

Edexcel (A) Economics A-level
**Theme 2: The UK Economy,
Performance and Policies**

2.4 National Income

2.4.4 The multiplier

Notes



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 tax (MPT)**



This is defined as the proportion of each pound taxed by the government. The higher the rate of tax, the less disposable income each consumer has, and the smaller the size of the multiplier.

- **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If consumers spend income on imports rather than domestic goods and services, income is withdrawn from the circular flow of income.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:
 $1/(1-0.6) = 1/0.4 = 2.5$.

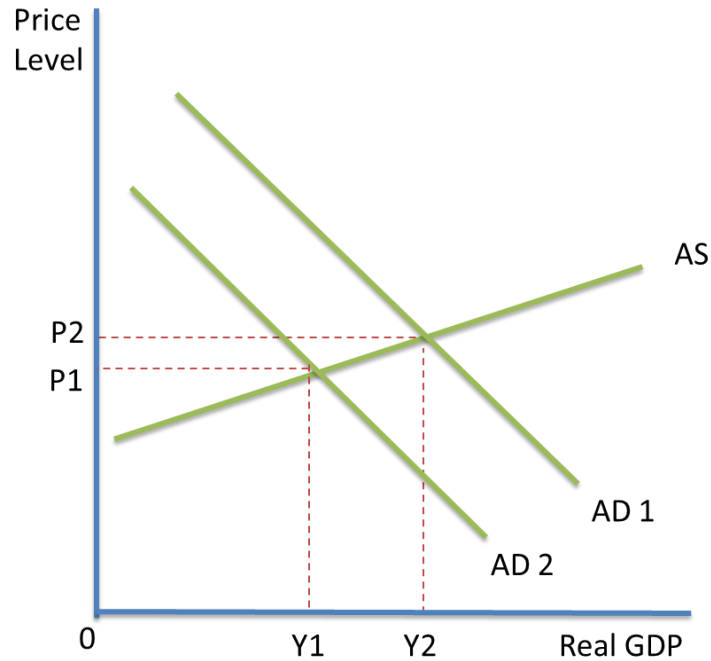
This means that every £1 of income generates £2.50 of new income.

- 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:
- $1/MPW$

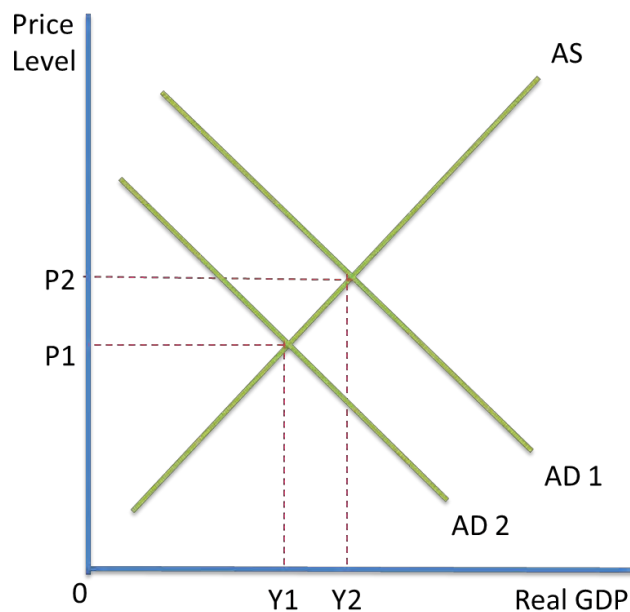
The significance of the multiplier to shifts in AD


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 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.

