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Public spending on education in the UK

Prepared for the Education and Skills Select
Committee

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1. Introduction

This note is based on analysis prepared by Alissa Goodman and Luke Sibieta of the Institute for Fiscal Studies at the request of the House of Commons Education and Skills Select Committee, for their inquiry into Public Expenditure on Education and Skills being carried out during June and July 2006.

The note discusses some key issues that have arisen in education spending in the last year. We begin by examining the significance of the Chancellor's statements in Budget 2006 – both regarding school capital expenditure and the pledge to increase funding per pupil in the state sector to that currently seen in the private sector. We then move on to what the Comprehensive Spending Review in 2007 is likely to mean for education, given commitments in other areas of government spending. An Appendix contains some information about overall trends in public spending on education in the UK, and the international context.

2. Budget 2006

The Chancellor made a number of announcements in Budget 2006 about school spending, including new payments to be made direct to schools for 2006/07 and 2007/08 (worth £270 million and £440 million respectively); new school capital spending for the years 2008/09, 2009/10 and 2010/11; and a new aspiration for spending per pupil in the state sector to match that in the private sector. In this note, we discuss the announced increases in school capital spending, and the aspiration to raise per-pupil funding in the state sector. We argue that the new school capital spending announced by the Chancellor is not as large as its presentation suggested, whilst the meaningfulness of the aspiration for state per-pupil spending depends on the timetable by which it is achieved, something that the Chancellor did not spell out.

2.1 Capital spending in schools: a '£34 Billion Schools Bonanza'?

The Chancellor announced in his Budget Statement of 2006 that 'In the coming five years investment in schools will rise from £5.6 billion today to reach

¹ With thanks to Carl Emmerson, Lorraine Dearden and Christine Frayne of IFS for their comments.

£8 billions a year – a 50 per cent rise making a total of £34 billion new investment over five years’. This figure was widely quoted in the national press (and was referred to in the *Daily Mirror* as a ‘£34 Billion Schools Bonanza’).

Commentators would have been forgiven for assuming from the Budget Speech that there will now be a significant increase in the rate of growth of new school capital spending in the public sector. This is not the case. First, we set out how much of the spending announced is new spending, and next we show how the projected growth in school capital spending compares with past growth.

How much of it is new public spending? As Tony Travers was quoted in the *Financial Times*, in the aftermath of the Budget ‘The way in which announcements are made, particularly at budget time, makes it very difficult to be certain how much in total is planned in new spending compared to [what was previously planned] for the next year and the year after’.²

Table 3 sets out the school capital spending figures provided in the Budget Speech and Statement. A number of points should be noted:

- Before the Budget announcements, there were spending plans for schools already in place up to 2007/08 (the end of the present spending review period). In 2007/08, planned school capital spending was £6.4 billion; adjusting for inflation, this is £6.1 billion in 2005/06 prices.

The Chancellor announced spending for 2010/11 of £8 billion in nominal terms, which is £7 billion in 2005/06 prices. **School capital spending in 2010/11 will therefore be £0.9 billion higher in real terms than in 2007/08, implying an average real increase over the next spending review period of 4.9% per year (or just under 15% over the three years as a whole).**

- By contrast, the Chancellor’s figure of £34 billion can only be arrived at by adding together total planned capital spending in nominal terms for each of the five years 2006/07 to 2010/11.³ This accumulation of total spending is a highly misleading presentational device. It combines the £0.9 billion new planned funds with (i) the total amount of school capital spending already being spent each year, (ii) the new funding already planned before Budget 2006 and (iii) the effects of economy-wide inflation. Finally, the total is added up across all five years. An analogy is the following: a worker on approximately male full-time average earnings (£25,000) is given a nominal pay freeze, but is told he is being awarded a ‘total of £125,000 new income over five years’.

² ‘Chancellor’s schools pledge could cost £17bn’, *Financial Times*, 23 March 2006.

³ Assuming a constant rate of spending growth between 2005/06 and 2007/08, and between 2007/08 and 2010/11, the sum £6bn + £6.4bn + £6.9bn + £7.4bn + £8bn = £34.7 billion.

