

Edexcel Economics (A) A-level

Theme 4: A Global Perspective

4.5 Role of the State in the Macroeconomy

Detailed Notes



4.5.1 Public expenditure

The government spends money for a number of reasons. It is used for macroeconomic management to control AD and achieve macroeconomic objectives: economic growth, low and stable inflation, balanced current account and low unemployment. Moreover, they aim for equity and equality by providing services to individuals or groups who would otherwise not receive them. Additionally, government spending can correct market failure by providing public goods and fixing externalities.

Types of expenditure:

- **Capital government expenditure** is spending on investment goods such as new roads, schools and hospitals which will be consumed in over a year.
- General government final consumption is spending on goods and services that will be consumed within the next year, such as public-sector salaries.
- **Transfer payments** are government payments for which there is no corresponding output, where money is taken from one group and given to another, for example benefits and pensions.
- The government also has to spend money on interest payments for national debt. The **current government expenditure** is general government final consumption plus transfer payments plus interest payments.

The major areas of expenditure are: defence (6%), protection (4%), education (12%), pensions (20%), welfare (15%), transport (2%) and health care (18%). 7% of all government spending is on interest repayments of loans.

Composition and size of public expenditure:

- In most mixed and free economies, the **lower the average income of the country, the lower is likely to be the percentage of GDP spent by the government.** This is because poorer countries tend to have a **lower tax revenue**, due to avoidance, inefficiency at collecting and a smaller amount of wealth to tax. Moreover, citizens in higher income countries **demand more services from their governments**; government provided goods are income elastic. For example, access to improving technologies means that more is demanded from the NHS compared to what would be demanded of state healthcare in poorer countries.
- However, amongst developed countries, there are **significant differences** in the size of government spending. For example the USA has much lower state spending. and this is due to **attitudes** in that country.
- The **Global Financial Crisis** led to huge increases in government spending as governments had to increase welfare payments and some governments used



taxpayer money to bail out the banks. In the UK, the government bought stakes in Lloyds and the Royal Bank of Scotland.

- However, since 2010 the UK government has been following a **policy of austerity** in an attempt to reduce the debt. They have been consistently attempting to reduce expenditure where they can. Therefore, the size of spending depends on government aims.
- In the next decades, Europe and Japan will see pressure on government spending due to **aging populations** meaning larger pension bills and higher levels of care needed.

Impacts:

Productivity and growth:

- Free market economists argue that government spending is **wasteful and causes inefficiency**. However, the government is able to enjoy **economies of scale** when it provides goods, and this improves productivity.
- They also provide the **infrastructure**, such as roads, necessary for the economy to run efficiently.
- Education creates the **human capital** necessary for growth whilst the healthcare system reduces the number of days workers lose from **serious illness**. Spending on **research and development** may not be done by the private sector and the government will undertake it to give businesses a long term competitive edge.
- Through spending, the government can create a **multiplier effect** and this can be focused on areas of the country with high unemployment, creating growth.

Living standards:

- Government spending can cause large improvements in living standards. The government **corrects market failure** and **provides public goods**, which improves social welfare.
- They are also important since they **reduce absolute poverty** by providing benefits and basic goods, such as education and healthcare. In developing countries, governments do not have the resources to do this and this leads to malnutrition, poor water etc.
- There is some debate about how much the government can contribute to improved living standards. It is argued that the government will be inefficient at providing goods and services and will have a negative disincentive impact on workers, meaning that **output overall is reduced** and so living standards fall.
- It can be argued that the government suffers from the **principal agent problem** since they make decisions on behalf of the people and individuals may have spent that money differently. As a result, there is a loss in welfare and so a fall in living standards. However, the **political system** means that society decides the



government and so therefore decides to an extent where it would like money to be spent.

Crowding out:

- In order to spend money above their tax revenues, the government has to **borrow from individuals and businesses**. However, the amount of money in the economy available to borrow does not increase. The government will therefore be competing with the private sector for finance and will cause **higher interest rates**. This will **discourage firms from investing and individuals from buying on credit**.
- On top of this, the **limited number of resources in the economy** means that for every resource used in government spending, there are less resources available for the private sector. The result is that government borrowing crowds out private sector borrowing and spending and may lead to no real increase in AD.
- Free market economists argue that **investment would be more efficient if done by the private sector** and that the government targets investment poorly and is wasteful.
- The crowding out effect is felt most at **full employment**, but it is not always the case. **Transfer payments** have no impact on output and so would not cause crowding out as resources are simply taken from one group and given to another; the government isn't taking resources from the economy. Moreover, when levels of unemployment are high then extra government spending could lead to **crowding in** where it encourages investment through the multiplier.

