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Economics Revision Focus: 2004

AS Economics

**Trend Economic Growth**

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## Revision Focus on Trend Economic Growth

### AS Syllabus Requirement

Candidates should understand that economic growth occurs when the **productive capacity** of the economy is increasing and that the principal indicator of economic growth is the rate at which **real national income** is changing.

They should understand the main factors that influence the rate of economic growth. Candidates should understand that **supply-side policies** may be used to attempt to influence the **underlying long-run trend rate of economic growth**.

In this revision note we will consider the factors that determine the **underlying long-run trend rate of growth for an economy**.

First we remind ourselves of the central macroeconomic objectives of the current government:

The Government's central economic objective is to achieve **high and stable levels of growth and employment**. Even small changes in the rate of growth can have large effects if sustained over a number of years. For this reason, the Government aims to raise the economy's trend growth rate.

Source: HM Treasury [www.treasury.gov.uk](http://www.treasury.gov.uk)

### So what is the trend rate of growth?

*Trend economic growth refers to the smooth path of long run output.*

Measuring the trend requires a long-run series of macroeconomic data (perhaps of 20 years or more) in order to identify the different stages of the economic cycle and then calculate **average growth rates** from peak to peak or trough to trough.

Another way of thinking about the trend growth rate is to view it as an **underlying safe speed limit for the economy**. In other words, an estimate of how fast the economy can reasonably be expected to grow over a number of years without creating an increase in inflationary pressure.

- **Above trend growth – positive output gap:** If the economy grows too quickly (much faster than the trend) – then aggregate demand will eventually exceed long-run aggregate supply and lead to a positive output gap emerging (excess demand in the economy). This can lead to demand-pull and cost-push inflation
- **Below trend growth – negative output gap:** If the economy experiences a sustained slowdown or recession (i.e. growth is well below the trend rate) then output will fall short of potential GDP leading to a negative output gap. The result is downward pressure on prices and rising unemployment because of a lack of aggregate demand

*The trend growth rate is the rate at which the economy can grow without higher inflation*

The table below provides a summary of UK economic growth over the period 1992-2004

	<b>Consumer Spending</b> % change	<b>Real GDP (Economic Growth)</b> % change	<b>Industrial Production</b> % change	<b>Unemployment</b> % of labour force
2000	4.4	3.8	1.9	3.6
2001	3.1	2.1	-1.6	3.2
2002	3.4	1.7	-2.7	3.1
2003	2.3	2.1	-0.6	3.1
2004	2.6	2.9	1.5	2.9
<b>Average 1992-2004</b>	<b>3.0</b>	<b>2.6</b>	<b>1.0</b>	<b>5.5</b>
<b>Maximum</b>	4.6	4.4	5.4	9.7
<b>Minimum</b>	0.5	0.2	-2.7	2.9
<b>Standard Deviation</b>	1.1	1.0	2.0	2.6

- Average growth has been just over 2.5% (pretty much in line with agreed estimates of the trend rate of growth for the UK)
- Industrial production has been growing much less quickly – suggesting that much of the growth since 1992 has come from the services industries
- Industrial production has also been more volatile than GDP (look at the data for the standard deviation) – perhaps because the industrial sector is subject to greater “shocks” such as movements in the exchange rate and economic cycles in other countries
- Household spending (consumption) has been growing more strongly than GDP – partly fuelled by falling unemployment, low interest rates and rising house prices and borrowing

### What economic factors affect the trend rate of economic growth?

This summary statement provides an overview of the Treasury’s latest research on underlying growth

Many factors influence the rate of economic growth. Some factors, such as changes in consumer and business confidence, aggregate demand conditions in the UK’s trading partners, and monetary and fiscal policy, tend to have a mainly temporary effect on growth. Other factors, such as the rates of population and productivity growth, have more enduring effects, and help to determine the economy’s average growth rate over long periods of time.

