

# OCR Economics A-level Macroeconomics

# Topic 2: Economic Policy Objectives 2.4 Inflation

**Notes** 

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- **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 of inflation, 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.
- **Hyperinflation** is when the rate of inflation is high and accelerating, to the extent that it is out of control.

# Macroeconomic policy objective of low 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.

This is a good summary by the Bank of England about the government's inflation target:

http://www.bankofengland.co.uk/monetarypolicy/Pages/framework/framework.aspx

#### Real and nominal values:

Real values have been adjusted for inflation. Nominal values have not been inflation. For example, the nominal price of bread could have risen, but the real cost of bread may have actually fallen (when you take into account inflation).

#### Calculating the inflation rate in the UK

This is done 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
  - o 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. Some consumers think this more accurately reflects the cost of living.
- RPI tends to have a higher value than CPI due to the inclusion of housing costs.
- RPI has been used for much longer than CPI, which makes it better for comparisons over time.
- The RPI is unique to the UK, and is not consistent with the European Central Bank's inflation measurement like the CPI is. Therefore, CPI is more accurate for making comparisons between European countries.

# Calculating the rate of inflation using index numbers

Index numbers are used to make comparisons between years, and to measure the magnitude of change over time. A **base year** is used and is then compared to other











years. For example, if the year 2015 is the base year, the value given to it is 100. If inflation has risen by 5% between 2015 and 2018, the index number for 2018 will be 105.

In the calculation of CPI, different items in the basket of goods have difference weights. Food will have a much larger weighting than clothing, since consumers spend more of their income on food. The index number measures the change in price over time.

# 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:
  - Raw materials become more expensive, such as when oil prices rise.
  - 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, which pushes up the price of raw materials.











- Monopolies, using their dominant market position to exploit consumers with high prices.
- Growth of the money supply: If, for instance, the Bank of England printed more money, there would be more money flowing in the economy. Extreme increases in the money supply usually cause hyperinflation, when the rate of inflation is incredibly high and uncontrollable. It is only inflationary if the money supply increases at a faster rate than real output.

Quantitative Easing 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. This means the bank had to adopt another measure: pumping money directly into the economy. 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. 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.

# The consequences of inflation on:

#### 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.

#### Firms

- 2 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.
- 2 Workers might demand higher wages, which could increase the costs of production for firms.
- 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 government

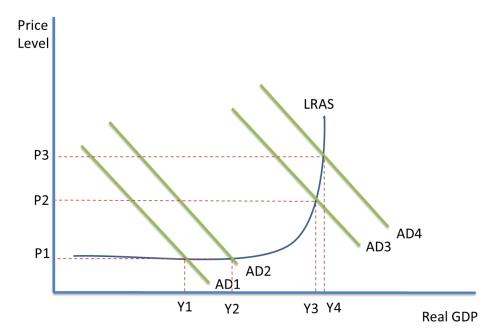
The government will have to increase the value of the state pension and welfare payments, because the cost of living is increasing.

#### 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.

## Causes of deflation

 A fall in aggregate demand: Deflation is usually caused in recessions, when output and demand are decreasing. This can be illustrated in the diagram. A fall in AD from AD2 to AD1, or AD4 to AD3, causes the price level to fall. However, usually falling AD causes disinflation rather than deflation.



- If the supply of money falls in the economy, there could be a fall in the average price level. This can be caused by a tightening of monetary policy, such as with higher interest rates.
- Increase in aggregate supply: This lowers production costs for firms. Output increases at the same time, and this type of deflation is not normally considered as bad as if it is caused by falling AD.











# The consequences of deflation:

- During periods of deflation, the value of money increases. This means each pound can buy more of a good or service.
- This could lead to a sharp decline in consumer spending, since consumers wait for prices to keep falling before spending.
- The decline in consumer spending is particularly obvious with expensive items, such as TVs and cars.
- The economy might crash and the unemployment rate might increase. This
  can add more deflationary pressure to the price level. This is why deflation
  can quickly spiral out of control.
- Deflation causes the debt burden on consumers to increase in real terms. This
  means it could be more expensive to pay off the debt, so consumers and firms
  have less disposable income. This can reduce spending and investment,
  making it hard to escape a deflationary spiral.
- Since interest rates cannot be negative, the rate of deflation is below the interest rate. This means that by saving money, the real value of the savings increases. This furthers the possibility of lower growth.
- Nominal wages are often 'sticky', which means workers resist pay cuts. This
  means real wages rise when there is deflation, which could cause
  unemployment.