- The figures for future spending announced by the Chancellor are inclusive of both ‘purely public’ capital spending and capital spending through the Private Finance Initiative.

Table 4. Capital spending in schools, 2005/06 to 2010/11

	Nominal total ‘publicly-sponsored’ school capital spending (PFI + public expenditure), current prices	Real total ‘publicly-sponsored’ school capital spending (PFI + public expenditure), 2005/06 prices
2005/06	£5.6bn	£5.6bn
2006/07		
2007/08 (previous plans)	£6.4bn	£6.1bn
2008/09		
2009/10		
2010/11 (Budget announcement)	£8.0bn	£7.0bn
<i>Annual average increase 1996/97 to 2004/05 (public only)</i>		11.9%
<i>Annual average increase 1996/97 to 2004/05 (public + PFI)</i>		17.7%
<i>Annual average increase 2005/06 to 2007/08 (public + PFI)</i>		4.2%
<i>Annual average increase 2007/08 to 2010/11 (public + PFI)</i>		4.9%

Note: The average annual increases are calculated on the basis of unrounded numbers, so may not be perfectly consistent with the absolute amounts, which are rounded to one decimal place.

Sources: Figures for pure public spending on schools capital are the authors’ calculations based on Departmental Reports from various years up to 2005, Department for Education and Skills. Figures for all schools capital spending are taken from the Chancellor’s Budget Statement of 2006.

The evolution of schools capital spending

It is not straightforward to compare how these (existing and new) plans for school capital spending announced by the Chancellor compare with previous increases in school capital spending. This is because the inclusion of PFI capital spending in the total makes the Budget figures differ from those routinely published by the Department for Education and Skills.

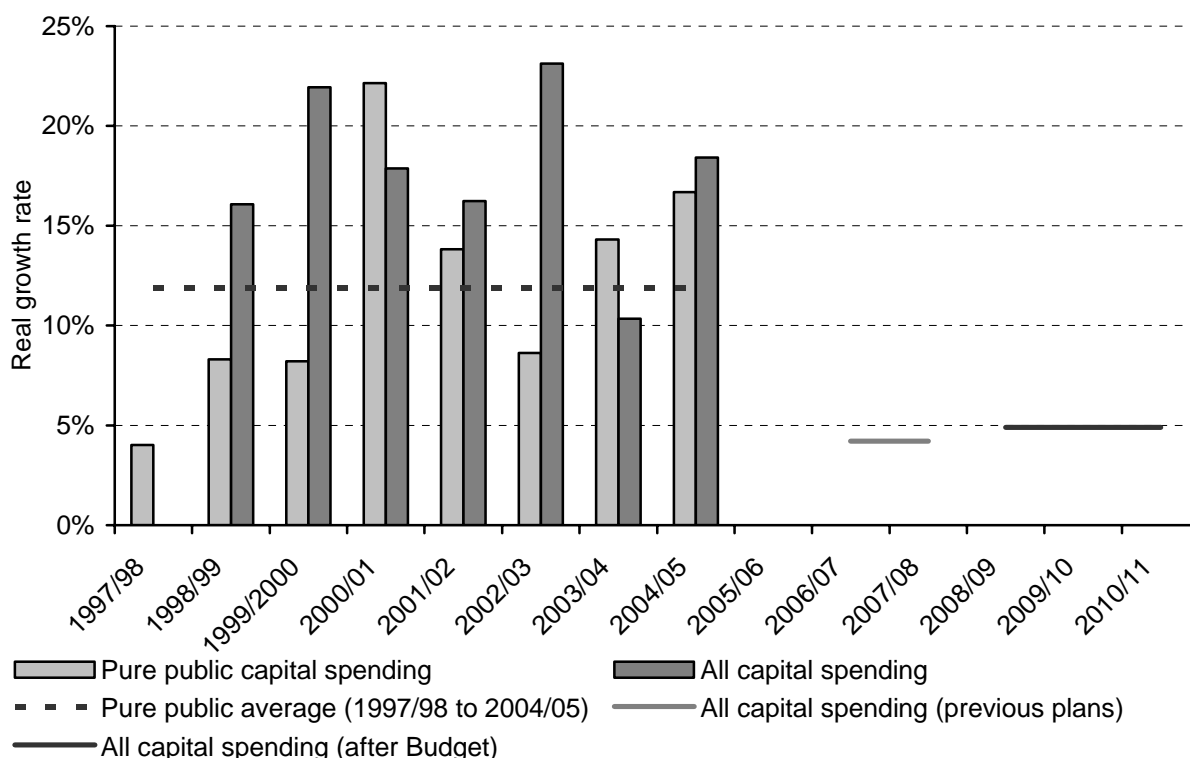
The fact that the Budget presentation of the school spending figures diverged from the figures publicly available through DfES made independent analysis of the figures in the immediate aftermath of the Budget extremely difficult. It was only through ad hoc communication with officials at the Treasury that we were able to reconcile the Budget and DfES figures enough to assess the significance of the new plans, relative to the recent past.

