

Economic development

The three main sectors of the economy are:

1. **Primary sector** is the extraction of raw materials – mining, fishing and agriculture.
2. **Secondary / manufacturing sector** is concerned with producing finished goods, e.g. factories making toys, cars, food, and clothes.
3. **Tertiary 'service' sector** is concerned with offering intangible goods and services to consumers. This includes retail, tourism, banking, entertainment and I.T. services.

Economic development

Economic development is concerned with quality of life and a range of economic indicators that affect economic welfare. These include:

- GDP per capita,
- Health care / life expectancy,
- Education / literacy,
- Gender equality,
- Pollution and environmental standards,
- Access to basic amenities, such as water and good quality shelter,
- Extent of welfare state,
- Increase in size of manufacturing and later service sector of the economy, and
- Relative decline in primary sector.

Measuring development

1. Real GDP per capita. GDP measures national output / national income / national expenditure. It is a rough measure of the average national income per person in society (real is adjusted for inflation).

- GDP is useful for measuring the level of economic activity and average incomes. However, it has many limitations for measuring the level of economic development.

Limitations of GDP as a measure of living standards

1. **Difficult to measure.** It is difficult to calculate the total output of an economy, because GDP statistics will ignore the underground economy, as transactions are not recorded. Subsistence farmers who grow their own food may have zero income but actually be quite well-off.
2. **Negative externalities.** GDP includes negative externalities, such as pollution and congestion; therefore, a rise in real GDP will often overestimate living standards on this count. For example, China's high growth has come at a cost of harmful pollution and growth in congestion.

Circular flow of income

The circular flow of income shows how money flows from households to firms (to buy goods). Then firms pay households wages to produce goods.



GDP (Gross Domestic Product) measures national income — the total wealth of a country. The circular flow of income shows three ways to calculate GDP:

1. Total national income (wages, dividends)
 2. Total national expenditure (consumption and investment)
 3. Total national output (value of goods and services produced)
- **Nominal income** is the monetary figure.
 - **Real income** is the value of GDP adjusted for inflation; therefore, it shows the actual value of goods and services.
 - For example, if the GDP increases by 7%, but inflation was 5%, the real increase would be $7 - 5 = 2\%$.

Injectors (J)

This is an increase of expenditure into the circular flow of income, leading to an increase in aggregate demand (AD). Injectors can include:

- Exports (X) — spending on domestic goods from abroad
- Government spending (G)
- Investment (I) — spending on capital goods by firms

Withdrawals (W)

Withdrawals are a reduction of money in the circular flow, sometimes known as leakages. Withdrawals can include:

- Saving (S) — depositing money in banks
- Imports (M) — spending on foreign goods
- Taxation (T) — the government raising money from consumers and firms

Physical and monetary flows

- Physical flows involve the transfer of goods.
- Monetary flows involve the sending of payments to workers or to good.
- For example, a consumer may buy an import from Germany. This requires a financial flow from the UK to Germany (a withdrawal). Once payment is received the good is transferred to UK.

Marginal propensity

- **Marginal propensity to consumer (MPC)** is the % of extra income that is spent, e.g. if confidence is high, the MPC will be higher.
- **Marginal propensity to save (MPS)** is the % of extra income that is saved (e.g. bank savings). Higher interest rates may encourage more saving.
- **Marginal propensity to tax (MPT)** is the % of extra income that goes in tax payments. This is determined by income tax rates and VAT rates.
- **Marginal propensity to import (MPM)** is the % of extra income that is spent on imported goods (and leaves the UK economy).
- **Marginal propensity to withdraw (MPW)** = $MPS + MPT + MPM$.

Average propensity

- **Average propensity to consume (APC)**. This is the percentage of income that is spent rather than saved.
- **Average propensity to save (APS)**. This is percentage of income that is saved.

Calculation

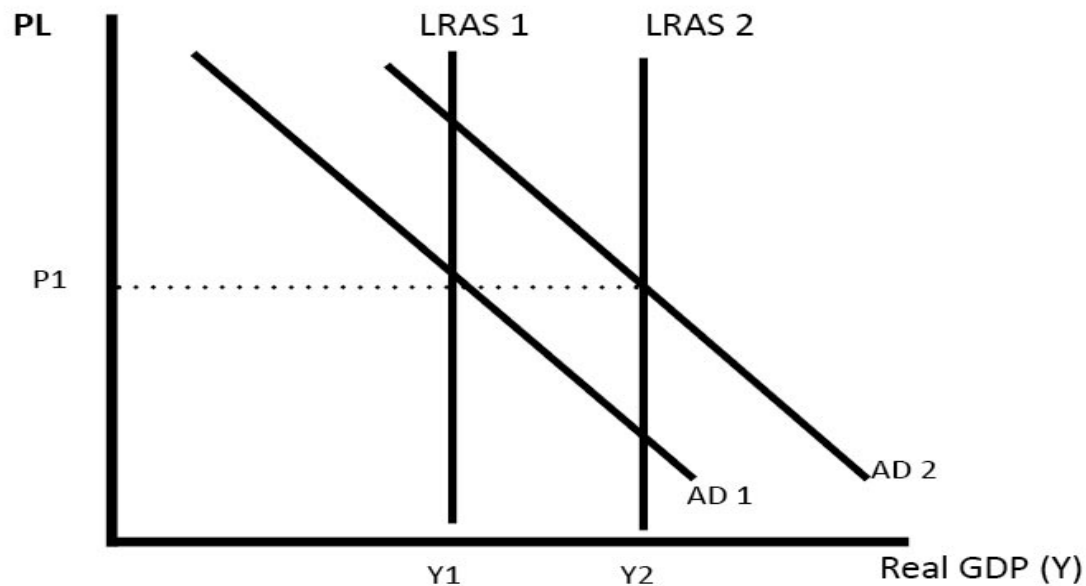
If a person has income of £10,000 and he spends £8,000, saving £2,000.

