growth is important and the tools at the government's disposal to pr

When looking at an entire economy we have to extend
economies too. Most countries have open economies a
What's the balance between imports and exports? Wh
change?

Macroeconomics might seem more relevant; it considers the big issues su
and GDP that politicians are invariably talking about on the news. Howeve
the microeconomic principles which underpin a lot of macroeconomic the

Measures of Economic Perform

By the end of this topic, you should understand...

- ✓ **Economic Growth**
  - What is meant by interconnectedness of economies
  - Economic growth as a change in the rate of real GDP
  - The difference between value and volume, total and per capita, real and n
  - The purpose of purchasing power parities
  - National happiness
  - The limitations of GDP
- ✓ **Inflation**
  - Difference between inflation, deflation and disinf
  - The effects of inflation on consumers, firm[illegible]ernment and workers
  - How inflation is measured using CPI and PI
- ✓ **Unemployment**
  - Difference bet[illegible]yment, unemployment and underemployment
  - Th[illegible]nployment
  - [illegible]ffe[illegible] unemployment on consumers, firms, workers, the government a
  - [illegible]nemployment is measured
  - [illegible]e significance of migration
- ✓ **Balance of Payments**
  - The structure of the balance of payments
  - What is meant by a current account deficit and a current account surplus

Economic Growth

Economists and politicians alike are obsessed with growth. It's the fundamental i is doing and arguably one of the most straightforward to interpret: growth mean means more money and it means a better standard of living in general. In this se growth is and how it can be measured.

Gross Domestic Product (GDP) and Economic Growth

The most common measure of growth is 'real' gross domestic product (real GDP). GDP is the sum market value of all the goods and services produced in one economy in one year*. It can be calculated either by finding the sum value of the economy's income, or the sum value of the economy's expenditure. Remember the circular flow diagram! Every time somebody spends money (expenditure), a producer has earned that money (income), ergo expenditure should equal income.

Real G
when l
becau
to hav
have l
of mo

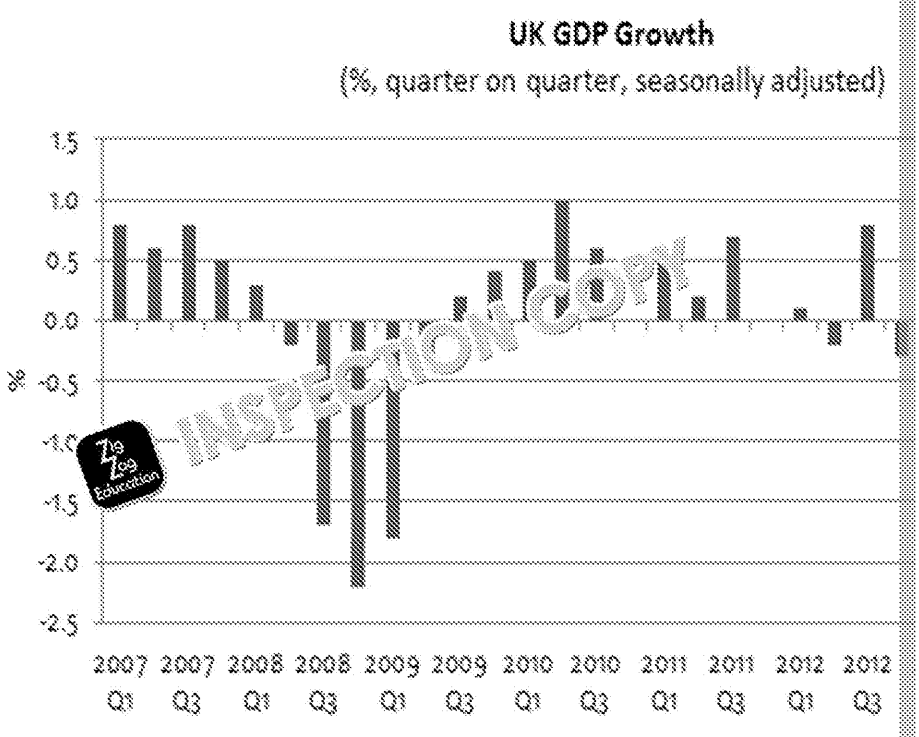
Did you know...?
Small differences in growth rate[illegible] can have big effects on t[illegible]y if maintained [illegible]ars. The UK's average [illegible] over the last 50 years is 2.6%. [illegible]nstant rate of 2.6% an economy will double in size every 27 years. If this is increased to 3.2% a year then the time it takes to double decreases to 22 years – 5 years sooner!

Becau[illegible]DP shows the size [illegible]h[illegible]ges shows the growth [illegible]conomic growth is the value GDP. This can be seen on a P PPF shows the maximum pot produce, if all its resources w allocated. A shift outwards o economy has a greater capab goods and services and is mo increase its real GDP. There i growth.

* GDP can be measured using various time frames, such as every month, or even every d otherwise, GDP values use one-year time periods.

ACTIVITY

The technical definition of a recession is *two consecutive quarters of* mind, think about the graph below which shows quarterly growth figures for th



QUANTITATIVE SKILLS

Percentage Change

In macroeconomics it's often useful to express changes in percentage terms. For e UK was £381,142,000,000 in 2005 (*source: ONS*). This rose to £396,566,000,0 £15,424,000,000. On their own, these figures are hard to interpret – they are l

A much simpler way of expressing the increase in growth is to look at *percentage* calculate this is shown below:

$$\% \text{ change} = \frac{(\text{new value} - \text{old value})}{\text{old value}} \times 100$$

Putting our figures into this formula we get:

$$\% \text{ change} = \frac{15\,424\,000\,000}{381\,142\,000\,000} \times 100 = 4.05\%$$

So there was growth of around 4% over the course of the year. This is much easie other yec d other economies. Make sure you're comfortable with calculatin they're a part of economics.

Volume versus Value

If GDP is the total value of products then the number of goods and services shou 'volume' of goods and services, but what is the value? Remember the function o comparable value; to compare the changes in the GDP, goods and services need such as prices! Therefore, we calculate the total price of all the goods and servic monetary value of the economy – the GDP.

Real versus Nominal

One of the main reasons to measure economic growth is to allow for comparison how the economy compares to last year, the year before that – or even decades

However, as mentioned in the section on inflation, prices change over time. A po worth as much as a pound today because inflation erodes the value away. There distinction between **real** and **nominal** national income. **Nominal** national income services produced that year *at that year's prices*. This means that comparisons w meaning. Nominal national income growth will look higher than in reality becaus grow, price levels increase too.

To account for this, economists use **real** national income as a measure of an eco This accounts for rises in price levels by 'deflating' the nominal amounts by the in more meaningful comparison of values over time.

For example: *an economy pro[illegible] socks at £1 each will have a nominal GDP £1.50 but the economy is [illegible] producing 50 socks then the economy's nomina appears to grow by 50%. However, in reality the economy has not grown a*

QUANTITATIVE SKILLS

Converting from money to real terms

Macroeconomists like to compare values over time to get a sense of the direction heading. How has growth changed? Have wages increased?

The trouble is that the value of money changes too as a result of inflation. A pou worth as much as it is today.

Measurements of prices *from the time they were recorded* are known as **nominal** nominal values over time will be exaggerated because it will capture both chan increases in the price level due to inflation.

To truly compare values over time, therefore, we must convert to **real terms**. This of changes in the price level. To do this, we use a price index (such as CPI) to 'de

For example, suppose that the median wage increases from £25,000 to £26,00 which is an increase in nominal terms of 4%. However, the price index shows tha over the same period of 1%.

We therefore construct a 'deflator' which is 100 divided by the index: $\frac{100}{101}$

This is then multiplied by the new value to give it in real terms:

$$\text{New real value} = \frac{100}{101} \times 26{,}000 = £25{,}743$$

So the new **real** median w[illegible] £25,743. This is *less* than £26,000 because the removed.

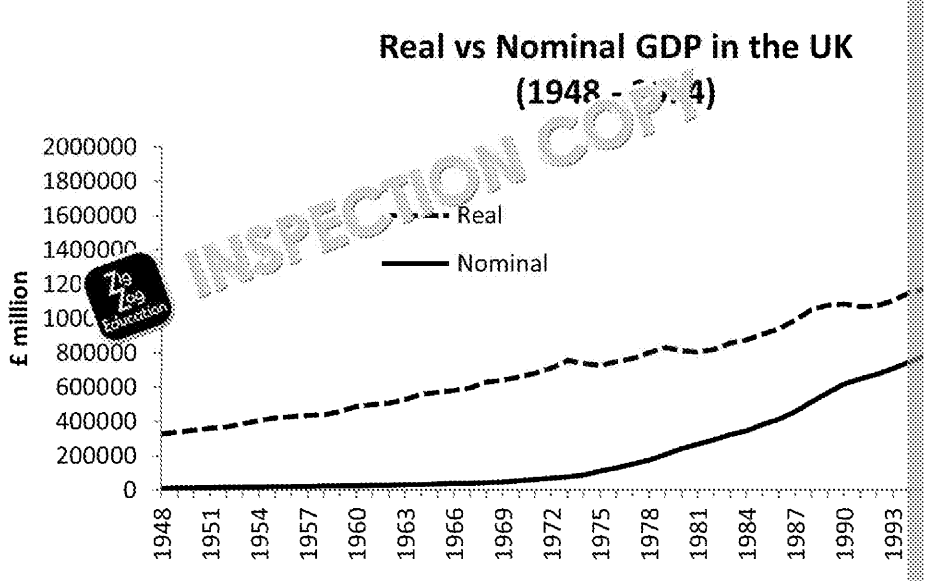
We look at the 'real' change when comparing GDP over time – we need to look a goods without the effect of rising prices (inflation). To do this we calculate the va produced in a country in one year and give them this same value they would hav that is picked is called the 'base year' and it is the year that all subsequent meas

Real GDP growth is one of the key economic variables that politicians will use to economic policies, and which may even make front-page news when growth plu the direction of the economy over the last period, giving everyone an indication heading right now!

DATA

Let's look at an example which illustrates the idea of real and nominal growth. Be
from the Bank of England. It shows real and nominal GDP in the UK between 195
figures use market prices from each year. The real GDP figures, on the other han
level. So, in 1950 the national income was about £13,000 million. But in 2006 pr
about £30,000 million.

Note how nominal GDP looks as if it rises much faster. This is because prices are i



Total versus Per Capita

The USA is a large country, whereas somewhere like the UK is much smaller. The
has less labour and fewer resources than the USA and will, therefore, be able to
produce far fewer goods and services. Comparing GDP across countries is difficu
because a large country may have much higher GDP levels than a smaller country
mean they are growing more. Instead, economists may look at GDP per capita w
country. It takes the GDP of the country (total GDP) and divides by the populatio
GDP per capita.

$$\frac{\text{GDP}}{\text{Population}} = \text{GDP per Capita}$$

QUANTITATIVE SKILLS

GDP per capita

The GDP of the UK was $2.678 *trillion* in 2013 while the GDP of Belgium was $ economy is much bigger. But then the UK had a population of 64.1 million in 20 million. More people mean a higher level of output of goods and services.

Therefore economists sometimes look at GDP per capita (per person) to remove populations. This is done by dividing the level of GDP by the population.

Let's do this with the figures from our example:

$$\text{UK GDP per capita} = \frac{2.678\ trillion}{64.1\ million} = \$41,80$$

$$\text{Belgium GDP per capita} = \frac{524.8\ billion}{11.2\ million} = \$46,9$$

So although the UK's overall level of GDP is higher, Belgium has the higher GDP

Note, however, that GNI (Gross National Income) per capita is often preferred to G of living standards between countries.

Other Measures of Economic Growth

- **Gross National Income (GNI):** This is similar to GDP but includes the income example from dividends from shares owned in foreign companies.
- **Gross National Product (GNP):** This is GNI but excludes the income non-nat the World Bank uses.

Comparison of Growth Rates – see table overleaf

Look at the table overleaf. It shows the GDP of various countries over time. Comparing £1.3 trillion to €2.4 trillion, it is difficult to know which is bigger and by how much because pounds and euros are different measurements. So the data has been converted into one currency for easier comparison.

The column named 'GDP' shows the total GDP of each country over the four years. This gives very little helpful information. **Generally**, all countries have increased over the four years. But it is difficult, without further calculations, to tell whether each country's growth rates have slowed or not (grown but not by as much the following year) and for policymakers it is difficult to analyse the effectiveness of policies. Equally, the USA has higher GDP levels than smaller economies such as Sweden (about $15 trillion compared to $0.5 trillion), but this is biased so because the USA i no indication of how well the USA is growing given its and access to resource

Did you kn
An Americ
an Americ
American n
trillion is 1
zeros) but
zeros). This
of continen
intermedia
10^9 (9 zer

Nowadays,
trillion is co
is 10^9 and
new standa

The column named 'GDP per Ca as you may have guessed, the GDP p population size. A large means the economy has access to a large am produce a l goods. In 2014 the US had a population of about 323 population 10 million, so it is no surprise that their economy produced ab taking account of this variable it can be seen that the USA, Sweden and Germany per-capita levels.

The last column, 'GDP Growth', shows the percentage change of GDP level for ea years. This allows us to view whether the countries are growing, shrinking or sim growing by 1.7% in 2010, but in 2011 it had only grown by 0.4%. Italy's economy grew by was smaller. 2012 wasn't a good year for Italy as its economy had negat 2013, showing it had shrunk ($2.196 trillion in 2012, to $2.013 trillion in 2013, to looked better in 2013 where Italy's growth rate was –1.9%; it was still shrinking b

Comparison of Growth Rates

Countries	GDP (current US$)				
	2010	2011	01	2013	20
Bhutan	1,585,396,256	1,840,841,618	,8 ,558	1,883,654,335	2,2
Brazil	2,143,067,871,760	2,476,69	2,248,780,912,396	2,245,673,032,354	10,9
China	5,930,502,270,317	,613	8,229,490,030,098	9,240,270,452,050	4,4
Germany	3 439 6	,628,110,015,053	3,425,956,470,874	3,634,822,579,319	40,4
Guatemala	38,0 ,893	47,654,789,735	50,388,454,861	53,796,711,129	2,8
Guinea	5,956,476	47,654,789,735	50,388,454,861	53,796,711,129	4
Iceland	12,564,705,489	14,042,801,904	13,586,123,061	14,619,848,414	39,5
India	1,708,458,876,830	1,880,100,141,185	1,858,744,737,180	1,876,797,199,133	1,4
Indonesia	709,190,823,320	845,931,645,399	876,709,347,689	868,345,645,449	2,9
Italy	2,055,355,252,805	2,196,336,800,620	2,013,265,404,946	2,071,306,890,125	34,6
Japan	5,495,387,182,996	590,563,087,455	5,937,766,585,288	4,901,529,519,266	43,1
Kenya	32,440,133,261	34,313,315,840	40,264,403,585	4,410,114,724	7
Mexico	1,051,627,949,327	1,170,085,556,896	1,186,460,890,130	1,260,914,660,977	8,9
New Zealand	143,466,535,135	163,841,041,662	171,461,480,706	185,787,428,717	32,8
Peru	148,509,857,547	170,563,949,736	192,636,058,714	02,295,635,536	5,6
Romania	164,792,252,746	182,610,666,616	169,396	9,638,162,013	8,1
Russian Fed.	1,524,916,112,079	1,904,793,021,649	2,0 ,4	2,096,777,030,571	10,7
Sudan	65,632,237,471	67,320	69,029,562,337	66,547,789,474	1,4
Sweden	463,062,061,649	0,58	523,941,063,360	558,948,700,780	49,3
Tunisia	44,054	951,129,422	45,238,491,581	47,128,700,683	4,1
UK	22, 422	2,462,484,285,580	2,461,768,284,868	2,521,380,958,035	36,5
USA	00,000,000	15,533,800,000,000	16,244,600,000,000	16,768,100,000,000	48,3
Rep. Yemen	31,743,751,169	29,207,296,703	31,992,801,303	35,954,502,304	1,1
Zambia	16,190,196,832	19,201,691,493	20,596,424,325	22,383,715,315	1,2

Purchasing Power Parities Theory

Purchasing power parity means that when the 'buying ability' of different curren equal across countries, then the foreign exchange market is in equilibrium. The t purchasing power parities states that any deviation from equilibrium is only tem because in the long run the market will gravitate back towards equilibrium.

Imagine a good in two countries; let's say tables in the UK and Germany. The pur suggests that equilibrium is met when the table costs the same in both the UK an between the two is £1 = €2, so t and €100 in Germany.

Learn More!
Look at the Big Mac Index created by *The Economist* in 1986.
http://www.economist.com/content/big-mac-index

If the tab stead cost €80 in G e ual of £40, so UK consum Germany rather than the UK (ign costs). UK table producers would their prices would fall. table producers would find their demand ris This would n table prices across both countries equalised.

Purchasing power parities can highlight whether a currency is over- or undervalu currency will return to equilibrium in the long run, unless, like China, something of an undervalued currency and the Chinese government deliberately keeps the their growth heavily relies on export sales and their trade surplus. An undervalue cheaper than foreign goods and encourages the sale of exports. However, an und import prices to appear more expensive and Chinese companies that import goo

GDP, Living Standards and Happiness

Economic growth means that the total value of all goods and services in an econ development is slightly different. It refers to an improvement in living standards as health, environment, education and infrastructure.

ACTIVITY

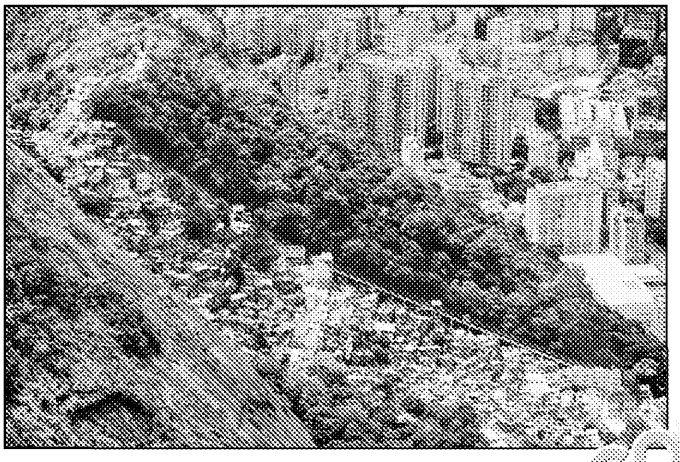
Once you've read this paragraph, make a list of all the drawbacks to using measures such as GDP, GNI and GNP.

Can you explain why economists still use variables such as GDP to measure living standards and happiness despite these limitations?

Increasing GDP and oth used to show an increa happiness. The idea is t are more goods and se people's wants and ne make people happier a Also, as the economy g This means more hous afford the goods and s growing economy will also have the opportunity for promotion and increasing in will not need to work as hard to afford goods and servi e general idea is th money is generated, it can be reinvested in incre sin ng standards and happi education levels and providing greater o p ity to others within the economy down" economics. As the high ear e s see their incomes increase with econo money. This flows thro s e economic system and raises everybody's living sta

However, e c growth does not always result in economic development and Barriers can prevent money trickling down to the poorest members of society an even richer. There is no guarantee the money from economic growth is being inv higher living standards or improve people's happiness. Increased GDP shows an e goods and services, but it does not show how they were made or where the mon

If population growth is greater than economic growth, then growth will not resu This is because although the economy is expanding, the greater demand of a larg public services, such as hospitals and schools. In order for economic growth to re the least, economic growth needs to be greater than population growth.



Another limitation of r
use averages. Average
Although the average
(for example), there c
are earning far, far les
income inequality, suc
have high levels of gro
development and little
can be seen in Brazil w
towns are adjacent to
photo). Any prosperity
erated from econo
distributed to benefit

So why is economic growth used
standards? Economic var
than happin
happiness i
the amount
proportionate, there is a general correlation between economic growth, happiness and development.

Learn More!
To find out more on t
http://www.grossnat

And watch
https://www.youtube

National Happiness
The Gross National Happiness (GNH) Index attempts to steer policy objectives to
standards by measuring happiness rather than production and incomes.

The GNH Index originated in Bhutan and is a more 'all-inclusive' approach to measuring an economy. Unlike the typical views of happiness, the GNH looks above and beyond that of a subjective understanding of happiness. The four pillars of GNH are good governance, sustainable socio-economic development, cultural preservation and environmental conservation.

Learn More!
Visit
http://www.ons.gov.
g-national-well-being
national-well-being--
society.html

UK National Well-being

Well-being is the state of a person in terms of their satisfaction, health and happ
Well-being has been set up by the Office of National Statistics (ONS), which has a
current economic statistics and current development statistics by including what
individuals and as a wider society. A debate was carried out between November
information was gathered across the country to determine what should be meas
observing national well-being. The result goes beyond ec ic figures and deve
GNI, literacy rates and mortality rates, and includ measures for relations
family or partner), education, financial s governance, the environment a

Real Income and S e Happiness

The relatio et en incomes and happiness is an interesting topic in econo
economic re . There is controversy over the exact relationship among man
'Does money bring happiness?'

Research shows that generally countries with higher incomes have a happier pop
incomes. Research has also shown this relationship exists within a country, i.e. th
country are generally happier than those with less money within the same count
because a lack of money can create a struggle to meet basic needs, whereas hav
purchase the goods desired and countries with higher incomes can provide great

Some economists believe an increase in real incomes can mean a worker does no purchase the goods they want, thereby making them happier. Some believe an in effect on happiness, and some believe it can make a person less happy due to the related pressures. Another hypothesis states an increase in real incomes will increase subjective happiness until a point. This can be known as a 'saturation point', where any increase in real incomes above this point will make no difference to happiness. The true relationship is still unknown; however, there is continuous research surrounding this field of economics.

ACTIVITY

I

Think about the

- If you mov unchanged though, an breaks and rises furthe
- The produc cause illne also adds t
- A country extracting rises as a r not have a are used u

Why is Economic Growth a Measure of Economic Performance?

A well-performing economy increases, e... and grows. Economic growth can bring with ... s, which will help to lower unemployment ... an income for people. Economic g... is ... ly linked to higher living standards a... gs greater opportunity to an economy, although this is not always the case; nor is the benefit always evenly distributed across all economic agents.

Inflation

Microeconomics talks about prices for individual goods in the context of individu However, with macroeconomics the focus is on the 'price level' in the economy; prices for all goods in the economy. Economists are not concerned with the level but instead the rate of change of price level, i.e. by how much the prices have ris

Country A's inflation rate was 3% in June, but in July its inflation was 2%. This would be disinflation because the rate has fallen but there is still a rise in general price.

Country B's inflation over a four-year period is shown below...

Year	Inflation
Year 1	2.0%
Year 2	1.4%
Year 3	0.3%
Year 4	–0.6%

For the first three years, co... experienced disinflation. It wasn't until year 4 –0.6%, that the cou... ienced deflating prices.

Causes of Inflation

Inflation has three main causes. However, this will be covered further in Topic 2.1 learnt the relevant information. For those who like a very simplified and quick ex box below...

> *Can't wait...?*
> Remember the supply and demand diagram! If demand or supply c price changes. Price will rise if supply retracts or if demand increase
>
> **Do not** use the simple supply and demand diagram when discussing because this is only a microeconomic concept – you will be marked Inflation looks at prices from a macro le[illegible] t[illegible]ese changes shoul sum change of all the demand c[illegible] f[illegible] all the consumers and a for all the goods/servic[illegible] t[illegible] economy. A micro supply and dem appropriate.

Effects of Inflation

There is a variety of problems that arise from price changes. Inflation can be associated with economic growth because, often, inflation follows growth. The other causes of inflation will be discussed in Topic 2.5.1. Deflation, therefore, is associated with negative economic growth. However, deflation can also cause negative growth rates. If prices are falling then firms and consumers know that if they wait, they can get a better deal because things will be cheaper. If people stop buying goods or investing their money, then the economy will stop expanding (think about the circular flow of income diagram). It is generally believed that inflation should be positive; however, high levels of inflation can still have undesirable effects.

- **Diminishes the Value of Savings**
  Because inflation decreases purchasing power, money kept aside will los usually diminished by inflation. High enough interest rates (the money re money with them) can help mitigate the value-diminishing effects of infla susceptible to inflation for the same reason.

- **Shoe-leather Costs**
  As a consumer, if you know roughly the relative prices of similar goods th a price is acceptable. Firms need knowledge of relative prices in order to before determining a price. Inflation means prices are changing, which m price of a good. This idea of a 'shoe leather' c[illegible]s from the notion down from walking between various s[illegible] t[illegible]her knowledge of the p

  Another effect of infla[illegible] tha[illegible]ears shoe leather comes from the first p debit and cre[illegible]s. People need cash, i.e. they need to hold cash in its and[illegible], holding money will lose its value because of inflation. Fo keep[illegible] money in a bank account hoping to reduce the effects of infla more time travelling to the bank to withdraw money. Travelling to and fr withdraw money will wear down shoe leather.

- **Menu Costs**
  Changing prices mean firms have to change their labels, print new menus machines is costly, such as on tills, vending machines, etc. This is most re experience extremely high inflation known as hyperinflation. Zimbabwe peak of their hyperinflation problem prices were doubling *every 24 hours* less impossible to maintain price lists.

- **Disposable Income**
  If prices rise then the purchasing power of people's income falls. By this, meant that money doesn't go as far. Imagine you have £5; it costs £1 for bus to school, lunch is £1.50 and at the end of the day you still have £2.5 do with as you please. Maybe you buy a magazine at £2 and buy a 50p ba of crisps. Now, you still have £5 but inflation is at 20%. The bus to school and you only have £2 left to do with as you please. But the magazine is £ are unable to purchase the same items as before. This is of particular co income. Public-sector workers can find their wages are 'frozen' when the back. A 'pay freeze' means wages are kept fixed at the same nominal valu a pay cut as prices rise and purchasing power falls.

- **Costs of Living**
  If prices increase then people's costs of li ing crease. This can be proble groups living on or close to th ov y ine. For workers with low bargain wage-rate determinat n, the may find themselves in a squeeze from ris does not inc e t e st with inflation.

- **Dis**
  Peri s of high inflation have been known to start riots and revolts. If pri change to incomes, people feel worse off.

- **Government Taxation**
  If the government doesn't raise personal income tax allowance with infla society will be greater but the government will receive more tax revenue amount workers can earn before being taxed. Equally, if specific taxes or inflation then the government will receive less tax revenue than it could.

- **Unemployment**
  This relationship is discussed in detail in Topic 2.6.4. Phillips found an inv unemployment and inflation. He found that as inflation increases, unem vice versa.

- **International Competitiveness**
  As UK prices rise, UK goods will appear more expensive on the global ma goods, ceteris paribus. Therefore, inflation can diminish UK competitiver services appear relatively expensive.

- **Anticipated Inflation**
  If inflation is anticipated, firms and governments can include it in plannin from inflation and mitigating its effects. Unanticipated inflation can thro which will lead to problems. If inflation is anticipated, people can take st unanticipated inflation can create uncertainty in business planning and in

Further Your Ecor n t owledge...

Fiscal D
in comes rise, people who were close to a tax-bracket boundary racket. This means more people will be paying the higher incom receive more tax revenue without having changed fiscal policy and th

Measures of Inflation

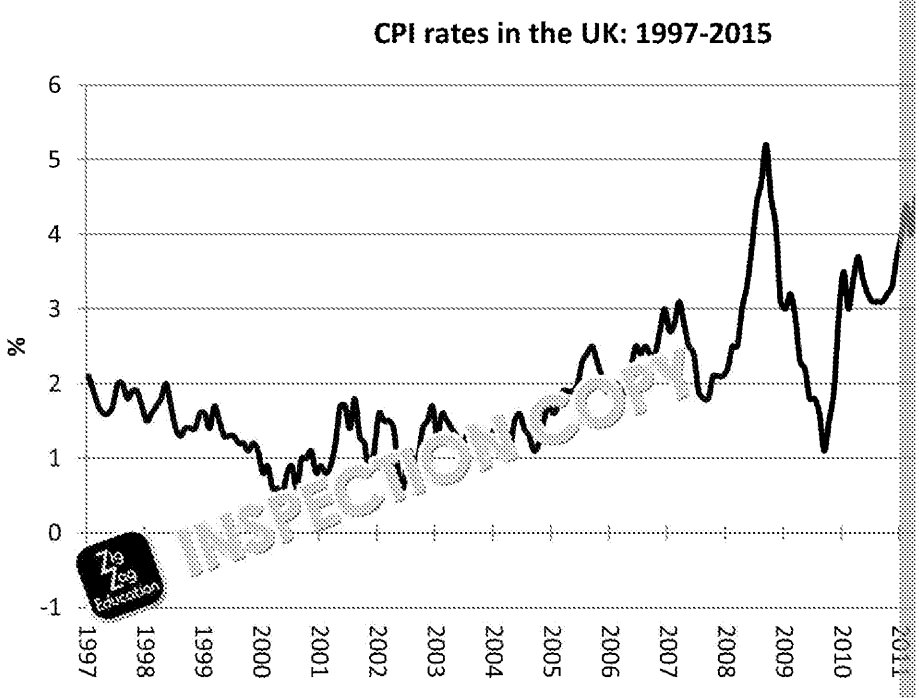
Consumer Price Index (CPI) is a measure of inflation and is the measure used by t
the name, is an index of prices and measures the percentage change in prices. A
level is the inflation rate.

There are far too many goods and services in the UK produced by a variety of suppliers and sold at a variety of outlets to measure all of them. Instead, CPI measures the prices of a representative proportion of aggregate consumption, i.e. CPI measures the price change for over 700 goods and services that are typically bought by an average household. These goods/services are referred to as a 'basket of goods' and are found from the 'Liv
where households taking the survey record their expend for a month and th
average household's spending pattern. The relati a d anging price of this ba
average price level change (inflation). Pr es change, meaning the basket o
survey is done regularly in orde ke e basket of goods revised and up to d

The Living C nc survey has another use as well. Inflation on expensive
impact on t omy than inflation on cheaper products. Equally, prices of ess
such as energy and food, will have a more significant impact on the economy tha
bought too often. For this reason, some goods need greater importance attached
of inflation. 'Weights' are given to items to account for their various impacts. The
by the Family Expenditure Survey.

DATA

Below is a chart of the CPI rates in the UK between 1997 and 2015. The Bank o
as stable as possible and targets a rate of 2%. You can see that prior to the 20
doing quite well: inflation was just below 2% and quite constant. Since the crisis,
more volatile, rising about 5% and even becoming slightly negative in early 20



Indexation and Measuring CPI

Let's use an example to show how an index is calculated to show inflation.

