

# **Education spending in the UK**

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Author: Paul Bolton

Section Social & General Statistics

## Spending in the current and future years

Since 2010 no spending review or budget has set out detailed figures on *total* UK education spending in the current year or plans for the future. Education spending covers different Whitehall departments, central and local government spending and the devolved administrations. This means it cannot be calculated from departmental plans which go up to the end of the most recent spending review period (currently 2015-16). This note therefore relies on outturn spending data which has no forward looking element. Some relevant spending plans up to 2015-16 are summarised towards the end of this note.

Levels of public spending on education in the UK reached new record levels in real terms in each year between 1996-97 and 2010-11. Spending as a proportion of GDP in 2009-10 and 2010-11 was at its highest since the mid-1970s. In 2011 UK public expenditure on education as a proportion of GDP was above the level in most other EU countries and above the OECD average.

This note looks at trends in public sector education expenditure in the UK. Some more detail can be found in *Public expenditure statistical analysis 2014* including a breakdown of total expenditure by type of education and spending in total and per head in the different parts of the UK. The annual report and accounts of the Department for Education and the Department for Business, Innovation & Skills both include more technical detail of spending in the most recent year and, in appendices, plans to the end of the current spending review period. Chapter B of the *OECD's Education at a Glance 2014* compares education spending across OECD and other countries.

The standard notes Changes to higher education funding and student support from 2012/13 and HE in England from 2012: Funding and finance look in detail at spending on higher education in England. The Department for Education publishes a wide range of data and analysis on school funding and expenditure in England under different headings. The most useful can be found at: Statistics: local authority/school finance data, School and college funding and finance, Section 251 documents and Making schools and colleges more accountable and funding them fairly.

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# 1 UK public expenditure on education since 1979

#### A note on terms

This section looks at two main series; total UK public expenditure on education and total UK public spending on education and training. These have not been explicitly distinguished in recent official statistics on public spending, but this note uses the former descriptions where 'education' excludes the 'education not elsewhere classified' subfunction¹ and 'education and training' includes it. The definition of this sub-function has not changed, but official statistics now use education to refer to what was known as education and training in the past.

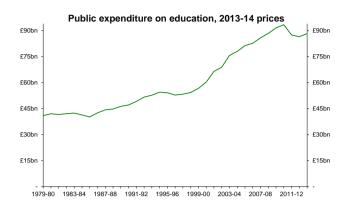
This note retains the distinction between the terms for two reasons. First the education and training series only goes back to the late 1980s, while the education series goes back much further, even with some breaks in the series the concept remains the same. Second the education and training series is consistent over the period it is available for. The spending data are regularly revised. These revisions can change the total figure, or move items of expenditure from one sub-function to another. The detailed breakdown by subfunction is only revised back five years. This presents a problem with consistency when trying to compile long-term series based on sub-functions and the authors warn against simply splicing one set of data with another pre and post-revision. The education and training series in this note is therefore consistent for its entire length. The education series is not and although revisions are generally quite small, readers should be careful when drawing conclusions from this data, especially those based on small differences.

The spending data analysed here cover all stages of education from under fives to postgraduate and adult education and the administrative costs of running the education system. The figures include the costs of student support, including the subsidy element of student loans which are not included in some public expenditure aggregates.

The Government uses the UN Classifications of the Functions of Government to classify spending by function and sub-function.

## 1.1 Education expenditure since 1979

Real spending levels have gone through four distinct phases as illustrated opposite; no change in the early 1980s, growth through to the mid 1990s, no change to the end of the 1990s and continuous growth in spending to 2010-11. The falls in the real level of spending in 2011-12 and 2012-13 were the first since the mid-1990s, but both were still higher than in 2007-08 or any previous year. The growth in spending since 1998-99 is very clear, as is the fact that absolute annual increases were much larger than in the



previous sustained period of increase (mid 1980s to mid 1990s). The only periods where real spending fell for two consecutive years were 1983-84 to 1985-86, 1994-95 to 1997-98 and 2011-12 to 2012-13. Spending in 2013-14 was £88.3 billion; more than double the level seen at the end of the 1990s.

Table 1 at the end of this note shows education spending in cash and real terms and as a percentage of GDP for each financial year since 1979-80 and education and training expenditure since 1987-88.

