Yr 13 Economics

Theme 4: A global perspective

Section 4.5: Role of the state in the macro-economy

4.5.1 Public expenditure

- Distinction between capital expenditure, current expenditure and transfer payments
- Reasons for the changing size and composition of public expenditure in a global context
- Significance of differing levels of public expenditure as a proportion of GDP on:
  - Productivity and growth
  - Living standards
  - Crowding out
  - Level of taxation
  - Equality

The specification:

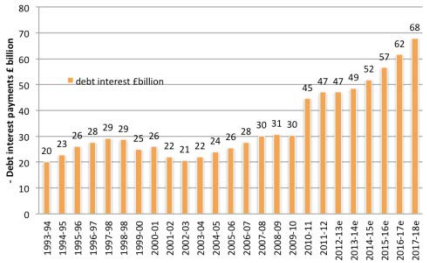
- Theme 4 – A global perspective
  - Role of the state in the macro-economy

Subject content	What students need to learn:
4.5.1 Public expenditure	a) Distinction between capital expenditure, current expenditure and transfer payments b) Reasons for the changing size and composition of public expenditure in a global context c) The significance of differing levels of public expenditure as a proportion of GDP on: o productivity and growth o living standards o crowding out o level of taxation o equality

Current, capital expenditure and transfers

Total government spending is equal to current expenditure plus capital expenditure

- Current government expenditure
  - General government final consumption
    - Spending on goods and services that will be consumed in the short term
      - Examples are: teachers' wages ; grit used to de-ice roads in winter, etc
  - Transfer payments
    - Payments for which there is no corresponding output (so therefore not included in GDP)
      - Examples are: welfare payments made to individuals; contributions to the EU
  - Debt interest
    - Interest paid on the National Debt by the government



- Capital government expenditure
  - Sending on investment goods
    - Spending on goods and services that will be consumed over a period longer than one year
      - Examples are: new motorways, new schools, hospitals etc

	Debt interest £bn	Net welfare benefits £bn	General government final consumption £bn	Capital expenditure £bn	Public sector net debt at end of period (excluding banks) £bn
2010-11	46.6	178.8	415.4	59.0	1 101
2013-14	48.7	196.3	431.1	52.6	1 402

Government Current and Capital Spending

Current spending – on providing public services

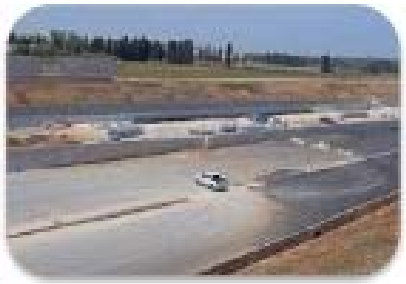
Salaries of NHS employees

Drugs used in health care

Road maintenance

Army logistics supplies

Capital spending – new public infrastructure



Construction of new motorways

New equipment in the NHS

Flood defence schemes

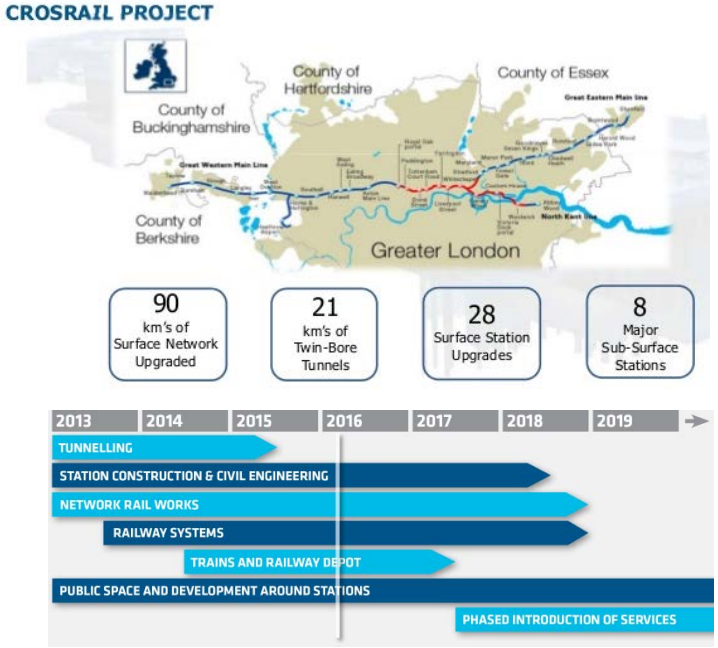
Extra defence equipment

Fiscal deficits: the good and the bad

When governments spend more than they receive in tax and other revenues, they incur a budget or "fiscal" deficit. Some deficits are more problematic than others…

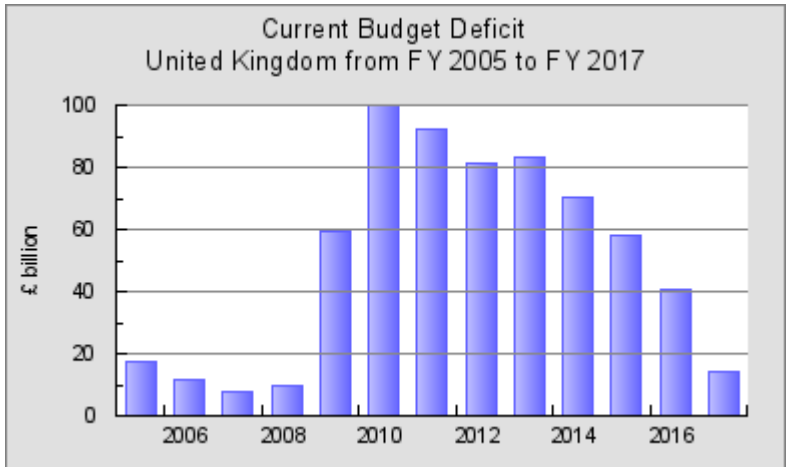
- Borrowing to pay for capital expenditure…