- The APC is 0.8
- The APS is 0.2

If income increases from £10,000 to £11,000 and consumption rises £400.

- The MPC is 0.4 ($400/1000$)

Long-run economic growth

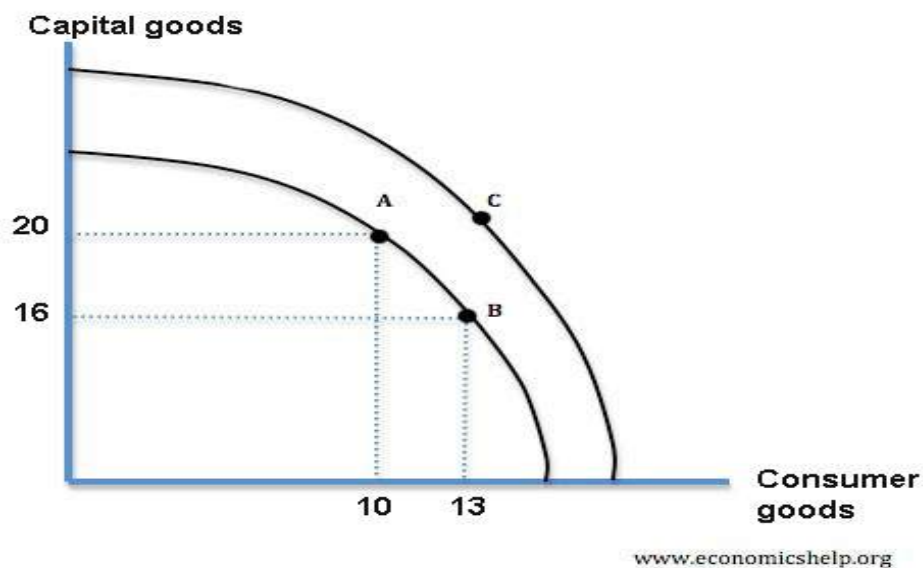


With long-run economic growth we see an increase in both LRAS and AD. This rise in LRAS represents an increase in the productive capacity of the economy.

Factors that could increase LRAS include:

- Increased investment in productive capacity
- Better education and training to increase labour productivity
- Improvement in technology leading to lower costs of production
- Improvements in infrastructure, such as transport
- Inward investment from overseas multinational firms
- Net migration causing a rise in the labour supply

Long run economic growth using PPF



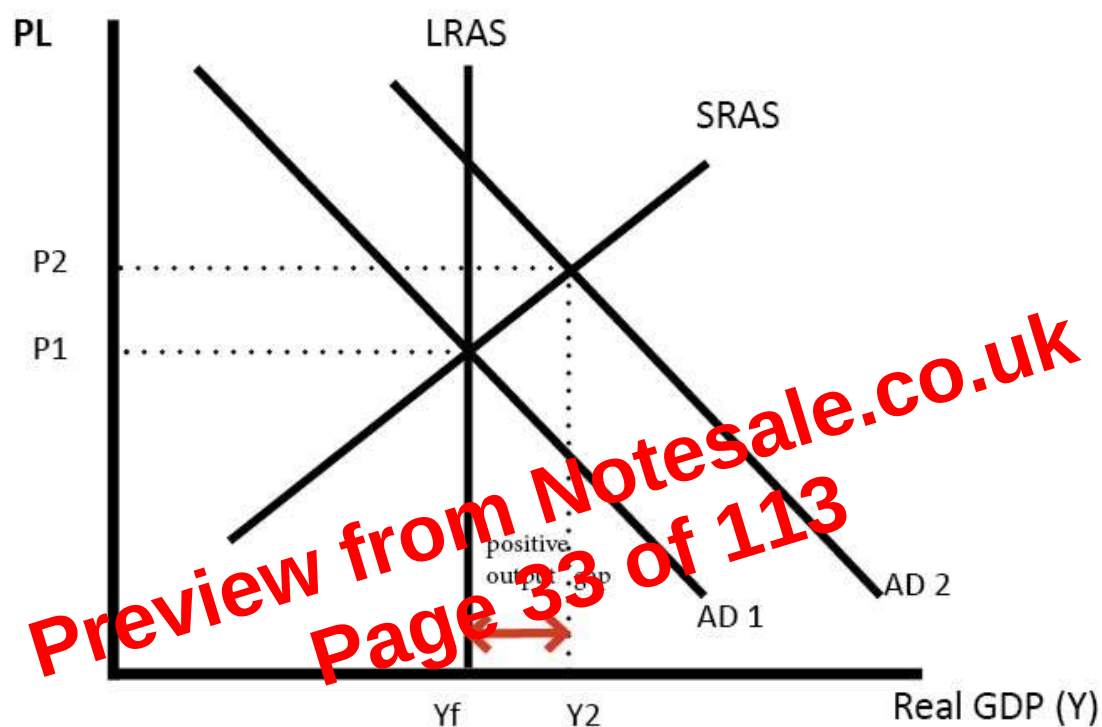
If the PPF shifts to the right, we get economic growth in the long run.

Output gaps

An output gap is the difference between potential GDP and actual GDP. In the real world, the rate of economic growth is rarely constant. We can have positive and negative output gaps.

Positive output gap

A positive output gap will occur when the actual economic growth is above the sustainable potential, e.g. if the long-run trend rate is 2.5%, but we have growth of 4%.