Peak spending in real terms was in 2010-11 at £93.4 billion (2013-14 prices). This figure is inflated to a certain extent by some one-off accounting adjustments to the subsidy element of student loans. These adjustments were to revalue the existing stock of loans to reflect lower than expected repayments.<sup>2</sup> The additional expenditure was 'scored' against the year in which these decisions were made, despite the facts that lower repayments will often not be realised for many years to come and the loans in question were taken out from the end of the 1990s onwards. Spending on tertiary education was recorded as £15.8 billion in 2010-11 compared to £13.2 billion in 2009-10 and £13.1 billion in 2011-12. Further large adjustments were made in 2013-14 pushing tertiary education up from £13.5 billion to £15.4 billion at a time when direct public spending on higher education in England was being cut. The annual reports and accounts from the relevant years give more detail.

These accounting adjustments are large enough to have a noticeable impact on the trend in overall public spending on education. The table below therefore looks at the component parts of education spending from 2009-10. Some of the main trends were:

- Spending on pre-primary fell in 2011-12, but returned to its real 2009-10 level in 2013-14.
- Spending on primary education fell in real terms in 2011-12 and 2012-13. The 2013-14 increase was almost big enough to bring it back to the real value from the start of this period.
- Secondary education spending<sup>3</sup> fell in real terms in each year shown and by 2013-14 had lost 8% of its real value.

For revised assumptions regarding the base rate cap and the decision to use OBR data on short term earnings and RPI, rather than long term assumptions.

Spending on lower and upper secondary education not just spending on secondary schools. Upper secondary education includes a substantial amount of spending on what would normally be classed as further education in the UK. Lower secondary spending will also include some further education spending on courses up to GCSE/equivalent.

Definitions for the other terms used here can be found on the UN Statistics Division website.

#### Major component parts of education spending

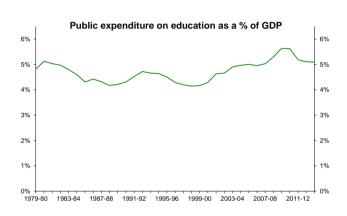
£ billion 2013-14 prices

	2009-10	2010-11	2011-12	2012-13	2013-14	Change 09-10 to 13-14
Pre-primary	5.2	5.1	4.8	5.1	5.2	-0.3%
Primary	27.3	27.2	26.8	26.2	27.1	-0.8%
Secondary	39.0	38.8	37.3	36.9	36.0	-7.6%
Tertiary	14.3	16.6	13.6	13.8	15.4	+7.6%
Subsidiary services	4.5	4.3	4.0	3.7	3.7	-17.4%
Total	91.6	93.4	87.5	86.5	88.3	-3.6%

Note: Total also includes spending on education not definable by level and R&D education

Source: HM Treasury, PESA 2014. Table 5.2

Spending has varied less when expressed as a proportion of GDP (opposite). It fell for much of the 1980s from 5.1% in 1980-81 to 4.2% in 1988-89. It increased to more than 4.5% again in the early 1990s due to increased spending and falling GDP. The lowest level in the whole period was in 1998-99 at 4.1% following a number of years little or no real spending increases and a strong economy. The increases since then have dramatic than in absolute been less spending levels. Education spending



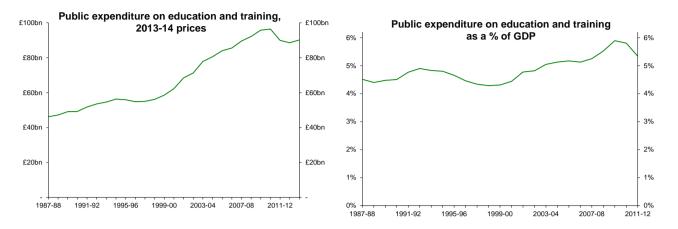
reached 5.0% of GDP in 2005-06 –the highest level since 1981-82- and remained at around this level before increasing to 5.3% in 2008-09 and 5.6% in 2009-10 and 2010-11. These particularly high figures reflect increases in spending during a recession and the accounting adjustments for student loans (2010-11) mentioned earlier. While the 2009-10 figure was a post-1979 high, earlier data, summarised later in this note, suggest that spending was higher in the mid-1970s. International comparisons of spending as a share of GDP are given later in this note.

#### **Revised GDP figures**

All the data in this note used revised GDP figures issues by the Office for National Statistics following changes to National Accounts methodologies introduced in September 2014. These changed the treatment of R&D and military spending and included estimates of the value of some illegal activities for the first time. The impact on GDP of these and other revisions varies year-to-year in the range of 2.6% to 6.2 % (increases) since 1997. More detail can be found in Changes to National Accounts.

## 1.2 Education and training since 1987

Trends in expenditure on education and training are also given in Table 1 at the end of this note and illustrated below.



The inclusion of training expenditure has little impact on the 'shape' of either trend. Real spending on education and training peaked at £96 billion (2013-14 prices) in 2010-11 and at 5.9% of GDP in 2009-10.

