

Edexcel (B) Economics A-level
Theme 4: Making Markets Work

4.4 Macroeconomic Policies and
Impact on Firms and Individuals

4.4.1 The AD/AS model

Notes



Changes in Aggregate Demand (AD)

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.

Capital investment:

This accounts for around 15-20% of GDP in the UK per annum, and about $\frac{3}{4}$ of this comes from private sector firms. The other $\frac{1}{4}$ 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 funds 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:

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.
- 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

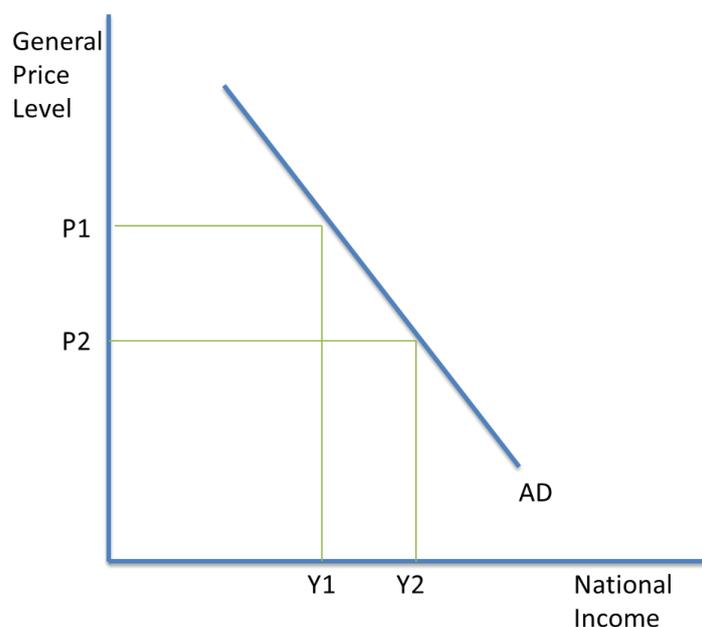
- Protectionism is the act of guarding a country's industries from foreign competition. It can take the form of tariffs, quotas, regulation or embargoes.
- If the UK employed several protectionist measures, then the trade deficit will reduce. This is because the UK will be importing less due to tariffs and quotas on imports to the UK.
- 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.



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.

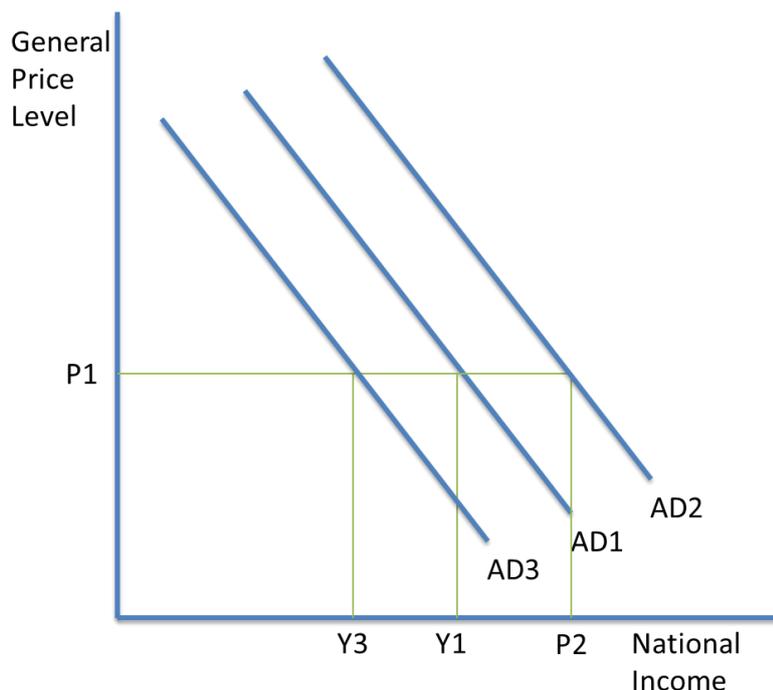
 The downward slope of the AD curve can be explained by:

- 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 ($AD1 \rightarrow AD2$).

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.

