

Long term trends in public expenditure

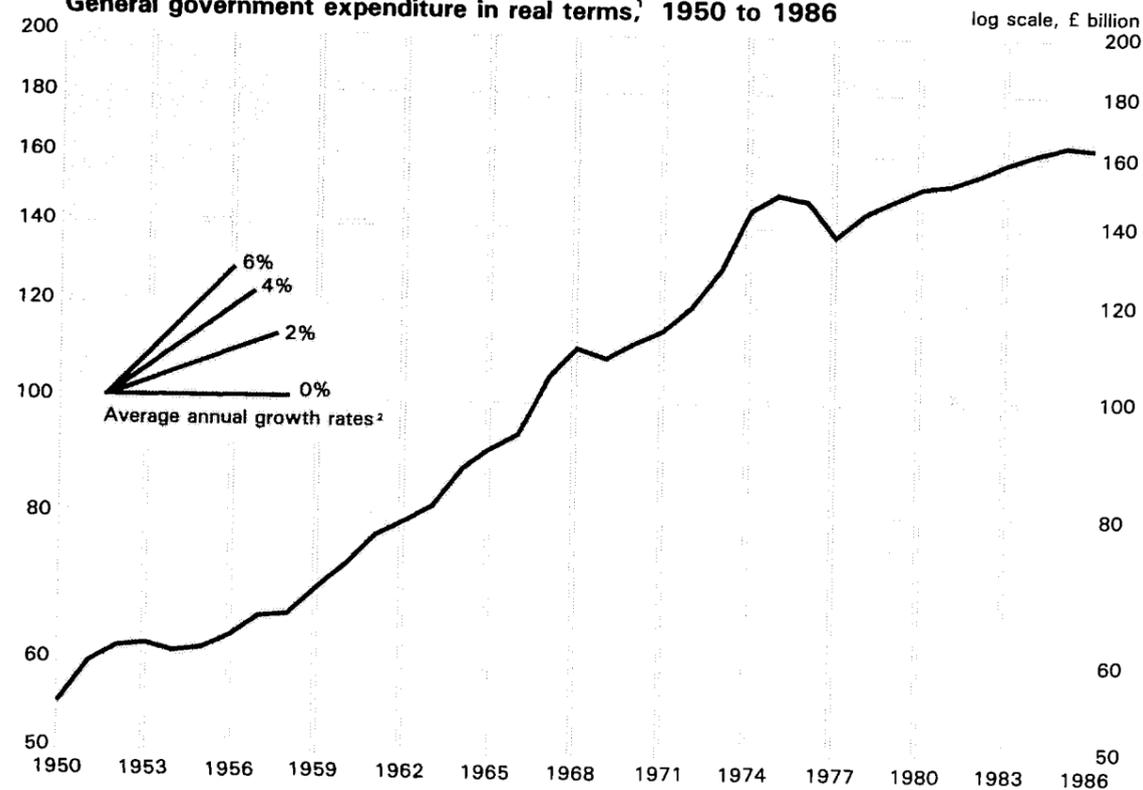
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Introduction

There are a number of different measures of public spending. A key measure is general government expenditure (the combined spending of central and local government including both capital and current spending plus net lending). This is useful for analysing overall trends in public spending, and in the formulation of macro-economic policy. It is broadly a measure of the amount which the Government has to raise by taxation and borrowing and is the key public spending aggregate used in the Medium Term Financial Strategy.

2. General government expenditure differs in a number of respects from the public expenditure planning total, the other key public spending aggregate which is used by the Government in its annual review of detailed public expenditure plans and forms the basis of the control totals set each year. The main differences in coverage are the inclusion in general government expenditure of gross debt interest and the finance which public corporations raise directly from the market rather than from Government. Other differences are explained in more detail in an Annex to Part 2 of the 1987 public expenditure White Paper (Cm 56-II) and in the *Financial Statistics Explanatory Handbook*.

CHART 1
General government expenditure in real terms¹ 1950 to 1986



¹ Real terms figures are the cash figures adjusted to 1986 price levels by excluding the effect of general inflation as measured by the GDP deflator.