  - Tax-payers in the future will benefit from the expenditure made now
    - It can be therefore be argued that it is only fair that future tax-payers should pay their share of the investment



- Borrowing to pay for current expenditure…

  - Tax-payers in the future will not benefit from the expenditure made now
    - Future generations will have to pay for present-day irresponsible spending decisions

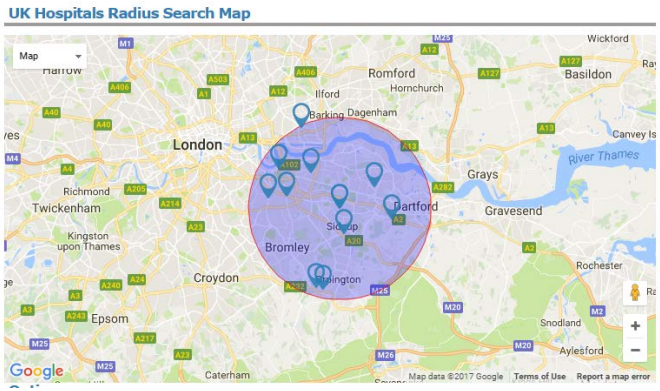


For the fiscal year ending in March 2017:
The "current budget deficit*" is estimated to be **£14.0 billion**.
The difference between spending (including capital expenditure) and revenue is estimated to be **£53.9 billion**.
The increase in UK "net debt" is estimated to be **£139.4 billion**.

Reasons for public expenditure

There are three main reasons why governments spend money on behalf of citizens

- Efficiency and market failure
  - Sometimes the state is better at producing some goods and services because it can achieve economies of scale
    - The free market will also produce too few public goods



- Equity and equality
  - Free markets can produce an inequitable and unequal distribution of resources
    - Governments have an obligation to spend in order to reduce inequity and inequality

- Macro-economic management
  - Governments may use spending to manage individual markets
    - This is to counteract over-production by markets or under-production by markets

Improving efficiency and remedying market failure

Free markets can be less efficient than the state in the production of some goods and services. In these instances, the state will step in and organise production

- Public goods
  - Market failure will mean that that the free markets will produce too few public goods and services
    - This is an example of **allocative** inefficiency

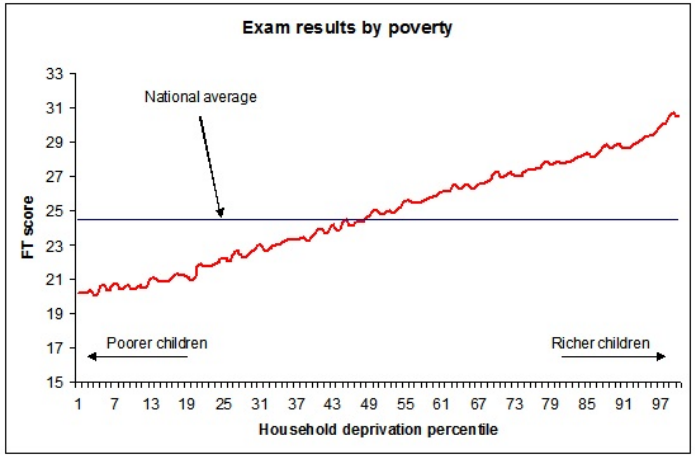
- Recap: examples of public goods and services
  - Defence
  - Law and order
  - Street lighting

- Free markets can be productively inefficient too
  - The state can build up economies of scale
    - Or it can be a monopsonist (sole buyer) and thus drive down suppliers' prices

Promoting equity and equality

Free markets can produce an inequitable and unequal distribution of resources. Governments can "level out the playing field" by providing services to the poor.

- Healthcare
  - The segment of the population in greatest need of healthcare is usually the elderly
    - The elderly are usually in the lower brackets of income distribution
      - Unless the state provided assistance, many elderly people would not be able to afford healthcare



- Education
  - If schooling had to be paid for, children from poor families would suffer most
    - This would create a vicious cycle of poor education as a child, poor earnings as an adult, poor education for their children

Macro-economic management

Governments may use their spending to manage individual markets in the economy. Markets may over-produce (demerit goods) or under produce (merit goods)

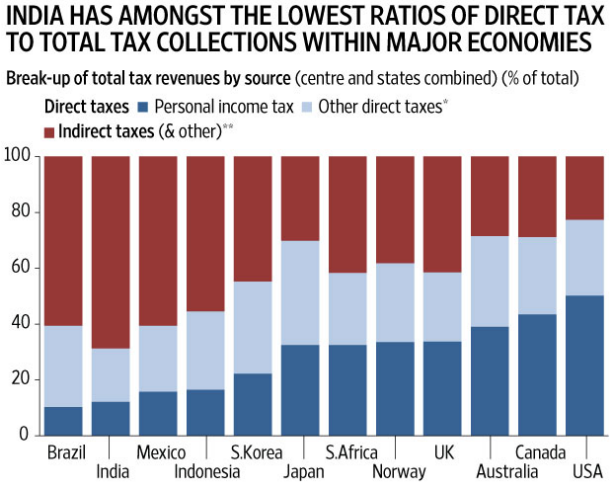
- Over-production of demerit goods
  - Free markets are likely to over-produce tobacco because consumers do not pay for the negative externalities
    - Governments spend money on anti-smoking campaigns to mitigate the market failure in the tobacco market

- Under-production of merit goods
  - Free markets are likely to under-produce green energy because consumers are not willing to pay extra for the positive externalities
    - Governments can pay subsidies to the producers of green energy to reduce greenhouse gas emissions

Changing size and composition

Government expenditure is heavily influenced by the level of average incomes

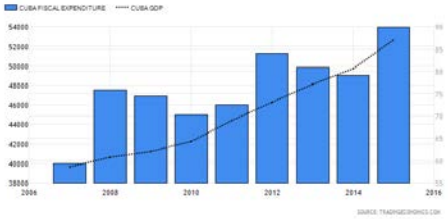
- Free market and mixed economies
  - The lower the average income of the country, the lower the % of GDP spent by the government
    - Lower income countries lack the tax base to raise revenue to pay for government spending
      - Taxes like income tax and VAT are difficult to administer and easy to evade



