



Schools Spending

IFS Briefing Note BN168
IFS election analysis: funded by the Nuffield Foundation



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Election 2015: Briefing Note 10

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Executive summary

- Current or day-to-day spending on schools in England has been relatively protected both compared with other areas of public service spending and compared with other areas of education spending under the coalition government. Between 2010–11 and 2014–15, current spending on schools has risen by 3.0% in real terms and by 0.6% in terms of real spending per pupil. This compares with a real-terms cut of 13.6% to the age 16–19 education budget and a large real-terms cut to capital spending (across all phases of education) of about one-third. Current public service spending was cut by just over 8% in real terms.
- The coalition government has made a number of important reforms to the school funding system in England, including: the introduction of the pupil premium; simpler school funding formulae, which help ensure local authority maintained schools, academies and free schools are funded on a similar basis; and giving schools more financial autonomy and responsibility.
- Even before the pupil premium, there was already a substantial level of funding targeted at deprivation. In 2010–11, funding per pupil was 35% higher amongst the most deprived set of primary schools than amongst the least deprived ones, and it was 41% higher amongst the most deprived secondary schools than amongst the least deprived. By 2014–15, these figures had increased to about 42% and 49%, respectively, as funding per pupil rose more strongly amongst more deprived schools as a result of the pupil premium.
- As well as a relatively generous settlement in the current parliament, squeezes on public sector pay mean that the actual costs faced by schools are likely to have increased by less than overall measures of economy-wide inflation. This is probably an important explanation for why the school workforce has not fallen since 2010. The number of teachers has held steady at 450,000 and the number of teaching assistants has actually increased from 210,000 in 2010 to reach 240,000 by 2013.
- There are likely to be some significant cost pressures on schools' spending over the next parliament. First, overall pupil numbers are expected to grow by 7% between 2016 and 2020. Second, the cost of employing staff for schools is likely to rise. There will be upward pressure on public sector pay levels in the next few years if private sector earnings continue to recover. The Office for Budget Responsibility

 $^{^1}$ The authors gratefully acknowledge funding from the Nuffield Foundation, which has provided generous support for ongoing IFS analysis relating to the 2015 general election.

The Nuffield Foundation is an endowed charitable trust that aims to improve social well-being in the widest sense. It funds research and innovation in education and social policy and also works to build capacity in education, science and social science research. The Nuffield Foundation has funded this project, but the views expressed are those of the authors and not necessarily those of the Foundation. More information is available at http://www.nuffieldfoundation.org.

Support from the Economic and Social Research Council (ESRC) through the Centre for the Microeconomic Analysis of Public Policy at IFS (grant reference ES/H021221/1) is also gratefully acknowledged.

(OBR) currently expects public sector pay per head to rise by 14.2% between 2014–15 and 2019–20. Additional employer pension contributions and higher National Insurance contributions (due to the end of contracting out) will further push up costs. The level of economy-wide inflation as measured by the GDP deflator is currently expected to be 9.1% between 2014–15 and 2019–20. If we account for the end of contracting out and increased employer pension contributions, we estimate that costs faced by schools will increase by 11.7% between 2014–15 and 2019–20. This increases to 16.0% if we further account for the OBR's assumptions for likely growth in public sector earnings.

• Labour and the Liberal Democrats have committed to protecting the age 3–19 education budget in real terms, though neither have said how this will be split across different parts of the budget. Meanwhile, the Conservatives have committed to protecting cash school spending per pupil. In practice, these commitments might imply similar overall settlements for schools if nominal spending increases are allocated equally across all areas by Labour and the Liberal Democrats (and assuming the protections are only just met). However, all could imply real-terms cuts to school spending per head of 7% between 2015–16 and 2019–20. This increases to 9% if we account for increases in National Insurance and pension contributions and to 12% if we also account for the OBR's assumption for likely growth in public sector earnings. This would be less generous than the real-terms increase in spending per pupil seen over the current parliament. There are clearer differences on proposals for education spending outside schools, such as 16–19 education, which has already seen large cuts.

1. Introduction

Since 2010, school spending in England has been protected from spending cuts. Current or day-to-day spending per pupil on schools has grown in real terms since 2010. This contrasts with other areas of education, such as reductions in education spending for 16- to 19-year-olds and cuts to capital spending. There have also been substantial reforms to the school funding system, such as the creation of the pupil premium. This briefing note focuses on changes in schools spending in England over time, comparing these with other areas of education spending, and examines how reforms to school funding have affected different groups of schools.

Although not the focus of this briefing note, it is important to acknowledge that there have been a number of other major reforms to the school system in England over the last parliament. The academies programme has rapidly expanded from around 200 schools in 2010 to over 3,500 in 2014 (covering more than half of all secondary schools). Over 250 applications for new free schools have been approved.² Teacher training has been restructured such that more training takes place within schools.³ There have been changes to teacher pay structures, with all schools needing to develop their own pay policies. Systems of accountability and qualifications have been reformed, with fewer (potentially lower-value) vocational qualifications counting in school performance tables. The majority of these reforms have given individual schools more responsibilities, with

² https://www.gov.uk/government/policies/increasing-the-number-of-academies-and-free-schools-to-create-a-better-and-more-diverse-school-system.

³ R. Allen, C. Belfield, E. Greaves, C. Sharp and M. Walker, *The Costs and Benefits of Different Initial Teacher Training Routes*, IFS Report R100, 2014, http://www.ifs.org.uk/publications/7435.

academies and free schools running more of their own affairs and all schools being asked to do more in terms of training teachers and setting pay policies.

In the rest of this briefing note, we focus on changes to school spending in England over the current parliament and how these compare with trends in spending across areas of the Department for Education's budget, which covers education from ages 3 to 19 (Section 2). This excludes spending on higher education, which is the responsibility of the Department for Business, Innovation and Skills and is discussed in other work by IFS researchers.⁴ We also examine the consequences of reforms to school funding in England and how funding per pupil has changed across different schools as a result of these reforms (Section 3). Finally, we examine likely challenges facing the incoming government after the 2015 general election and the plans the different parties have set out for schools and education spending (Section 4).

