ECONOMIC GROWTH

- **Economic growth** occurs when there is a rise in the value of Gross Domestic Product (GDP).
- **GDP measures** the quantity of goods and services produced in an economy. In other words, a rise in economic growth means there has been an increase in national output.
- Economic growth leads to higher living standards and more employment opportunities.
- **Real GDP** is the value of GDP adjusted for inflation. For example, if the economy grew by 4% since last year, but inflation was 2%, real economic growth was 2%.
- **Nominal GDP** is the value of GDP without being adjusted for inflation. In the above example, nominal economic growth is 4%. This is misleading, because it can make GDP appear higher than it really is. Total GDP is the combined monetary value of all goods and services produced within a country's borders during a specific time period.
- **GDP per capita** is the value of total GDP divided by the population of the country. Capita is another word for 'head', so it essentially measures the average output per person in an economy. This is useful for comparing the relative performance of countries.

National income can also be measured by:

- **Gross National Product (GNP)** is the market value of all products produced in an annum by the labour and property supplied by the citizens of one country. It includes GDP plus income earned from overseas assets minus income earned by overseas residents. GDP is within a country's borders, whilst GNP includes products produced by citizens of a country, whether inside the border or not.
- **Gross National Income (GNI)** is the sum of value added by all producers who reside in a nation, plus product taxes (subtract subsidies) not included in the value of output, plus receipts of primary income from abroad (this is the compensation of employees and property income).

The use and limitations of national income data to compare differences in living standards between countries

- GDP does not give any indication of the distribution of income. Therefore, two countries with similar GDPs per capita may have different distributions which lead to different living standards in the country.
- GDP may need to be recalculated in terms of purchasing power, so that it can account for international price differences. The purchasing power is determined by the cost of living in each country, and the inflation rate.
- There are also large hidden economies, such as the black market, which are not accounted for in GDP. This can make GDP comparisons misleading and difficult to compare.
- GDP gives no indication of welfare. Other measures, such as the happiness index, might be used to compare living standards instead or in conjunction with GDP.

Causes of growth

Factors which cause economic growth

- Increase in AD, either from domestic demand or from trade.
- Improving the labour force, with a better quality and quantity to increase productivity. The larger the size of the labour force, the greater the productive potential of the economy.
- Improved technology, which is more productive
- More investment, to fuel economic growth
- Capital deepening which is an increase in the size of physical capital stock.

Actual growth

This is short run growth and it is the percentage increase in a country's real GDP. It is usually measured annually and is caused by increases in AD.

Potential growth

This is the long run expansion of the productive potential of an economy. It is caused by increases in AS. The potential output of an economy is what the economy could produce if resources were fully employed.

Constraints on growth

- **Access to credit and banking**
  Without a safe, secure and stable banking system, there is unlikely to be a lot of saving in a country. Hence, the rate of growth is limited.
- **Infrastructure**
  Poor infrastructure discourages MNCs from setting up premises in the country. This is since production costs increase where basic infrastructure, such as a continuous supply of electricity, is not available.
- **Education/skills**
  This is important for developing human capital. Adequate human capital ensures the economy can be productive and produce goods and services of a high quality. It helps generate employment and raise standards of living.
- **Absence of property rights**
  Weak or absent property rights mean entrepreneurs cannot protect their ideas, so do not have an incentive to innovate.
- **Corruption**
  In sub-Saharan Africa, the money lost from corruption could pay for the education of 10 million children per year in developing countries.
- **Poor governance/civil war**
  This could hold back infrastructure development and is a constraint on future economic development. It could destroy current infrastructure and force people into poverty.
- **Vulnerability to external shocks**
  For example, an earthquake prone country is likely to find it hard to develop their infrastructure, and people might be pushed into poverty. Nepal was already one of the poorest countries in the world, but the Nepal earthquake in 2015 pushed more people into poverty.

Costs and Benefits of Economic Growth

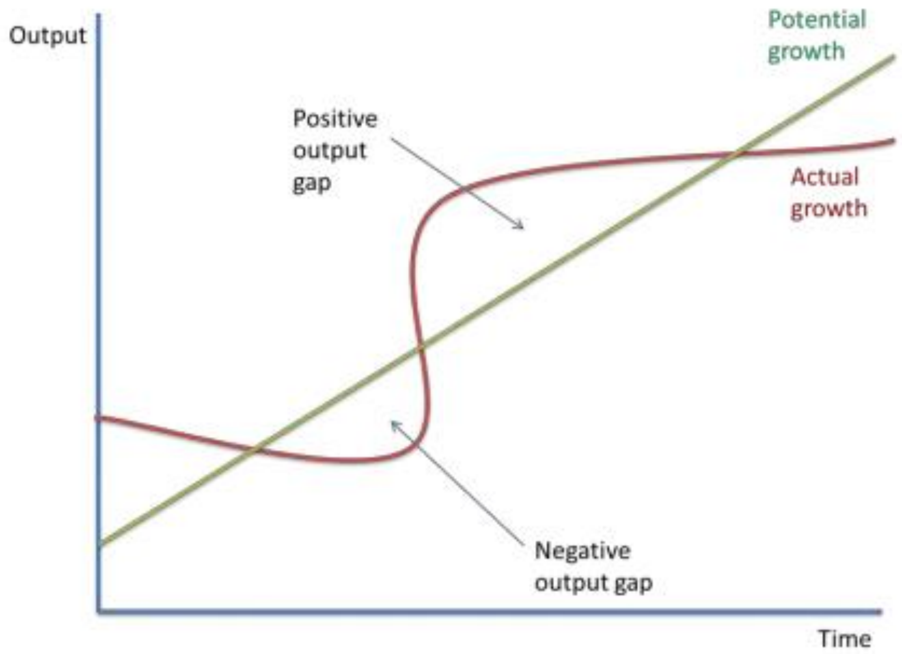
	Cost	Benefit
Consumers	Economic growth does not benefit everyone equally. Those on low and fixed incomes might feel worse off if there is high inflation and inequality could increase. There is likely to be higher demand-pull inflation, due to higher levels of consumer spending. Consumers could face more shoe leather costs, which means they have to spend more time and effort finding the best deal while prices are rising. The benefits of more consumption might not last after the first few units, due to the law of diminishing returns, which states that the utility consumers derive from consuming a good diminishes as more of the good is consumed.	The average consumer income increases as more people are in employment and wages increase. Consumers feel more confident in the economy, which increases consumption and leads to higher living standards.
Firms	Firms could face more menu costs as a result of higher inflation. This means they have to keep changing their prices to meet inflation.	Firms might make more profits, which might in turn increase investment. This is also driven by higher levels of business confidence. Higher levels of investment could develop new technologies to improve productivity and lower average costs in the long run. As firms grow, they can take advantages of the benefits of economies of scale. If there is more economic growth in export markets, firms might face more competition, which will make them more productive and efficient, but it will also give them more sales opportunities.

Government	Governments might increase their spending on healthcare if the consumption of demerit goods increases.	The government budget might improve, since fewer people require welfare payments and more people will be paying tax. There is an increase in tax revenue.
Current and future living standards	High levels of growth could lead to damage to the environment in the long run, due to increase negative externalities from the consumption and production of some goods and services.	As consumer incomes increase, some people might show more concern about the environment. Also, economic growth could lead to the development of technology to produce goods and services more greenly. Higher average wages mean consumers can enjoy more goods and services of a higher quality. Public services improve, since governments have higher tax revenues, so they can afford to spend on improving services. This could increase life expectancy and education levels.

<u>Output gaps</u>

The difference between actual growth rates and long-term trends in growth rates:
Actual growth is the percentage increase in a country's real GDP and it is usually measured annually. It is caused by increases in AD.
The long-term trend in growth rates is the long run expansion of the productive potential of an economy. It is caused by increases in AS.
The potential output of an economy is what the economy could produce if resources were fully employed.

Positive and negative output gaps:



An output gap occurs when there is a difference between the actual level of output and the potential level of output. It is measured as a percentage of national output.

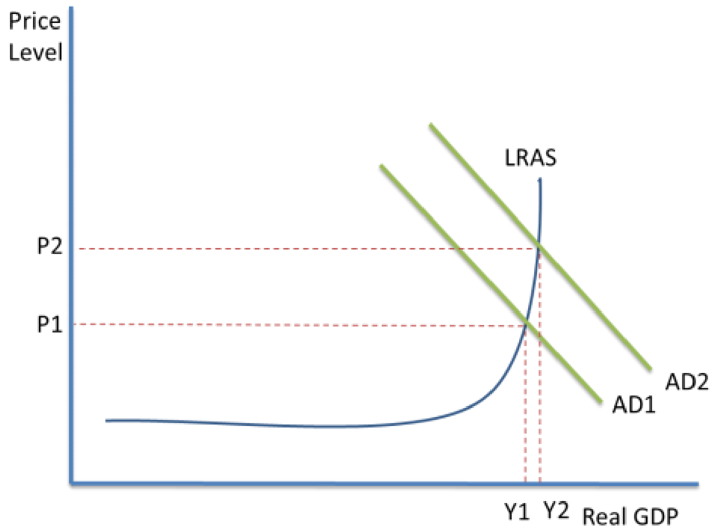
- **A negative output gap** occurs when the actual level of output is less than the potential level of output. This puts downward pressure on inflation. It usually means there is the unemployment of resources in an economy, so labour and capital are not used to their full productive potential. This means there is a lot of spare capacity in the economy.
- **A positive output gap** occurs when the actual level of output is greater than the potential level of output. It could be due to resources being used beyond the normal capacity, such as if labour works overtime. If productivity is growing, the output gap becomes positive. It puts upwards pressure on inflation. Countries, such as China and India, which have high rates of inflation due to fast and increasing demand, are associated with positive output gaps.

Difficulties with measuring the output gap

- It is difficult to estimate the trend in a series of data.
- The structure of the economy often changes, which means estimates may not always be accurate. For example, immediately after a recession, the level of spare capacity might fall below the level anticipated, since some workers might become economically inactive, firms might close and some banks might be unwilling to lend.
- Changes in the exchange rate might offset some inflationary effects of a positive output gap.
- Data is not always reliable, especially from emerging markets, and extrapolating data from past trends might lead to uncertainties.

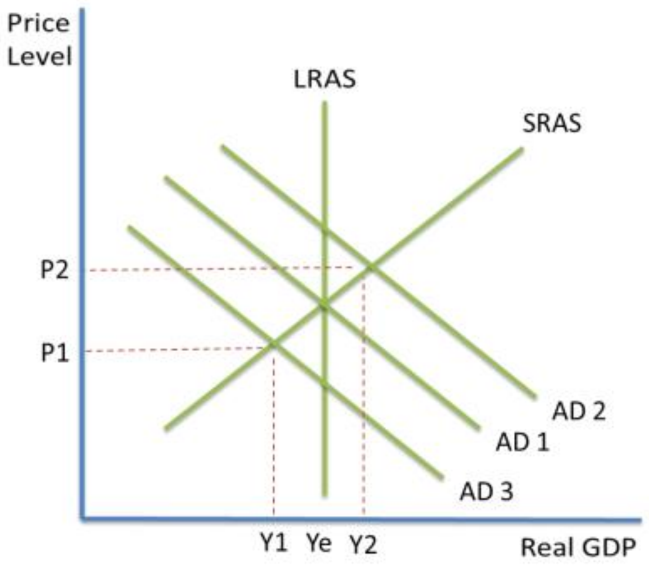
Illustrating Output Gap:

Keynesian Model:



There is a negative output gap between Y1 and Y2. Keynesians believe that output gaps exist in both the short and long run.