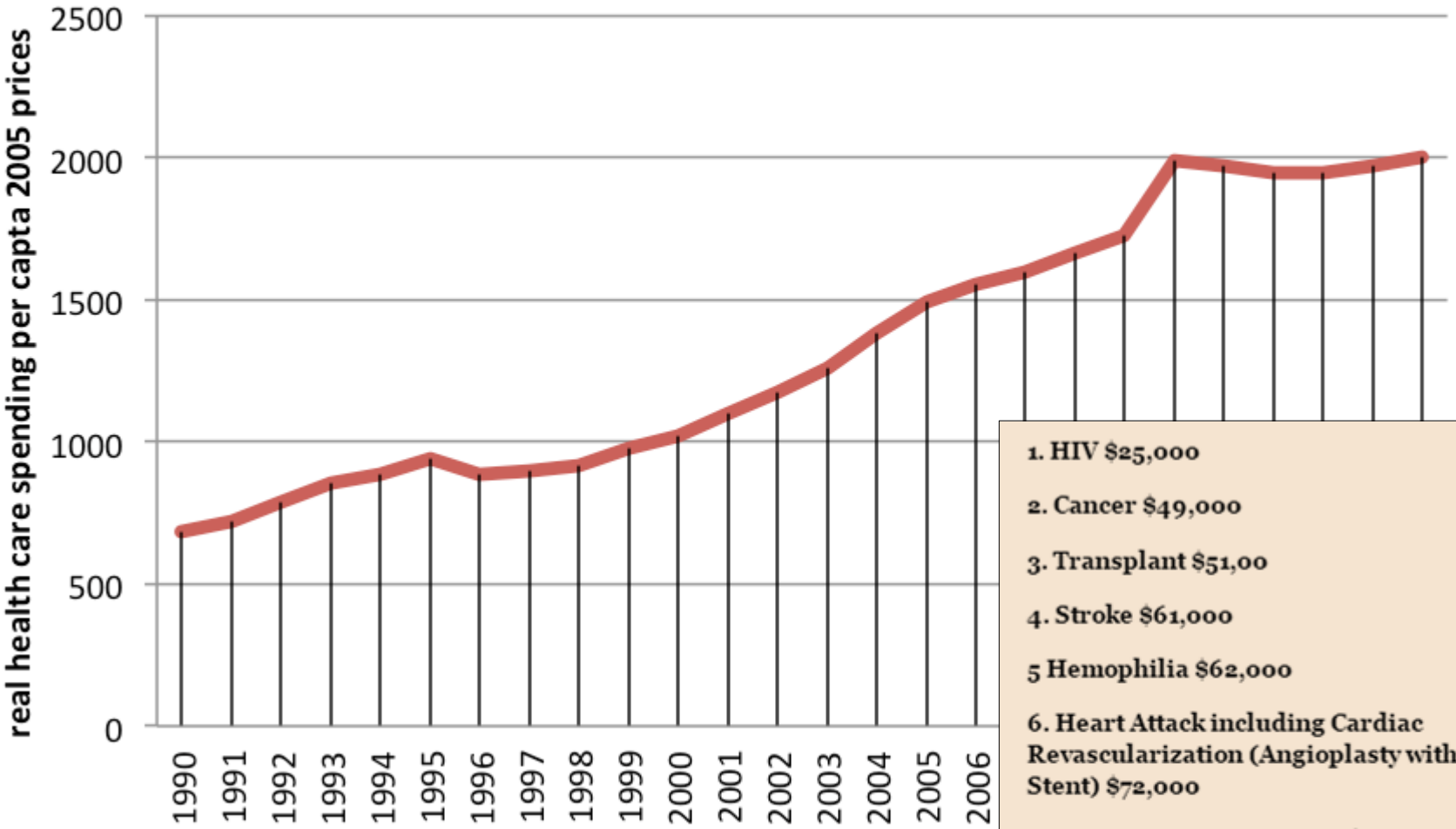
CNBC % of Indians pay tax

- The higher the average income of the country, the higher the percentage of GDP spent by the government
  - Its citizens will demand their government provides higher-quality goods and services
    - State goods and services are income-elastic

- Centrally planned economies
  - Government expenditure will be a very high percentage of GDP



Real health care spending per capita



1. HIV $25,000
2. Cancer $49,000
3. Transplant $51,00
4. Stroke $61,000
5 Hemophilia $62,000
6. Heart Attack including Cardiac Revascularization (Angioplasty with or without Stent) $72,000
7. Coronary Artery Disease $75,000
8. Neonate (premature baby) with extreme problems $101,000
9. End-Stage Renal Disease $173,000
10. Respiratory Failure on Ventilator $314,000

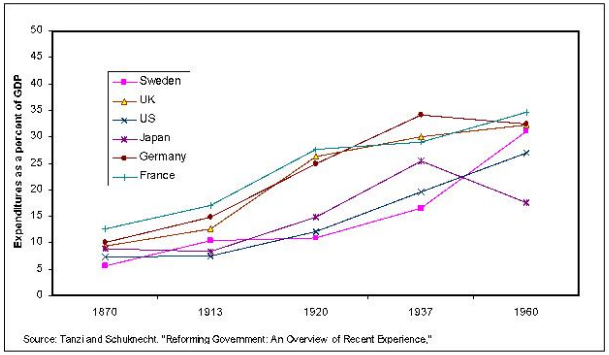
These are the 10 most expensive medical conditions for public health authorities. When the NHS was founded, none of these conditions were treatable

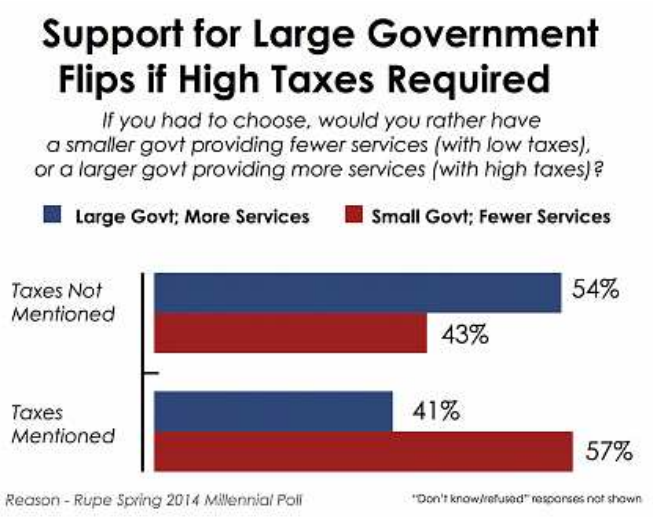
Changing size and composition (cont.)