Year	Goods		
	Good name	Price	Items bought as a percentage of total items bought (weight)
2013 (base year)	Good A	£25	10% (0.1)
	Good B	£1.50	65% (0.65)
	Good C	£5.00	15% (0.15)
	Good D	£7.50	10% (0.1)
2014	Good A	£25.50	10% (0.1)
	Good B	£1.60	65% (0.65)
	Good C	£5.50	20% (0.15)
	Good D	£7.50	5% (0.05)
2015	Good A	£26	10% (0.1)
	Good B	£1.60	60% (0.6)
	Good C	£5.50	20% (0.2)
	Good D	£7.50	5% (0.05)
	Good E	£7.00	5% (0.05)
2016	Good A	£27	10% (0.1)
	Good B	£1.60	60% (0.6)
	Good C	£5.60	15% (0.15)
	Good E	£7.50	15% (0.15)

1. First you need to select a base year. There may be particular reasons for a y but otherwise it can be any. In this example 2013 will be the base year beca data for.

2. From the survey, the goods bought by most households and their weights fo the survey. The goods and their weights may change slightly according to pr years.

3. The price level for each year is then found from the representative sample d each good by its weight and adding them together.

$$\text{Price Level}_{\text{Year}} = (\text{Price}_A \times \text{Weight}_A) + (\text{Price}_B \times \text{Wei}_B) + (\text{Price}_C \times \text{Weigh}$$
$$\text{Price Level}_{2013} = (£25 \times 0.1) + (£1.5 \times 0.65) \quad 15) + (£7.5 \times 0.1) =$$

This is done for all the years and s wn on the table.

4. Then t ex is found by $= \left(\frac{\text{Price Value of Year}}{\text{Price Value of Base Year}}\right) \times 100.$
So the y 2014 would be $\left(\frac{£5.02}{£4.98}\right) \times 100 = 101$

5. The base year is always 100 $\left[100 = \left(\frac{£4.98}{£4.98}\right) \times 100\right]$. Any index above 100 s price level and therefore inflation, e.g. from 2013 to 2014 (index 101) there to 2015 (index 108) there was 8% inflation. If the index was 98 then there w

6. To find the inflation between years, you first find the difference between th
the base number. Inflation $= \left[\frac{(\text{Index}_B - \text{Index}_A)}{\text{Index}_{Base}}\right] \times 100$. So the inflation fro
$\left[\frac{(108-101)}{100}\right] \times 100$.

Because the base year is always 100, finding inflation from the base year ca

Inflation = Difference between two years

QUANTITATIVE SKILLS

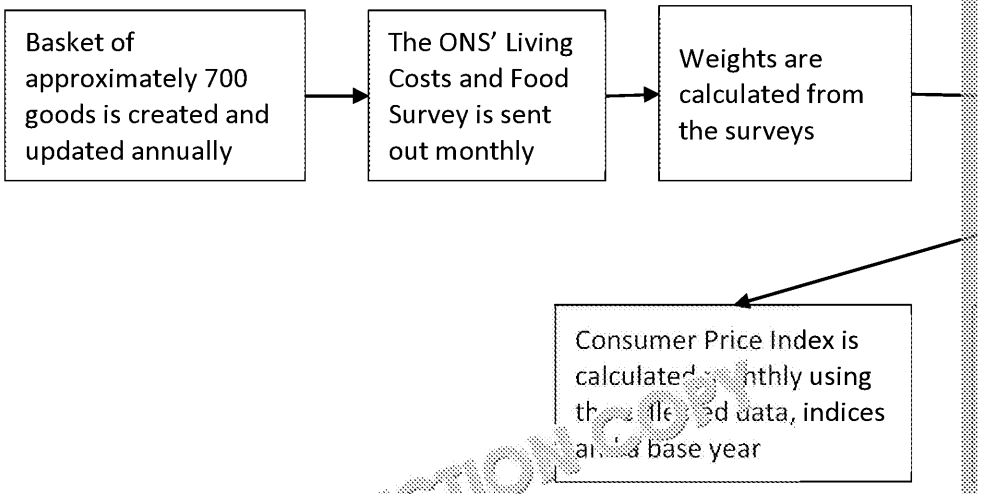
You need to know how to calculate and interpret inde ers as part of the q
element of the course. These skills account for up f the marks in the A Le
sure you're comfortable with the ideas culation process.

Retail Pri lex (RPI)

The RPI is another measure of inflation. CPI is used by the government but RPI is
and there has been talk of swapping from measuring inflation using CPI to RPI m

Both measures use a representative proportion of aggregate household consum
and they both record their prices for a variety of goods/services, suppliers and re
independent stores and large chains). They both use weighted prices and calcula
price change from a base year.

The difference between the two measures is very complicated and does not nee
CPI uses a geometric average, whereas RPI uses an arithmetic average. But the m
includes housing costs and CPI includes energy costs which will show a bigger im



Inflation and Income

The rate at which wages increase can differ from inflation (the rate at which pric wages do not increase, then people will find their income cannot go as far and th paying their bills and weekly shop, etc. In some cases people may find they are u they could buy beforehand and will have to cut back. This can have a severe soci increase above inflation then overall they will be better off.

For example: *If your income was £100, you spent £40 on the weekly shop for gro would have £10 to spend and/or save as you wish (that's 10% of your income). H your income stays the same. Groceries would rise to £44 and bills would be £55; save as you wish. There is then disinflation, but prices have still risen by 5%. Groc £57.75; this equates to £103.95 but your income is still or £100.*

However, if your income rose in line with inflation, then when bills and groceries rise to £110. You would have £11 to spend/save as you wish (that's 10% of you bills and groceries to rise to £115.50 your income would rise to £115.50 and you save as you wish (th of your income).

If your incom by more than inflation, then, although prices were rising, you would exceed the marginal increase in your spending. Therefore, you would be b

Econ the d econ chang outsi

Limitations of using CPI to measure inflation

- **Quality**
  If the quality of a good/service increases, then its price will increase too. The increase in price will be recorded as inflation. CPI has not accounted for the quality increase even though this may improve lives. For example, cars are much more advanced than they development of features such as air conditioning, parking assistance and c have become more expensive because these features cost money – but th comfortable and faster.
- **Shocks**
  Shocks may cause a temporary price change and this may give misleading overseas may interrupt trading which can cause shortages.
- **Differing Measures**
  CPI generally gives a higher inflation level than RPI. Using different inflatio results and so it is important to policymakers, budgeters and business pla they use.
- **Unrepresentative**
  A problem of using CPI to measure inflation comes fro the maths. Avera which could have potential importance. For ex flation will be diffe not just because everybody is different bu se each household cons of people, different genders a ffe ce in wealth levels. Inflation may may find instead that th ve ge prices have increased by 6%. Varying h calculated usi ing Costs and Food Survey.
- **Subs**
  If the price of a good increases, then people are likely to swap to a cheape represented clearly in the measures of inflation. Equally, CPI may overstat inflation if people may shop at 'discount' shops because they will pay lowe measured by CPI.

Why is Inflation a Measure of Economic Performance?

Inflation can bring with it a variety of problems, as discussed above, and deflatio growth, causing the economy to become stagnant. High levels of inflation are dis and indicate a volatile market. Maintaining price stability can help maintain stab

Employment and Unemployment

Unemployment is a crucial economic indicator. If lots of people want to work bu that the economy isn't functioning as well as it could. In this section we will look definitions of unemployment, as well as what causes it. Let's start with distinguis unemployment and *under*employment.

Employment: *the name given to a used resource; a worker who has a job and is earning*

Unemployment: *the name given to an unused resource; a worker who is economically*

Underemployment: *a worker is employed, but this differs from employment because th human capital*

Underemployment occurs when a [illegible] less of a worker than the worker is able or willing to [illegible] part-time or reduced hours when the worker wishes to do [illegible] urs, or the requirements of a job are less than the skillset [illegible] level a worker possesses. Underemployment in an economy can [illegible] the economy is producing within its production possibility frontier (PPF) because, even if all resources are used, they are not used most efficiently. Recent university graduates are often underemployed as financial struggles can cause them to take jobs that are below their skillsets.

ACTIVITY

The ONS define underemployment as those who are working fewer hours than they wish to work. Research the effects of the 2008 global financial crisis on underemployment.

Employment does not fall just because unemployment has risen; they ar independently of each other. For example number of people who are economically a jobs, then the level of employment has ris remained the same.

Causes of Unemployment

- **Structural Unemployment**
  When the demand for labour is low and doesn't meet the supply of labour then people will find they are unemployed. This can happen in a variety of ways and is caused by the immobility and inflexibility in labour. As economists, we assume the resources in an economy can shift between markets to react to price change. We assume there are no barriers to factor mobility. However, when industries decline, workers are unable to adapt to rising industries because of a mismatch in skills. Structural unemployment can also exist because the supply and demand of labour is distributed unevenly across the country and mismatched.

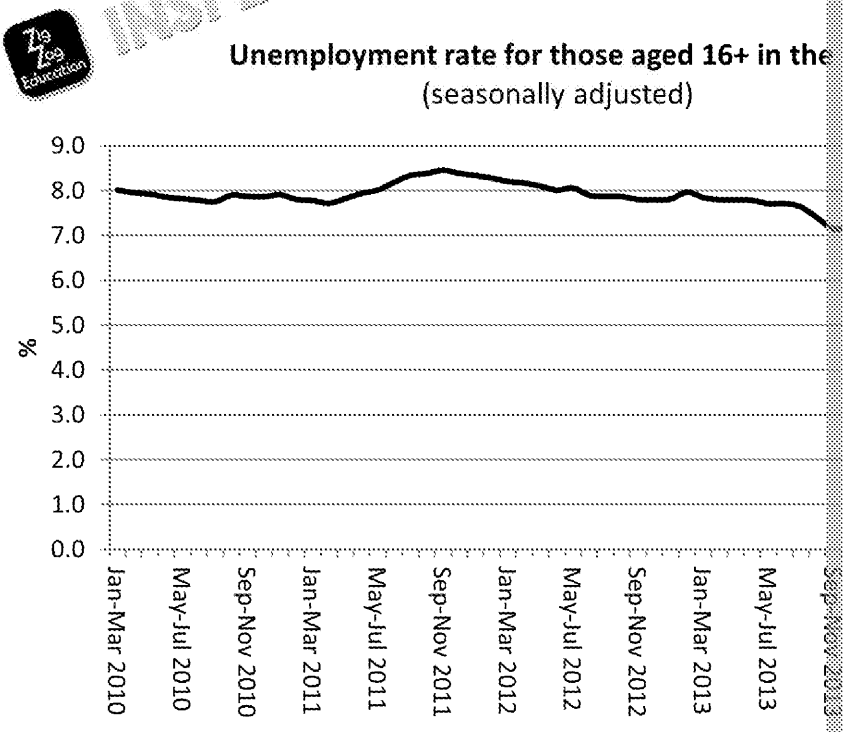
- **Frictional Unemployment**
  While [illegible] change from one job to another there is a period of unemplo unemployment. It refers to people who are 'between jobs'. Most economi unemployment as a problem.

- **Seasonal Unemployment**
  Workers in tourist-reliant industries tend to suffer from seasonal unemplo will find they are out of work during certain periods. Generally, seasonal u and high in winter.

- **Demand Deficiency and Cyclical Unemployment**
  Unemployment occurs when an economy is in recession. Recessions and b
  but for now, recessions are when the economy shrinks and has falling GDP
  production and reduce costs, firms will reduce of resources they use; one o
  people will lose their jobs and the level of unemployment will rise. This is l
  falls, whether in a recession or not, because firms will restrict supply by m
  as labour) in order to meet the lower demand levels.

DATA

Below is a graph showing the recent history of unemployment in the UK. Observe
high of over 8% following the financial crisis to about 5.5% at the start of 2015.
been seasonally adjusted so any seasonal variation (as explained above) has be
out. A rate of about 5% is quite good. There will never be 0% unemployment be
slack – perhaps people prefer leisure to working, or are 'between jobs'. The lo
been in the UK was 3.4% in [illegible]3.



- **Real-wage Inflexibility**
  If the actual wage rate exceeds the market equilibrium wage rate then there will be an excess supply of labour – more people would be willing to supply at that than people would be willing to purchase at that. The excess supply of labour represents unemployed labour.

  If the actual equilibrium wage rate fell because demand for labour fell, for example, the actual wage rate may remain at the same point rather than falling. This is because the labour market is inflexible to changes and wages are 'sticky'. Sticky wages are explained again later in Topic 2.3.3, but for now, sticky wages are wages that do not change or are slow to change. This hap
  accept falling wages because they are lower than their expectations. If the
  then it would follow the equilibrium more closely and unemployment wou

Human C
worker, su
experience
human cap
human as
University
It increase
worker an
is the retu

Further Your Economic Knowledge...

Natural Rate of Unemployment

The natural rate of unemployment is the level of unemployment that
the labour market is in equilibrium. Any attempts to decrease unemp
be temporary as the economy will gravitate towards this level in the l
those who want a job at the wage level and those who are willing and
of unemployment. This means it includes frictional and structural une
job at the current wage rate but are not working because they are wa
do not have matching skills to the current structure.

Inflation will increase if unemployment is [illegible] its natural rate. Equ
unemployment is greater than its [illegible]. For this reason the nat
also be called the non-[illegible] inflation rate of unemployment.

Effects of Unemployment

Workers

- Unemployed workers are not receiving an income and will find they are less
services.
- Workers out of work will find their human capital falling as they forget skills
- Those who are unemployed for a long period of time will find it harder to ac
for two reasons. Firstly, their human capital has fallen. Secondly, employers
shortlisting candidates because they take the stance that 'if other employers
would they waste time coming to the same conclusions?'.
- Claiming unemployment benefits has a stigma attached to it. Unemployed w
esteem and higher levels of depression.

Consumers

- Consumers will reduce their spending if their income falls.

Firms

- Falling incomes and falling spending will mean firms will find demand falls fo
revenue.
- However, if firms did want to increase supply there would be a pool of unus
flatten their supply curves (make supply more elastic).

The Government

- Higher levels of unemployment mean there are more people claiming Jobse
spending will increase.
- Lower employment means fewer people are receiving an income and the go
revenue from incomes and national insurance, for example.
- Falling incomes and falling consumption mean the government will receive l
goods and services.
- Falling revenue and increased government spending will mean the gover
expend[illegible]eficit which may lead to higher levels of national debt.

The Economy and Society

- High unemployment can cause people to lose confidence in the economy
- Falling incomes means living standards will fall
- Because government spending is made possible by the collection of taxes, in
on benefits is likely to be followed by higher taxes in the future.
- Higher levels of national debt are likely to cause higher taxes.
- Research has found that higher levels of unemployment can lead to increase

- Communities can become run down if there are high levels of unemployme can cause both local shops to close and a fall in living standards.
- Higher levels of unemployment can increase inequality and strengthen an u those without jobs lose their incomes and potentially fall into poverty.
- Unemployment, however, can have some advantages to it. Structural unem is improving and evolving as resources are being reshuffled to more produc
- If there is lots of unemployed labour in the market, this means firms can ex because there is a pool of readily available workers. Equally, there will be n the cost of production remains relatively low.

The Benefits of Employment

If somebody becomes employed then they will gain an in . This increase in i easier to buy the goods and services that they ne d, w h will improve living sta to purchase the goods that make them h p , which will also increase living stan is that with increased incomes comes increased spending, which will benefit firm audience to buy their g ds.

If more peo earning an income and firms are making more profits from th government will gain more revenue from taxes. This in turn will go back into the spending on roads or hospitals, for example. Equally, as employment rises, there the government can reduce its spending on unemployment benefits.

If people have jobs then it gives them a chance to improve their skillset and incre the worker but the overall economy will benefit from increased human capital be in human capital will improve efficiency and allow the economy to increase its m

Measures of Unemployment

There are two main measures of unemployment: ILO unemployment rate and cla claimant count tend to differ by a greater amount when the economy is successfu economy is declining.

ILO Unemployment Rate

The International Labour Organisation (ILO) defines unemployment as 'those wh seeking work but have not yet found it'. To identify the level of unemployment, t out to a sample of households. The survey asks whether people are in or out of w and whether they are seeking or not seeking work. From the sample an estimate can be calculated for the economy.

Claimant Count

This measures unemployment by counting the number of people who have regis 'unemployed' and are claiming Jobseeker's Allowance. To be eligible to claim Job must be, of course, out of work but also economically active (i.e. able to work an The claimant count is quite a broad measure of unemployment as it counts all th rather than just a sample of people. However, it is inaccurate at measuring the le economy because it includes people who are economically inactive, i.e. those or unwilling to work. The claimant count generally underestimates the level of un it only counts those who are claiming; there are many who are unemployed but Allowance. For many there is a stigma attached to 'being on the dole' and they p looking for a new job.

Migration and Employment

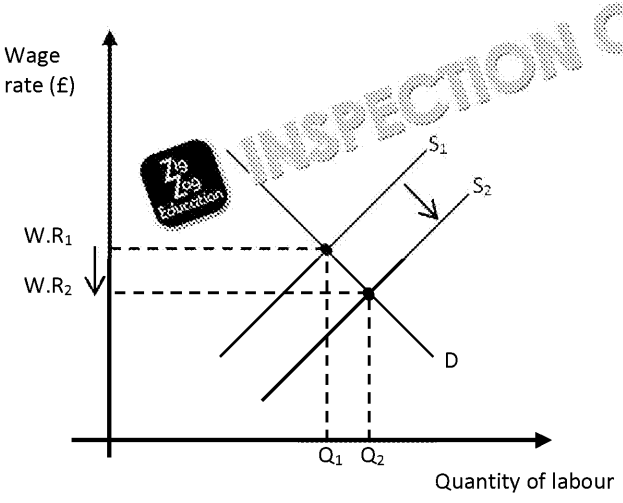
Immigration: an inward flow of people (people moving to a country)

Emigration: an outward flow of people (people moving away from a country)

Migration: movement of people between countries

Net
imm
(pos
have
nega
have

Migration occurs for a variety of reasons and its effects differ depending on these reasons. Some may migrate to find work or for a specific job, such as a foreign company headhunting a worker, or migrate because a company n help set up a new firm in a foreign market. Some may migrate in order to escape c countries. Others may migrate for greater opportunities o[illegible]ducation, such as a



Those who immigrate t
not affect employment
number of people uner
immigrated for a specif
find work will increase e
unemployed will not be
immigration can fill sho
increase levels of emplo

It can be argued that in
the labour supply curve
of labour to fall. It shou
is a minimum wage in t
this level whatever the

Effect of Migration on the Economy

Increased immigration will increase demand in the economy, which will cause the economy to grow and create more jobs. Aggregate demand is discussed later in Topic 2.2. Economic growth can also occur from immigration because the resources available to an economy have increased. If the volume of labour resource available has increased then the economy can increase its maximum pr PPFs). Working immigrants will pay income taxes which means the government w

Migration will carry human capital. Countries with high levels of immigration will find there is an influx of skills and education. Economies with high levels of emigration, on the other hand, may find themselves in a 'brain drain' with their most skilled and educated workers leaving to work abroad. Some worry that perfect mobility of labour will damage developing countries by enabling exploitation of their resources as workers emigrate leaving the country drained of human capital

Learn M
Read K
2003 on
http://w
brain-d

Why is Unemployment a Measure of Economic Performance?

Low levels of unemployment are generally associated with economic growth because as the economy grows and expands, new industries, markets and firms are created which bring with them more jobs. More jobs means more people are employed and so low levels of unemployment can indicate the economy is expanding.

Learn M
Search
Latest
the mo

Unemployment can also indicate high levels of poverty. This is because those without jobs have no income. The economy is performing well if t (relative or absolute) and more people are able to afford the goods or services th

Most relevantly, unemployment means there are unused urces within an ec indicate the economy is not producing its maxim o tive potential and is w room for improvement.

ACTIVITY

Research the Great Depression and the effects unemployment had during this period. The two links below are a good place to start…

- *http://thegreatdepressioncauses.com/unemployment*
- *http://bigmateo0.tripod.com/id2.html*

Further Your Economic Knowledge...

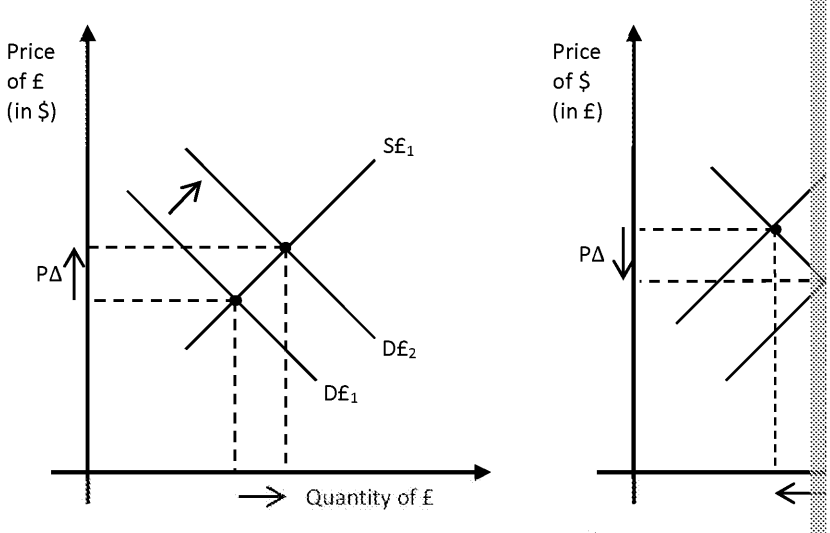
The Exchange Rate

When a good is bought, an amount of money is given over 'in excha the good is shown by the amount of money swapped for it. The exch one currency can be swapped (exchanged) for another currency, or, t in terms of another currency (e.g. $).

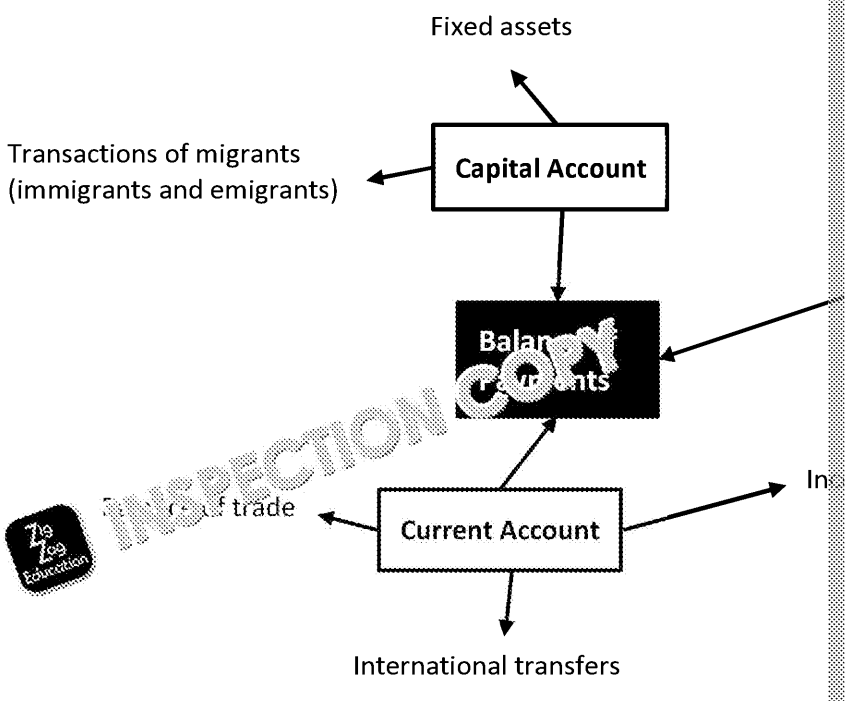
If a US consumer decides to buy a British good then they will need to British currency (£) because the good is valued in £.

Let's look at the exchange rate of £ and $ and how this transaction w equilibrium in the foreign exchange mark[illegible] graph on the left sho the quantity of £ in the global eco[illegible]my is shown on the x-axis, 'quan on the y-axis, and the price of £ is shown in $ as we want to kn The graph on the right shows the demand and supply of $: the quant shown on the x-axis, 'quantity of $'; the price of $ is shown on the y-a in £ as we want to know how many $ we can get for £.

As the American wishes to buy £, the demand for £ increases from D£ £ in $ to increase by PΔ. The value of the £ has appreciated; this mea (the ability of the £ to buy) has increased; the £ can buy more $ than the supply of $ increases from $S\$_1$ to $S\$_2$ and the price of $ decreases value; this means the value of the $ has decreased so its purchasing p fewer £s.



Balance of Payments



The balance of payments is a record of the international trade between one econ
balance of payments is made up of three accounts which are responsible for vari
will only need to know about one of these: the current account.

The current account records three aspects of trade. **International transfers** refer
governments and international organisations. **Income payments** encompass em
profits, dividends and interest from overseas assets owned by nationals. The **bal**
current account you will study in most depth.

The Current Account Balance of Trade

2.4
2.2.5
2.6

This looks at the proportion of exports compared to the proportion of imports. Topic 2.4 discussed how an import is a flow of money OUT of the economy. Therefore, an import appears as a negative on the current account. An export is a flow of money INTO the economy and, therefore, appears as a positive on the current account.

If exports > imports then there would be more money flo ***into*** the economy; the '+' would be greater than the '–'. Th be a current account s

If imports > exports then there w re money flowing ***out*** of the econom the '+'. This would be a unt ***deficit***.

There are n ngs that affect the current account trade balance by affecting imports (M) and exports (X). Relative prices of goods in the global market, just th market, affect the demand and supply of a good. If there is high inflation in the U '***relatively***' more expensive than eurozone goods. This means the number of UK consumers will fall, and the demand from UK consumers for imports (goods from consumers swap from buying the relatively expensive UK goods to the relatively exports fall and UK imports rise there will be a current account deficit, a worseni an improvement in a current account surplus.

Be careful when talking about the trade balance. If exports increase and imports
exports are now bigger than imports. Imagine three different companies who ex
assume that the goods they trade have an equal monetary value. With all these
will increase and their imports decrease; what will happen to their trade balance

1. If **company 1** exported 100 fridges but imported 200 TVs, they would have a
increased by 30 and their imports decreased by 40, they would export 130 f
company would still have a trade deficit because, although exports have rise
imports are still greater than exports. Their trade deficit has improved.
2. Imagine **company 2** export 150 office desks but import 100 dining room tab
Company 2's exports increase by 20 desks and imports decrease by 20 table
change in exports and imports has resulted in a w[illegible] of the trade surp
desks and import 80 dining room tables.
3. Imagine **company 3** export 9[illegible] and import 100 spades – a trade d
120 and their import[illegible] They have now gone from a trade deficit to

The point o[illegible]xample is that a change in imports and exports cannot tell you
deficit or su[illegible] without further information, i.e. without knowing their original
much exports have changed in relation to imports, etc. It is much better to say 't
deficit or improve a trade surplus', or 'this will **either** worsen a trade surplus or i
typically has a current account deficit and so you can explain the results of a cha
describing their effects as worsening or improving a deficit.

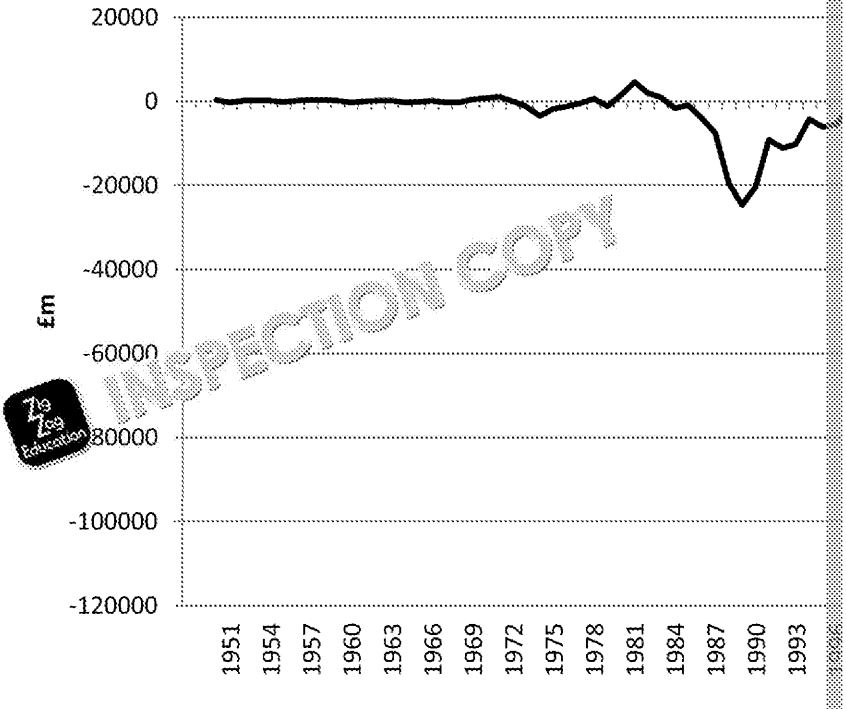
Remember this, because exports and imports are important later for aggregate d
of surpluses and deficits will be discussed in Topic 2.6.

DATA

The diagram below shows the UK Balance of Payments on the current account fr
consistently run a deficit on the current account balance in recent years. This is n
economy.

UK Balance of Payments: 1946–2014

current account balance, current prices, seasonally



Balancing the Balance of Payments

The balance of payments must always equal 0; it must always balance. Any surplu
offset by a deficit (–) in the other accounts. In UK history over the last few decad
account deficit, usually due to the balance of trade (M>X). This may be balanced
surplus in the financial account by selling UK assets overseas.

There is a balancing element to account for inaccurate data. This is called the 'ne
which attempts to offset any errors in data collection and entry.

Interconnectedness of Economies

The buying of goods and services from abroad and the selling of our goods and s
(international trade) can affect the domestic economy. T eans the consump
consumers will affect our economy just as the cor ur o behaviour of UK con
countries' economies. This highlights a m cause and effect' between count
'interconnectedness' or 'interdep of economies and means that countri
are connected; they are susceptible to and supported by each other.

Because on ry's imports are another country's exports, their balance of tr
another. Theoretically the sum of all the trade balances across the world should

Why is the Balance of Payments a Measure of Economic Performance?

The balance of payments can be used as a measure of economic performance as
leaving an economy. An economy with a large deficit means more money is with
lead to a deflation. This can be funded by a surplus in another account, such as t
deficits or surpluses are unsustainable.