### The importance of the supply-side of the economy

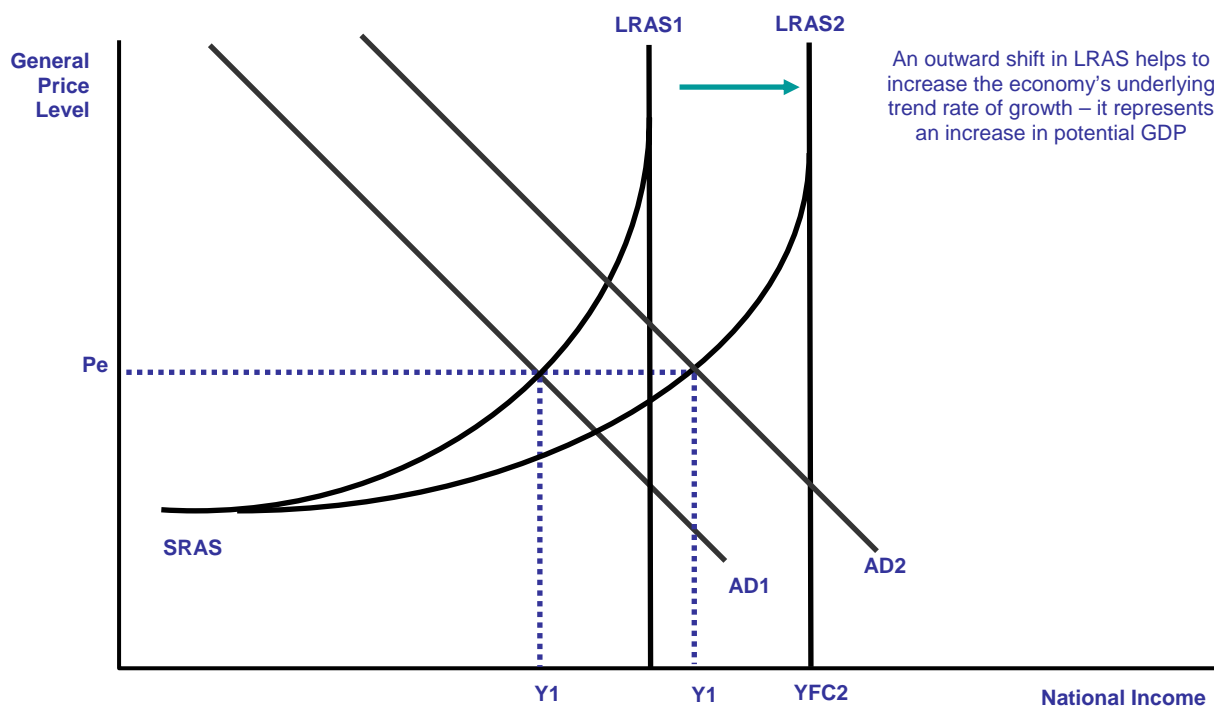
The trend rate of growth is determined by the **supply-side capacity** of a country – i.e. the extent to which LRAS increases year-on-year to meet a higher level of aggregate demand. Potential output in the long run depends on the following factors

- The trend **growth of the working population** i.e. the size of the active labour supply (e.g. those people able available and willing to find paid employment)

- The growth of the nation's **stock of capital** – driven by the level of capital investment in new buildings, machinery, plant and technology
- The trend rate of **growth of factor productivity** (including labour productivity) – a measure of gains in factor efficiency
- **Technological improvements** driven by innovation and invention which reduce the costs of supplying goods and services and which lead to an outward shift in a country's production possibility frontier

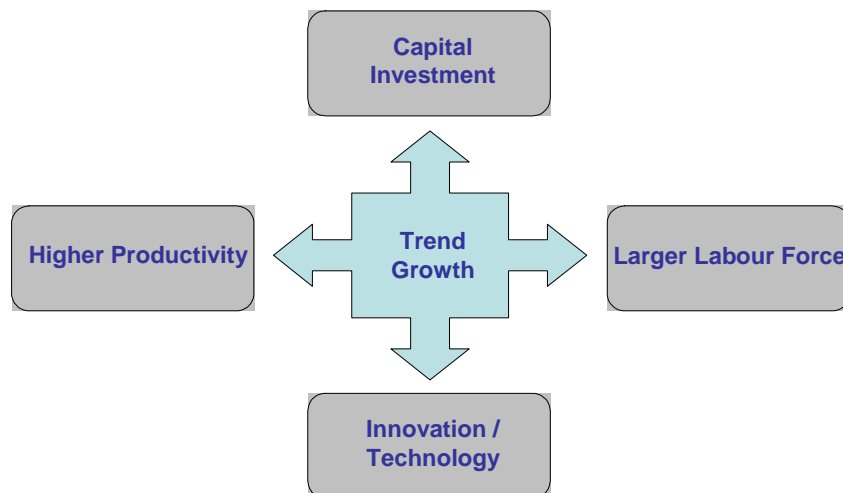
### Long Run Aggregate Supply and the Trend Rate of Growth

The effects of an increase in **long run aggregate supply** are traced in the diagram below. An increase in LRAS allows the economy to operate at a higher level of aggregate demand – leading to sustained increases in real national output.