Looking just at publicly available DfES figures, our calculations suggest that the annualised average growth between 1996/97 and 2004/05 in *purely public* school capital expenditure was about 11.9% per year. We have also calculated our own series for public + PFI school capital spending going back over time (see Figure 1). The real annual average growth in this series between 1996/97 and 2004/05 was around 17.7% per year.⁴

This growth over the recent past is considerably greater than both the 4.9% real annual average planned growth in public + PFI capital spending between 2007/08 and 2010/11, and the 4.2% real-terms growth in public + PFI spending between 2005/06 and 2007/08 (see Table 4 and Figure 1).

Looking at Figure 1 in more detail, we can see that public expenditure on school capital grew relatively modestly in the first few years of the Labour government (whilst Labour kept to the spending plans of the previous Conservative government). However, from 2000/01 onwards, it grew by a substantial amount, with double-digit growth for four out of five years. Including PFI spending in the analysis in most cases considerably increases the annual growth rate.

Figure 1. The evolution of school capital spending, 1997/98 to 2010/11



Sources: Figures for pure public spending and all spending, inclusive of PFI spending, on schools capital are the authors' calculations based on Departmental Reports from various years up to 2005, Department for Education and Skills. Figures for PFI spending were

⁴ See Sources to Figure 2 for discussion of assumptions about PFI spending over time.

calculated under the assumption that the figures stated in Departmental Reports were in the same prices as those for pure public capital spending – both sets of figures were presented in the same table, so this is a reasonable assumption. Making the assumption that the DfES figures for PFI are in nominal terms does not qualitatively change the above graph, with both under- and over-estimations under 1 percentage point.

The plans going forward for school capital spending therefore actually imply a step down in terms of the annualised real growth rate, compared with the recent past. However, one should also remember that the growth of schools capital spending began from a small base of about £1.2 billion in 1996/97 (public spend only). Therefore, it is currently growing by a larger amount in absolute terms compared with Labour's first term, despite the slower growth rate.

2.2 Raising per-pupil expenditure in the state sector

The Chancellor also announced in his Budget Statement of 2006 that 'Our long-term aim should be to ensure for 100 per cent of our children the educational support now available to just 10 per cent'. He clarified this aim in quantitative terms by pledging to increase spending per pupil in the state sector to that currently being spent per pupil in the private sector. According to Treasury figures, this means increasing funding per pupil in the state sector from around £5,000 to around £8,000 (the private sector level in 2005/06). Here, we set out how much this might cost in new public spending to achieve and how long it could take, before making some general comments about how significant and meaningful the pledge is.