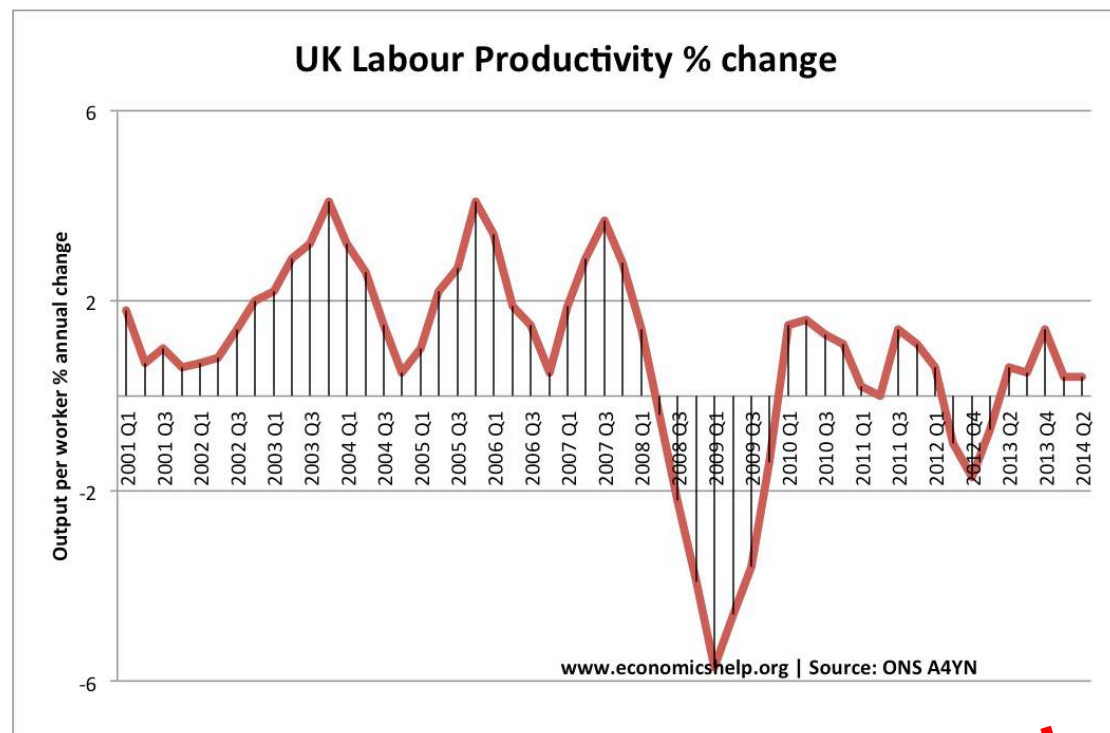


In this diagram, firms are temporarily producing at Y_2 , which is greater than Y_f (full employment). They have increased output in the short run (e.g. getting workers to do overtime). But this is stretching potential output and is unsustainable.

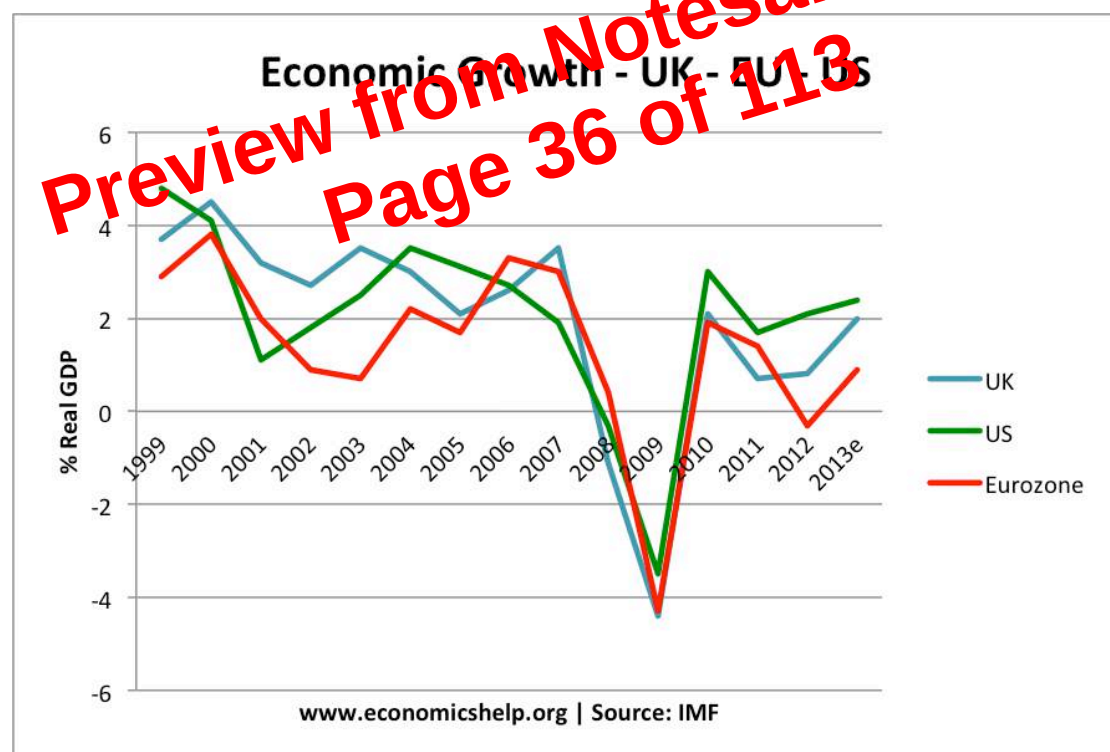
A positive output gap occurs when AD increases faster than AS. A positive output gap leads to:

- Inflation, because the demand is growing faster than the supply.
- Lower unemployment due to greater demand for workers.
- A deterioration in the current account balance of payments.
- The Central Bank may deal with the inflation by putting up interest rates.
- The 'boom' will be unsustainable and may lead to an economic downturn.
- PPF curve: In a boom, output will be on the PPF curve, or just exceeding, due to short-term extension in supply.