The level and composition of government expenditure differs between countries. This is often due to ideological differences over the role of the state

- "Small government" ideology
  - The belief that governments should be involved as little as possible in the functioning of the market
    - The more "free market"-orientated a government is, the more services it will leave to firms to provide
      - The USA's government spending and transfers account for 38% of GDP. Access to medical care for 16-65 year-olds is left mainly to free markets

Burden of Government Used to be Small





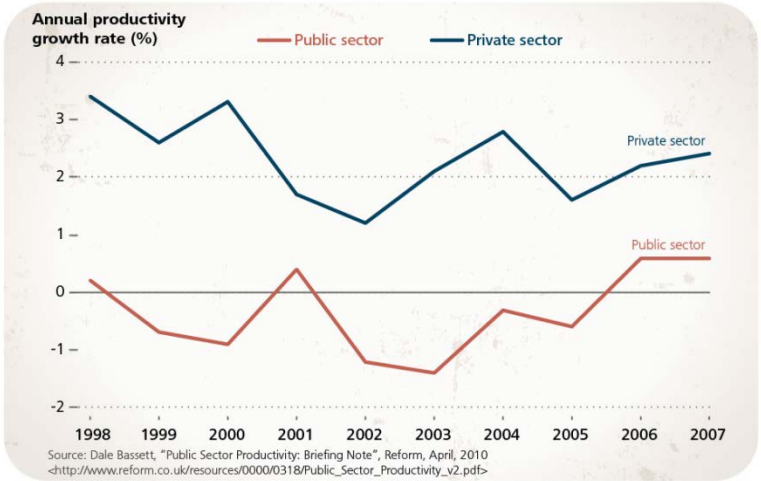
- The "interventionist" ideology
  - The belief that the state has a duty to provide some essential services and merit goods
    - The private sector takes a secondary role in providing essential services, e.g. education and healthcare in the UK
      - The UK government spending and transfers is 44% of GDP. In the Eurozone, the average is 49%

Efficiency of government spending

Can governments be economically efficient? Some argue that governments can never be as efficient as the private sector because they lack the profit motive

- Private sector firms will drive down costs to maximise profit
  - Public sector providers have no incentive to cut costs
    - Public sector employees are rarely subject to output targets

Figure 2: UK annual productivity growth: Public vs. private sector



Source: Dale Bassett, "Public Sector Productivity: Briefing Note", Reform, April, 2010 <http://www.reform.co.uk/resources/0000/0318/Public_Sector_Productivity_v2.pdf>

Graphic: Deloitte University Press | DUPress.com

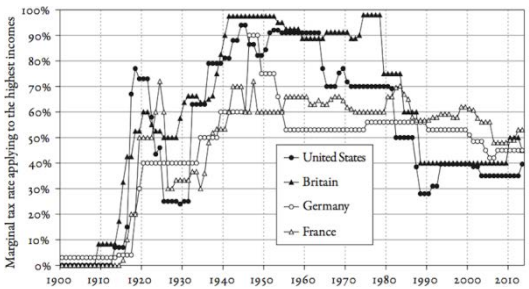
- Private firms will produce goods and services that consumers show they wish to buy through the market mechanism
  - Public sector providers have no incentive to innovate because they are often monopoly providers

- If the inefficiency of government is greater than the benefits from correcting market failure, then government should be as small as possible

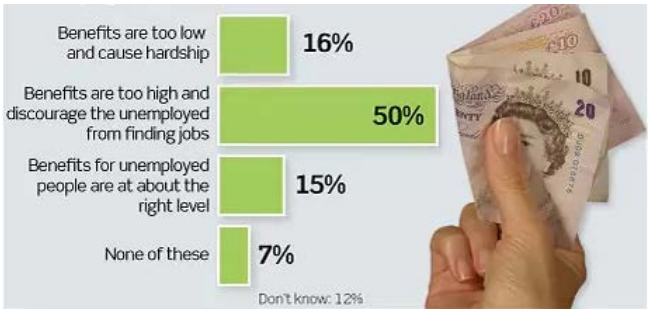
Disincentive effects

Public expenditure requires taxation to fund it. Free market economists argue that the disincentive effects of taxation outweigh any benefits of government spending

- Negative impact of high income tax
  - Discourages individuals from working or saving?

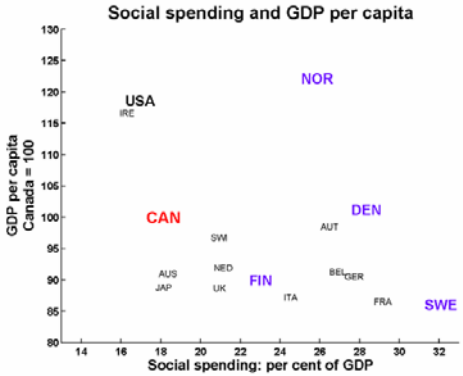


Top income tax rates 1900-2013



- Negative impact of generous benefits
  - Discourages individuals from working?