² The different slopes of the lines represent different rates of annual growth. The steeper the gradient the greater the growth rate. By comparing the slopes with particular sections of the graph the reader can determine the appropriate rate of annual growth over that period.

3. This article discusses long term trends in public expenditure and concentrates on general government expenditure. The national accounts include detailed figures of government spending, which comprises a number of different elements. General government expenditure on goods and services is the government's direct contribution to the expenditure measure of GDP; total current and capital expenditure also includes interest payments and transfer payments such as subsidies and grants; and general government expenditure in total also includes net lending. Figures for general government expenditure are published in the *Blue Book (United Kingdom National Accounts)* and *Financial Statistics*.

General government expenditure since 1950

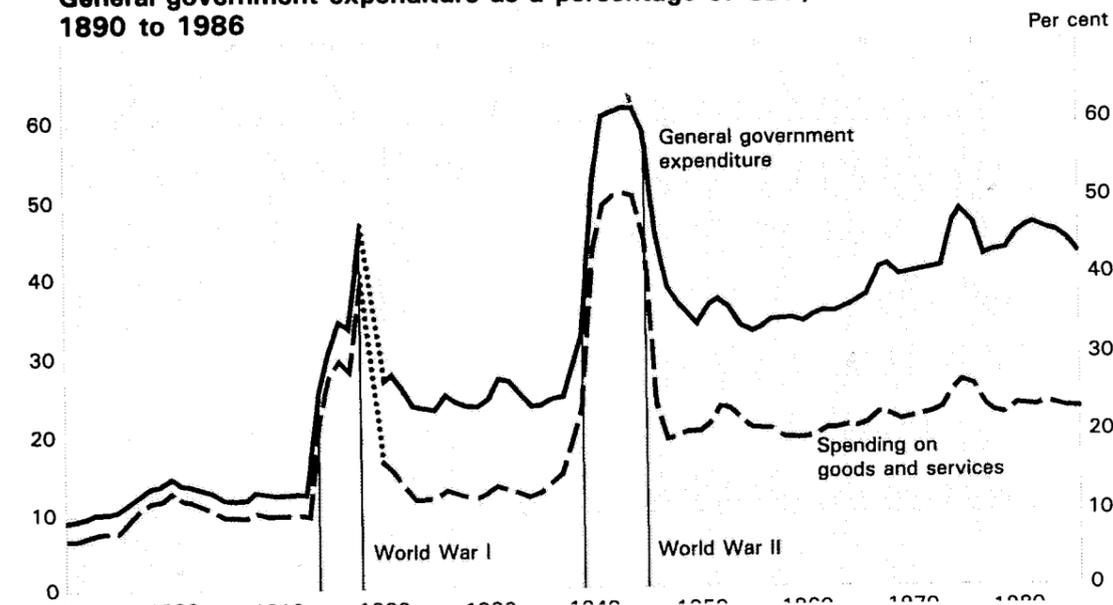
4. The Central Statistical Office (CSO) has a consistent series of general government expenditure figures back to the late 1940s. **Chart 1** shows general government expenditure from 1950 to 1986 in real terms. Real terms figures are the cash figures adjusted to 1986 price levels by excluding the effect of general inflation as measured by the GDP deflator.

5. General government expenditure has increased in real terms over the years, showing a small peak in 1968 and a much larger peak in the mid-1970s. After the peak in 1968 efforts were made to reduce government expenditure in 1969, mainly by the acceleration of the withdrawal of British forces east of Suez, a postponement of the general increase in social security benefits, and deferment by two years of the raising of the school leaving age. As a result of government expenditure fell in real terms, but soon started to follow an upward trend again to reach a peak in the mid-1970s. Following negotiations with the International Monetary Fund (IMF) in the latter half of 1976, public expenditure plans for 1977-78 were revised downwards by £1 billion and it was announced that £500 million of government-owned shares in the British Petroleum Company were to be sold in 1977-78. (The proceeds from the sale counted as negative expenditure.) The planned reductions were spread across most public expenditure programmes but actual expenditure in 1977-78 was even lower than expected - about £4 billion below the revised plans set in January 1977. Much of this was due to underspending which was difficult to forecast in advance. This reduction in spending coincided with the introduction of cash limits in 1976.