UK Productivity



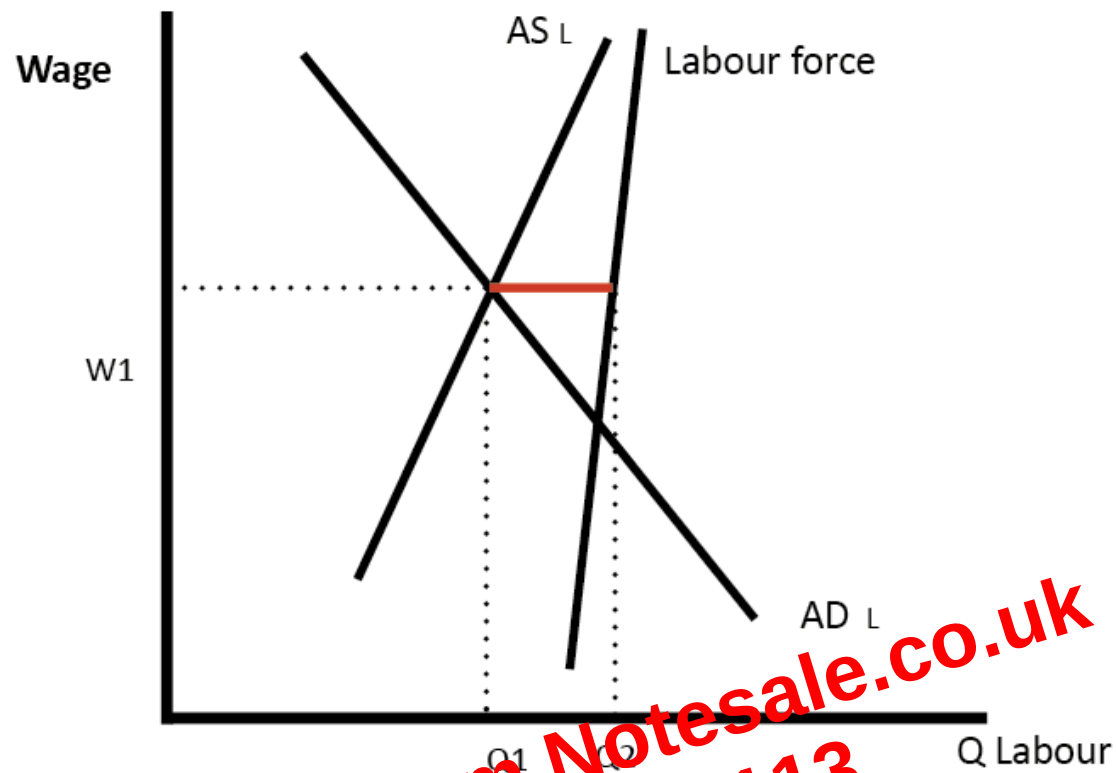
Since 2008, UK labour productivity growth has been poor – well below post trends. UK productivity is important for determining long-run trend rate.



Graph showing correlation between UK economy growth and Eurozone. Since 2013, the UK has had marginally higher rates of growth than the Eurozone.

The natural rate of unemployment

The natural rate of unemployment is the rate of unemployment when the labour market is in equilibrium.



- The natural rate is the difference between those who would like a job at the current wage rate, and those who are willing and able to take a job. The natural rate of unemployment includes frictional and structural unemployment. The natural rate of unemployment is unemployment caused by supply-side factors rather than demand-side factors.

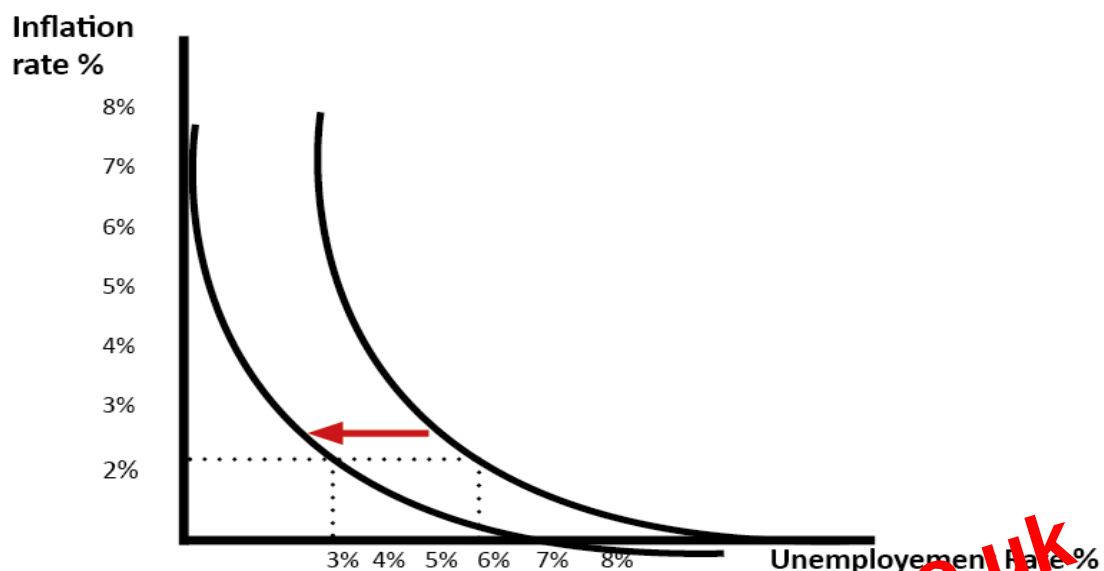
What determines the natural rate of unemployment?

- Availability of job information.
- Quality of education and retraining schemes, which affect levels of occupational immobilities.
- Degree of geographical labour mobility, can workers move to where jobs are available?
- Flexibility of the labour market, e.g. powerful trade unions may be able to restrict the supply of labour to certain labour markets.
- Hysteresis. A rise in unemployment caused by a recession may cause the natural rate of unemployment to increase. This is because when workers are unemployed for a time period they become deskilled and demotivated.
- Monetarists believe that unemployment is primarily due to supply-side factors — the natural rate of unemployment. They believe demand-side unemployment will only be temporary.