2. Overall spending patterns

The level of resource and capital spending for the Department for Education (DfE) in 2010–11 and 2014–15 (in 2015–16 prices) and the real-terms changes over these years (i.e. after accounting for economy-wide inflation) are shown in Table 2.1. Also shown are the level and change in spending across different areas of spending and phases of education. All figures quoted in the table and text are in 2015–16 prices.

The real-terms cut to overall DfE resource spending of 1.2% between 2010–11 and 2014–15 has been relatively small, certainly compared with resource spending across other departments, which has fallen by 8.3% in real terms over the same time frame. In contrast, DfE capital spending has been cut by around one-third in real terms, which is not only larger than the cut to DfE resource spending but also larger than the cut to capital DEL spending across other departments (around 15%).

Generally speaking, DfE's budget includes funding for education in England for children and young people up to age 19. This covers the early years, schools, 16–19 education and other smaller elements of DfE's budget.

In 2010–11, the schools budget accounted for the lion's share of DfE's resource budget: £37.5 billion or about 68% of DfE's resource budget. This includes grants from central government to local authorities and schools to cover education for children aged 5–16 in state-funded schools (including academies and local authority maintained schools).⁵ The overall schools budget has increased by 3.0% in real terms between 2010–11 and 2014–15. With pupil numbers growing by about 2.4% over the period,⁶ this represents a small increase in real spending per pupil of about 0.6%. This occurred despite a decision only to protect the main schools grant per pupil in cash terms. Overall, this was more than compensated for by the introduction of the pupil premium, spending on which reached £2.3 billion in 2014–15.

⁴ http://election2015.ifs.org.uk/higher-education.

⁵ Local authorities can top up this funding if they so wish, but this became increasingly uncommon after the introduction of the Dedicated Schools Grant in the mid-2000s. For instance, in 2013–14, local authority additional contributions to the schools budget represented about 0.1% of school expenditure in England.

⁶ Department for Education, 'National pupil projections: trends in pupil numbers, 2014, https://www.gov.uk/government/statistics/national-pupil-projections-trends-in-pupil-numbers-july-2014.

The area of DfE spending that has suffered the largest cuts has been 16–19 education, where spending has fallen by 14% in real terms between 2010–11 and 2014–15. The 16–19 education budget covers funding for further education colleges, sixth forms, apprenticeships, and grants to individuals to support post-16 participation by young people from low-income backgrounds (including the old education maintenance

Table 2.1. Department for Education DEL budget, 2010–11 and 2014–15

	2010–11	2014–15	% total change	% annual
	(£bn, 2015	–16 prices)	(real terms)	average
DfE total DEL	62.6	59.3	-5.3%	-1.4%
DfE capital DEL	7.8	5.1	-34.3%	-10.0%
DfE resource DEL	54.8	54.2	-1.2%	-0.3%
Of which:				
Early years budget	2.1	2.9	39.1%	8.6%
Schools budget (ages 5–16)	37.5	38.6	3.0%	0.7%
Of which:				
Dedicated Schools Grant	37.5	36.3	-3.1%	-0.8%
Pupil premium	0.0	2.3	n/a	n/a
16–19 education budget	8.8	7.6	-13.6%	-3.6%
Of which:				
Further education and sixth forms	7.2	6.5	-9.8%	-2.5%
Apprenticeships	0.9	0.8	-3.1%	-0.8%
EMA and 16–19 bursary	0.7	0.2	-66.7%	-24.0%
Other	6.4	5.0	-22.0%	-6.0%
Memo:				
Early Intervention Grant (DCLG)	2.7	1.6	-40.9%	-12.3%
Total DEL	403.1	366.2	-9.2%	-2.4%
Total capital DEL	54.3	46.2	-14.8%	-3.9%
Total resource DEL	348.8	319.9	-8.3%	-2.1%

Source: Early years budget covers expenditure on the entitlement to free nursery care; 2010–11 figure taken from https://www.nao.org.uk/report/delivering-the-free-entitlement-to-education-for-three-and-four-year-olds/; 2014–15 figure represents early years budget and additions for disadvantaged 2-year-olds within the Dedicated Schools Grant allocations for 2014–15, https://www.gov.uk/government/publications/dedicated-schools-grant-2014-to-2015#history. Figures for 2010–11 for the schools element of the Dedicated Schools Grant and pupil premium taken from baseline figures within 2011–12 schools funding settlement, http://webarchive.nationalarchives.gov.uk/20130123124929/http://www.education.gov.uk//schools/adminan dfinance/financialmanagement/schoolsrevenuefunding/settlement2012pupilpremium; figures for 2014–15 taken from 2014–15 Dedicated Schools Grant allocation tables (see above) and, for the pupil premium, https://www.gov.uk/government/publications/pupil-premium-2014-to-2015-illustrative-allocation-tables. Figures for 2010–11 for 16–19 education budget taken from Young People's Learning Agency Annual Report and Accounts 2011–12,

 $\frac{\text{https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/229164/0469.pdf; 2014-15}{\text{figures taken from Education Funding Agency, }\textit{EFA Business Plan 2014 to 2015,}}$

https://www.gov.uk/government/publications/efa-business-plan-2013-2015. Early Intervention Grant figures based on H. Chowdry and L. Sibieta, 'Trends in education and schools spending', IFS Briefing Note 121, 2011, http://www.ifs.org.uk/bns/bn121.pdf, and Local Government Financial Settlement for 2014–15, https://www.gov.uk/government/publications/breakdown-of-settlement-funding-assessment-final-local-government-finance-settlement-2014-to-2015. Figures for resource and capital DEL spending taken from *Public Expenditure Statistical Analyses 2014* (PESA 2014),

https://www.gov.uk/government/statistics/public-expenditure-statistical-analyses-2014. Deflators taken from OBR Public Finance Databank for Budget 2015, http://budgetresponsibility.org.uk/data/

allowance (EMA) and its replacement, the 16-19 bursary scheme⁷). The cuts since 2010-11 are partly driven by the fact that the new 16-19 bursary scheme has a much lower budget than the previous EMA. However, funding allocated to further education colleges and schools' sixth forms has also been cut by 10% in real terms (though schools with sixth forms might have been able to mitigate some of these cuts by cross-subsidising, given the greater generosity of the schools settlement). At the same time, the number of young people aged 16-18 in some form of education has grown by about 1% between the end of 2010 and 2013, though numbers in full-time education have fallen by 1%.