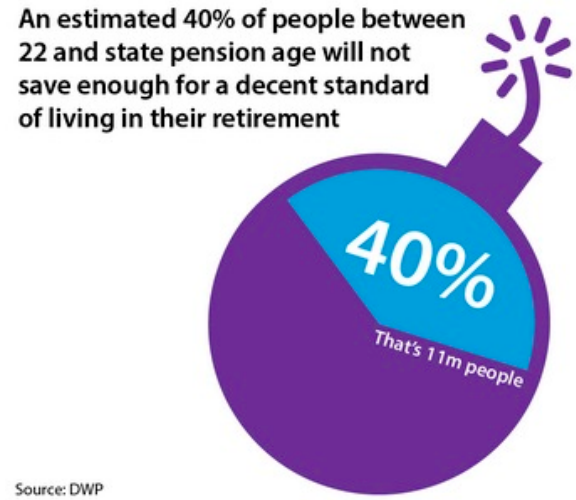
- However, some countries seem able to design their tax and benefits system so that disincentive effects are minimised…
  - The Nordic countries have high taxes and generous benefits
    - These Nordic countries have similar rates of economic growth to low tax-and-benefit countries like the USA



Utility

If politicians decide how tax-payers' money should be spent, there might be a loss of welfare or utility, because the tax-payer might have spent it differently

- This argument assumes that tax-payers are always best-placed to make spending decisions that maximise their utility… BUT
  - Individuals cannot be relied upon to make decisions that are in their best interests
    - For example, most people do not save enough for their retirement, so the government has to do it for them

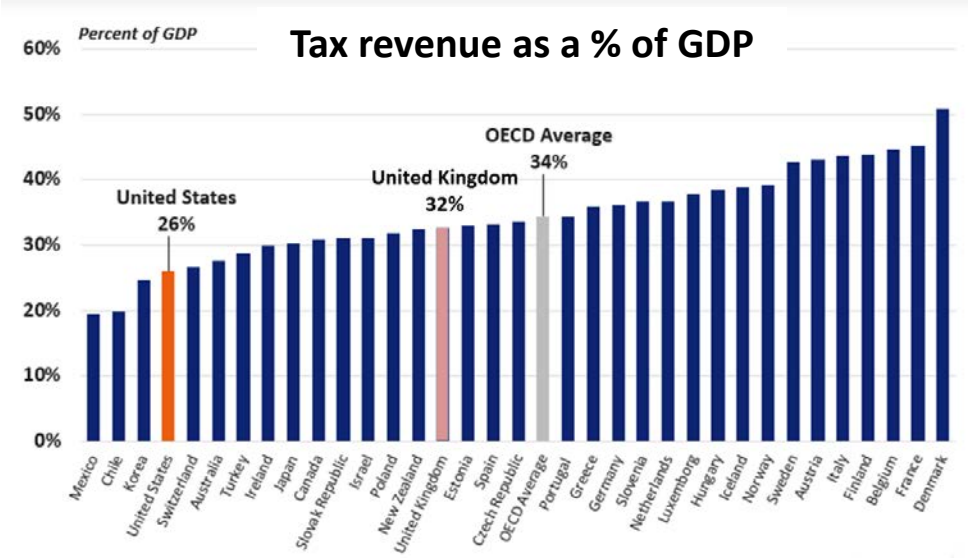


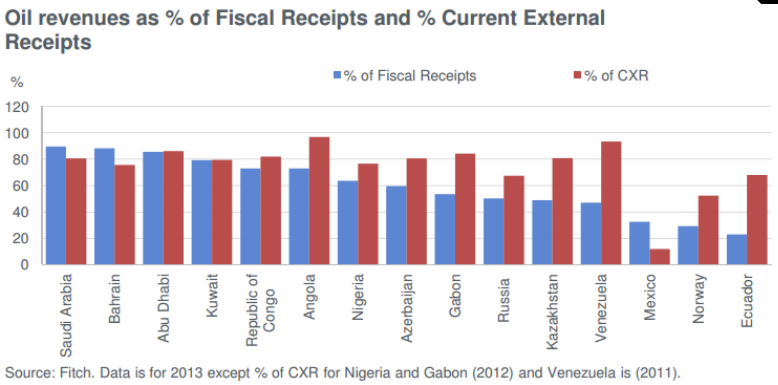
- Some also argue that no individual has responsibility for any other individual and therefore government should not be taxing individuals to help others
  - Others argue that certain spending decisions need to be made by a majority even if some disagree
    - The political system is the mechanism by which this argument can be decided

Taxation

If government spending is a high proportion of GDP, this usually means that tax revenues will also have to be a high proportion of GDP…

- High levels of tax can have a disincentive effect
  - But some countries seem to have been able to avoid this
    - Denmark and Sweden have high levels of government spending and high taxes without suffering disincentive effects





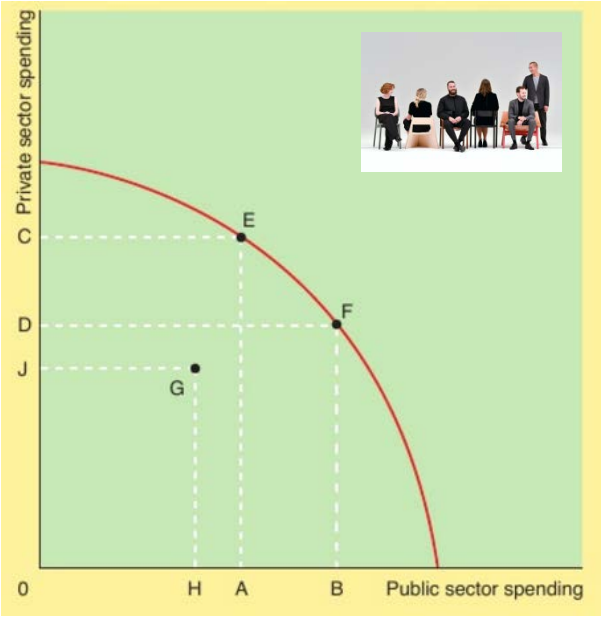
- Some countries have high levels of government spending as a percentage of GDP but low taxes
  - This is often the case if their governments can raise large amounts of revenue from other sources
    - Saudi Arabia's government receives large amount of revenue from its oil exports