Avoiding conflict between inflation and unemployment

1. Supply-side policies to reduce structural unemployment.

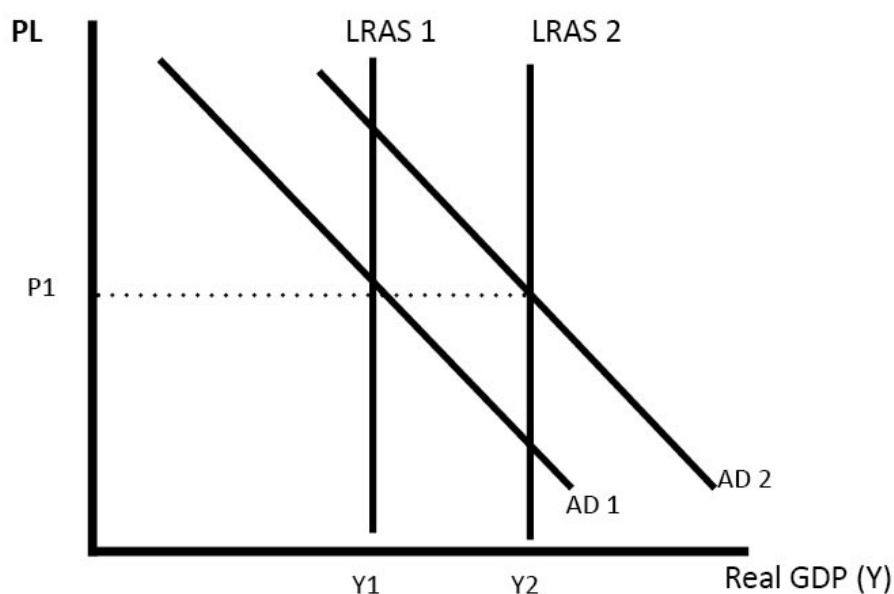
If the government introduced successful supply-side policies, we could see a fall in structural and frictional unemployment. This would reduce the natural rate of unemployment and shift the Phillips curve to the left.



There is still a trade-off between unemployment and inflation, but after the fall in the natural rate of unemployment there is a better trade-off.

2. Economic growth close to long-run trend rate of growth.

If the economic growth is kept close to the long-run trend rate (e.g. 2.5%), then the growth is sustainable. In this case there will not be a positive output gap, but we will reach full employment with minimal inflationary pressure.



- Initially, with low inflation expectations, workers see the nominal wage increase as a real increase, therefore they do work more.
- However, this positive output gap is not sustainable. Workers don't want to keep doing overtime permanently. Also, when workers see inflation has increased, they realise real wages have stayed the same and so they don't want to do overtime.
- With higher nominal wages, SRAS shifts to the left.
- This shift in the SRAS causes inflation to increase and real GDP to return to Y1 — the full employment level of real GDP, but now at a higher price level (P3).
- Therefore, in this model, the increase in the money supply has not changed real GDP in the long run, but it has caused a higher price level.

Criticisms of the monetarist view on inflation

- **Money supply link to inflation is weak.** Evidence in the 1980s showed that the money supply could grow much faster than the price level, suggesting the link was not true in the real world.
- **Quantitative easing did not cause inflation.** In the great recession of 2008-13, even quantitative easing (increasing monetary base) didn't lead to higher inflation, because the economy was depressed.
- **The velocity of circulation (V) is not stable.** The velocity of circulation can change due to factors such as an increase in the use of credit cards. Growth in the money supply can be erratic and due to institutional factors, e.g. more cash machines caused an increase in M0.
- **Economy not always at full employment.** Keynesians argue that the LRAS is not necessarily inelastic; they argue that the economy can be below full capacity for a long time. In this depressed state, increasing the money supply may not cause inflation.

Importance of inflation expectations

If people expect low inflation, low inflation is more likely to occur.