Questions: Measures of Economic Performance

1. What is the difference between inflation, deflation and disinfla

2. a) List and explain four effects of inflation.
   b) Despite these effects, why is deflation worse?

3. What is a basket of goods?

4. These questions refer to measuring inflation.
   a) How is inflation measured using the CPI?
   b) What is another measure of inflation?
   c) What are the limitations of measuring inflation?
   d) Using the information in the table below:
      i) Fill in the missing columns.
      ii) What is the rate of inflation in Year 1, Year 2 and Year
      iii) Using inflation, deflation and disinflation, can you de
      years?

Year	Goods			
	Good name	Price	Items bought as a percentage of total items bought (weight)	
Year 1 (base year)	Good A	£5.00	20%	0.20
	Good B	£3.00	15%	0.15
	Good C	£0.50	35%	0.35
	Good D	£9.50	30%	0.30
Year 2	Good A	£5.25	21%	0.21
	Good B	£3.50	15%	0.15
	Good C	£0.65	35%	0.35
	Good D	£9.60	29%	0.29
Year 3	Good A	£5.75	21%	0.21
	Good B	£3.75	16%	0.16
	Good C	£0.75	35%	0.35
	Good D	£10.00	28%	0.28
Year 4	Good A	£5.75	18%	0.18
	Good B	£3.75	14%	0.14
	Good C	£0.75	35%	0.35
	Good D	£10.00	27%	0.27
	Good E	£2.00	6%	0.06

5. What is the difference between employment, unemployment a

6. a) What are the five main causes of unemployment?
   b) Can you explain these causes?

7. List and explain four effects of unemployment.

8. These questions refer to the measures of unemployment.
   a) What are the two main measures of unemployment?
   b) How do these measures attempt to quantify unemployme
   c) How accurate are these measures?

9. What is the difference between immigration, emigration and m

10. Can you explain some effects of positive net migration on the e

11. a) What is GDP?
    b) How effective is GDP in measuring l g standards and h
    c) How do real and nominal GD
    d) How can GDP be adj account for population size?

12. Accord e theory of purchasing power parity, when is e

13. t is meant when economists say there is a current account

14. What is meant by the interconnectedness of economies?

15. Why are inflation, economic growth, the balance of payments a measures for economic performance?

Exam-style Questions 1: Measures of Econom

1. Describe the difference between real GDP and nominal GDP.

....

....

....

2. Which **one** of the following is correct?

A In the case of constant prices (0% inflation), real GDP will rise fa

B Real GDP is adjusted using the unemployment rate.

C Nominal GDP adjusts all values relative to a base year.

D If inflation is positive, nominal GDP will rise faster than real GD

3. Define the term 'disinflation'.

....

....

....

4. Explain **one** limitation of using GDP as a measure of growth.

....

....

....

5. Name and explain briefly **three** different effects of inflation.

1. ....

....

....

2. ....

....

....

3. ....

....

....

6. Describe the process of creating an index for inflation.

.....

.....

.....

.....

.....

.....

.....

The table below shows the **claimant count** measure of unemployment for Northern Ireland, and the UK as a whole, in March 2015.

	Total level of workforce (thousands)	Claimant co	
		Total level (thousands)	
England	28,678	625.5	
Wales	1,432	44.8	
Scotland	2,704	78.1	
Northern Ireland	843	43.4	
United Kingdom	33,673	791.8	

7. Define the claimant count measure of unemployment.

.....

.....

.....

8. Which **one** of the following **cannot** be inferred from the information in th
   - A More people were unemployed in England than in Wales.
   - B A higher proportion of people in Northern Ireland were unemp Scotland or Wales.
   - C England has more people in its workforce than Wales, Scotland
   - D A smaller proportion of Scottish people were unemployed than W

9. Which **one** of the following is correct?
   - A The CPI method of recording inflation aggregates price changes the economy.
   - B CPI and RPI are identical measures.
   - C Some goods are given more importance than others when calcu
   - D CPI is always positive.

Aggregate Demand (2.

By the end of this topic, you should understand...

- ✓ The aggregate demand function (the components of aggregate demand)
- ✓ The relationship between savings and consumption
- ✓ Factors that affect the levels of consumption and their wider effects on aggregate
- ✓ The difference between net and gross investment
- ✓ Factors that affect the levels of investment and their wider effects on aggregate
- ✓ Factors that affect the levels of government spending and their wider effects on
- ✓ Factors that affect the levels of exports and imports (net trade) and their wider e

In the last theme we looked at demand; in this topic we look at aggregate demand. Aggregate demand in the economy. Every individual person's demand curve and each demand for every good/service come together to create the aggregate demand curve:

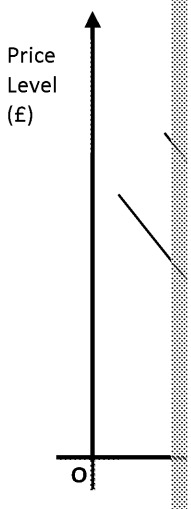
$$AD = \underset{60\%}{C} + \underset{15\%}{I} + \underset{25\%}{G} + \underset{1\%}{(X - M)}$$

The components of AD are consumption (C), investment (I), government spending (G) and net exports (X) – imports (M), also known as net exports (NX). These are explained further in each section. On the demand curve, there is a difference between ***movements along*** and ***shifts in*** the curve. A movement occurs when you move to a different point on the curve, whereas a shift occurs when the curve moves to another position. Shifts occur when the components of AD change.

Each component has a relative importance to aggregate demand. Consumption makes up 60% of aggregate demand, whereas investment only makes up 15%. An equal change in each component will have a disproportionate change in aggregate demand; for example, a 10% change in consumption will have a far bigger effect on aggregate demand than a 10% change in net exports.

The Aggregate Demand Curve (AD)

A movement along the AD curve occurs because of a change in the price level and the economy simply moves to another point on the same curve. A shift in the curve occurs when there is a change in the components of aggregate demand and the whole curve moves either inwards or outwards.



There are two reasons why the aggregate demand curve slopes downwards.

- **Real-balance Effect**
  As the price level increases, the purchasing power of people's incomes fall. If people can't buy as many items with their money, they will purchase fewer items and aggregate demand in the economy will be lower. So as price level rises, aggregate demand falls.

- **International Competitiveness**
  As UK prices rise, UK goods will appear more expensive in relation to other countries. Fewer people will demand UK exports, and more domestic consumers will demand imports. If demand for exports increases and demand for imports decreases, then aggregate

X-axis: Economic Growth (GDP)

In theme one, the x-axis was the quantity of goods produced. In macro we look a
and so we look at the total goods and services that were produced in an econom
Domestic Product (real GDP) is the total amount of goods and services produced
what is used for the x-axis.

Some AS/AD diagrams may have National Income (Y) on the x-axis; this is becaus
income. Remember Topic 2.4; it measures the income households receive from f
production. Real GDP includes exports and imports so is a more intricate measur
circular flow diagram. A rise in real GDP means an economy has increased the an
services it produces; this indicates economic growth. This will be covered further

Inflation: a sustained rise in the general price level

Deflation: a sustained fall in g al price level

Disinflati l in inflation, i.e. a fall in the increase of general price level

Y-axis: Price Level/Inflation

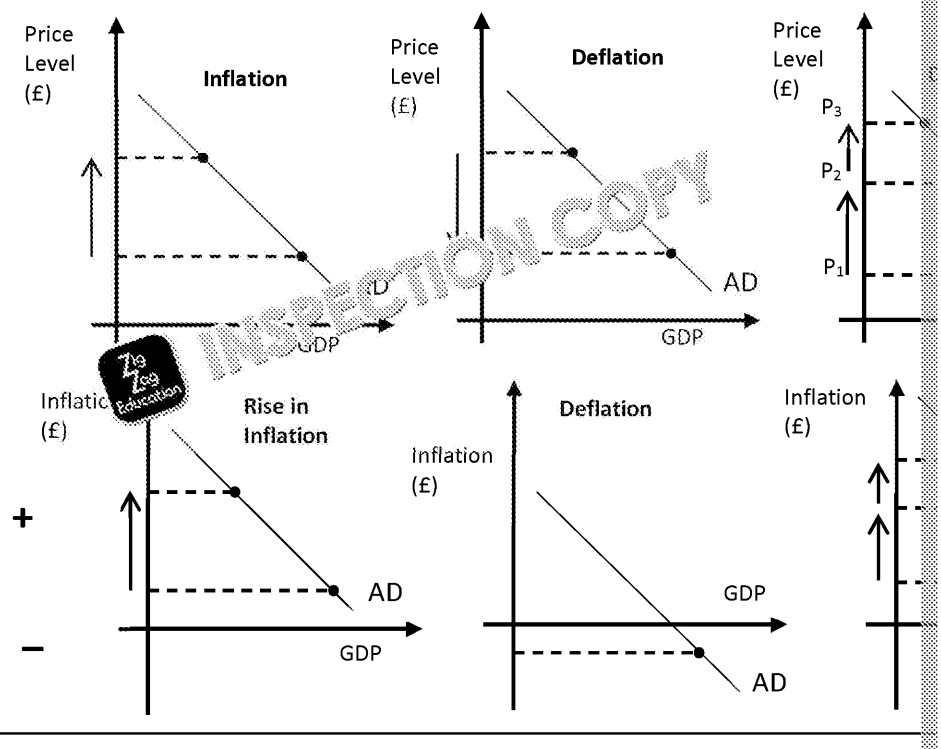
Macroeconomics talks about prices for i individual businesses or markets. Howe focus is on the 'price level' in the econo the prices for all goods in the economy. with the value, but instead the rate of c it has risen or fallen by.

The y-axis can be labelled 'Inflation' or 'Price Level'. At A Level standard, it is most common for you to label the axis as 'Price Level'. You may come across some diagrams labelled as 'Inflation' and you will need to distinguish between inflation, deflation and disinflation when presented with data in written, graphical, tabular and numerical forms. So, remember to think about the axis label before explaining the effects. To see the difference between the three in graphical form, see below.

Be careful!

If it is labelled 'Price Level', and the equilibrium level rises, this means there is falls, this means there is deflation. Disinflation is when price level rises (inflatio previously.

However, if it is labelled 'Inflation', any point on the positive side of the y-axis point on the negative side of the y-axis would show deflation. If the equilibriu



Consumption (C)

When people buy goods/services, they are demanding goods/services just like w
Consumption is the total amount of spending by households, individuals and co
go out and consume more goods, this means consumption has increased, which
and push the AD curve outwards. On the other hand, if consumption falls, aggreg
curve shifts inwards. Consumption makes up the biggest proportion of aggregate
most influential component.

The Main Influences on the Level of Consumption

- **Disposable Income**
  Disposable income is the proportion of their income that people actually ha
  the income left over once taxes have been subtracted and any benefits have
  to spend this money on consuming goods. If disposable income increases, p
  spend more money. Thus if incomes increase, it is likely consumption will in
  proportional amount which will push up aggregate demand and push out t

- **Marginal Propensity to Consume**
  Marginal propensity to consume (MPC) is the proportion of extra income that an individual spends on consumption. If incomes increase by £1,000 per annum, consumption will increase but it is unlikely to increase by £1,000. People don't tend to spend all their marginal income (all their extra bit of income). They may wish to save or invest a proportion of their marginal income. MPC is the amount of their extra income they will use for consumption.

  Marg
  Prope
  Marg
  propo
  that g

  For example: *The marginal propensity to consume is 0.3. This means that 30*
  be used for increased consumption. For every £1,000 increase in incomes, co

  $$\text{Consumption Increase} = \text{Marginal Propensity to Consume} \times$$

- **Interest Rates**
  In order to buy expensive goods such as houses or cars, people may have to
  money is expensive because not only do you have to pay back the money yo
  pay back the interest which can be thought of as the cost of borrowing mon
  the extra amount that somebody pays back. If interest rates go up, borrowi
  expensive because you will have to pay back more. Equally, the interest rate

  Consumption is likely to fall if interest rates go up. This is because it costs m
  effectively, become more expensive. Higher interest rates deter people from
  borrowing and buying expensive goods so consumption falls. People will als
  be more tempted to save their money rather than spending it, thus reducing
  consumption. Aggregate demand falls and the AD curve shifts inwards.
  Equally, if interest rates fall, saving becomes less attractive and borrowing
  becomes cheaper, so consumption goes up, aggregate demand goes up, and
  the AD curve shifts outwards.

  The wealth effect also comes into play with interest rates...

- **Wealth Effect**
  Remember the difference between wealth and income. We've already spok
  in income on consumption. Wealth, the stock of money somebody holds, fo
  of a house. If house prices increase then people feel wealthier because thei
  and they now have more wealth. If people feel wealthier, they are more like
  people feel wealthier, consumption goes up, aggregate demand goes up an

If interest rates decrease and borrowing becomes cheaper, then the demand for houses could grow because people are more able to afford them. This will cause house prices to fall and thus make people feel less wealthy.

Invest
means
to inc
consu

Invest
capac
profit

- **Consumer Confidence**
  Consumer confidence refers to the level of confidence people have in the economy. If consumer confidence is low, then people have little faith in the economy; they believe the economy is not doing so well. If people believe the economy is unstable they are more likely 'safety net'. They are less likely to spend their money if the future economy consumption will fall if confidence is low, and so aggregate demand will fall shift inwards.

  If consumer confidence is high, then people believe the economy is doing w safe spending their money because they believe the economy is stable. This consumption increases, aggregate demand increases and the AD curve is pu

Relationship of Savings and Consumption

There are only two things that a person can do with their income: they can either that influence consumption can also influence savings. For example, if consumer will save their money because savings provide a 'safety net' during rough times. return on saving rises and so the opportunity cost of spending (rather than savin rates rise.

The savings ratio is the amount the average household saves in the UK. It is calcu save from their disposable income. The UK has a savings ratio of around 5%; this China which has a savings ratio of 30–40%.

Investment (I)

Investment is like consumption for firms. Firms invest money either to increase t they produce or to replace their old machines. If investment increases then this i flow. Aggregate demand increases if investment increases and this will push the

Distinction between Gross and Net Investment

Investment is made either to buy more capital and increase production, or to rep (production stays the same). ***Gross investment*** is the total amount spent on inve capital or buy additional capital. ***Net investment*** is the additional gains of capital replacement investment. Imagine a company had 50 machines originally and inv which were to replace broken machines. They would now have 60 machines; the but their net investment would be 10 (3 –). If net investment is greater than shows an expansion and is therefore linked with economic growth.

ACTIVITY

Read about the accelerator theory.
http://www.economicshelp.org/blog/glossary/accelerator-effect/

The Main Influences on the Level of Investment

- **Rate of Economic Growth**
  The level of investment depends on the demand for the good. If people find they are likely to spend more. This means the demand for a product will incr this increase in demand, a firm will undertake net investment in order to inc the rate of economic growth can influence the level of investment because incomes increase and employment increases, leading to increasing demand order to keep up.

- **Business Expectation and Confidence: Keynes' Animal Spirits**
  This is similar to consumer confidence. Investing money means firms are unab but the reward is more money in the future, or so is the plan. Firms are less lik confidence or low expectations of the economy because firms are uncertain a back their spending on investment. If the economy crashes or there is a sudde lose profits and those firms that have invested may be unable to cover their c (stored money for future use usually made up of things such as past profits) a other hand if expectations of the future are high, or firms have confidence in they will feel later about investing their money as they do not feel they will n continue business with less 'safety-net' money in order to receive bigger retu

  Keynes coined the term 'animal spirits' to explain economic agents' behavio psychology teamed with economics in order to account for irrational behavi risky ventures despite logic or maths because of their irrational instinct or c avoid investing if they are hesitant, even if the maths shows it is a good inve may be irrational or even reckless; animal spirits attempts to calculate and e investment decisions firms make.

- **Exports**
  There is a variety of factors that increase the level of exports, as will be disc demand for exports increases then firms producing exported goods will nee production to meet demand. Increasing exports will boost the economy; thi incomes rising and will increase their demand. Firms will have to increase production via net investment.

- **Interest Rates**
  There betwe and th
  Firms may need to borrow money in order to invest. Interest rates determine how much extra money a firm pays back when it borrows money. If interest rates go up, the cost of borrowing increases and firms are less likely to invest. Equally, investing money has an firm gets from investing needs to outweigh the interest the firm would rece Because interest rates affect the amount of money a firm gains from saving, investment is twofold. If interest rates go up, investing becomes more expe also increases, therefore investment levels fall as the cost of demand falls and Remember the Keynesian marginal efficiency of capital curve (Topic 2.4.3)!

- **Access to Credit**
  In order to make an investment, a firm needs money. If a firm does not have borrow money on the condition it will pay it back in the future. This is w it is the ease to borrow; it is money available to firms. If firms have easy ac obtain the funds needed to invest and are therefore more likely to. If there investment will fall and aggregate demand will shift inwards because firms funds they need to invest.

- **Influence of Government and Regulation**
  Because the government has a large influence on the economy and can cha can determine the outcome of an investment. If the government creates re particular investment then firms are less likely to invest. Equally, if governm investments then firms are more likely to invest.

Government Expenditure (G)

Government spending is mostly autonomous, i.e. it is unaffected by other variables such as interest rates or confidence. Government expenditure is determined by the government.

If net trad
this does
surplus. It
was in a t
much the
compared

It is bette
will decre
lead to a t

The Main Influences on the Level of Government Expenditure

- **Trade Cycle** (Further explanation in Topic 2.5)
  As the economy goes into recession, people lose their jobs and firms find their revenues falling. This means there is less tax revenue for the government and the injection ch k
  Equally, as people become unemployed, gov rn nts spend more on unemploym t nefits. There will be a budget defic the government spends more than i v it is likely to lead to (increasing) government de
  o er its expenditure.

  As the economy goes into a boom, there will be more jobs for people, so un employed people will increase their spending. Firms will find their revenues receive more tax revenue as there are more firms and employed workers pa fall as there is less unemployment benefits expenditure. There will be a bud receives more tax than it spends.

  The Golden Rule justifies government debt as long as over the business cycl recession) the debt build-up in the recession is cancelled out by the budget s

- **Fiscal Policy** (further explained in Topic 2.6.2)
  The government can directly change the amount it spends in the economy a as the interest rate is determined by monetary policy, the level of taxation a spending is determined by fiscal policy. Both policies are used to control, sta manipulate the economy; if the government decides to change its fiscal app government expenditure in the economy will change.

Net Trade (X – M)

Net trade is the sum total of income flowing out of the economy from imports a flowing into the economy from exports. If exports increase and/or imports fall, n which increases aggregate demand. If there is more money coming into the econ exports are greater than imports) then there is a trade surplus. This was discusse Topic 2.1.4. If imports are greater than exports then there is a trade deficit. The a imports bought not only depends on their price, but also the price of foreign goo goods are cheaper relative to foreign goods then we would say 'UK goods are m foreign demand for UK exports would increase (as foreign consumers would swit demand for imports would fall (as domestic consumers would switch from foreign goods to domestic goods). Exports w increase, imports would decrease, net trade would re e and there would be a trade surplus (X>M), ag e and would increase and the AD curve would ards.

If taxes de spending i may go int depends o and taxes, and how b

Instead it i either a de a budget d

The Main ue on the (Net) Trade Balance

Just like wit domestic market, prices can play a big factor in the global market. People are more likely to choose the good that is cheaper. The important part to remember about this sentence is: it is the good that appears cheaper ***relative*** to other goods. There are many things that can affect the relative prices of goods on the global market, as will be discussed in a minute. One assumption we make as economists is that there are no transport costs. A good p cheaper than a good produced in France, but once the costs of posting have bee more expensive than the French good.

- **Real Income**
  Normal goods are goods that increase in demand by a normal amount when are normal goods, therefore as UK real incomes rise, the demand for import the UK trade deficit.

- **Exchange Rates**
  If the £ appreciates, then UK goods will appear more expensive in comparison to foreign goods (assuming their currency stays the same; ceteris paribus). This means demand for UK goods will fall and demand for foreign goods will rise; demand for UK exports will fall and demand for imports will rise. Exports will decrease, imports will increase and so net trade and aggregate demand will decrease. If exports fall and imports rise this could lead to a trade deficit.

  P re th co to ex

  If the £ depreciates, UK goods appear cheap in relation to foreign goods. T rise, and domestic consumers will s y from buying imports so the de rise and imports fall which ean net trade rises and aggregate demand do curve outwards.

- **State o orld Economy**
  A recession usually results in falling price level (disinflation and potentially d economy in recession is likely to have more competitive goods. Also, in a re to falling consumption of both foreign and domestic goods.

  If the world economy is in recession then domestic consumers will buy fewe consumption of domestic goods falling) and foreign consumers will buy few balance is unknown, i.e. whether imports fall more than exports leading to a exports fall more than imports, because exports and imports have fallen, ne does aggregate demand.

If France is in a recession, but the UK is not, the UK will see exports to Franc incomes have fallen. Equally, French goods will probably appear cheaper an French imports. With decreasing exports and increasing imports there is like

- **Degree of Protectionism**
  Governments may put in place protectionism in order to protect the domes competition. They do this by distorting the price of UK goods and/or the pri

  By giving subsidies, the government can reduce the price of UK goods; dema and the demand for imports will fall as domestic consumers switch to buyin imports decrease, meaning overall net trade increases and so too does dem

  By taxing imports, governments can increase the price of foreign goods rela consumers will switch to domestic g[illegible] demand for imports will fa too will aggregate demand

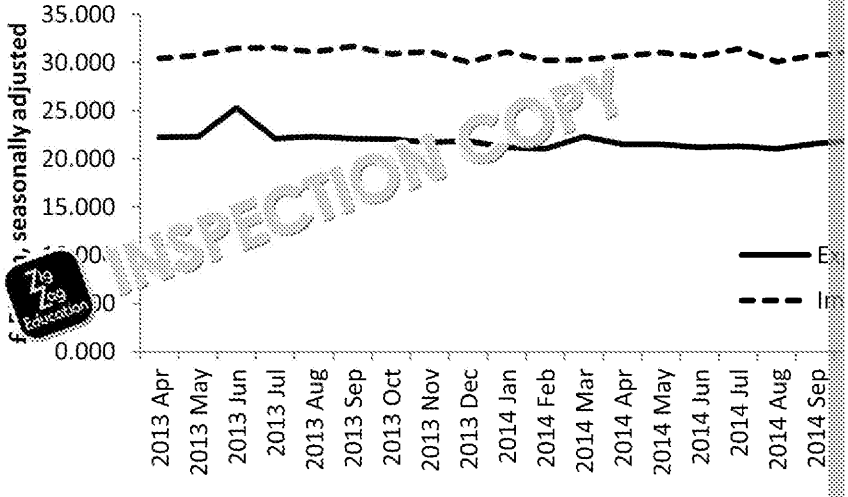
- **Non-price effect**
  The sa[illegible]ommodity would depend on its price because it is a homogeneous good. However, some countries may sell heterogeneous goods and therefore the sale of these goods wold depend on factors other than the price: 'non-price factors'. Countries may sell specialised equipment that has been patented. The result of this is that no other country or firm can make it, and therefore the export or import of this good will depend on countries' need to carry out the specialised task the machine is designed for and the machine's

> ***Commodity:*** *A good tha such as milk or wheat, ar little difference between e farmer is very similar to inability to distinguish be they are called 'homogene*
>
> *Goods that can be differen example, smartphones co goods because each smart system, design, tariff, ca*

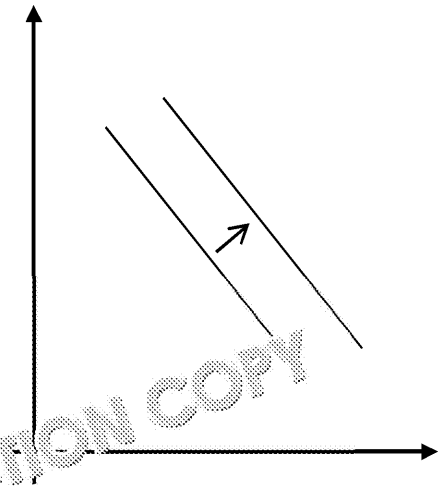
ACTIVITY

The chart below shows the recent history of the UK's volume o UK has consistently exported less than it imports in recent years; it has a neg about the effects of this disparity with reference to the ideas mentioned abov

Value of UK trade in goods April 2013 – April 2



Questions: Aggregate Demand



1. Sp[illegible] this diagram showing aggregate demand by labellin[illegible] axis.
   a) What has happened to this curve?
   b) i) What four main factors can shift the AD curve?
      ii) For each factor, explain 2–3 reasons why the curve wa[illegible]

2. Explain how rising interest rates can affect aggregate demand.

3. What is the wealth effect?

4. a) What is the relationship between savings and consumptio[illegible]
   b) What is meant by the marginal propensity to consume?

5. a) How does net investment differ from gross investment?
   b) A firm has five machines; three of them are old and the fir[illegible] them. The firm has invested in five more machines.
      i) What is the firm's net investment?
      ii) What is the firm's gross investment?

6. What does Keynes' idea of animal spirits refer to?

7. What is the Golden Rule?

8. Draw a graph for the relation[illegible]ip between consumption and r[illegible] on the x-axis).

9. [illegible] interest rates being on the y-axis, draw a graph to show t[illegible]
   a) Consumption
   b) Investment

10. If Marcy's income rose from £25,000 per annum to £30,000 per [illegible] for the year increased from £9,000 to £11,000:
    a) What is her marginal propensity to consume?
    b) If her marginal propensity to consume was instead 0.5, wh[illegible] consumption to?

Aggregate Supply (2.3

By the end of this topic, you should understand...

- ✓ The distinction between movements along and shifts of the AS curve
- ✓ The difference between short run and long run
- ✓ The factors that influence short-run aggregate supply
- ✓ The factors that influence long-run aggregate supply
- ✓ The different-shaped long-run aggregate supply curves
- ✓ Different causes of inflation
  - Demand-pull
  - Cost-push
- ✓ Why the money supply grows

In the last theme we looked at supply; in this topic we look at aggregate supply w economy. Just like the supply cur[illegible] a difference between *movements alo* movement along occurs [illegible] move to a different point on the curve, where curve moves [illegible] ion.

Aggregate supply is the sum total of all the supply curves for every firm, every m supply, firms would switch to producing the goods with the greatest price. Howe macro looks at aggregate supply, firms switching from one industry to another m to the overall supply from the economy. Aggregate supply links with Topic 1.1.4 w maximum productive potential were discussed.

There are various schools of thought within economics and some have conflicting exam you need to be able to differentiate between the Keynesian AS curve and t schools have different-shaped AS curves. Firstly, in this topic you need to unders short-run and long-run aggregate supply.

Short Run and Long Run

Short run: *at least one factor of production is fixed, they are not all variable*

Long run: *all factor*

> ***Be careful!*** *Long run and short run do not have a set length of time. They are instead the names given to periods with differing variables.*

Keynes said that the idea of the *long run* wa famously explaining that '*in the long run*, w serves a purpose to us, as economists, to di the short run. Let's consider an example:

For example *... [illegible]men has a fishing rod his garden (land) and, of course, himself ([illegible]). [illegible] people in his village have re you. The price of fish has increase[illegible]*

The fisherm[illegible]cia[illegible] crease his supply of fish. He buys more bait: one facto capital, lan[illegible]bour are still constant; this is the ***short run****.*

He buys a better fishing rod that allows him to catch bigger fish: another factor o and land are still constant; this is the ***short run****.*

He buys more fishing rods and asks his children to help him catch more fish: two f changed (labour has changed and capital has changed again); land is still consta

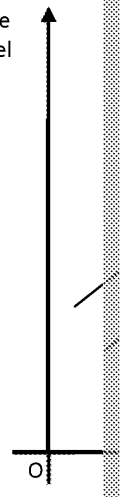
*The river also runs through his neighbour's garden. He decides to buy some of his ... increase the amount of river that he can fish from. Now, all the factors of produc... **long run**.*

Short-run aggregate supply is the total amount of goods and services supplied in ... Firms are able to change most of their factors of production to react to price cha... the total amount of goods and services supplied in the economy in the ***long run***. ... factors of production to react to price change. If all factors of production can be ... able to increase aggregate supply to meet its maximum productive potential. A p... supply (LRAS) curve means the economy is producing at its maximum productive ...

Factors that Influence the Short-run Aggrega... upply (SRAS)

These influences will affect firms in the short run ... they can change some of ... Short-run aggregate supply can easily be ... ed or decreased to react to chan... production.

The short-r... re... supply (SRAS) curve is upward sloping because all ... pply curves for all the firms in the economy are upwards sloping and when they all come together to create the aggregate supply curve, it creates an overall upward-sloping curve. In the short run, as output increases, firms' costs increase. This is because firms will have to pay extra (premium prices) to get workers to stay overtime and increase their order of raw materials. These increased costs are passed on to consumers in the form of higher prices.



The SRAS curve can be shifted up or down as shown in the diagram to the right. Shifts in the SRAS curve can be caused by various factors:

Raw Materials and Energy

If the price of the raw materials used in the production of a good/service increas... will increase. Firms will reduce supply at each and every price level. The short-ru... inwards if the costs of the raw materials increased.

Energy is an influential cost within the economy because all firms need energy to ... Factories and offices need electricity to light and heat rooms, and for capital such ... computers, for example. If energy prices increase, firms may cut back on supply. ... see the aggregate supply curve shift inwards.

Exchange Rates

The exchange rate will affect the prices of export... p... s and goods that are im... table-making company may import the ... f the exchange rate changes so t... then aggregate supply will fall ... firm ... not be able to produce the same num... price level.

...tes

1.2.9

The government may change the tax rate on certain goods or add ta... Topic 1.2.9; increasing a tax will increase the costs of production and ...

Factors that Influence the Long-run Aggregate Supply (LRAS)

In the long run all factors of production will be changed. Therefore only factors t
productive potential of the economy affect long-run aggregate supply.

Technological Advances

Technological advances tend to mean there is an improvement in technology and
More productive capital means output per unit is greater, and therefore the max
economy is greater and long-run aggregate supply will increase.

Relative Productivity

Productivity refers to the amount of output a single unit of a resource could prod
produce five units of a good in one working day, but thro[illegible] either training or ne
the worker could now produce eight units of a go[illegible] working day, the wor
increased. If the resources in an econom[illegible] more productive, i.e. they can
economy's long-run aggregate supply increase.

Education and Skills (Human Capital)

The ability [illegible] workforce is a constant variable and can only really be improve
economy, such as school leaving age. If the workforce is more educated or obtai
more productive. A more productive workforce will be able to produce more goo
run aggregate supply curve will increase.