Over the last twenty years, government of different political persuasions, have put in place policies which they expect will be successful in raising investment, encouraging entrepreneurship and improving incentives to work.

Potential output in the long run depends on the following factors



(1) **The growth of the labour force** e.g. those people able available and willing to find employment

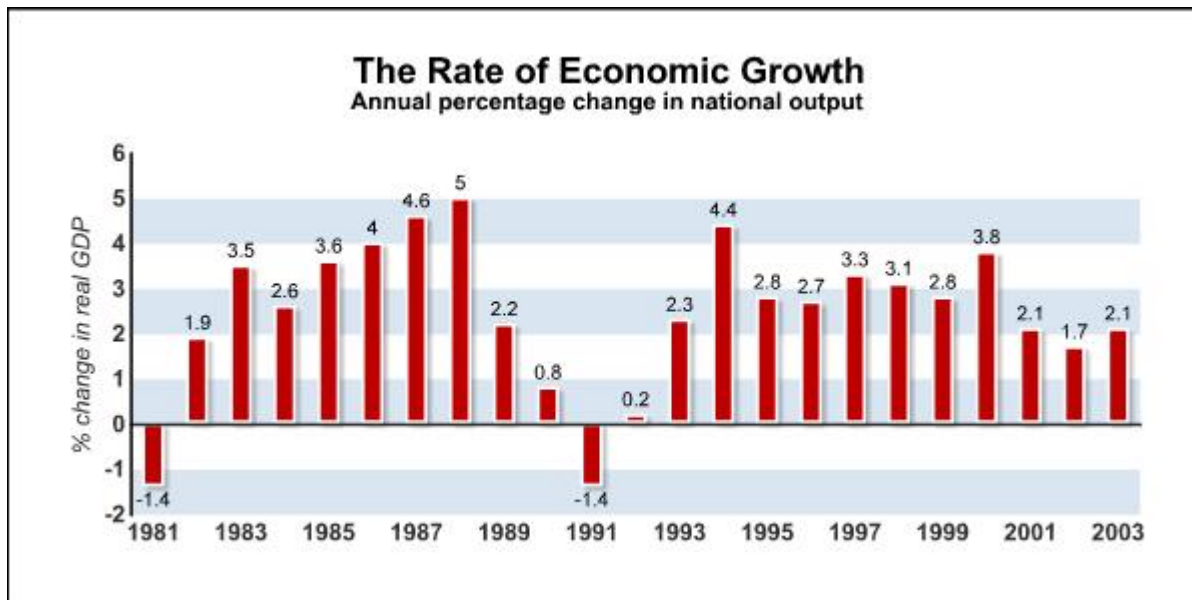
If the government can increase the number of people willing and able to actively seek paid employment, then the employment rate increases leading to a higher output of goods and services. The Government has invested heavily in a number of employment schemes designed to raise employment including **New Deal** and **reforms to the tax and benefit system**. Changes in the age structure of the population also affect the total number of people seeking work. And we might also consider the effects that **migration of workers** into the UK from overseas, including the newly enlarged European Union, can have on our total labour supply

(2) **The growth of the nation's stock of capital – driven by the level of fixed capital investment.**

A rise in capital investment adds directly to GDP in the sense that capital goods have to be designed, produced, marketed and delivered. Higher investment also provides workers with more capital to work with. New capital also tends to embody technological improvements which providing workers have sufficient skills and training to make full and efficient use of their new capital inputs, should lead to a higher level of productivity after a time lag.

(3) **The trend rate of growth of productivity of labour and capital.** For most countries it is the growth of **productivity** that drives the long-term growth. The root causes of improved efficiency come from **making markets more competitive** and achieving better productivity within individual plants and factories. Increased **investment in the human capital of the workforce** is widely seen as essential if the UK is to improve its long run productivity performance – for example – increased spending on work-related training and improvement in the UK education system at all levels.

(4) **Technological improvements** are important because they reduce the real costs of supplying goods and services which leads to an outward shift in a country's production possibility frontier



The current growth phase for the UK is the longest period of continuous growth for over forty years. That said, the trend growth rate remains increases in real GDP of almost exactly 2.5% a year. The good news is that our trend growth rate is currently higher than our main Western European neighbours (both Germany and France are stuck in the doldrums) although it is lower than the average growth rates of the ten new countries joining the EU in May 2004 (their trend growth is closer to 4% pa); a little below that of the United States. Much lower than the amazing growth rates being experienced at the moment by the Chinese economy.

Of course the burning issue for the Chinese is whether their current growth drive can be maintained.