

occurs when the factors of production within the economy are being utilised – with full employment. Thus, firms cannot increase production without increasing the quality or quantity of the factors of production themselves. The long-run equilibrium level of potential output can also be referred to as the **natural level of output**.

### Output gaps

A **positive output gap** occurs when the economy temporarily produces at a point outside its production possibility frontier (beyond the LRAS). This can only be sustained temporarily because it produces beyond the economy's natural capacity of output. It occurs when the factors of production are being overused, causing rising labour and capital costs alongside general inflation. This is when the economy 'overheats'. A **negative output gap** occurs when the economy produces at a point within its production possibility frontier (below the full employment level of output at LRAS,  $Y^{FE}$ )

### Keynesian LRAS

Keynes held the view that a depressed economy can settle into an under-full employment equilibrium. He claimed without purposeful Government intervention, an economy could display permanent demand-deficiency. If the Government could shift AD to the right using expansionary fiscal policy, output could increase filling up the existing spare capacity without an increase in the price level.

*What is the purpose of learning this? Will we need it in the exam? Can we use it in evaluation?*

### Vertical LRAS

Because it is vertical, an increase in AD, when the equilibrium is at  $Y^{FE}$  will increase the price level, but not output in the long-run. It is irresponsible for Governments to use expansionary fiscal policy/expansionary monetary policy to increase AD beyond its natural capacity. In the short-run it may work, but output and employment will fall back to its natural rates. Supply-side economists believe it is important to use microeconomic supply side policies to increase the productive potential as well.

*This can be used for evaluation.*

### Multipliers

The **national income multiplier** measures the relationship between a change in any of the components of aggregate demand and the resulting change in national income (output). The multiplier exists whenever a change in one AD component causes multiple and successive stages of change in output. *E.g. if consumption increases, people spend more money. This causes businesses to earn more profits, causing them to be able to spend more, which they could spend on more labour causing consumption to increase further. Consumers earn more money causing tax revenues to rise, and the Government can as a result spend more money on schemes such as education, within which they can choose to invest in teachers, causing them to have more money causing consumption to increase again.* There are different types of multipliers corresponding to each component: Consumption multiplier, investment multiplier etc. There are also negative multipliers including the taxation multiplier and the import multiplier.

During the Keynesian era from the 1950s to 1979, Governments fine-tuned AD in the economy, using contractionary fiscal policy to reduce demand-pull inflation when AD was too high, and expansionary fiscal policy to increase output when AD was too low, or the economy was in a recession. These actions often brought about multiplier effects.

The effect of the multiplier depends upon the **marginal propensity to consume**. This refers to the proportion of additional income people plan to spend, rather than save. If it was 0.9, 90p of every addition £1 they earned would be spent, whilst 10p would be saved. This is opposite to the **marginal propensity to save**.  $MPC + MPS = 1$ .

The effect also depends upon other leakages such as imports and taxes.

The Government Spending multiplier effect was initially thought to have been quite small – at 0.5 during the NICE decade era. However, more recently, the IMF and OBR have claimed that since the Great Recession, the spending multiplier has increased to a figure between 0.9-1.7. This means spending cuts has a much stronger reduction effect on the economy than it would have before the recession.

The strength of Keynesian fiscal policy is dependent largely upon the Government Spending Multiplier. Keynesian economics would be much more efficient and effective in countries with a large multiplier, than countries like the UK where the multiplier is small.

used, but in the form of supply-side policy to increase the UK's ability to produce (i.e. infrastructure and education), and taxes were cut to improve personal incentives to work harder, save and invest etc. In the 1990s, and when New Labour took power, fiscal policy returned, but the Government still believed that monetary policy should be used to control demand and inflation in an economy, with fiscal policy largely centred around supply-side policy. In 2008 however, Labour started to spend a lot in order to avoid a deep recession.

## Taxation and Public Spending

### *Taxation basics:*

- **Taxation** is a compulsory levy charged by the Government to raise revenue, primarily to finance Government spending. It is the principle source of Government revenue.
- **Progressive taxes** are taxes for which the proportion of a person's income paid in tax rises as income increases.
- **Regressive taxes** are taxes for which the proportion of a person's income in tax falls as income increases.
- **Proportionate taxes (or flat-rate taxes)** are taxes for which the proportion of a person's income in tax stays the same as income increases.
- Typically, under more Keynesian and economically left-wing Governments, taxes have been more progressive in order to achieve a greater redistribution of income.
- The **average tax rate** refers to total tax paid divided by total income earned. It measures what proportion of your income goes to tax.
- The **marginal tax rate** refers to the change in tax paid divided by change in income earned in response to a change in income. It measures the tax rate on a particular bracket of income.

