

# Macroeconomics Knowledge Organiser

## 4 main objectives

- achieve economic growth and improve living standards and levels of economic welfare
- create and maintain full employment or low unemployment
- limit or control inflation, or to achieve some measure of price stability
- attain a satisfactory balance of payments, usually defined as the avoidance of an external deficit

## Price Stability

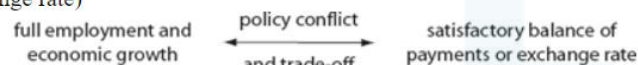
**inflation** a persistent or continuing rise in the average price level.

**deflation** a persistent or continuing fall in the average price level.

**disinflation** when the rate of inflation is falling, but still positive.

## Policy Conflicts – Trade offs exist where two or more macroeconomic objectives are mutually exclusive

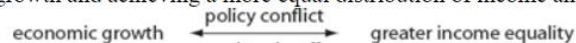
- between internal policy objectives of full employment and growth and the external objective of achieving a satisfactory balance of payments (or possibly supporting a particular exchange rate)



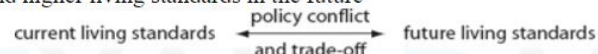
- between achieving full employment and controlling inflation



- between increasing the rate of economic growth and achieving a more equal distribution of income and wealth

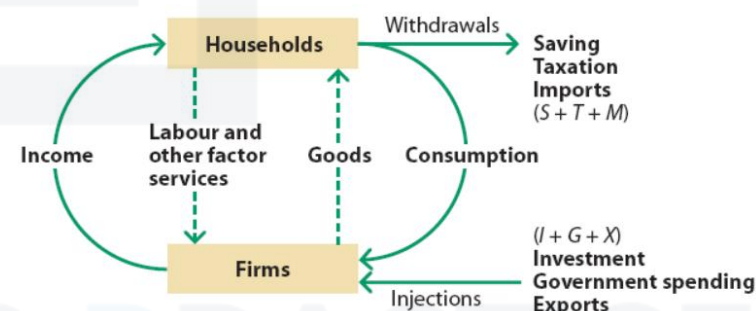


- between higher living standards now and higher living standards in the future

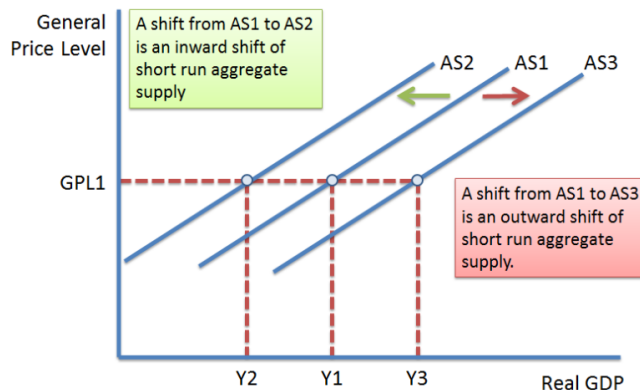


## Circular Flow Model

$$S + T + M = I + G + X$$



## Showing Shifts in Short Run Aggregate Supply



## Shifts in Short Run Aggregate Supply (SRAS)

Shifts in the position of the short run aggregate supply curve in the price level / output space are caused by changes in the conditions of supply for different sectors of the economy:

- **Employment costs** e.g. wages, employment taxes. Unit labour costs are also affected by the level of labour productivity
- **Costs of other inputs** e.g. commodity prices, raw materials. The exchange rate can affect the prices of key imported products
- **Impact of government** e.g. environmental taxes such as carbon duties & business regulations which affect the costs of production

## Examples of Shifts in Aggregate Demand

### Fall in AD

Fall in net exports ( $M > X$ )

Cut in government spending ( $G$ )

Higher interest rates

Decline in household wealth and confidence

### Increase in AD

Depreciation of the exchange rate

Cuts in direct and indirect taxes

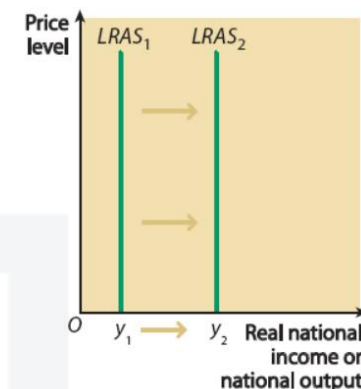
Increase in house prices

Expansion of supply of credit + lower interest rates

## The position of the *LRAS* curve, shifts of the *LRAS* curve, and economic growth

The position of the vertical *LRAS* curve represents the normal capacity level of output of the economy, with the economy producing at full potential. The position is determined by the same factors that determine the position of the economy's production possibility frontier. These include:

