

## Model Answers Unit 2 June 2009

1) A) i) With reference to Figure 1,

i) explain what is meant by the term *economic growth*. (4)

Economic growth means an increase in real GDP (*KAA 3 marks*). In 2006, Spain's economic growth was 2.7% (figure 1) (*KAA 1 mark*).

ii) outline how the Consumer Price Index is calculated. (4)

An annual price survey, the Expenditure and Food Survey, is undertaken by the ONS to collect data. The CPI is a price index of a basket of roughly 700 goods and services typically bought by the average household. The basket includes food, drink, shelter, clothing, energy, education and banking services. Goods are weighted more if households spend more money on them (*KAA 4 marks*).

iii) discuss two reasons why economic growth is inadequate as a measure of changes in living standards over time. (12)

A first reason is that GDP does not consider income distribution. An economy could be growing but income distribution may be becoming more unequal because it could be the rich that are driving economic growth and then receiving higher incomes rather than the poor. The poor may then not benefit from economic growth so living standards do not rise (*KAA 4 marks*). A second reason is that GDP does not consider health. A rise in GDP does not necessarily mean that the majority of people are becoming healthier. Maybe the NHS is inefficient and remains inefficient despite high economic growth. If people do not become healthier then living standards do not rise (*KAA 4 marks*). But, GDP has benefits such as being a cheap, easy and fairly reliable measure of economic growth and living standards. Mostly all economies have GDP data and it is a good first estimate of living standards (*E 2 marks*). Also, it may be difficult to measure living standards. It may not be possible to measure how healthy or how happy people are (*E 2 marks*).

B) i) Does Spain's current account balance as shown in Figure 1 represent a net *injection* or *withdrawal*? Explain your answer. (4)

A leakage/withdrawal is money leaving the economy (*KAA 2 marks*). Spain's current account deficit of -10.2% of GDP (figure 1) means that Spain's imports are more than its exports, more money is leaving Spain than coming in so it is a net leakage (*KAA 2 marks*).

ii) Outline two possible reasons for Spain's current account balance, with reference to the data in Figure 1. (6)

One reason may be Spain's high economic growth. In 2006, Spain's economy grew by 2.7% (figure 1) so Spanish consumers' income rose and Spanish consumers could buy more domestic and foreign goods so imports rose and the current account moved towards a deficit (*KAA 3 marks*). Another reason may be Spain's high inflation. In 2006, Spain's inflation rate was 2.8% and higher than Germany's inflation rate of 1.8% (figure 1) so Spanish goods were becoming dearer relative to German goods and Spanish consumers may have switched from buying Spanish goods to importing German goods (*KAA 3 marks*).

**C) With reference to Figures 1 and 2,**

**i) explain what is meant by the term *Human Development Index*. (4)**

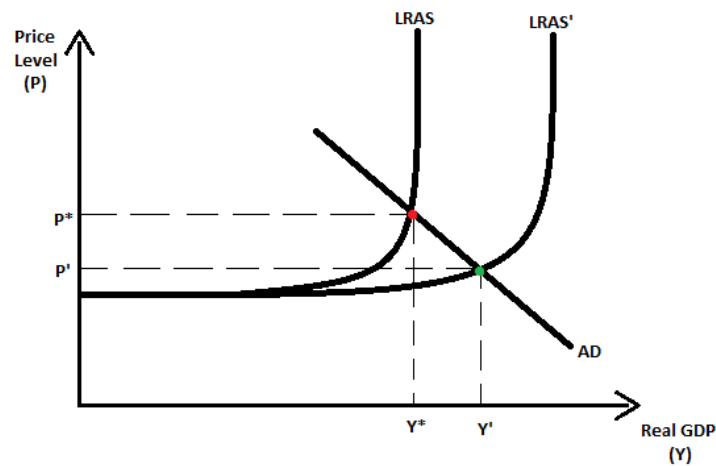
The HDI is a multidimensional measure of economic development. The HDI measures a mix of GDP per capita (2006 PPP), health (life expectancy) and education (literacy) **(KAA/KAA 4 marks)**.

**\*ii) evaluate the advantages of the HDI in making comparisons between countries. (16)**

A first benefit is that the data is easy to obtain data. Almost every country has GDP, life expectancy and literacy rate figures. Most, if not all, of the data should also be free as they should be available online **(KAA 3 marks)**. A second benefit is that HDI scores are easily comparable. It is easy to compare HDI scores between countries because they are just numbers between 0 and 1. A country with a HDI score of 0.7 is more developed than a country with a HDI score of 0.4 **(KAA 3 marks)**. A third benefit is that HDI includes health and education. Economic development is more than just high incomes, it includes health, measured by life expectancy in the HDI, and education, measured by literacy rates in the HDI **(KAA 3 marks)**. But, GDP per capita does not reveal the distribution of income. Maybe the majority of the population are in poverty so the economy is not developed. Maybe the Human Poverty Index could be added to the HDI to include a deprivation measure **(E 2 marks)**. Also, the HDI does not reveal the quality of education. Kids could be in school but not learning. Also, maybe kids are taught academic KAA when they need practical KAA (cooking, cleaning and building) **(E 2 marks)**.

**\*iii) Evaluate the use of supply side policies to achieve economic growth. (30)**

Supply-side policies are designed to increase efficiency and shift LRAS right (*KAA 2 marks*).



LRAS shifts right to LRAS', the price level falls from P\* to P' and real GDP rises from Y\* to Y' (*KAA 4 marks*).

A supply-side policy that could be used is reducing unemployment benefits. Reducing benefits will encourage the unemployed to find jobs because working and earning a wage now gives the unemployed an even higher income than staying on the lower unemployment benefits so incomes rise, consumption rises, firms produce more and real GDP rises (*KAA 4 marks*).

Another supply-side policy the government could use is reducing corporation tax. Reducing corporation tax means firms' after-tax profits rise, firms have more money to invest in R&D and their capital stock, new and more efficient machinery is developed, the economy becomes more efficient, the economy's productive capacity increases, LRAS shifts right and real GDP rises (*KAA 4 marks*).

Another supply-side policy that could be used is education and training. An increase in education spending means more people go to school and university and more people undertake apprenticeships so workers become better educated and better skilled, workers can produce more and quicker so firms become more efficient, LRAS shifts right and real GDP rises (*KAA 4 marks*).

Although, for supply-side policies to be effective, their magnitude must be significant. A small rise of £1 million on education spending will not improve schools or apprenticeships that much, workers do not become that much more skilled and the economy does not become much more efficient. The government must ensure that enough money is spent on education and that corporation tax and benefits are cut far enough to be effective (*E 4 marks*).

Additionally, supply-side policies may be ineffective in the short-run. As there are time lags involved such as building a school, training for about 2 years on an apprenticeship and building machinery, supply-side policies do not come into effect until the long-run so in the short-run the economy does not become more efficient (*E 4 marks*).

Lastly, supply-side policies have an opportunity cost. A large rise in education spending may mean a large fall in healthcare spending, the NHS will suffer as there may be less ambulances, the NHS becomes more inefficient and ill people may be denied healthcare when they urgently require it (*E 4 marks*).

**2) A) i) What is meant by an *inflation target* (Extract 1, line 9)? (4)**

An inflation target is the range allowed for prices to move between. The MPC's inflation target is 2% plus/minus 1% as measured by the CPI **(KAA 4 marks)**.

**i) Using the evidence from Extract 1 and Figure 1, analyse two possible reasons why the MPC took the decision to cut the official interest rate in February 2008. (10)**

A reason may be that access to credit has been restricted (extract 1). Restrictions on credit means consumers and firms cannot take out as many loans, consumption and investment fall, there is less money flowing around the economy, AD falls and there is demand-pull deflation **(KAA 5 marks)**. Another reason may be disruption to global financial markets (extract 1). As a result of the 2007 credit crisis, banks restricted lending, consumers could not borrow much so consumption fell, AD fell and inflation fell. So the MPC must reduce interest rates to boost consumption, investment and AD to raise inflation **(KAA 5 marks)**.

**iii) Assess the likely impact of a cut in interest rates on the distribution of income. (8)**

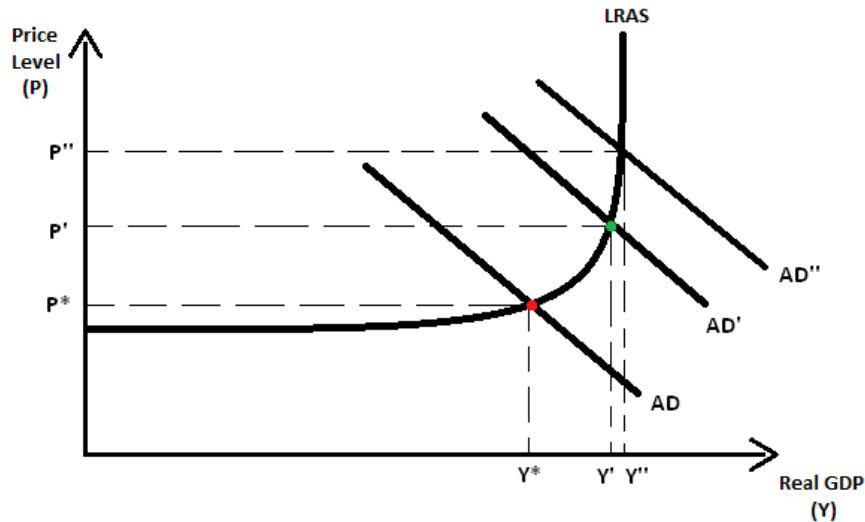
A cut in interest rates will likely improve income distribution. Borrowers are likely to be poor and if interest rates fall, the cost of borrowing falls, the poor pay back less on their loans so the poor's disposable income rises. Savers are likely to be rich and if interest rates fall, the return on savings falls and the rich do not make as much money. Income distribution improves because the poor's income rises relative to the rich's income **(KAA 4 marks)**. However, the poor may also be savers and if interest rates fall, the poor will suffer from lower returns on their savings as well as the rich **(E 2 marks)**. Also, the poor's mortgages may be a higher proportion of their income than the rich so, as interest rates fall, the poor must devote an even higher proportion of their income to mortgage repayments, the poor's disposable income falls and income distribution becomes more uneven **(E 2 marks)**.

**B) With reference to Extract 2 and Figure 2,**

**i) Explain the phrase *government budget deficit*. (4)**

A government budget deficit means government spending is greater than taxation **(KAA 2 marks)**. In 2007, the UK government budget deficit was £39.4 billion **(KAA 2 marks)**.

**\*ii) Evaluate why a change in the government budget deficit may lead to a more than proportional change in aggregate demand. Use an aggregate demand and supply diagram to illustrate your answer. (14)**



AD shifts right to AD'', the price level rises from  $P^*$  to  $P''$  and real GDP rises from  $Y^*$  to  $Y''$  (KAA 4 marks).

An initial change in AD has a larger final impact on real GDP due to the multiplier (KAA 2 marks). A rise in government spending means more injections and AD shifts right to AD'. Because there is more spending in the economy, firms produce more so they must hire more workers, workers earn higher incomes, consumption rises and, due to the multiplier, AD' shifts right to AD'' (KAA 4 marks).