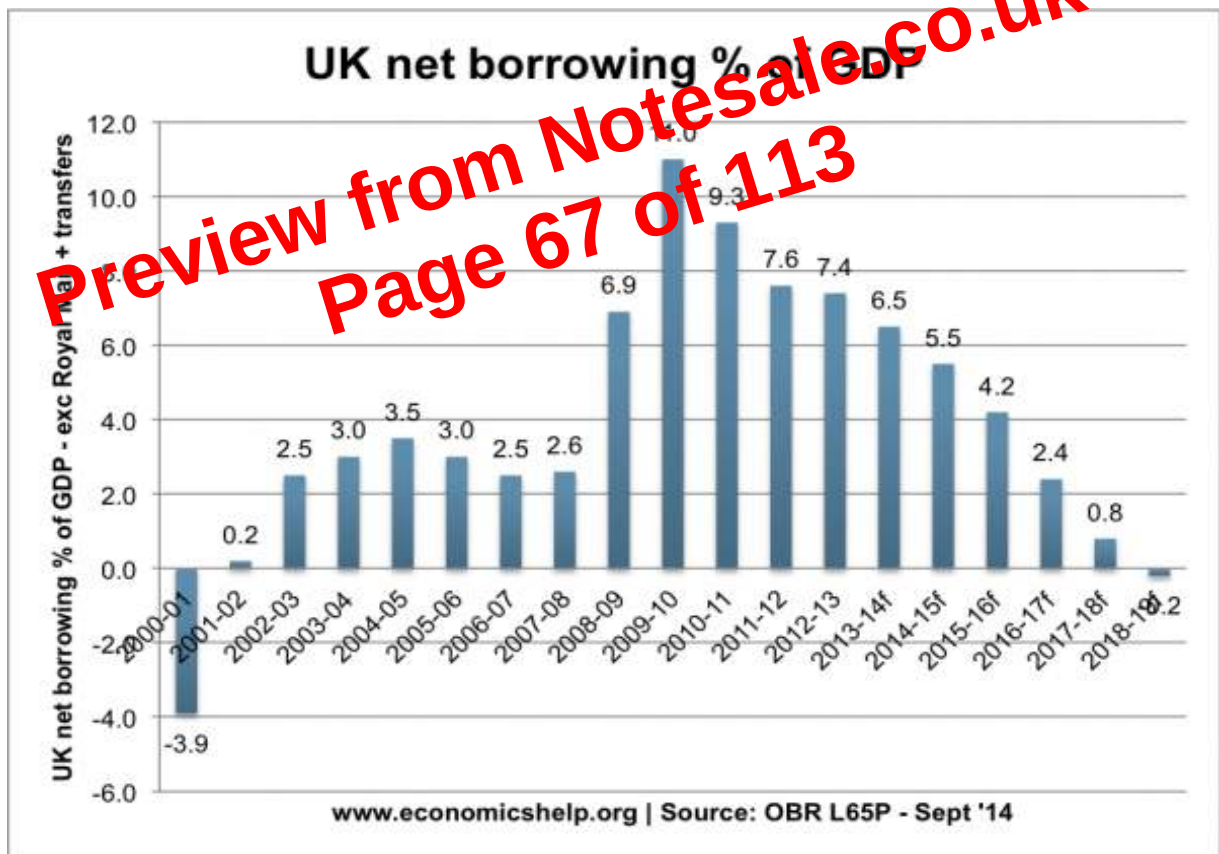
- If workers expect low inflation, they will be more likely to accept low wage increases.
- If firms expect low inflation and low cost of raw materials, they will keep prices competitive.
- If inflation expectations rise, it can cause inflation — as firms push up prices, and workers try to secure higher wages.
- In the 1970s, the UK experienced high inflation. This was partly caused by rising oil prices, but also by strong wage growth. Trade unions bargained for higher wages because they expected inflation.
- If a Central Bank has strong anti-inflation credibility, it can make it easier to keep inflation low. This is why many governments gave the responsibility of monetary policy to an independent Central Bank.

Government borrowing

- **The budget deficit** is the annual amount the government needs to borrow from the private sector. It is the difference between government spending (G) and tax revenue (T).
- **A budget surplus** occurs if government spending is less than tax revenue.
- **A balanced budget** occurs if government spending equals tax revenue.
- **Fiscal stance** refers to the budget position, e.g. deficit or surplus.
- **Primary budget balance** refers to budget position ignoring interest payments. The primary deficit includes just current expenditure and current tax revenues.
- **The overall budget** includes interest payments and all types of spending.

Financing the deficit

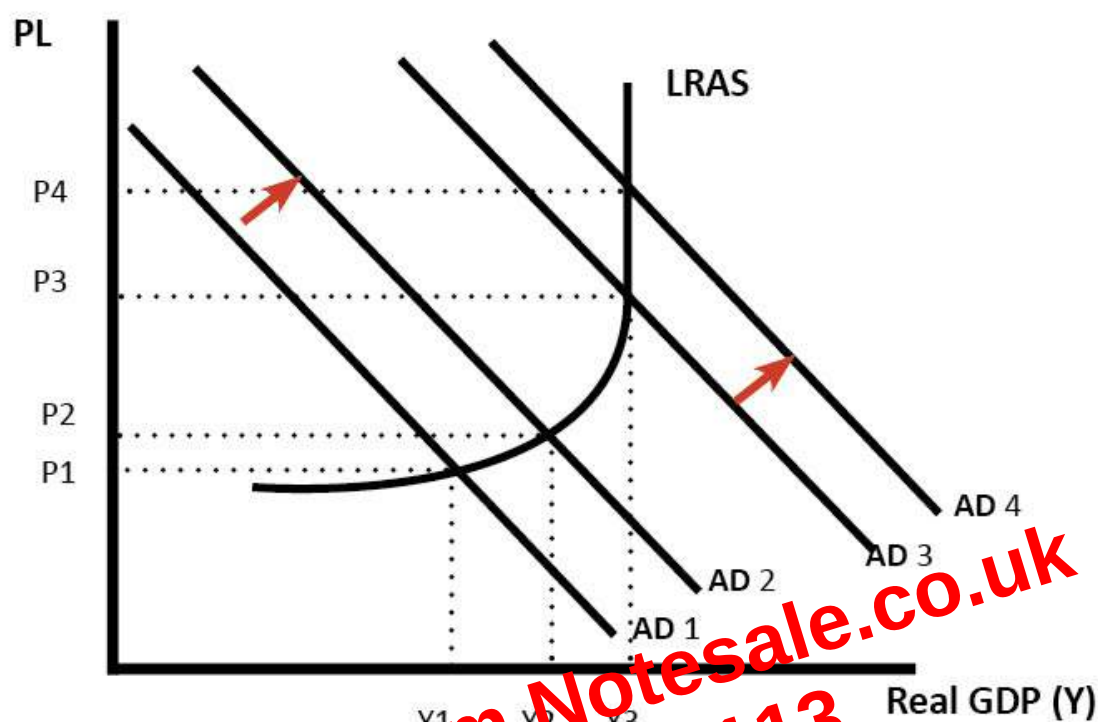
- The budget deficit is financed by the government selling bonds to the private sector. The government pays interest to encourage investors to buy government bonds.
- In rare circumstances, the Central Bank may create money electronically and hold government debt itself. This occurred in great recession of 2009-13.



- In 2000/01, the government ran a budget surplus (3.9% of GDP).
- Borrowing peaked in 2009-10 (11% of GDP) because of the financial crisis and recession. In 2009, the government also pursued expansionary fiscal policy (cutting VAT rates to boost AD).