The expenditure plans since the 2000 Spending Review have been presented on a resource basis.<sup>4</sup> Past levels of expenditure have only been restated back to 1998-99. However, according to the Treasury this change should 'make little very little difference to the numbers'<sup>5</sup> as the definition of expenditure on services excludes non-cash items. For education the main difference is in the timing of expenditure on student loans. However, this has been calculated on a resource basis since they were introduced. Treasury figures on education spending in 1998-99 and 1999-00 have been presented using both methods. These were the same to one decimal place.<sup>6</sup>

The following table concentrates on spending covered by the 2004 Spending Review, the 2007 Comprehensive Spending Review and the Spending Review 2010. This is outturn data which do not yet cover 2014-15, the final year of the 2010 Spending Review or plans set out in Spending Round 2013 for 2015-16. Readers should note the impact of accounting adjustments for student loans (2010-11 and 2013-14 especially) described earlier.

The total increase over this period is planned to be £20.4 billion in cash terms. The average annual increase in spending over this time is planned to be £2.6 billion, or 0.9% above inflation. Real increases in the years covered by the in the 2007 spending review (2008-11) and the 2010 settlement saw the first real cuts in this period.

The 2002 Spending Review figures were presented on a 'full' resource basis, however this has had a negligible effect on the DfES Departmental Expenditure Limit -Spending Review 2002, Cm 5570

PESA 2002-03, HMT (Cm 5401) chapter 3 box 1

<sup>&</sup>lt;sup>6</sup> Equivalent to £100 million. The resource figures were only produced to this level of detail, Cm 5401 tables 1.2 and 3.6

Education and training expenditure in the UK, 2005-06 to 2013-14

	Cash prices			 2013	3-14 prices	(a)
	Total change <i>change</i>		 Total	change	change	
	£ billion	£ billion	percentage	£ billion	£ billion	percentage
2005-06	69.8	+6.8	+10.7%	84.0	+6.0	+7.7%
2006-07	73.0	+3.2	+4.6%	85.6	+1.5	+1.8%
2007-08	78.7	+5.7	+7.7%	89.6	+4.0	+4.7%
2008-09	83.0	+4.3	+5.5%	92.2	+2.6	+2.9%
2009-10	88.5	+5.5	+6.6%	95.8	+3.6	+3.9%
2010-11	91.5	+3.0	+3.4%	96.4	+0.6	+0.6%
2011-12	86.9	-4.6	-5.0%	90.0	-6.5	-6.7%
2012-13	87.0	+0.1	+0.1%	88.6	-1.4	-1.5%
2013-14	90.2	+3.2	+3.7%	90.2	+1.6	+1.8%
Average change 2005-06						
to 2013-14		+2.6	+3.3%		+0.8	+0.9%

(a) Adjusted using HM Treasury GDP deflators as at September 2014

Sources: HM Treasury, PESA 2014, and earlier editions

The next table compares indicators of expenditure and expenditure growth for various time periods since 1987. As explained earlier, changes to the calculation of expenditure mean that the latter figures are based on both cash and resource accounting. The average percentages of GDP spent on education were lower in the first two periods than in any of the latter three. The average annual increase across the whole of the period 1997-98 to 2010-11 at 4.4% was well above the earlier two periods. It was also higher than the final period (covered by the 2007 spending review). The periods overlap and hence this illustrates the lower than average planned increases from 2007-08 onwards. Spending from 2010-11 fell in real terms from its high point

The relatively large difference seen in the pre- and post-1997 average increases may seem at odds with the relatively small difference in the percentage of GDP figures. The same could be said about the real cuts/relatively high percentage of GDP from 2010-11 compared to large real increases/lower share of GDP from 1997 to 2010. However, as the charts on the previous pages showed, spending as a percentage of GDP was relatively high at the start of the 1980s, but fell in fourteen of the next twenty years. Therefore the average percentage of GDP over this period was relatively high; despite smaller average increases in spending. The reverse is true for the period from 1999-00; it took large real increases in spending to increase the proportion of GDP figure from its low level. The overall cuts in real spending from 2010 reduce the share of GDP going on education, but from a high point. These have been relatively short lived so the impact is still quite small.

#### Comparison of education and training expenditure in the UK in selected periods

	Average £ billion at	Average percentage	Average real annual increase		
	2013-14 prices <sup>(a)</sup>	of GDP	percentage	£ billion	
1987-88 to 1996-97	51.9	4.64%	1.92%	0.96	
1992-93 to 1996-97	55.1	4.72%	0.59%	0.32	
1997-98 to 2010-11 <sup>(b)</sup>	76.7	5.08%	4.41%	3.19	
2007-08 to 2010-11	93.5	5.62%	2.49%	2.28	
2010-11 to 2013-14	91.3	5.39%	-2.20%	-2.07	

<sup>(</sup>a) Adjusted using HM Treasury GDP deflators as at September 2014

Sources: HM Treasury, PESA 2014, and earlier editions

ONS series YBHA

The final table in this section breaks spending down into current and capital. This shows that the proportionate cut in capital spending was much larger.