Classical Model:



Classical economists believe markets clear in the long run, so there is full employment. They believe there are output gaps in the short run. A negative output gap is between Ye and Y1, and a positive output gap is between Ye and Y2.

Definition and characteristics of recession

- In the UK, a recession is defined as two consecutive quarters of negative economic growth. Recessions are characterised by:
- Negative economic growth
- Lots of spare capacity and negative output gaps
- Demand-deficient unemployment
- Low inflation rates
- Government budgets worsen due to more spending on welfare payments and lower tax revenues Less confidence amongst consumers and firms, which leads to less spending and investment

Employment and Unemployment

The International Labour Organisation (ILO)

- This measure uses data from surveys taken in each country in order to calculate the measure of unemployment. It allows for comparisons between countries, but it is limited by differences in sampling between countries. The survey asks people if they meet the following criteria:
    - Been out of work for 4 weeks
    - Able and willing to start working within 2 weeks
    - Workers should be available for 1 hour per week. Part time unemployment is included.
- The unemployed are those able and willing to work, but are not employed. They are actively seeking work and usually looking to start within the next two weeks.
- The underemployed are those who have a job, but their labour is not used to its full productive potential. Those who are in part-time work, but are looking for a fulltime jobs are underemployed.

The causes of unemployment:
Structural unemployment

- This occurs with a long term decline in demand for the goods and services in an industry, which costs jobs. This is especially true of jobs in industries such as car manufacturing, where labour is replaced by capital (this is also called technological unemployment). Moreover, the decline of the coal and ship building industries in the UK, led to a great deal of structural unemployment.
- This type of unemployment is worsened by the geographical and occupational immobility of labour. If workers do not have the transferable skills to move to another industry, or if it is not easy to move somewhere jobs are available, then those facing structural unemployment are likely to remain unemployed in the long run.

Frictional unemployment

- This is the time between leaving a job and looking for another job. It is common for there to always be some frictional unemployment, and it is not particularly damaging since it is only temporary.
- For example, it could be the time between graduating from university and finding a job.
- This is why it is rare to get 100% employment: there will always be people moving between jobs.

Seasonal unemployment

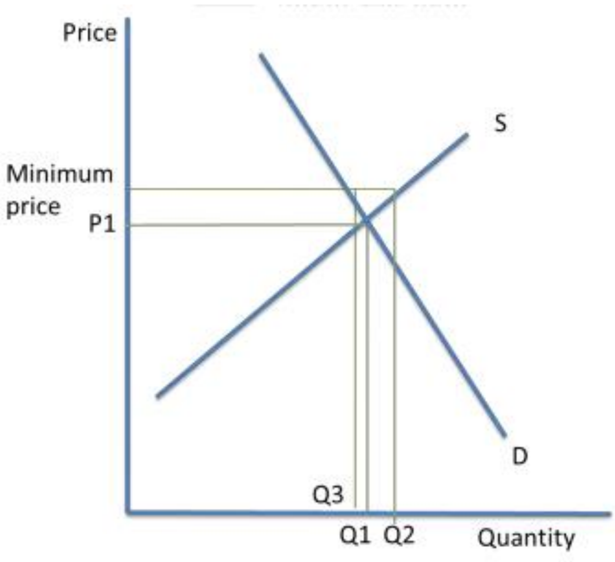
- This occurs during certain points in the year, usually around summer and winter. During the summer, more people will be employed in the tourist industry, when demand increases.

Demand deficiency (cyclical unemployment)

- This is caused by a lack of demand for goods and services, and it usually occurs during periods of economic decline or recessions. It is linked to a negative output gap. Firms are either forced to close or make workers redundant, because their profits are falling due to decreased consumer spending, and they need to reduce their costs. This then causes output to fall in several industries.
- This type of unemployment could actually be caused by increases in productivity, which means each worker can produce a higher output, and therefore fewer workers are needed to produce the same quantity of goods and services.

Real wage unemployment

- Wages above the market equilibrium may cause unemployment. This is because the supply of labour exceeds demand. Classical economists argue that by letting wages fall to the equilibrium level, there would be no unemployment.



- In the diagram, the point at 'minimum price' reflects the NMW. This causes unemployment of Q1 – Q3.
- If demand then shifts to the left, due to a fall in consumer spending for example, there would be more unemployment since wages are not able to adjust.
- Classical economists would argue that by letting wages be flexible, by removing trade union power and removing the NMW, wages could fall and unemployment would fall to 0.
- However, cutting wages during times of weak consumer spending would cause further falls in consumer spending, and there would be even lower economic growth. Moreover, the classical economist argument is made on the assumption of a perfectly competitive market, which is not true in reality.

The significance of changes in the rates of:
Employment and Unemployment:

- ♣ Consumers

  If consumers are unemployed, they have less disposable income and their standard of living may fall as a result. There are also psychological consequences of losing a job, which could affect the mental health of workers.

- ♣ Firms

  With a higher rate of unemployment, firms have a larger supply of labour to employ from. This causes wages to fall, which would help firms reduce their costs. However, with higher rates of unemployment, since consumers have less disposable income, consumer spending falls so firms may lose profits. Producers which sell inferior goods might see a rise in sales. It might cost firms to retrain workers, especially if they have been out of work for a long time.

- ♣ Workers

  With unemployment, there is a waste of workers' resources. They could also lose their existing skills if they are not fully utilised.

- ♣ The government

  If the unemployment rate increases, the government may have to spend more on JSA, which incurs an opportunity cost because the money could have been invested elsewhere. The government would also receive less revenue from income tax, and from indirect taxes on expenditure, since the unemployed have less disposable income to spend.

- ♣ Society

  There is an opportunity cost to society, since workers could have produced goods and services if they were employed. There could be negative externalities in the form of crime and vandalism, if the unemployment rate increases.

Inactivity:

The economically inactive are those who are not actively looking for jobs. These could include carers for the elderly, disabled or children, or those who have retired. Some workers are discouraged from the labour market, since they have been out of work for so long that they have stopped looking for work. If the number of the economically inactive increases, the size of the labour force may decrease, which means the productive potential of the economy could fall.

The significance of migration

Migrants are usually of working age, so the supply of labour at all wage rates tends to increase with more migration. There could be more competition to get a job due to the rise in the size of the working population. Migrants tend to be of working age, and many are looking for a job. Migrants tend to bring high quality skills to the domestic workforce, which can increase productivity and increase the skillset of the labour market. This could increase global competitiveness.

INFLATION

- **Inflation** is the sustained rise in the general price level over time. This means that the cost of living increases and the purchasing power of money decreases.
- **Deflation** is the opposite, where the average price level in the economy falls. There is a negative inflation rate.
- **Disinflation** is the falling rate of inflation. This is when the average price level is still rising, but to a slower extent. This means goods and services are relatively cheaper now than a year ago, and the purchasing power of money has increased.
- For example, a 4% increase in the price level between 2014 and 2015 would be inflation. A change from 4% to 2% is still inflation, but there has been disinflation where the price rise has slowed. If the change in the price level is now -3%, there is deflation.
- It is important to note that deflationary government policies aim to reduce AD, and do not necessarily result in deflation.

Interpret price indices (RPI and CPI) and the rate of inflation

- In the UK, the rate of inflation is calculated using the Consumer Prices Index (CPI). It measures household purchasing power with the Family Expenditure Survey. The survey finds out what consumers spend their income on. From this, a basket of goods is created. The goods are weighted according to how much income is spent on each item. Petrol has a higher weighting than tea, for example. Each year, the basket is updated to account for changes in spending patterns.
- In the UK, it is a government macroeconomic objective for inflation to be at 2% + or – 1%. This is to maintain price stability.
- The key points when answering an exam question on CPI are:
  - A survey is used
  - Weighted basket of goods
  - Measures average price change of the goods
  - Updated annually
  -

Limitations of CPI when measuring inflation

- The basket of goods is only representative of the average household, so it is not accurate for households who do not own cars, for example, and therefore do not spend 14% of their income on motoring.
- Different demographics have different spending patterns.
- Housing costs account for about 16% of the index, yet this varies between people.
- CPI is slow to respond to new goods and services, even though it is updated regularly. Moreover, it is hard to make historical comparisons, since technology twenty years ago was of a vastly different quality, and arguably a different product altogether, than now.

Retail Price Index (RPI)

- This is an alternative measure of inflation.
- Unlike CPI, RPI includes housing costs, such as payments on mortgage interest and council tax.
- This is why RPI tends to have a higher value than CPI.

Real and nominal values, constant and current prices

- **Real values** are adjusted for inflation. For example, real GDP is the value of GDP adjusted for inflation. For example, if the economy grew by 4% since last year, but inflation was 2%, real economic growth was 2%.
- **Nominal values** are not adjusted for inflation. Real GDP is the value of GDP without being adjusted for inflation. In the above example, nominal economic growth is 4%. This is misleading, because it can make GDP appear higher than it really is. Real and nominal values are applied to data using constant and current prices. Constant prices consider inflation, whilst current prices do not.

Causes of inflation:
Demand pull:
This is from the demand side of the economy. When aggregate demand is growing unsustainably, there is pressure on resources. Producers increase their prices and earn more profits. It usually occurs when resources are fully employed.
The main triggers for demand pull inflation are:

♣ A depreciation in the exchange rate, which causes imports to become more expensive, whilst exports become cheaper. This causes AD to rise.

♣ Fiscal stimulus in the form of lower taxes or more government spending. This means consumers have more disposable income, so consumer spending increases.

♣ Lower interest rates makes saving less attractive and borrowing more attractive, so consumer spending increases.

♣ High growth in UK export markets means UK exports increase and AD increases.

Cost push:
This is from the supply side of the economy, and occurs when firms face rising costs. This occurs when:

♣ Changes in world commodity prices can affect domestic inflation. For example, raw materials might become more expensive if oil prices rise. This increases costs of production.

♣ Labour becomes more expensive. This could be through trade unions, for example.

♣ Expectations of inflation- if consumers expect prices to rise, they may ask for higher wages to make up for this, and this could trigger more inflation.

♣ Indirect taxes could increase the cost of goods such as cigarettes or fuel, if producers choose to pass the costs onto the consumer.

♣ Depreciation in the exchange rate, which causes imports to become more expensive and pushes up the price of raw materials.

♣ Monopolies, using their dominant market position to exploit consumers with high prices.