### *Principles of taxation:*

A tax, according to Adam Smith, must abide by four principles. It must be equitable, economical, convenient and certain:

- **Equitable**, meaning it should be fair (this depends upon opinion: some believe a flat rate is fair, while others believe those with a higher ability to pay should pay more). However, many believe this is a justification for progressive taxation and fair means it should be based on ability to pay.
- **Economical**, meaning the cost of collection should be low.
- **Convenient**, meaning it should be done at a time that is practically viable (i.e. not mid-harvest when output is yet to be realised).
- **Certain** (individual should know what the tax is for, how he is going to (practically) pay for tax and when he must do it).

Another principle:

- **Flexible** (another common principle), meaning if the tax is a means of economic management, it should be easy to change and alter to changing economic conditions.

### *Public Expenditure:*

(Often does not include the spending of nationalised industries because these gain revenue from selling their good/service to customers, not from taxation).

Generally, throughout the first half of the 20<sup>th</sup> century (with the exception of post-war spending), the UK saw a gradual and steady rise in its **public expenditure to national income ratio** from 10% to 40%, reaching 47% in 1982/83. It fell in the late 1980s, before rising again during New Labour's term in Government to a high of 50% during the Great Recession. The primary determinant in the public expenditure to national income ratio is the stage at which an economy is within the economic cycle. During recession, the cost of public spending in terms of welfare for Job-Seekers Allowance and income-support benefit increase rapidly; while national income experiences a fall. And vice versa in an economic boom.

When **transfers** is taken out of the public spending equation (money spent on people, and not capital), spending falls to around 20-30% of GDP. This refers to spending to produce hospitals, roads (not private sector and welfare spending).

A Government must also pay interest on its share of national debt. This figure is based on the stock of national debt a Government has, and interest rates at the time.

### *Aims of Taxation and Public Spending:*

Primary aims include to:

- Raise money to spend
- **Allocation:**

Automatic stabilisers also operate in the opposite way, to dampen the expansionary effect of an increase in AD. As AD increases, unemployment falls and less people receive means-tested benefits such as unemployment benefits taking demand out of the economy reducing the possibility of the UK overheating during a boom phase. These stabilisers are the primary reason to the UK's more stable economic growth since 1939.

#### Budget deficit and borrowing

Generally, in a recession, spending on benefits increase will tax revenue from income falls, leading to a budget deficit and increased borrowing, and vice versa.

A **structural budget deficit** can also occur. This is when factors regarding the changing structure of the UK economy such as deindustrialisation and globalisation, can have an impact on the country's finances. In this case, the structural changes of deindustrialisation worsen unemployment and worsen the budget deficit.

#### Diagram

**Expansionary fiscal policy** is aimed at increasing aggregate demand and causes AD to shift to the right (either due to greater government spending, or greater consumer spending as a result of tax cuts).

**Contractionary fiscal policy** is aimed at reducing aggregate demand and causes AD to shift to the left (either due to falling government spending or falling consumer spending as a result of increases in tax).

On the diagram, the nearer the economy gets to full employment, the more inflationary the effect of an increase in AD becomes, until full employment is reached and the economy is operating at full capacity. At this point, the economy cannot grow aside from temporary overheating growth – the impact of increasing AD will be almost entirely inflationary.

The effect of supply-side fiscal policy is largely the shifting of the LRAS curve to the right.

#### Crowding out

**Crowding out** is a process through which private sector spending and output is displaced by the growth of public sector spending and output. This process is split into two forms:

- **Resource crowding out** – There is an opportunity cost with employing resources to the public sector, because these resources won't be available to the private sector.

*However, this assumes the economy is currently at its production possibility frontier, and is currently using all of its factors of production. If unemployment exists, public spending would simply use idle resources, taking up the slack in the economy and leading to a boosted economic recovery. Public spending using a budget deficit may even stimulate (crowd in) the private sector as spending on infrastructure provides work for many construction firms. The multiplier effect generates further business for the private sector.*

- **Financial crowding out** – The public sector is funded by taxation, and thus a large public sector requires high taxes. Such taxes reduce the spending power of private individuals and firms paying the taxes.