## Current and capital spending on education and training

£ billion 2013-14 prices

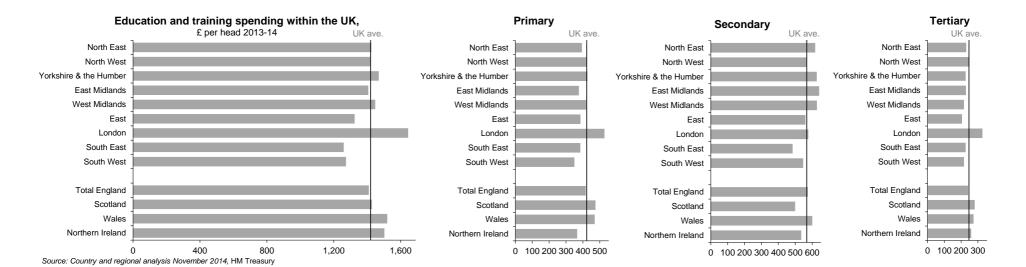
	2009-10	2010-11	2011-12	2012-13	2013-14	Change 09-10 to 13-14
Current Capital	85.1 10.8	86.8 9.6	81.9 8.1	81.8 6.8	83.5 6.8	-1.9% -37.3%
Total	95.8	96.4	90.0	88.6	90.2	-5.9%

Source: HM Treasury, PESA 2014. Table 5.4

## Expenditure by region and nation

The following charts look at education spending per head in the different parts of the UK. The underlying data is from an annual exercise where departments and devolved administrations assign spending to the regions and nations of the UK based on who it benefits/where it is spent.

<sup>(</sup>b) Partly calculated on a resource basis



Total education and training expenditure apportionable to any one region/country was £1,420 per head in 2013-14. Highest in London at £1,645, lowest in the South East at £1,260. Comparisons will of course be affected by demographics —the relative size of the school/college/university age population in each region.

Spending per head on primary education was an average of £420 across the UK. Again highest in London at £530, lowest in the South West at £350.

The East Midlands had the highest spend on 'secondary' education at £640 per head compared to the UK average of £570. The South East was lowest at £480

Relative gaps were largest in tertiary education; from £205 per head in the East of England to £330 in London. The average was just under £250 per head.

## 1.3 Expenditure plans for 2014-15 and 2015-16

Comprehensive UK-wide outturn spending data for 2014-15 is expected in summer 2015 and for 2015-16 the following year. Planned spending on major individual elements of education spending for these years are summarised below. They do not include all education expenditure and are plans rather than outturn, the final spending data may therefore show somewhat different trends. The figures below are in cash terms. To put these in context economy-wide inflation is expected to be 2.1% and 1.4% in 2014-15 and 2015-16 respectively. Any spending increase above these rates is a real terms increase and *vice versa*. GDP is expected to grow in cash terms by 5.1% and 3.6% in 2014-15 and 2015-16. Any overall spending increase above these rates would increase education spending as a share of GDP and *vice versa*.

## Schools in England<sup>7</sup>

- Dedicated Schools Grant is expected to increase by £0.7 billion or 1.7%
- Pupil Premium is planned to increase by £0.6 billion or 33%
- Spending Round 2013 made a commitment to protect the schools budget and the Pupil Premium in real terms in 2015-16
- Capital spending is due to increase by £0.6 billion (15%) in 2014-15 and be maintained at this level in 2015-16

## • 16-19 education in England8

 Total allocations for 16-19 further education and school sixth forms fell be £0.1 billion (1%) in 2014-15

## Higher education in England<sup>9</sup>

- Direct funding via the funding council is planned to be cut by £0.9 billion (18%) in 2014-15 and £0.1 billion in 2015-16 (2%)
- The cash value of tuition fee loans is expected to increase by £1.4 billion in 2014-15 and £1.2 billion in 2015-16. Assuming that the public spending element of this is around 45% then these imply spending increases on these loans of around £0.6 billion (25%) in 2014-15 and £0.5 billion (17%) in 2015-16.
- 19+ Further education and skills in England<sup>10</sup>
  - Total funding is planned to be increased by £0.1 billion in 2014-15 (1%) then cut by £0.3 billion (7%) in 2015-16

## 2 Long term trends in public expenditure

The data included earlier in this note is the most consistent time series available. To go further back in time means using more than one series and introducing some inconsistencies. Table 2 at the end of this note gives various public education expenditure series back to the early 1950s. Where there is overlap in years the series show little variation, so we can be confident that the overall pattern of change over this period is broadly accurate. More detail about the series is given in the notes to this table.