The impact of inflation on firms:

- Low interest rates means borrowing and investing is more attractive than saving profits. With high inflation, interest rates are likely to be higher, so the cost of investing will be higher and firms are less likely to invest.
- Workers might demand higher wages, which could increase the costs of production for firms. This could cause inflation to increase further, since firms have to put up prices to make up for the higher costs of labour.
- Firms may be less price competitive on a global scale if inflation is high. This depends on what happens in other countries, though.
- Unpredictable inflation will reduce business confidence, since they are not aware of what their costs will be. This could mean there is less investment.

The impact of inflation on individuals:

Workers

♣ Real incomes fall with inflation, so workers will have less disposable income.

♣ If firms face higher costs, there could be more redundancies when firms try and cut their costs.

Consumers

♣ Those on low and fixed incomes are hit hardest by inflation, due to its regressive effect, because the cost of necessities such as food and water becomes expensive. The purchasing power of money falls, which affects those with high incomes the least.

♣ If consumers have loans, the value of the repayment will be lower, because the amount owed does not increase with inflation, so the real value of debt decreases.

BALANCE OF PAYMENTS

Components of the balance of payments

- This is a record of all financial transactions made between consumers, firms and the government from one country with other countries.
- It states how much is spent on imports, and what the value of exports is.
- **Exports** are goods and services sold to foreign countries, and are positive in the balance of payments. This is because they are an inflow of money.
- **Imports** are goods and services bought from foreign countries, and they are negative on the balance of payments. They are an outflow of money.
- The balance of payments is made up of:
  - The current account
  - The capital account
  - The official financing account.
- For the AS course, only the current account is focussed on.
- The current account on the balance of payments is the balance of trade in goods and services.

Current account deficits and surpluses

- A current account surplus means there is a net inflow of money into the circular flow of income. The UK has a surplus with services, but a deficit with goods.
- When a country has a current account deficit, they are spending more on imports from foreign countries than they earn from exports to foreign countries. If the deficit is large and runs for a long time, there could be financial difficulties with financing the deficit.

The causes of an imbalance in the current account

- **Appreciation of the currency:** A stronger currency means imports are cheaper and exports are relatively more expensive, which means the current account deficit would worsen.
- **Economic growth:** During periods of economic growth, consumers have high levels of spending. Consumers with a high marginal propensity to import are likely to spend more on imports. This leads to a worsening of the current account deficit. However, export-led growth, such as that of China and Germany, means a country can run a current account surplus and have high levels of economic growth.
- **More competitive:** If a country becomes more internationally competitive, such as with lower inflation or if there is economic growth in export markets, exports should increase. This could cause the current account deficit to improve, or increase the current account surplus.
- **Deindustrialisation:** In the UK, the manufacturing sector has been declining since the 1970s. The goods that the UK previously made domestically now have to be imported, which worsens the deficit.
- **Membership of trade union:** The UK has traditionally had negative current transfers, since fees are paid for membership of the EU.

Appreciation

An appreciation means an increase in the value of a currency against other foreign currency.

An appreciation makes exports more expensive and imports cheaper.

An example of an appreciation in the value of the Pound 2009 – 2012

Jan 2009 If £1 = €1.1

June 2012 £1 = €1.27

In this case, we can say there was a 15% appreciation in the value of the Pound against the Euro – between Jan 2009 and June 2012.

Effects of an appreciation on the UK economy

Exports more expensive. The foreign price of UK exports will increase – so Europeans will find British exports more expensive. Therefore with a higher price, we would expect to see a fall in the quantity of UK exports.

Imports are cheaper. UK consumers will find that £1 now buys a greater quantity of European goods. Therefore, with cheaper imports, we would expect to see an increase in the number of imports.

Lower (X-M) With lower export demand and greater spending on imports, we would expect fall in domestic aggregate demand (AD), causing lower economic growth.

Lower inflation. An appreciation tends to cause lower inflation because:

import prices are cheaper. The cost of imported goods and raw materials will fall after an appreciation, e.g. imported oil will decrease, leading to cheaper petrol prices.

Lower AD leads to lower demand-pull inflation.

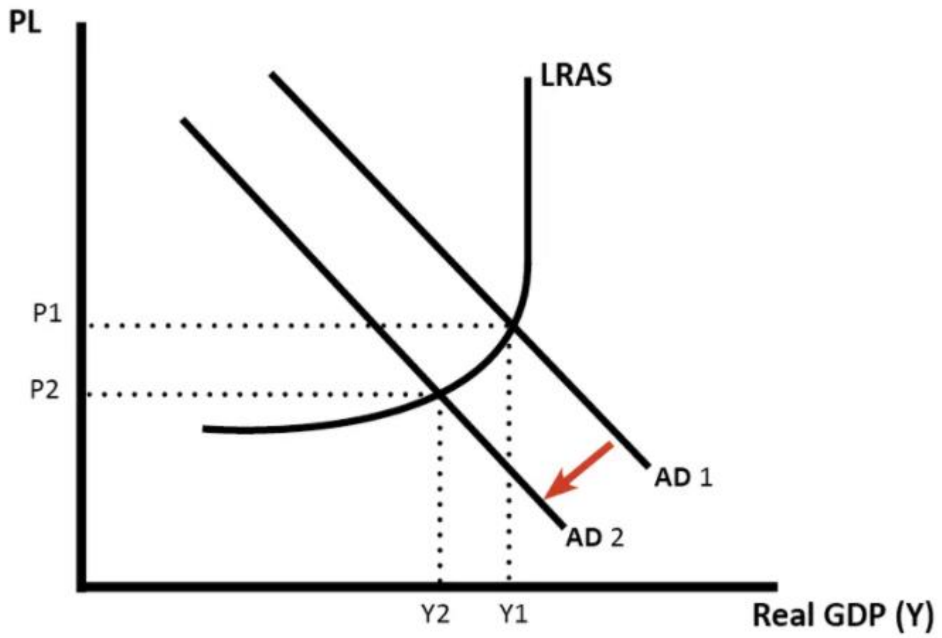
With export prices more expensive, manufacturers have greater incentives to cut costs try and remain competitive.

Monetary policy. It is possible that an appreciation in the exchange rate may make the Central Bank more willing to cut interest rates.

An appreciation reduces inflationary pressure so interest rates can be lower.

Also higher interest rates would cause the currency to rise even more. If the Central Bank thought appreciation was too rapid, they may cut rates to reduce the value of the currency.

Impact of appreciation on AD/AS



Assuming demand is relatively elastic, an appreciation contributes to lower AD (or a slower growth of AD), leading to lower inflation and lower economic growth.

Impact of an appreciation on the current account

Assuming demand is relatively elastic, we would expect an appreciation to worsen the current account position. Exports are more expensive, so we get a fall in eXports. Imports are cheaper and so we see an increase in iMports. This will cause a bigger deficit on the current account.

However, the impact on the current account is not certain:

- An appreciation will tend to reduce inflation. This can make UK goods more competitive, leading to stronger exports in the long term, therefore, this could help improve the current account.
- The impact on the current account depends on the elasticity of demand. If demand for imports and exports is inelastic, then the current account could even improve. Exports are more expensive, but if demand is inelastic, there will only be a small fall in demand. The value of exports will increase. If demand for exports is price elastic, there will be a proportionately greater fall in export demand, and there will be a fall in the value of exports.
- Often in the short term, demand is inelastic, but over time people become more price sensitive and demand more elastic. It also depends on what goods you export. Some goods with little competition will be inelastic. China’s manufacturing exports are more likely to be price sensitive because there is more competition.

Evaluating the effects of an appreciation

- **Elasticity.** The impact of an appreciation depends upon the price elasticity of demand for exports and imports. The Marshall Lerner condition stations that an appreciation will worsen the current account if (PEDx + PEDm >1) Elasticity varies over time. In the short run, we often find demand for exports and imports is inelastic, so an appreciation improves current account. But, over time, demand becomes more elastic as people switch to alternatives.
- **The impact of an appreciation depends on the situation of the economy.** If the economy is in a recession, then an appreciation will cause a significant fall in aggregate demand, and will probably contribute to higher unemployment. However, if the economy is in a boom, then an appreciation will help reduce inflationary pressures and limit the growth rate without too much adverse impact.
- **It also depends on economic growth in other countries.** If Europe was experiencing strong growth, they would be more likely to keep buying UK exports, even though they are more expensive. However, in 2012, the EU economy was in a recession and therefore was sensitive to the increased price of UK exports.
- **It also depends on why the exchange rate is increasing in value**. If there is an appreciation because the economy is becoming more competitive, then the appreciation will not be causing a loss of competitiveness. But, if there is an appreciation because of speculation or weakness in other countries, then the appreciation could cause a bigger loss of competitiveness.

Is an appreciation good or bad?

- An appreciation can help improve living standards – it enables consumers to buy cheaper imports.
- If the appreciation is a result of improved competitiveness, then the appreciation is sustainable, and it shouldn't cause lower growth.
- An appreciation could be a problem if the currency appreciates rapidly during difficult economic circumstances.

For example, in 1979 and 1980, the UK had a sharp appreciation in the exchange rate, partly due to the discovery of North Sea oil. The value of the Pound increased from £1=\$1.5 to £1 = \$2.5. However, this appreciation was a factor in causing the recession of 1981 – which particularly affected UK exports and manufacturing.

Impact of depreciation

A depreciation/depreciation means there is a fall in the value of a currency. The main effects are:

- Exports are cheaper to foreign customers
- Imports more expensive.
- In the short-term, a depreciation tends to cause inflation, higher growth and increased demand for exports.

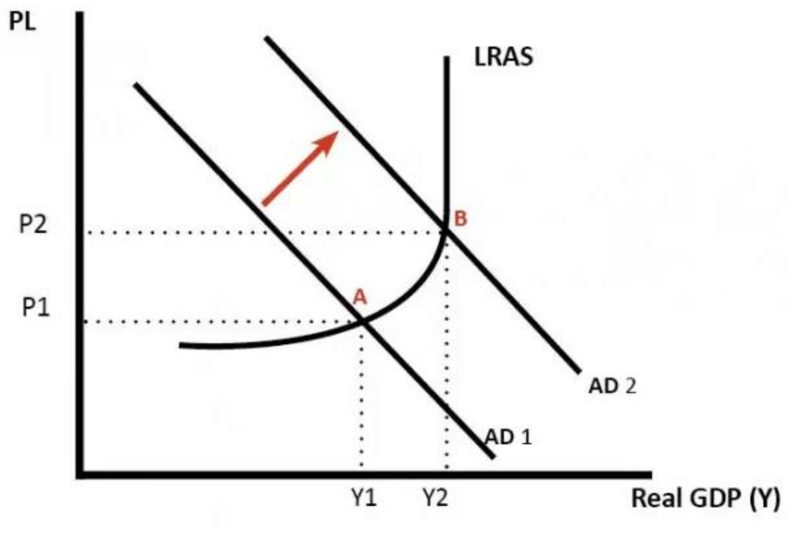
A depreciation in the Pound means £1 is worth less compared to other foreign currencies. For example

- Jan 2016. £1= $1.50
- July 2016 – £1=$1.28

1. **Exports cheaper**. A depreciation of the exchange rate will make exports more competitive and appear cheaper to foreigners. This will increase demand for exports. Also, after a depreciation, UK assets become more attractive; for example, a depreciation in the Pound can make UK property appear cheaper to foreigners.