Government Regulation

The government can add or remove regulations that will affect the efficiency of f
increases the level of health and safety in order to protect workers, then this cou
processes, making them less efficient, or stop potentially quick but unsafe proce
number of goods produced.

Demographic and Migration

The labour supply available to an economy is often fixed. If all workers are emplo
goods an economy can produce. Migration allows the supply of labour to increas
increase or decrease long-run aggregate supply respectively. The age of the popu
age is 18 to 65 by UK standards, and so if migration or simply time means the eco
above working age, then this will cause little increase to the maximum productiv
people, either from a previous baby boom or immigration, is likely to increase lo
because this has increased the supply of workers.

Competition Policy

If there is greater competition within markets then firms will have to attract mor
that are cheaper and/or better than their rivals. This will drive firms to find more
of producing in order to cut costs to obtain lower pric[illegible]es that increase co
encourage productivity gains and thereby incr[illegible] long-run aggregate supply.

How do Classical Economists and Keynesians Differ?

Classical economists believe that in the long run markets will always find equilibrium. In the labour market a fall in demand for labour (D_L) would lead to a fall in the wage rate and employment; the market adjusts. The diagram shows the demand and supply for the labour market with wage rates (price of labour) on the y-axis and employment (quantity of labour used) on the x-axis. If the demand for labour falls, the D_L curve shifts into D_{L2}, and employment falls as fewer firms are willing to pay this wage rate for workers. There is an excess of supply of workers and unemployed workers will adjust their 'wage expectations' to accept jobs with lower wages and employment rises again as firms are willing to employ more workers at these new (lower) wages for workers. The market is back at the same level, but there is no unemployment as those unemployed are not willing to supply labour at these lower wages.

Sticky Wages: This is the idea that wage rates will not change. It is difficult to lower wage expectations because workers are used to higher wages.

Other things, such as trade unions or minimum wages, can also prevent wages from falling.

Keynesians instead believe that when demand for labour falls to D_{L2}, workers will not adjust their wage expectations and the wage rate will not fall. This is 'sticky wages'. The excess supply of labour remains (unemployment) and will only shrink when demand for labour increases.

These two schools of thought and their differing assumptions create two different long run aggregate supply curves (LRAS).

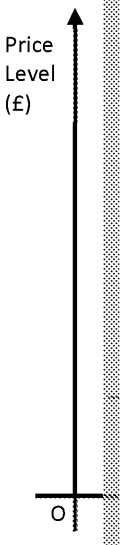
Classical LRAS Curve (C.LRAS)

Classical economists believe that aggregate supply is fixed. If all resources are being used efficiently, then the economy is on the PPF curve and it is not possible to produce any more goods. At this point aggregate supply is price inelastic. The economy cannot produce any more goods/services and so aggregate supply will not change with change in price. If aggregate demand goes up but aggregate supply cannot increase to meet this, then the rationing function of the market comes into play (Topic 1.2.7). If demand increases then more people will buy goods; supply can't increase so there will be a shortage of goods. Some consumers would be willing to pay higher prices to ensure they get the goods. Firms, assuming perfect knowledge, will increase prices but their supply won't change.

The diagram shows that any increase in AD will only result in price-level changes and not output. The equilibrium point is always at full employment (where resources are used efficiently) and the market will always revert back to this point on the LRAS. The curve is vertical at full employment because at this point economists believe the economy to be working at its capacity. Some unemployment exists. Some explanation of the natural rate of unemployment

Keynesian LRAS Curve (K.LRAS)

John Maynard Keynes built a new long-run aggregate supply curve, which could explain a market that had reached equilibrium but was below full employment. The Keynesian AS curve assumes wages are sticky.



Section A of the curve shows an inelastic aggregate supply. At any point on this curve, the economy is at full employment (aka the economy is at full capacity) and any increase in AD will only result in increasing price and no increase in output. This is because, in order to increase output, firms must offer higher wages than existing wages to encourage workers to leave their jobs and work for them instead. Overall, output will not rise because the resource has simply moved from producing one good to producing another, but prices have gone up.

Section B shows an inelastic aggregate supply. Here the economy is likely to be described as resources are unemployed. At this point there is spare capacity to grow. Output can increase without increasing prices. This is because there is no competition for resources and a firm can easily gain more. Overall output of the economy will increase but price level will not.

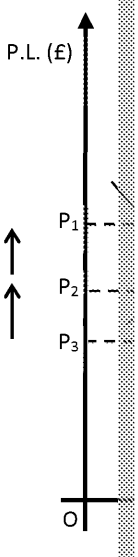
Section C, the middle section, is the part that brings the two extremes together. There is a trade-off between increased GDP and higher price level. This is a well-known relationship that inflation will increase if there is economic growth. This will be discussed later in Theme 4.

Classical economists believe equilibrium would always gravitate towards full employment as they believe everything will adapt to the changes, such as workers accepting lower wages. They believed there were frictions within the market that would prevent it from adjusting quickly. This meant that the market could be in equilibrium (where AD meets AS), but this could be below full employment. Unemployed workers won't accept lower-paying jobs and so remain unemployed. They don't have enough money to increase their consumption and AD is unlikely to move. Prices stay low, costs of production are low as there is no increasing demand to meet, so firms are unlikely to change their supply. There are still spare resources.

LRAS and SAS Curves (Adapted Classical)

Classical economists believe the market will gravitate towards equilibrium at full employment. They believe this will happen straight away. Some classical economists believe there may be a time lag before the market will find equilibrium. Friedman is a famous economist from the monetarist school of thought who did not agree with Keynes and created this model as a response.

The classical model can be adapted to include a short-run aggregate supply (SRAS) curve to explain the market when it is temporarily out of equilibrium and not on the LRAS curve. This can explain the market not only when it is at full employment, but also when it is producing below full employment (outside the PPF). If aggregate demand increases and shifts the AD curve out, then the economy will move along the SRAS curve so that more goods are produced to meet this increase of demand (Y_e to Y_1). Production is above full employment. This can be done temporarily by, for example, paying overtime to workers to encourage them to work more hours. However, overtime pay for 'out-of-hours work' is more expensive and it is unlikely firms will stay at this point. Workers will increase their wage expectations and the wage rate will increase. This means the costs of production will increase and the SRAS curve will shift back in until it meets the equilibrium point C on the LRAS curve.



Causes of Inflation

Now that you have learnt about the AS and AD curve, it is possible to explain the AS/AD diagrams (see overleaf). Factors that cause inflation can be separated into affect aggregate demand and those that affect aggregate supply.

Demand-pull Inflation

Demand-pull inflation occurs when aggregate demand increases and pulls up the diagram 1 where AD_1 shifts out to AD_2 and prices rise from P_1 to P_2. This happens supply, producers will find they are running into shortages. In order to ration the pulled upwards with demand. It is more prominent when the economy is near fu people have an income and can therefore go out and spe

Demand-pull inflation occurs when any of the factors of aggregate demand incre rise, maybe because income tax has fallen then consumption will increase and t outwards. If confidence or expectations are high then firms and consumers are and investment will push the AD curve outwards and pull up price level.

Cost-push Inflation

Cost-push inflation occurs when aggregate supply decreases and the price level i seen on diagram 2 where AS_1 shifts into AS_2 and prices rise from P_1 to P_2. This hap increase. In order to cover these new costs, firms will push the costs on to the co higher prices.

Cost-push inflation occurs when any of the factors of production increase in cost materials such as oil are one of the most common sources of cost-push inflation. rates – perhaps due to trade union pressure – which increase firms' costs and pu rises can also cause cost-push inflation if firms have to pass the tax onto consum

Growth in Money Supply

Another cause of inflation is an increase in the supply of money. This causes infla demand or supply. Remember the circular flow of income diagram; if there was a economy would inflate.

If the money supplies increase then there is more money around to purchase goo exceeds the number of goods and services in the economy then this can cause in 'there was too much money chasing too few goods'. By this, it is meant that if pe there are goods and services available to purchase, consumers will end up offeri ensure they can have them. Firms will then rise their prices to meet their increas to meet increased demand). Also, the demand for labour will increase as firms at meet this increased ability to purchase goods and services. This will cause a rise costs of production.

Diagram 1: Demand-pull inflation

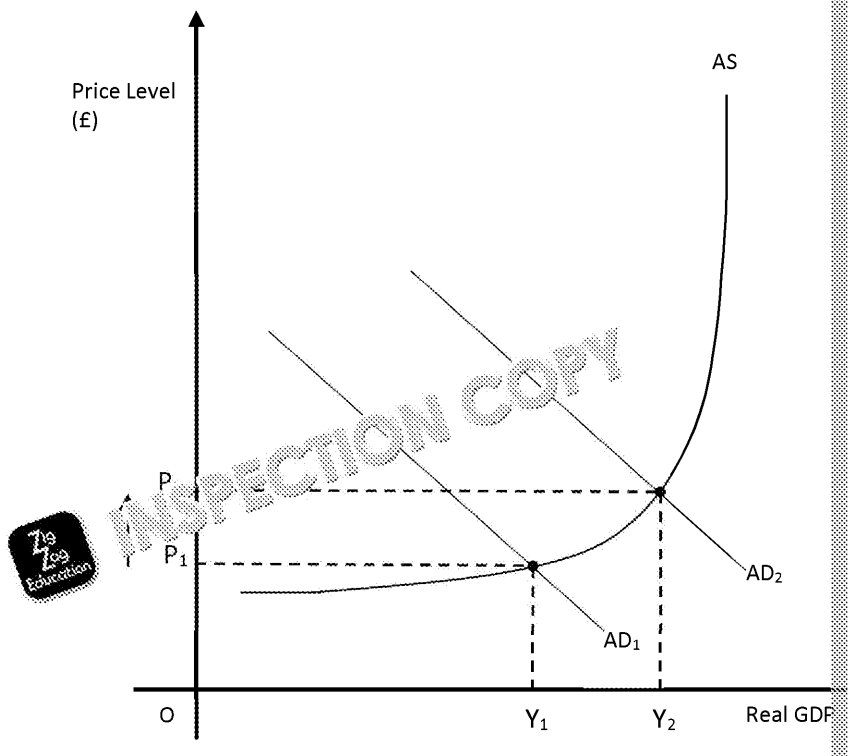
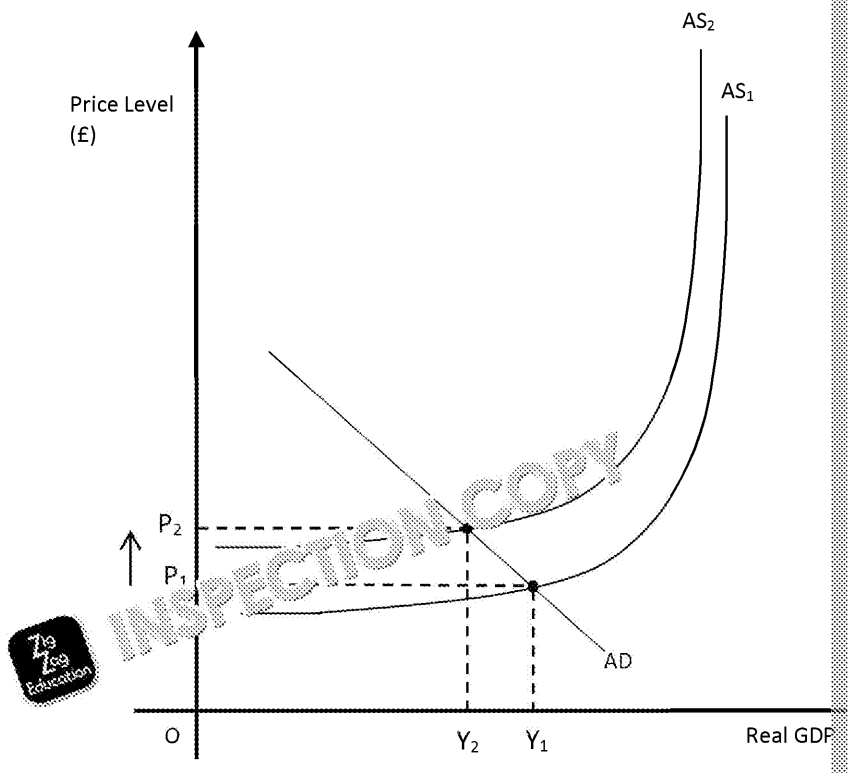
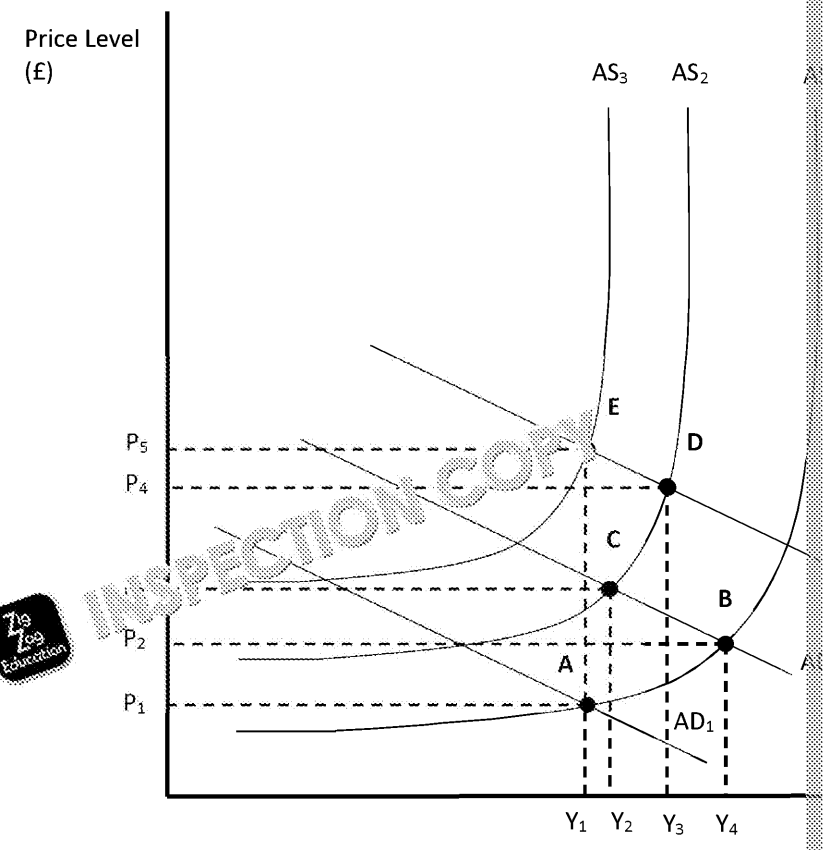


Diagram 2: Cost-push Inflation

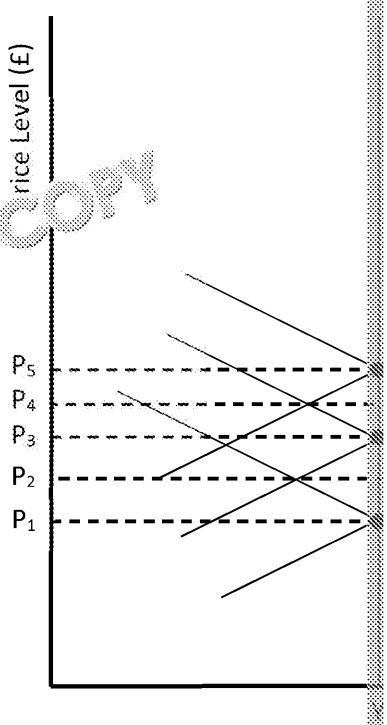




Further Your Economic Knowledge

Wage–price Spiral

The wage–price spiral is a process that occurs when demand-pull and cost-push inflation occur in tandem. Let's start at **Point A**. Here, prices are at P_1. Demand in the economy increases for whatever reason and so the aggregate demand curve shifts from AD_1 to AD_2. The economy is now producing at **Point B** and prices have risen to P_2. The cost of living has gone up and workers demand higher wages from the employers. The aggregate supply curve now shifts in to AS_2. The economy is producing at **Point C** and there has been cost-push inflation, prices have risen to P_3. Workers have spent the extra money from their increased income, they can increase their consumption and the aggregate demand curve pushes out again to AD_3. Now the economy is producing at **Point D** and there has been further demand-pull inflation, prices have risen again to P_4. To cover these rising prices, workers will demand higher wages, causing the aggregate supply curve to shift into AS_3. Now the economy is producing at **Point E** and there has been cost-push inflation, pushing the price level up again to P_5. This will occur again and again. This is shown graphically above and below using a Keynesian AS/AD curve (above) and a classical AS/AD curve (below).



Questions: Aggregate Supply

1. a) When is a firm in the long run and the short run?
   b) What factors could affect long-run aggregate supply?
   c) What factors could affect short-run aggregate supply?

2. a) How do Keynesian and classical assumptions in the labou
   b) i) Draw a classical aggregate supply diagram.
      ii) Explain what the curves show.
   c) i) Draw a Keynesian aggregate supply diagram.
      ii) Explain what the curves sho

3. a) What are the th of inflation?
   b) Using explain these causes.

Exam-style Questions 2: Aggregate Demand and

1. Define the term 'disposable income'.

.....

.....

.....

2. An individual receives a windfall of £1,600. Their marginal propensity
Calculate how much of the extra income the ind ual will use for c

.....

.....

.....

3. Suppose that the individual chooses to save all of the extra income an
the MPC be?

.....

.....

.....

4. Explain **one** factor that may influence the level of aggregate investme

.....

.....

.....

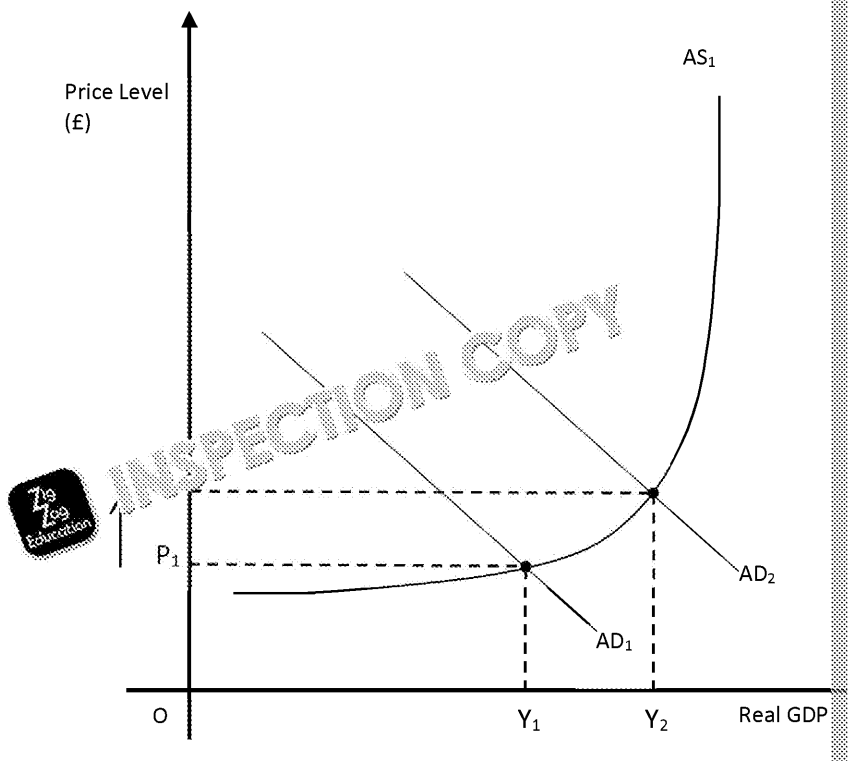
5. Define the term 'aggregate supply'.

.....

.....

.....

6. What type of inflation is shown by the diagram below?



.....

.....

.....

National Income (2.4)

By the end of this topic, you should understand...

- ✓ The multiplier
- ✓ The idea of real national output
- ✓ The difference between wealth and income
- ✓ The circular flow diagram
- ✓ The difference between an injection and a withdrawal
- ✓ The three injections and three withdrawals

One of the most important ideas that you will cover in macroeconomics is the co
short, it is the final total output of all goods and servic[illegible]oduced in one year in
in depth. When starting to think about the ide[illegible] it's in[illegible]tant to distinguish betw
boxes below.

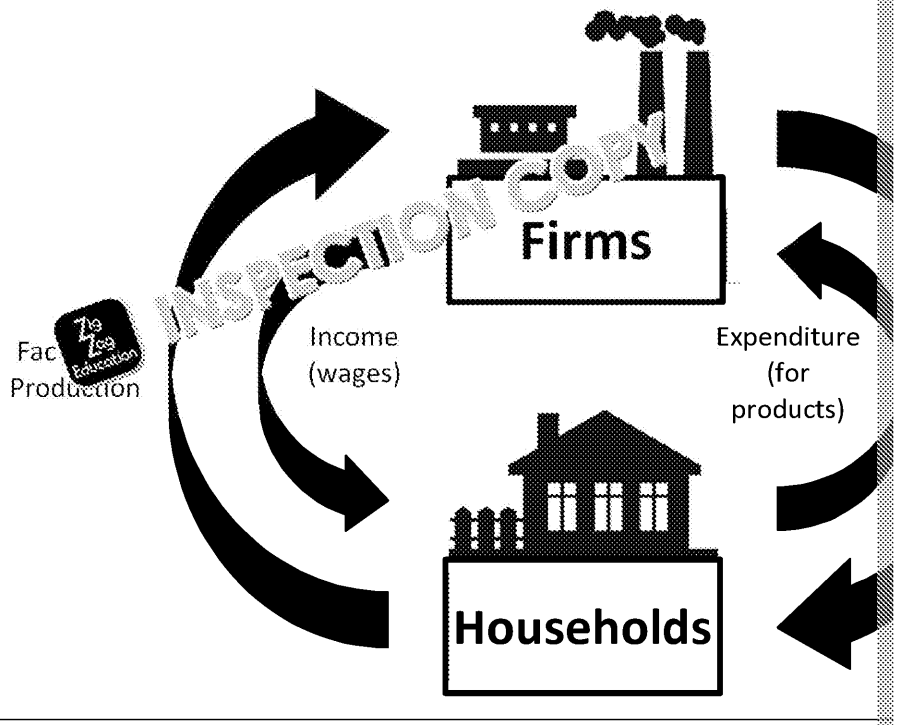
Income is the money th[illegible]rs receives in exchange f[illegible]th[illegible]g. wages from labour or the rent fro[illegible]g a property. It moves from one agent to another; it is seen as a flow of money.

Wealth is the money that a pe[illegible] from wages or investment retu[illegible] is seen as a stock as it is money savings accounts or items such

Remember: *National income is the total amount of income flowing around the e[illegible] used to purchase goods and services, national income can also be used to show t[illegible] or the total amount of output.*

Wealth can create income; the money and items stored can generate a flow of m
example to think of is a house. The house is wealth, it is a stock/store of wealth,
to other people you can receive an income back from it in the form of rent.

With this in mind, let's look at the diagram that shows the circular flow of incom
assumes a very simple economy (remember the importance of assumptions in T
and no interaction with other economies, there are only households and firms. B
people of any amount, one individual or a family. Households receive income fro
and spend this income buying the goods and services produced by firms. Firms re
as labour, from households and produce goods and services that are bought by c
and round the economy from firms to households.



Injections and Withdrawals

This is a very simplified model of the economy. In reality, firms do much more th produce goods; similarly, consumers do more than spend their wages on goods. that may intervene and we do interact with other economies.

Think of the circular flow of income diagram as a circular flow of water. Waters f income, but you can 'inject' more water into the system and the system will gro water from the system and the system will shrink. If the total sum of injections is withdrawals, then more money will be flowing into the economy and so it will gr withdrawals is bigger than the total sum of injections, then more money will be f so it will shrink.

***Withdrawals** are things that economic agents (within the system) do with their incom of the circular flow. By taking money out of the circular flow it is no longer going aroun*

***Injections** are things that outside economic agents do with their incomes that result in circular flow. There is now more money going around the system.*

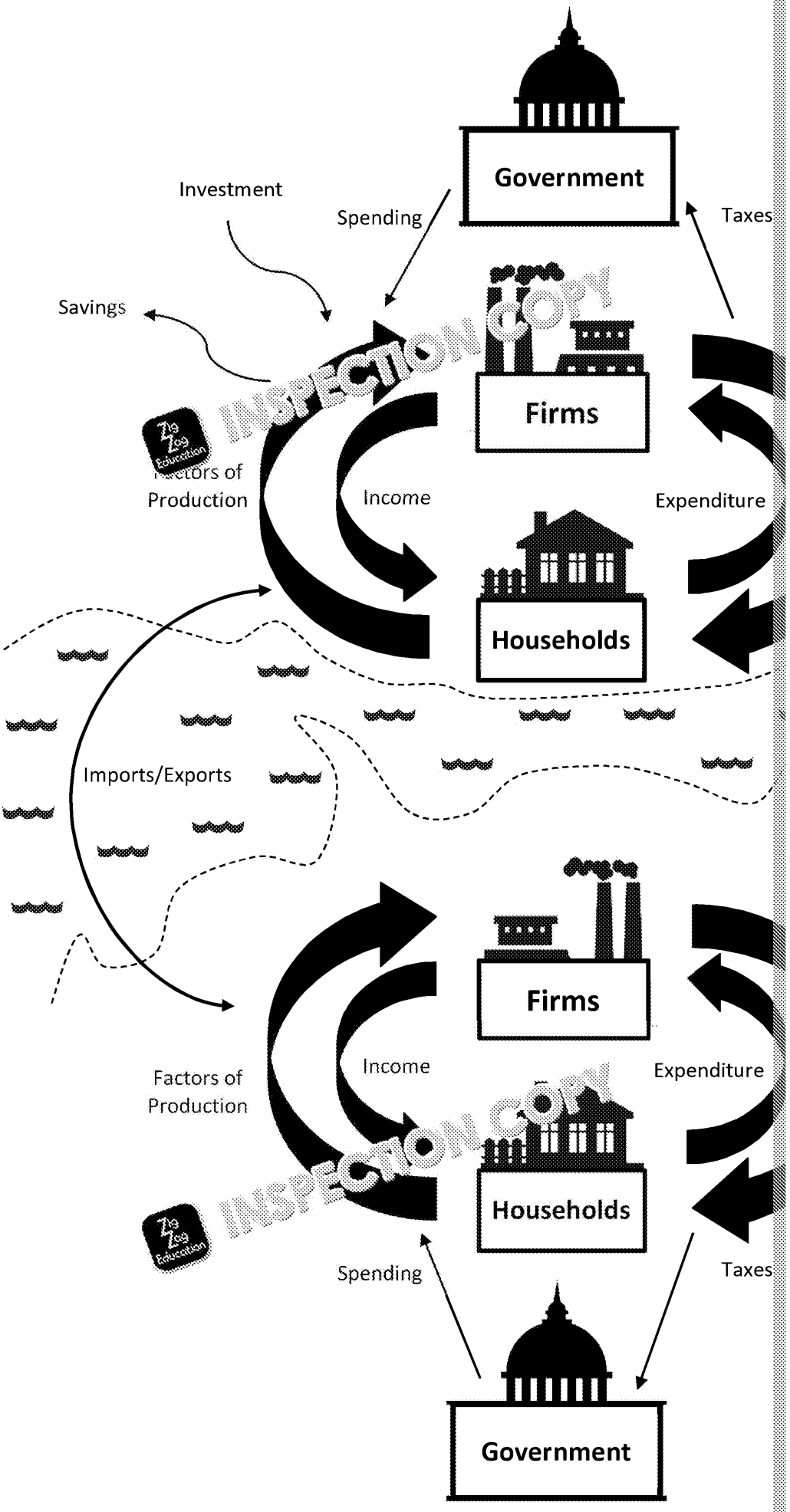
Injections and withdrawals can be grouped together into opposite pairs:

- **Savings and Investments**
  Savings are a withdrawal because instead of spending income and keepi economy, people may instead put it into a savings account. This takes it o however, are injections because they put money into the economy in or production. The level of savings and investments can be influenced indir interest. If interest rates go up, people are more likely to save because th their savings account. If interest rates go up, investment is likely to fall b back more money when they borrow it. To further your knowledge and u marginal efficiency of capital curve that follows later.

- **Taxes and Government Spending**
  These injections and withdrawals can be directly influenced by the gover because instead of letting income flow around the economy, a proportio system and given to the government. Government spending is an injectio government puts into the economy in order to provide things such as sch

- **Imports and Exports**
  In reality our economy does interact with other economies. When we buy foreign goods we send money from our economy to the other economy and receive a good from their economy into ours. The good is an imported good but the money for it is a withdrawal. We may sell a good that is bought by an economic agent in another country. In this instance our economy receives money, an injection and our good is exported to their economy.

A circular flow diagram of two economies with injections and wi



Real National Output

Using diagrams 1 and 2, this section will explain how changes in aggregate demand and supply will change the national output in an economy. This concept is similar to the micro demand and supply diagram.

ACTI

cause
diagr

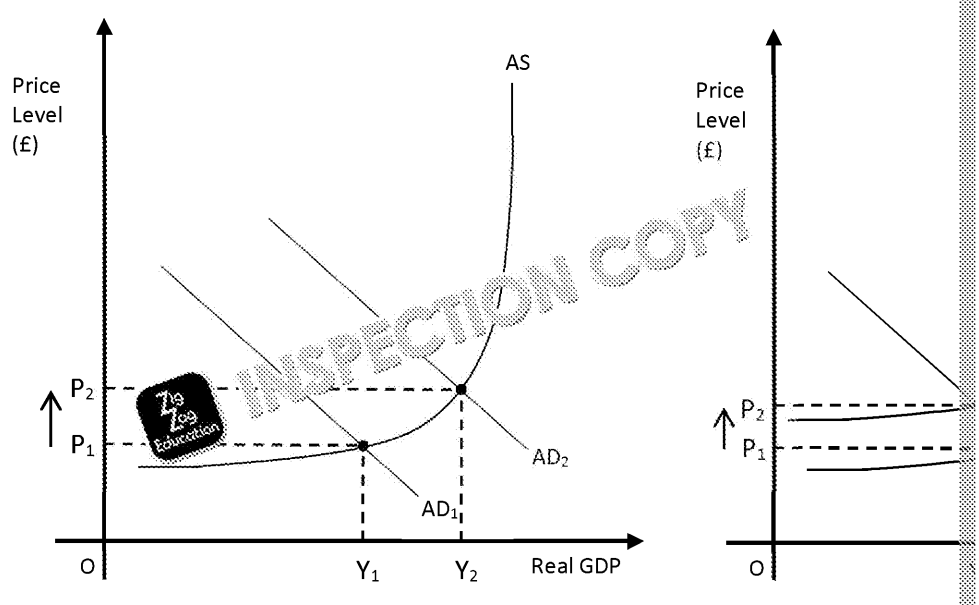


Diagram 1

Real national output is the output of the economy once inflation has been accou
above inflation (the value of the total number of goods is greater, even including
indicates an increase in amount of goods and services produced, i.e. economic gr

Equilibrium levels of real national output occur when planned aggregate demand
supply and the two curves intersect. A change in aggregate demand or aggregate
equilibrium level of real national output.

