CIE Economics A-level

Topic 4: The Macroeconomy

e) The circular flow of income

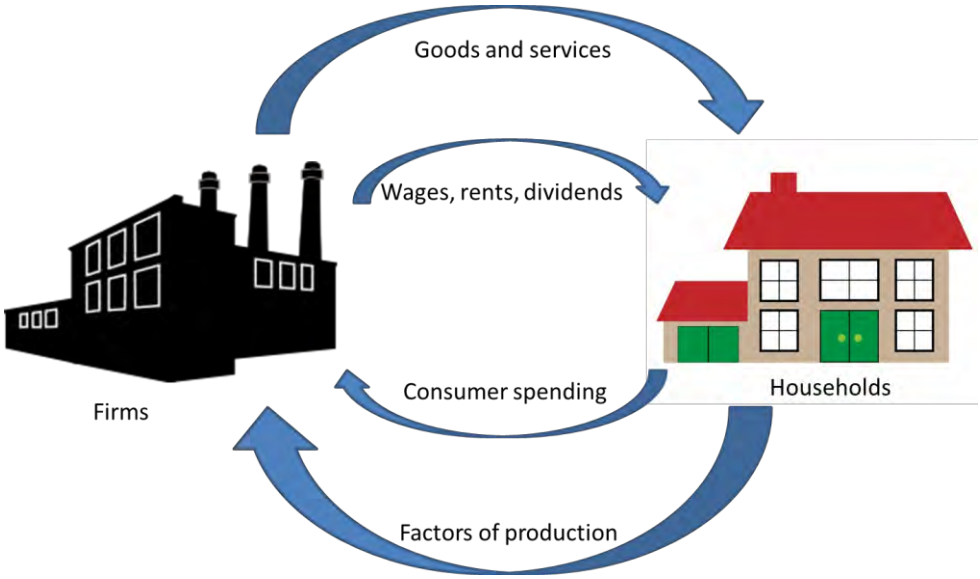
Notes

Closed and open economies

A closed economy is entirely self-sufficient, so it has no need to import anything, and it does not export anything. Everything consumed is produced within the border.

An open economy trades with other economies.

The circular flow of income between households, firms, the government and the international economy



- 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.

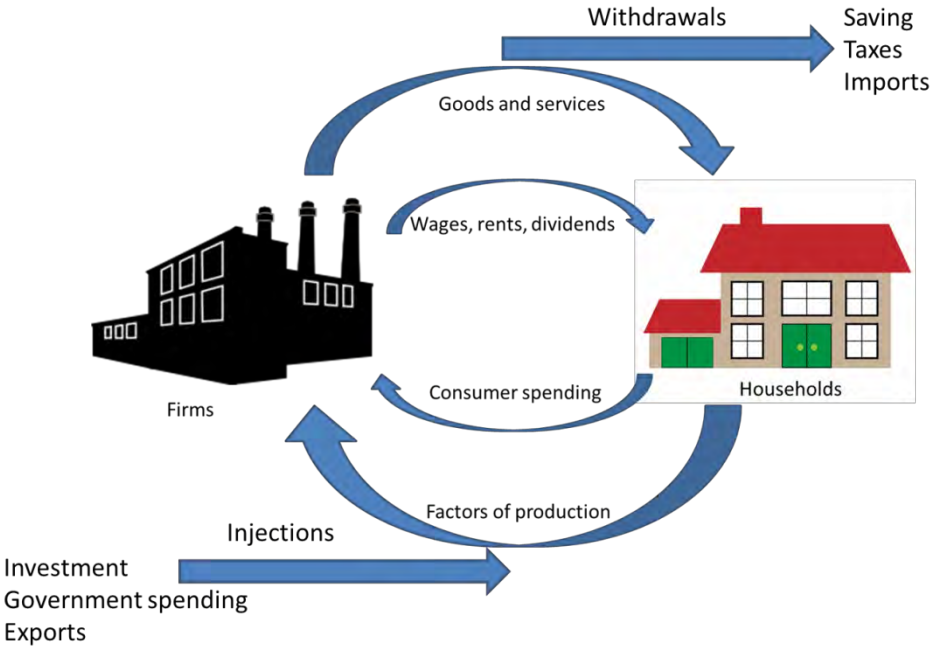
- Saving income removes it from the circular flow. This is a **withdrawal** of income.
- Taxes are also a withdrawal of income, whilst government spending on public and merit goods, and welfare payments, are **injections** into the economy.