2. **Imports more expensive**. A depreciation means imports, such as petrol, food and raw materials will become more expensive. This will reduce the demand for imports. It may also encourage British tourists to take a holiday in the UK, rather than the US – which now appears more expensive.

3. **Increased aggregate demand (AD).** A depreciation could cause higher economic growth. Part of AD is (X-M) therefore higher exports and lower imports should increase AD (assuming demand is relatively elastic). In normal circumstances, higher AD is likely to cause higher real GDP and inflation.



4. **Inflation** is likely to occur following a depreciation because:
Imports are more expensive – causing cost push inflation.
AD is increasing causing demand pull inflation
With exports becoming cheaper, manufacturers may have less incentive to cut costs and become more efficient. Therefore over time, costs may increase.

5. **Improvement in the current account.** With exports more competitive and imports more expensive, we should see higher exports and lower imports, which will reduce the current account deficit. In 2016, the UK had a near record current account deficit, so a depreciation is necessary to reduce the size of the deficit.
6**. Wages**. A depreciation in the Pound makes the UK less attractive for foreign workers. For example, with fall in the value of the Pound, migrant workers from Eastern Europe may prefer to work in Germany than the UK. In the UK food manufacturing industry, more than 30% of workers are from the EU. UK firms may have to push up wages to keep foreign labour. Similarly, it becomes more attractive for British workers to get a job in the US because a dollar wage will go further. (FT – migrants become more picky about UK jobs)
7. **Falling real wages.** In a period of stagnant wage growth, depreciation can cause a fall in real wages. This is because depreciation causes inflation, but if the inflation rate is higher than wage increases, then real wages will fall.

Evaluation of a depreciation
The effect of a depreciation depends on:
1. **Elasticity of demand for exports and imports**. If demand is price inelastic, then a fall in the price of exports will lead to only a small rise in quantity. Therefore, the value of exports may actually fall. An improvement in the current account on the balance of payments depends upon the Marshall Lerner condition and the elasticity of demand for exports and imports
If PEDx + PEDm > 1 then a depreciation will improve the current account
The impact of a depreciation may take time to influence the economy. In the short term, demand may be inelastic, but over time demand may become more price elastic and have a bigger effect.
2. **State of the global economy**. If the global economy is in recession, then a depreciation may be insufficient to boost export demand. If growth is strong, then there will be a greater increase in demand. However, in a boom, a depreciation is likely to exacerbate inflation.
3. **Inflation.** The effect on inflation will depend on other factors such as:
Spare capacity in the economy. E.g. in a recession, a depreciation is unlikely to cause inflation.
Do firms pass increased import costs onto consumers? Firms may reduce their profit margins, at least in the short run.
Import prices are not the only determinant of inflation. Other factors affecting inflation such as wage increases may be important.
4. **It depends on why the currency is being depreciated.** If it is due to a loss of competitiveness, then a depreciation can help to restore competitiveness and economic growth. If the depreciation is aiming to meet a certain exchange rate target, it may be inappropriate for the economy.

Aggregate Demand

Aggregate demand is the total demand in the economy. It measures spending on goods and services by consumers, firms, the government and overseas consumers and firms.
It is made up of the following components, which make up the equation: C + I + G +(X-M)

Consumer spending:

- This is how much consumers spend on goods and services. This is the largest component of AD and is therefore most significant to economic growth. It makes up just over 60% of GDP.
- Disposable income is the amount of income consumers have left over after taxes and social security charges have been removed. It is what consumers can choose to spend.
- Consumer income might come from wages, savings, pensions, benefits and investments, such as dividend payments.

Influences on consumer spending:

- **Interest rates**
  - If the Monetary Policy Committee lowers interest rates, it is cheaper to borrow and reduces the incentive to save, so spending and investment increase. However, there are time lags between the change in interest rates and the rise in AD, so this is not suitable if a rise in AD is needed immediately. Lower interest rates also lower the cost of debt, such as mortgages. This increases the effective disposable income of households.
- **Consumer confidence**
  - Consumers and firms have higher confidence levels, so they invest and spend more, because they feel as though they will get a higher return on them. This is affected by anticipated income and inflation.
  - If consumers fear unemployment or higher taxes, consumers may feel less confident about the economy, so they are likely to spend less and save more. This delays large purchases, such as houses or cars.
- **Marginal propensity to consume (MPC)**
  - A consumer's marginal propensity to save is the proportion of each additional pound of household income that is used for saving.
  - The government could influence the MPC by changing the rate of direct tax. If consumers have more disposable income due to lower income tax rates, their propensity to consume might increase.
- **Marginal propensity to save (MPS)**
  - A consumer's marginal propensity to save plus the marginal propensity to consume is equal to 1.

Capital investment:

- This accounts for around 15-20% of GDP in the UK per annum, and about ¾ of this comes from private sector firms. The other ¼ is spent by the government on, for example, new schools. This is the smallest component of AD.

Influences on investment:

- **The rate of economic growth**
  - If growth is high, firms will be making more revenue due to higher rates of consumer spending. This means they have more profits available to invest.
- **Business expectations and confidence**
  - If firms expect a high rate of return, they will invest more. Firms need to be certain about the future, otherwise they will postpone their investments.
  - Also, expectations about society and politics could affect investment. For example, if a change in government might happen, or if commodity prices are due to rise, businesses may postpone their investment decisions.
  - Keynes coined the term animal spirits when describing instincts and emotions of human behaviour, which drives the level of confidence in an economy.
- **Demand for exports**
  - This is related to the rate of market demand. The higher demand is, the more likely it is that firms will invest. This is because they expect higher sales, so they might direct capital goods into the markets where consumer demand is increasing.
- **Interest rates**
  - Investment increases as interest rates falls. This means that the cost of borrowing is less and the return to lending is higher.
  - The higher interest rates are, the greater the opportunity cost of not saving the money.
  - Moreover, high interest rates might make firms expect a fall in consumer spending, which is likely to discourage investment.
- **Access to credit**
  - If banks and lenders are unwilling to lend, such as shortly after the financial crisis when banks became more risk averse, firms will find it harder to gain access to credit, so it is either more expensive or not possible to gain the funds for investment.
  - Firms could use retained profits, however.
  - The availability of funds is dependent on the level of saving in the economy. The more consumers are saving, the more available fund are for lending, and therefore for investing.
- **The influence of government and regulations**
  - The rate of corporation tax could affect investment. Lower taxes means firms keep more profits, which could encourage investment.

Government spending:

- This is how much the government spends on state goods and services, such as schools and the NHS. It accounts for 18-20% of GDP. Transfer payments are not included in this figure, because no output is derived from them, and it is simply a transfer of money from one group of people to another. Government spending is the third largest component of AD.

  Influences on government expenditure:
  - **Economic growth**
    - During recessions, governments might increase spending to try and stimulate the economy. This could involve spending on welfare payments to help people who have lost their jobs, or cutting taxes.
    - This will increase the government deficit, and they may have to finance this.
    - During periods of economic growth, governments may receive more tax revenue since consumers will be spending more and earning more. They may decide to spend less, since the economy does not need stimulating, and fewer people will be claiming benefits.
  - **Fiscal policy**
    - Governments use fiscal policy to influence the economy. It involves changing government spending and taxation.
    - Governments might spend on public goods and merit goods, as well as welfare payments.
    - Fiscal policy is a demand-side policy, so it works by influencing the level or composition of AD.
    - Discretionary fiscal policy is a policy which is implemented through one-off policy changes.
    - The government might use expansionary fiscal policy during periods of economic decline. This involves increasing spending on transfer payments or on boosting AD, or by reducing taxes.
    - During periods of economic growth, governments might use contractionary fiscal policy by decreasing expenditure on purchases and transfer payments. Additionally, tax rates might increase. This reduces the size of the government budget deficit.

Exports minus imports (X-M):

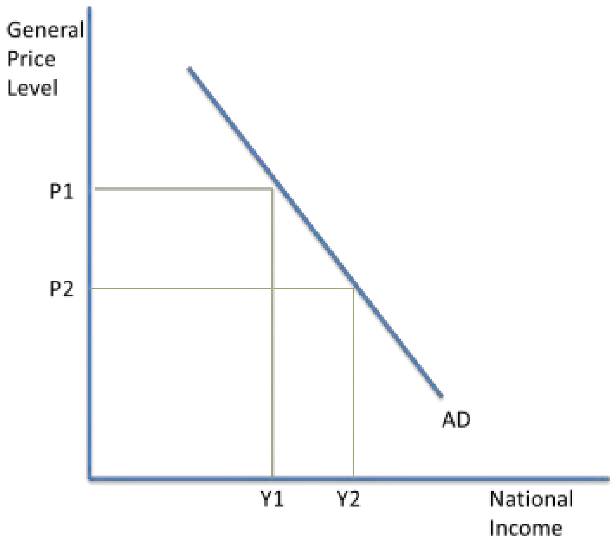
- This is the value of the current account on the balance of payments. A positive value indicates a surplus, whilst a negative value indicates a deficit. The UK has a relatively large trade deficit, which reduces the value of AD. This is the second largest component of AD.

The main influences on the (net) trade balances:

- **Real income**
  - During periods of economic growth, when consumers have higher incomes and they can afford to consume more, there is a larger deficit on the current account.
  - When consumers increase their spending, they consume more domestic products as well as more imports.
  - During periods of economic decline, real incomes fall and historically, this has led to improvements in the UK's current account.
- **Exchange rates**
  - A depreciation of the pound means imports are more expensive, and exports are cheaper, so the current account trade deficit narrows.
  - Depreciations make the currency relatively more competitive against other currencies. o However, it depends on which currency the pound depreciates against. If it is the dollar or euro, it is likely to have a more significant effect, than a currency which is not from one of the UK's major trading partners.
  - Moreover, the demand for UK exports has to be price elastic to lead to an increase in exports. If demand is price inelastic, exports will not increase significantly, and the value of exports will decrease.
- **State of the world economy**
  - A decline in economic growth in one of the UK's export markets means there will be a fall in exports. This is because consumer spending in those economies will fall, due to falling real incomes.
  - For example, the UK's largest export market is the EU. If they face an economic downturn then demand for UK goods and services will fall, since consumers in the EU are less able to afford imports.