The third-largest element is the early years budget, which here only includes expenditure on the free entitlement to nursery care. This represented £2.1 billion in 2010–11 or about 4% of DfE's total resource budget. Funding for free early years entitlement is provided to local authorities via the Dedicated Schools Grant, which can then be used to fund provision of nursery care at local authority nurseries or private, voluntary and independent settings. Expenditure on the entitlement to free nursery care has increased substantially (by almost 40% between 2010–11 and 2014–15). This is the result of two specific policy changes. First, the entitlement to free nursery care for all 3- and 4-year-olds increased from 12.5 to 15 hours in September 2010. Second, and more significantly, it was extended to cover disadvantaged 2-year-olds from September 2013 onwards, at a current cost of about £0.7 billion. At this point, it is worth noting that the government also provides support for early years education and childcare as part of the tax and benefit system, such as through tax-free vouchers from employers (estimated to cost £860 million in 2014– 15^9) and subsidies delivered through in-work benefits and tax credits (estimated to cost £1.18 billion in 2012– 13^{10}).

Further support for early years services is provided through the Early Intervention Grant (which used to be part of DfE's budget, but has since been included in the overall local government settlement as part of the Department for Communities and Local Government (DCLG)'s budget. The Early Intervention Grant replaced a myriad of specific grants to local authorities to cover services for families and children across a wide range of ages (as well as some services for young people). The single largest element was funding for Sure Start children's centres. The value of the Early Intervention Grant has fallen by over 40% in real terms between 2010–11 and 2014–15 (from £2.7 billion in 2010–11 to £1.6 billion by 2014–15). However, the Early Intervention Grant is not hypothecated and local authorities have some freedom over how much to spend across these areas. Having said that, total expenditure on Sure Start children's centres has fallen by nearly 30% in real terms between 2010–11 and 2013–14. Therefore, whilst

⁷ http://www.ifs.org.uk/publications/5529.

⁸ https://www.gov.uk/government/statistics/participation-in-education-training-and-employment-age-16-to-18.

 $[\]frac{\text{https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/389539/20141231_expenditure_reliefs_v0.3.pdf.}{\text{https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/389539/20141231_expenditure_reliefs_v0.3.pdf.}{\text{https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/389539/20141231_expenditure_reliefs_v0.3.pdf.}{\text{https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/389539/20141231_expenditure_reliefs_v0.3.pdf.}{\text{https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/389539/20141231_expenditure_reliefs_v0.3.pdf.}{\text{https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/389539/20141231_expenditure_reliefs_v0.3.pdf.}{\text{https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/389539/20141231_expenditure_reliefs_v0.3.pdf.}{\text{https://www.gov.uk/gov.u$

 $[\]underline{\text{https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/384916/cwtc_awards_revised.odf.}$

¹¹ It is important to note here that £0.7 billion of expenditure on the entitlement to free nursery care for disadvantaged 2-year-olds was moved from the Early Intervention Grant to the Dedicated Schools Grant in 2014–15. However, this expenditure represented less than £0.1 billion in 2010–11, such that the change in the level of the Early Intervention Grant probably represents a genuine cut in expenditure on the specific services covered by the grant when it was created in 2010–11.

¹² Total expenditure on Sure Start children's centres represented £1.52 billion in 2010–11 (https://www.gov.uk/government/statistics/local-authority-and-school-expenditure-on-education-childrens-

expenditure on the entitlement to free nursery care has clearly risen, expenditure on specific early intervention services has fallen substantially.

Other expenditure represented about £5.0 billion in 2014–15. This covers expenditure on teaching training, the Education Services Grant (which is given to local authorities to cover central services provided by the authority) and other smaller areas of education spending.

In summary, overall day-to-day spending on schools has been protected from real cuts since 2010 and has fared relatively well compared with other areas of education spending (with 16–19 education, specific early intervention services and capital spending seeing large cuts). However, there are still likely to be substantial differences in funding trends for different schools as the real-terms increase in schools spending was entirely explained by the funding associated with the pupil premium (we investigate this issue in more detail in Section 3).

2.1 Comparison with past changes in spending

How do these patterns of spending changes compare with the spending increases that took place under the previous Labour government? Table 2.2 shows the average annual real-terms increases across different areas of education spending in England between April 1998 and March 2009. These represent slightly different definitions of spending and do not cover Labour's full period in office, but they do give a sense of relative spending priorities. Here, we see that the real-terms increases in current or resource spending on schools since 2010–11 (0.7% per year) are in addition to the growth seen under Labour, albeit at a much slower rate. Spending on the under-5s also increased in real terms

Table 2.2. Increases in various components of public spending, April 1998 to March 2009

	Average annual real increase, April 1998 to March 2009
Education (England only)	5.2
Schools	5.6
Of which:	
Capital spending	12.9
Current spending	5.0
Of which:	
Under-5s	6.1
Primary schools	3.9
Secondary schools	5.0
Further education	7.7
Higher education	2.3
Other education spending	5.6

Source: Department for Children, Schools and Families departmental report 2009. Original figures published in 2007–08 prices using March 2009 GDP deflators.