If aggregate demand has increased from AD_1 to AD_2, then firms within the econo
meet this new demand for their goods. This results in a movement along the AS
where the new AD curve intersects it. At this point the market is in equilibrium a
has increased.

If aggregate demand falls from AD_2 to AD_1, then firms within the economy will de
excess unconsumed products they would be left with from the lack of demand. T
the AS curve until it meets the point where the new AD c intersects it. At thi
equilibrium again and real national output has de

If aggregate supply increases, ha be tax rates have been cut or technol
production, then firms supply goods at a cheaper price. This is more l
levels of co a market as the increase in customers may increase
price would er prices more consumers are willing to buy the good, which
AD curve unti it reaches the new AS curve. The market is in equilibrium again an
has increased.

If aggregate supply decreases, perhaps because a natural disaster has damaged
then costs of production will increase and as a response firms will increase price
consumers are willing to buy the good, which results in a movement along the A
AS curve. The market is in equilibrium again and real national output has decrea

The Multiplier

Let's start with an example to illustrate the idea of the multiplier:

> *The government decides to build more colleges and sixth forms to encourage education. They have £20 million that they give to various building contracto £20 million into the economy. The economy grows by £20 million. The contra builders in return for their labour. The income flows from firms to household households will then spend their incomes on bills to buy electricity for their h from households to firms.*

As the money goes round and round, it generates more and more income. The economy absorbs the original injection and gr[illegible] income then flows around the economy and the econo[illegible] again.

Th aft an or

The money may be saved [illegible] spent, or it may be spent on imports instead of do[illegible] As firms and households receive the income, it will be taxe[illegible] means the economy will keep growing and multiplying until al withdrawn.

The size of the multiplier depends on two things: the amount of income that is in be withdrawn each time. If injections are large, then the economy will grow by a are large then the economy won't grow by much each time. This creates the mul relationship between leakages and withdrawals and the proportions of each.

A formula for the multiplier can be derived to give policymakers an idea of how m with an injection. Something multiplied by 1 equals the same amount. The multip but by a little less than the original amount because some income has been leake 1 divided by the amount of income that is likely to be withdrawn. This is shown b

$$\text{Multiplier} = \frac{1}{\text{marginal propensity to withdraw}}$$

Marginal propensity to withdraw (MPW) is the proportion of income that will be The income withdrawn from the economy will be spent differently on each withd different marginal propensity. The higher these marginal propensities, the more the multiplier will be smaller and the economy won't grow by as much.

The marginal propensity to save (MPS) = *the proportion of income that will be leake*

The marginal propensity to tax (MPT) = *the proportion of income that will be leaked*

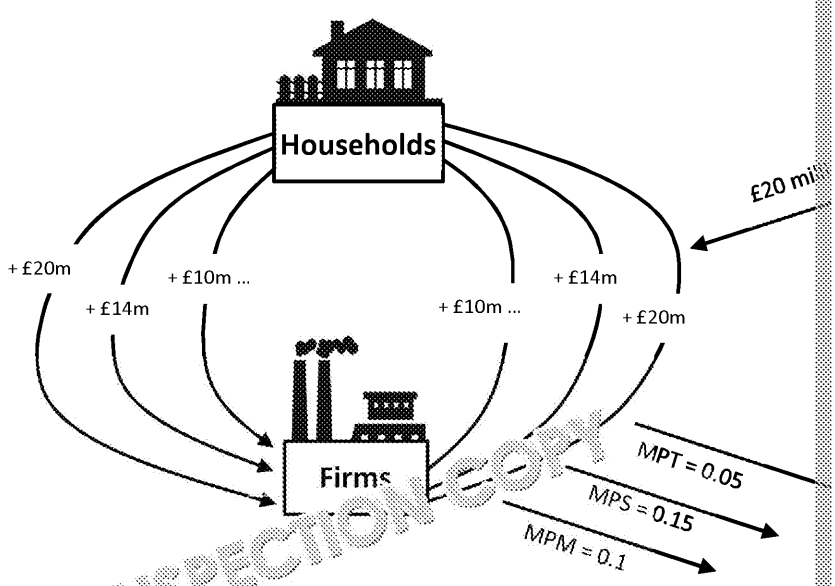
The marginal propensity to import (MPM) = *the proportion of income that will be l*

Above are the marginal propensities to withdrawals. Adding these marginal pro marginal propensity to with[illegible] MPW = MPS + MPT + MPM). The marginal p somewhat the opposite of the marginal propensity to withdraw. MPC is the prop spent on co[illegible]tion of goods and services – the proportion of income that will take away th[illegible]C, then what is left will be the proportion of income that is with through either taxing, saving or importing.

Below are the two formulas you need to know for your exam to work out the mu economy will grow by from an injection.

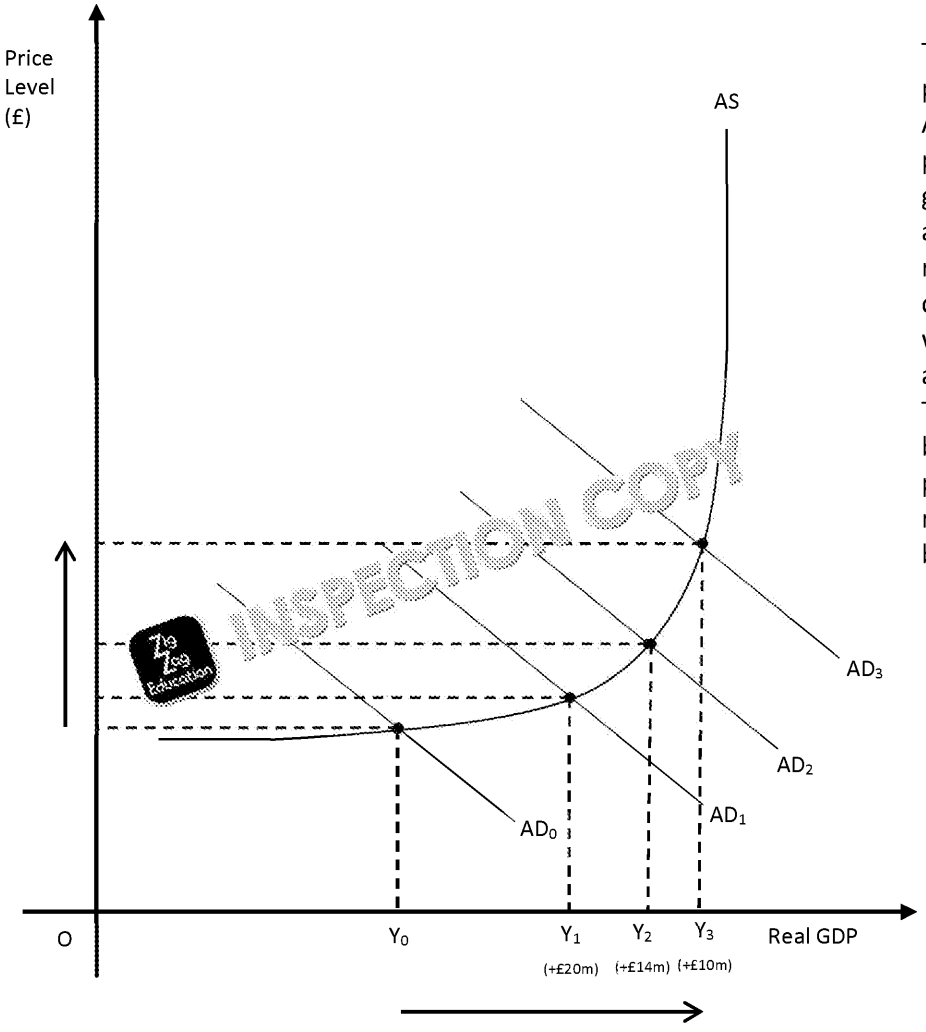
$$\mathbf{MPW} = 1 - \mathbf{MPC} = \mathbf{MPS} + \mathbf{MPT} + \mathbf{MPM}$$

$$\text{Multiplier} = \frac{1}{\mathbf{MPW}} = \frac{1}{(1 - \mathbf{MPC})}$$



If, in the ex… given at the beginning, MPT was 0.05, MPS was 0.15 and MPM… be 0.3 and t… multiplier would be about 3. The economy would increase output … injection. £20 million would go round the economy and for every £1, 5p would b… saved and 10p would be spent on imports. So 30% of the £20 million would be le… £14 million to be circulated round the next time. Then 30% of the £14 million wo… leaving about only £10 million to circulate round the next time. This goes on and … leaked and the economy would have grown by £60 million.

So how does this link with aggregate demand? Every time the income flows arou… demand curve is shifted out. Using the same example, the Keynesian AS/AD diag…



Th… pu… AD… pr… go… an… ro… cu… wh… an… Th… be… pr… mi… by…

Questions: National Income

1. What is the difference between wealth and income?

2. a) What is an injection and what is a withdrawal?
   b) List and explain the six injections and withdrawals.

3. a) Draw a circular flow diagram with all the injections and wi
   b) Explain how income flows around the economy.
   c) What would happen if injections were bi ger than withdra
   d) What would happen if the gover ment increased the tax ra

4. What is the multipli

5. is by the marginal propensity to…
   e?
   b) tax?
   c) import?

6. If the marginal propensity to save was 0.1 and the marginal pro
   a) What would the marginal propensity to tax be if the margin 0.5?
   b) What would the multiplier be?
   c) If the government injected £10 million into the economy…
      i) How much would the economy grow by?
      ii) Draw a circular flow diagram to show the path of this £ the economy.
      iii) Show this using an aggregate demand and aggregate s

Economic Growth (2.5

By the end of this topic, you should understand...

- ✓ The factors that cause economic growth
- ✓ The distinction between actual and potential growth
- ✓ The distinction between actual growth rates and long-term trends in growth rates
- ✓ The effects of economic growth on consumers, firms, the government and living sta
- ✓ The positive output gap
  - Where this is on the trade cycle
  - How this can be illustrated on an AS/AD diagram
  - How this can be illustrated on a PPF
  - The characteristics of a boom
- ✓ The negative output gap
  - Where this is on the trade cycle
  - How this can be illustrated o[n] AD diagram
  - How this can be illustrated [on] PPF
  - The charact[eristics] of a recession

Causes and Impacts of Growth

We have already introduced the idea of growth and national income, and how it this section we will think about *changes* in growth rates. Growth is not constant. consecutive quarters, let alone years. We will talk about the general pattern that time and offer explanations for the variations that we observe.

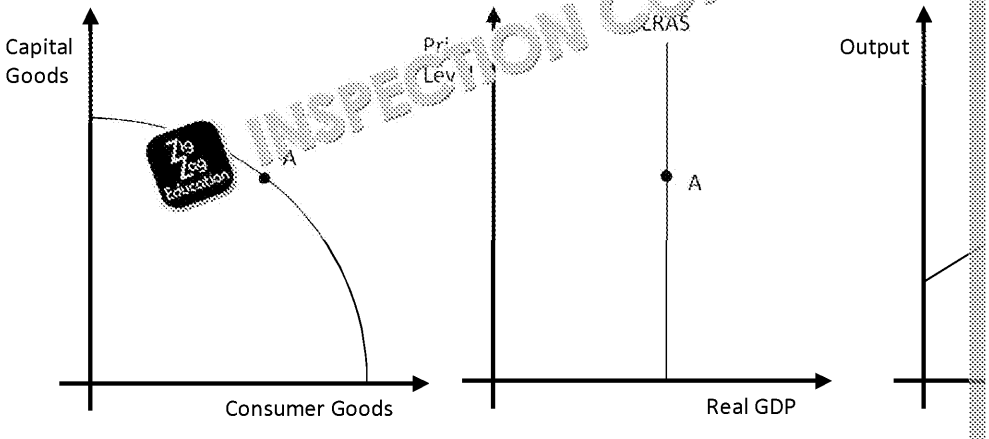
Actual growth *is the true amount of growth that is observed in real life.*

Potential growth *is the predicted growth of the economy in the long run, observing its previous trend. The potential growth of an economy is shown by the 'trend growth rate' line on the diagram.*

Actual growth rates *a economy is growing in*

Long-term trends in g *of growth of an economy fluctuations. The long-t shown by the 'trend gro*

Potential growth is also shown on a PPF diagram and the classical economic view Because the PPF shows the maximum productive potential of an economy, when shows the economy has changed all factors of production (is in the long run) in o its resources available to produce as many goods/services as it possibly can and maximum potential growth.



Factors that Cause Growth

Factors that cause the long-run aggregate supply to change or shift the PPF will cause economic growth to change in a similar fashion. All these factors are summarised below. In a nutshell, however, anything that increases the number of goods and services in an economy or improves the ability of factors of production will cause economic growth.

The level of g
from an incre
depends on t
the position
diagram. If th
capacity, a gr
in a large inc
increase in re

- **Technological Advances**
  If technology improves, it improves the ability of factors of production. This improves an economy's productive potential grow as it can produce more goods and service[illegible] the resources ava
- **Education and Skills**
  This is an investment in human [illegible] and will create a more productiv economy to grow and produce more goods and services in the long run
- **Government [illegible]**
  By [illegible]ing laws and legislations, a government can affect the efficienc in[illegible]nt or promote competition and innovation which will improve or create new goods that need fewer inputs. This will allow an economy services, bringing the potential to grow economically.
- **Demographic and Migration**
  Migration and changing the demographic of an economy will change th economy. Generally, populations grow over time and so the economy w
- **Investment**
  Positive net investment will create economic growth, whereas gross inv maximum amount an economy can produce. This highlights the criteri growth-related investment. Investment in research and development, h will increase the efficiency in resources.
- **Natural Disasters or War**
  Natural disasters and war will cause an economy to lose resources as th taken out of production and instead used for war.
- **Export-led Growth**
  For some countries, such as China, the high levels of exports are what fu called export-led growth. For these countries, international trade is high income from their foreign trading partners is what boosts their econom the injections would cease and the economy would not grow.

Effects of Economic Growth

Consumers and Workers

- Increased growth means the economy is expanding and there will be a cr people will have incomes and the negativities associated with unemploy
- Increased incomes mean people can increase their savings and increase t
- Increased incomes mean [illegible] consume more goods they desire.
- Economic growth [illegible]rms will enter the market or increase their p more goods [illegible]e for consumers with the potential of new goods the

Firms

- Economic growth indicates firms have increased production or new firms
- With increased production, firms will gain more revenue and higher prof
- Firms will have taken and are more likely to invest in improving and incre

The Government and Economy

- High employment means expenditure on benefits has fallen.
- The government will also receive more tax revenue from income tax.
- High levels of consumption mean the government will receive more tax r
and services.
- More firms or increased production means the government will receive m
- Expectations and confidence will be higher.
- Higher expectations and higher confidence will increase investment and c
- Economic growth usually entails inflation. This means UK prices will appe
goods. UK exports will fall and imports will rise; this is likely to worsen th

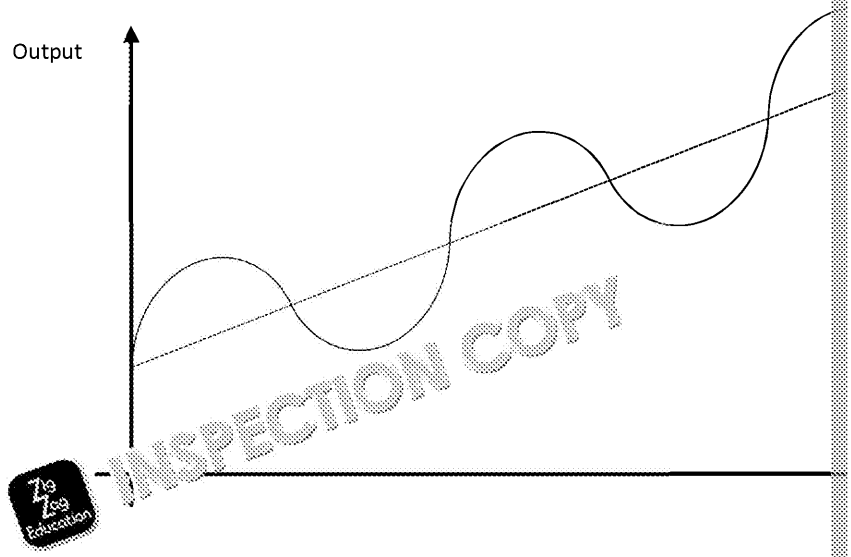
Living Standards

- Economic growth indicates higher employment which should decrease th
an economy.
- If more people have jobs, this should reduce income inequality.
- Economic growth is associated with increased living standards, although
not the case.

Trade (Business) Cycle and Output Gaps

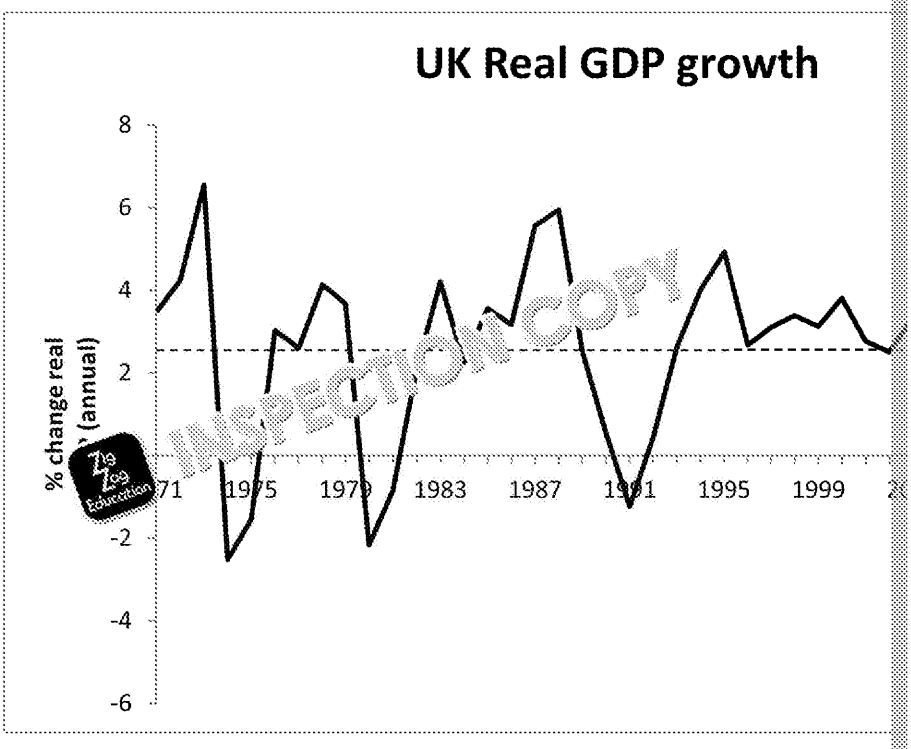
In order to follow the trend growth rate, an economy needs to have economic st
measures of macroeconomic performance remain steady and there should be no
price, unemployment, growth and balance of payments. The economy should hav
run equilibrium. However, in reality it is difficult to keep these variables unwaver
swing above and below this trend rate.

The diagram below shows this idea, known as the trade cycle or business cycle, i
average, or trend, growth is a 'line of best fit' through the middle of the wave:



ACTIVITY

Compare the diagram of the trade cycle with the real observed p
between 1971 and 2014: (the dotted line shows the average annual growth rate)



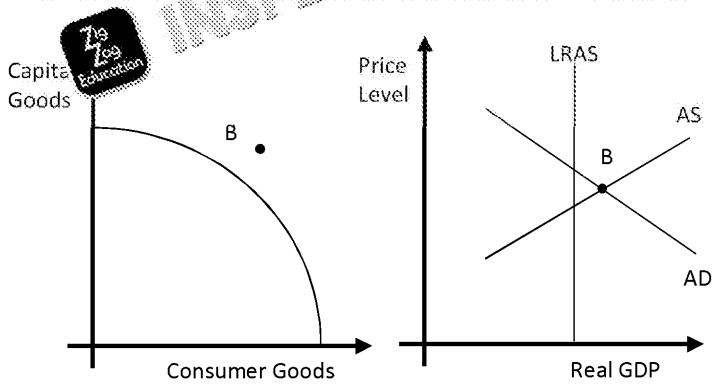
The table below summarises the effect of each stage of the cycle on various econ

	In Recovery	In a Boom	In Rec
Confidence and Expectation	Remain low, but begin to rise	High	Remain hig begin to fa
Unemployment	Starts to fall	Barely any	Starts to ri
Inflation	Remains low, but begins to rise	High inflation	Disinflatio
Exports and Imports		UK prices are high, exports fall and imports rise	
Gov. Spending on Benefits	Begins to fall as employment rise	Lo	Begins to f people are redundant
Taxation	B as sumption, investment and job creation increase	High	Begins to f people sto spending a investing a incomes fa

An output gap occurs whenever there is a difference between trend growth and a
measure these output gaps for a variety of reasons. Firstly, measuring actual gro
Topic 2.1.2 to remind yourself of the difficulties of measuring economic growth.
a theoretical concept and much like the AS and AD curve, they are hard to place
equations have been constructed to eliminate the fluctuations in actual growth i
Some equations attempt to count the number of resources that exist in the coun
productivity in order to find an economy's maximum productive potential. Howe
the output of every individual resource, the results can only be an estimate. The
complex to collect accurate figures.

Booms: Positive Output Gaps

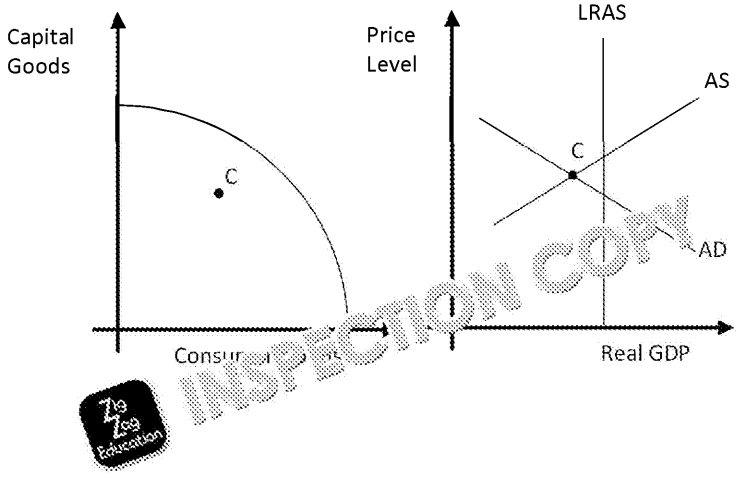
A positive output gap is when the economy is producing above its long-trend gro
economy is producing beyond its PPF, i.e. it is using more resources than it curre
capacity. An economy can do this in the short run by, for example, employing wo
often associated with high levels of inflation but low levels of unemployment. Th
being used and there is high demand from increased incomes.



Recover

Recessions: Negative Output Gaps

A negative output gap is when the economy is producing below its long-trend gr
economy is producing within its PPF, i.e. there are unemployed resources within
with spare capacity. Recessions are often associated with low levels of inflation b
This is because resources are not being used and confidence is low.



Recessio

Questions: Economic Growth

1. Distinguish actual and potential growth.

2. What factors cause economic growth?

3. Why is international trade important for countries with an exp

4. Draw a business (trade) cycle diagram.
   a) i) Label the positive output gap(s).
      ii) Illustrate this gap using an AS/AD diagram.
      iii) Using the concept of capacity, explain what is happen
      iv) What is happening to inflation, unemployment, confi
      budget throughout the output gap?

   i) Label the negative output gap(s).
   ii) Illustrate this gap using an AS/AD diagram.
   iii) Using the concept of capacity, explain what is happen
   iv) What is happening to inflation, unemployment, confi
   budget throughout the output gap?

5. What are the effects of economic growth on consumers, firms,
   standards?

Macroeconomic Objectives and

By the end of this topic, you should understand...

- ✓ The seven macroeconomic objectives of the government
- ✓ Monetary policy
  - The monetary instruments used
  - The Bank of England as the operator of monetary policy
- ✓ Fiscal policy
  - The fiscal instruments used
  - What is meant by fiscal deficit and surplus
- ✓ The USA's response to the Great Depression
- ✓ The UK's response to the global financial crisis of 2008
- ✓ The difference between market-based and interve[illegible]thods
- ✓ Various supply-side polices that are used
- ✓ How the policies can be illustrated [illegible]AD diagram
- ✓ The strengths and weakness[illegible]d-side and supply-side policies
- ✓ The conflicts and trad[illegible]may exist between objectives and policies
- ✓ The sho[illegible]run

First and fore[illegible]ost policymakers strive for growth; they want the country to be w[illegible] look at how governments aim to achieve this objective, and others, and what too[illegible] when the economy starts to shrink.

Possible Macroeconomic Objectives

The government is tasked with steering the economy with the aim of making the [illegible] and raising living standards. Higher growth and stability are the keys to this but p[illegible] other factors too. The main objectives of government economic policy can be su[illegible]

1. **Economic growth**
   Economic growth indicates more jobs, increased income and greater opport[illegible] sustainable level of economic growth.

2. **Low unemployment (less than 5%)**
   The government aims to have full employment because this indicates the ec[illegible] productive potential. In the UK, 5% is considered the natural rate of unempl[illegible] level the government aims for.

3. **Low and stable rate of inflation (less than 2%)**
   Price stability is important for economic agents to function properly. As disc[illegible] create a stagnant and potentially diminishing market; therefore the governm[illegible] levels of inflation at around 2%.

4. **Balance of payments current account equilibri[illegible]**
   A balanced current account means the[illegible] a balance of injections and withd[illegible] than the other it can cause the [illegible]y to boom above or deflate below its

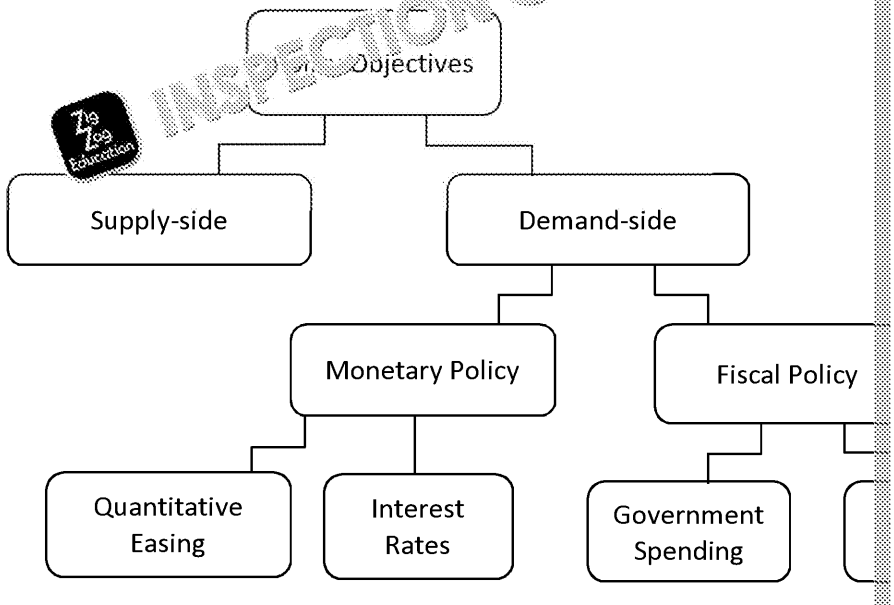
5. **Balanced governm[illegible]dget (tax revenue = spending)**
   The go[illegible]er budget refers to the levels of government spending compa[illegible] High d[illegible]els are unsustainable for a government and can lead to financi[illegible] recession has highlighted. In order to have sustainable government finances need to equal spending.

6. **Protect the environment**
   In order to meet growing demand from infinite wants and population growt[illegible] resources are used up, leading us to a bottleneck. Without a healthy environ[illegible] cease to function, whereas a healthy environment is beneficial for well-bein[illegible] Therefore it is imperative to protect and maintain it.

7. **Greater income equality**
   A more equal distribution of income creates a fairer economy and allows th
   more efficiently to increase living standards; however, a gap is still needed i
   Reducing relative poverty will create greater income equality.

The main government objectives can be achieved using various policies. Each po
instruments'; this means variables that the government can control in order to m
achieve the various policy objectives. These instruments control the economy by
demand or aggregate supply.

Policies that use instruments to influence aggregate supply are called 'supply-sid
instruments to influence aggregate demand are called 'de d-side policies'. Th
policies: monetary policy and fiscal policy. These p e discussed in the sub



Demand-side Policies

Fiscal Policy

Fiscal Instruments: G

Government spending is an injection into the economy and taxation is a withdrawal from the economy. These two instruments work in a and come together to create an expenditure ratio. The government can directly c tax at a different level or choosing to spend a different amount.

Deflationary fiscal policy is where the government tries to 'deflate' or reduce the eco towards or currently in a boom. To deflate the economy the government will reduce go taxation. This will decrease the AD curve from AD2 to AD1; price level has fallen (defla

Expansionary fiscal policy is where the government tries to 'inflate' or boost the eco recession. To inflate the economy, the government will increase government spending a increase the AD curve from AD1 to AD2. GDP has risen but there is also inflation.

Indirect Taxation

Indirect taxes are taxes that are imposed on an economic agent but are not paid imposed on a producer but are passed on to a consumer. The tax is indirectly pa party does not have to pay the tax, i.e. they can choose not to buy the product th taxes on fuel, or other goods and services, are indirect taxes; VAT is an indirect ta because there are very few goods/services the tax doesn't apply to.