Level of taxation:

- In most cases, where government spending is high, **levels of tax must be high** in order for spending to be sustainable. High levels of tax may have a disincentive effect.
- **Oil-rich countries** tend to be an exception, where revenue from oil can pay for most of government spending.

Equality:

- Spending should **increase equality** as it leads to redistribution and helps to provide a **minimum standard of living** for the poorest in society. It ensures everyone has access to **basic goods**, such as education and healthcare, which will help to give them a fair start in life.

Synoptic point:

Government spending can have microeconomic objectives, for example subsidies in individual markets to reduce externalities or the provision of a public good. The impacts of government spending on individuals, such as those who receive transfer payments, is a microeconomic impact.



4.5.2 Taxation

Tax is used to **pay for the number of goods and services that the government provides**. On top of this, tax can be used to **correct market failure** at a microeconomic level and to **manage the economy and redistribute income** at a macroeconomic one.

The UK government's current aims include keeping the burden of tax low, improving incentives, using equitable taxes, correcting market failure and taxing spending rather than income.

Adam Smith argued there were four 'canons' of taxation, characteristics required of a good tax. These are: cost of collection should be relatively low; timing of collection and amount to be paid should be clear and certain; means and timing of payment should be convenient to the taxpayer; and taxes should be levied according to the ability of the individual taxpayer to pay. Recently, it has been added that a good tax should lead to the smallest loss of economic efficiency possible or even increase it, is compatible with foreign tax systems and adjusts to changes in price levels. Some people argue that taxation should be linked to the benefits individuals receive from that tax, for example taxes on motorists should be used to improve roads; they argue this is fairer. However, this conflicts with the aim of income redistribution. A major problem with high taxes is that they encourage tax avoidance and evasion, particularly amongst the rich.

Progressive, proportional and regressive taxes:

- **Progressive tax** is where those who are on higher incomes pay a higher marginal rate of tax; they pay a higher percentage of their income on tax. Direct taxes tend to be progressive, for example income tax.
- **Regressive tax** is where the proportion of income paid in tax falls as the income of the taxpayer rises. Those on higher incomes pay a smaller percentage of their income on the tax. Most indirect taxes are regressive, for example everyone pays the same rate of VAT and for those on higher wages this represents a small proportion of their earnings compared to those on low wages.
- **Proportional tax** is where the proportion of income paid on tax remains the same whilst the income of the taxpayer changes e.g. 10% of income is spent on tax, regardless of income. Everyone pays the same percentage of their income on the tax.



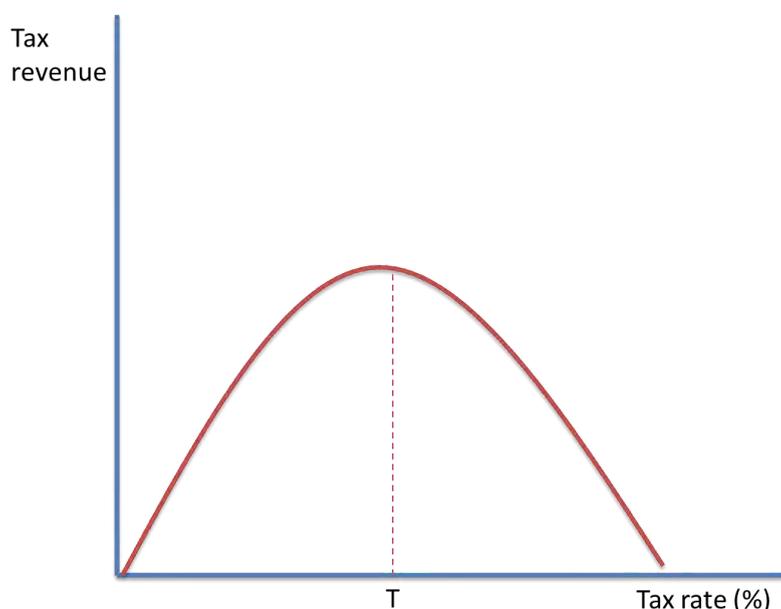
Impacts of tax changes:

Incentives to work:

- It is argued that high marginal rates of tax will **discourage individuals from working**. Free market economists argue that the supply of labour is relatively elastic and a reduction in marginal taxes on income will lead to a significant increase in work as individuals work longer hours, accept promotions and more people join the workforce.
- High taxes on high income earners could encourage them to **move abroad** and taxes on the poor may lead to a **poverty trap**.
- It is **income tax** which is important: high income tax reduces incentives more than high VAT. Thus, a switch from direct to indirect taxes may increase incentives.
- However, there is **no hard evidence** for the link between income tax and incentives. Nordic countries have high taxes and welfare benefits but have similar rates of growth compared to lower tax and government spending countries like US and UK.
- It can be argued that higher taxes mean people have to **work longer hours in order to maintain their income** and so even increases the incentive work.

Tax revenues:

- The Laffer curve shows that a **rise in the tax rate does not necessarily increase tax revenue**. If people were taxed at 100%, they would not do any work and this means that tax revenue is 0 at both 0% and 100%.
- Tax revenue will initially rise as the tax rate is increased but it will come to a point where revenue is maximised and will then fall. As tax rates rise, motivation and drive will fall so there will be a fall in output and there is an increased incentive to use tax avoidance and tax evasion. T is the **optimal tax level**, which maximises revenue.



- Revenue from indirect taxes can be uncertain as they depend on **consumer spending patterns**.

Income distribution:

- A **progressive tax system** will increase the equality of income distribution as more money is proportionally taken from the rich than from the poor. A **regressive one** will decrease income equality. Since direct taxes tend to be progressive and indirect taxes regressive, a move from indirect to direct taxes will improve equality.
- Inheritance taxes are the most progressive form of taxation. High corporation taxes take money from shareholders, who tend to be very well off, and give them to the government to spend on the poor.
- One problem with using tax to redistribute income is that it does not give the poor anything, so the **system needs to be supported with benefits**.

Real output and employment:

- Some taxes affect AD whilst others affect AS. A rise in direct taxes will reduce the level of disposable income an individual has, which will cause a fall in their spending and thus a **fall in AD**. It could also cause a fall in leftover profits for businesses and therefore a fall in investment. The effect this has on output will depend on where the economy is: whether it is at full employment or not.
- On top of this, higher indirect taxes and NICs increase costs for firms and this will **decrease SRAS**. This impact will again depend on where the economy is producing.
- It can be argued that income taxes cause a **disincentive to work** and therefore reduce LRAS as the most skilled workers go overseas and more people become inactive.

Price level:

- As explained above, **taxes can impact LRAS, SRAS and AD**. Therefore, these changes will impact price depending on where the economy is producing.
- Indirect taxes, particularly VAT, often cause **cost push inflation**.

Trade balance:

- A rise in taxes will decrease income and therefore decrease consumption, theoretically this will also mean **consumers spend less on imports**. Imports in the UK have been found to be highly income elastic. As a result, the trade balance will improve in the short run.
- However, in the long run, lower AD will reduce businesses' need to invest and this could **reduce competitiveness** meaning that exports decrease.



FDI flows:

- Low taxes on profit and investment tend to **encourage businesses to invest** in a country since it will help them to see a higher level of return.
- The problem with this is that it can be a '**race to the bottom**' where countries have to continue to lower their taxes in order to make them the lowest to encourage investment; the eventual result is a fall in revenues for all countries.

4.5.3 Public sector finances

Automatic stabilisers and discretionary fiscal policy:

- **Automatic stabilisers** are mechanisms which reduce the impact of changes in the economy on national income; government spending and taxation are automatic stabilisers. In a recession, benefits increase as more people are unemployed and so the benefits are a stabiliser as it means that the overall fall in AD is reduced, preventing too much change in the economy. On the other hand, during a boom, tax increases as people have more jobs and higher incomes, and this tax reduces disposable income so decreases consumption and AD, meaning that demand doesn't grow too high.
- These automatic stabilisers **cannot prevent fluctuations**; they simply reduce the size of these problem and there can be negative aspects to these stabilisers. Benefits may act as a disincentive to work and lead to higher unemployment whilst high levels of tax can decrease the incentive to work hard.
- **Discretionary fiscal policy** is the deliberate manipulation of government expenditure and taxes to influence the economy; expansionary and deflationary policies.