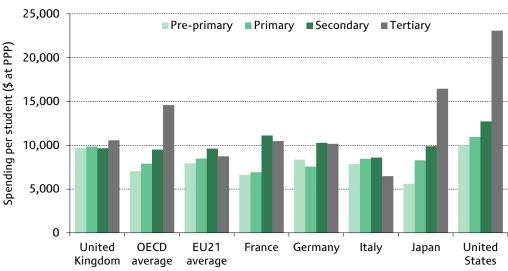
between 1998 and 2009 (by just over 6% per year, on average). Increases in expenditure on free entitlement to nursery care represent a continuation of that trend, though reduced expenditure on specific services (such as Sure Start) represents a partial reversal. The real-terms fall in further education and sixth form spending seen since 2010–11 (falling about 2.5% per year, on average) is quite a strong contrast with the large real-terms increase of 7.7% per year, on average, in the further education budget between 1998 and 2009. The large fall in capital spending under the coalition also represents at least a partial reversal of the large real-terms increase seen under Labour.

In summary, there are some similarities between the education spending priorities of the coalition government and the previous Labour government, with the coalition continuing real-terms growth in schools and under-5s spending. However, under Labour we saw stronger growth in schools capital spending than in current spending and faster growth in further education spending than in schools. Under the coalition, we see the reverse, with schools current spending growing faster than capital spending and stronger growth in schools than in further education spending.

2.2 International comparisons

How does spending across different phases of education compare with that seen in other countries? Here, we must examine education spending at the UK level, rather than just for England. However, such comparisons are still informative for considering how overall levels of spending on different phases of education across the UK differ from levels in other countries. Figure 2.1 shows total spending per student across different stages of education in 2011 in the UK, the (weighted) average in the OECD, the average across EU countries and the level in each of the G7 countries (excluding Canada, for which comparative data are not available). These spending figures include both public and private expenditure, and are measured using US dollars converted using purchasing power parities (PPPs). The graph shows that the UK spends more per pupil in the preprimary sector than both the OECD and EU averages, and a similar level in 2011 to that seen in the US. The UK also spends above the OECD and EU averages in both primary and

Figure 2.1. Profile of spending per student across stages of education in 2011, G7 countries and EU/OECD averages 25,000 ■ Pre-primary
■ Primary
■ Secondary
■ Tertiary



Note: EU21 refers to countries that are members of both the OECD and the European Union. Source: OECD, Education at a Glance 2014, http://dx.doi.org/10.1787/888933116908.

secondary schools, though the difference here is smaller than is the case for pre-primary education. Spending per student is below the OECD average in the tertiary sector (which includes universities). Spending per student is higher in Japan and much higher in the US, largely reflecting the higher levels of private contributions to tertiary education spending in both of these countries. However, UK spending per pupil in the tertiary sector is above the EU average and the European countries shown here.

In broad terms, these data show that the UK's profile of spending per pupil is actually relatively flat across ages. This contrasts quite sharply with the OECD average, the US and Japan, where spending per pupil increases with age. In other EU countries, spending per pupil also generally increases with age (apart from a small drop at tertiary level), though the profile is less steep than is the case for other OECD countries.

3. School funding changes

Broadly speaking, the way the school funding system operates in England is that each local authority receives a grant from central government (called the Dedicated Schools Grant¹³), which it has to spend on schools. It can retain some of this money to spend on central services for all local authority maintained schools. However, local authorities allocate the vast majority to schools in their area using a locally-determined funding formula. A number of different factors are used in the local authorities' respective formulae, the most important being the number of pupils and the number of pupils from disadvantaged backgrounds at individual schools.

The coalition government has made a number of important changes to this system since 2010, as summarised in Table 3.1. These have had important consequences for changes in funding across different groups of schools. In this section, we describe this set of reforms and how funding per pupil has changed across schools and local authorities as a result.

Table 3.1. Major changes to the school funding system

Year	Description of reforms
2010–11	Specific grants streamlined into Dedicated Schools Grant
2011–12	Introduction of pupil premium
2012–13	More responsibilities devolved to maintained schools
	Extension of pupil premium to cover pupils eligible for free school meals in past six years
2013–14	Introduction of simpler local funding formulae
	Pupil premium level set at higher level for primary schools
2014–15	Pupil premium increased by more for primary schools
2015–16	Reforms to allocation of grant to local authorities

¹³ Before 2010–11, schools received funding from a range of specific grants in addition to their main grant from local authorities. In 2010–11, these specific grants were all streamlined into the Dedicated Schools Grant. At the same time, local authorities could take account of how much schools received from specific grants in previous years to ensure schools were not disadvantaged by this change.

3.1 Policy background

As part of the 2010 Spending Review settlement, the coalition government announced a cash-terms freeze in all existing school funding per pupil and the creation of a pupil premium targeted at disadvantaged pupils. The net result is that the most deprived schools have seen the largest increases in funding between 2010–11 and 2014–15, with less deprived schools seeing smaller increases (and, in some cases, falls in funding per pupil in real terms).

The pupil premium was initially set at £488 14 for each pupil registered as eligible for free school meals (FSM) in 2011–12. This has grown over time and been expanded to cover pupils ever eligible for FSM in the past six years, and a higher level has been provided to primary schools. In 2014–15, the level of the pupil premium was £1,300 per primary school pupil and £935 per secondary school pupil. This differentiation was justified on the basis that early intervention was more effective than later intervention in helping to improve the attainment levels of disadvantaged pupils and would also help ensure they are ready for secondary school. 15

Even before the pupil premium, there was already a substantial level of funding targeted at deprivation. As we shall see below, funding per pupil was already 35% higher in primary schools with the greatest proportion of disadvantaged pupils than in the least deprived ones in 2010–11, and it was 41% higher amongst the most deprived secondary schools than amongst the least deprived. The pupil premium came on top of this and made the school funding system even more targeted at deprived schools by 2014–15.