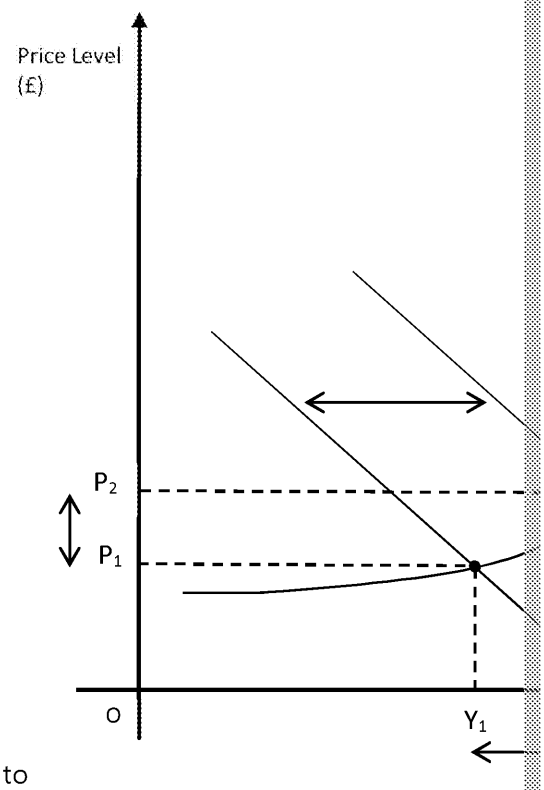
Direct Taxation

Direct taxes are paid directly by the economic agent that they are imposed upon. inheritance tax, student loans or poll tax are imposed on an agent and are paid d government. These taxes cannot be avoided through consumption choice.

Government Budget (Fiscal) Deficit *is when the money coming into the government the form of tax revenue and government spending. A fiscal deficit is not the same thing to the idea of stocks and flows. The overall debt is a stock, or the total amount of money o variable amount measured over a period of time. A government will need to borrow mo turn creates debt.*

Government Budget (Fiscal) Surplus *is when the money coming into the government leaving (government spending).*

There is a ... or things that affect the effectiveness of fiscal policy; it is a good idea to mention some of these as you will gain 'evaluation' marks in the exam.



- The size of the multiplier will determine how effective fiscal policy is because it will 'amplify' any changes made by the government. A large multiplier means the government needs only make small changes in order to have large effects, whereas a small multiplier will not bolster changes to tax or spending and therefore larger changes are needed.
- The economy is complex and hard to measure. It is difficult to determine whereabouts the economy is on the business cycle and where the AS and AD curves are. Therefore, the incorrect information or misjudge by how much they should cut/increase spe government could over- or under-shoot by incorrectly using fiscal policy a problems.
- Expansionary fiscal policy will worsen the budget deficit because tax reven and spending rises. Although this doesn't determine the effectiveness o affects the policy and can create issues in the future.
- The principal problem with fiscal policy is that there are time lags between and the actual implementation of the policy because it takes time to pass bureaucracy and to hire more public workers. However, once implemented felt pretty quickly. This time lag is problematic because the government ca fluctuating market regardless of its severity. Equally, even if the governmen changed their instruments in accordance with the economy, there is no tel future. External shocks that occur after policy implementation can cause th to policy predictions or the remnants of the policy and the new state of the further failures, especially if the government's attempts are slow to correct

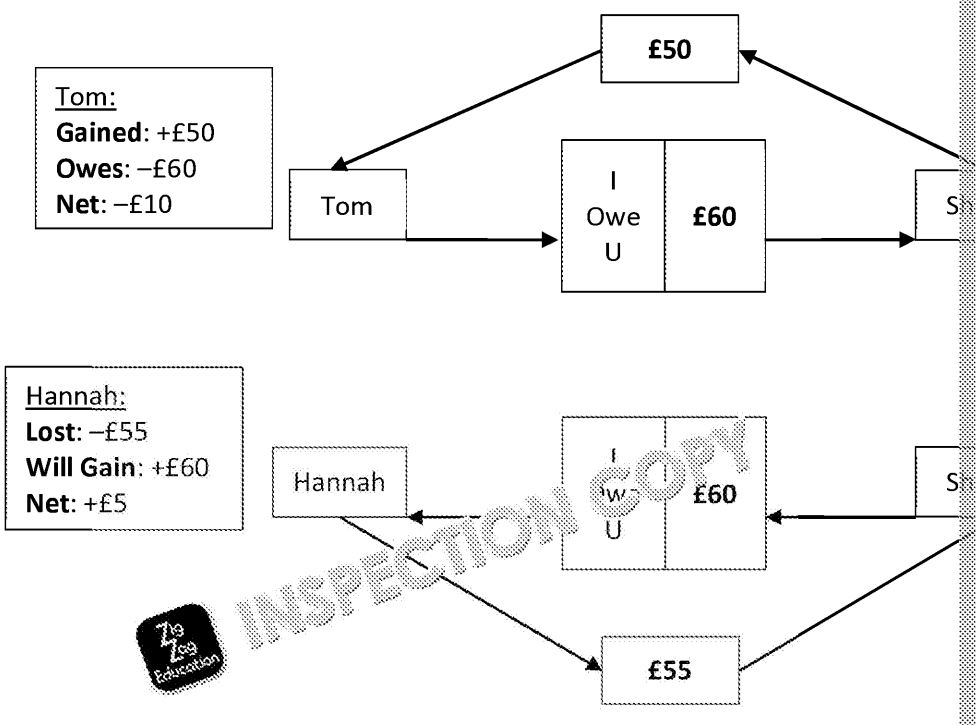
Monetary Policy

Quick Explanation of the Finance Market

Banks lend to others because, although the borrower is currently without money, they will pay back this money plus interest. Therefore the lender (the bank) will make money in the long run.

If the lender needs money, they of course can't use their own because they have must then find money elsewhere; rather than borrowing themselves, they will 's work? Shannon lends Tom £50; in return Tom will pay Shannon £60 next month. money and cannot wait until next month. She tells Hannah that Tom owes her £6 £55, Tom will owe Hannah £60. This way, Shannon has received the money she l Hannah will have earnt £5 from lending Shannon £55. Thi be repeated again The financial system is complicated and with num s nsactions, it can be ha whom, especially when the borrower ca y back the loan (defaults on their

Cash (notes and coins), s gs. Liquidity is the ease with which something cards are re y you can get cash from them quickly from a cashpoint go to a paw and exchange it for cash; however, there is difficulty in finding hours and finding a shop who will buy the ring. A house is more illiquid than a rin to find someone to buy a house since people need longer to make a decision on bureaucratic procedures that slow down the sale of a house. Loans can be turne when she sold the loan to Hannah. Some loans are more liquid than others. Gov and are fairly liquid. When a government needs to borrow money, it will sell a bo that says 'I, the government, owe you £££'. Say Tom was the government and Sh have sold a government bond to Shannon for £50, with the bond stating that To owner of this bond £60 next month. The UK government, for example, is a very t unlikely to default on its loan. Therefore, being a low-risk loan, the bond would b



Monetary policy is set in a different way to fiscal policy and this is mainly becaus not directly controlled by the government. As discussed before, interest rates aff investment; however, there are a few more steps in between.

Further your economic knowledge...

The responsibility for setting interest rates was passed from the gove
1997 under the leadership of Gordon Brown as Chancellor and Tony

Previously, there was the suspicion that governments had been mani
political purposes. By reducing the rate close to elections, aggregate
economy would boom. This would increase the chances of re-electio
– but also increase the peaks and troughs of the **economic cycle**, lea
uncertainty and deeper recessions.

Now the Monetary Policy Committee (MPC) of th Bank of England s
independent of political pressures and lo se the optimal rate t
the country.

Tight (deflationary) monetary policy *is implemented when inflation is expected to e
attempt to t a se demand by increasing interest rates and/or decreasing the
from Fisca this will cause the AD curve to shift inwards from AD_2 to AD_1; pric*

Loose (expansionary) monetary policy *is when inflation is expected to fall below tar
monetary policy by decreasing interest rates and/or increasing money supply. This will
outwards to AD_2; price level has risen and so has GDP.*

ACTIVITY

Read the recent letters from the Governor explaining why the 2% inflation target has been missed.
www.bankofengland.co.uk/monetarypolicy/Pages/letters.aspx

Firstly, you need to understand the role o
tasks a central bank can have, including c
reserves, maintaining the exchange rate,
inflation control. The Bank of England is t
to maintain the exchange rate but in 1992
rate market. It still holds the stock of fore
coins (via the Royal Mint). Its main role is
(inflation control), which is done by settin

The base interest rate is the rate of interest the Bank of England charges to comm
from them. Commercial banks are those that you see on the high street; they are
businesses use to borrow money from and store their savings. If the Bank of Eng
then commercial banks are likely to raise their interest rates to cover their increa
then mean the cost of borrowing for businesses and consumers will increase and
their spending and investment.

The Bank of England was given the role of inflation targeting because the govern
interest rates during times of election in order to boo sumer confidence an
democratic disruption to the economy, inflation t g was given to an indepe
England, specifically the Monetary P C ittee (MPC). If the Bank of Engla
targets, then it must report h o the government with an explanation as to wh

ACTIVIT

e Bank of Japan was the first to use a program of quantitative easing in the early 2000s. Research why this was necessary: read about Japan's 'Lost Decade'.

The Bank of England may also use 'quanti
to lend money and create greater ease of
does this by effectively printing more mo
physical money, it assumes it has more m
the Bank of England is able to buy corpora
commercial banks. This means banks will
transaction rather than exchange of phys
they gain from their sale of bonds means
lend money to economic agents. Quantitative easing is used when there is a lack
economy.

Monetary policy is seen as a blunter policy than fiscal policy because it targets th
fiscal policy could be targeted to selected markets. However, interest rates can b
quickly than tax rates.

- Commercial banks may not pass the change in the base rates on to consum
businesses. Therefore, effectively, the interest rate has not changed and the
activity.
- If confidence or expectations are out of sync with the economy, then econo
respond in the same way regardless of the changing instruments.
- There can be time lags between when monetary policy is implemented and
because it may take economic agents time to adjust their consumption and
interest rates.
- There may be a credit crunch and so commercial banks may not have the fund
and consumers.

Demand-side Policies (Monetary and Fiscal)

Similarities and Differences

	Monetary	
Policymaker	Bank of England's Monetary Policy Committee	Governm
Instruments	Interest Rates and Quantitative Easing	Governm
Time lags	6–12 months due to adjustment in habits and expectations	Up to 18 impleme
Trade Cycle	Better in… worse in…	Better in

History of the Use of Demand-side Policies

To boost an economy, the government should reduce interest rates (monetary p
spending on infrastructure (fiscal policy). The money that is in the economy coul
investment; if there is a low supply of money, then little can be lent for investme
determined the level of investment rather than the interest rate because savings
more people saved their money in banks, banks could lend more money to inves
increasing the money supply to boost the economy would work during normal ti
during a depression.

Great Depression in the 1930s

United States of America

During the Depression, US exports fell heavily as foreign trading partners also fel
unable to afford US goods. In response, the USA added the Smoot–Hawley tariff,
agricultural and industrial items. The aim was to support and protect domestic p
imports and thereby shifting domestic consumption from foreign goods to domes
a 'tit-for-tat' retaliation from countries that imposed a tax on US imported
between the USA and Europe. Equally, Europe owed reparation money to the US
recover fro[illegible] Europe found they were losing revenue, because US consu
from their g[illegible] and they were now unable to pay their reparations. This meant
inflow of income and the economy was becoming stagnant. The US government
projects such as road building. This was not only an attempt to inject money into
attempt to tackle the high unemployment problem by providing jobs. The effecti
injection is debated; some believe it helped end the Great Depression, whereas
production from World War II was the main contributor.

Although the job-creation policy was more successful than the import taxing, it w
still slow and gave very little improvement. Their monetary approach was equally
unsuccessful. Interest rates were already close to 0 and this did not seem to boo
aggregate demand. The government provided $2 billion to the banks in order to
promote consumption and investment which would trickle down through the ec
jobs and wages. The outcome of this is controversial; some believed it helped the
the money was mainly lent to large businesses who didn't spend it on plans that
During the Depression people were not spending or investing their money, but th
they were not depositing their money into bank accounts. This created a liquidity
Roosevelt decided to insure the wealth people stored in their bank accounts, wh
the banks and encouraged them to put their money back into accounts rather tha
the liquidity problem and banks now had funds to lend for investment and consu

United Kingdom
In the UK, the government took deflationary measures and looked at cutting the
unemployment benefits and public sector pay by 10% and increased income tax
2.5%). This reduced the purchasing power in the economy and only made the de
UK imposed tariffs on imported goods. The tariff rate was at 10% and only affec
countries that were not in the British Empire.

The abandoning of the gold standard in the early 1930s improved UK competitiv
to fall by 25% to its natural position. This increase in international competitivene
and increase aggregate demand. On top of this, the Bank of England decreased t
drop in interest rate helped to recover the UK economy.

Global Financial Crisis of 2008
The 2008 global financial crash was the worst recession the world has seen since
was triggered by the sub-prime mortgage crisis in the USA. The sub-prime mortg
began issuing mortgages to high-risk household owners (homeowners that were
These high-risk mortgages were then split up and mixed with other loans that we
create a 'mixed bag' of various parts of different loans, so that as an average, the
when the risky borrowers started defaulting on their loans, nobody could track w
financial system started to unravel, especially as speculation meant people beca
loans. The financial system dried up, lots of people lost a lot of money and it left
interest on customers' savings accounts. As in the 1930s, the global economy fou
which means that monetary policy became ineffective.

United States
At the start of the crisis in 2008, the USA followed an expansionary fiscal policy.
the economy to promote aggregate demand. Later, in 2009, the economy was st
so the US government opted for an approach that was spread over a longer perio
the USA spent a larger $787 billion in the economy.

The USA also used quantitative easing in an attempt to increase the money supp
The effectiveness of this policy is much debated and no one really knows the tru
Federal Reserve reduced the interest rate from 5.25% in 2007 to almost 0% by m

United King
The UK redu xes in an expansionary fiscal policy movement and reduced VA
the government spent £3 billion on investment in the economy to boost it out of
tax cuts and spending caused a severe budget deficit. By 2010 the UK governme
attempts to reduce it.

The Bank of England reduced its interest rates from 5.75% at the start of the cris
This had little effect and by the following year the Bank of England had reduced t
to a record low. Despite having rates close to 0, there was little change in borrow
their money. To compensate, the UK government tried quantitative easing of aro
banks the liquidity to lend again.

Strengths

- Although demand-side policies have a time lag of about a year, they are
  policies and are therefore used to respond to changes in the economy.

Weaknesses

- Classical economists believe any increase in aggregate demand will only
- Although the government can manipulate the economy, the global mark
  government has no control over. The government policy is weak to exte
- Data collection is slow and long-winded. The information provided to go
  inaccurate but also out of date, causing the government to react slowly a

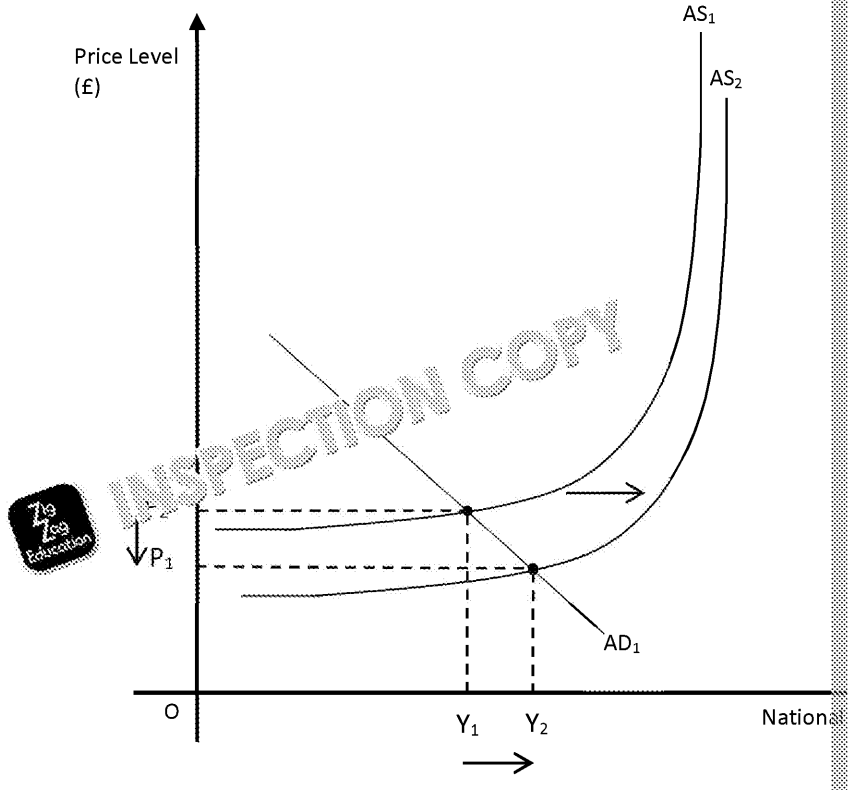
Supply-side Policies

Market-based Policies: *T* *little government intervention with market-bas*
policies is to *he forces of the free market to increase efficiency, product*
Market-ba *ies try to boost aggregate supply by improving the ability of the free*
any barrier

Interventionist Policies: *Interventionist policies are the opposite of market-based poli*
quite an active role within the economy. Its role is to intervene in order to correct any fa
and to guide an economy to a better equilibrium.

There is a wide range of things that affect the aggregate supply, none of which th
level of control over as it does with demand-side policy instruments. The main w
aggregate supply is through spending on supply-affecting investments or by char

Let's remind ourselves of AS/AD analysis. If aggregate supply shifts outward ther
being equal:



Below are some conditions that affect aggregate supply and explanations of how
policies to affect those conditions.

- **Promote Competition**
  If there are lots of producers in a market, then there is more competition will give producers an incentive to find ways to cut production costs beca goods at a lower price, thereby gaining more customers. To do this the g loans to start-up companies, reduce barriers to entry (obstacles that may market'), or enforce laws that prevent monopolies (large firms that othe reducing taxes on imports or subsidies for domestic firms, there will be a will increase competition within the market. By both reducing taxes on i enter a market and providing subsidies to domestic firms, an economy ca allowing domestic firms to remain. This will boost LRAS because domesti replaced with foreign production, but the competition drives the firms to thereby pushing out the LRAS curve. Privatisation can also boost compet worried about increasing revenues or cutting costs to boost profits, there competitive. By giving the business to the private sector, it will increase c will compete against other market players.

- **Reform of the Labour Market**
  Ref the labour market refers to the quantity and quality of labour and force moving freely within this market. Structural unemployment is a result o labour. Trade unions are another barrier to the free market system. Trade u an individual worker by uniting them together as one large body. This gives when it comes to wage and working conditions negotiations. By opening up gain workers and thereby increase its ability to produce goods. Because this around migration are supply-side policies. By increasing minimum wage, mo work. Equally, by reducing unemployment benefits, this would disincentivise benefit and encourage them to work. However, unemployment benefits are incomes and so there is a trade-off between protection and incentive.

- **Quality of Workforce (Skills and Education)**
  If the government invested in schools by, for example, buying new learni have a better education system, creating a more productive workforce. E provide financial assistance for pupils to continue into further education. Educational Maintenance Allowance (EMA) was granted to students from has now been scrapped in England. Investing in training courses for work human capital of an economy. This is particularly useful if there are struc because it will help the mobility of workers between markets.

- **Infrastructure**
  Spending on infrastructure means investing to improve the physical conditions or organisation of the economy – for example, investing in transport systems such as railways and roads, or investing in buildings for factories or houses. By improving these factors, society will be happier and the economy will function more efficiently. If there were adequate housing, then the workforce could be happier; if the roads were smoother and straighter, then the lorries could move between factories more easily.

  Learn
  To se
  spend
  the e
  https
  ganis

- **Quality of Capital and Production Processes**
  Investment into research and development will create a technological ad machines are invented and more efficient methods of production are cre curve out because a more productive and efficient economy can produce positive net investment will indicate increased capital stock. Greater qua means there is the possibility for more production.

Strengths

- Shifting the aggregate supply curve outwards will not cause inflation as it prices through competition and improvements to production.
- Increasing aggregate supply is an increase in production, as long as it is m demand (movement along the AD curve). This indicates a rate of econom as resources are generally improved or increased in the long term.
- Increasing production and economic growth will mean there is job creati level of unemployment.
- By improving the productive capacity of an economy and reducing the co will become more competitive in the global market. This will mean expor trade deficit.

Weaknesses

- Supply-side policies have long tim[illegible] Improving the quality of the wor education can take 13 ye[illegible]ildren start aged 4–5 and finish aged 1
- These policies ca[illegible]y costly, which would have a negative impact on
- Alth[illegible]th [illegible]nment can manipulate the economy, the global marke gov[illegible]t has no control over. The government policy is weak to exter
- Data collection is slow and long-winded. The information provided to gov inaccurate but also out of date, causing the government to react slowly a

Conflicts and Trade-offs between Objectives and Polici

Macroeconomic Objectives

There may be conflicts between macroeconomic objectives, i.e. in the process of i objective is impaired. The most famous trade-off is the one that is shown by the Ph trade-off to be explained because your syllabus requires more in-depth knowledge

Economic Growth versus Inflation

Economic growth usually results from an increase in aggregate demand. An incre only increases growth but also increases the price level. Therefore, as an econom growing rates of inflation too. One way to increase growth without increasing pr supply; classical economists believe this is the only way to create economic grow LRAS curve, any increase in aggregate demand will only result in price increases i

Economic Growth versus the Current Account

As the economy grows and people's incomes rise, people will spend more on imp worsen a trade deficit (or improve a surplus). Equally, as the economy grows and will appear more expensive in relation to foreign goods. This means exports will imports could create a negative current account (defic[illegible]

Economic Growth versus Environm[illegible]

Pollution and environmental d[illegible]adation is a social cost. Remember negative ex Polluting the environ[illegible]nce accounted for in the market system. Economies they grow, [illegible]wi[illegible]se up more of the finite resources. With more production fuels, and w[illegible] expansion of new factories, offices, hospitals, etc. comes the may currently be inhabited by nature. China is a clear example of the trade-off b economic growth and their low rates of clean air and healthy environment. Coun the environment during their industrialisation stage, where environmental conce the rapid rise in growth rates, and countries switch to more capital-intensive for

Inflation versus Unemployment (Phillips Curve)

In 1958, Bill Phillips hypothesised a relationship between unemployment and inflation. He believed that if there was high unemployment in an economy (spare resources), then firms could offer relatively low wages as most people would be without an income. Another way to look at this is in terms of competition; there was very little competition within the labour market as the supply of jobs was low relative to the supply of available workers. On the other hand, when the economy was near full employment, attempting to expand would be more costly because firms would have to offer wages that were much higher than the market equilibrium in order to tempt already employed workers away from their current jobs. So, as unemployment fell, expanding production would become more costly and prices would increase to compensate.

Inflat

Long-run and Short-run Phillips Cu

The economy went through a period of stagflation in the 1970s that seemed to disprove the Phillips curve trade-off. Stagflation is when the economy h growth, and high levels of both inflation and unemploym ther than a compromise between the two. It was instead theorised that expectations had adjusted to the high levels of inflation and these new expectations of inflation were incorporated into wage negotiations. Equally, the strong union power in the UK at the time meant the market was restricted from adjusting to the market equilibrium, resulting in high unemployment (remember the Keynesian idea of sticky wages).

Inflat

With this idea the theory of the short-run Phillips curve was created. The relation true to Phillips' relationship; the curve may simply shift in the short run so that d results in increasing inflation but at high or low levels. In the long run, however, relationship and therefore the Phillips curve is a straight line in the long run. It is curve lies at the natural rate of unemployment.

Macroeconomic Policy

Fiscal Policy Conflicts

Increased government spending may help to boost an economy out of a recessio will be likely to result in increased taxes in the future. This tax increase not only c approach, but will reduce incentives to work and could worsen income distributio is implemented.

Reducing government spending may mean cutting benefits or reducing investme can have a negative impact on the living standards within an economy. After the shifted focus to reduce government debt by cutting spending, however, this was who feared losing the NHS and the adverse effects on education quality. Cutting b worsen income distribution and disadvantage those who may need the benefits

Monetary Policy Co

The Bank o and has independent control over the interest rates in order to increasing i rates can be damaging to some people; for example, new hom pay a mortgage. This could worsen wealth distribution. Monetary policy can also If interest rates are high then this will discourage new start-up businesses and re the market.

Supply-side Policy Conflicts

Supply-side policies that improve infrastructure will improve the efficiency of the damage the environment. Areas of forests, for example, may be cut down in ord supply-side investments will come out of the government's budget which may c fiscal policy.

Questions: Macroeconomic Objectives and Policy

1. a) What are the economic objectives of the government?
   b) Why are these the objectives of the government?

2. a) What are the three macroeconomic policies?
   b) What are the demand-side policy tools and how can each manipulate the economy?
   c) Who is in charge of the three policies?

3. What is meant by a fiscal deficit and why is this problematic?

4. What is the difference between direct and indirect taxes?

5. What is the role of the Bank of England?

6. *'Supply-side policies are better for the economy than demand-side policies not used is because the time lags mean politicians won't see results in* extent do you agree with this statement?

7. How does fiscal policy conflict with other policies and the gov

8. How does monetary policy conflict with other policies and the

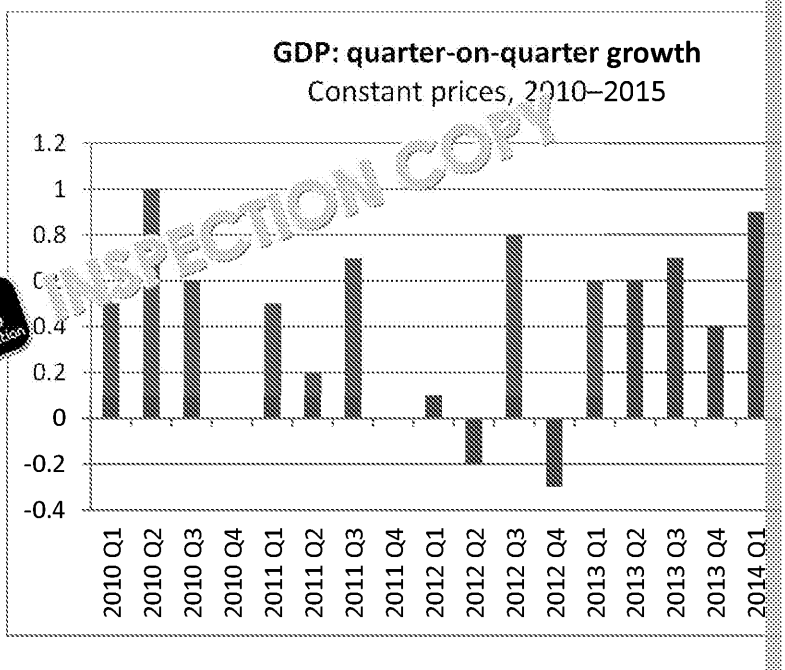
9. How do supply-side policies conflict with other policies and th

10. What are market-based policies?

11. What are interventionist policies?

12. a) Draw a short-run Phillips curve.
    b) What does the Phillips curve show in terms of meeting all
    c) Draw a diagram to show how the Phillips curve might loo
    d) Name and explain four other conflicts that might arise in t

1. Which **one** of the following **can** be inferred from the chart below?
   - A The UK's economy shrank between Q2 2014 and Q1 2015.
   - B Between 2010 and 2015 the UK's economy had consecutive quar
   - C The highest growth during the period was in 2014.
   - D The UK's economy grew overall in 2010.



2. Which of the following statements is not true?
   - A In a boom an economy produces above its long-term trend rate
   - B An output gap is the difference between actual growth and the
   - C In the long term, the trend rate of growth is always 0%.
   - D During a recession there is spare capacity in an economy that is

3. Describe the idea of loose monetary policy and how it can be used to

.....

.....

.....

.....

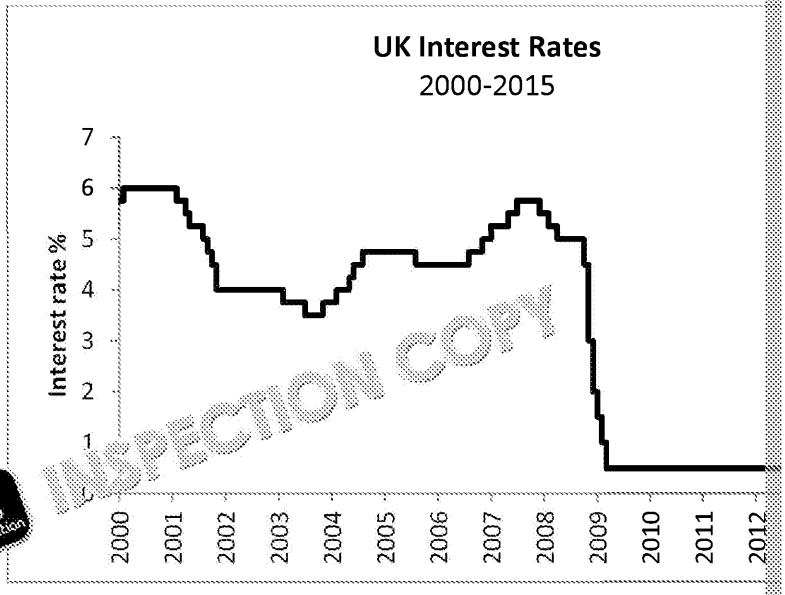
.....

.....

.....

.....

4. Look at the chart below which shows the interest rates in the UK set b
Committee (MPC) of the Bank of England between 2000 and 2015.



Source: The Guardian / Ban

Describe the main trends shown in the graph.

.....

.....

.....

.....

.....

.....

5. Explain the difference between direct and indirect taxes.

.....

.....

.....

.....

.....

.....

6. Calcula the **multiplier** if Marginal Propensity to Withdraw (MPW)

.....

.....

.....

Measures of Economic Performance

1. **What is the difference between inflation, deflation and disinflation?**
   Inflation is a rise in general price level, whereas deflation is a fall in general p
   inflation, meaning general price level has increased, but the increase is less th

2. a) **List and explain four effects of inflation.**
   Any four of the following
   - **Diminishes the Value of Saving**: A[illegible]y that is stored will re
     the value of a good increas[illegible] pr[illegible] increases). This reduces the
   - **Shoe-leather Cost**: [illegible]s of inflation mean prices are constan
     less able t[illegible]e prices of goods.
   - **[illegible]nu[illegible]**: Firms will need to change their price labels.
   - **[illegible]posable Income**: Higher prices reduce purchasing power as pe
   - **Cost of Living**: As prices rises, people will find their costs of living
   - **Discontent**: People become discontent and unhappy if prices are g
     going up at a similar rate.
   - **Government Taxation**: Workers can earn a certain amount before t
     doesn't increase at the rate of inflation, then, in real terms, the amo
     they are taxed will fall. So they are taxed more heavily.
   - **Unemployment**: The Phillips curve relationship states that as infla
   - **Anticipated Inflation**: If firms have not prepared for increasing pr
     budgets. Equally, firms' expectations will fall if they experience hig
     are less likely to invest.

   b) **Despite these effects, why is deflation worse?**
   Because inflation follows economic growth, deflation is associated with
   expectations and confidence. Equally, because prices are falling, people
   before making a purchase, which will lead to a stagnant economy.