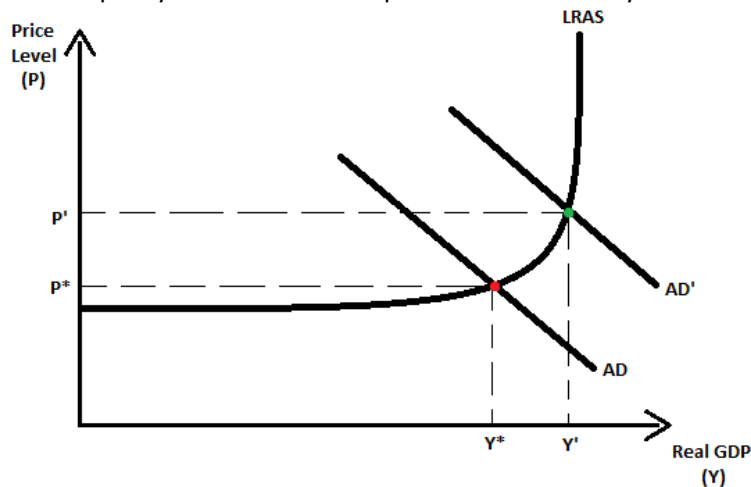
However, the extent of the rise in real GDP depends on the magnitude of the rise in the fiscal deficit. A small rise in the fiscal deficit means only a small rise in injections into the economy, a small rise in money flowing around the circular flow and a small rise in production by firms (E 2 marks). Also, the effect on the price level depends on the elasticity of LRAS. If LRAS is inelastic, a rise in AD means the economy moves closer to full capacity, resources are running out, labour and raw material prices rise, firms' costs and prices rise and there is severe cost-push inflation (E 2 marks).

**C) With reference to Figure 3, explain two costs of unemployment. (10)**

Between mid-2005 and January 2009, unemployment rose from, about 1.45 million to roughly 1.80 million (KAA 2 marks). A cost of unemployment is lower living standards. Anyone unemployed earns no wage and must go on unemployment benefits so their income falls, they cannot buy as many goods and services and consequently their living standards fall. At the extreme, if there are no social safety nets like unemployment benefits then the unemployed may be forced into poverty. Additionally, the unemployed may have dependents who rely on being fed and looked after, these dependents will also suffer lower living standards (KAA 4 marks). Another cost of unemployment is lower tax revenue. The government's tax revenue falls because with less people working, the government receives less in income tax and there is less consumption so the government receives less VAT revenue. The government must also spend more on unemployment benefits so they may need to raise taxes or cut spending on health or education to pay for more benefits (KAA 4 marks).

**\*D) To what extent do demand-side policies lead to conflicts between macroeconomic objectives? (30)**

Monetary policy and fiscal policy are demand-side policies because they affect AD **(KAA 2 marks)**.



AD shifts right to  $AD'$ , the price level rises from  $P^*$  to  $P'$  and real GDP rises from  $Y^*$  to  $Y'$  **(KAA 4 marks)**.

Monetary policy to target lower inflation may conflict with high economic growth. A tight monetary policy means interest rates rise, the cost of borrowing rises, consumers and firms take out less loans, consumption and investment both fall, AD falls, the price level falls so there is demand-pull deflation and real GDP falls. This means the MPC meet their inflation target of 2% plus/minus 1% (CPI) but the government's objective of high economic growth is not met **(KAA 4 marks)**.

Monetary policy to target lower inflation may also conflict with a current account surplus. A tight monetary policy means interest rates rise, the cost of borrowing rises, consumers take out less loans, consumption falls, AD falls, the price level falls so there is demand-pull deflation and real GDP falls. Because UK interest rates are higher, foreigners will demand more £ to save in UK banks, the £ appreciates, UK exports are dearer so exports fall, UK imports are cheaper so imports rise and the current account moves towards a deficit **(KAA 4 marks)**.

Fiscal policy to target high economic growth may conflict with environmental protection. A rise in government spending means more injections into the circular flow of income, more money flowing around the economy, more jobs are created, incomes and consumption rise, AD rises and real GDP rises. Because AD rises, firms produce more and dump more toxic waste into rivers so the biosphere is damaged as river plant and sea life are harmed **(KAA 4 marks)**.

However, low inflation and high economic growth will only conflict if LRAS is elastic. If LRAS is inelastic then, as interest rates rise, consumption falls, AD falls, the price level falls so there is demand-pull deflation but real GDP stays the same. Real GDP does not fall because the economy is at full capacity, the economy is producing its maximum amount and production will not fall unless AD shifts left to a large extent **(E 4 marks)**.

Additionally, monetary policy may take time to cause conflicts between inflation and economic growth. Both an interest rate change and the multiplier take up to two years to exert their full effects. A tight monetary policy will not cause AD to fall in the short-run so economic growth will not be effected until the long-run **(E 4 marks)**.

Lastly, other factors may prevent conflicts between macroeconomic objectives. For example, a tight monetary policy raises interest rates and may reduce consumption but if consumer confidence is extremely high then consumers will continue to take out loans and consume because they expect to be earning high incomes in the future, so AD and real GDP do not fall **(E 4 marks)**.

## Model Answers Unit 2 June 2010

1) A) With reference to Figure 1 and Extract 1,

i) explain what is meant by an 'output gap' (*Extract 1, line 5*). (4)

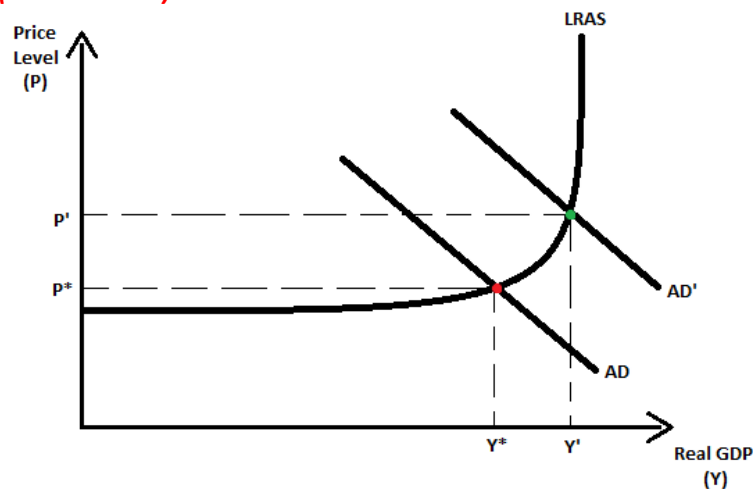
An output gap is the difference between actual/real and potential/trend GDP growth (*KAA 2 marks*). During 2009 Q1, actual GDP growth was -2.5% so there was a negative output gap because actual GDP growth was lower than potential GDP growth (figure 1) (*KAA 2 marks*).

ii) distinguish between *fiscal policy* and *monetary policy*. (6)

Monetary policy is the manipulation of monetary variables (interest rate and money supply) by the MPC to control inflation (*KAA 3 marks*). Fiscal policy is the manipulation of government spending and taxation by the government to target macroeconomic objectives (*KAA 3 marks*).

\*iii) discuss the likely effectiveness of 'expansionary... fiscal and monetary policies' (*Extract 1, lines 2 to 3*) as a means of closing the output gap. (16)

A loose monetary policy means the MPC reduce interest rates, the cost of borrowing falls, consumers take out more loans, consumption rises, AD rises and real GDP rises (*KAA 4 marks*). Expansionary fiscal policy means the government raise government spending so there are more injections into the circular flow of income, more money flowing around the economy, consumption rises, AD shifts right and real GDP rises. Real GDP moves closer to potential/trend GDP growth so the output gap closes (*KAA 4 marks*).



AD shifts right to AD', the price level rises from P\* to P' and real GDP rises from Y\* to Y' (*KAA 4 marks*).

But, real GDP will only rise if LRAS is elastic. If LRAS is perfectly inelastic then the economy is at full capacity, any rise in AD will only increase inflation and not increase real GDP because the economy cannot produce any extra goods (*E 2 marks*). Moreover, monetary policy has a time lag because it takes roughly 2 years for an interest rate change to exert its full effect. Fiscal policy also takes time to exert its effects because spending and taxation plans must first be announced in The Budget before they are executed (*E 2 marks*).

**B) i) Explain the methods used to obtain measures of ILO unemployment and the claimant count. (4)**

To measure ILO unemployment, the ONS carry out a survey of 60,000 working age people (aged 16-65) and interview them four times per year by phone. A person is defined as unemployed if they have been looking for work in the last four weeks and if they are ready to work within the next two weeks **(KAA/KAA 2 marks)**. Anyone aged 18-65 claiming unemployment benefit such as Job Seekers Allowance is defined as unemployed by the Claimant Count **(KAA/KAA 2 marks)**.

**ii) Explain why ILO unemployment is still expected to rise above 3 million even though 'the worst of the economic downturn is over' (Extract 1, line 1). (6)**

Basically, unemployment is a lagging indicator, that is, unemployment has a time delay before it adjusts **(KAA 2 marks)**. Maybe firms cannot afford recruitment and search costs as they are just coming out of a recession so they cannot currently hire workers **(KAA 2 marks)**. Also, maybe firms fear that the recovery will only be short-term and that the economy will fall into a double-dip recession so they may begin to fire some workers **(KAA 2 marks)**.

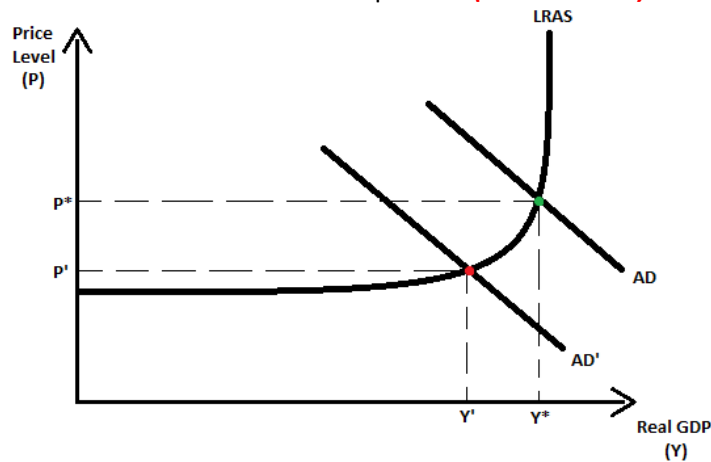
**C) With reference to Figure 3 and Figure 4, assess the significance of immigration for employment and unemployment. (14)**

Between 1998-2007, immigration into the UK rose from 400,000 to roughly 600,000 (figure 3) **(KAA 2 marks)**. Migrants may fill important skill shortages in the UK labour market so employment rises. For example, in the last few years, migrants have accounted for over half the expansion of NHS staff **(KAA 2 marks)**. Additionally, migrants will increase the UK's population and consumption so AD rises, firms must produce more goods so they hire more labour, more jobs are created and employment rises **(KAA 2 marks)**. Because only 30% of migrants have a definite job (figure 4), most migrants may come to the UK, find no jobs, begin to claim benefits and increase UK unemployment **(KAA 2 marks)**. Also, migrants may take jobs away from UK workers so unemployment amongst UK born citizens rises **(KAA 2 marks)**. However, the data may be unreliable. For example, the data does not reveal whether migrants who are coming for formal study will remain in the UK to search for jobs **(E 2 marks)**. Furthermore, migrants may come to the UK with dependents like kids so, even if they do want to work, they may not be able to work because they cannot leave their children at home unsupervised **(E 2 marks)**.



**\*D) Evaluate the likely effects of a recession (negative economic growth) on the UK economy. (30)**

A recession means real GDP falls for 2 consecutive quarters **(KAA 2 marks)**.



AD shifts left to AD', the price level falls from  $P^*$  to  $P'$  and real GDP falls from  $Y^*$  to  $Y'$  **(KAA 4 marks)**.