In addition to the pupil premium, the coalition government has implemented a number of other reforms to the school funding system in England – a system which has clearly been in need of reform for a number of years as successive ad hoc changes had left it overcomplicated and unintelligible.

First, grants provided to local authorities have not been based on an explicit formula since at least 2004, with allocations instead being largely based on proportional increases in funding per pupil on the previous year. Indeed, between 2010–11 and 2014–15, existing grants to local authorities have been frozen in cash terms per pupil. However, from April 2015, the government has introduced a minimum funding formula for determining the level of per-pupil funding provided to different local authorities. If local authorities receive less than the level given by the formula, then their grant will be topped up to the minimum level. If they receive more, then their funding per pupil will be frozen in cash terms (as it has been over the current parliament). The new formula has been designed in a way to minimise the degree of turbulence across local authorities. If It also incorporates an updated and improved methodology for accounting for differences in costs across areas. This is less generous to some local authorities than the current system, particularly those in Inner London. For instance, the current area cost adjustment in Inner London is about 27%, whilst the new method provides an uplift of about 19% instead.

¹⁴ http://www.parliament.uk/briefing-papers/SN06700.pdf.

¹⁵ http://www.publications.parliament.uk/pa/cm201314/cmhansrd/cm130717/debtext/130717-0001.htm#13071772000004.

¹⁶ It represents an average of school funding formulae currently used by different local authorities.

This reform has the welcome feature of using a transparent formula for determining funding levels across different local authorities for the first time since at least 2004. It also has the welcome feature of correcting some previous anomalies, such as in the area cost adjustment. However, there is some uncertainty as to what comes next. The government has said it will introduce a national funding formula 'when the time is right', but has not said what this is likely to look like in practice.¹⁷

Second, until 2013–14, local authorities used a wide array of different and historical factors in their own formulae for allocating funding to schools. Different authorities used different formulae. The resulting system was complex and in many ways arbitrary. The rapid expansion in the number of academies and free schools has also added to the complexity as separate formulae were created in an attempt to ensure that academies and free schools were funded by central government on a similar basis to nearby maintained schools. In 2013–14, the government required all local authorities to introduce simplified local school funding formulae, setting out which factors local authorities could use in their formulae (e.g. number of pupils, different measures of deprivation and need, fixed costs), and use up-to-date factors. Local authorities then decided how much funding to attach to different factors. This has reduced the complexity of the system, reduced dependence on out-of-date factors and increased transparency. Academies and free schools are also covered by these formulae, which has further reduced complexity.

Lastly, schools have been given responsibility for more financial decisions, which has increased the amount of expenditure over which individual schools (as opposed to local authorities) have control. This is the result of two specific changes. First, the rapid conversion to academy status has given converting academies more responsibilities (academies receive additional grants to cover services that were previously provided by local authorities). Second, in 2012-13, funding for services that had previously been provided centrally by local authorities now had to be passed to individual schools. This meant that greater levels of funding were given to schools, though this came with extra responsibilities. As a result, funding allocated to individual schools will have grown faster than the overall schools budget, though this is just a consequence of a reallocation of funds from local authorities to schools. 18 Local authorities had to devolve some responsibilities and expenditure to schools (e.g. devolved elements of threshold and performance pay), representing just over 1% of local authorities' schools budgets in 2010-11. However, local authorities could also transfer further services and expenditure to schools at the discretion of school forums¹⁹ (e.g. behaviour support services and school-specific contingencies), which represented just under 3% of local authorities' schools budgets in 2010-11.

3.2 Changes in funding per pupil between 2010-11 and 2014-15

How has funding per pupil changed across different groups of schools as a result of these reforms? In order to answer this question, we make use of publicly-available data on funding per pupil across all local authority maintained schools in England for 2010-11

¹⁷ Department for Education, 'Fairer schools funding in 2015–16', Consultation Document, https://www.qov.uk/qovernment/consultations/fairer-schools-funding-2015-to-2016.

¹⁸ These reforms are described in more detail in H. Chowdry, J. Cribb and L. Sibieta, 'Schools' relationship with local authorities: lessons from the decentralisation of healthcare commissioning', Centre for Understanding Behaviour Change, Short Policy Report 12/05, 2012, http://www.ifs.org.uk/publications/6489.

¹⁹ A school forum is a decision-making body comprised of representatives from schools in the local area.

through to 2013–14 (this excludes academies, a subject we return to below). We simulate 2014–15 levels based on known policy changes (increases in the pupil premium and a cash-terms freeze in existing funding per pupil). We then split primary and secondary schools into five equally-sized groups based on school-level deprivation (proportion of pupils eligible to receive free school meals) and examine real-terms changes in funding across each quintile, together with the average change. The results are shown in Figure 3.1a for primary schools and 3.1b for secondary schools.

Figure 3.1 shows that there was already a substantial level of funding targeted at deprivation in 2010–11, with funding per pupil 35% higher amongst the most deprived set of primary schools than amongst the least deprived ones, and 41% higher amongst the most deprived secondary schools. By 2014–15, these figures had increased to 42% and 49%, respectively, as funding per pupil rose more strongly amongst more deprived schools as a result of the pupil premium.

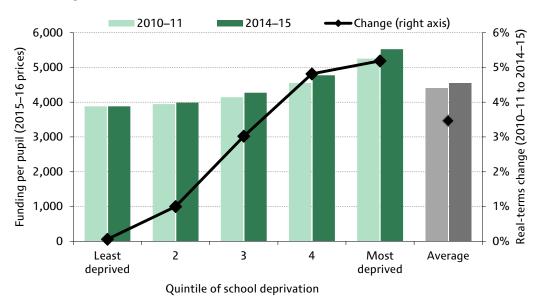
However, there are a number of further nuances and qualifications worth noting. First, there is a clear picture of higher increases in funding for more deprived primary schools, with the most deprived quintile seeing a real-terms increase of over 5% and the least deprived quintile seeing a real-terms freeze. For secondary schools, the picture is not quite as simple as it is the second-most-deprived quintile that saw the largest increase in funding per pupil (which we return to below).