3. **What is a basket of goods?**
   It is a list of items that are bought by the average household.

4. **These questions refer to measuring inflation.**
   a) **How is inflation measured using the CPI?**
   First, a basket of goods is created. Then the ONS sends out the Living C
   calculate the weights and average prices of each good in the basket.
   b) **What is the other measure of inflation?**
   Retail Price Index (RPI)
   c) **What are the limitations of me[illegible]flation?**
   Neither CPI nor RPI [illegible]un[illegible]e change in quality. If a good has imp
   is likely to cos[illegible], but this is only seen as inflation, and not an impro
   T[illegible]ary [illegible]s can change prices, which, measured as inflation with
   m[illegible]CPI and RPI give a different measure of inflation, which shows
   they attempt to, CPI and RPI can be unrepresentative for some cohorts.
   substitutes.
   d) **Using the information in the table below:**
      i) **Fill in the missing columns.**
      See table.
      ii) **What is the rate of inflation in Year 1, Year 2 and Year 3?**
      Year 1 = 4%, Year 2 = 5%, Year 3 = 4%
      iii) **Using inflation, deflation and disinflation, can you describe the t**
      Between 2000, 2001 and 2002 there is inflation; in 2003 there is disi

Goods				Price Value	Index
Good name	Price	Items bought as a percentage of total items bought (weight)			
Good A	£5.00	20%	0.20	*£4.48*	*100*
Good B	£3.00	15%	0.15		
Good C	£0.50	35%	0.35		
Good D	£9.50	30%	0.30		
Good A	£5.25	21%	0.21	*£4.64*	*104*
Good B	£3.50	15%	0.15		
Good C	£0.65	35%	0.35		
Good D	£9.60	29%	0.29		
Good A	£5.75	21%	0.21	*£4.87*	*109*
Good B	£3.75	16%	0.16		
Good C	£0.75	35%	0.35		
Good D	£10.00	28%	0.28		
Good A	£5.75	18%	0.18	*£4.64*	*104*
Good B	£3.75	14%	0.14		
Good C	£0.75	35%	0.35		
Good D	£10.00	27%	0.27		
Good E	£2.00	6%	0.06		

iference between employment, unemployment and underemployment?
when somebody has a job, whereas unemployment is when somebody is willing and able to
n't have a job. Underemployment is when somebody is in employment (has a job), but is
hours than they would like, i.e. they are in part-time work rather than full-time work.

he five main causes of unemployment?
frictional, seasonal, demand-deficient and real-wage inflexibility
xplain these causes?
tural: This occurs when demand and supply of labour do not match or when the skills of a
er do not match the requirements. This is known as geographical or occupational immobility.
onal: This occurs as people change jobs.
onal: If people are employed in seasonal work, then when the seasons change, they are without

and-deficient: If the economy is in a recession, then firms will cut back on production and there
e little demand for labour.
wage Inflexibility: If the actual wage rate is below the market equilibrium, then there will be
cess supply of labour.

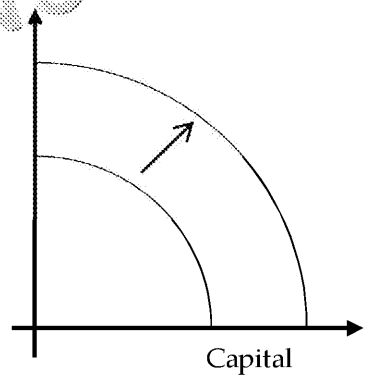
n four effects of unemployment.
for a full list of effects.

is refer to the measures of unemployment.
he two main measures of unemployment?
ployment Rate and Claimant Count
iese measures attempt to quantify unemployment?
Unemployment Rate: The ILO sends out the Labour Force Survey to determine the number of
le who are in/out of work and who are seeking work. From this, they are able to calculate an
ated percentage.
iant Count: This counts the number of people who are claiming unemployment benefits as a
ntage of the working population.

c) **How accurate are these measures?**
Neither measure is completely accurate as they only calculate the statist
claimant account generally underestimates the number of people in une

9. **What is the difference between immigration, emigration and migration?**
Migration is a movement of people between countries; immigration is an inv
emigration is an outward flow of people.

10. **Can you explain some effects of positive net migration on the economy? T
demand and supply diagram.**
If net migration is positive, i.e. immigration is greater than emigration, then
available in an economy (assuming those entering th nomy are of worki
economy's PPF as there are more resources a bl ndicating the potentia
see PPF diagram.



11. a) **What is GDP?**
Gross Domestic Product: the total number of goods and services produ
b) **How effective is GDP in measuring living standards and happiness?**
Economic growth generally has a correlation with living standards, alth
Because GDP doesn't account for any happiness or development indica
living standards. However, because GDP measures more quantitative v
more qualitative, it is an easier measure to collect.
c) **How do real and nominal GDP differ?**
Real GDP accounts for inflation, whereas nominal inflation is merely th
d) **How can GDP be adjusted to account for population size?**
By dividing the total GDP of a country by the population, GDP can be c

12. **According to the theory of purchasing power parity, when is equilibrium r**
When the purchasing power is equal across countries.

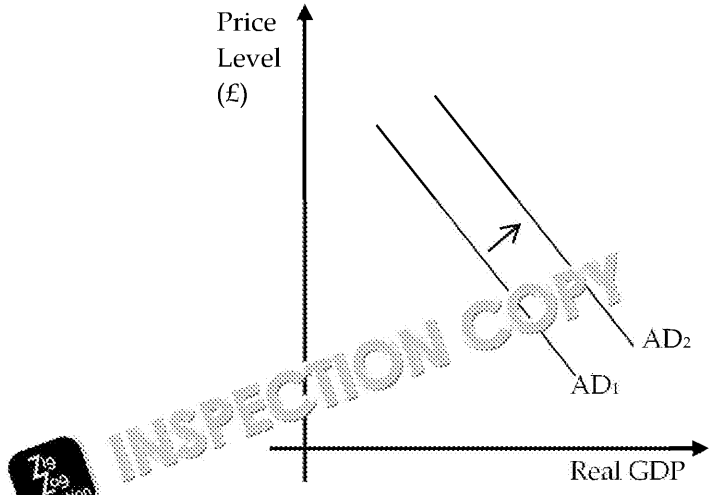
13. **What is meant when economists say there is a curr count deficit?**
When imports are greater than exports beca e f or money is leaving the e

14. **What is meant by the inte m ess of economies?**
Where economies g globe interact through trade, they rely on each o
Theref y nterconnected'.

15. **Why are inflation, economic growth, the balance of payments and unempl
economic performance?**
- **Inflation**: High levels of inflation are associated with instability.
- **Economic Growth**: Economic growth is linked to a stable and improvin
- **Balance of Payments**: A deficit indicates more money is leaving the eco
unsustainable.
- **Unemployment**: High levels of unemployment mean resources are not
economy and so it is underperforming. Equally, if people are unemploy
income and so are not spending money to boost the economy.

Aggregate Demand (AD)

1. **Complete this diagram by labelling the curves, the x-axis and the y-axis.**



a) **What has happened to this curve?**
The curve has shifted to the right indicating an increase in aggregate de

b) i) **What four main factors can shift the AD curve?**
Changes in consumption, investment, government spending, net e

ii) **For each factor, explain 2–3 reasons why the curve was caused to**

- **Consumption**: (1) If disposable income has increased, then pe and so will increase consumption. (2) The government might l in turn lowers the cost of borrowing and reduces the opportu This will encourage people to spend their money rather than s to consume large, expensive goods. (3) Another cause might r house price. If people's assets increase, then people will feel w increase their spending. (4) Lastly, if people have high levels o they will feel happier about spending their money and won't t they are more likely to increase their consumption. Increased aggregate demand (AD) and push the AD curve outwards.
- **Investment**: (1) Increasing economic growth will increase peo consumption is likely to increase and there will be greater de response, firms will invest in expanding their business in orde increased demand. Hence, investment increases with economi increased, perhaps because the exchange rate has fallen, or be have increased, then exporting companies may invest in expa match their supply with the increased demand; investment ha lowers interest rates, then the cost of borrowing and the oppo have fallen. This will encourage firms to invest their profits ra is greater access to credit, then it will be easier for firms to bor likely to invest. (3) If the government chooses to create regulat investment is likely to increase as a response, assu implemented correctly.
- **Government Expenditure**: (1) If the economy is in a recession increase its spending in order to stimulate the economy. (2) E to an expansionary fiscal policy approach, then their spending changes in the budget.
- **Net Trade**: (1) If UK incomes fall, then UK consumers are like of imports. This could lead to a positive net trade, which will i the pound depreciates, then UK goods will appear cheaper in will fall as UK consumers switch to consuming domestically p increase as foreign consumers buy UK goods. This will mean t

increased aggregate demand. (3) If there is a world economic b
will rise. Exports will increase as foreign consumers can purch
Alternatively, UK consumers will also be more able to purcha
outweigh the increase in exports. However, because the aggre
out, this indicates that exports are greater than imports. (4) If t
level of protectionist measures implemented on UK goods, the
their consumption of UK goods. Increased exports will increa
UK produces high-quality goods, then the relative price will n
consumers will increase their consumption of the UK export b
will increase aggregate demand.

2. **Explain how rising interest rates can affect aggregate demand.**
If interest rates increase then the cost of borrowing and the opportunity cost
rises too. This will mean consumption falls as people are less able to affor
save is much higher. Investment will also fall as firms will be less able to affo
save their profits which discourages an increase in consumption, and an increase i
aggregate demand will push out the aggregate demand curve.

3. **What is the wealth effect?**
The wealth effect is that people will feel wealthier if their assets or houses pr

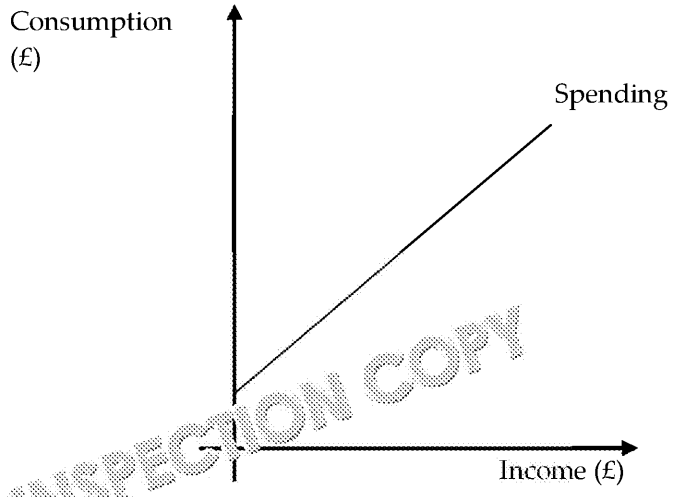
4. a) **What is the relationship between savings and consumption?**
Firms and households can either save their money or spend/invest. If ar
more, then their spending will decrease, ceteris paribus.
b) **What is meant by the marginal propensity to consume?**
The proportion of an amount of additional income that a person choose

5. a) **How does net investment differ from gross investment?**
Gross investment is the investment to replace old or used machines. Thi
resources has not increased. Net investment is the total investment minu
net value of additional capital.
b) **A firm has five machines; three of them are old and the firm have plan
has invested in five more machines.**
i) **What is the firm's net investment?**
Two machines
ii) **What is the firm's gross investment?**
Five machines

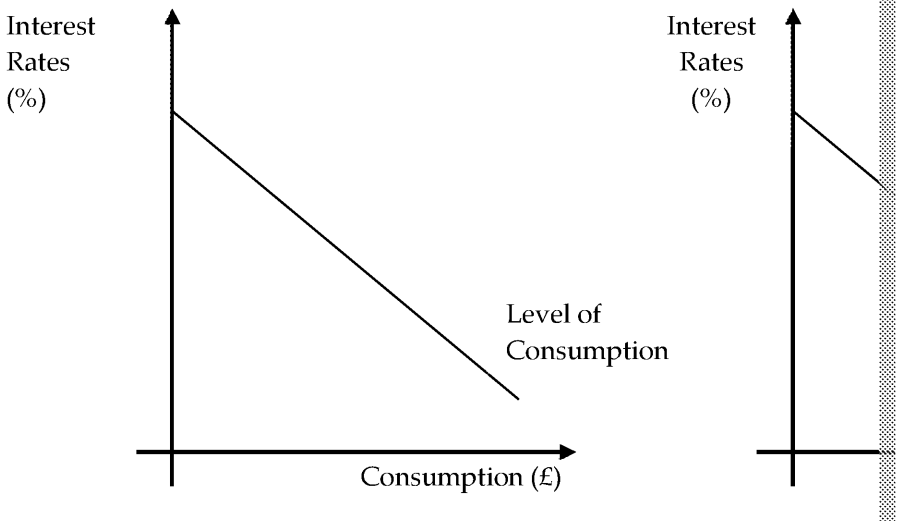
6. **What are Keynes' animal spirits?**
Keynes uses the phrase 'animal spirits' to describe a mix of confidence and e
decisions of both consumers and producers. During an economic downturn
means that consumers spend less and producers invest less.

7. **What is the Golden Rule?**
That a government's borrowing should be equal over a business cycle, i.e. their b
should be zero over the end of the recession/boom cycle.

8. **Draw a graph for the relationship between consumption and real income (x-axis).**



9. **With interest rates being on the y-axis, draw a graph to show the relationsh**
   a) **Consumption**
   b) **Investment**



10. **If Marcy's income rose from £25,000 per annum to £30,000 per annum and h increased from £9,000 to £11,000:**
    a) **What is her marginal propensity to consume?**

$$\text{Marginal Propensity to Consume} = \frac{\text{Change in Consumption}}{\text{Change in Income}}$$

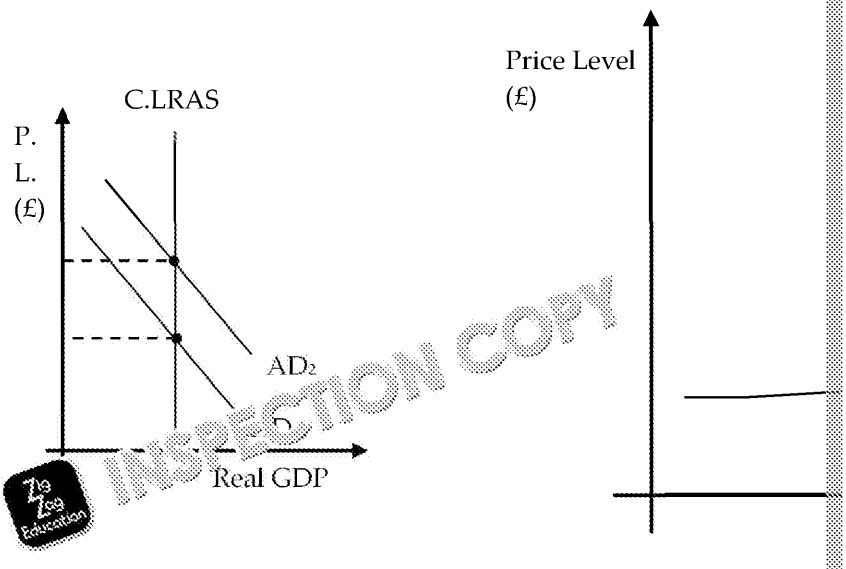
$$\frac{(11000 - 9000)}{(30000 - 25000)} = \frac{2000}{5000} = 0.4$$

    b) **If marginal propensity to consume was instead 0.5, what would sh** £11,000. An MPC of 0.5 indicates that Marcy will now spend half of her top of her initial consumption of £9,000. This takes her total consumptio

Aggregate Supply

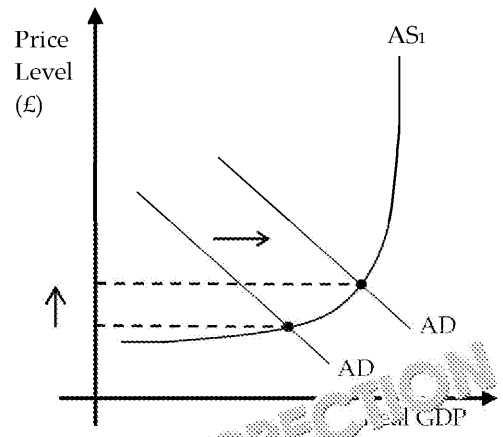
1. a) **When is a firm in the long run and the short run?**
   A firm is in the long run when it is able to change all their factors of pro
   when it is unable to change one factor of production.
   b) **What factors could affect long-run aggregate supply?**
   Technological advances, relative productivity, worker human capital, g
   demographic, migration and competition policy
   c) **What factors could affect short-run aggregate supply?**
   The price of inputs (costs of production); for example, raw materials an
   tax rates

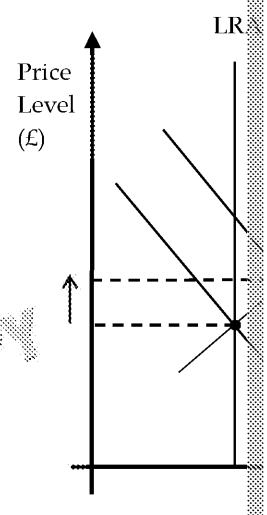
2. a) **How do Keynesian and classical assum ns the labour market di**
   Keynesians believe in sticky wa e ea that wages will not autom
   'stick' at the same level ea people's wage expectations. Classical
   wages will fall et equilibrium, even, as some classical econom
   b) i) **w cal aggregate supply diagram.**
   iagram below
   ii) **Explain what the curves show.**
   An increase in aggregate demand will only increase the price level
   supply does not change.
   c) i) **Draw a Keynesian aggregate supply diagram.**
   See diagram below
   ii) **Explain what the curves show.**
   The level of spare capacity in the economy determines whereabout
   the flatter end of the AS curve, then it is likely to be in a recession w
   firms will be able to increase production with ease. Increasing aggr
   increase GDP with very little increase in price level. If the economy
   curve then supply is inelastic and it will be costly to increase produ
   capacity. Any increase in aggregate demand at this point will only
   with little increase in GDP.

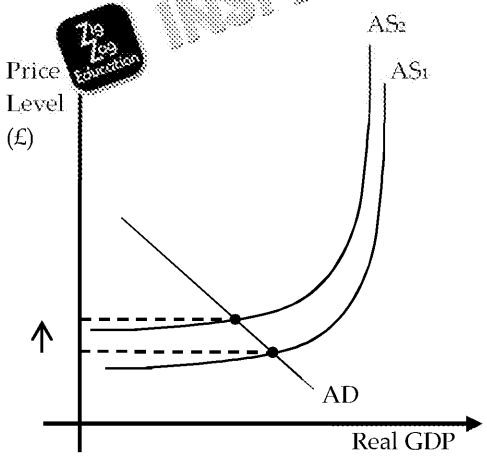


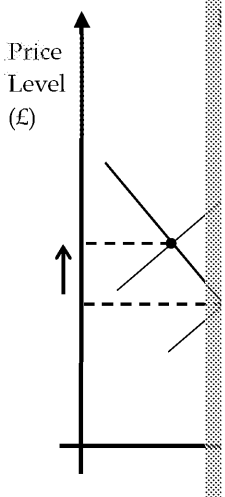
3. **a) What are the three causes of inflation?**
Cost-push, demand-pull, growth in money supply

b) Using a diagram, explain these causes.









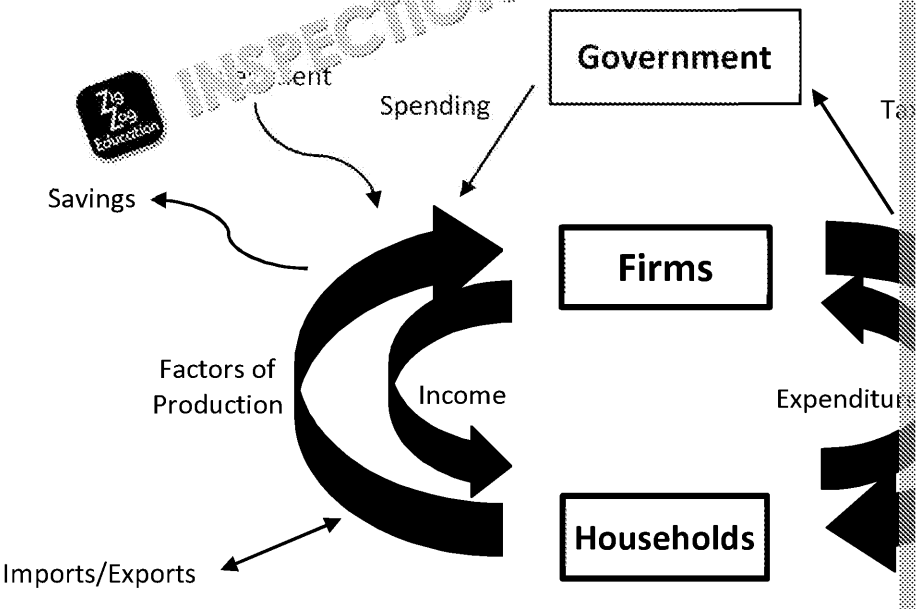
- **Cost-push Inflation**: If the costs of production increase because, fo
or oil prices have risen, the firms will increase their prices to compe
will increase.
- **Demand-pull Inflation**: If, for example, the minimum wage is increas
risen and consumption will increase. This will push out aggregate de
increased. This happens because as demand exceeds supply, produce
shortages. In order to ration their goods they allow prices to be pulled
- **Growth in Money Supply**: The phrase 'too much money chasing t
inflation phenomenon of growth in money supply. If the amount o
goods and services available for purchase t rices will increase
money to buy goods.

National Income

1. **What is the difference between wealth and income?**
   Wealth is a stock concept, whereas income is a flow concept. A stock is a tota
   point whereas a flow is a variable quantity measured over a defined period o

2. a) **What is an injection and what is a withdrawal?**
   An injection is money is being added to the economy, whereas a withd
   the economy.
   b) **List and explain the six injections and withdrawals.**
   Injections: Exports, Investment, Government Spending
   Withdrawals: Imports, Savings, Tax

3. a) **Draw a circular flow diagram with all the injections and withdrawa**



   b) **Explain how income flows around the economy.**
   As firms purchase factors of production from households, they provid
   purchase goods and services from firms, they provide expenditure.
   c) **What would happen if injections were bigger than withdrawals?**
   The income coming into the economy would be greater than the incom
   so the economy would grow.
   d) **What would happen if the government increased the tax rate?**
   The income coming into the economy would be smaller than the incom
   and so the economy would shrink.

4. **What is the multiplier?**
   The multiplier is the proc[illegible]hat occurs after an injection into the economy a
   original amount in[illegible]

5. **What i[illegible]t by the marginal propensity to…**
   a) **save?** It is the proportion of people's income that will be saved.
   b) **tax?** It is the proportion of people's income that will be taxed.
   c) **import?** It is the proportion of people's income that will be spent on im

6. **If the marginal propensity to save was 0.1 and the marginal propensity to i**
   a) **What would the marginal propensity to tax be if the marginal propens**
   MPW $= 1 -$ **MPC** $=$ **MPS** $+$ **MPT** $+$ **MPM**
   $1 - 0.5 = 0.1 +$ **MPT** $+ 0.2$ $\quad 0.5 = 0.3 +$ **MPT**
   $0.2 =$ **MPT**

b) What would the multiplier be?

Multiplier $= \frac{1}{\mathbf{MPW}} = \frac{1}{(1-\mathbf{MPC})}$ $\quad \mathbf{MPW} = 1 - \mathbf{MPC} = \mathbf{MPS} + \mathbf{MPT}$

(MPW) $0.5 = 0.1 + 0.2 + 0.2$

Multiplier $= \frac{1}{\text{MPW}} = \frac{1}{(0.5)} = 2$

or,

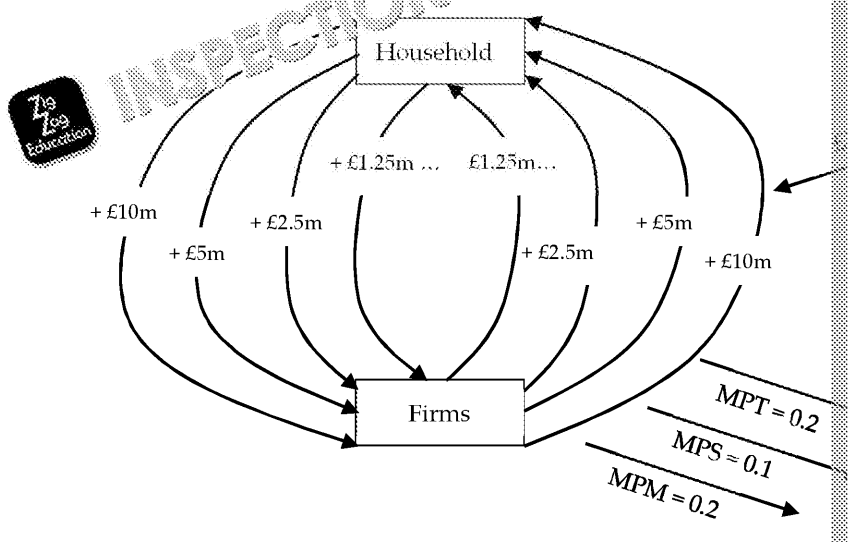
Multiplier $= \frac{1}{(1-\mathbf{MPC})} = \frac{1}{(1-\mathbf{0.5})} = \frac{1}{(0.5)} = 2$

c) If the government injected £10 million into the economy…

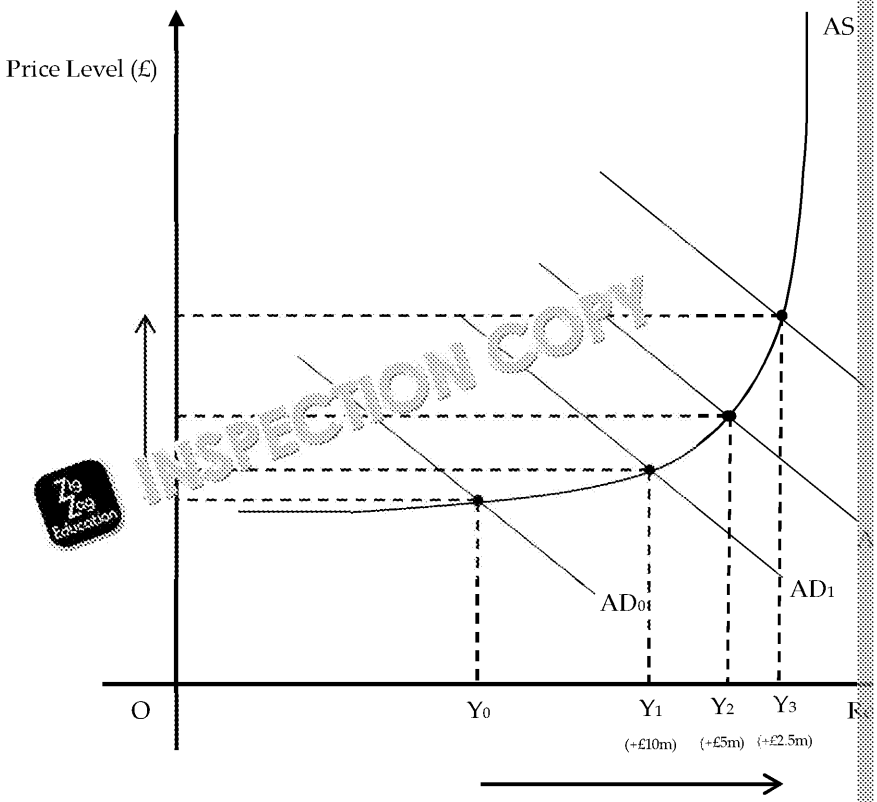
i) How much would the economy grow by?

£10 million × 2 = £20 million

ii) Draw a circular flow diagram to show the path of this £10 million

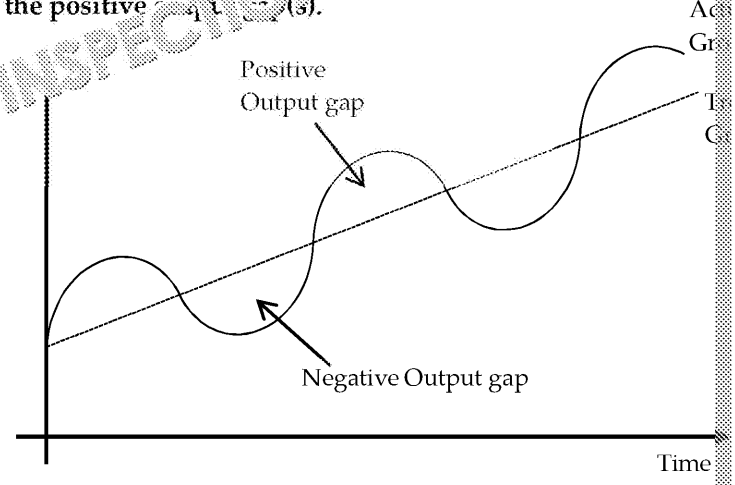


iii) Show this using an aggregate demand and aggregate supply diagram.