6. Since the reduction in the late 1970s general government expenditure continued to increase in real terms, but at a slower rate. Over this period the main increases have been on employment measures, defence, social security, law and order and the health service. In other areas there have been reductions. Spending on public sector housing and subsidies to the trade, industry and energy programmes have fallen substantially. This is a reflection of Government policies for sales of publicly owned houses and for a greater share of housing needs to be provided by the private sector, and for support to both private and public sector industry to be reduced as profitability increases.

7. During the 1950s general government expenditure rose in real terms by about 2½ per cent a year. This increased to 4½ per cent a year in the 1960s and 3 per cent a year in the 1970s but has now fallen to 1¼ per cent a year since 1980. Since 1982-83 the average annual growth rate has been about 1¼ per cent a year and even after excluding privatisation proceeds, in order to show the underlying trend, the rate has been 1¼ per cent a year, lower than the corresponding rates in the 1950s, 1960s and 1970s.

CHART 2
General government expenditure as a percentage of GDP, 1890 to 1986



General government expenditure as a percentage of GDP since 1890

8. General government expenditure is often expressed as a percentage of GDP. This compares growth in government spending with growth in the economy. It does not represent the share of GDP 'consumed' by government, as public spending includes transfer payments, such as grants and loans, which transfer spending power to the private sector. The government's own consumption is measured by public spending on goods and services only. However, the wider measure shows the extent to which the government has to raise taxation and borrow on financial markets to finance its activities and is the statistic most widely used in discussion of public spending comparisons with GDP.

9. The definition of public expenditure used in the comparison with GDP has varied over the years. The different definitions which have been used in Treasury documents are discussed in an article in the August 1985 edition of *Economic Trends*. General government expenditure was introduced as the numerator of the GDP percentage in the 1984 Green Paper on long term spending and is now the measure of expenditure used in Government publications.

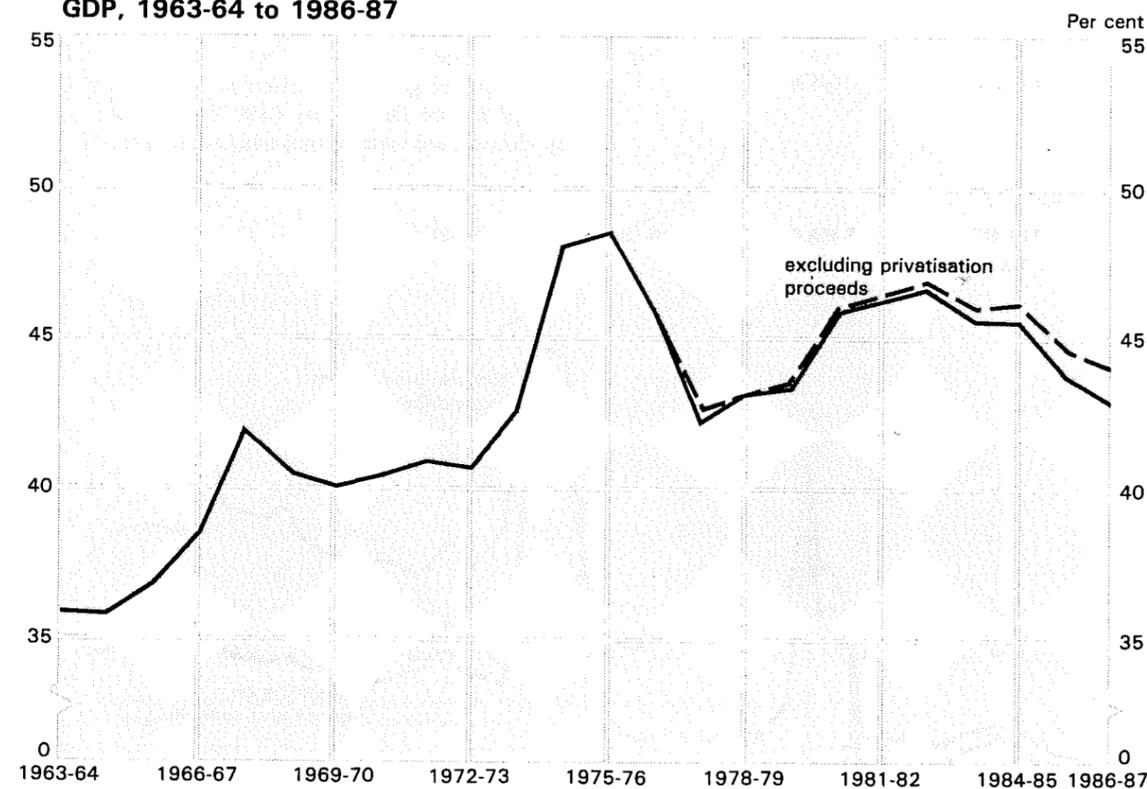
10. There are also alternatives for the denominator of the percentage. In the past GNP has often been used, by both the Treasury and outside commentators, rather than GDP. Whether GNP or GDP is adopted there are a number of alternative measures. For example, GDP can be measured in three ways, the expenditure based measure, GDP(E), the income based measure, GDP(I), and the output based measure, GDP(O), and both GNP and GDP can be measured either at factor cost or at market prices. The three measures of GDP are combined to give an average measure, GDP(A), which is the preferred measure for assessing medium and long term changes. The current practice, introduced in the 1984 Autumn Statement, is to use GDP(A) at market prices in the calculation of the percentage. **Appendix 1** gives more detail about the different ways of measuring GDP and GNP.