The first chart looks at education spending in real terms. This shows the post 1979 series in context. The period immediately before this was the most atypical of all. Real spending levels fell in each year from 1976-77 to 1979-80 and together with fairly flat levels of real spending

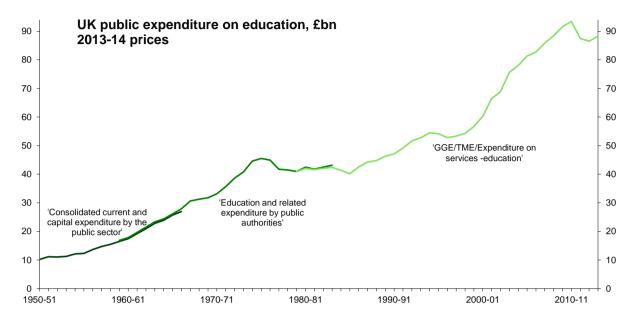
DfE consolidated annual report and accounts 2012 to 2013; Dedicated Schools Grant final allocation 2014-15, DfF

<sup>&</sup>lt;sup>8</sup> 16 to 19 allocation data: 2014 to 2015 academic year, Education Funding Agency

<sup>&</sup>lt;sup>9</sup> Funding for higher education in England for 2014-15, and earlier, BIS/HEFCE

<sup>&</sup>lt;sup>10</sup> Skills Funding Statement 2013-2016, SFA

in the early and mid-1980s meant that real spending did not return to its mid-1970s level until the late 1980s. Before then real spending had increased in each and every year from the early 1950s to the mid 1970s –the longest continuous period of increase.



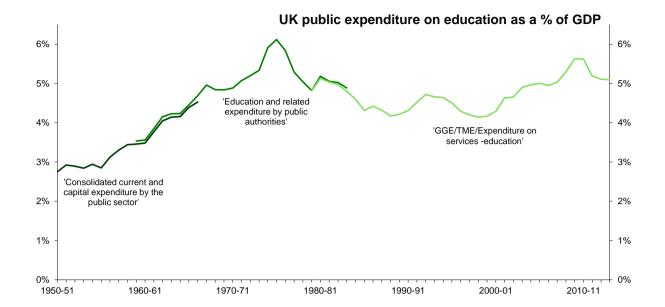
The increases shown in the 1950s and 1960s are not surprising given the changes to public sector education at the time. These are summarised in the note *Education: Historical Statistics*. During the 1950s and 1960s:

- The number of primary school pupils increased by 20% and primary teachers by 30%
- The number of public sector secondary school pupils doubled and the number of secondary teachers increased by 150%
- The number of students gaining university qualifications more than tripled

More detail is given in that note.

The chart shows that the largest annual increases occurred in the last 10 years or so. The fastest *rate* of increase was in the 1950s and early 60s; spending doubled in real terms in the 11 years between 1952/53 and 1963/64. The real increase in the 11 years to 2009-10 was just over two-thirds.

The next chart gives spending as a proportion of GDP. This produces a slightly more erratic trend, although again the main period of increase was in the two decades from the mid-1950s. The increases since the late 1990s are much smaller in comparison and have not taken spending to a greater share of national income than the 1975-76 peak of 6.1%. The fall from this peak to 5.0% in 1979-80 was the fastest rate of change in the whole period



When such a long period is covered it inevitably includes a number of different economic cycles beyond the memory of most readers. GDP fell in 1974-76, 1980-81, 1991-92 and 2008-10. The fastest periods of growth were the early 1960s, early 1970s, late 1980s and mid-1990s.

Before the Second World War the scale of public sector education was much smaller than even that of the early 1950s. During the late 1920s and most of the 1930s public spending on education was 2.2% to 2.4% of GDP. The only exception was in 1931-33 when sharp falls in GDP meant education spending increased to 2.5-2.6%.<sup>11</sup> 12

The appendix at the end of this note looks at long term trends in combined public and private spending on education and puts this in the context of changes in the size of the school age population.