Evaluation of monetary policy

1. The effect of interest rates depends on the situation of the economy. If the economy is close to full employment, a cut in interest rates is likely to cause a significant increase in inflation, but only a small increase in real GDP (AD3 to AD4).



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- However, if the economy has spare capacity (e.g. at Y1 to Y2), higher AD will increase GDP with only a small amount of inflation.

2. Other components in the economy. The effectiveness of monetary policy depends upon other variables in the economy, for example:

- If confidence is low, a reduction in interest rates may not increase demand.
- If taxes are rising, this may counter a fall in interest rates.
- If the world economy is slowing, this will reduce exports and AD; this would keep spending low, even if there was a reduction in interest rates.

3. Time lags. There may be time lags for lower interest rates to have an effect. For example, higher interest rates may not reduce investment in the short term, because firms will continue with existing investment projects.

4. Conflicts of objectives. Monetary policy may conflict with other macroeconomic objectives. If the MPC reduces inflation, this may lead to lower growth or higher unemployment.

5. Worse trade-off. In 2008, the UK experienced cost-push inflation due to rising oil prices, the MPC didn't increase interest rates because the economic growth was negative. In 2008, they had to tolerate inflation being above target.

6. Exchange rate effect. Cutting interest rates will cause depreciation in exchange rate, which will cause imported inflation.

Quantitative easing

1. Quantitative easing involves the Central Bank creating more money and trying to reduce bond yields.
2. The aim of quantitative easing is to:
 1. Increase the supply of money
 2. Increase the inflation rate and avoid deflation
 3. Increase bank lending and increase economic growth

How quantitative easing works

- The Central Bank creates money electronically (this is a similar effect to printing money).
- The Central Bank uses these extra bank reserves to buy various securities, such as government bonds and corporate bonds.
- Commercial banks sell assets (bonds) to the Central Bank for cash.
- Therefore, banks see an increase in their liquidity (cash reserves).
- In theory, with more cash reserves the bank will be more willing to lend to customers. This lending will be important for increasing investment and consumer spending.
- Buying assets reduces their interest rate. Lower interest rates on these securities may also encourage banks to lend. Higher lending should help improve economic growth.

Evaluation of quantitative easing QE in the UK

- The UK Central Bank engaged in quantitative easing QE— £375bn of new money asset purchases.
- It is hard to quantify the effect of QE. At the same time, the UK growth was affected by deflationary fiscal policy and low growth in Europe. Perhaps, without QE, the recession would have been deeper.
- Government bond yields did fall, making it cheaper for the government to borrow, though some feared a bond bubble.
- **Future inflation?** Some fear that quantitative easing creates the possibility of future inflation because, when the economy recovers, there is excess money supply in the financial system, which may be hard to remove. However, inflation stayed low (2009-2015).
- Economic growth was low/negative between 2009 and 2012, suggesting QE was of limited effect in boosting economic growth.

- There is only so much the government can do. It is important to bear in mind that technological improvements and productivity gains come largely from the private sector.
- It is difficult for the government to transform productivity and create new technology. At best, the government can create a climate for private sector innovation to occur.

Policy conflicts

1. **Higher economic growth may cause environmental problems**, e.g. the overuse of scarce (limited) resources acts as a constraint on future living standards.
 - o However, with higher economic growth, the government may have more tax revenue to spend on looking after environment. Economic development may also lead to lower industrialisation and a more service sector based economy.
2. **Higher growth, but higher inequality**. Lower income tax and corporation tax may provide a boost to growth, but may also increase inequality because high earners benefit most from these tax cuts.
 - o However, it depends on the nature of growth. Growth could enable lower unemployment and more opportunities to reduce relative poverty.
3. **Reducing government debt, but increasing inequality**. Cutting down welfare benefits may provide an incentive for the unemployed to get a job, but it may cause increased inequality.
4. **Growth and balance of payments**. Policies to reduce a current account deficit (e.g. deflationary fiscal policy) may cause lower economic growth and higher unemployment.
5. **Inflation and balance of payments**. If a government tried to reduce current account deficit through devaluation, it could cause inflation, due to higher import prices and rising AD.
6. **Growth and inflation**. Higher economic growth could cause inflation, if it is caused by higher aggregate demand.
 - o However, if growth is sustainable and AS and AD increase at a similar rate, growth does not need to be inflationary. (See: Phillips curve for more detail)

Globalisation

Globalisation refers to the process of how national economies are becoming increasingly interdependent and integrated.

- In practice, globalisation refers to the increased flow of labour, capital and trade between different countries, and a breakdown of barriers between countries.

Characteristics of globalisation

- Growth in free trade between countries
- Growth in movement of labour and capital across national borders
- Increased importance of global financial systems
- Growth in trading blocs (groups of countries, like EU)
- Growth of multinational companies who operate around the world

Causes of globalisation

- **Growth of free trade.** Trade is increasingly important to the global economy. Economies increasingly rely on importing raw materials and exporting goods to foreign markets. Increased trade has made countries more closely integrated.
- **Multinational companies.** There has been a growth in the number of multinational companies who have an influential cross-border presence. Multinationals have different production processes across the globe.
- **Technology.** The development of technology, such as the internet, has helped improve communication and made it easier to connect to all corners of the world.
- **Transport.** Improved transport, especially air transport and shipping, has helped to make trade cheaper, and also made it easier for labour to move between different countries.
- **WTO.** Institutions like the WTO have helped reduce barriers to trade and provide a forum for discussing global issues.
- **Trading blocs.** Trading areas like the EU have considerably reduced barriers to trade within Europe, and also raised the profile of international co-operation.
- **Opening up of China and Eastern Block.** Since the 1980s, China, India, Brazil and Russia have become much more open to the global economy. China has been a key player in the development of the global economy, e.g. its investment in Africa to benefit from raw materials.