11. **Chart 2** compares general government expenditure with GDP over the period 1890 to 1986. It also compares general government expenditure on goods and services with GDP. The expenditure figures for the early years (1890 to 1920) are necessarily approximate and some interpolation has been necessary to derive

figures for individual years. Up to 1947 the expenditure data have been extracted from 'The growth of public expenditure in the United Kingdom' (A.T. Peacock and J. Wiseman) and the GDP data from 'National income, expenditure and output of the United Kingdom, 1855 to 1965.' (C.H. Feinstein). Thereafter the figures are taken from data held by the CSO. GDP(A) at market prices is available from the CSO and has been used as the denominator from 1948 onwards. However for the years prior to 1948 only GDP(E) at market prices is available. The difference between GDP(A) and GDP(E), and the use of alternative sources for the expenditure data, are likely to result in relatively small differences and these should not affect the overall trends illustrated in Chart 2.

12. Chart 2 shows that many of the peaks coincide with years of war - in particular, the two World Wars (1914 to 1918 and 1939 to 1945). Smaller peaks can be seen at the time of the Boer War (1899 to 1902) and the Korean War (1951 to 1952). The chart shows that government expenditure was less than 15 per cent of GDP before World War I, rising to just under 50 per cent of GDP during the War. Afterwards, the percentage fell but not to its earlier level and between World Wars I and II the percentage fluctuated around 25 per cent. In the slump of the 1930s, it took rearmament to restore the rising trend in government expenditure and eventually the percentage reached its peak during the Second World War, rising to around 60 per cent. Again the percentage dropped immediately after the War and has not reached the wartime level since. During the early 1950s the percentage rose a little at the time of the Korean War and there were small peaks in 1966 and the mid 1970s. In 1982 the percentage reached its highest level since the mid 1970s but since then has been continuously falling.

CHART 3
General government expenditure as a percentage of GDP, 1963-64 to 1986-87



Effect of privatisation proceeds on general government expenditure as a percentage of GDP

13. Receipts from the privatisation programme, which reduce general government expenditure, have been increasing in recent years and currently amount to about £5 billion a year. Chart 3 shows that even after taking them out of the figures general government expenditure has been falling as a percentage of GDP, with a decline of almost 3 percentage points between 1982-83 and 1986-87.

14. The data used to produce the charts in this article are shown in Tables 1, 2 and 3 in Appendix 2. Figures in Tables 1 and 2 (and hence Charts 1 and 2) are based on calendar years and those in Table 3 (and Chart 3) are based on financial years.

Appendix 1

The measures of GDP and GNP used in the calculation of public spending as a percentage of GDP.