Fiscal deficit and the national debt:

- The **national debt** is the sum of all government debts built up over many years whilst a **fiscal deficit** is when the government spends more than it receives that year.
- They can either be measured in money terms, for example national debt in 2018 is around £1.8 trn. or as a percentage of GDP, the UK's national debt is 87.7% of total GDP. The GDP measure is often more useful because it gives an indication of how easy to will be for the government to finance a deficit or repay the national debt. In 2018, the fiscal deficit is £48bn. 2.3% of GDP.



The Public-Sector Net Cash Requirement is the total amount of money that the government needs to borrow in order to fulfil its spending plans, the difference between spending and revenue.

Distinction between structural and cyclical deficits:

- A **cyclical deficit** is the part of the deficit that occurs because government spending and tax fluctuates around the trade cycle. When the economy is in recession, tax revenues are low and spending is high creating a larger deficit.
- At the peak of the boom, there is no cyclical deficit; any deficit at this point is a **structural deficit**. The structural deficit is the fiscal deficit which occurs when the cyclical deficit is zero; it is long term and not related to the state of the economy.
- The **actual deficit** is the structural deficit plus the fiscal deficit.
- Governments can have structural deficits, structural surpluses or structural balances. A structural surplus occurs when at the peak of the boom, there is an actual fiscal surplus whilst a structural balance occurs when at the peak of the boom, the actual fiscal balance is 0.
- If the government has a structural deficit, it is likely that **national debt will grow over time** as the government has to consistently borrow money to finance spending. For this reason, it is argued that **structural deficits need to be eliminated** but this is difficult since it is **impossible to know what part of the deficit is structural and what part of it is cyclical**, just as it is impossible to know the size of the output gap.

Factors influencing the size of fiscal deficits:

- One major factor which influences the fiscal deficit is the **trade cycle**, as explained by the concept of cyclical and structural debts. During a downturn, government tax revenue decreases whilst government spending increases and so the deficit increases. In the UK, the fiscal deficit peaked in 2010 at 10.1% of GDP.
- **Unforeseen events**, such as natural disasters or recessions, lead to huge increases in spending which increase the deficit.
- On top of this, **interest rates** play a role. If interest rates on government debt increase, the amount the government pays in interest repayments increases and this is likely to increase the deficit. The impact of this will depend on how significant interest repayments are in the size of the deficit. Interest rates depend on market



rates and the credit ratings of the government. 7% of all UK government spending is on interest repayments of loans.

- Events like **privatisation** provide one-off payments to the government which will decrease the deficit in the short term; it will depend on the value of the company sold.
- **Government aims** are important in the size of the deficit, as this will influence their fiscal policy, for example the austerity aim has helped to decrease the size of the deficit but attempting to increase AD would increase spending. The austerity policy managed to reduce the fiscal deficit by 75% since 2010.
- Many countries with **high revenues from oil**, for example the OPEC countries, run a budget surplus and so government revenue is important in the size of the deficit.
- Factors such as the **number of dependents** in a country affect both spending and tax revenues so influence the deficit.

Factors influencing the size of national debts:

- If the government is continuously running a deficit, then the national debt will increase overtime. There is a consensus view that **fiscal deficits over 3% will lead to growing national debt as a proportion of GDP**. It is only when the government runs a budget surplus that the size of the national debt decreases.
- **Ageing populations** tend to contribute to a high national debt since the government runs a structural deficit in order to fund their pensions and care and this leads to a high national debt.

The significance of fiscal deficits and national debts:

- High levels of borrowing may **raise interest rates** in the economy since an increase in the demand for money will increase the price of money, i.e. interest rates. This could cause crowding out of the economy. However, this may not always be the case as the government may borrow from overseas and during a recession, private sector investment falls which means interest rates may remain unchanged.
- Countries have to spend a large amount of money on **servicing their national debt** through interest repayments, which has a high opportunity cost. The UK spends £70 billion a year to service its debts but this is small as a percentage of GDP. A primary budget deficit is the actual budget deficit but does not include interest repayments on the national debt. The impact will depend on the level of interest rates and the size of the primary deficit compared to interest repayments. In a liquidity trap (when interest



current budget deficit is one where government revenues are less than current expenditure; the government has to borrow money simply to finance day to day spending. It is argued that the government should run a current budget surplus to enable it to invest for the future, except in recessions when they can run a deficit to increase AD. A current budget deficit is problematic as it means that future generations are forced to pay the bill for today's expenditure. However, if the deficit is due to capital expenditure, the future generations benefit from increased spending and so their extra tax bill to pay for today's borrowing can be justified. The value of debt tends to fall overtime because inflation erodes its value and because a country's GDP grows meaning the debt is easier to pay off, so this limits the impact on future generations.