A likely effect may be a rise in unemployment. A recession means AD falls, consumers demand less goods and services from firms and, because labour is a derived demand, firms fire workers. Multiplier effects mean the unemployed have lower incomes so they consume less, AD falls again, even more workers are fired and unemployment rises further. So there may be high demand-deficient unemployment **(KAA 4 marks)**.

Another effect may be falling investment. A recession means consumption is falling so firms must produce less and firms do not need to build more machinery so investment falls. Furthermore, firms will expect to make lower profits in the future if the recession continues so firms are disincentivized to invest in R&D so there is less innovation in the economy and consumers do not benefit from new goods **(KAA 4 marks)**.

Another effect may be deflation. A fall in AD means there is less spending in the UK, UK firms produce less so they fire workers and demand less raw materials. This means resources become less scarce so firms' resource costs fall and firms can charge lower prices so there is demand-pull deflation **(KAA 4 marks)**.

Although, a benefit of a recession may be less environmental damage. A recession means consumers buy less cars and less petrol so they drive less, less dirty emissions are pumped into the air so damage to the atmosphere is reduced. Moreover, firms produce less goods so they extract less oil and diamonds from the ground so damage to the geosphere is reduced **(E 4 marks)**.

Additionally, there may be cost-push inflation rather than demand-pull deflation. Maybe the recession is caused by LRAS shifting left rather than AD shifting left. If LRAS shifts left, resource prices and wages rise so firms' costs rise and their prices rise so there is cost-push inflation **(E 4 marks)**.

Lastly, the recession may not have a negative effect on the economy if agents expect the economy to boom in the near future. If agents expect a boom to quickly follow the recession, agents may continue to spend because they expect to earn higher incomes in the future so consumption rises, AD rises and real GDP rises **(E 4 marks)**.

## 2) With reference to Extract 1,

### A) i) explain how Consumer Price Inflation (CPI) is measured. Refer to weights in your answer. (4)

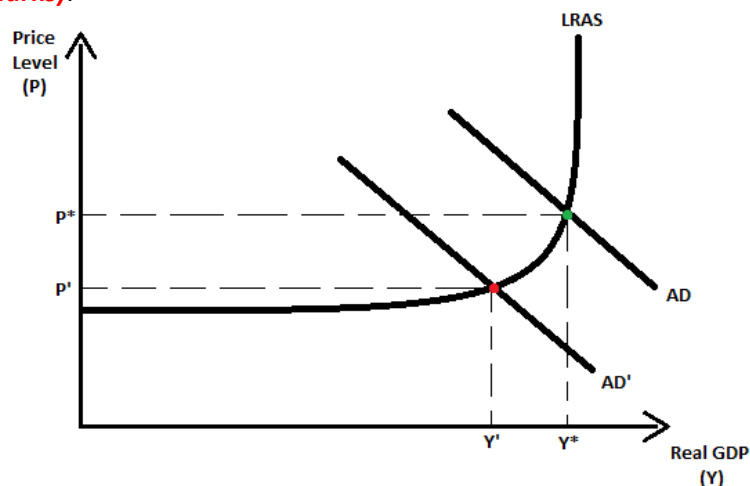
An annual price survey, the Expenditure and Food Survey, is undertaken by the ONS to collect data. The CPI is a price index of a basket of roughly 700 goods and services typically bought by the average household. The basket includes food, drink, shelter, clothing, energy, education and banking services. Goods are weighted more if households spend more money on them **(KAA 4 marks)**.

### ii) explain two reasons why the government has a low rate of inflation as a macroeconomic objective. (8)

A reason is to keep real incomes high. Inflation devalues money and consumers' real income so less can be bought and living standards fall. This is especially damaging for the poor as they may be on fixed nominal incomes without any power to negotiate higher nominal wages when inflation rises **(KAA 4 marks)**. Another reason is to help investment. A low and stable rate of inflation makes it easier for firms to plan and invest. Also, high inflation means firms must suffer menu costs because they must update their menus, shop signs and websites and this means firms make lower profits and invest less **(KAA 4 marks)**.

### iii) examine how interest rate decisions may be used to achieve the government's inflation target. (14)

A high rate of inflation means the MPC must raise interest rates. A rise in interest rates means the cost of borrowing rises, consumers take out less loans and buy less credit-bought items like TVs so consumption falls, AD falls and there is demand-pull deflation **(KAA 4 marks)**. Moreover, higher interest rates means the cost of borrowing rises for firms so firms take out more loans, investment falls, there are less injections into the circular flow of income, AD falls and there is demand-pull deflation **(KAA 4 marks)**.



AD shifts left to AD', the price level falls from P\* to P' and real GDP falls from Y\* to Y' **(KAA 4 marks)**.

However, interest rates have a time lag before they reduce inflation. An interest rate change takes up to 2 years to exert its full effect on AD and inflation **(E 2 marks)**. Furthermore, a higher interest rate will only reduce inflation if LRAS is inelastic. An elastic LRAS means, as AD falls, real GDP falls but the price level does not change so there is no deflation **(E 2 marks)**.

With reference to Figures 1 and 2,

**B) i) identify changes in house prices and affordability of houses in the UK since 2005. (4)**

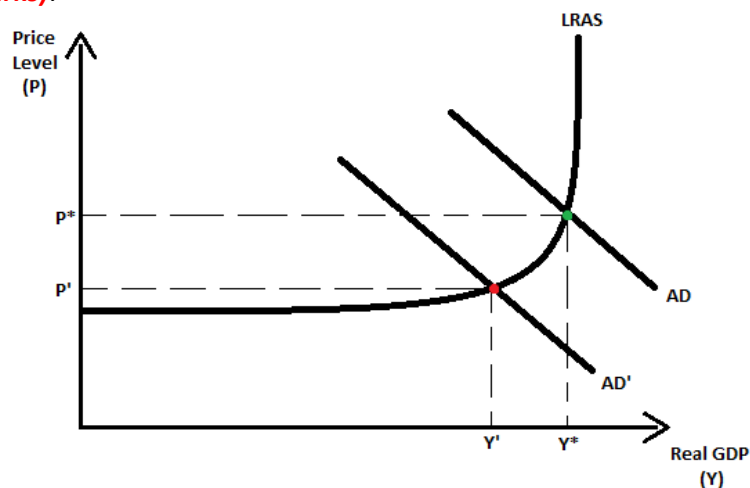
Between 2005-2007, house prices rose from about £165,000 to £200,000 (figure 1) *(KAA 1 mark)*. House prices peaked at £200,000 in 2007 (figure 1) *(KAA 2 marks)*. Houses were most affordable at the end of 2008 at roughly £165,000 (figure 1) *(KAA 1 mark)*.

**ii) define the term *wealth effect*. (4)**

A wealth effect occurs when an asset's value changes. A rise in house prices, for example, makes homeowners feel wealthier so homeowners increase their consumption *(KAA 4 marks)*.

**\*iii) assess the likely effects on real output and the general price level of changes in house prices since mid-2007. Use an aggregate demand and supply diagram to support your answer. (16)**

A fall in house prices induces a negative wealth effect that makes homeowners feel less wealthy so homeowners decrease their consumption, there is less spending in the economy and AD falls *(KAA 2 marks)*. Additionally, there is a decrease in equity withdrawal. Because houses have fallen in value, homeowners take out lower loans against the value of their homes, consumption falls further and AD falls *(KAA 2 marks)*.



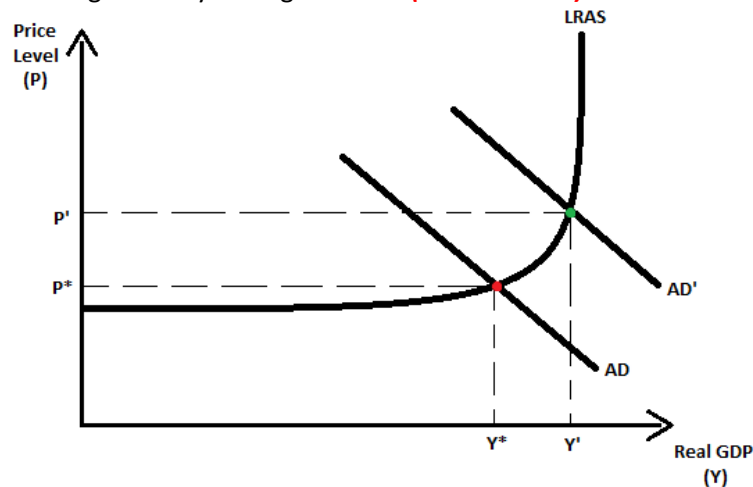
AD shifts left to AD', the price level falls from P\* to P' and real GDP falls from Y\* to Y' *(KAA 4 marks)*.

AD falls to AD' so there is demand-pull deflation as the price level falls from P\* to P' *(KAA 2 marks)*. Because there is less spending in the economy, firms produce less and real GDP falls from Y\* to Y' *(KAA 2 marks)*.

The effect of decreasing house prices on real GDP and the price level depends on the elasticity of LRAS. If LRAS is elastic then, as AD falls, real GDP falls significantly but the price level does not change *(E 2 marks)*. Moreover, after mid-2007, houses are becoming more affordable for first time buyers (figure 2) so AD may rise. As house prices fall, mortgages become cheaper, homeowners' debt falls, real disposable incomes rise, consumption rises and AD rises *(E 2 marks)*.

**\*C) Evaluate three ways in which economic policy can be used to 'stimulate UK economic growth' (Extract 1, lines 4 to 5). (30)**

A government stimulates growth by raising real GDP **(KAA 2 marks)**.



AD shifts right to AD', the price level rises from P\* to P' and real GDP rises from Y\* to Y' **(KAA 4 marks)**.

Loose monetary policy may be used to boost economic growth. The MPC could reduce interest rates so the cost of borrowing falls, consumers take out more loans, consumption rises, AD rises and real GDP rises. Additionally, a fall in interest rates means the return on savings falls so consumers are disincentivized to save and instead increase consumption so AD rises further and real GDP rises **(KAA 4 marks)**.

Expansionary fiscal policy could also be used to increase economic growth. An increase in government spending and decrease in taxation means there are more injections into, and less leakages from, the circular flow of income, more money flowing around the economy, more spending, more jobs are created, AD rises and real GDP rises **(KAA 4 marks)**.

Supply-side policies may also be used to raise economic growth. The government could increase spending on education and training so that human capital improves, workers become more skilled, firms become more efficient and can produce more so the productive capacity of the economy increases, full capacity increases, LRAS shifts right and real GDP rises **(KAA 4 marks)**.

However, the magnitude of interest rate cuts and tax cuts must be large enough to raise real GDP. A small fall in interest rates means the cost of borrowing only falls a little bit so consumption, AD and real GDP do not rise much. Likewise, the multiplier must be large enough for monetary policy and fiscal policy to be effective. A larger multiplier means AD shifts further right and real GDP rises even higher **(E 4 marks)**.

Additionally, there are time lags involved with these policies so they may not stimulate economic growth until the long-run. Monetary policy takes time because it takes up to 2 years for an interest rate change to exert its full effect on AD. Fiscal policy takes time because tax changes must first be announced in The Budget before they are executed. Supply-side policies take time because schools may need to be built and it takes time to educate/train workers **(E 4 marks)**.

Lastly, the effectiveness of monetary and fiscal policy depends on the elasticity of LRAS. If the economy is at full capacity on the inelastic part of LRAS then, as AD rises, real GDP does not change because the economy cannot produce an extra output so all that occurs is demand-pull inflation. Monetary policy and fiscal policy only raise real GDP if LRAS is elastic **(E 4 marks)**.