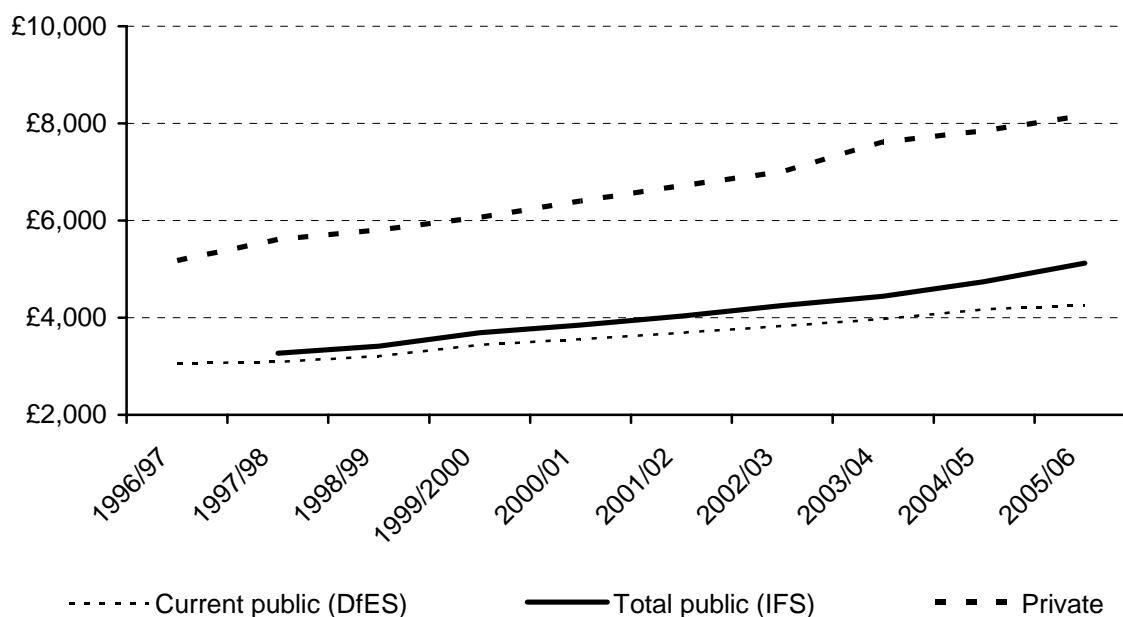
Trends in per-pupil expenditure in the public and private sectors

The measure of spending per pupil in the private sector the Chancellor chose to use was the average termly fee (multiplied by three) per pupil in day schools in the UK.⁵ The measure of funding per pupil in the state sector chosen by the Chancellor is a total of all schools capital and current expenditure per pupil (inclusive of PFI).

This figure is not available going back in time as the DfES published figures focus on *current* spending per pupil. Figure 3 shows the evolution of the series for private day schools and the DfES's current 'pure public' spending per pupil (i.e. excluding both capital and PFI spending) in the state sector. In addition, it shows the Treasury's figure for total spending per pupil (current + capital + PFI) for 2005/06 only, and IFS calculations of this series going back in time.

⁵ This is taken from the annual census of independent schools conducted by the Independent Schools Council, <http://www.isc.co.uk/index.php/347>.

Figure 2. The evolution of real spending per head in the public and private sectors (2005/06 prices)



Sources: See Sources to Figure 2 for public spending per head. Figures for private sector spending per pupil are taken from the annual census of independent schools conducted by the Independent Schools Council from various years, <http://www.isc.co.uk/index.php/347>.

The graph shows an increase in the relative gap between *current* per-pupil spending in the state sector and private sector spending since 1996/97: the private sector spent around 70% more per pupil than current spending in the state sector in 1996/97, whilst this rose to almost 90% by 2005/06. Including capital + PFI spending per head in the public sector series narrows this gap (HMT estimates suggest that capital + PFI spending amounted to around £740 per head in 2005/06). Our calculations suggest that taking into account capital spending means that the per-pupil spending gap has stayed relatively constant over time.

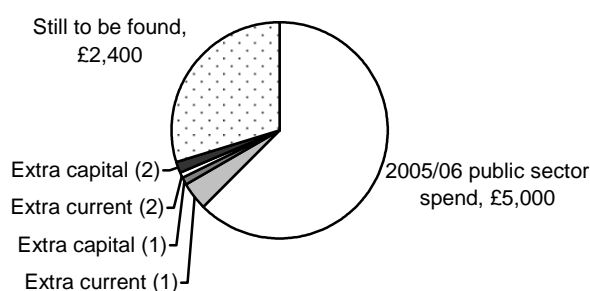
How much would it cost and how long would it take to achieve?