<sup>11</sup> These figures are intended to be indicative only as the coverage of the spending data is different from any included in Table 2

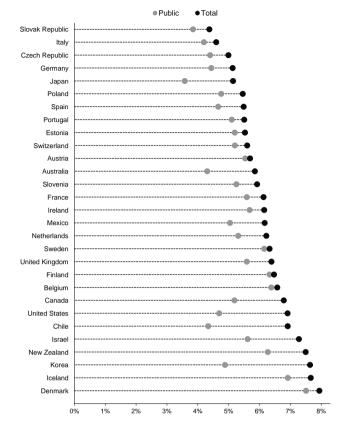
Statistical Abstract for the United Kingdom 1924-1938, Board of Trade; B R Mitchell British Historical Statistics (1988)

# 3 International comparisons

The chart opposite illustrates differences in education expenditure<sup>13</sup> as a proportion of GDP across the OECD. 2011 are the latest available data. These figures cover public and private spending and the public total is indicated in the chart.

Overall spending on this measure in the UK was 6.4%; above the OECD average of 6.2%, above the figure for most other EU countries, but below levels in the US, Canada and Korea. Public spending in the UK at 5.6% was above the OECD total (weighted average) of 4.8% and below the levels in some other EU states which had lower overall education spending. Private education expenditure in the UK formed a greater share of the total than in most other EU states. Denmark, Iceland and Belgium had the highest *public* expenditure on education compared to GDP. Korea, Chile and the US had the highest private rates which put them all near the top on total spending.

Expenditure on education institutions as a % of GDP, OECD nations 2011



Source: OECD Education at a Glance 2014

Expenditure on institutions. This excludes some spending which directly benefits pupils/students such as maintenance support

## 4 Reference tables

Table 1  $\label{eq:table_table} \mbox{Total public expenditure on education in the $\mathsf{UK}^{(a)}$}$ 

	Education only			Education and training			
	At cash	At 2013-14		At cash	At 2013-14		
	prices	prices <sup>(b)</sup>	Percent of	prices	prices <sup>(b)</sup>	Percent of	
Financial year	£ billion	£ billion	GDP (c)	£ billion	£ billion	GDP (c)	
1979-80	10.5	40.9	4.81%				
1980-81	12.8	42.0	5.13%				
1981-82	13.9	41.6	5.03%				
1982-83	15.0	42.0	4.97%				
1983-84	15.8	42.4	4.80%				
1984-85	16.3	41.3	4.60%				
1985-86	16.8	40.2	4.31%				
1986-87	18.5	42.5	4.42%				
1987-88	20.3	44.2	4.32%	21.2	46.2	4.51%	
1988-89	21.9	44.8	4.17%	23.1	47.2	4.40%	
1989-90	24.4	46.3	4.22%	25.9	49.1	4.47%	
1990-91	26.9	47.1	4.31%	28.1	49.2	4.50%	
1991-92	29.7	49.1	4.52%	31.3	51.8	4.76%	
1992-93	32.0	51.6	4.72%	33.2	53.6	4.90%	
1993-94	33.5	52.7	4.66%	34.7	54.6	4.83%	
1994-95	35.0	54.5	4.64%	36.2	56.3	4.80%	
1995-96	35.8	54.1	4.50%	37.0	55.9	4.65%	
1996-97	36.4	52.8	4.29%	37.8	54.8	4.46%	
1997-98	37.4	53.3	4.20%	38.6	55.0	4.34%	
1998-99	38.7	54.3	4.15%	40.0	56.1	4.29%	
1999-00	40.8	56.7	4.17%	42.2	58.6	4.31%	
2000-01 <sup>(d)</sup>	44.4	60.3	4.29%	45.9	62.3	4.44%	
2001-02 <sup>(d)</sup>	49.7	66.5	4.63%	51.2	68.5	4.77%	
2002-03 <sup>(d)</sup>	52.9	68.9	4.66%	54.7	71.3	4.82%	
2002-03							
2003-04	59.2	75.6	4.90%	61.0	77.9	5.04%	
2004-03	63.0	78.0	4.97%	65.1	80.6	5.13%	
2005-06 <sup>(d)</sup>	67.6	81.4	5.00%	69.8	84.0	5.17%	
2006-07 <sup>(d)</sup>	70.6	82.7	4.95%	73.0	85.6	5.13%	
2007-08 (d)	75.4	85.9	5.03%	78.7	89.6	5.25%	
2008-09 (d)	79.6	88.4	5.30%	83.0	92.2	5.52%	
2009-10 <sup>(d)</sup>	84.6	91.6	5.63%	88.5	95.8	5.89%	
2010-11 <sup>(d)</sup>	88.6	93.4	5.62%	91.5	96.4	5.80%	
2011-12 <sup>(d)</sup>	84.5	87.5	5.19%	86.9	90.0	5.34%	
2012-13 <sup>(d)</sup>	85.0	86.5	5.11%	87.0	88.6	5.23%	
2013-14 <sup>(d)</sup>	88.3	88.3	5.09%	90.2	90.2	5.21%	
2010-14	00.5	00.5	J.UJ/0	30.2	30.2	J.Z I /0	

<sup>..</sup> Not available

Sources: HM Treasury, PESA 2014, and earlier editions

ONS series YBHA

HM Treasury GDP deflators

<sup>(</sup>a) General Government Expenditure to 1982-83. Total Managed Expenditure to 1987-88, total expenditure on services thereafter.