Crowding out

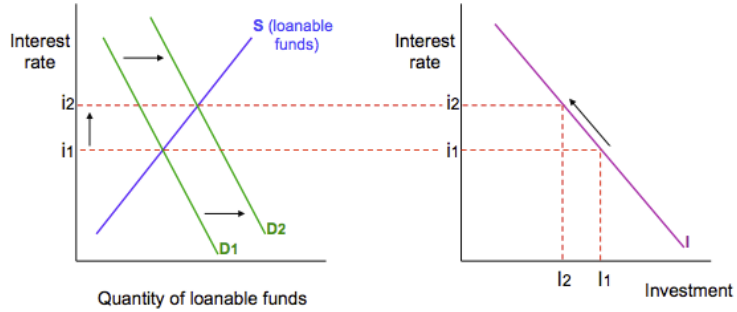
If an economy is running at full capacity, all its factors of production are being used. The state can only increase its spending by depriving the private sector of resources

- If a country is operating at full employment, further public spending growth will "crowd out" the private sector
  - This is because the public sector can only grow by using resources also needed by the private sector

- Crowding out can also occur at production levels below full employment
  - Governments often borrow in their domestic financial markets to find their spending



If the economy is at full employment, then an increase in public spending from A→B will crowd out C→D of private sector spending.

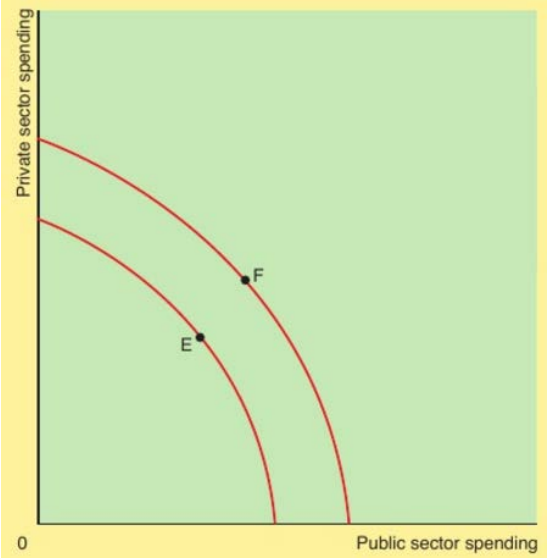


- Increased demand for borrowed funds will push up interest rates
  - Higher interest rates will discourage private sector borrowing for investment

Crowding out and crowding in

Sometimes an increase in public spending does not crowd out private sector spending, even if the economy is running at full capacity

- Transfer payments
  - There is no corresponding output associated with transfer payments
    - An increase in taxes on workers to pay higher pensions will not reduce the availability of resources for the private sector to use
      - The government has simply arranged the transfer of money from workers to pensioners



If the economy is at full employment, then an increase in public sector investment will shift the PPF outwards, allowing production to move from E to F

- Crowding in
  - Public sector investment can lead to higher private sector spending
    - The government has increased the productive potential of the whole economy
      - Free market economists argue that if this investment is funded by increased taxes, the disincentive effect will actually shrink the economy; if it funded by more borrowing, higher interest rates will reduce private sector investment; if it is funded by printing more money, then inflation will cut real private sector spending

Productivity and growth

Economists are also divided about the impact of government spending on productivity and growth

- Free market economists say…
  - … that public sector spending is often wasteful and inefficient
    - … that it is better to leave it to the private sector to seek out profitable opportunities that will increase the size of the economy

- Interventionist economists say…
  - … that the private sector does not provide goods are services which are vital to productivity and growth
    - Efficient road network encourages trade and specialisation
    - High-quality education that increases human capital
    - Comprehensive healthcare system reduces time off work
    - Well targeted benefits that encourage people to find jobs
    - Spending on Research & Development – dynamic efficiencies
    - Regional aid to reduce structural unemployment

Public expenditure totals in the UK

Public sector expenditure in the UK comprises central government, local government and government enterprises such as public corporations like the BBC

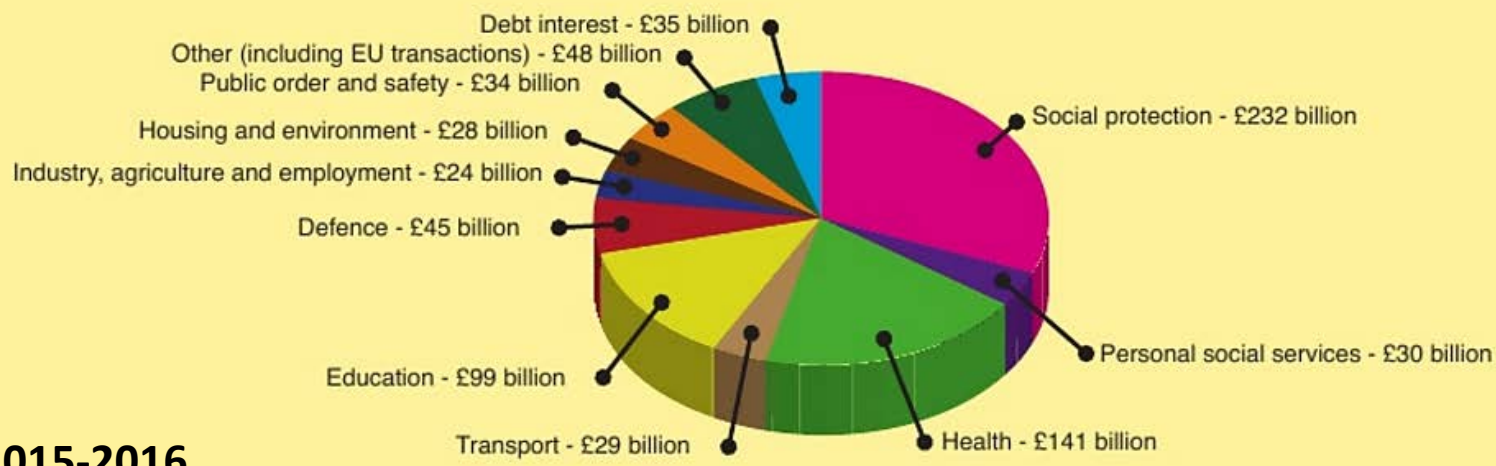
- Central government is responsible for approximately ¾ of total public spending
  - The UK government spends more as a % of GDP than the USA or Japan
    - It is at the low end of the range for EU countries