- High fiscal deficits can cause **inflation**. If the government increases their spending and there is no similar fall in private sector spending, AD will rise and this can be inflationary. More dangerously, if a government is unable to borrow money, they will print more money and this can cause hyperinflation as in Germany in 1923 or Zimbabwe in 2008. Printing money will not necessarily cause hyperinflation, it depends on how much is printed and where the economy is producing on the LRAS.
- High levels of debt tend to result in a **reduced credit rating for the government**. Private sector companies estimate the likelihood that a government will default on its debt and give it a rating from AAA to D. Lower credit ratings mean that lending to the government is riskier and so higher interest rates are demanded from lenders. However, in reality, it is not the size of the debt that influences the level of risk involved with the lending the money, it is whether that country has ever defaulted on their loans before and their current economic/political climate.
- If a government has borrowed from abroad, it may have difficulties getting **enough foreign currency** to make repayments on its debt. This could also cause problems for consumers as if there is not enough foreign currency, they will be unable to import goods.
- On the other hand, government borrowing can **benefit growth** if it used for capital spending since this will improve the supply side of the economy and thus reduce the deficit in the long term. On top of this, the budget deficit can be used as a tool for short term demand management: Keynesians argue a deficit is acceptable to use as a stimulus in demand during recessions.



4.5.4 Macroeconomic policies in a global context

Use of policies:

Governments can use **fiscal policy**, **monetary policy**, **supply side policy**, **exchange rate policy** and **direct controls** in order to achieve a number of goals. Direct controls include minimum or maximum prices/wages, quotas on imports, limits on currency or regulation e.g. maximum interest rates.

Reduce fiscal deficits and national debts:

- To decrease the national debt, the UK government has been using a **policy of austerity since 2010**, where they attempt to decrease spending. It would also be possible to **increase taxes**. Both of these are unpopular, could limit growth, and reduce living standards and income equality. Free market economists say that spending can be reduced by **cutting out waste**, but it is highly unlikely that these efficiency savings will make a significant difference. Sweden used spending cuts and tax increases to balance their budget in the 1990s.
- On the other hand, opposition parties offer an alternative in the form of **demand stimulus by high spending**, which will cause economic growth and therefore bring about higher tax revenues. This will allow for budget surpluses and eventually a reduction of national debt.
- Another approach is to simply **rely on automatic stabilisers** to allow the economy to grow so national debt/fiscal deficit will reduce as a percentage of GDP. This is mainly the approach that the US took after the Global Financial Crisis and their economy recovered fairly quickly. By 2015, the fiscal deficit as a percentage of GDP was similar in the US and UK.
- One way to reduce national debt would be for the government to **default on their loans** but the economic cost of this is so large that governments only default if it is the only option. Russia and Argentina have defaulted on their debts in the past.

Reducing poverty and inequality:

- Free market forces are unlikely to create an equal society, leading to absolute or relative poverty and inequality. Most agree that **some redistribution from rich to poor is necessary**, but the degree to which it is done is contentious. Those on the right argue that high incomes and profits are essential to provide an incentive, whilst those on the left argue that those on low incomes need to be supported.
- Firstly, the government can use a **progressive tax system** which will produce a more equal distribution of income after tax. Inheritance taxes mean that wealth



inequality will be reduced as less money can be passed on to the next generation. However, this tax is difficult to enforce as they are avoidable by careful tax planning. Tax in general means that **money can be taken from the rich and given to the poor**. However, unit 4.5.2 shows that there are some unintended consequences of raising tax, for example a reduction in incentives and the impact of the Laffer Curve. The USA has a progressive tax system but the welfare system is not effective at redistributing income. In countries such as Finland and Scandinavia, the tax system is less progressive but the government collects a lot of tax revenue which they are effective at redistributing.

- Along with this, they can use **government expenditure in the form of benefits and transfer payments**. Social security and National Insurance benefits now represent 30% of government spending in the UK.
 - **Universal benefits** are available to everyone who meet certain criteria, irrespective of personal income e.g. winter fuel allowance, child benefits.
 - **Means tested benefits** are only available to people who have sufficiently low levels of income/wealth. They are targeted at people who need the most help and provide a safety net/minimum standard of living and are better at improving inequality since they directly affect the poor.