## **Model Answers Unit 2 January 2011**

**1) A) i) With reference to Figure 1, explain what happened to the price level in the period shown. (6)**

Inflation is a rise in the average price level sustained over a period of time **(KAA 2 marks)**. Both the CPI and RPI measure inflation but the RPI includes mortgage interest repayments **(KAA 2 marks)**. Between November 2007-November 2009, the CPI fell from about 4.2% to roughly 2% whereas the RPI fell from about 4.3% to roughly 0.2% (figure 1) **(KAA 2 marks)**. The CPI and RPI both peaked in August 2008 at about 5% (figure 1) **(KAA 2 marks)**.

**ii) With reference to Figure 1, and your own knowledge, to what extent has monetary policy, as conducted by the Monetary Policy Committee, been a success? (12)**

Monetary policy has been a success because the MPC have brought inflation back in target. The MPC target inflation of 2% plus/minus 1% as measured by the CPI. Between August 2008-November 2009, inflation fell from about 5% to roughly 2% (figure 1). Maybe the MPC raised interest rates to bring inflation back down to its target **(KAA 4 marks)**. Also, the MPC have been a success because they are still independent from politics. The BoE were made independent from the government in May 1997 so that the BoE could credibly target inflation. Agents believe that the BoE will target inflation and will not change interest rates based on political decisions for example, to reduce unemployment during election times **(KAA 4 marks)**. However, the CPI was not always within target. Between November 2007-August 2008, the CPI rose from about 2.1% to roughly 5% (figure 1). Because inflation was above the maximum 3% allowed by the MPC, the MPC failed to control inflation for this period **(E 2 marks)**. Moreover, in 2009 the BoE used Quantitative Easing (QE), basically buying back assets and government bonds from private banks, and this may have had an uncertain effect on inflation. QE is unpredictable as it has never been used in the UK before 2009. At the extreme, it may cause hyper-inflation **(E 2 marks)**.

**B) With reference to Figure 2,**

**i) Explain what is meant by a fall in *Gross Domestic Product at constant prices*. (4)**

GDP at constant prices is real GDP, that is, GDP with inflation taken into account **(KAA 1 mark)**. A fall in real GDP means there is a fall in the output of goods or services produced in an economy **(KAA 1 mark)**. In 2009, the UK's real GDP growth was -4.9% **(KAA 2 marks)**.

**\*ii) Discuss two problems of comparing the economic growth of the UK and developing economies using GDP as a measure. (12)**

A problem is the black economy. The UK may have a smaller black economy than LDCs so LDCs will have more unrecorded transactions and their GDP will be lower than it should be **(KAA 2 marks)**. For example, there may be many people in Yemen selling goods unofficially whereas in the UK a person must legally create a business to sell goods which are then recorded and charged VAT **(KAA 2 marks)**. Another problem may be rapid population growth in LDCs. LDCs' population may grow faster than the UK's and more people in LDCs potentially means more can be produced and GDP rises. Essentially GDP is then measuring population size rather than output **(KAA 2 marks)**. For example, the population of Uganda may grow twice as fast the population of the UK, meaning that GDP could potentially grow twice as fast in Uganda than the UK **(KAA 2 marks)**. But, the benefit of using GDP is that it is easily comparable between countries and simple and cheap to collect data because basically every country has GDP data **(E 2 marks)**. Furthermore, GDP per capita could be

used instead to compare economies because population size is taken into account. GDP per capita is GDP divided by population. Between the UK and LDCs, if LDCs' population is growing faster, LDCs' GDP per capita may be falling because the average person becomes worse off **(E 2 marks)**.

**iii) Analyse two possible implications for macroeconomic policy of inaccurate forecasts of GDP growth data. (8)**

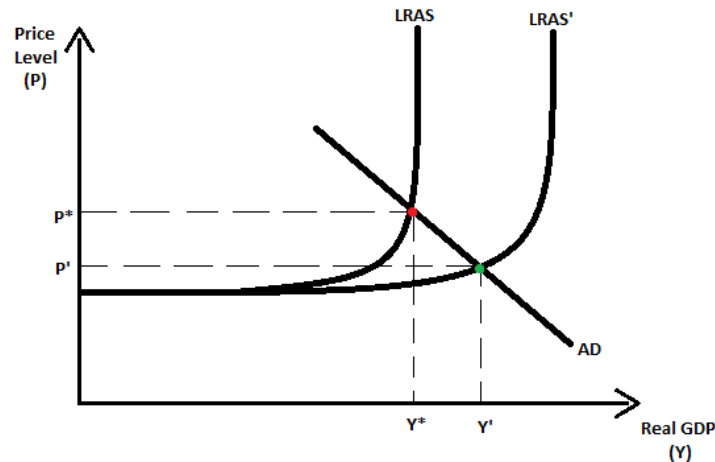
Maybe real GDP grows faster than the data forecasts, meaning the economy moves closer to full capacity **(KAA 2 marks)**. A tight monetary policy may be required because inflation may rise. Because the economy moves closer to full capacity, there may be demand-pull inflation that raises inflation above the MPC's target of 2% plus/minus 1% (CPI) so the MPC must raise interest rates to raise the cost of borrowing, reduce consumption, reduce AD and push inflation back down **(KAA 4 marks)**. Additionally, the government may need to use supply-side policies to raise economic growth in the future. As the economy reaches full capacity, LRAS becomes more inelastic and a rise in AD will, eventually, not raise real GDP anymore. So the government must use supply-side policies like education and training to increase efficiency, shift LRAS right and increase the productive capacity of the economy **(KAA 4 marks)**.

**C) With reference to Extract 1, analyse the possible impact on the distribution of income of negative economic growth. (8)**

Most likely, negative economic growth will increase income inequality **(KAA 2 marks)**. As the economy shrinks, unemployment amongst the poor may rise. AD is lower so firms produce less and, because labour is a derived-demand, unemployment rises. The poor will likely lose their jobs and go on unemployment benefits so income amongst the poor falls whereas income amongst the rich may remain stable so income inequality rises **(KAA 4 marks)**. Moreover, during negative economic growth, banks may lend less to the poor. Banks will not lend to risky borrowers and, because the poor are most likely to lose their jobs, the poor are the most risky. Banks will restrict credit to the poor but continue to lend to the rich so the poor cannot develop their businesses or invest in their education whereas the rich can so the rich get richer than the poor and income inequality rises **(KAA 4 marks)**.

**\*D) Assess the effectiveness of supply-side measures that the government could use to deal with the problems outlined in paragraphs 3, 4 and 5 of Extract 1. (30)**

Supply-side policies are designed to increase efficiency and shift LRAS right **(KAA 2 marks)**.



LRAS shifts right to  $LRAS'$ , the price level falls from  $P^*$  to  $P'$  and real GDP rises from  $Y^*$  to  $Y'$  **(KAA 4 marks)**.

A supply-side policy that could be used is reducing unemployment benefits. Reducing benefits will encourage the unemployed to find jobs because working and earning a wage should give the unemployed a higher income than staying on the now lower unemployment benefits. Bringing the unemployed back to work should help to reduce the high unemployment in the economy (extract 1) **(KAA 4 marks)**.

Another supply-side policy the government could use is reducing corporation tax. Reducing corporation tax means firms' after-tax or retained profits rise, firms have more money to invest in R&D and their capital stock, new and more efficient machinery is developed and the economy becomes more efficient. Reducing corporation tax should offset the reduction in bank credit to firms that is restricting firms' ability to invest in their capital stock and R&D (extract 1) **(KAA 4 marks)**.

Another supply-side policy that could be used is education and training. An increase in education spending means more people go to school and university and more people undertake apprenticeships so workers become better educated and better skilled, workers can produce more and quicker so firms become more efficient. This should help reduce the problem of falling productivity (extract 1) **(KAA 4 marks)**.

Although, for supply-side policies to be effective, their magnitude must be significant. A small rise of £1 million on education spending will not improve schools or apprenticeships that much, workers do not become that much more skilled and the economy does not become much more efficient. The government must ensure that enough money is spent on education and that corporation tax and benefits are cut far enough to be effective **(E 4 marks)**.

Additionally, supply-side policies may be ineffective in the short-run. As there are time lags involved such as building a school, training for about 2 years on an apprenticeship and building machinery, supply-side policies do not come into effect until the long-run so in the short-run the economy may not become much more efficient **(E 4 marks)**.

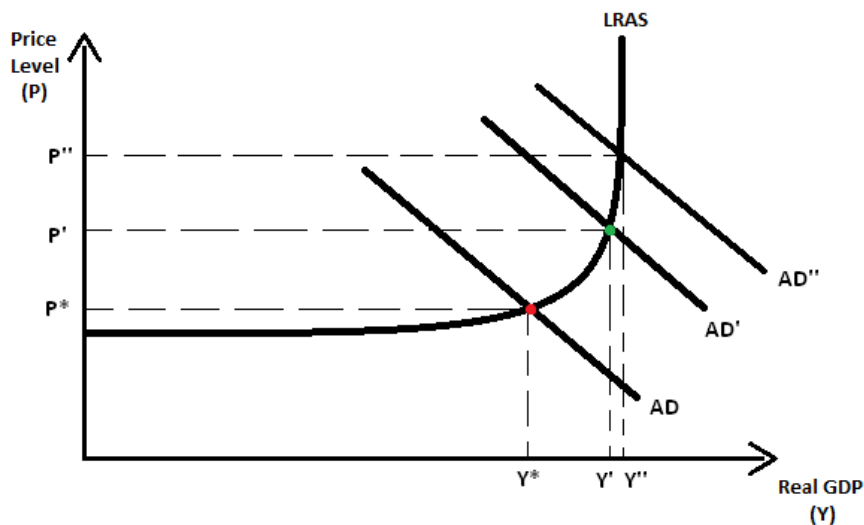
Lastly, supply-side policies have an opportunity cost. A large rise in spending on education may mean a large fall in healthcare spending, the NHS will suffer as there may be less ambulances, the NHS becomes more inefficient and ill people may be denied healthcare when they urgently require it **(E 4 marks)**.

2) A) i) With reference to the information in Extract 1, explain what is meant by ‘a modest increase in the fiscal deficit’ (line 7). (6)

A fiscal deficit occurs when government spending is greater than tax revenue (KAA 2 marks). An increase in the fiscal deficit means that government spending is rising and/or tax revenue is falling (KAA 2 marks). By 2011/12, the Chancellor plans to increase government spending by £15 billion and receive only £9 billion extra through new tax hikes (extract 1) (KAA 2 marks).

ii) Illustrating your answer with an aggregate demand and aggregate supply diagram, evaluate the likely effect of an increase in the fiscal deficit on the level of real output and on the price level. Refer to the multiplier effect in your answer. (16)

A rise in the fiscal deficit means there are more injections and less leakages from the circular flow of income, more money flowing around the economy, more spending and thus a rise in AD (KAA 2 marks).



AD shifts right to AD'', the price level rises from P\* to P'' and real GDP rises from Y\* to Y'' (KAA 4 marks).

An initial change in AD has a larger final impact on real GDP due to the multiplier (KAA 2 marks). A rise in government spending means more injections and AD shifts right to AD'. Because there is more spending in the economy, firms produce more so they must hire more workers, workers earn higher incomes, consumption rises and, due to the multiplier, AD' shifts right to AD'' (KAA 4 marks).

AD rises to AD'' so there is demand-pull inflation as the price level rises from P\* to P'' (KAA 2 marks). Because there are more injections into the circular flow, there is more money in the economy and firms produce more so real GDP rises from Y\* to Y'' (KAA 2 marks).