- 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 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, average and marginal propensities to save and consume

The multiplier process

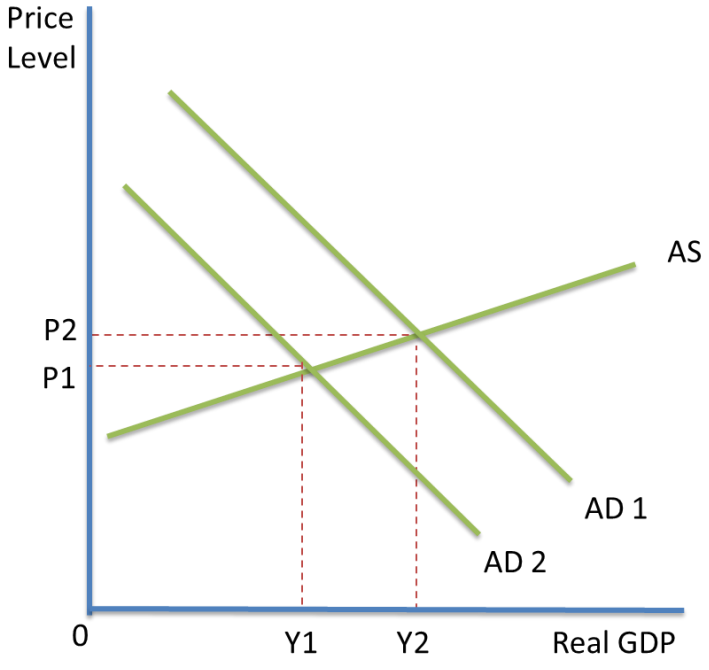
The multiplier effect occurs when there is new demand in an economy. This leads to an injection of more income into the circular flow of income, which leads to economic growth. This leads to more jobs being created, higher average incomes, more spending, and eventually, more income is created.

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

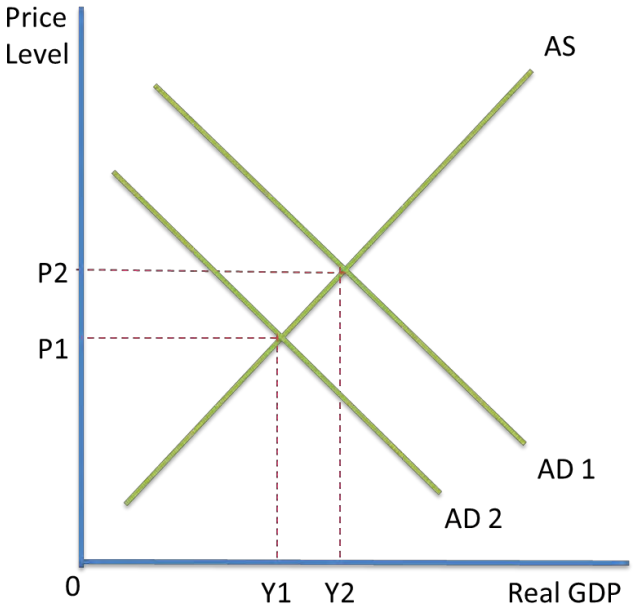
It occurs since 'one person's spending is another person's income'.

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.

- **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.
The **average propensity to consume** is the percentage of income spent rather than saved. It is calculated by total consumption divided by total income.

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.

The **average propensity to save** is the income that is not spent. This is also known as the savings ratio.

Aggregate Expenditure (AE) function

- ### Meaning, components of AE and their determinants

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.
- **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.
- **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.
- **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.

- ### Inflationary and deflationary gaps; full employment level of income and equilibrium level of income

At the equilibrium level of income, there is no tendency for income or output to rise or fall.

An inflationary gap occurs when AD exceeds AS at the level of full employment. It causes the average price level to rise.

A deflationary gap occurs when AD is below AS at full employment, so there is a deficiency in demand. This leads to a fall in output, employment and income. It puts downward pressure on the average price level.

- **Autonomous and induced investment; the accelerator**

Autonomous investment does not depend on income, output or interest rates. Induced investment is in response to the level of income and interest rates.

The accelerator effect occurs when an increase in demand leads to an even bigger increase in investment.

Firms increase production and use their productive capacity more fully. If demand increases significantly, the firm might increase investment to further their productive capacity. Therefore, the demand for capital goods increases as a result of an increase in the demand for consumer goods.