- the state of technical progress
- the quantities of capital and labour and other factors of production in the economy
- the mobility of factors of production, particularly labour
- the productivity of the factors of production, particularly labour productivity
- people's attitudes to hard work
- personal enterprise, particularly among entrepreneurs. The emergence of a large number of risk-taking entrepreneurs is especially important for shifting the *LRAS* curve to the right
- related to this, the existence of appropriate economic incentives
- the institutional structure of the economy, involving such factors as the rule of law and the efficiency of the banking system



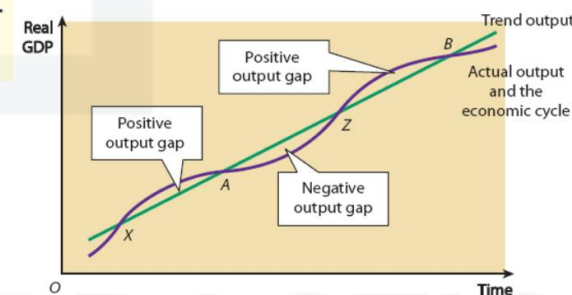
**trend growth rate** the rate at which output can grow, on a sustained basis, without putting upward or downward pressure on inflation. It reflects the annual average percentage increase in the productive capacity of the economy.

**positive output gap** the level of *actual* real output in the economy is greater than the *trend* output level.

**negative output gap** the level of *actual* real output in the economy is lower than the *trend* output level.

### Benefits of economic growth

- Economic growth increases standards of living and people's welfare.
- Growth may lead to more civilised communities, who take action to improve the environment.
- Growth provides new and more environmentally friendly technologies.
- Economic growth has increased the length of people's lives and has provided the means to reduce disease.
- Economic growth provides a route out of poverty for much of the world's population.



**structural unemployment** long-term unemployment occurring when some industries are declining, even though other industries may be growing. Also occurs within a growing industry if automation reduces the demand for labour, and when production requires new skills not possessed by the workers who lose their jobs. Structural unemployment is associated with the occupational and geographical immobility of labour.

**cyclical unemployment** also known as **Keynesian unemployment** and **demand-deficient unemployment**. As the latter name suggests, it is unemployment caused by a lack of aggregate demand in the economy and occurs when the economy goes into a recession or depression.

**frictional unemployment** unemployment that is usually short term and occurs when a worker switches between jobs. Also known as **transitional unemployment**.

**seasonal unemployment** unemployment arising in different seasons of the year, caused by factors such as the weather and the end of the Christmas shopping period.

**full employment** according to Beveridge's definition, full employment means 3% or less of the labour force unemployed. According to the free-market definition, it is the level of employment occurring at the market-clearing real-wage rate, where the number of workers whom employers wish to hire equals the number of workers wanting to work.

## Monetary Policy

**expansionary monetary policy** uses lower interest rates to increase aggregate demand and to shift the *AD* curve to the right.

- **Higher interest rates reduce household consumption (C).** First, higher interest rates encourage people to save, and higher saving means that less income is therefore available for consumption. Second, the cost of household borrowing increases, which increases the cost of servicing a mortgage and credit card debt. Borrowers have less money to spend on consumption because more of their income is being used for interest payments. Third, higher interest rates may cause asset prices to fall, for example the prices of houses and shares. (An asset is something that has a value and can be sold for money.) These falling prices reduce personal wealth, which reduces consumption. Fourth, falling house and share prices reduce consumer confidence, which further deflates consumption.
- **Higher interest rates reduce business investment (I).** Investment is the purchase of capital goods such as machines by firms. Businesses postpone or cancel investment projects as they believe that higher borrowing costs make buying capital goods unprofitable. This is likely to be exacerbated by a fall in business confidence and increased business pessimism.
- **Changes in interest rates affect exports and imports via the exchange rate.** The third way in which an increase in interest rates leads to a decrease in aggregate demand works through the effect of higher interest rates on net export demand ( $X - M$ ). In the context of the UK balance of payments, a higher interest rate increases the demand for pounds by attracting capital flows into the currency. The increased demand for sterling causes the pound's **exchange rate** to rise, which makes UK exports less price competitive in world markets and imports more competitive in UK markets. The UK's balance of payments on current account worsens, which shifts the *AD* curve leftward.