- **Degree of protectionism**
  - Protectionism is the act of guarding a country's industries from foreign competition. It can take the form of tariffs, quotas, regulation or embargoes.
  - If the UK employed several protectionist measures, then the trade deficit will reduce. This is because the UK will be importing less due to tariffs and quotas on imports to the UK. o However, since protectionism leads to retaliation, exports might decrease too, which undoes the effect of reduced imports.
- **Non-price factors**
  - The competitiveness of a country's goods and services, which is influenced by supply-side policies, impacts how many exports the country has.
  - A country can become more competitive by being innovative, having higher quality goods and services, operating in a niche market, having lower labour costs, being more productive or by having better infrastructure. These increase exports.
  - Moreover, trade deals and being part of trading blocs can influence how much a country exports. This either opens up a country to, or closes a country from, significant export opportunities.
- **Marginal propensity to import (MPM)**
  - If consumers spend income on imports rather than domestic goods and services, income is withdrawn from the circular flow of income.

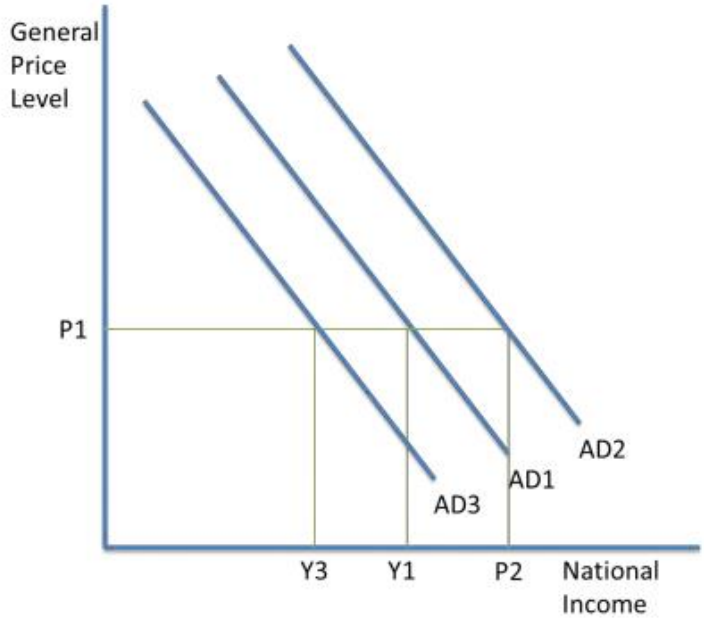
Moving along the AD curve:



- A fall in the price level from P1 to P2 causes an expansion in demand from Y1 to Y2.
- A rise in the price level from P2 to P1 causes a contraction in demand from Y2 to Y1.
- Changes in the price level cause movements along the demand curve.
- The downward slope of the AD curve can be explained by:
    - Higher prices lead to a fall in the value of real incomes, so goods and services become less affordable in real terms.
    - If there was high inflation in the UK so that the average price level was high, foreign goods would seem relatively cheaper. Therefore, there would be more imports, so the deficit on the current account might increase, and AD would fall.
    - High inflation generally means the interest rates will be higher. This will discourage spending, since saving becomes more attractive and borrowing becomes expensive.

Shifting the AD curve:

The AD curve is shifted by changes in the components of AD (C, I, G or X-M):



A rise in AD is shown by a shift to the right in the demand curve (AD1 to AD2). This rise in economic growth occurs when:

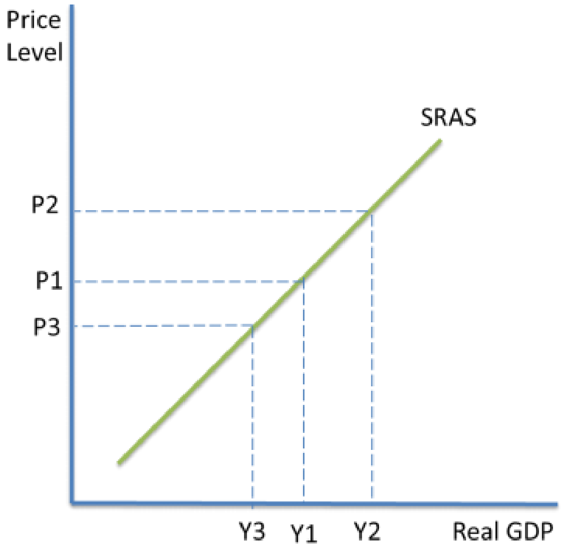
- Consumers and firms have higher confidence levels, so they invest and spend more, because they feel as though they will get a higher return on them. This is affected by anticipated income and inflation.
- If the Monetary Policy Committee lowers interest rates, it is cheaper to borrow and reduces the incentive to save, so spending and investment increase. However, there are time lags between the change in interest rates and the rise in AD, so this is not suitable if a rise in AD is needed immediately. Lower taxes mean consumers have more disposable income, so AD rises.
- An increase in government spending will boost AD.
- Depreciation in a currency means M is more expensive, and X is cheaper, so AD increases. A decline in economic growth in one of the UK's export markets means there will be a fall in X, so AD falls.
- In the UK, most people own their houses. This means that a rise in the price of houses makes people feel wealthier, so they are likely to spend more. This is the wealth effect.
- If credit is more available, then spending and investment might increase. Recently, since the financial crisis of 2008, banks have been less willing to lend due to the risks associated with lending.

Aggregate Supply

The AS curve:

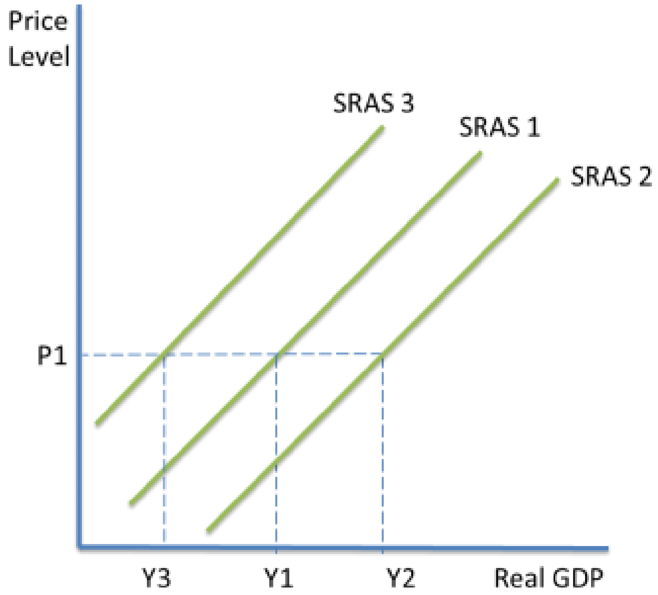
o Aggregate supply shows the quantity of real GDP which is supplied at difference price levels in the economy.
o The AS curve is upward sloping because at a higher price level, producers are willing to supply more because they can earn more profits.

Moving along the AS curve:



- Only changes in the price level, which occur due to changes in AD, lead to movements along the AS curve.
- If AD increases, there is an expansion in the SRAS, from Y1 to Y2. If AD falls, there is a contraction in SRAS, from Y1 to Y3.

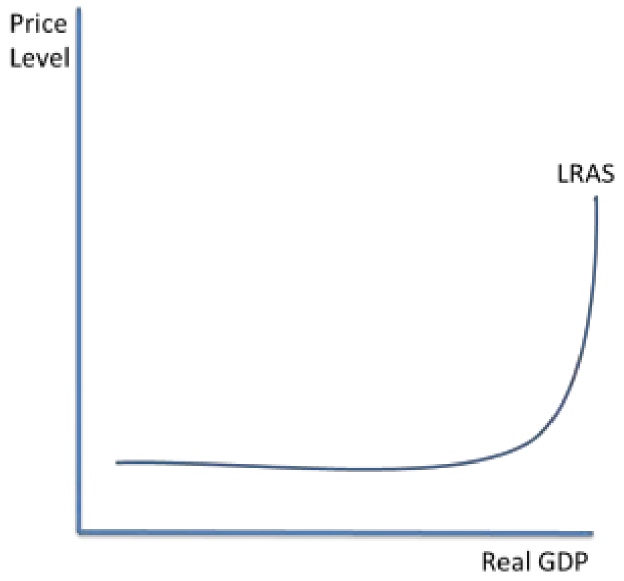
Shifting the AS curve:



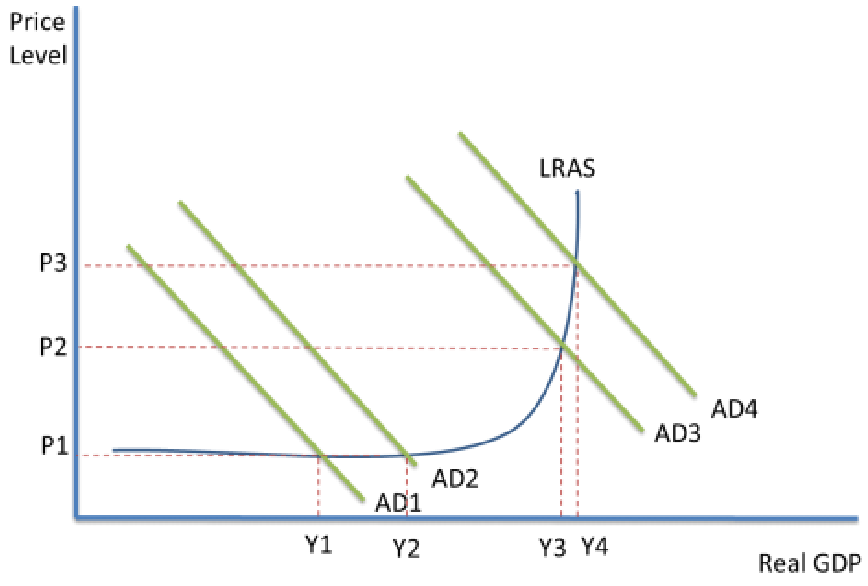
The SRAS curve shifts when there are changes in the conditions of supply.

- The cost of employment might change, e.g. wages, taxes, labour productivity
- The cost of other inputs e.g. raw materials, commodity prices, the exchange rate if products are imported
- Government regulation or intervention, such as environmental laws and taxes, and business regulation. Business regulation is sometimes called ‘red tape’.

Keynesian long-run AS:

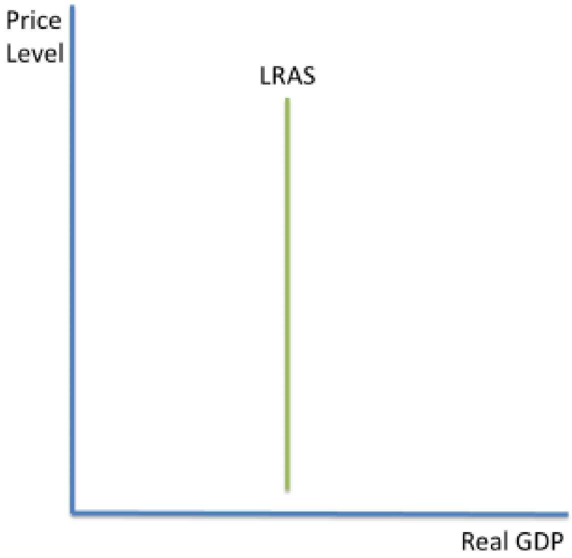


- The Keynesian view suggests that the price level in the economy is fixed until resources are fully employed. The horizontal section shows the output and price level when resources are not fully employed; there is spare capacity in the economy. The vertical section is when resources are fully employed.
- Over the spare capacity section, output can be increased (AD1 to AD2) without affecting the price level (stays at P1). In other words, output changes are not inflationary.
- Once resources are fully employed, an increase in output (AD3 to AD4) will be inflationary (price level increases from P2 to P3).