1. Public expenditure is often presented as a percentage of GNP instead of GDP. GNP includes the income of United Kingdom residents from economic activity abroad and from property held abroad and excludes the corresponding income in the United Kingdom of non-residents. In practice it is generally more appropriate to compare government spending with domestic output rather than GNP, because GDP is the aggregate more commonly used in macro-economic management.

2. In addition the definition of GDP used in the calculation of public spending as a percentage of GDP has changed over the years. GDP can be measured in three ways:

- GDP(E) - the expenditure method - sums the current expenditure by UK consumers and government and the additions to fixed capital and stocks and adds on exports minus imports.
- GDP(I) - the income method - sums income from employment and self-employment in the UK and adds on company profits and other trading surpluses.
- GDP(O) - the output method - sums the value of output of all industry and services in the UK.

3. In theory the three measures of GDP are equal but in practice discrepancies occur. The average of all three measures is called GDP(A).

4. Until 1984 GDP(E) was used as the denominator but this was then replaced by GDP(A). GDP(A) was introduced in the 1984

Autumn Statement as the denominator of the percentage to overcome the discrepancies between the three measures and also because the forecasts of GDP used in the Government's Medium Term Financial Strategy are based on GDP(A).

5. GDP can also be measured either at factor cost or at market prices. Market prices are the prices which purchasers pay for the goods and services they acquire or use. Factor cost is market prices less taxes on expenditure plus subsidies.

6. During the earlier part of the 1970s GDP at factor cost formed the denominator of the percentage. It was argued that if government expenditure were expressed as a percentage of GDP at market prices, rather than at factor cost, year to year comparisons of the resulting percentages could be distorted by changes in indirect taxation. This is because the impact of indirect taxation on government expenditure is small compared to its impact on expenditure by the private consumer and thus on the total expenditure in GDP. This difficulty could be overcome if both government expenditure and GDP were expressed at factor cost. However information on indirect taxes less subsidies is not available for all economic categories of government expenditure, so government expenditure can only be expressed at market prices. Midway through the 1970s the denominator was changed to GDP at market prices.

7. The percentage using GDP is higher than the percentage using GNP, by about half a percentage point. However, there is a larger difference as a result of measuring GDP or GNP at factor cost rather than at market prices where the difference in recent years amounts to about 7 or 8 percentage points. (The percentage would be larger if factor cost were used.)

Appendix 2

Table 1. General government expenditure, 1950 to 1986

	£ billion			£ billion	
	Cash	Real terms ⁽¹⁾		Cash	Real terms ⁽¹⁾
1950	4.5	54.8	1970	20.9	111.4
1951	5.4	59.6	1971	23.5	114.7
1952	6.0	61.5	1972	26.4	119.2
1953	6.2	61.8	1973	30.5	128.4
1954	6.1	60.7	1974	39.2	144.0
1955	6.5	61.4	1975	51.5	148.6
1956	7.0	62.7	1976	58.5	146.8
1957	7.6	65.6	1977	61.9	136.3
1958	8.0	65.7	1978	72.2	143.0
1959	8.5	69.0	1979	85.5	147.8
1960	8.9	72.1	1980	104.1	150.2
1961	9.8	76.1	1981	117.0	151.4
1962	10.4	78.2	1982	128.6	154.8
1963	11.0	81.2	1983	138.5	158.5
1964	12.0	87.1	1984	146.9	161.1
1965	13.3	90.3	1985	157.6	163.2
1966	14.5	93.7	1986	162.2	162.2
1967	16.7	104.7			
1968	18.3	110.5			
1969	19.0	109.0			

¹ Cash figures adjusted to 1986 price levels by excluding the effect of general inflation as measured by the GDP deflator.