However, the extent of the rise in real GDP depends on the magnitude of the rise in the fiscal deficit. A small rise in the fiscal deficit means only a small rise in injections into the economy, a small rise in money flowing around the circular flow and a small rise in production by firms (E 2 marks). Also, the effect on the price level depends on the elasticity of LRAS. If LRAS is inelastic, a rise in AD means the economy moves closer to full capacity, resources are running out, labour and raw material prices rise, firms' costs and prices rise and there is severe cost-push inflation (E 2 marks).



**B) i) Explain the impact on aggregate demand of the fall in the size of the current account deficit in 2009, as represented in Figure 1 by 'Exports – Imports'. (6)**

The circular flow of income is a model of the economy that shows how households sell their labour to firms for an income and then use this income to buy goods and services produced by firms **(KAA 2 marks)**. Exports are an injection, that is, money flowing into the economy and imports are a leakage, that is, money flowing out of the economy **(KAA 2 marks)**. A reduction of the current account deficit means exports rise and/or imports fall so there are more injections and/or less leakages so AD rises **(KAA 2 marks)**.

**\*ii) With reference to Figure 1, discuss two likely reasons for the fall in consumer expenditure in 2009. (14)**

Between 2008-2009, consumption fell by 3% (figure 1) **(KAA 2 marks)**. A likely reason may be a rise in unemployment. Rising unemployment means workers are losing their job and must go on unemployment benefits so incomes fall, consumers have less money to spend on goods and services and consumption falls **(KAA 4 marks)**. Another likely reason may be a negative wealth effect. As house prices fell after the 2007 credit crisis, UK homeowners felt less wealthy, homeowners took out less loans and resultantly consumption fell **(KAA 4 marks)**. But, the fall in consumption may only be temporary because consumers may have better expectations of the future. If consumers feel confident about the future then they will expect to be in a job and earning an income so they will be more willing to spend and increase consumption **(E 2 marks)**. Maybe the most important factor is the negative wealth effect. As a result of the 2007 credit crisis, the UK housing bubble burst and house prices fell dramatically. A dramatic house price fall would have had a detrimental effect on consumer confidence and consumption **(E 2 marks)**.

**C) ii) With reference to Figure 2, explain the term *exchange rate*. (4)**

An exchange rate is the price of one currency in terms of another **(KAA 2 marks)**. In 2004, £1 bought €1.43 (figure 2) **(KAA 2 marks)**.

**ii) Using the data in Figure 2, calculate the percentage change in the value of the pound against the Euro between 2004 and 2009. (4)**

$$\% \text{ Change} = \frac{\text{New} - \text{Original}}{\text{Original}} \times 100$$

$$\frac{1.10 - 1.43}{1.43} \times 100 = -23.1\%$$

**(KAA 4 marks)**

**\*D) Evaluate the likely effects on the UK's current account of the balance of payments of changes in consumption, investment and the exchange rate of the pound sterling (£), as shown in Figures 1 and 2. (30)**

The current account measures an economy's exports minus its imports (*KAA 2 marks*). The current account covers the trade in goods like cars (*KAA 2 marks*) and trade in services like banking (*KAA 2 marks*).

Between 2008-2009, UK consumption fell by 3% (figure 1), this should cause the current account to move towards a surplus. A fall in UK consumption will likely mean UK consumers buy less UK goods and less foreign goods, so imports fall. Additionally, UK firms may begin to sell more goods to foreign consumers as they cannot sell much to UK consumers who consume less, so exports rise. Falling imports and rising exports means the UK current account moves towards a surplus (*KAA 4 marks*).

Between 2008-2009, UK investment fell by 14% (figure 1), this may move the current account towards a deficit. A fall in investment means UK firms do not develop as much new machinery and do not replace their broken capital stock so UK firms become less productive, UK firms' costs rise and their prices rise. Because UK goods are dearer, UK consumers buy less UK goods and more foreign goods so imports rise, foreign consumers buy less UK goods so exports fall and the current account moves towards a deficit (*KAA 4 marks*).

Between 2008-2009, the £ fell from €1.15 to €1.10 (figure 2), this should cause the current account to move towards a surplus. A weaker £ relative to the € means that UK exports are cheaper so Eurozone consumers buy more UK exports. Moreover, Eurozone goods are dearer to import into the UK so UK imports fall. Rising exports and falling imports means the UK current account moves towards a surplus (*KAA 4 marks*).

Although, a fall in consumption will only have an effect on the UK current account if the magnitude of the fall is large. A small fall in UK consumption will have a limited effect on imports and exports. A 3% fall is quite a large drop so it should have a significant effect on the UK's exports and imports. Likewise, with a 14% drop in investment, the magnitude of the drop is large enough to have a significant effect (*E 4 marks*).

The weaker £ will only raise exports if the price elasticity of demand (PED) for exports is elastic. An inelastic PED for UK exports means that, as the £ becomes weaker against the €, Eurozone consumers' demand for UK exports rises less proportionally so UK export revenues actually fall and the UK current account moves towards a deficit (*E 4 marks*).

Lastly, a fall in UK investment may take time to hit the UK current account. A fall in investment does not reduce UK firms' capital stock or limit their technological development in the short-run as investment has a time lag before it comes into effect. The long-run effects of a drop in investment will be larger than its short-run effects because it is in the future that UK firms will suffer as machinery brakes down and new technology is not developed (*E 4 marks*).

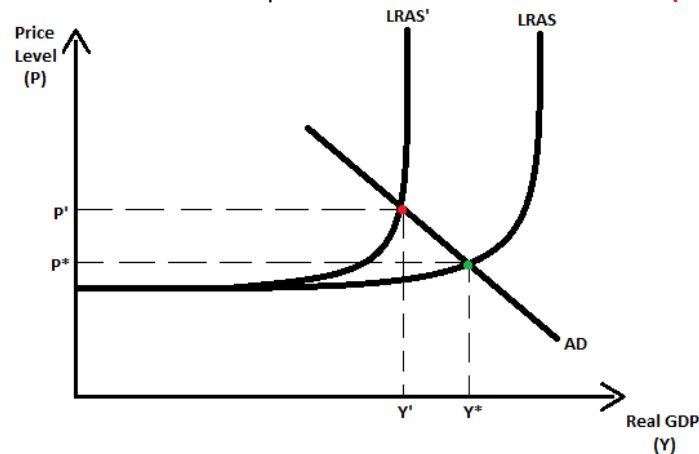
## Model Answers Unit 2 May 2011

**1) A) i) With reference to Figure 1, explain why it is necessary to regularly update the CPI basket of goods and services. (6)**

The CPI is a measure of inflation, it is a price index of a basket of roughly 700 goods and services typically bought by the average household. The basket includes food, drink, shelter, clothing, energy, education and banking services. Goods are weighted more if households spend more money on them **(KAA 2 marks)**. The basket must be updated to account for changes in consumer tastes, some goods must be taken out and/or given less weight **(KAA 2 marks)**. Also, the basket must be updated because of new goods, current goods must be taken out of the basket and new goods must be added **(KAA 2 marks)**.

**ii) Using aggregate demand and aggregate supply KAA, explain the likely impact on the equilibrium price level and level of real output in the UK of the 'sharp increase in oil prices' (Extract 1, line 6). (10)**

A rise in oil prices means UK firms' costs of production rise so LRAS shifts left **(KAA 2 marks)**.



LRAS shifts left to LRAS', the price level rises from P\* to P' and real GDP falls from Y\* to Y' **(KAA 4 marks)**.

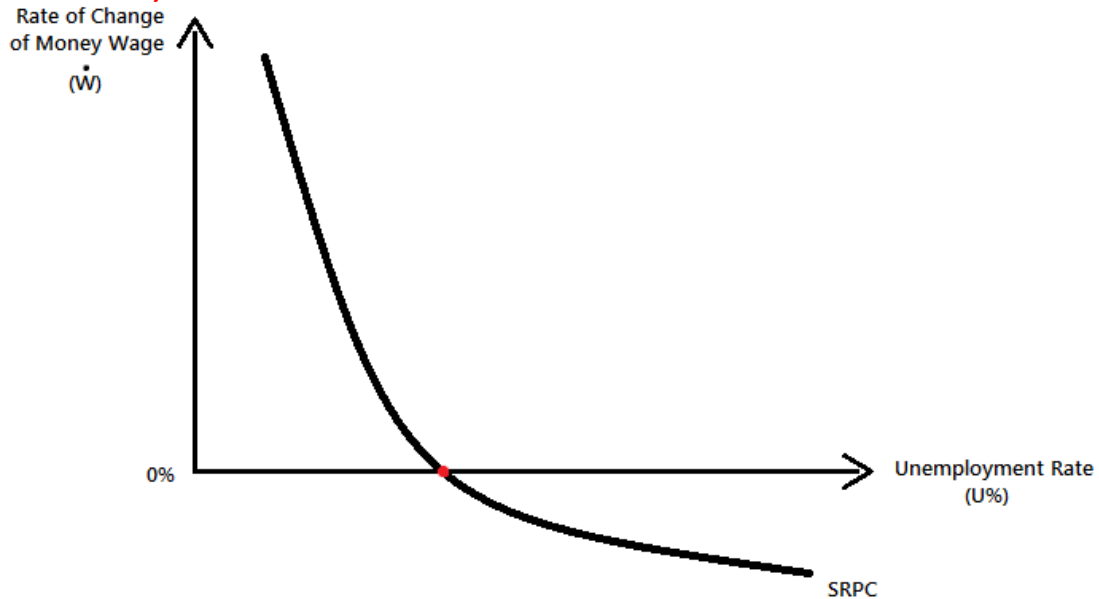
Because LRAS shifts left there is cost-push inflation so the price level rises from P\* to P' **(KAA 2 marks)**. Because LRAS shifts left, the productive capacity of the economy falls as less can be produced so real GDP falls from Y\* to Y' **(KAA 2 marks)**.

**iii) Assess the usefulness of the information provided in Extracts 1 and 2 and Figure 3 to the MPC when making interest rate decisions. (12)**

A factor that the MPC will consider is a roughly 70% sharp rise in oil prices (extract 1). A rise in oil prices means the cost of production for UK firms rises so LRAS shifts left and there is cost-push inflation so the MPC must raise interest rates to reduce inflation **(KAA 4 marks)**. Another factor is a sharp fall in consumer spending (extract 1). A fall in consumer spending means AD falls and shifts left so there is demand-pull deflation and the MPC must reduce interest rates to raise inflation **(KAA 4 marks)**. However, oil prices are volatile, they may have risen sharply by 70% but they could easily fall again in the near future. This makes it hard for the MPC to plan their interest rate change because the effect of oil prices on inflation is difficult to predict **(E 2 marks)**. Also, interest rates are already so low at about 0.5%, the UK is almost stuck in a liquidity trap because interest rates cannot fall much further if the MPC need to raise inflation **(E 2 marks)**.

**B) i) What relationship might be expected between average earnings growth and the unemployment rate? (6)**

An inverse relationship should exist, that is, as average earnings growth rises, unemployment should fall **(KAA 2 marks)**.



The Short-Run Phillips Curve (SRPC) posits that there is an inverse relationship between inflation and unemployment. As the economy grows, firms hire more labour to produce more goods. But to hire more labour, firms must offer higher money wages. This increases firms' costs so they must raise their prices. Lower unemployment thus leads to higher inflation **(KAA/Diagram 4 marks)**.