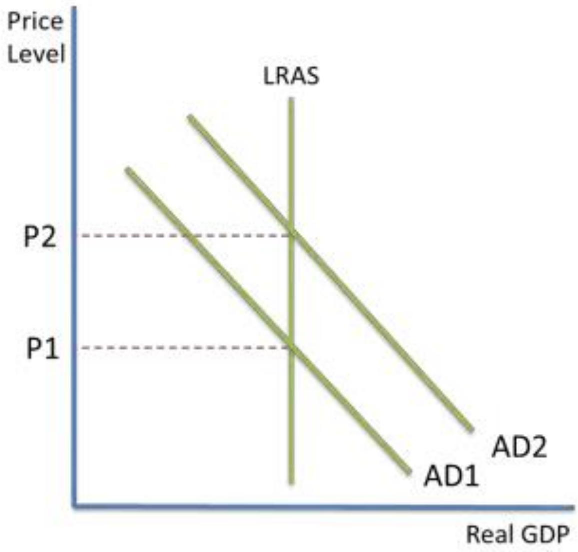


Classical Long-run AS curve:

The LRAS is vertical at the full employment level of output



- Output is fixed at each level. All factors of production in the economy are fully employed in the long run.
- This means that changing AD, such as from AD1 to AD2, only makes a change in the price level (P1 to P2), and it will not change national output (real GDP).



Factors influencing the long-run AS:

The LRAS curve is influenced by changes which affect the quantity or quality of the factors of production. This is equivalent to shifting the PPF curve i.e. when the economy is operating at full capacity.

- **Technological advances:**
  If more money is spent on improving technology, the economy can produce goods in larger volumes or improve the quality of goods and services produced.

- **Changes in relative productivity:**
  A more productive labour and capital input will produce a larger quantity of output with the same quantity of input.

- **Changes in education and skills:**
  This improves the quality of human capital, so it is more productive and more able to produce a wider variety of goods and services.

- **Changes in government regulations:**
  Government regulation could limit how productive and efficient a firm can be if it is excessive. This is sometimes referred to as 'red-tape'.

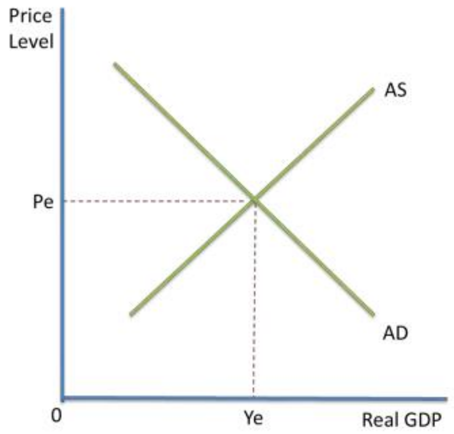
- **Demographic changes and migration:**
  If there is net inward migration and the majority of the population is of working age, the size of the labour force is going to be significant, which means the economy can increase its output.

- **Competition policy:**
  A more competitive market encourages firms to be more efficient and more productive, so they are not competed out of business. Governments can use effective competition policy to stimulate this in the economy

Equilibrium Level of Real Output

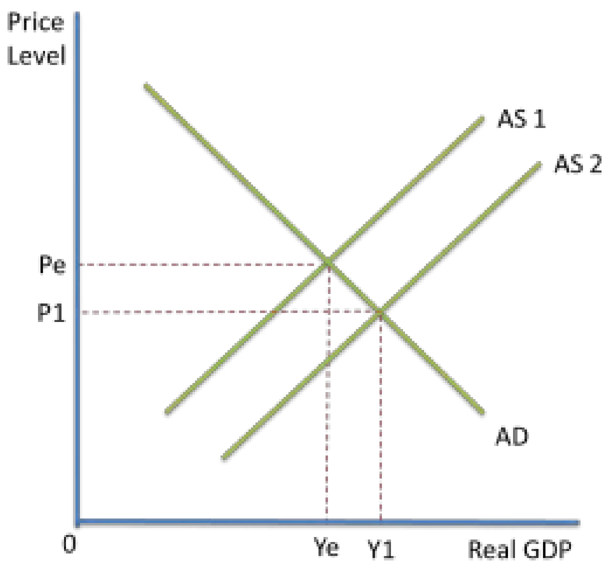
The economy reaches a state of equilibrium when the rate of withdrawals = the rate of injections. This is equivalent to the point where AD = AS.

The effects of shifts in AD and AS on the price level and real national Output



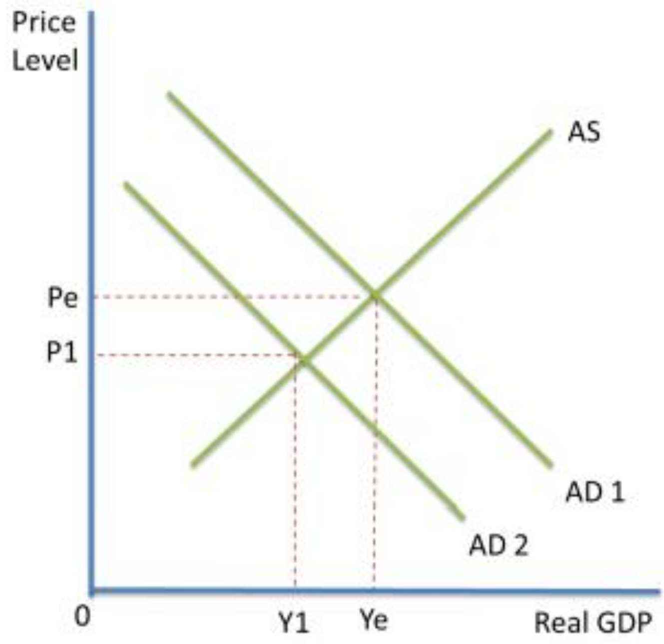
At a price above equilibrium, there will be excess supply. At a price below equilibrium, there will be excess aggregate demand, in the short run.

Shift in AS:



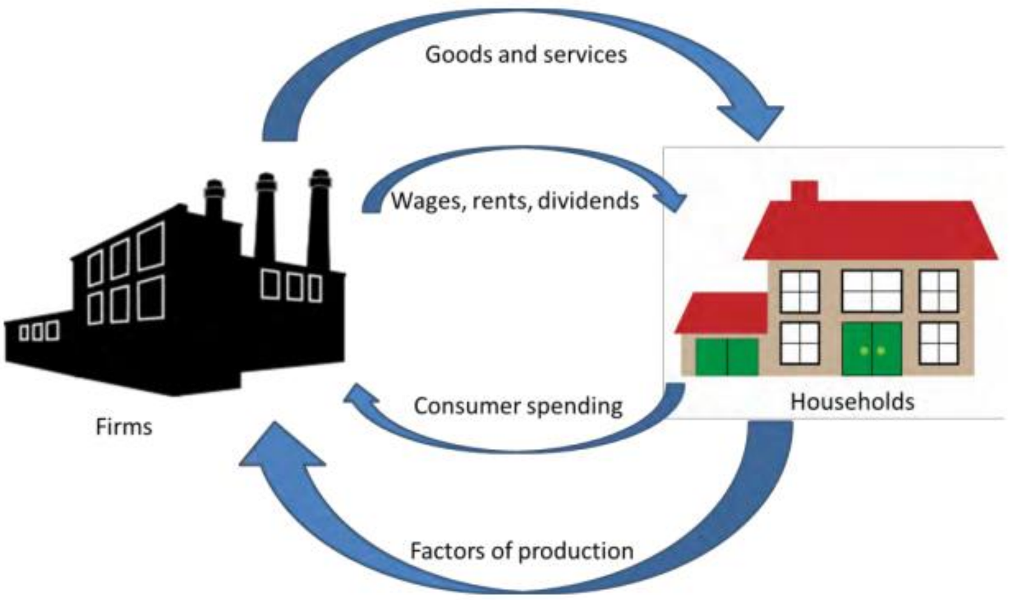
- If the economy becomes more productive, or if there is an increase in efficiency, supply will shift to the right.
- This lowers the average price level (Pe to P1) and increases national output (Ye to Y1).
- If AS shifts inwards, price increases and national output decreases.

Shift in AD:

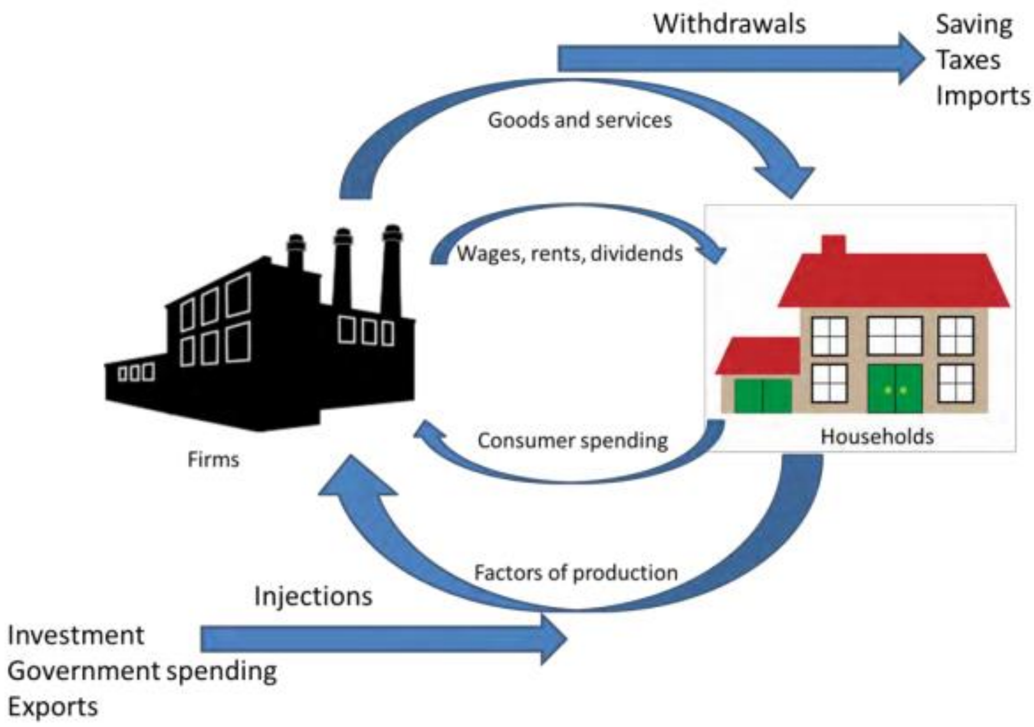


- If firms have less confidence or there is a recession, AD might shift inwards. This causes the price level to fall from Pe to P1, and national output to fall from Ye to Y1.
- If AD increases, the price level and level of national output both increase.