<sup>(</sup>b) Adjusted 2013-14 prices using HM Treasury GDP deflators from September 2014.

c) Calculated using GDP figures revised after September 2014 changes to National Accounts methodologies

<sup>(</sup>d) Expenditure calculated on a resource basis. These figures may not be directly comparable with earlier years that were calculated on a cash basis.

Table 2 UK public expenditure on education

	£ billion 2013-14 prices <sup>a</sup>			% of GDP			
	Series 1	Series 2	Series 3	Series 1	Series 2	Series 3	
1950-51 <sup>b</sup>	10.2			2.75%			
1955-56	12.3			2.85%			
1960-61	17.4	17.8		3.48%	3.56%		
1965-66	25.7	26.1		4.39%	4.45%		
1970-71		33.1			4.88%		
1975-56		45.5			6.12%		
1980-81		42.5	42.0		5.18%	5.13%	
1985-86		41.3	40.2		4.44%	4.31%	
1990-91			47.1			4.31%	
1995-96			54.1			4.50%	
2000-01			60.3			4.29%	
2005-06			81.4			5.00%	
2010-11			93.4			5.62%	
2011-12			87.5			5.19%	
2012-13			86.5			5.11%	
2013-14			88.3			5.09%	

Notes:

Series 1 Annual abstract series 'Consolidated current and capital expenditure by the public sector'. Excludes spending on school meals and milk

Education in the UK series 'Education and related expenditure by public authorities'. Series 2 Includes expenditure on teacher training and the youth service

Public Expenditure Statistical Analysis series. General Government Expenditure to 1982-83. Total Managed Expenditure to 1987-88, total expenditure on services thereafter. Expenditure calculated on a resource basis from 2000-01. Series 3

Adjusted using March 2011 GDP deflators GDP and GDP deflator data before 1955-56 is on a calendar year basis

Annual abstract of statistics 1967, and earlier editions, CSO Sources:

Education statistics for the United Kingdom, various years, DES HM Treasury, PESA 2014, and earlier editions ONS series ADIE and YBHA

# 5 Appendix –Trends in education spending to 2011-12 v population change

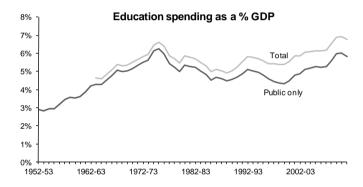
In 2011 an estimated £14 billion was spent privately on education. \(^{14}\) Including this spending with the earlier figures gives a more complete picture of the amount of national income that we have devoted to education. A series that only looks at public spending will be affected by shifts in the liability for costs from the public to private sections (tuition fees) and vice versa (free early years education). So a total private and public series more accurately reflects overall spending at any one point in time and is not affected by shifts from one sector to another. It is not perfect though. Data on private spending on education start in the 1960s, there is a break in the series in 1997 due to revised data and the figures cover fees for education only. This means that private spending on books and other education resources for school pupils is excluded, as is student maintenance and loan repayments. Excluding student maintenance should not be a problem as the costs of 'pupil maintenance' are not included. However, up to the late 1980s all maintenance support was included in the public education figures. Since the introduction of loans the burden has shifted to the private

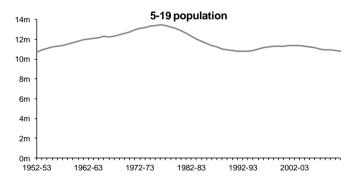
individual, but is not picked up in the private education figures.

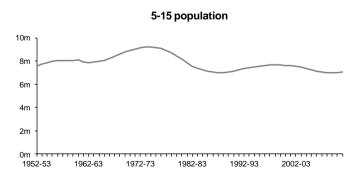
The impact of including private education expenditure on the long term spending series is illustrated opposite. It shifts spending up by around one percentage point in recent years, but much less in the early part of this period. Until recently peak spending (as a proportion of GDP) was of 6.6% in 1975-76, but this was beaten in each of the last three years.

The proportion of our national income we devote to education has varied over time, but so has the population. If spending only focussed on primary or secondary pupils it would be straightforward to work out the relevant population or 'demand' for education spending. However, over these years the school leaving age increased to 16, free early education places were offered to all three and four year olds and there has been a very large expansion in the post-16 education of all types.