Some argue that benefits reduce people's incentive to work, especially if they can earn a similar amount on benefits to what they could in work. The extent to which governments should use spending to redistribute income is highly controversial, particularly with high levels of national debt and austerity as seen in the UK.

- The government can also **provide goods and services** which give citizens equal opportunities and access to services they may not otherwise be able to afford, such as healthcare, education and housing. This helps to ensure that everyone is given an equal start in life, for example poor children do not lose out because their parents are unable to afford education. The problem with these is that they also benefit those on higher incomes and incur a high opportunity cost. In the UK, the government provides free healthcare, but this is not the case in many countries.
- Moreover, the government can attempt to **reduce wage differentials**.
 - A **national minimum wage** will improve the incomes of the poor whilst **maximum wages or pay ratios** will reduce the incomes of the rich and could even mean companies increase the pay of their lowest income workers. However, minimum wages may cause unemployment and maximum wages may lead to a loss of the most skilled workers.
 - **Equal pay legislation** will prevent inequality between men and women or between different ethnic groups.
 - **Trade union friendly legislation** will allow the wages of their workers to rise, and those in unions are more likely to be the low paid so this will positively affect equality .
 - Employers could be forced to **provide benefits to their workers**, such as sickness benefits, pensions and medical care, which will effectively increase wages.



- Improvements in **access to education and training opportunities** will prevent children from poorer backgrounds achieving less than others, which would reduce their earning potential. The government has attempted to address this by offering additional funding through the pupil premium scheme and easier access to universities, for example lower grades for those in certain areas.
- Moreover, they could introduce **price controls** on essential goods, such as housing, bus fares, bread, electricity etc. This will increase the spending power of the poor. However, this could cause excess supply and may lead to the development of black markets.
- Free market economists use the concept of **trickle down**, arguing that increasing the incomes of the rich will lead to an increase in the income of the poor. The rich create jobs by spending their money and employing others and reducing their income would reduce employment and lead to lower living standards. They also believe inequality is necessary to encourage people to work hard and therefore increase their income.
- The **law of diminishing marginal utility** suggests that **redistribution increases total utility** and therefore is a better allocation of resources. The higher the spending of an individual, the less satisfaction they gained from spending an extra pound. £10 a week given to a poor family increases satisfaction more than £10 given to a rich family would. The high growth rates of Nordic countries, like Denmark, where redistribution is high suggests that it is not negative for economic growth.

Changes in interest rate and supply of money:

- The central bank has the ability to change interest rates and monetary supply. They may do this for **domestic reasons**, such as to control inflation, or due to **global issues** such as a low exchange rate or a change in world commodity prices. A fall in the bank rate is likely to increase the supply of money because it will mean there is more demand for loans.
- There is **no simple relationship between the supply of money and inflation** and it can be argued that central banks don't have complete control over the money supply because they cannot control the ability of the financial system to create credit. The **globalisation of the financial market** has also made it increasingly harder to control domestic money supply.
- The consensus is that central banks should allow inflation caused by supply side shocks but **manage demand side inflation**.
- Following the financial crisis of 2007-08, some central banks were concerned with deflation rather than inflation and this led to the policy of **quantitative easing**. For example, the Bank of England and the European Central Bank used this policy. This is because interest rates were so low they could not be reduced much further.



International competitiveness:

- The government can improve competitiveness by **taking action to increase any of the factors** which affect competitiveness.
- **Supply side measures** will improve productivity and flexibility and can involve taxes and deregulation. They can encourage competition, forcing firms to be efficient and thus competitive within the global market. They can place an emphasis on quality of products and use tax incentives to encourage incentives. Education will improve the skills of the workforce and help improve flexibility. The UK government has established the 'Red Tape Challenge', which aims to simplify regulation for businesses.
- **Exchange rate policies** may be used, and they may control inflation and macroeconomic stability. For example, China devalues their currency in order to reduce export prices.
- They can **join the WTO** or **sign trade agreements**.

External shocks:

Due to globalisation, the world's economies are **increasingly interdependent**. Macroeconomic policies can be used to combat the effects of negative shocks to the economy. One example could be a **commodity price shock**, for example where oil prices greatly increase. The government could use expansionary policy to reduce the impact of a fall in GDP or they could use deflationary policy to reduce the impact on inflation. Another example may be a **financial crisis**, where the government can use expansionary policy to increase AD. It is estimated that shocks in the global economy accounted for about 2/3 of weakness in the UK output after the financial crisis, due to the impact on trade. Following **Brexit**, interest rates were lowered to improve confidence but then raised to deal with inflation caused by the falling value of the pound. The chancellor has set aside around £3bn to deal with the effects of Brexit and around £35bn will be spent in order to leave the EU. **Changes in exchange rates** can cause inflation within the country or could cause a fall in growth and a poor balance of payments, both of which the government can attempt to solve through various methods. **Political instability** in the UK or in other countries is likely to impact the economy, and will mean the government needs to take action.