Second, the increases in average funding per pupil of 3.5% in real terms for primary and over 4% for secondary schools between 2010–11 and 2014–15 are clearly larger than the 0.6% real-terms increase in the overall schools budget per pupil seen in Section 2. These differences almost certainly result from the fact that local authorities must now pass a greater share of the schools budget on to individual schools, with schools taking on extra responsibilities. The set of responsibilities that had to be devolved to schools represented about 1% of local authorities' schools budgets in 2010–11, whilst further services that could be devolved at the discretion of school forums represented about 3%. Assuming that all services were devolved means that we would expect individual schools' funding levels to be artificially boosted by about 4%, which is close to what we see. This means that the 3.5% and 4% figures are probably an overstatement of the increase in school resources per pupil (the 0.6% real-terms increase in the overall schools budget per pupil is a better measure of this). However, differences across schools are still likely to give an indication of how changes in funding per pupil have differed by deprivation.

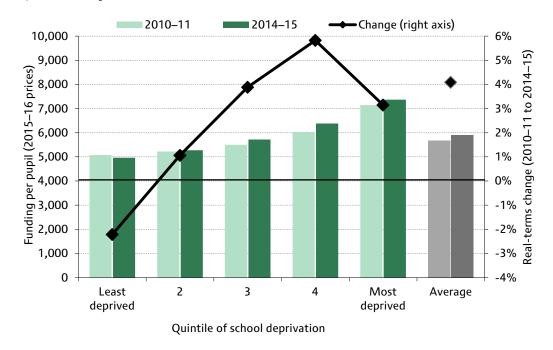
Third, this analysis excludes academies, data for which are only available up to 2012–13. This is potentially a big concern as over half of secondary schools have converted to academy status since 2010, though fewer primary schools have done so. If schools that became academies were not representative of schools as a whole (e.g. had particularly low or high levels of deprivation), this could bias some of the changes shown in Figure 3.1. Partly allaying such concerns, Appendix Table A.1 shows that the average levels of FSM eligibility for primary schools do not change greatly over time, suggesting that we are looking at similar maintained schools in terms of deprivation over time within each quintile. For secondary schools, average eligibility for FSM increases slightly over time across all quintiles bar the most deprived quintile, which might be one explanation for why the most deprived secondary schools do not see a larger increase in funding per pupil. Appendix Figure A.1 compares the funding levels of academies and maintained schools in 2012–13 within each quintile. This is based on a measure of funding per pupil

Figure 3.1. Changes in funding per pupil by quintile of school deprivation level between 2010–11 and 2014–15 (2015–16 prices)

a) Primary schools



b) Secondary schools



Note: Quintiles based on percentage of pupils eligible for free school meals in January 2010 and 2013 (with the latter acting as a proxy for January 2014). Quintiles are defined separately for primary and secondary schools.

Source: Consistent Financial Reporting Data, 2010–11

(http://www.education.gov.uk/schools/performance/2011/download_data.html) and 2013–14 (http://www.education.gov.uk/schools/performance/download_data.html); author's calculations.

designed to be as consistent as possible between academies and maintained schools.²⁰ Although this measure is somewhat imperfect, funding per pupil is only slightly higher for academies than for maintained schools within the same quintile in 2012–13. This suggests that maintained schools and academies within each quintile are broadly similar in terms of average funding per pupil. Ideally, we would also examine changes in funding per pupil for academies; however, no such data exist for academies before 2011–12.

3.3 Effects of reforms to local authority funding in 2015–16

Here, we analyse the implications of changes to local authority funding for 2015–16.²¹ Table 3.2 shows the cash-terms changes in funding per pupil across local authorities with different levels of deprivation in 2015–16. Note that the cash increase of 1.3% on average equates to roughly flat real-terms funding per pupil. We divide local authorities into five equally-sized groups based on the proportion of pupils eligible for free school meals and calculate the average cash-terms changes under the reforms as well as the proportion of local authorities receiving any cash-terms increase. This highlights some clear differences according to deprivation. Local authorities with low levels of FSM are due to receive a slightly higher average increase (2.9%) than those with high levels of FSM (0.3%).

One likely explanation for this pattern is the fact that, on average, local authorities tend to spread out extra funds provided for deprivation across all schools in their area, rather than focus it on schools with higher levels of deprivation. This flattening of deprivation funding has been well observed in the past.²² As a result, the new system will be slightly less generous to local authorities with higher levels of deprivation than the current distribution of funds across local authorities, as the new formula is the average of the formulae currently used by local authorities.

Table 3.2. Changes in local authority funding per pupil by level of deprivation (2015–16)

Local authority type	Average increase (%)	Proportion of local authorities with an increase in funding (%)
Least deprived	2.9	84
2 nd quintile	1.9	68
Middle quintile	0.9	38
4 th quintile	0.6	23
Most deprived	0.3	13
All local authorities	1.3	54

Note: Quintiles are defined by dividing local authorities into five equally-sized groups based on the proportion of pupils eligible for free school meals in January 2014 (averaged over primary and secondary pupils). Source: Author's calculations using 'Fairer schools funding: arrangements for 2015 to 2016', https://www.gov.uk/government/publications/fairer-schools-funding-arrangements-for-2015-to-2016 and 'Schools, pupils and their characteristics: January 2014', https://www.gov.uk/government/statistics/schools-pupils-and-their-characteristics-january-2014.

²⁰ This excludes the extra income that academies receive for delivering extra services previously provided by local authorities (the Local Authority Centre Services Element Grant or LACSEG). The measure of funding used in Figure A.1 is not perfect as it includes the extra grants for insurance and start-up grants that academies also receive.

²¹ The pupil premium was also protected in real terms in the 2013 Spending Round, though this is not discussed here (see https://www.gov.uk/government/topical-events/spending-round-2013).