## How does Quantitative Easing work in the UK?

1. The central bank (BoE) creates new money electronically to make large purchases of assets (bonds) from the private sector
2. Increased demand for government bonds causes an increase in the market price of bonds and therefore causes their price to rise
3. A higher bond price causes a fall in the yield on a bond (there is an inverse relationship between bond prices and yields)
4. Those who have sold their bonds may use the extra funds to buy assets with relatively higher yields such as shares of listed businesses and corporate bonds
5. Commercial banks receive cash from asset purchases and this increases their liquidity. This may encourage them to lend out to customers which will help to stimulate an increased in loan-financed capital investment in the economy

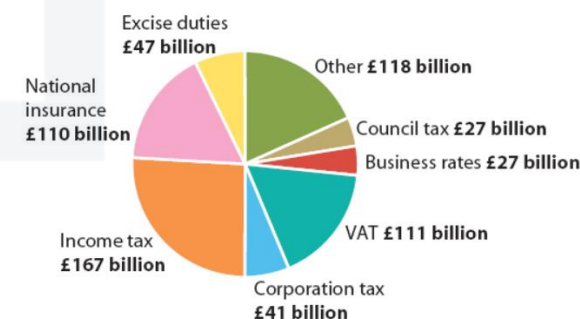
## The meaning of fiscal policy

**Fiscal policy** is the part of a government's overall economic policy that aims to achieve the government's economic objectives through the use of the fiscal instruments of taxation, public spending and the government's budgetary position. As an economic term, fiscal policy is often associated with Keynesian economic theory and policy. Between the 1950s and late 1970s, Keynesian governments used fiscal policy to manage the level of aggregate demand.

### KEY TERM

**fiscal policy** involves the use of taxation, public spending and the government's budgetary position to achieve the government's policy objectives.

Total projected government tax revenues and other receipts  
£648 billion



## The government's budgetary position

Using the symbols *G* for government spending and *T* for taxation and other sources of government revenue, the three possible budgetary positions a government can have are:

$G = T$ : **balanced budget**

$G > T$ : **budget deficit**

$G < T$ : **budget surplus**

**progressive taxation** a tax is progressive if, as income rises, a greater proportion of income is paid to the government in tax.

**regressive taxation** when the proportion of income paid in tax falls as income increases.

**proportional taxation** when the proportion of income paid in tax stays the same as income increases.

### Main Objectives of Supply-Side Policies

Key concepts to focus on when discussing S-SPs are incentives, enterprise, technology, mobility, flexibility and efficiency

1. **Improve incentives** to look for work and invest in people's skills
2. Increase labour and capital **productivity**
3. Increase occupational and geographical **mobility of labour** to help reduce the rate of unemployment
4. Increase **investment** and **research and development spending**
5. **Promote more competition** and stimulate a faster pace of **invention and innovation** to improve **competitiveness**
6. Provide a strong platform for **sustained non-inflationary growth**
7. Encourage the **start-up and expansion of new businesses** / enterprises especially those with export potential
8. Improve the trend rate of growth of real GDP to help support improved living standards and regional economic balance

### Economic Advantages of Higher Productivity

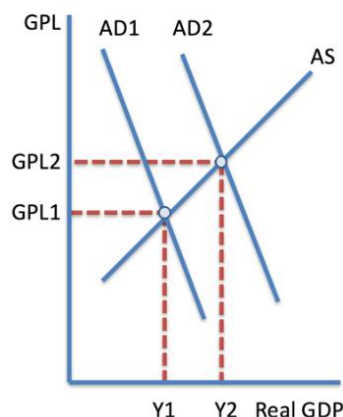
1. **Lower unit costs:** Cost savings for businesses can bring lower prices, encouraging higher demand, more output and an increase in employment
2. **Improved competitiveness** and trade performance (BoP)
3. **Higher profits:** Efficiency gains are a source of larger profits for companies which might be re-invested
4. **Higher wages:** Businesses can afford higher wages when their workers are more efficient
5. **Economic growth:** If an economy can raise productivity then the trend growth of national output can pick up
6. **Productivity improvements** mean that labour can be released from one industry and be made available for another