Table 2 Government expenditure as a percentage of GDP

	1960-67	1968-73	1974-79	1980-89	1990-99	2000-07	2008-14
France	37.4	38.9	45.0	49.9	52.8	52.2	56.2
Sweden	34.8	44.3	51.4	59.8	63.1	54.0	53.5
Italy	31.9	36.0	38.2	47.5	51.7	46.9	50.0
UK	34.7	39.5	44.2	43.0	39.8	39.8	45.8
Germany	35.7	39.8	47.5	47.8	43.5	45.8	45.1
Canada	29.3	34.7	39.8	45.4	47.5	39.6	41.3
Japan	18.7	20.5	30.2	32.9	35.0	37.2	41.2
US	28.3	31.0	34.6	36.7	36.9	36.1	40.6

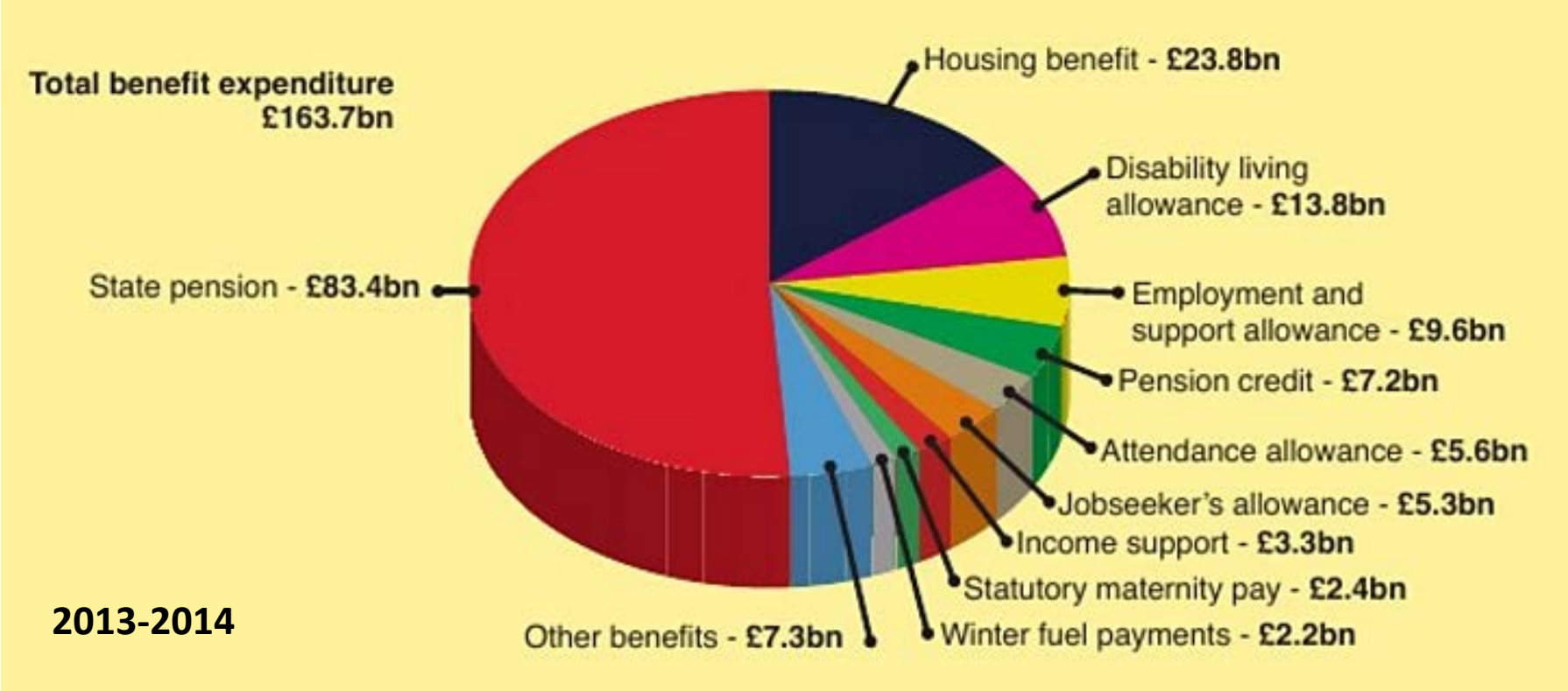
Source: adapted from OECD, *Historical Statistics*, www.stats.oecd.org.