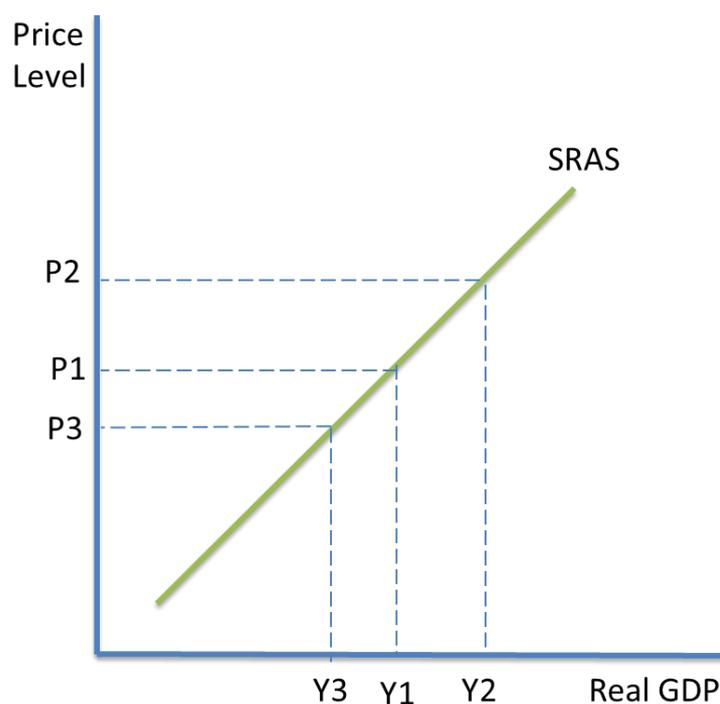


Changes in Aggregate Supply (AS)

The AS curve:

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

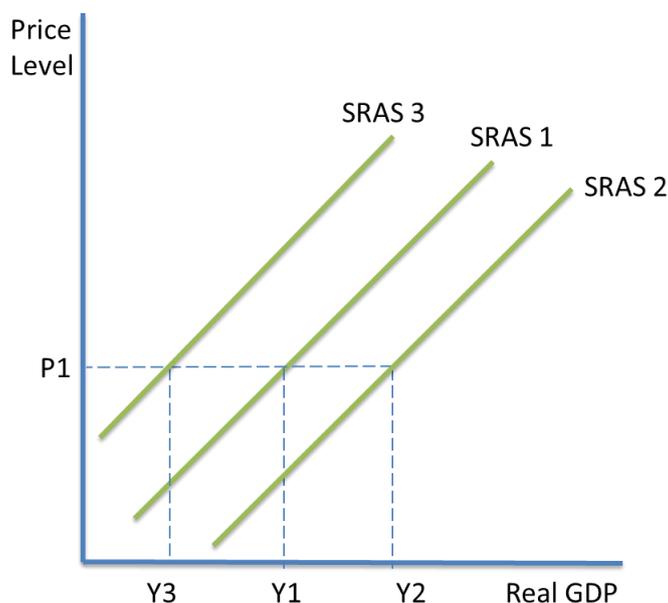
Moving along the AS curve:



- 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.



Factors influencing short-run AS:



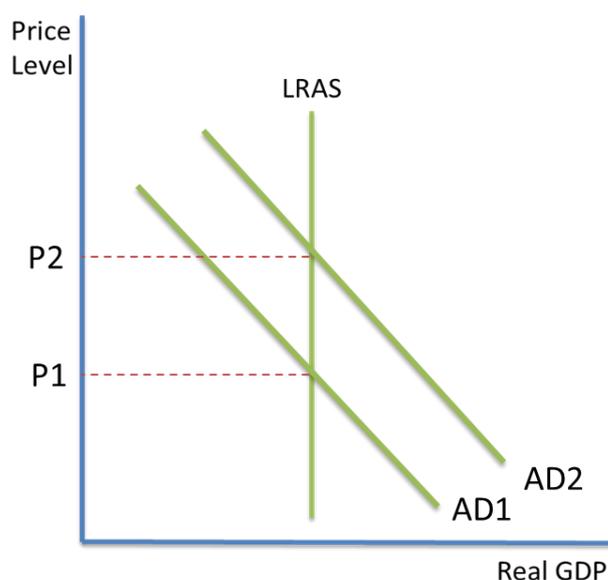
- The SRAS curve shifts when there are changes in the conditions of supply. The price level and production costs are the main determinants of SRAS.
 - The cost of employment might change, e.g. wages, taxes, and labour productivity. If costs increase, supply will shift inwards from SRAS1 to SRAS3.
 - The cost of other inputs e.g. raw materials, commodity prices, and the exchange rate if products are imported. A stronger currency reduces the price of imports, so imported products will be cheaper. This would shift the AS curve outwards, from SRAS1 to SRAS2.
 - Government regulation or intervention, such as environmental laws or green taxes and business regulation. Business regulation is sometimes called 'red tape'.
 - There could be a net outward migration of workers, which causes a 'brain drain' on the domestic economy, as skilled workers move elsewhere.
 - If there is a fall in business capital spending, supply will fall.