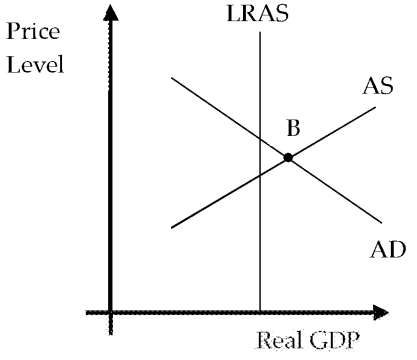


Economic Growth

1. **Distinguish between actual and potential growth.**
   Potential growth is the maximum amount of growth that an economy could a
   the factual real amount of growth that an economy has achieved.
2. **What factors cause economic growth?**
   Technological advances, increasing human capital, government regulation, c
   migration, investment
3. **Why is international trade important for countries with an export-led grow**
   Because countries that take this approach are relying on selling their exports t
   to bring money into the economy. Therefore, the economic situation of their t
   of the international trade market are important fo[illegible]e countries.
4. **Draw a business (trade) cycle diagra[illegible]**
   a) i) **Label the positive [illegible] (3).**



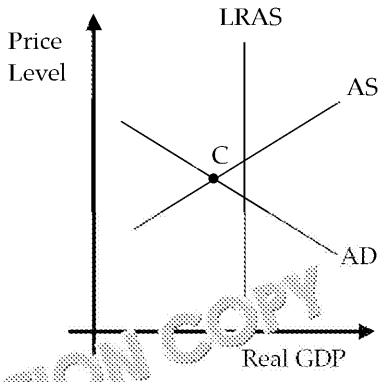
   ii) **Illustrate this gap using an AS/AD diagram.**



   iii) **Using the concept of capacity, explain wh[illegible]appening within t**
   There is very little capacity; if anyth[illegible]conomy is producing t
   the economy is producing [illegible]d it[illegible]PF, and is overusing the reso
   goods than the re[illegible]s [illegible]as available are currently able to prod
   iv) **What is h[illegible]g to inflation, unemployment, confidence and t**
   pu[illegible]ne output gap?
   As an economy enters a positive output gap, inflation rises an
   Confidence increases; however, there is often a time lag with c
   government budget deficit will begin to fall as increased consu
   increases tax revenue and falling unemployment means less sp
   - At the height of a boom, inflation is very high, unemployment
   very high. The government's budget is likely in a surplus at th
   - As an economy leaves a boom and heads towards a recession,
   and unemployment will begin to rise. Confidence will begin t
   time lag with consumer confidence. Any government budget s
   become a deficit.

b) i) **Label the negative output gap(s).**
See diagram on previous page

ii) **Illustrate this gap using an AS/AD diagram.**



iii) **Using the ... capacity, explain what is happening within ...**
thi... there are a lot of spare/unemployed resources as the e...
The spare capacity is very high.

iv) **What is happening to inflation, unemployment, confidence and t... throughout the output gap?**

- As an economy enters a negative output gap, inflation falls an... Confidence decreases; however, there is often a time lag with ... government budget surplus will begin to fall as decreased con... decreases tax revenue and rising unemployment means more ...
- At the height of a recession, inflation is very low, unemploym... very low. The government's budget is likely to be in a deficit a...
- As an economy leaves a recession and heads towards a boom, ... unemployment will begin to fall again. Confidence will begin ... time lag with consumer confidence. Any government budget ... possibly become a surplus.

5. **What are the effects of economic growth on consumers, firms, the governm...**

- **Consumer and Workers**: Increased growth means the economy is expan... of jobs, meaning more people will have incomes and the negativities ass... fall. This means people can increase their savings and increase their wea... goods. Economic growth indicates firms will enter the market or increas... are more goods available for consumers with the potential of new goods...
- **Firms**: Economic growth indicates firms have increased production or r... market. With this increased production, firms will gain more revenue an... are more likely to invest in improving and increasing capital and/or labo...
- **The Government and Economy**: Higher emplo... from the increased ... on benefits will fall. Equally, the govern... also receive more tax ... high levels of consumption me... overnment will receive more tax ... services. Further to thi... or increased production means the ... revenue from ... Expectations of the economy and confidence wi... in... investment and consumption. Economic growth usually en... pr... appear more expensive than foreign goods. UK exports will ... likely to worsen the current account deficit.
- **Living Standards**: Economic growth is associated with increased living ... always the case. Economic growth indicates higher employment which ... poverty in an economy. If more people have incomes, then this should r...

Macroeconomic Objectives and Policies

1. a) **What are the economic objectives of the government?**
Sustainable, positive economic growth; low unemployment; law and sta
current account equilibrium; balanced government budget; environmen
inequality.

b) **Why are these the objectives of the government?**
Sustainable positive economic growth can bring about greater living sta
improve well-being and help boost the economy through increased inco
bad for well-being and a drain on resources so the government aims to k
Inflation is disconcerting for an economy and diminishes people's savin
increasing living costs. Therefore the governmen[illegible] aim to keep this l
households can anticipate and plan for th[illegible]se. A current account
money is leaving the economy th[illegible]g. The government cannot su
(tax revenue) and so aim to achieve a balanced budget. It's a moral imper
protect the env[illegible]. Equally, the UK can be fined by the EU if it doe
ach[illegible]g [illegible]andards and some economist argues it can boost econ

2. a) **What are the three macroeconomic policies?**
Fiscal, monetary and supply-side policies.

b) **What are the demand-side policy tools and how can each of these be c
the economy?**
- **Fiscal Policy**: Tax: Tax is a withdrawal from the circular flow of ec
economy which affects aggregate demand, inflation and growth.
- Government Spending: The government can inject money into the
levels and stimulate an economy out of recession.
- **Monetary Policy**: Interest Rates: The Bank of England is able to set
as it influences consumption and investment.
- Quantitative Easing: Banks are unlikely to lend to people if they do
lend. Quantitative easing helps liquidity traps and enables greater
stimulate consumption and investment.
- **Supply-side Policy**: There is a variety of things a government can i
aggregate supply such as deregulation, reducing income tax or low

c) **Who is in charge of the three policies?**
The government is in charge of fiscal policy and supply-side policy, wh
charge of monetary policy.

3. **What is meant by a fiscal deficit and why is this problematic?**
A fiscal deficit means that government debt is increasing. A larger debt mea
less money for the government to spend providing services and infrastructu

4. **What is the difference between direct and i[illegible]ax[illegible]es?**
Direct taxes are imposed 'directly' o[illegible]nomic agent, such as a tax on the
tax is a tax that is paid im[illegible]ly [illegible]can be avoided, such as a tax on certain

5. **What i[illegible]ol[illegible]the Bank of England?**
The Ba[illegible]ngland is in charge of controlling and maintaining stable inflat

6. **'Supply-side policies are better for the economy than demand-side policie
used is because the time lags mean politicians won't see results in time for
you agree with this statement?**
Unlike demand-side policies, which typically cause inflation, shifting the agg
has downward pressure on prices through competition and improvements t
of economic growth that can be sustained as resources are generally improve
Equally, increasing production and economic growth will mean there is job c
the level of unemployment. By improving the productive capacity of an econ

production, an economy will become more competitive in the global market. increase and which will improve any trade deficit.

However, supply-side policies have long time lags; improving the quality of education can take 13 years. Data collection is slow and long-winded. The in governments may not only be inaccurate but also out of date, causing the go possibly incorrectly. Further to this, although the government can manipulat has some influences that the government has no control over. The governme shocks. Supply-side policies can also be very costly, which would have a neg government budget.

7. **How does fiscal policy conflict with other policies and the government's o**
Increased government spending may help to boo[illegible]conomy out of a rece spending will be likely to result in increas[illegible]d taxe[illegible]the future. This tax incr future fiscal approach, but will r[illegible]e [illegible]atives to work and could worsen how the tax is implement[illegible]ed. Equally, reducing government spending may m investment in sch[illegible]s, hospitals. This can have a negative impact on the liv econo[illegible]er the 2008 recession, the government shifted focus to reduce g spendi[illegible]wever, this was met with outrage by the public who feared losi on education quality. Cutting benefits also has the potential to worsen incom those who may need the benefits for survival.

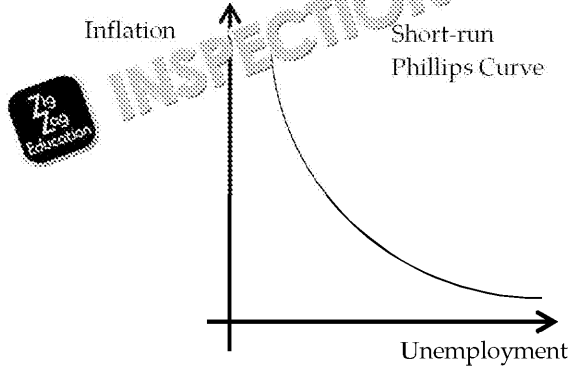
8. **How does monetary policy conflict with other policies and the governmen**
The Bank of England has independent control over the interest rates in order increasing interest rates can be damaging to some people; for example, new pay a mortgage. This could worsen wealth distribution. Monetary policy can policy. If interest rates are high then this will discourage new start-up busine within the market.

9. **How do supply-side policies conflict with other policies and the governme**
Supply-side policies that improve infrastructure will improve the efficiency damage the environment. Areas of forests, for example, may be cut down in Equally, supply-side investments will come out of the government's budget deflationary fiscal policy.

10. **What are market-based policies?**
Market-based policies aim to work alongside the market forces to manipulat

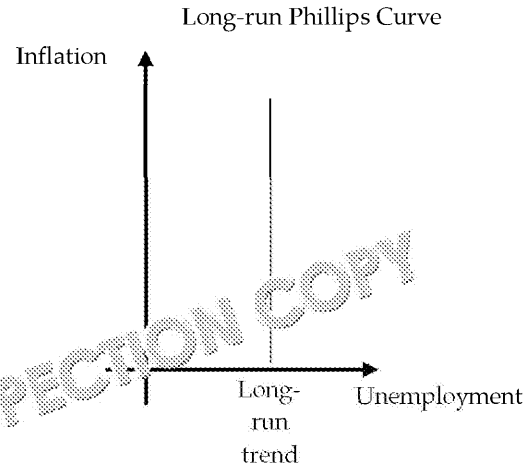
11. **What are interventionist policies?**
The government has a direct role with interventionist policies and intervene the economy.

12. a) **Draw a short-run Phillips curve.**



b) **What does the Phillips curve show in terms of meeting all the governm**
The Phillips curve shows that an economy cannot have both low inflatio
there is a trade-off between the two.

c) **Draw a diagram to show how the Phillips curve might look in the lon**



d) **Name and explain three other conflicts that might arise in the governm**
There is a conflict between economic growth and inflation. Economic gr
increase in aggregate demand. An increase in aggregate demand not on
increases the price level. Therefore, as an economy grows, it will tend to
too. One way to increase growth without increasing prices is to increase
economists believe this is the only way to create economic growth becau
curve, any increase in aggregate demand will only result in price increa

There is also a conflict between economic growth and the current accou
people's incomes rise, people will spend more on imports. As imports r
deficit (or improve a surplus). Equally, as the economy grows and inflat
appear more expensive in relation to foreign goods. This means exports
rising imports could create a negative current account (deficit).

Lastly, economic growth also conflicts with the government's environm
failure of negative externalities. Pollution and environmental degradati
environment is not accounted for in the market system. Economies gene
grow, which will use up more of the finite resources. With more produc
fossil fuels and with the expansion of new factories, offices, hospitals, et
space, which may currently be inhabited by nature. China is a clear exa
their high rates of economic growth and their low rates of clean air and
are particularly damaging to the environment d[illegible] their industrialisa
concerns are quickly forgotten with the [illegible]in growth rates, and c
intensive forms of production.

Answers to Exam-style Que

Exam-style Questions 1

1. **Describe the difference between real GDP and nominal GDP.**
The key point here is that real GDP adjusts for inflation so that values can be compa is correctly interpreted.

2. **Which one of the following is correct?**
   - **A** **In the case of constant prices (0% inflation), real GDP will rise faster t**
   - **B** **Real GDP is adjusted using the unemployment ra**
   - **C** **Nominal GDP adjusts all values relative to a** **e year.**
   - **D** **If inflation is positive, nominal GD** **w** **ll** **se faster than real GDP.**

Answer D is correct: if inflation is positive then nominal GDP will rise faster than r rising as well as economi *Award 1 mark for the correct answer.*

3. **Defin** **rm 'disinflation'.**
Disinfla *a slow-down in the rate of inflation. Prices are still rising (**not** negati mark for the correct interpretation.*

4. **Explain one limitation of using GDP as a measure of growth.**
These are covered in the text. Award 1 mark for an appropriate answer. Answers inc
   - *GDP does not take into account equality and how the growth is distributed.*
   - *GDP does not factor in resource depletion or environmental degradation.*
   - *If something is destroyed and then replaced it counts as growth.*
   - *GDP does not take into account happiness or well-being.*

5. **Name and explain briefly three different effects of inflation.**
The effects include diminished value of savings, shoe-leather costs, menu costs, disco international competition. Award one mark for each that is mentioned and explained

6. **Describe the process of creating an index for inflation.**
Award a mark for each correct point made:
   - *Selection of a basket of goods and services which represents the consumption ch*
   - *Each good is assigned a weighting based on its respective importance*
   - *Price increases are multiplied by the weight for each good and summed togethe*
   - *Price changes are analysed respective to a base year*

7. **Define the claimant count measure of unemployment.**
The claimaint count measures the number of people claiming unemployment benefits mark for the correct definition.

8. **Which one of the following cann** **rred from information in the tab**
   - **A** **More people were u** **ploy** **n England than in Wales.**
   - **B** **A higher pro** **people in Northern Ireland were unemployed tha**
   - **C** **E** **h** **re people in its workforce than Wales, Scotland or No**
   - **D** **A** **proportion of Scottish people were unemployed than Welsh**

The answer is D: A higher proportion of Scottish people were unemployed than Wels are 2.8% for Scotland and 3% for Wales. Award 1 mark for the correct answer.

9. **Which one of the following is correct?**
   - **A** **The CPI method of recording inflation aggregates price changes for all go**
   - **B** **CPI and RPI are identical measures.**
   - **C** **Some goods are given more importance than others when calculating**
   - **D** **CPI is always positive.**

The answer is C. This refers to the method of assigning goods different weights. Awa

Exam-style Questions 2

1. **Define the term 'disposable income'.**
   Disposable income is the money available to people once taxes have been subtracted a
   can choose to save or spend the income. Award 1 mark for a correct interpretation w

2. **An individual receives a windfall of £1,600. Their marginal propensity to c**
   how much of the extra income the individual will use for consumption.
   0.4 × 1600 = £640 will be used for consumption.

   Award 1 mark for the correct answer.

3. **Suppose that the individual chooses to save all of the extra income and no**
   MPC be?
   In this case MPC would be 0. In answer above it would be £0 out of £1,600 = 0/

   Award 1 mark for correct answer.

4. **Explain one factor that may influence the level of aggregate investment.**
   Factors mentioned in the text include: the rate of economic growth, business expecta
   rates, access to credit, and government regulation. Award 1 mark for correctly ident
   explaining it briefly.

5. **Define the term 'aggregate supply'.**
   The most simple definition is the total amount of output in an economy. It is the sup
   specified time period. Award 1 mark for a correct interpretation.

6. **What type of inflation is shown by the diagram below?**
   Demand has shifted out and 'pulls' costs upwards. This is demand-pull inflation. A

Exam-style Questions 3

1. **Which one of the following can be inferred from chart above?**
   - **A** **The UK's economy shrank between Q2 2014 and Q1 2015.**
   - **B** **Between 2010 and 2015 the UK's economy had consecutive quarters o**
   - **C** **The highest growth during the period was in 2014.**
   - **D** **The UK's economy grew overall in 2010.**

   The answer is D: The UK's economy grew overall in 2010 despite the fact that growt the correct answer.

2. **Which of the following statements is not true?**
   - **A** **In a boom an economy produces abov[illegible]-term trend rate of gr**
   - **B** **An output gap is the differer[illegible]ve[illegible]actual growth and the long-t**
   - **C** **In the long term, the t[illegible]t growth is always 0%.**
   - **D** **During a rec[illegible]is spare capacity in an economy that is not u**

   The ans[illegible]D. [illegible]sion signifies a negative output gap during which resources maxim[illegible]city. Award 1 mark for the correct answer.

3. **Describe the idea of loose monetary policy and how it can be used to stimu**

   By decreasing interest rates the central bank hopes to cut borrowing costs. This shou incomes and promote spending, thus boosting the economy. It may cause inflation to (0.5%) then it becomes impractical to lower them further and monetary policy may b 3 relevant points.

4. **Describe the main trends shown in the graph.**

   The key point is the sharp decline in interest rates following the 2008 financial crisis near-zero rates (0.5%). Prior to the crisis rates were higher and tended to vary year o correct observations.

5. **Explain the difference between direct and indirect taxes.**

   Award 1 mark for a correct definition of each. In the case of a direct tax, the taxpayer An indirect tax is paid by a middleperson who does not bear the burden of the tax. A tax. An example of an indirect tax is VAT.

6. **Calculate the multiplier if Marginal Propensity to Withdraw (MPW) is 0.4**

   The multiplier = 1/MPW = 1/0.4 = 2.5

   Award 1 mark for the correct answer.

Glossary

Aggregate	Total, the sum effect of the individual parts
Basket of goods	The name given to a list (basket) of items (goods) bought by an a accumulated from the Living Costs and Food Survey.
Brain Drain	Emigration of highly skilled or educated workers that causes a co
Commodity	A good that is **common**. Usually simple goods, such as milk or wh is very little difference between each product, i.e. milk from one another farmer. This inability to distinguish between the goods i 'homogeneous goods'. Goods that can be differentiated are calle eterogeneous; for e considered heterogeneous goo ch smartphone has tariff, camera specificati et
Deflation	A sustained fall the price level
Deflationary fiscal policy	Wh nment tries to 'deflate' or reduce the economy, or currently in a boom. To deflate the economy, the gov pending and/or increase taxation. This will decrease the AD cur fallen (deflation) and GDP has fallen to Y_2.
Disinflation	A fall in inflation, i.e. a fall in the increase of general price level
Economic Shock	An event that upsets the dynamics and the equilibriums in an ec change can happen within (internal) or outside (external) an eco
Economically Active	People who are willing and able to work whether they are emplo
Economically Inactive	People who are of working age (16–64) but are not available or l unable due to a disability, those who have chosen to stay at hom retired early
Emigration	An outward flow of people (people moving away from a country
Employment	The name given to a used resource; a worker who has a job and employment
Expansionary fiscal policy	Where the government tries to 'inflate' or boost the economy, u inflate the economy, the government will increase government s This will increase the AD curve from AD_1 to AD_2. GDP has risen b
Factor Immobility	The inability of factors of production to change or move
Fiscal Instruments	Government Spending and Taxation
Geographical Immobility	The inability of resources to move geographically
Government Budget (Fiscal) Deficit	When the money coming into the government is less than the m revenue and government spending. A fiscal deficit is not the sam linked to the idea of stocks and flows. The overall debt is a stock, owed. The deficit is a flow, a variable amount measured over a p need to borrow money to finance a deficit, which in turn creates
Government Budget (Fiscal) Surplus	When the money coming into the ov nment (tax revenue) exc spending).
Human Capital	The value or qu f a worker, such as their skills, knowledge, Invest ur n capital will increase the quality of a human a ty is an investment in human capital. It increases the edu creased wages a degree offers is the return on the investment.
Immigration	An inward flow of people (people moving to a country)
Income	The money that a person receives in exchange for something, e.g from letting a property. It moves from one agent to another; it is
Inflation	A sustained rise in the general price level
Injections	Things that outside economic agents do with their incomes that the circular flow. There is now more money going around the sys
Interventionist Policies	Interventionist policies are the opposite of market-based policie an active role within the economy. Its role is to intervene in orde market may generate and to guide an economy to a better equil

In economics, investment means firms have spent money in order to increase their ability to produce more consumer goods/services in the future. Investing increases a firm's 'productive capacity' and will thereby increase profits.
All factors of production can be changed
When inflation is expected to fall below target rates; the MPC will loosen its monetary policy by decreasing interest rates and/or increasing money supply. This will cause the AD curve to shift outwards to AD_2; price level has risen and so has GDP.
additional/extra bit
The proportion of the additional bit of income that goes to consumption
There is very little government intervention with market-based policies. The idea of these policies is to support and use the forces of the free market to increase efficiency, productivity and aggregate supply. Market-based policies try to boost aggregate supply by improving the ability of the free market to function and removing any barriers.
Movement of people between countries
Interest Rates and Quantitative Easing
The end sum of immigration minus emigration (positive net migration = more people have entered a country than left; negative net migration = more people have left a country than entered)
the inability of resources to swap from one industry to another
Equal
Per person
Ability
Portion
Rules and regulations put in place to protect the domestic economy from foreign competition. Import taxes, subsidies to domestic firms and quotas are all examples of protectionism.
Buying
The ability (power) to buy things (purchase)
At least one factor of production is fixed, they are not all variable
Currency that is pegged to the value of gold.
The proportion of income that will be leaked by buying imports
The proportion of income that will be leaked by saving
The proportion of income that will be leaked due to taxes
The process occurs after an injection into the economy and causes it to grow beyond the original amount injected.
Implemented when inflation is expected to exceed targets. The MPC will attempt to restrict aggregate demand by increasing interest rates and/or decreasing the money supply. Using the diagram from Fiscal Policy, this will cause the AD curve to shift inwards from AD_2 to AD_1; price level has fallen but so has GDP.
A worker is employed, but this differs from employment because the job does not fully utilise their human capital
The name given to an unused resource; a worker who is economically active but without a job
The money that a person holds. It may have built up from wages or investment returns, but it does not go anywhere. It is seen as a **stock** as it is money that is kept stored. Wealth can be savings accounts or items such as houses (assets).
Things that economic agents (within the system) do with their incomes that result in taking money out of the circular flow. By taking money out of the circular flow it is no longer going around the diagram.

Exam Tips!

Edexcel has designed this specification to create critical and broad-thinking economists. Try to remember the objectives when you write your answers because these are the skills they will be looking out for when they mark your exam papers.

Edexcel wants you to...

- Be critical
- Understand the economic concepts and be able to apply them to various sit
- Understand the theories and ideologies from variou[illegible]ools of thought
- Be able to draw on real-world examples (the[illegible]need to remember exa knowing a few relevant case studies[illegible]you can add in a sentence or two
- Make connections and link[illegible]the topics in each theme relevant to t

The Struc[illegible]f [illegible]xams: AS

Paper 2: Th[illegible]K economy – performance and policies

⏳ **Time**: 1 hour 30 minutes ✓ **Total Marks**: 80

Paper 2 looks at Theme 2, so it is a macroeconomic paper. Do not confuse micro try to keep them clear and differentiated in your mind! (*Paper 1 is similar in stru*

Within both papers there are two sections which require slightly different skills..

- **Section A** includes both multiple-choice questions (1 mark) and short-answe section tests a broad spectrum of your microeconomic/macroeconomic kno knowledge (AO1) and application (AO2), but note that there are also a few m
- **Section B** uses real-world examples and provides data for you to analyse – a is one question which is broken down into sub-questions. This section requi the ability to use higher-order skills (such as evaluating, comparing and cont this section, you should focus on providing not only AO1- and AO2- but also
- Finally, at the end of Section B, there are two long-answer questions, of whic answer both! They are 'open response' questions, which means they require questions are usually in the form of 'evaluating' a topic or point, or 'to what statement. This question will require answers showing the full range of skills

The Structure of the Exams: A Level

Paper 1: 'Markets and business behaviour' and Paper 2: 'The national an

⏳ **Time**: 2 hours per paper ✓ **Total Marks**: 100 per paper

Paper 1 looks at Themes 1 and 3, which are microeconomic[illegible]aper 2 looks at Th macroeconomics. Do not confuse micro concepts with macro concepts; try to ke in your mind!

Within both papers there are three sections which all require slightly different sk

- **Section A** includes both multiple-choice questions (1 mark) and short-answe sectio[illegible]a broad spectrum of your microeconomic/macroeconomic kno knowle[illegible]O1) and application (AO2), but note that there are also a few m
- **Section B** uses real-world examples and provides data for you to analyse – a is one question which is broken down into sub-questions. This section requi the ability to use higher-order skills (such as evaluating, comparing and cont this section, you should focus on providing not only AO1- and AO2- but also
- **Section C** provides two questions; you have a choice as to which one you an are 'open response' questions, which means they require an essay-style ans in the form of 'evaluating' a topic or point, or 'to what extent do you agree' question will require an AO1 and AO2 response, but do not focus too highly mainly be looking at higher-order skills and AO3- and AO4-level answers.

Paper 3: 'Microeconomics and macroeconomics'

⏳ **Time**: 2 hours	✓ **Total Marks**: 100

Paper 3 looks at all four themes. This means that the questions test a mixture of

The paper is split into two sections, and you will need to answer questions from
a 'data-response' question which will be split into sub-questions. Also in each se
response' questions and you can choice which one you answer. Each section beg
which you should remember to analyse and refer to in your answers, as required
questions asking you to refer to the data, and references in the questions such a
make sure you only answer questions you need to where there is an either/or ch

How the Examiner Awards Marks

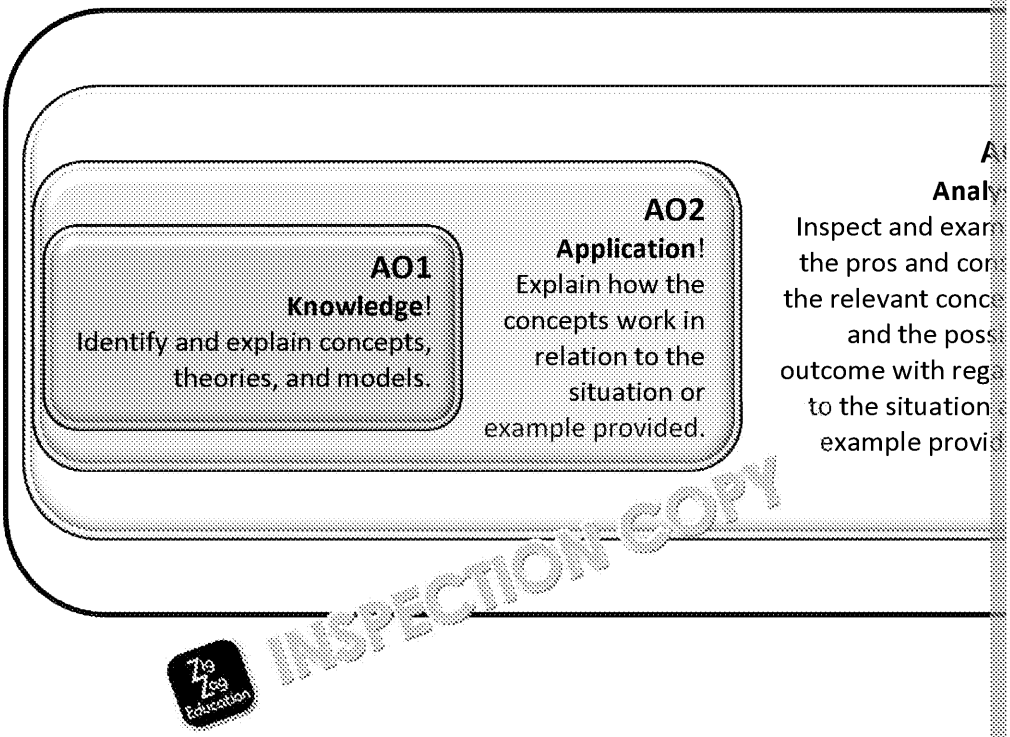
Show the examiner you know your stuff and h[illegible] it easy for them to give

This section will guide you [illegible] to present your answers in a way that the
knowing what the e[illegible] looking for, what the question is asking and what
student wil[illegible] you are better able to demonstrate you know your economics
marker to a[illegible] you more marks!

Some of this stuff may seem like common sense – but read it and remember it w
will help you to organise your thoughts and get into the mindset Edexcel are loo

Assessment Objectives

Assessment Objectives, or AOs, determine the level of your answers and show th
should award. Not all questions will require all the levels; make sure you have fu
gain the highest marks, without wasting time on answers that go above and beyo



Meaning of the Command Words (Taxonomy)

It may seem obvious to some of you that when the question asks you to examine kind of answer they are looking for. But the exam board have tried to stick to the questions to suggest the structure and answers on the mark scheme. This section meaning of the words, but about ensuring you know exactly what Edexcel are ge same wavelength.

These are the key command words for the longer questions:

- **'Examine…'**
  This kind of question is looking for you to answer, 'why does the topic of the an informed judgment, which is a chance for you as a student to express you opinion. But you will not need to give a decision.
- **'Assess…'**
  This kind of question wants you to weigh both sides of the topic. You will need points and concepts but identify which are most relevant. Provide your judg decision.
- **'Discuss…'**
  This question will require you to identify the topic in question, consider and then debate the relevance or importance of these ideas. Again, you will nee decision is not needed.
- **'Evaluate…' / 'To what extent…'**
  For this question, you will need to consider the information provided, then c relevant concepts and the provided data. You should give your judgment an the topic in question, in an all-inclusive conclusion.

Be Careful and Remember

How to Tackle a Question

It's a good idea to underline the key words while you're reading a question. This points and skills the question is testing. This also means that when you come bac quickly recognise what you're supposed to be checking for.

Essay-style and long-answer questions will require an answer that is succinct, str seem like a waste of time, but spending just a few minutes brainstorming and pla your response, save time in the long run and make it easier for the examiner ma examiner's life easy by showing them what you know – remember that this is yo knowledge! By planning what you are going to say and in wh order, you will ma Equally, this gives you a chance to trawl through your m or, and draw upon re through writing and forgotten the other poi t ou re going to mention, or tho have to tack on? If you have a plan it e you through all the points you th

Timing

In the **A Lev** ns you have two hours (120 minutes) to answer the questions time up and calculating how long you should spend on each question will mean y and give yourself time to check. Equally, if you know you have a limit, and keep t going too in-depth on a question that won't reward you for it.

Split the time using the marks as a weighting:

- 2 hours = 120 minutes
- Take out 20 minutes for reading the data, planning and checking at the end, minutes to write 100 marks (20 minutes is only as a guide, you can adapt th calculation more rounded and easy).
- 1 mark = 1 minute
  So, if you have a 5-mark question, spend 5 minutes answering it. If you have minutes answering it.

If you have extra time:

- 2 hours + 25% = 150 minutes
- 150 minutes to make 100 marks, excluding checking time, isn't such an easy minutes for checking and this leaves you with 120 minutes to write 100 mar
- 1 mark = 1.2 minutes, or, 5 marks = 6 minutes
  So, if you have a 15-mark question, $\left(\frac{15}{5}\right) \times 6$, spend 18 minutes answering it spend 30 minutes answering it.

In the **AS** exams, you have 90 minutes for 80 marks, so roughly 10 minutes plann mark again.

Things to Always Check Before Fin ish in

- Each axis on your graph i e ell d, and labelled correctly
- Lines/curves on di s are labelled, and labelled correctly
- Micro ts e kept for micro questions
- Macro pts are kept for macro questions
- Calculations are correct. Start with the end number and work through the ca checking to see whether the number you then end with, matches the origin
- You have answered all the questions you need to answer, all sub-questions looking for