Synoptic point:

The government may need to respond to microeconomic shocks, such as a commodity price shock, which would have effects on the whole economy.



Transnational companies:

- TNCs can bring **huge gains to an economy** through their creation of jobs, the tax revenue they raise, the knowledge they bring and the investment they undertake.
- However, they can have a **negative economic and social impact** by destroying local culture, affecting the environment and withdrawing more in profits than they inject through investment. They also have a history of **influencing politicians** to take decisions that will favour their interests and are involved in tax avoidance.
- In the EU and the USA, it is illegal for TNCs operating in their country to use bribery or corrupt practices anywhere in the world and they can be fined for doing so.
- Some developing countries don't allow TNCs to set up in their country without first setting up a **joint company with a local partner**, meaning that some profits are retained within the country and knowledge/technology is transferred. Many governments use **import contracts** with TNCs, meaning that at least some part of the value of the order must be manufactured in the country.

Regulation of transfer pricing:

- Transfer pricing is one way for firms to engage in **tax avoidance**. This can occur if a firm produces a good in one country and then transfers it to another to make it into another good which it then sells.
- If taxes are higher in the first country than the second country, they can set a low price on the product made in the first country. The overall aim is to **increase their profit made in the low tax country** and decrease it in the high tax country and so overall **reduce their tax bill**.
- In the UK, companies which don't allocate sufficient profits here are challenged by HMRC and this has led to billions of pounds earned in taxes.
- The Transfer Pricing Guidelines were introduced by the OECD in 1995, providing guidelines on cross-border services, intangibles, cost contribution arrangements and advance pricing guidelines; these were modified in 2010. They aim for the price to be the same as if the two parties were independent of each other; the '**arm's length principle**'.

Ability to control global companies:

- It is **difficult for individual governments to control TNCs**. Small countries may earn less in revenue than a TNC earns in profits. Highly educated, successful executives are able to use a vast number of resources to find a solution which will benefit them.



- The EU suffers from legal tax avoidance schemes, such as the 'Dutch sandwich' and the 'double Irish', where costs, revenues and profits are routed through Ireland, the Netherlands or Luxemburg and then sent to a tax haven like the Bahamas or the Cayman Islands. It is suggested that for every £1 gained in extra taxes by Luxemburg, other countries are collectively losing possibly £1000 in tax revenues.
- Solutions to taxation are extremely difficult as they require **worldwide agreement**. However, any solution which would benefit a country like the UK would lead to great **losses for countries like the Bahamas, Ireland and Luxemburg**. There is also **division within countries**, for example in the USA between the Democrats and Republicans. This division allows TNCs are able to prevent any agreement they do not like through immense lobbying. Any solutions are also time consuming and costly.

Problems facing policy makers:

- **Inaccurate information:** Short term information, such as GDP figures for the previous month, are often inaccurate and so may mean that the government is unable to see if there are problems within the economy. Trying to cut down on tax evasion and avoidance is difficult as the government does not have the full picture on the level of avoidance, who it is that is avoiding the tax and the best way to reduce it. The Bank of England makes its decisions based on past data but it is possible trends in the economy may be changing so past data gives an inaccurate picture of where the economy is currently heading. With interest rates so low for such a long period, past data is unlikely to give an accurate representation of the current economic climate which makes it difficult for the Bank to know which action to take. Full cost-benefit analyses can be time consuming and costly and it is impractical for the government to gain every single bit of information they need.
- **Risks and uncertainties:** The government cannot accurately predict the future and so it is difficult for them to know whether extra spending is necessary etc. They can't know the full impact of their decisions as consumers often react unexpectedly and this could undermine government policy. Managing risk is an essential part of good decision making.
- **External shocks:** The government is unable to control and prepare for these external shocks; the best they can hope to do is lessen their impact. Since every situation is different, it may be difficult to know the best method to solve the problem. Policies employed by policy makers may not have their intended impacts and it may undermine current policies in place, for example Brexit has delayed government plans to balance the budget.