²² H. Chowdry, A. Muriel and L. Sibieta, *Level Playing Field? The Implications of School Funding*, CfBT Education Trust, Reading, 2008, http://www.ifs.org.uk/publications/4252.

Table 3.3. Changes in local authority funding per pupil by region (2015–16)

Local authority region	Average increase (%)	Proportion of local authorities with an increase in funding (%)
South West	2.4	87
Outer London	2.1	37
East Midlands	2.0	67
East of England	2.0	64
West Midlands	1.7	57
South East	1.1	58
North West	0.9	39
North East	0.7	17
Yorkshire and the Humber	0.5	33
Inner London	0.3	7
All local authorities	1.3	54

Source: Author's calculations using 'Fairer schools funding: arrangements for 2015 to 2016', https://www.gov.uk/government/publications/fairer schools funding arrangements for 2015 to

https://www.gov.uk/government/publications/fairer-schools-funding-arrangements-for-2015-to-2016 and 'Schools, pupils and their characteristics: January 2014', https://www.gov.uk/government/statistics/schools-pupils-and-their-characteristics-january-2014.

There are also clear differences across regions (see Table 3.3). The regions experiencing the largest average increases are Outer London and the South West. The region experiencing the smallest increase is Inner London. This pattern is less surprising. It results from the fact that the new area cost adjustment is less generous to Inner London than the current system.

Under these reforms, local authorities that currently receive more than implied by the formula will see their funding per pupil frozen in cash terms. One obvious policy option for the future could be to continue with this approach so that local authorities above the formula amount continue to see cash-terms freezes until the formula catches up with them. This would imply that the patterns by region and by deprivation level would continue for a number of years into the next parliament (how long will depend on how the formula is uprated). However, none of the three main UK political parties has set out plans for school funding reform beyond 2015. The government has said it will introduce a national funding formula 'when the time is right', but has not said what this is likely to look like in practice.²³

4. Future challenges

There a number of challenges a new government will face in terms of pressures on schools spending. First, the pupil population is rapidly expanding. Figure 4.1 shows the actual and forecast changes in the number of pupils in primary and secondary schools between January 2008 and January 2020. To date, the primary school population has grown by about 8% between 2010 and 2014, whilst the secondary school population has fallen by about 4%, leading to a net increase of 2.4%. Between 2016 and 2020, we expect to see a rise in both the primary school population (of 5%) and the secondary school

²³ Department for Education, 'Fairer schools funding in 2015–16', Consultation Document, https://www.qov.uk/qovernment/consultations/fairer-schools-funding-2015-to-2016.

4,000 Primary (ages 5–10) Secondary (ages 11–15)

3,000

2,000

Figure 4.1. Actual and forecast pupil numbers at state-funded schools January 2008 to January 2020

Note: Data and projections are for January each year. Age is at the start of the academic year. Dashed lines denote forecast years.

2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020

Source: Department for Education, 'National pupil projections: trends in pupil numbers, 2014, https://www.qov.uk/qovernment/statistics/national-pupil-projections-trends-in-pupil-numbers-july-2014.

population (10%), leading to a net expected rise of 7% in the school population. This growth in pupil numbers will place pressure on both the current budget and the capital budget (the latter is already planned to be cut by over 40% between 2010–11 and 2015–16).

These increases in pupil numbers are expected to differ across regions. London is expected to see the largest growth, with current projections implying a 14% increase in primary school pupils and a 3% increase in the secondary school population between 2012 and 2017.²⁴ All regions are expected to see growth in the primary school population over this time (though less than in London). However, London is the only region expected to see growth in the secondary school population. The fact that the increases in the pupil population are concentrated in London poses clear challenges for policymakers as this is the region that has already seen the largest growth to date and where space is at a premium.

Second, there are likely to be significant pressures on the cost of staff. To date, public sector pay levels have been squeezed significantly, with freezes in 2011–12 and 2012–13 (for all but the lowest-paid staff) and 1% increases in 2013–14, 2014–15 and 2015–16. These squeezes on public sector pay have meant that the actual costs faced by schools are likely to have increased by less than overall measures of economy-wide inflation. This is probably an important explanation for why the school workforce has not fallen since 2010. Indeed, the number of teachers has held steady at 450,000 and the number of teaching assistants has actually increased from 210,000 in 2010 to reach 240,000 by

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²⁴ See figures 3a and 3b, https://www.gov.uk/government/statistics/national-pupil-projections-trends-in-pupil-numbers-july-2014.

2013.²⁵ However, there are likely to be significant pressures on the cost of staff in the coming years.

There could well be upward pressure on public sector pay levels if private sector earnings continue to recover. Indeed, the Office for Budget Responsibility (OBR) currently expects public sector pay per head to rise by 14.2% between 2014–15 and 2019–20.²⁶ Additional employer pension and National Insurance contributions will further push up the cost to schools of employing teachers and other staff. From September 2015, employer contributions to the teacher pension scheme (TPS) will rise from 14.1% to 16.5%. From April 2016, the introduction of the single-tier pension will mean that it will no longer be possible for members of the TPS to contract out of the state second pension (this is happening for all members of defined-benefit pension schemes), which will increase employer National Insurance contributions (NICs) paid by schools by 3.4 percentage points (from 10.4% to 13.8%).

The level of economy-wide inflation as measured by the GDP deflator is currently expected to be 9.1% between 2014–15 and 2019–20. If we account for the end of contracting out and increased employer pension contributions, we estimate that costs faced by schools will increase by 11.7% between 2014–15 and 2019–20. This increases to 16.0% if we then further account for the OBR's assumptions for likely growth in public sector earnings. 27

What differences are there between the three main UK parties in terms of their proposals for schools and education spending over the next parliament? Labour²⁸ and the Liberal Democrats²⁹ have committed to protecting the 3–19 education budget in real terms, though neither have said how this will be split across different areas of the budget. Meanwhile, the Conservatives³⁰ have committed to protecting nominal school spending per pupil.