The Chancellor said that he wanted to bring the per-pupil spend in the state sector up to today's level in the private sector, i.e. about £8,000. This means that it will have to rise by around £3,000 per pupil in real terms to meet this objective. Our calculations suggest that on existing plans going forward to 2007/08, current and capital spending already imply spending per pupil rising by a further £340 and £90 respectively. Also announced in the Budget were a further £60 per pupil in 2007/08 from higher direct payments to schools and a further £150 in capital spending by 2010/11. This leaves a further real-terms gap of about £2,400 still to be met (see Figure 4).

How much would this cost in terms of extra public expenditure? Based on constant pupil numbers of about 7.2 million (the Treasury's estimate for pupil numbers in 2010/11), it would cost an extra £17 billion in real terms. Evidently, this does not have to be raised immediately through taxation or borrowing, so it makes sense to try to understand how long it would take to fill this gap based on a series of scenarios for the growth in schools spending.

Figure 3. Matching private school spending

Total private sector per-pupil spend, £8,000 in 2005/06



Note: Extra current and capital (1) are those already written into spending plans before Budget 2006; extra current and capital (2) represent the new allocations announced in the Budget.

Source: IFS calculations.

If school spending were to grow at the underlying rate of growth in the economy (assumed at 2.25% real per year⁶) and thus remain constant as a share of GDP, it would take till 2024 to fill this gap. Alternatively, if school spending were to grow by the same amount as total per-pupil spending in the state sector grew between 1996/97 and 2007/08 (5.3%), it would take until 2014 to fill this gap. Perhaps a more likely scenario (see Section 4 below) is for school spending to grow at the rate we estimate would be feasible for the whole of education spending over the next spending review period, at 3.4% per year. In this case, it would be 2018 before the pledge would be met.⁷ Since these estimates are based on constant pupil numbers in the state sector, further falls in pupil rolls would also help to fill the gap.

Significance of the pledge

But is the pledge meaningful?

⁶ This is the central assumption for underlying growth after 2007/08 built into HM Treasury's public finance projections.

⁷ All of these scenarios are based on the assumption that the additional capital spending announced in Budget 2006 makes up part of the increases of 2.5%, 5.3% and 3.4% per year.

Some commentators have questioned whether the per-pupil spends in the private sector and state sector are comparing like with like:

- Some private schools may have access to other sources of income, apart from fees, such as rental income or income from capital. On the other hand, some have argued that some private schools may have greater capital expenses (e.g. old listed buildings). The comparisons also exclude the boarding school population.
- The age compositions of the private and public school populations are quite different, with a greater proportion of older children at school in the private sector. Since it costs more to teach older children, this probably means that directly comparing the average per-pupil spending of the private and state sectors overstates the gap in resources between them. However, there may be other compositional differences which work in the other direction, e.g. proportion of pupils who have English as a first language.

However, aside from these measurement issues, there are some other important considerations:

- Achieving this pledge is very unlikely to mean that pupils in state schools will have the same level of funding as those in private schools at any point in time, since private school funding per pupil is also likely to grow in real terms over the future.
- Moreover, since the Chancellor's target is to increase spending per pupil in the state sector to £8,000 at some unspecified point in the future, *when it is achieved* is an important issue in evaluating the significance of the pledge. Meeting it by 2024 with schools expenditure only growing by 2.25% a year would probably not be consistent with making schools spending a priority. The critical question is therefore how much new public expenditure is allocated towards schools in the Comprehensive Spending Review in 2007. We turn to this subject in the next section.

3. What will the Spending Review mean for education?

The 2007 Comprehensive Spending Review (CSR) will set out public spending allocations for the period 2008/09 to 2010/11.