*However, if taxes were increased on the rich it may lead to higher private sector spending because taxes would be spent on benefits giving the poorest in society greater incomes – low-income groups have higher marginal propensities to consume than high-income groups; although at the probable cost of personal incentives.*

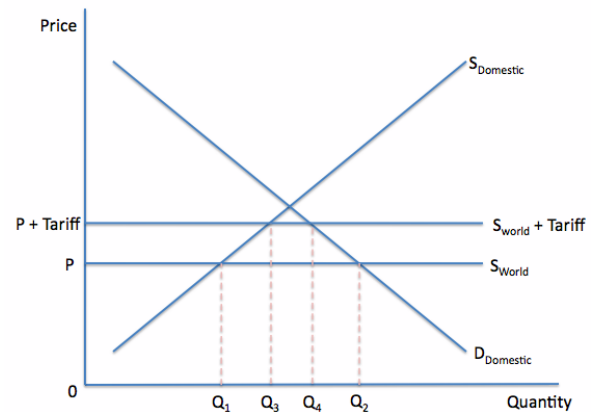
#### PPF diagram:

Contrasting views can be portrayed on a **PPF DIAGRAM**. In this diagram, free-market economists argue that public spending will simply lead to a trade-off and the economy moves towards a public-sector led economy. Some extreme free-market economists argue that the government spending multiplier would be negative and the PPF would decrease because public sector spending is unproductive and displaces wealth-creating private sector investment. *However this assumes all public-sector spending is wealth-consuming and all private sector spending is wealth-producing.* Keynesians argue that producing at a point within the PPF, would require public spending which would initially lead to a movement upwards, towards the public sector spending area of the economy, but would be kinked towards the right towards private sector investment due to the multiplier effect (look at the textbook pg. 316).

Additionally, while Keynesian economists believe that the level of employment is a good indicator of the amount of slack within an economy, free-market economists argue that such an indicator is misleading and thus crowding out can still occur when unemployment is high if there is not enough capital for example.

quantity in between filled with imports. Consumer surplus is now, not only that shown in the first diagram above, but it also captures the producer surplus. In addition to this, the triangle created, signifying imports, is added to the consumer surplus as well, creating a **net welfare gain**, equal to the area of imports.

If a tariff were to operate within an open economy, it would equalise the effect of  $P^{\text{world}}$ . However, a smaller tariff may raise  $P^{\text{world}}$  to  $P + \text{Tariff}$ . In this situation, domestic demand will fall (from an open economy) to  $Q^4$ , while domestic supply will increase to  $Q^3$ . In this situation, all areas between  $P$  and  $P + \text{tariff}$  is removed from consumer surplus. The bit within the triangle, within  $Q^3$  and  $Q^4$  is moved to government revenue, the bit within the triangle outside of those parts are referred to as net welfare losses, while the bit (to the left) and outside of the triangle is moved to producer surplus.



### Patterns of Trade

Traditionally, world trade was primarily North-South trade, with the north exporting most manufactured goods to the south, which exports primary production such as raw materials and foodstuffs back to the north. However, more recently, there has been a North-North pattern of trade. Much of this trade is within **Newly Industrialising Countries** (NICs) such as India, China and South Korea; in addition to the **BRIC** countries of Brazil, Russia, India and China. They export large quantities of manufactured goods to developed countries, while importing raw materials and commodities from countries in Africa etc. This shift represents the changing competitive and comparative advantage – the manufacturing and industrial sectors of NICs are more competitive, arguably due to lower labour costs, sparking the deindustrialisation which has occurred in developed countries. Most of the UK's trade has switched from developing countries to countries within the EU within recent decades.

### Globalisation

Globalisation is the process of growing economic integration of the world's economies. Such movements have been made possible by developments in information and communication technology. Critics of globalisation argue that it exploits poorer, developing countries, while there is a loss of culture. They argue low-paid workers are often exploited by large TNCs operating from other countries. They also claim that an increased prominence of US goods such as Coca-Cola and McDonalds has destroyed local and national products in other countries, harming economic growth there.

*Features of globalisation:*

- Growth of international trade and reduction of protectionist trade barriers
- Greater international mobility of capital (and to some extent, labour)
- Increase in the power of international corporations such as MNCs and TNCs
- Deindustrialisation of older industrial regions and countries, and the movement of such industries to newly industrialising countries

*Employment practices:*

TNCs such as Nike selling trainers and footballers have often been accused of selling their goods in developed countries at prices far higher than the costs of production as they pay very low wages in developing countries. However, they argue that their wages encourage local wage growth as it is still far higher than indigenous firms are willing to pay labour; they also argue their working conditions are much better than indigenous firms. Additionally, some argue TNCs push down wages in developed countries as they threaten to close factories and move to developing countries.

*Service sector:*

The service sector has become increasingly mobile, with the example of call centres, which were traditionally based in the UK, but now have been relocated overseas to countries such as India, which is now more viable as it is easier to travel and transfer capital overseas, and it is easier to communicate internationally. Such companies locate to countries with low wages, reliable and cheap telecommunications and with a high prominence of English-speaking residents.

*Labour and capital mobility:*