Public sector spending by function, 2015-16



2015-2016

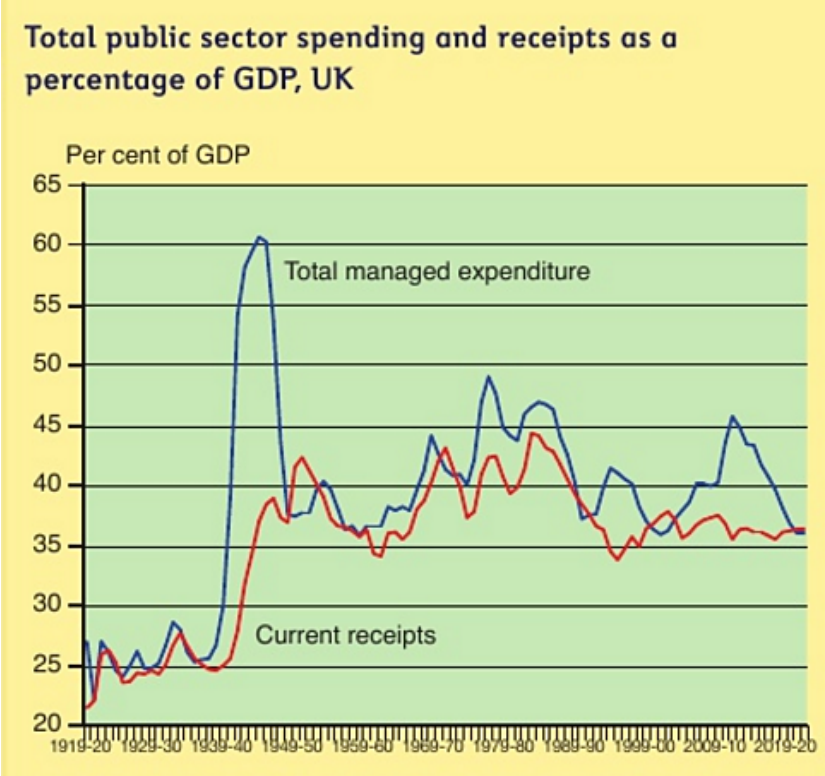
Welfare spending in the UK



Trends in public expenditure

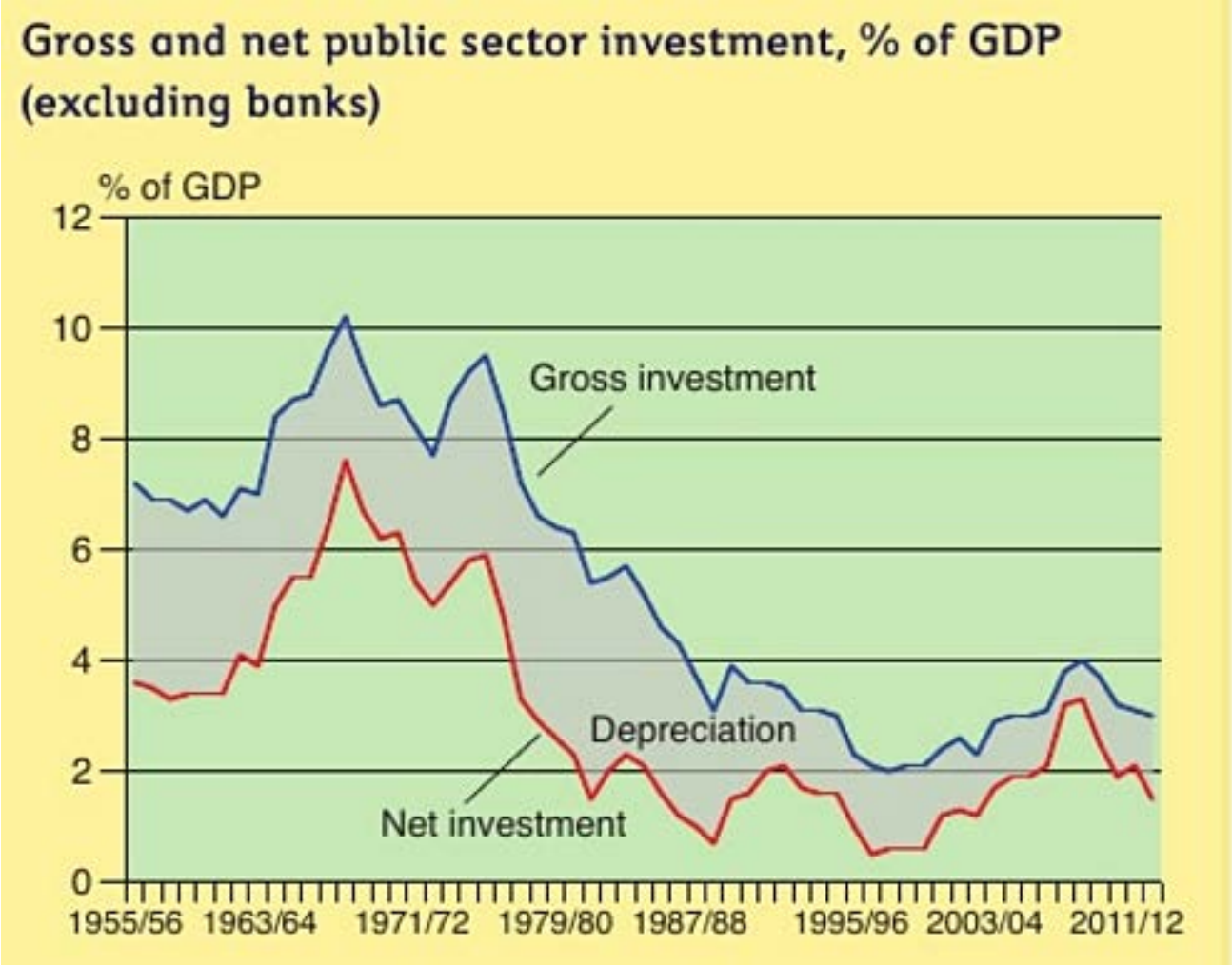
As incomes rose in the 1960s and 1970s, so did the proportion of GDP spent by governments

- The rise in public spending between 1939 and 1945 due to the Second World War.
- The creation of the welfare state between 1945 and 1951 which saw public spending settle down to a higher level that the inter-war period of 1919-1939.
- The fall in public spending between 1982 and 1989 as the Prime Minister Margaret Thatcher strove to reduce the size of the state and increase the size of the private sector.
- The rise in public spending under the Prime Minister Tony Blair between 2001 and 2007 which saw significant rises in spending on the National Health Service and education.
- The rise in public spending between 2008 and 2010 due to the financial crisis of 2007-08 and the resulting recession.
- The fall in public spending from 2011 onwards as the Prime Minister, David Cameron, oversaw large cuts in public



Capital and current expenditure

Capital expenditure by the UK government over the past 40 years has averaged less than 5% of total public spending



Composition of UK central government spending