The Circular Flow of Income



- Firms and households interact and exchange resources in an economy.
- Households supply firms with the factors of production, such as labour and capital, and in return, they receive wages and dividends.
- Firms supply goods and services to households. Consumers pay firms for these.
- This spending and income circulates around the economy in the circular flow of income, which is represented in the diagram above.
- Saving income removes it from the circular flow. This is a withdrawal of income.
- Taxes are also a withdrawal of income, whilst government spending on public and merit goods, and welfare payments, are injections into the economy.
- International trade is also included in the circular flow of income. Exports are an injection into the economy, since goods and services are sold to foreign countries and revenue in earned from the sale. Imports are a withdrawal from the economy, since money leaves the country when goods and services are bought from abroad.
- The economy reaches a state of equilibrium when the rate of withdrawals = the rate of injections.
- The full circular flow of income can be derived from this:



- It is important to remember that income = output = expenditure in the circular flow.

The distinction between income and wealth

- Wealth is defined as a stock of assets, such as a house, shares, land, cars and savings. Wealth inequality is the unequal distribution of these assets.
- Income is money received on a regular basis. For example, it could be from a job, welfare payments, interest or dividends. When income is unevenly distributed across a nation, income inequality is said to exist.

The effect of changes in injections and withdrawals on national income

- An injection into the circular flow of income is money which enters the economy. This is in the form of government spending, investment and exports.
- A withdrawal from the circular flow of income is money which leaves the economy. This can be from taxes, saving and imports.
- The amount of savings in an economy is equal to the amount of investment. In the UK, there is a traditionally low savings rate, especially during periods of high economic growth, and this means that the rate of investment is also low. In Japan there is a high savings rate and with this comes a high level of investment.
- If there are net injections into the economy, there will be an expansion of national output.
- If there are net withdrawals from the economy, there will be a contraction of production, so output decreases.

The Multiplier

The multiplier ratio

This is the ratio of the rise national income to the initial rise in AD. In other words, it is the number of times a rise in national income is larger than the rise in the initial injection of AD, which led to the rise in national income.

The multiplier process

The multiplier effect occurs when there is new demand in an economy. This leads to an injection of more income into the circular flow of income, which leads to economic growth. This leads to more jobs being created, higher average incomes, more spending, and eventually, more income is created. The multiplier effect refers to how an initial increase in AD leads to an even bigger increase in national income.
It occurs since 'one person's spending is another person's income'.

Effects of marginal propensities on the multiplier

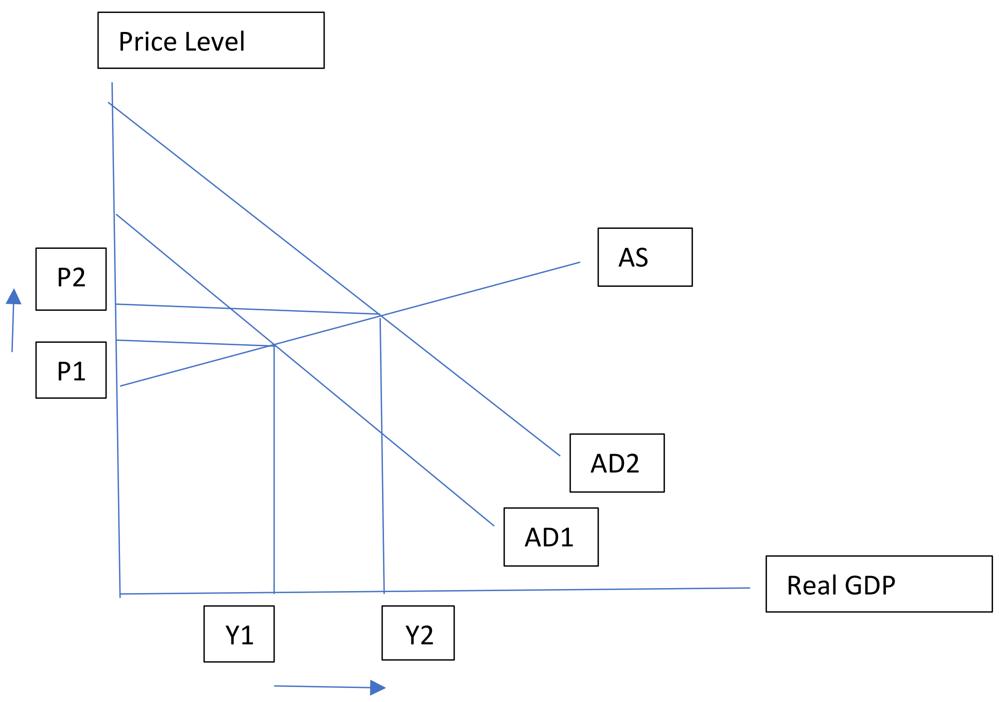
- ***Marginal propensity to consume (MPC)***
    - A consumer's marginal propensity to save is the proportion of each additional pound of household income that is used for saving.
    - The higher the MPC, the bigger the size of the multiplier.
    - The government could influence the MPC by changing the rate of direct tax. If consumers have more disposable income due to lower income tax rates, their propensity to consume might increase.
- ***Marginal propensity to save (MPS)***
    - A consumer's marginal propensity to save plus the marginal propensity to consume is equal to 1.
    - If consumers save more than they spend, the size of the multiplier will be small.
- ***Marginal propensity to import (MPM)***
    - If consumers spend income on imports rather than domestic goods and services, income is withdrawn from the circular flow of income. This reduces the size of the multiplier.

Calculating the multiplier

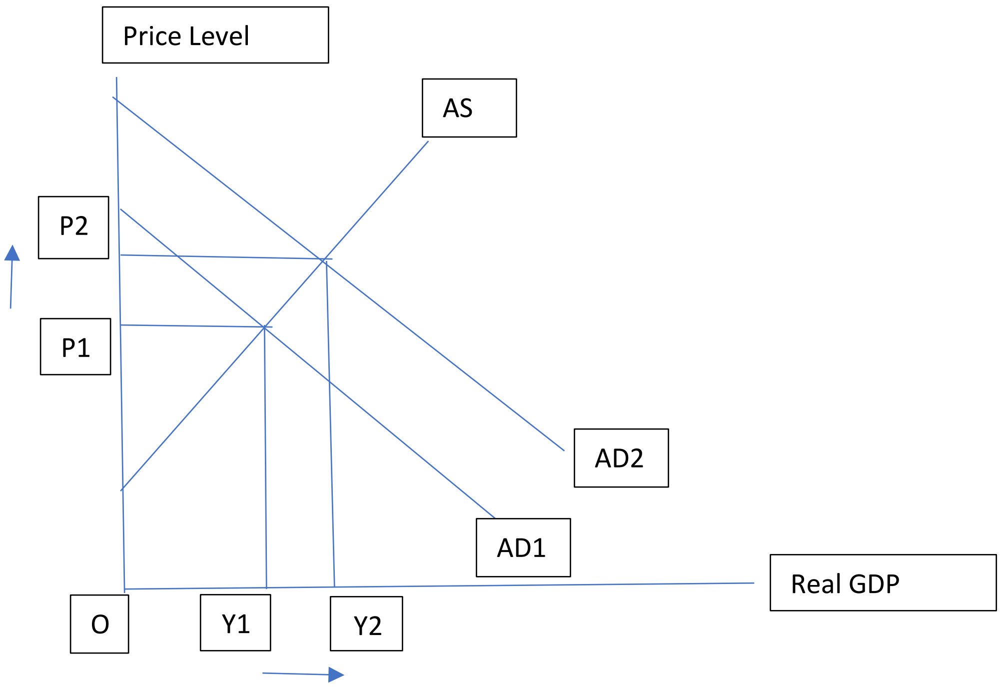
- One formula that can be used to calculate the multiplier is 1/(1-MPC).
- Example:
    - If consumers spend 0.6 of every £1 they earn, they save 0/4. Therefore, the multiplier will be:
    - 1/(1-0.6) = 1/0.4 = 2.5.
- This means that every £1 of income generates £2.50 of new income.
- An open economy has three areas of withdrawals: taxes, imports and savings.
- The marginal propensity to withdraw is calculated by MPW = MPS + MPT + MPM
- This gives another formula for calculating the multiplier:
    - 1/MPW

The significance of the multiplier to shifts in AD

- If an economy has a lot of spare capacity, extra output can be produced quickly and at little extra cost. This makes SRAS elastic and it means the size of the multiplier will be larger. A small increase in AD will lead to a large increase in national income.



- If SRAS is inelastic, the multiplier effect is likely to be smaller than its potential. This is because if AD increases, prices will increase rather than a full increase in national income. This higher rate of inflation will lead to higher interest rates. This will discourage spending and borrowing, and it will encourage saving, since the reward for saving is higher.



- It is also possible to have a ‘reverse’ multiplier. This means that a withdrawal of income form the circular flow of income could lead to an even larger decrease in income for the economy. This could decrease economic growth and potentially lead to a decline in the economy.

Macroeconomic Objectives

Economic growth:
In the UK, the long run trend of economic growth is about 2.5%. Governments aim to have sustainable economic growth for the long run.
In emerging markets and developing economies, governments might aim to increase economic development before economic growth, which will improve living standards, increase life expectancy and improve literacy rates.

Low unemployment:
Governments aim to have as near to full employment as possible. They account for frictional unemployment by aiming for an unemployment rate of around 3%. The labour force should also be employed in productive work.

Low and stable rate of inflation:
In the UK, the government inflation target is 2%, measured with CPI. This aims to provide price stability for firms and consumers, and will help them make decisions for the long run. If the inflation rate falls 1% outside this target, the Governor of the Bank of England has to write a letter to the Chancellor of the Exchequer to explain why this happened and what the Bank intends to do about it.

Balance of payments equilibrium on current account:
Governments aim for the current account to be satisfactory, so there is not a large deficit. This is usually near to equilibrium. A balance of payments equilibrium on the current account means the country can sustainably finance the current account, which is important for long term growth.

Balanced government budget:
This ensures the government keeps control of state borrowing, so the national debt does not escalate. This allows governments to borrow cheaply in the future should they need to, and makes repayment easier.

Protection of the environment:
This aims to provide long run environmental stability. It ensures resources used are not exploited, such as oil and natural gas, and that they are used sustainably, so future generations can access them too. Moreover, it means there is not excessive pollution.

Greater income equality:
Income and wealth should be distributed equitably, so the gap between the rich and poor is not extreme. It is generally associated with a fairer society.