### If Supply Side Policies Work

In general, a stronger supply-side performance allows a government to meet more of the key macro objectives

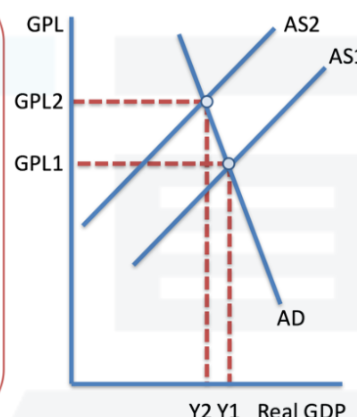
1. Achieve a sustained improvement in the possible trade-off between inflation and unemployment (see Phillips Curve)
2. Be more flexible in response to external demand and supply-side shocks such as rising energy prices
3. Raise living standards through stronger long term economic growth / an increase in underlying trend rate of growth
4. Reduce unemployment by lowering the natural rate of unemployment (less frictional & structural unemployment)
5. Improve competitiveness in global markets and achieve a stronger balance of trade in goods and services

### Demand Pull Inflation using AD-AS Diagram



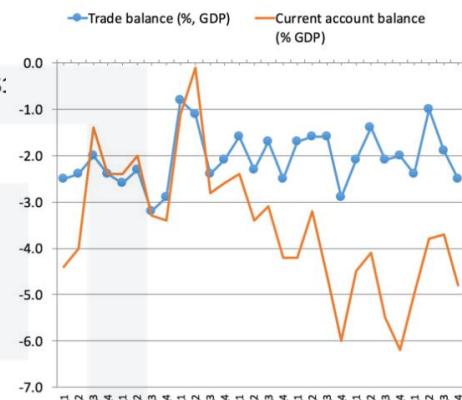
1. Demand-pull inflation occurs when AD grows at an unsustainable rate leading a positive output gap (i.e. Actual GDP > Potential GDP)
2. When there is excess demand, producers can raise their prices and thereby achieve bigger profit margins
3. Demand-pull inflation is most likely when there is full employment of resources, when aggregate supply is inelastic

### Cost-Push Inflation using AD-AS Diagram



- Cost-push inflation occurs when firms respond to rising costs by increasing their prices to protect profit margins
- Can be caused by:
1. Rising unit labour costs
  2. Higher prices for important components/raw materials
  3. A depreciation in the exchange rate causing a rise in import costs
  4. An increase in business taxes e.g. VAT or environmental taxes such as a carbon tax

### UK Trade and Current Account Balance (% of GDP)



In 2015, the UK's current account deficit was £96.2 billion, up from a deficit of £92.5 billion in 2014.

The deficit in 2015 equated to **5.2% of GDP** at current market prices.

**This was the largest annual deficit as a percentage of GDP at current market prices since annual records began in 1948**

### Sections of the current account, 2013 (£ million)

|                                                   |                |
|---------------------------------------------------|----------------|
| Balance of trade in goods                         | -110,196       |
| Balance of trade in services                      | +78,096        |
| Balance of primary income                         | -13,133        |
| Balance of secondary income                       | -27,162        |
| <b>Balance of payments on the current account</b> | <b>-72,395</b> |

### What does a current account deficit mean? Does it matter?

The current account balance for the UK (which includes trade, investment and financial transfers) was 4.1% of GDP in 2017, down from 5.8% of GDP in 2016.

Running a deficit on the current account means that an economy is not paying its way in the global economy. A deficit means a country is drawing in money from elsewhere and, as a consequence, building up corresponding liabilities – i.e. an increase in **external debt**.

**balance of trade in goods** the part of the current account measuring payments for exports and imports of goods. The difference between the total value of exports and the total value of imports of goods is sometimes called the 'balance of visible trade'.

**balance of trade in services** is part of the current account and is the difference between the payments for the exports of services and the payments for the imports of services.

**net investment income** the difference between inward and outward flows of investment income. When net investment income is positive, the UK is earning more income generated by the direct and portfolio investments held abroad than it is paying to overseas owners of capital assets in the UK. Investment income is the main component of primary income flows in the current account of the balance of payments.

**transfers** payments flowing between countries in forms such as foreign aid, grants, private transfers and gifts. They are payments that are made without anything of economic value being received in return. Not to be confused in this context with the part of government spending in which tax revenues are paid to people such as pensioners, without any output being produced in return.