In theory someone of almost any age can benefit from education, especially if we include private payment of fees. In practice those in education are





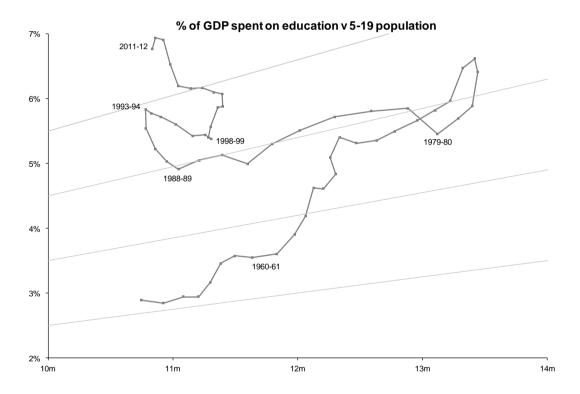


<sup>&</sup>lt;sup>14</sup> Consumer trends, ONS

concentrated in a much smaller age range. Population estimates back to the early 1950s are grouped in five year bands. The charts above compare trends in two age ranges which are meant to reflect the core group benefitting from education.

The shape of the trends is broadly similar, although the 5-15 age group is slightly more volatile. 15 The 5-19 age group is used below as a measure of the population group most likely to benefit from education.

Looking across the charts on the previous page it is clear that the increase in spending in the first two decades happened when the 5-19 population was increasing. Falls in population in the late 1970s and 1980s coincided with falls in spending. This is a rough and ready form of analysis only. The scatter plot below reveals more detail. It compares total spending on education as a % of GDP¹6 to the population aged 15-19. Here the 'gridlines' are constant ratios of education spending as a % of GDP to population since. Hence shifts above and to the left mean a greater share of national income is going to education compared to population and *vice versa*.



The key growth periods of education spending compared to population were in the 1960s, late 1980s/early 1990s and the first decade of this century. The latest figure is 2011-12 when, despite being lower than the previous year, the ratio was at a historical high and spending was substantially above levels seen when the 5-19 year old population was a similar levels. The major falls were in the late 1970s and the mid to late 1990s. Here most of the 1980s is characterised by falling population and spending which cancel each other out in each year.

<sup>&</sup>lt;sup>15</sup> Mid-year population estimates, ONS; Annual abstract of statistics, various years, CSO/ONS

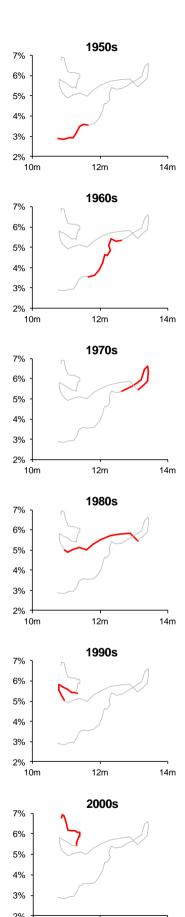
<sup>&</sup>lt;sup>16</sup> Public spending only in the first decade

The cuts in education spending relative to GDP and the growing population of the mid/late 1990s was reversed in the early part of this decade, but it took five years of large spending increases just to get back to a virtually identical position as in 1993-94.

The chronological order of this series can be difficult to follow through all its loops over time. The charts opposite give the same data, but highlight one decade at a time. If time is cut up this way then it is clear that the 1950s and 1960s saw the share of national income devoted to education increase at a faster rate than the (increasing population). This continued into the first half of the 1970s, but was reversed in the second half. During the 1980s the population aged 5-19 fell consistently and education spending as a % of GDP fell at a similar rate.

The early 1990s saw increases in education spending at a time when GDP and population fell. Spending stagnated in the second half of the decade as GDP and population grew and the earlier 'gains' were lost. The last decade has seen the smallest changes in population and some of the most consistent increases in spending as a proportion of GDP. This looks likely to continue to the end of this decade

Some unexpected patterns emerge after we 'adjust' long term education spending for changes in the size of the economy and population. Changes in the proportion of national income we devote to education can only be 'explained' by demographic changes in the early 1970s and most of the 1980s. During most of the rest of the last 60 years spending has not closely followed population. The pattern shown in the chart has been more influenced by falls in GDP. Education spending has continued to rise during most recessions and hence spending as a proportion of GDP has risen more rapidly. 2008-09 and 2009-10 saw two of the largest single year jumps as spending increases were coupled with falls in GDP and relatively little change in population. Real levels of education spending have followed different paths after recessions of the past, falling after the mid-1970s, stagnated after the early 1980s and increasing after the early 1990s.



10m

14m