Source: Central Statistical Office

Table 2. General government expenditure as a percentage of GDP, 1890 to 1986

	General government expenditure		Spending on goods and services only		per cent
	General government expenditure	Spending on goods and services only	General government expenditure	Spending on goods and services only	
1890	9.0	6.7	1923	23.4	11.6
1891	9.1	6.7	1924	23.2	11.8
1892	9.6	7.1	1925	23.1	11.9
1893	10.0	7.6	1926	25.2	13.0
1894	10.0	7.6	1927	24.0	12.5
1895	10.2	7.7	1928	23.5	12.0
1896	11.3	8.9	1929	23.4	12.0
1897	12.6	10.3	1930	24.4	12.3
1898	13.3	11.2	1931	26.9	13.3
1899	13.8	11.8	1932	26.6	12.7
1900	14.4	12.6	1933	25.0	12.4
1901	13.5	11.6	1934	23.5	12.0
1902	13.2	11.2	1935	23.7	12.6
1903	12.9	10.8	1936	24.2	13.7
1904	12.4	10.3	1937	24.7	14.9
1905	11.8	9.6	1938	28.5	18.7
1906	11.7	9.5	1939	32.9	23.8
1907	11.8	9.5	1940	51.9	43.3
1908	12.5	10.1	1941	60.4	49.4
1909	12.4	9.9	1942	61.1	50.3
1910	12.2	9.7	1943	61.4	50.4
1911	12.2	9.8	1944	61.4	50.3
1912	12.4	9.9	1945	58.8	44.3
1913	12.1	9.8	1946	45.5	23.6
1914	24.6	21.8	1947	38.8	19.1
1915	30.5	27.7	1948	36.3	19.2
1916	34.4	29.7	1949	34.8	20.0
1917	33.4	27.9	1950	33.8	20.1
1918	46.3	40.4	1951	36.1	21.2
1919	*	*	1952	37.2	23.4
1920	26.6	16.6	1953	35.9	23.0
1921	27.9	15.4	1954	33.8	21.8
1922	25.7	13.2	1955	33.0	20.5

Sources: 1890 to 1947 A. T. Peacock and J. Wiseman — *The growth of public expenditure in the United Kingdom*.
C. H. Feinstein — *National income, expenditure and output of the United Kingdom, 1855 to 1965*.
1948 to 1986 Central Statistical Office

*Not available

Table 3. General government expenditure as a percentage of GDP, 1963-64 to 1986-87

	General government expenditure			General government expenditure excluding privatisation proceeds		
	£ billion			£ billion		
	Cash	Real terms ⁽¹⁾	% of GDP	Cash	Real terms ⁽¹⁾	% of GDP
1963-64	11.3	84.3	35.9	11.3	84.3	35.9
1964-65	12.3	88.1	35.8	12.3	88.1	35.8
1965-66	13.6	91.7	36.8	13.6	91.7	36.8
1966-67	15.1	97.2	38.4	15.1	97.2	38.4
1967-68	17.5	109.7	42.0	17.5	109.7	42.0
1968-69	18.2	109.1	40.5	18.2	109.1	40.5
1969-70	19.3	110.0	40.0	19.3	110.0	40.0
1970-71	21.6	113.6	40.4	21.6	113.6	40.4
1971-72	24.4	117.2	40.9	24.4	117.2	40.9
1972-73	27.6	123.2	40.7	27.6	123.2	40.7
1973-74	31.9	132.9	42.6	31.9	132.9	42.6
1974-75	42.8	149.4	48.0	42.8	149.4	48.0
1975-76	53.7	149.1	48.5	53.7	149.1	48.5
1976-77	59.5	145.8	45.9	59.5	145.8	45.9
1977-78	63.7	137.2	42.2	64.2	138.4	42.6
1978-79	74.8	145.5	43.2	74.8	145.5	43.2
1979-80	89.8	149.4	43.3	90.1	150.1	43.4
1980-81	108.4	152.2	45.9	108.8	152.8	46.0
1981-82	120.5	154.1	46.3	121.0	154.7	46.5
1982-83	132.5	158.1	46.7	133.0	158.6	46.8
1983-84	140.1	159.7	45.6	141.2	161.0	46.0
1984-85	150.1	164.0	45.6	152.2	166.3	46.3
1985-86	158.3	163.0	43.8	161.0	165.8	44.6
1986-87	165.1	165.1	42.9	169.5	169.5	44.0

¹ Cash figures adjusted to 1986-87 price levels by excluding the effect of general inflation as measured by the GDP deflator.

Source: Central Statistical Office

Index of sources

Data given on page 5 may be more recent than that shown elsewhere in the publication.
United Kingdom balance of payments: National income and expenditure. In addition to the series indexed below, further detailed statistics are included in the regular quarterly articles (see inside back cover).

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