 **Long run aggregate supply**



-  In the long run, output is fixed at each level and all factors of production in the economy are fully employed.
-  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).
-  The position of the vertical LRAS curve represents the normal capacity level of output of the economy.



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. The LRAS curve will shift to the right if potential output increases.

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.



Full capacity output

-  The economy operates at full capacity when all resources are fully employed. the output level is the quantity of goods and services which can be produced when resources are fully employed.
-  When the economy operates at full capacity, low unemployment rates, increases in AD and sustainable rates of economic growth are often observed.

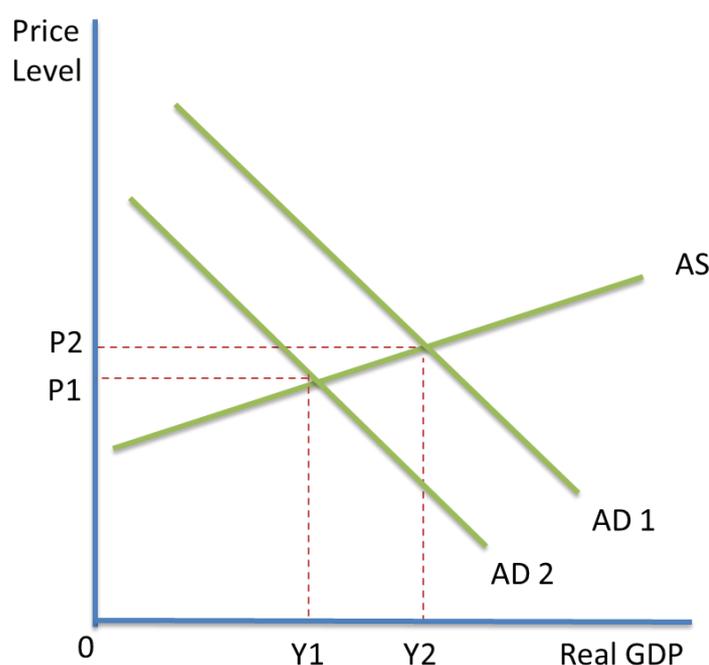
The multiplier effect

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.

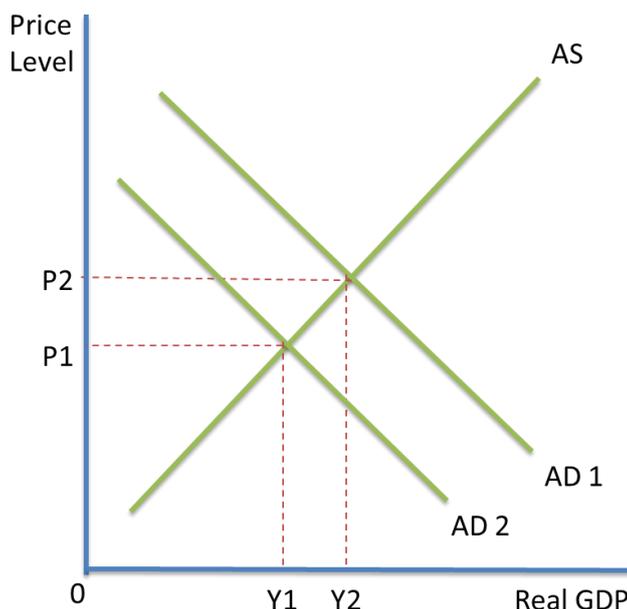
The multiplier effect refers to how an initial increase in AD leads to an even bigger increase in national income.

It occurs since 'one person's spending is another person's income'.

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 from 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.

How the AS/AD model sheds light on the economy as a whole