**ii) Is the relationship supported by the data in Figure 2? (4)**

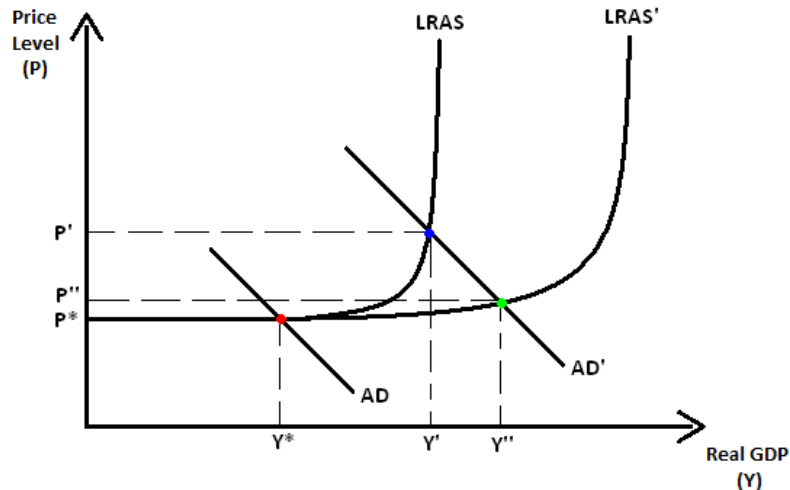
Yes the data supports the view of an inverse relationship. Between 1980-1985, inflation fell from 18% to roughly 5% whilst unemployment rose from about 6.5% to roughly 11.5% **(KAA 4 marks)**.

**\*C) Assess the extent to which a sharp depreciation of the pound will improve the UK current account of the balance of payments. (12)**

The UK current account measures the UK's exports and imports **(KAA 2 marks)**. A fall in the value of the £ means the UK gains international price competitiveness. UK exports are cheaper so exports rise and the current account moves towards a surplus **(KAA 4 marks)**. Additionally, imports into the UK become dearer so UK consumers switch to buying more UK goods, imports fall and the current account moves towards a surplus **(KAA 4 marks)**. But, the magnitude of the depreciation may be small. A small fall in the value of the £ means exports rise by only a small amount, imports fall by only a small amount and the current account does not move that far more towards a surplus **(E 2 marks)**. Moreover, UK consumers' demand for imports may be price inelastic. So as the £ becomes cheaper, imports become dearer, UK consumers only buy a little less imports and, because demand is price inelastic, total spending on imports rises and the current account moves towards a deficit **(E 2 marks)**.

**\*D) Discuss the fiscal and supply side policies the UK Government could pursue to reduce the rate of unemployment. Refer to Extract 2 and Figure 3 in your answer. (30)**

Fiscal policy is the manipulation of government spending and taxation to affect AD and macroeconomic objectives **(KAA 2 marks)**. Supply-side policies are designed to make the economy more efficient and shift LRAS right **(KAA 2 marks)**. Unemployment is the amount of people willing and able to work but unable to find a job **(KAA 2 marks)**.



AD shifts right to AD', LRAS shifts right to LRAS' and real GDP rises from Y\* to Y'' **(KAA 4 marks)**.

The government could use expansionary fiscal policy to reduce unemployment. A rise in government spending and fall in taxation means there are more injections into, and less leakages from, the circular flow of income so there is more money in the economy, AD rises, firms must produce more and hire more workers so unemployment falls **(KAA 4 marks)**.

A supply-side policy that may be used is more spending on education and training. Figure 3 shows that between 2004-2009, there has been a rise in the number of people who have been unemployed for more than a year from 1.0% to 2.0%. This means unemployment may be becoming a more chronic problem, maybe due to a lack of education. A rise in education spending and creating more apprenticeships will allow the chronic unemployed to develop new skills and restore their employability so they can find jobs **(KAA 4 marks)**.

Another supply-side policy to use is a cut in unemployment benefits. A fall in unemployment benefits means the unemployed are incentivized to find work because they now earn even less by not working and claiming benefits. The unemployed will want to work to earn wages that give them more income than the now lower unemployment benefits so unemployment should fall **(KAA 4 marks)**.

Although, the magnitude of the rise in government spending will determine the fall in unemployment. A small rise in government spending means there is only a small rise in the injections of money coming into the economy so AD does not shift that far right, not many jobs are created and unemployment does not fall much **(E 4 marks)**.

Additionally, the elasticity of LRAS will determine how effective expansionary fiscal policy is in reducing unemployment. A rise in government spending when LRAS is inelastic means AD shifts right, inflation rises but real GDP does not rise so unemployment does not fall. The economy is at full capacity so supply-side policies must be used to reduce unemployment **(E 4 marks)**.

Lastly, supply-side policies may be ineffective in the short-run. Supply-side policies take time to come into effect. For example, an apprenticeship may take roughly two years to complete and a university degree may take about 3 years to complete. In the short-run, whilst the unemployed are training, there may be no fall in unemployment **(E 4 marks)**.

**2) A) i) With reference to Figure 1, explain the term “rate of interest”. (4)**

The rate of interest is the extra amount of money a borrower must repay on top of their loan and/or the extra amount of money a saver receives from saving money in a bank *(KAA 2 marks)*. In October 2010 the rate of interest was 0.5% (figure 1) so if someone was saving in a bank they would have received  $0.005 \times \text{£}100 = \text{£}0.50$  of interest *(KAA 2 marks)*.

**ii) Explain how a change in interest rates might affect the level of investment. (6)**

Investment is total investment expenditure by firms on buildings, machinery and the change in inventories. A firm invests in capital goods (machinery and buildings) and uses these capital goods to produce consumer goods *(KAA 2 marks)*. A fall in the interest rate reduces the cost of borrowing so it is cheaper for firms to repay loans, firms take out more loans to invest so investment rises *(KAA 4 marks)*.

**iii) With reference to Figure 2, assess the likely impact of a fall in house prices on the economy. (12)**

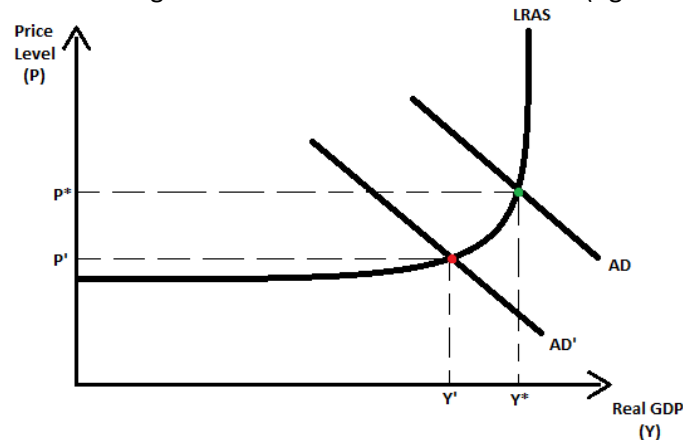
Between April 2008-January 2009, the change in house prices fell from 0% to -15% (figure 2) *(KAA 2 marks)*. As house prices fall, there is a negative wealth effect. A fall in house prices means homeowners' wealth falls so a homeowner can borrow less against the lower value of their home and thus must decrease their consumption (less equity withdrawal). Moreover, because consumers feel less wealthier they will buy less goods and services so consumption falls. A fall in consumption means AD falls, the economy produces less and real GDP falls *(KAA 6 marks)*. But, the fall in real output depends on the elasticity of LRAS. If LRAS is elastic and AD falls, real output will fall by a significant amount and the economy may fall into a recession *(E 2 marks)*. Furthermore, because consumption is roughly 67% of AD, a negative wealth effect that harms consumption will significantly reduce AD and real GDP *(E 2 marks)*.

**B) i) With reference to Figure 3, explain two factors that could influence the level of household saving. (6)**

Between 1991-2008, the UK's saving ratio fell from 12% to about 1.7% (figure 3) *(KAA 2 marks)*. One factor may be higher consumer confidence. As the UK economy was growing up until the 2007/08 credit crisis, consumers would have felt increasingly confident about their long-term future in terms of being employed and earning an income. So consumers would consume more and save less as they expect to earn incomes in the future to act as their savings *(KAA 2 marks)*. Another factor may be lower interest rates. Between February 2001-July 2003, interest rates fell from 5.75% to 3.5% and the savings ratio fell from about 7% to 5%. A lower interest rate means the return on savings falls so consumers are incentivized to save less and consume more so the savings ratio falls *(KAA 2 marks)*.

ii) Using aggregate demand and aggregate supply KAA, explain the likely impact on the equilibrium price level and the level of real output of an increase in the savings ratio. Refer to Figure 3 in your answer. (10)

Between 2007-2009, the UK savings ratio rose from about 1.7% to 9% (figure 3) (KAA 2 marks).



AD shifts left to AD', the price level falls from P\* to P' and real GDP falls from Y\* to Y' (KAA 4 marks).

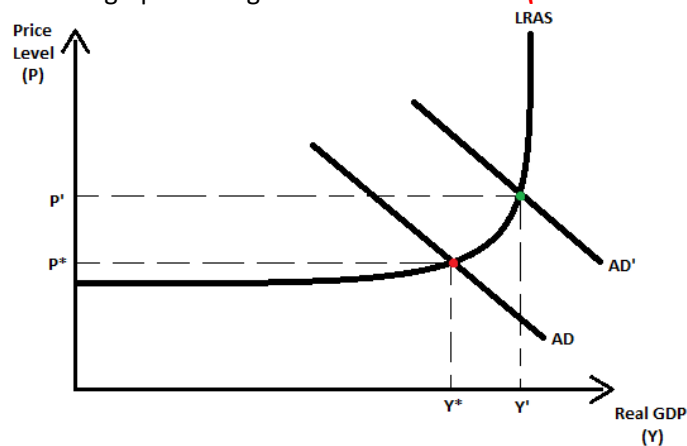
A rise in the savings ratio means consumers save more and spend less so consumption falls and AD shifts left. Because AD shifts left there is demand-pull deflation so the price level falls from P\* to P' (KAA 2 marks). Because AD shifts left, less is produced so real GDP falls from Y\* to Y' (KAA 2 marks).

\*iii) With reference to Figure 4, discuss two factors that might enable a country, such as China, to achieve a rapid rate of economic growth. (12)

Between 2003-2008, China's economic growth rate rose from roughly 8% to 12% (figure 4) (KAA 2 marks). Economic growth is a percentage increase in real GDP (KAA 2 marks). One factor that may cause economic growth is a rise in investment. An increase in investment by Chinese firms means there are more injections into the circular flow of income, more money flowing around the Chinese economy, AD rises, the multiplier makes AD rise further and real GDP rises (KAA 3 marks). Another factor may be loose monetary policy. Maybe the Chinese central bank reduced interest rates, making the cost of borrowing fall so that Chinese consumers could take out more loans, increase consumption, boost AD and increase real GDP (KAA 3 marks). But, the full affect of investment on GDP may only occur in the long-run. Chinese firms may invest by building more machines but machines take time to build so Chinese firms may not be able to produce more until the long-run (E 2 marks). Additionally, loose monetary policy will only raise real GDP if LRAS is elastic. If LRAS is inelastic, a rise in AD will cause demand-pull inflation but will not increase real GDP because the economy is at full capacity (E 2 marks).

**\*C) To what extent might rapid economic growth conflict with at least two other macroeconomic objectives? (30)**

Rapid economic growth is a high percentage increase in real GDP **(KAA 2 marks)**.



AD shifts right to AD', the price level rises from  $P^*$  to  $P'$  and real GDP rises from  $Y^*$  to  $Y'$  **(KAA 4 marks)**.