Trade

- International trade allows countries to specialise in goods and services which they are relatively best at producing.
- **Absolute advantage.** This occurs when one country can produce a good with fewer resources than another.
- **Comparative advantage.** A country has a comparative advantage if it can produce a good at a lower opportunity cost, e.g. it has to forego less of other goods in order to produce it.
- **The law of comparative advantage.** This states that trade can benefit all countries if they specialise in the goods in which they have a comparative advantage.

Example of trade

Let us assume there are two countries, India and the UK, who could both produce items of clothing or computers.

Opportunity cost of producing clothes or computers

	Clothes	Computers
UK	1	4
India	2	3
Total	3	7

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- For the UK to produce 1 unit of clothes, it has an opportunity cost of 4 computers.
- For India to produce 1 unit of clothes, it has an opportunity cost of 1.5 computers.
- Therefore, India has a comparative advantage in producing textiles, because it has a lower opportunity cost.

Opportunity cost of producing books

- If the UK produces a computer, the opportunity cost is $1/4$ (0.25).
- If India produces a computer, the opportunity cost is $2/3$ (0.66).
- Therefore, the UK has a comparative advantage in producing computers.

Output after specialisation

	Clothes	Computers
UK	0	8
India	4	0
TOTAL	4	8

- If each country now specialises in producing one good then, assuming constant returns to scale, output will double.
- Therefore, output of both goods has increased, illustrating the gains from comparative advantage.
- The total output is now 4 (clothes) and 8 (computers), which is higher than the previous totals.

Limitations of the theory of comparative advantage

- Assumes no transport costs but, in reality, transport costs can prohibit the benefits of trade.
- Increased specialisation may lead to diseconomies of scale (though also economies of scale can occur).
- Governments may restrict trade through tariffs.
- Comparative advantage measures static advantage, but not any dynamic advantage. For example, in the future, India could become good at producing books if it made the necessary investment.

Heckscher-Ohlin theory of trade

- This states that if two countries trade with each other, they will export the goods in which they have the more abundant factor of production.
- A capital abundant country will specialise in producing and exporting capital intensive goods, and import those labour intensive goods, in which it does not have an advantage.
- In more detail, we can separate labour into skilled and unskilled.
- A country like Germany may specialise in exporting goods which require skilled labour. A developing economy like China may specialise in goods which require low cost unskilled labour.
- In essence the Heckscher-Ohlin theory is based on principles of comparative advantage.

Restrictions on free trade

Protectionism involves policies to restrict trade. This can involve:

- **Higher tariffs** (type of tax on imports)
- **Non-tariff barriers**, e.g. the US have charges on packages under grounds of 'aviation security', and this increases the costs of imports. Other rules and regulations can make trade more difficult.
- **Voluntary export restraint** is effectively a type of quota where voluntary limits are placed on imports of goods.
- **Embargo**, e.g. US embargo with Cuba.
- **Government subsidy**. Government subsidies effectively give the firm an unfair competitive advantage. This has often occurred with national airlines.
- **Distorted exchange rate**. Keeping your currency artificially low makes exports relatively more competitive.

Arguments for restricting trade

- **Infant industry argument.** If developing countries have industries that are relatively new then, at that moment, these industries would struggle against international competition. Therefore, they need tariff protection while they develop their industries to be more competitive.
- **The senile industry argument.** If industries are declining and inefficient, they may require a large investment to make them efficient again. Protection for these industries could act as an incentive for firms to invest and reinvent themselves.
- **Need to diversify the economy.** Many developing countries rely on producing primary products, in which they currently have a comparative advantage. However, relying on agricultural products has several disadvantages:
 - Prices can fluctuate due to environmental factors.
 - Goods have a low income elasticity of demand. Therefore, even with economic growth, demand will only increase a little.
- **Protection against dumping.** The EU sold a lot of its food surplus from the CAP at very low prices on the world market. This caused problems for world farmers because they saw a big fall in their market prices. Tariffs can protect against dumping.
- **Environmental.** It is argued that free trade can harm the environment because countries with strict pollution controls may find that consumers import the goods from other countries where legislation is lax and pollution is allowed.

International competitiveness

The UK's international competitiveness measures the relative cost of British exports.

If UK goods and services become more expensive than our competitors, then we see a decline in competitiveness.

International competitiveness can be measured using

- Unit labour costs – costs of employing workers to produce goods
- Relative prices of exports and imports.

- Low inflation is considered to be the most important building block of a modern economy

Disadvantages of central bank targeting macro-economic indicators

- **Inflexibility.** With an inflation target, the Central Bank may place too much emphasis on reducing inflation and ignore more pressing problems, such as unemployment and growth.
- **Cost-push inflation.** In 2008, economies experienced cost-push inflation and a recession at the same time. The ECB increased interest rates but this made Eurozone recession worse.
- **Inflation not always highest priority.** Arguably unemployment of 10-20% we see in Eurozone is more damaging than inflation of 3-4%, but ECB retains low inflation as a primary objective.

Lender of last resort

- One role for the Central Bank is to act as the lender of last resort. This means that if banks are short of cash, the central bank will step in and provide cash / liquidity.
- This gives people confidence in the banking system and prevents bank panics, where people try to withdraw their money.
- The disadvantage is that it can create moral hazard. It can encourage banks to take risks because if things go badly, the Central Bank will bail them out.

Regulation of the financial system

The need for regulation

- **Asymmetric information.** Financial bodies may not be aware of the real state of a company's increasing likelihood of debt default.
 - A problem in the credit crunch was that many banks bought bundles of US mortgage debt, not realising that many US mortgages were highly likely to default.
- **Moral hazard.** Moral hazard occurs when financial guarantees alter economic behaviour and increase risk-taking.
 - A Central Bank commits to guaranteeing all bank deposits. If a commercial bank goes bankrupt, the Central Bank will bail it out.
 - Arguably, this bailout guarantee encourages commercial banks to take more risks because, if they lose money, the Central Bank will step in.