In its post-Budget analysis, IFS set out how much public spending on education might increase in the period 2008/09 to 2010/11, given the overall total managed expenditure (TME) envelope now set out by the Chancellor and the other spending commitments that have been made. One possible scenario is set out in Figure 4, which we explain below:

- The Pre-Budget Report of 2005 for the first time set out provisional estimates for the growth of TME over this period, implying a real annual

increase in TME of 1.9%. Although it is possible that this envelope will be revised before the CSR, any increases in public spending will have to be found from within the TME envelope.

- Assuming a 1.9% real-terms increase in TME each year, we make a number of assumptions about spending in other departments in order to calculate what a plausible increase in education spending might be.
- In the 2006 Budget, it was announced that the Home Office would see a 0% real increase over the next spending review period,⁸ whilst HM Treasury, the Cabinet Office, HMRC and DWP would see a 5% real spending cut each year.⁹

It is not yet known how much will be allocated to health spending, but we have conservatively assumed that it will grow at 4.4% per year, which is the amount that the 2002 Wanless Report suggested would be required for the NHS to become a ‘world-class health service’ in its most optimistic scenario, in which the NHS is ‘fully engaged’ in terms of its efficiency, quality and cost to the taxpayer, together with a public ‘fully engaged’ with improving their health.¹⁰

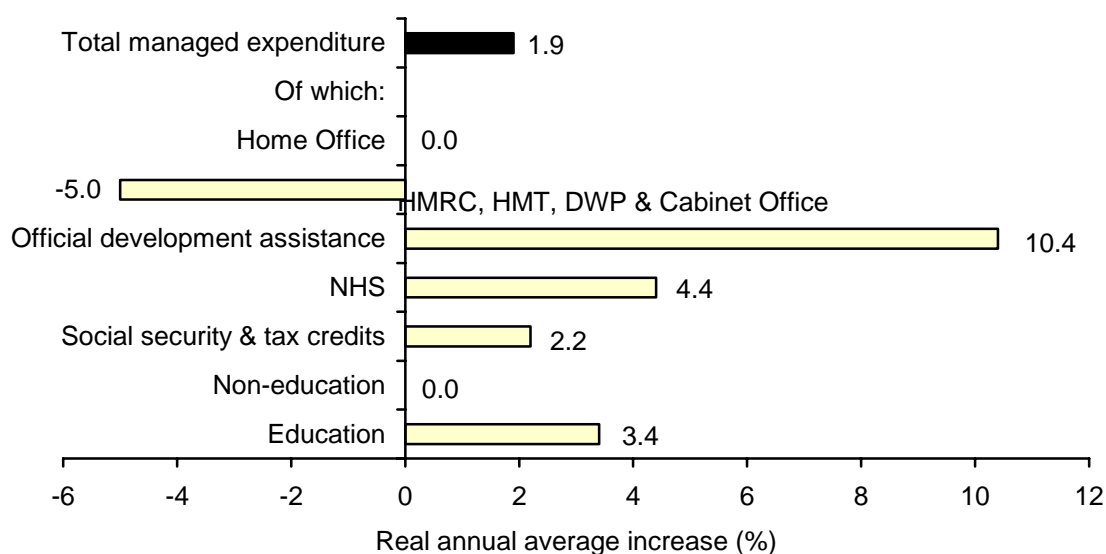
- The government has also stated its aim to increase official development assistance so that it reaches 0.7% of national income by 2007. Achieving this will require constant real annual increases of 10.4% between 2008/09 and 2012/13. This will further reduce the amount by which other public expenditure can grow.
- Social security and tax credit expenditure is the largest single element of public expenditure and so what the 2007 CSR allocates to it will make a significant impact on what is available for other areas of spending. The government has explicit targets for child poverty and strongly stated aims to reduce pensioner poverty, both of which are likely to require significant

⁸ ‘The Home Secretary has agreed that he can invest more in priorities like policing and security, while making savings in other areas within a three-year budget at its 2007–08 real terms level’ (Budget Speech 2006).

⁹ ‘HMRC, the Treasury, DWP and the Cabinet Office have also agreed that necessary modernisation will be funded from a new innovation fund and, alongside this, the spending review for these four departments will proceed on the basis of minus 5 per cent a year real terms below the base line of 2007/08’ (Budget Speech 2006).