Conflicts between objectives and policies

Economic growth vs inflation:
A growing economy is likely to experience inflationary pressures on the average price level. This is especially true when there is a positive output gap and AD increases faster than AS.
A **negative output gap** occurs when the actual level of output is less than the potential level of output. This puts downward pressure on inflation. It usually means there is the unemployment of resources in an economy, so labour and capital are not used to their full productive potential. This means there is a lot of spare capacity in the economy.
A **positive output gap** occurs when the actual level of output is greater than the potential level of output. It could be due to resources being used beyond the normal capacity, such as if labour works overtime. If productivity is growing, the output gap becomes positive. It puts upwards pressure on inflation. Countries, such as China and India, which have high rates of inflation due to fast and increasing demand, are associated with positive output gaps.

Economic growth vs the current account:
During periods of economic growth, consumers have high levels of spending. In the UK, consumers have a high marginal propensity to import, so there is likely to be more spending on imports. This leads to a worsening of the current account deficit. However, export-led growth, such as that of China and Germany, means a country can run a current account surplus and have high levels of economic growth.

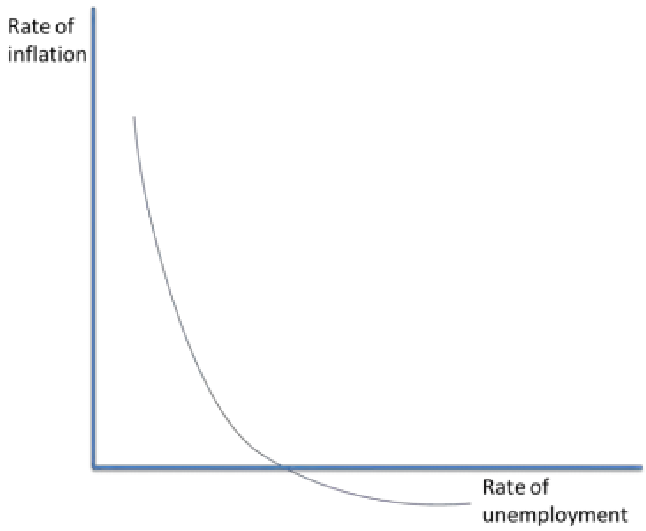
Economic growth vs the government budget deficit:
Reducing a budget deficit requires less expenditure and more tax revenue. This would lead to a fall in AD, however, and as a result there will be less economic growth.

Economic growth vs the environment:
High rates of economic growth are likely to result in high levels of negative externalities, such as pollution and the usage of non-renewable resources. This is because of more manufacturing, which is associated with higher levels of carbon dioxide emissions.

Unemployment vs inflation:

In the short run, there is a trade-off between the level of unemployment and the inflation rate. This is illustrated with a Phillips curve.

As economic growth increases, unemployment falls due to more jobs being created. However, this causes wages to increase, which can lead to more consumer spending and an increase in the average price level.



The extent of this trade off can be limited if supply side policies are used to reduce structural unemployment, which will not increase average wages.

Demand-side policies

Demand-side policies are policies designed to increase consumer demand, so that total production in the economy increases.

The distinction between monetary and fiscal policy:

Monetary policy is used by the government to control the money flow of the economy. This is done with interest rates and quantitative easing. This is conducted by the Bank of England, which is independent from the government.

Fiscal policy uses government spending and revenues from taxation to influence AD. This is conducted by the government.

Monetary policy instruments:

- **Interest rates**
    - In the UK, the Monetary Policy Committee (MPC) alters interest rates to control the supply of money. They are independent from the government, and the nine members meet each month to discuss what the rate of interest should be. Interest rates are used to help meet the government target of price stability, since it alters the cost of borrowing and reward for saving.
    - The bank controls the base rate, which ultimately controls the interest rates across the economy. When interest rates are high, the reward for saving is high and the cost of borrowing is higher. This encourages consumers to save more and spend less, and is used during periods of high inflation.
    - When interest rates are low, the reward for saving is low and the cost of borrowing is low. This means consumers and firms can access credit cheaply, which encourages spending and investment in the economy. This is usually used during periods of low inflation. However, during the financial crisis, the UK interest rate fell to a historic low of 0.5%, and has been at this rate since March 2009. Despite high inflation, the interest rate was set at a low rate to stimulate AD and boost economic growth.

- **Asset purchases to increase the money supply:**
- **Quantitative Easing (QE)**
    - This is used by banks to help to stimulate the economy when standard monetary policy is no longer effective. This has inflationary effects since it increases the money supply, and it can reduce the value of the currency.
    - QE is usually used where inflation is low and it is not possible to lower interest rates further.
    - QE is a method to pump money directly into the economy. It has been used by the European Central Bank to help stimulate the economy. Since the interest rates are already very low, it is not possible to lower them much more. The bank bought assets in the form of government bonds using the money they have created. This is then used to buy bonds from investors, which increases the amount of cash flowing in the financial system. This encourages more lending to firms and individuals, since it makes the cost of borrowing lower. The theory is that this encourages more investment, more spending, and hopefully higher growth. A possible effect of this is that there could be higher inflation.
    - If inflation gets high, the Bank of England can reduce the supply of money in the economy by selling their assets. This reduces the amount of spending in the economy.

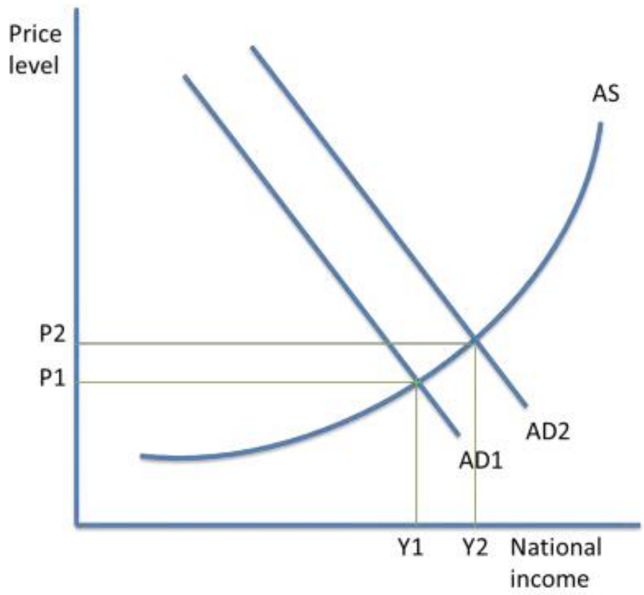
Limitations of monetary policy:

- Banks might not pass the base rate onto consumers, which means that even if the central bank changes the interest rate, it might not have the intended effect.
- Even if the cost of borrowing is low, consumers might be unable to borrow because banks are unwilling to lend. After the 2008 financial crisis, banks became more risk averse.
- Interest rates will be more effective at stimulating spending and investment when consumer and firm confidence is high. If consumers think the economy is still risky, they are less likely to spend, even if interest rates are low.

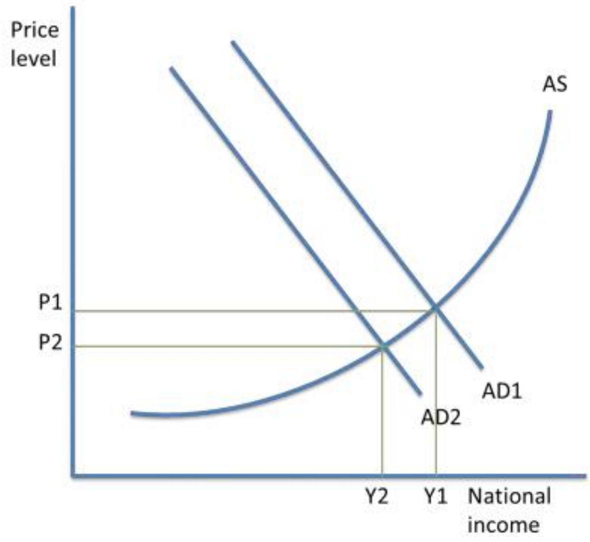
Fiscal policy instruments:

Government spending and taxation

- Governments can change the amount of spending and taxation to stimulate the economy. The government could influence the size of the circular flow by changing the government budget, and spending and taxes can be targeted in areas which need stimulating.
- Fiscal policy aims to stimulate economic growth and stabilise the economy.
- In the UK, the government spends most of their budget on pensions and welfare benefits, followed by health and education. Income tax is the biggest source of tax revenue in the UK.
- Expansionary fiscal policy This aims to increase AD. Governments increase spending or reduce taxes to do this. It leads to a worsening of the government budget deficit, and it may mean governments have to borrow more to finance this.



- Deflationary fiscal policy
  This aims to decrease AD. Governments cut spending or raise taxes, which reduces consumer spending. It leads to an improvement of the government budget deficit.



Limitations of fiscal policy:

- Governments might have imperfect information about the economy. It could lead to inefficient spending.
- There is a significant time lag involved with employing fiscal policy. It could take months or years to have an effect.
- If the government borrows from the private sector, there are fewer funds available for the private sector, which could lead to crowding out.
- The bigger the size of the multiplier, the bigger the effect on AD and the more effective the policy. o If interest rates are high, fiscal policy might not be effective for increasing demand.
- If the government spends too much, there could be difficulties paying back the debt, which could make it difficult to borrow in the future.

Supply side policies

Supply-side policies aim to improve the long run productive potential of the economy. The economy can experience supply-side improvements in the private sector, without government intervention. For example, there could be improvements in productivity, innovation and investment. The aims of supply-side policies include:

Strengths and weaknesses of supply-side policies:

- Supply-side policies are the only policies which can deal with structural unemployment, because the labour market can be directly improved with education and training.
- Demand-side policies are better at dealing with cyclical unemployment, since they can reduce the size of a negative output gap and shift the AD curve to the right.
- There are significant time lags associated with supply-side policies.
- Market-based supply-side policies, such as reducing the rate of tax, could lead to a more unequal distribution of wealth.

The distinction between market-based and interventionist policies:

Market-based policies limit the intervention of the government and allow the free market to eliminate imbalances. The forces of supply and demand are used.
Interventionist policies rely on the government intervening in the market.

Free market supply-side policies

- **To increase incentives –**
  Reducing income and corporation tax to encourage spending and investment. This could increase the long run productive potential of the economy, especially if labour and capital becomes more productive. This improves the underlying trend of economic growth.
- **To promote competition –**
  By deregulating or privatising the public sector, firms can compete in a competitive market, which should also help improve economic efficiency.
- **To reform the labour market –**
  Reducing the NMW (or abolishing it altogether) will allow free market forces to allocate wages and the labour market should clears. Reducing trade union power makes employing workers less restrictive and it increases the mobility of labour. This makes the labour market more efficient.

Interventionist supply-side policies:

- **To promote competition –**
  A stricter government competition policy could help reduce the monopoly power of some firms and ensure smaller firms can compete, too.
- **To reform the labour market –**
  Governments could try and improve the geographical mobility of labour by subsidising the relocation of workers and improving the availability of job vacancy information.
- **To improve skills and quality of the labour force –**
  The government could subsidise training or spend more on education. This also lowers costs for firms, since they will have to train fewer workers. – Spending more on healthcare helps improve the quality of the labour force, and contributes towards higher productivity.
- **To improve infrastructure –**
  Governments could spend more on infrastructure, such as improving roads and schools.