Basically, two main macroeconomic objectives for the UK government include: Low and stable inflation within 2% plus/minus 1% (CPI) **(KAA 2 marks)** and a current account surplus or low deficit **(KAA 2 marks)**. Another objective is environmental protection.

Rapid economic growth may cause high inflation. A rise in AD means there is more spending in the economy, firms must produce more so they hire more workers and use more raw materials. Resources become more scarce and spare capacity runs out, so resource prices rise, wages rise, firms' costs rise, firms' prices rise and there is demand-pull inflation **(KAA 4 marks)**.

Rapid economic growth may also cause a current account deficit. Rapid growth in the UK means UK incomes rise, UK consumers demand more domestic and foreign goods so imports rise. UK firms produce more for domestic consumers and less for foreign consumers so exports fall. Resultantly, the current account moves towards a deficit **(KAA 4 marks)**.

Additionally, rapid economic growth could cause environmental damage. A rise in growth means consumers have higher incomes so they may buy more cars, causing more air pollution. Moreover, firms produce more and may dump more toxic waste into rivers, destroying the biosphere, and extract more resources from the ground, harming the geosphere **(KAA 4 marks)**.

However, if economic growth is due to rising productivity then there may be no conflict with inflation or a current account deficit. Rising productivity means firms become more efficient so LRAS shifts right, firms can produce more so real GDP rises and there is cost-push deflation. UK goods are also cheaper so UK consumers will import less and UK firms will export more so the current account moves towards a surplus **(E 4 marks)**.

Furthermore, rapid growth may not conflict with inflation if LRAS is elastic. An elastic LRAS means that as AD rises, real GDP rises but the price level stays the same so there is no inflation. AD rising only causes inflation if LRAS is becoming inelastic because resources start to run out so resource costs start to rise and firms' prices rise **(E 4 marks)**.

Lastly, rapid growth may not cause a current account deficit if there is export-led growth. Export-led growth occurs when a country's exports are rising rapidly and causing economic growth. A rapid rise in exports means the economy is earning more export revenues and the current account is moving towards a surplus. The current account surplus is driving rapid economic growth **(E 4 marks)**.



## Model Answers Unit 2 January 2012

### 1) A) i) With reference to Figure 1, what is meant by 'labour productivity'? (4)

Labour productivity means output per worker (*KAA 2 marks*). Between 2007-2009, the UK's annual average labour productivity fell by 0.7% (figure 1) (*KAA 2 marks*).

### ii) Explain two possible reasons why UK labour productivity declined during the period 2007-2009 (Figure 1). (8)

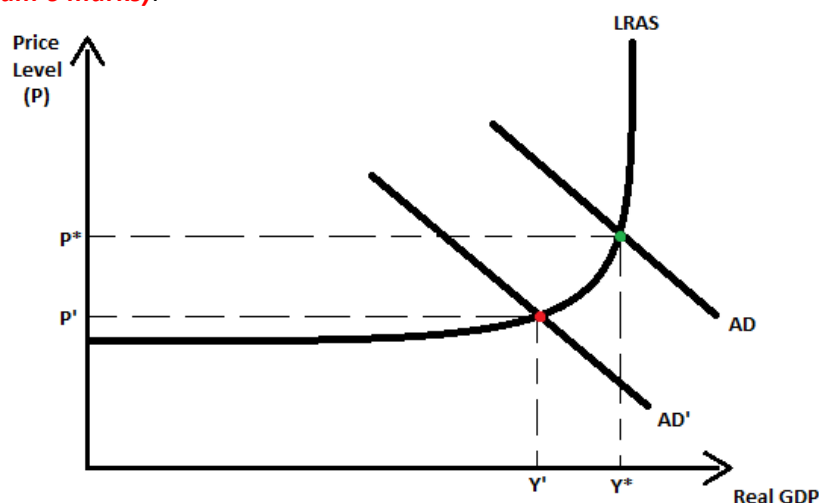
A likely reason is labour hoarding, that is, firms keeping more workers than they need to during a recession. Firms may do this because it may be cheaper to pay workers during a recession than to fire them (and pay redundancies) and hire new workers after the recession (and pay recruitment, search, contract and training costs). Labour productivity will fall because more workers are employed than are required so each worker produces less (*KAA 4 marks*). Another likely reason is that investment may have fallen. A fall in investment means firms produce less new technology and do not replace all of the current broken down machinery. So workers will be working with broken down machines and thus cannot produce as much as before (*KAA 4 marks*).

### iii) With reference to the data, evaluate the effects of declining productivity on the UK economy. (12)

An effect is a fall in UK GDP growth. Between 2007-2008, UK GDP growth fell from 2.7% to -0.1% (figure 2) (*KAA 2 marks*). A fall in productivity means the economy cannot produce as much as before because LRAS shifts left and real GDP falls (*KAA 2 marks*). Another effect is a fall in the UK's international price competitiveness. As UK productivity falls, UK firms' costs rise so UK export prices rise, UK exports fall and the UK current account moves towards a deficit (*KAA 4 marks*). However, the extent of the fall in real GDP depends on the magnitude of the fall in productivity. A small fall in productivity may have little effect. A fall in labour productivity by -0.7% between 2007-2009 (figure 1) may be significant and cause real GDP to fall dramatically (*E 2 marks*). Also, even though UK exports become dearer, UK exports may not fall much if they are still high quality and have strong brands (*E 2 marks*).

### B) i) With reference to Extract 1, explain what is likely to be 'the biggest risk to growth in the UK.' (Lines 1-2). (6)

A big risk is a recession in the Eurozone as more than 60% of UK exports are to the Eurozone (extract 1) (*KAA 2 marks*). A recession in the Eurozone means Eurozone incomes fall, Eurozone consumers demand less imports, UK exports fall, the UK's AD falls to AD' and the UK's real GDP falls from Y\* to Y' (*KAA/Diagram 6 marks*).

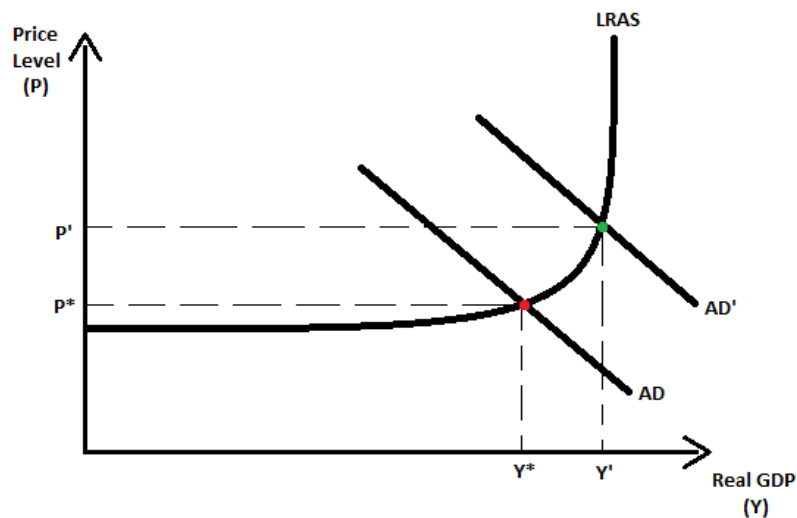


**ii) Explain two factors that might lead to an increase in investment in the UK. (8)**

A factor may be a fall in interest rates. A lower interest rate means the cost of borrowing falls, it is cheaper for firms to take out loans so firms take out more loans and invest more. Also, the lower interest rate means consumers take out more loans to buy more goods so firms will expect to make more profit and thus have to invest more **(KAA 4 marks)**. Another factor may be a fall in corporation tax. Corporation tax is a tax on firms' profits, if corporation tax falls, firms have more retained profits so they have more funds to invest and investment rises. Moreover, the government may provide tax breaks for firms if they increase their investment **(KAA 4 marks)**.

**\*iii) With reference to Figure 2, discuss the significance of investment for economic growth. Illustrate your answer with an aggregate demand and supply diagram. (12)**

Between 2003-2004, gross investment growth rose from 1.1% to 5.1% whilst GDP growth rose from 2.8% to 3.0% so there is a positive correlation between investment and GDP growth (figure 2) **(KAA 2 marks)**. A rise in investment means there are more injections into the circular flow of income, AD rises and real GDP rises **(KAA 2 marks)**.



AD shifts right to AD', the price level rises from P\* to P' and real GDP rises from Y\* to Y' **(KAA 4 marks)**.

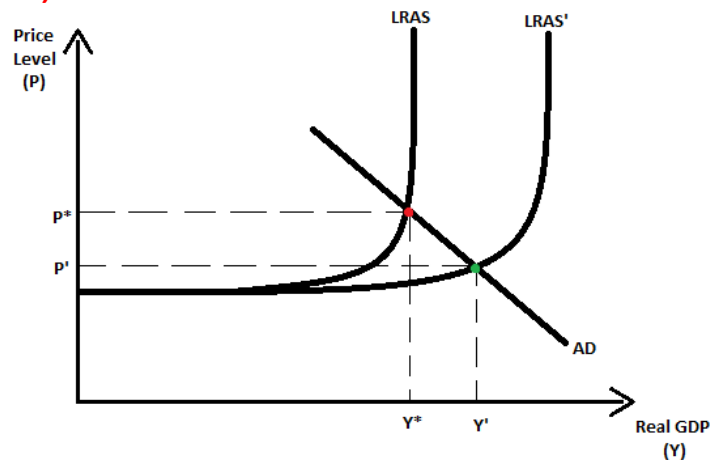
However, the data does not always show a positive correlation between investment and GDP growth. Between 2001-2002, gross investment growth rose from 2.6% to 3.6% whereas GDP growth fell from 2.5% to 2.1% (figure 1). Maybe this is due to time lags as it may take time for a rise in investment to increase GDP growth because, for example, it takes time to build a new factory **(E 2 marks)**. Furthermore, the positive relationship may be driven by other factors. Maybe consumption rises so AD rises and GDP growth then increases. Investment would rise as a result of consumption rising because firms see they can make more profit. Resultantly, maybe consumption causes both investment and GDP to rise **(E 2 marks)**.

**\*C) Assess the likely impact of UK government labour market policies on any three macroeconomic objectives. Refer to the information provided and to your own knowledge. (30)**

Basically, three main macroeconomic objectives for the UK government include: High economic growth (**KAA 2 marks**), low and stable inflation within 2% plus/minus 1% (measured by the CPI) (**KAA 2 marks**) and a current account surplus or low deficit (**KAA 2 marks**).

The government's labour market policies included making it harder to obtain Job Seeker's Allowance (JSA) and incapacity benefits (IB) (extract 2).

An effect may be a rise in economic growth. Making it harder to obtain JSA means the unemployed must return to work and find jobs. So there will be an increase in the size of the labour force, more economically active people, the productive capacity of the economy will rise because firms can now produce more and, on the diagram below, LRAS shifts right to LRAS' and real GDP rises from  $Y^*$  to  $Y'$  (**KAA/Diagram 4 marks**).



A second effect is deflation. More economically active people means the productive capacity of the economy rises and, on the diagram above, LRAS shifts right from LRAS to LRAS' and the price level falls from  $P^*$  to  $P'$ . Additionally, more workers means labour supply rises, workers bid down wages, firms' costs fall, firms' prices fall so there is cost-push deflation (**KAA/Diagram 4 marks**).

A third effect may be the current account moving towards a surplus. More economically active people means the UK economy produces more goods and services so UK exports rise. Furthermore, if the UK produces more domestic goods, UK consumers may import less foreign goods and buy more domestic goods so UK imports fall. A rise in UK exports and fall in imports means the current account moves towards a surplus (**KAA 4 marks**).