If we assume that all these protections are just met and that Labour and the Liberal Democrats increase all elements of the 3–19 education budget by equal percentage amounts, then there might be little expected difference between the three parties in terms of their proposals for school spending. Pupil numbers are expected to grow by 7% between January 2016 and January 2020, whilst economy-wide inflation between 2015–16 and 2019–20 is currently forecast to be 7.7%. As a result, the overall level of school spending could grow by similar amounts under the different proposals. However, if only just met, all these proposals imply real-terms cuts in spending per pupil. Combined with

²⁵ https://www.gov.uk/government/statistics/school-workforce-in-england-november-2013.

²⁶ Fiscal supplementary table 2.29 of Office for Budget Responsibility, *Economic and Fiscal Outlook: March 2015*, http://budgetresponsibility.org.uk/economic-fiscal-outlook-march-2015/.

²⁷ This figure is based on the expected changes in the costs of three types of inputs: teachers (51% of school expenditure), other staff (29%) and non-staff costs (20%). We assume teacher and other staff salary costs rise in line with the OBR assumptions for public sector pay per head between 2014–15 and 2019–20, to which we add additional employer pension contributions (teachers only) and NICs (both types of staff) as a proportion of total employer costs (employer costs calculated using the 2014 Annual Survey of Hours and Earnings (ASHE) for average salaries of teachers and teaching assistants, to which we add employer pension and National Insurance contributions on the basis of expected systems in place in 2014–15 and 2019–20). Changes in non-taff costs are assumed to follow the GDP deflator. Changes in the expected costs of each input type are then weighted by schools expenditure shares in 2013–14 (https://www.gov.uk/government/statistics/schools-education-and-childrens-services-spending-2013-to-2014).

http://press.labour.org.uk/post/110805266184/speech-by-ed-miliband-on-education-at-haverstock.

²⁹ http://www.libdems.org.uk/policy_paper_121.

³⁰ http://www.bbc.co.uk/news/education-31087137.

plans for 2015–16, these proposals imply a real-terms cut in school spending per pupil of about 7% between 2014–15 and 2019–20. This increases to 9% if we account for increases in National Insurance and pension contributions and to 12% if we also account for the OBR's assumption for likely growth in public sector earnings. The plans from all three main parties are therefore much less generous than the small real-terms increase in spending per pupil experienced over the current parliament.

One subtle difference between the proposals from the three main UK parties relates to who bears the risk of inflation or changes in pupil numbers. Under the Conservative proposals, the government would bear the risk that the pupil population grows by more or less than current projections, with schools bearing the risk of any changes to expected inflation. In contrast, under Labour and Liberal Democrat plans, the government would bear the risk of changes in inflation and the school sector would bear the risk of any revision to the growth in pupil numbers.

There appears to be a bigger difference between the parties in terms of other elements of education spending. Both Labour and the Liberal Democrats have committed to protecting the entire 3–19 education budget. Depending on how this is allocated across areas, this could be more generous for 16–19 education than the real-terms cuts seen in the current parliament. It could also allow schools spending to increase in real terms (if these other areas see below-real-terms increases). The Conservatives have not made any commitments for education spending outside of the schools budget. However, if the 16–19 education budget experiences the same rate of cuts as seen over the current parliament, then the overall 16–19 education budget would have fallen by 28% between 2010–11 and 2019–20.

Appendix

Table A.1. Average levels of eligibility for FSM by quintile over time

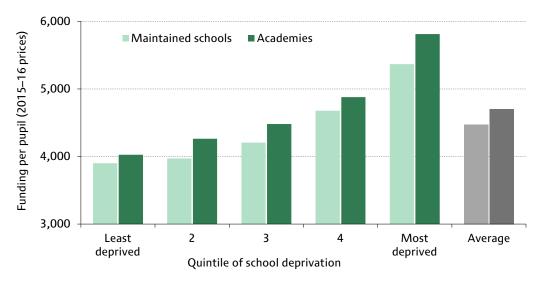
	2010–11	2014–15
Primary schools		
Least deprived	2.9	3.0
2 nd quintile	7.3	7.3
3 rd quintile	12.6	12.5
4 th quintile	21.6	21.0
Most deprived	39.4	38.3
Secondary schools		
Least deprived	3.6	5.1
2 nd quintile	7.5	9.7
3 rd quintile	11.8	14.4
4 th quintile	19.2	21.2
Most deprived	35.8	35.5

Source: 'Schools, pupils and their characteristics: January 2011',

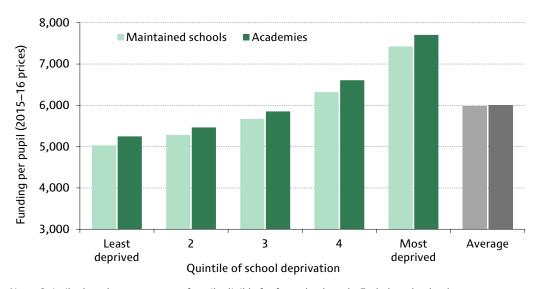
https://www.gov.uk/government/statistics/schools-pupils-and-their-characteristics-january-2011; 'Schools, pupils and their characteristics: January 2013', https://www.gov.uk/government/statistics/schools-pupils-and-their-characteristics-january-2013; author's calculations.

Figure A.1. Funding per pupil at maintained schools and academies, 2012–13

a) Primary schools



b) Secondary schools



Note: Quintiles based on percentage of pupils eligible for free school meals. Excludes schools where accounts are reported as part of Multiple Academies Trusts. Income from LACSEG excluded for academies. Source: Consistent Financial Reporting Data, 2012–13,

http://www.education.gov.uk/schools/performance/2013/download_data.html; Income and Expenditure of Academies, 2012–13, https://www.gov.uk/government/statistics/income-and-expenditure-in-academies-inengland-2012-to-2013.