¹⁰ The 2002 Wanless Report estimated that health spending would need to grow by between 4.4% and 5.7% per year after 2008/09 if the NHS is to become a ‘world-class health service’. The government is currently revising the calculations made for the Wanless Report, and so the amount required to maintain a ‘world-class health service’ may change as a result. Note that a growth rate of 4.4% for health spending is also considerably less than that seen between 1996/97 and 2007/08, when it grew by an average of 6.1% per year.

Figure 4. Possible 2007 CSR allocation under spending commitments made so far



amounts of public expenditure. One gauge of how much might be required is the growth rate between 1996/97 and 2007/08, which was 2.2% per year – at a time of falling expenditure on unemployment-related benefits, but also of rising generosity of benefits and tax credits targeted at poorer households in order to achieve the government’s goals in terms of relative poverty.

- Assuming that all remaining elements of public expenditure (which include, amongst others, transport and defence) are subjected to a real-terms freeze in spending after taking into account economy-wide inflation, **this would leave a 3.4% real-terms annual increase for the whole of education spending between 2008/09 and 2010/11**. This is slower than the average annual increase seen over the period of the Labour government up to 2007/08 (4.6%).
- Alternatively, were NHS spending to grow by 3.1% a year in real terms (the annual average over the period of Conservative Government between 1979 and 1997), then this would allow education to by 5.2% a year, a real growth rate that would be comparable to that seen since April 1999. However, it seems likely that the NHS will get a spending award higher than this.

In sum, it appears that there is unlikely to be room in CSR 2007 for substantial increases to education spending, given other commitments and priorities. Alternatively, further cutbacks will need to be found in other spending areas if education is to be given as strong a priority as it has in recent years.

Appendix. Overall trends in public spending on education

Compared with other areas of public expenditure

Over Labour's first two terms in office (between April 1997-March 2005), there have been large increases in education spending after accounting for economy-wide inflation (4.8% a year); but perhaps surprisingly this has been only the fourth fastest broad area of spending growth, after spending on the NHS (6.1% a year), transport (5.1% a year) and public order and safety (4.9% a year)¹¹. However, education received much smaller average annual increases during the 18 years of Conservative governments from 1979 to 1997 (1.5%).¹²