However, the effect on economic growth depends on the magnitude of number of unemployed people finding a job. A small rise in the number of economically active people in the UK means the UK's productive capacity only rises by a small amount, LRAS only shifts right by a small degree and real GDP only rises by a small amount. So JSA and IB must be cut by a significant amount to incentivize enough of the unemployed to find jobs (**E 4 marks**).

Moreover, cutting JSA and IB will not necessarily decrease unemployment unless enough jobs are available. If the UK is in a recession then firms do not require much labour so there will not be many jobs available. The UK government must then boost government spending to increase AD to make UK firms produce more goods and hire more labour (**E 4 marks**).

Additionally, employment will only rise if those on JSA and IB have the necessary skills to find jobs. If they do not have the necessary skills, cutting JSA and IB means that vulnerable people will be left with lower incomes and may fall into absolute poverty. So the UK government may also need to boost spending on education and set up apprenticeships to restore the employability of those on JSA and IB (**E 4 marks**).

**2) A) i) With reference to Extract 1, what is meant by a “budget deficit” (line 2)? (4)**

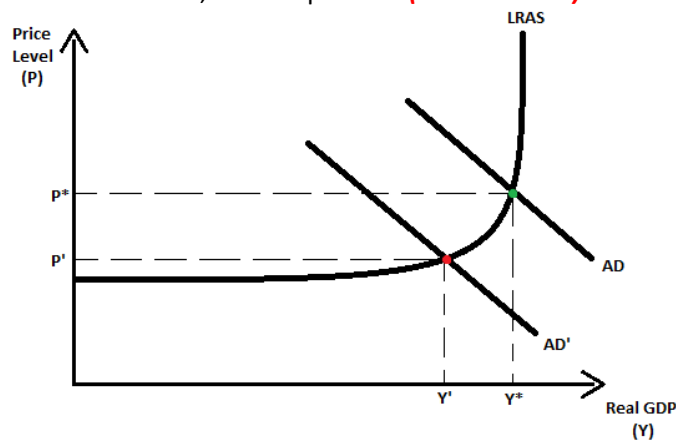
A budget deficit means government spending is greater than tax revenue **(KAA 2 marks)**. The UK government’s fiscal deficit in 2010-11 is expected to be 10% of GDP (extract 1) **(KAA 2 marks)**.

**ii) With reference to Extract 1, explain the likely impact of a reduction in the budget deficit on the circular flow of income. (8)**

The circular flow of income is a model of the economy that shows how households sell their labour to firms for an income and then use this income to buy goods and services produced by firms **(KAA 2 marks)**. The government budget deficit should be reduced in real terms by 3% by 2014-15 (extract 1) **(KAA 2 marks)**. A fall in the budget deficit means government spending falls so there are less injections and taxation rises so there are more leakages. So there is more money leaving the economy and less money flowing around the circular flow **(KAA 4 marks)**.

**iii) Using an aggregate demand and aggregate supply diagram, evaluate the effect on output of the half a million public sector job cuts (Extract 1, Line 12). (12)**

A cut in public sector jobs means unemployment rises, so incomes fall, consumption falls and AD falls **(KAA 2 marks)**. Because AD falls, real output falls **(KAA 2 marks)**.



AD falls to AD' and real output falls from Y\* to Y' **(KAA 4 marks)**.

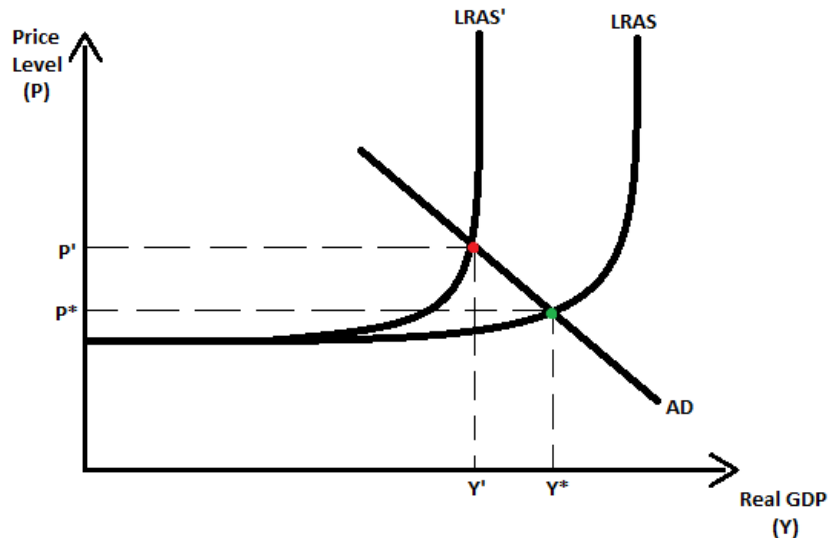
However, the magnitude of the job cuts will determine the extent of the fall in real output. A small cut in jobs will have little effect on AD and real output. Because half a million jobs were cut (extract 1), unemployment rises dramatically and leads to a large fall in real output **(E 2 marks)**. Additionally, because the government have cut jobs they may have to pay more unemployment benefits, so government spending rises, AD rises, consumption rises and real output rises **(E 2 marks)**.

**B) i) With reference to Extract 2, explain what has happened to “spare capacity” (line 29) in the context of the UK economy. (6)**

An economy has spare capacity if some resources are unemployed **(KAA 2 marks)**. Because of the 2007/08 recession (extract 2), UK incomes fell, consumption fell, AD shifted left and spare capacity rose. Because AD fell, firms did not need to produce as much so they did not require as many workers or machinery and thus unemployment rose and machinery was left idle **(KAA 4 marks)**.

**ii) With reference to Extract 2, analyse two of the causes of inflationary pressure that the Governor views as “temporary”. (8)**

A factor may be the rise in oil prices (extract 2) **(KAA 2 marks)**. A rise in oil prices means firms' costs rise, LRAS shifts left and the price level rises so there is cost-push inflation **(KAA 2 marks)**. Another factor may be the rise in VAT from 15% to 20% in January 2011 (extract 2) **(KAA 2 marks)**. A rise in VAT means firms' costs rise, LRAS shifts left and the price level rises so there is cost-push inflation **(KAA 2 marks)**.



LRAS shifts left to  $LRAS'$  and the price level rises from  $P^*$  to  $P'$  **(KAA 2 marks)**.

**\*iii) In light of the information provided, assess the case for an increase in the base interest rate set by the Monetary Policy Committee. (12)**

Basically, inflation is above the MPC's target of 2% plus/minus 1% (measured by the CPI) (extract 2) **(KAA 2 marks)**. So the MPC must increase interest rates to increase the cost of borrowing, make consumers take out less loans, decrease consumption, decrease AD and bring inflation back down to within the MPC's target **(KAA 2 marks)**. Additionally, the MPC must reduce inflation to reduce future inflationary expectations. If inflation is too high for too long then workers will expect high inflation to continue so workers will demand increased money wages to ensure their real wage is high enough to maintain their current living standards. This will cause firms' costs to rise, firms' prices to rise and again cause workers to demand increased money wages. A wage price spiral may then result and cause hyper-inflation **(KAA 4 marks)**. Although, most factors causing inflation are only temporary. For example, the rise in oil prices (extract 2) and rise in VAT (extract 2). In the near future, oil prices and VAT may fall and bring firms' costs and prices back down so that there is cost-push deflation and the MPC meet their inflation target without raising interest rates **(E 2 marks)**. Moreover, because there was a recession in the UK in 2007/08, if the MPC raise interest rates too high then consumption may fall dramatically, cause a serious case of demand-pull deflation and make inflation fall below target **(E 2 marks)**.

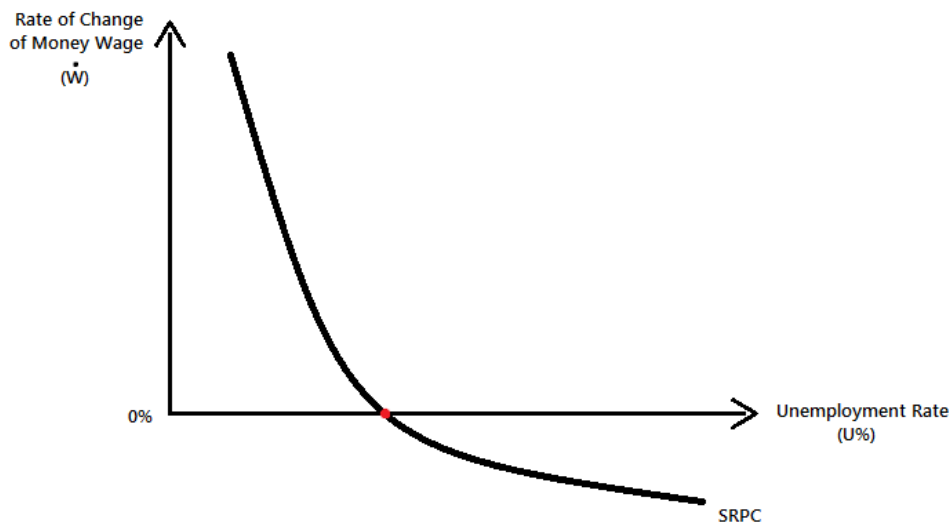
**\*C) With reference to Extract 2, evaluate the likely impact of higher inflation on three macroeconomic objectives. (30)**

Basically, three main macroeconomic objectives for the UK government include: High economic growth **(KAA 2 marks)**, low unemployment **(KAA 2 marks)** and a current account surplus or low deficit **(KAA 2 marks)**.

An impact may be a fall in economic growth. Inflation brings costs to firms such as menu costs, that is, firms incur costs because they must change their menus, shop signs and websites to reflect higher prices. So firms' profits may fall and firms may then be incentivized to invest less so investment falls, there are more leakages from the circular flow of income, less money flowing around the economy and lower economic growth **(KAA 4 marks)**.

A second impact may be the current account moving towards a deficit. A rise in the UK's inflation rate means the UK loses international price competitiveness as UK goods are more expensive. UK exports will be dearer so UK exports fall. UK consumers may switch to buying more foreign goods as they have become relatively cheaper so imports rise. A fall in exports and rise in imports means the UK current account moves towards a deficit **(KAA 4 marks)**.

A third effect may be a rise in unemployment as shown by the Phillips Curve below. Workers will demand higher money wages to ensure their real wage is high enough to maintain their current living standards. Firms may not be able to afford the higher money wages though because this will increase their costs. Firms must either pay some workers more and fire others, so unemployment rises, or pay all workers more and increase their prices, leading to cost-push inflation, a further demand by workers for increased money wages and a resultant wage-price spiral **(KAA 4 marks)**.



However, the magnitude of inflation is significant. A small rise in inflation will have a limited impact on economic growth, the current account and unemployment. Also, because the rise in inflation may only be temporary owing to oil price rises and an increase in VAT (extract 2), inflation may fall again in the near future and thus not impact negatively on economic growth **(E 4 marks)**.

Additionally, higher inflation may be beneficial for the government's macroeconomic objective of environmental protection. If inflation causes economic growth to fall then for example, consumers will buy less cars so there will be less air pollution and firms will produce less and maybe dump less toxic waste into rivers so there will be less water pollution **(E 4 marks)**.

Furthermore, the impact of higher inflation on unemployment depends on the strength of trade unions. If trade unions are weak and workers demand higher money wages, firms may be able to reject their demands and keep money wages low. So firms' costs remain low, firms do not need to raise prices much and there is not much cost-push inflation **(E 4 marks)**.