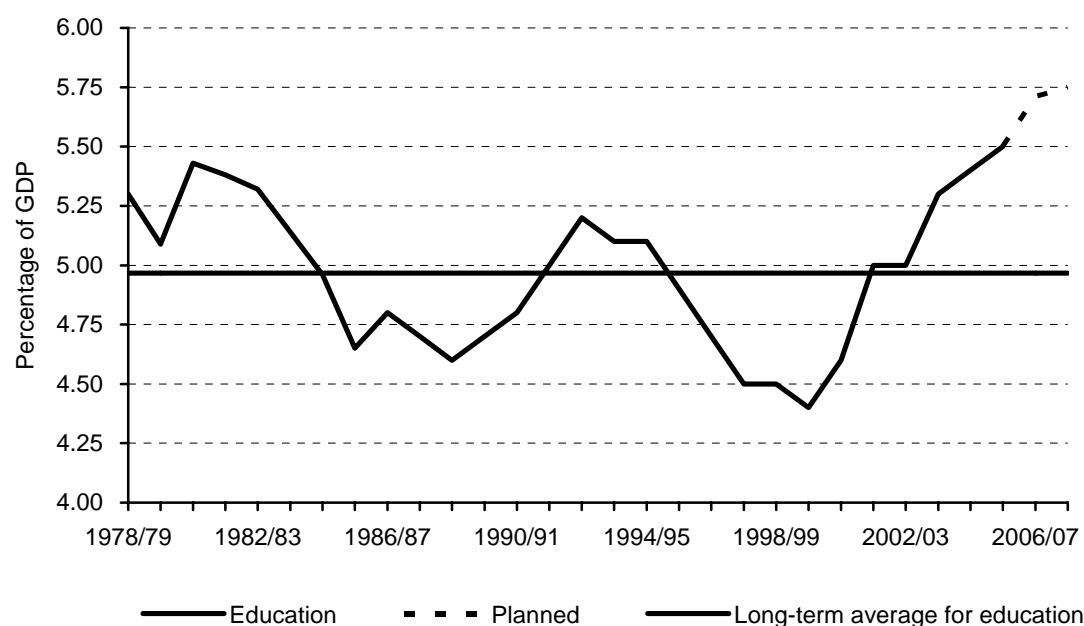
As a proportion of GDP

Since its lowest point for at least 20 years in 1999/2000 (at 4.4% of GDP), education spending has grown rapidly as a share of national income, and in 2005/06 it stood at 5.5%. This share is comparable to that last seen in the early 1980s and well above the average between 1978/79 and 2005/06 of 5.0%. By 2007/08, the share is projected to reach 5.8%. Training expenditure accounts for approximately a further 0.2% of GDP.

¹¹ This statement applies only when looking at the six main areas of public expenditure: education, health, public order and safety, transport, defence and social security. There are smaller areas of public expenditure that have experienced faster growth, for example, Overseas Development Assistance.

¹² Source: Education spending 1996-97-2004-5: Authors' calculations based on Public Expenditure Statistical Analyses 2005 Tables 1.11 and 3.2, and GDP deflators from 30 June 2005. All other figures are derived from C. Emmerson and C. Frayne, April 2005 "Public Spending", IFS Election Briefing Note <http://www.ifs.org.uk/bns/05ebn2.pdf>

Figure 5. Historical and forecast education spending, 1978/79 to 2007/08, as a share of national income



Source: HM-Treasury (2006) Public Expenditure Statistical Analyses 2006.
http://www.hm-treasury.gov.uk/media/375/5A/cm6811_comp.pdf

International comparisons

The UK spent a higher share of national income on education than Japan, Italy and Germany, but a lower share than the USA and France in 2002 (Table 1). This ranking is similar if we just consider *public* education spending as a proportion of GDP. *Private* education spending as a proportion of GDP is lower in the UK than in the USA and Japan, but higher than in France and Italy.

Table 1. Spending on education in selected major economies, 2002

	Total education spending, % of GDP	Public education spending, % of GDP	Private education spending, % of GDP
Japan	4.7	3.5	1.2
Italy	4.9	4.6	0.3
Germany	5.3	4.4	0.9
UK	5.9	5.0	0.9
France	6.1	5.7	0.4
USA	7.2	5.3	1.9

Source: OECD, *Education at a Glance*, Paris, 2005.

Table 2 shows spending per student (both public and private) and spending per student as a proportion of GDP per capita, relative to the UK, for selected OECD countries. It shows that the UK spends slightly more per student in the

primary sector than France and Germany, but quite a lot less than Japan, Italy and the USA. In the secondary sector, the UK spends much less per student compared to other OECD countries. The UK does spend more per student in the tertiary sector relative to other European countries, in absolute terms and relative to average income. However, the biggest spender per head in the tertiary sector is the USA. One interesting finding is that in comparison with other OECD countries, the UK spends substantially more per student in the under 5's category. Moreover, the under 5's is the only category where the UK outspends the USA.

Table 2. Spending per student on education by category.

	Spending per student, relative to the UK				Spending per student per unit of average income, relative to UK			
	Under 5's	Primary	Secondary	All tertiary	Under 5's	Primary	Secondary	All tertiary
Japan	44	119	107	99	48	122	113	105
Italy	64	140	116	74	72	150	126	80
Germany	59	88	108	93	66	94	113	100
UK	100	100	100	100	100	100	100	100
France	53	98	130	78	55	100	135	83
USA	93	156	140	174	76	122	109	139

Notes: Indices for spending per student are taken from figures that were converted into US dollars using purchasing power parities. Spending per student per unit of average income is calculated as spending per student by sector as a proportion of GDP per capita. Italy's figures only include spending on public institutions and the USA's figures only include spending on public and independent private institutions.

Source: OECD, *Education at a Glance*, Paris, 2005