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School spending in England: trends over time and future outlook

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Executive summary

Following large increases over the 2000s, school spending per pupil in England fell in real terms from about 2010 onwards. The present government sought to reverse this picture in 2019 by providing a three-year settlement for school spending increases up to 2022–23. This briefing note provides an update on school spending trends over time, covering the most recent sets of data, forecasts and policy announcements. School spending covers pupils in state-funded schools aged 5–16, as well as pupils aged 16–19 in school sixth forms. Where necessary, we also include pupils aged 3–4 in early years settings.

Section 1 begins by examining trends in total school spending per pupil over time, including spending by local authorities. This allows us to show how spending per pupil has changed in recent years, likely future trends, and how a consideration of the specific cost pressures faced by schools changes this picture. In Section 2, we look at spending by primary and secondary schools (excluding spending by local authorities) over the long run back to the 1970s. Given the government's focus on levelling up poorer parts of the country, Section 3 examines trends by levels of deprivation and the role of the National Funding Formula for schools. This illustrates that more deprived schools have seen and will continue to see larger cuts in funding, running counter to the levelling-up agenda. Finally, Section 4 discusses the overall pressures on school spending in the future, including pressures on teacher pay and the likely long-lasting effects of the pandemic.

Key findings

- 1 School spending per pupil in England fell by 9% in real terms between 2009–10 and 2019–20, the largest cut in over 40 years.
- 2 The government has allocated an extra £7.1 billion for schools in England through to 2022–23. Whilst this will increase spending per pupil by over 8%, school spending per pupil in 2022–23 will still be 1–2% lower in real terms than in 2009–10.
- 3 Over the long run, spending per pupil has gone up faster in primary schools than in secondary schools. In the late 1980s, secondary school spending per pupil was over 60% higher than spending in primary schools. In 2019–20, the difference was only 14%.
- 4 Deprived schools have seen larger cuts. The most deprived secondary schools saw a 14% real-terms fall in spending per pupil between 2009–10 and 2019–20, compared with a 9% drop for the least deprived schools. The National Funding Formula has continued this pattern by providing bigger real-terms increases for the least deprived schools (8–9%) than for the most deprived ones (5%) between 2017–18 and 2022–23. This runs counter to the government’s goal of levelling up poor areas.
- 5 Delivering a (delayed) manifesto commitment to increase teacher starting salaries to £30,000 will require a 17% cash-terms rise in starting salaries over 2022 and 2023. With salaries for more experienced teachers 8% lower in real terms than in 2007, there will also be pressure to increase other teacher salaries to avoid serious recruitment and retention problems.
- 6 Missed face-to-face schooling during the pandemic is likely to have long-lasting effects on children’s education. So far, the government has only provided about £3 billion of the £15 billion reportedly recommended by the Education Recovery Commissioner for catch-up.

1. Total school spending per pupil

Figure 1.1 shows total school spending per pupil aged 3–19 between 2003–04 and 2019–20 broken down into three different components:

- **Funding allocated to schools.** This includes funding directly allocated to schools and early years providers. Early years providers are included because primary school budgets include funding for nursery pupils in some years. This will also include special schools.
- **Local authority spending.** This includes central spending on a range of services for pupils with special educational needs, admissions, transport, educational psychology and other services.
- **Sixth-form funding.** This is funding provided to schools for pupils aged 16–19, which is often included within total school expenditure figures.

In 2003–04 (the earliest year for which we can produce this consistent set of figures), total school spending stood at about £5,850 per pupil in 2021–22 prices. This rose by 23% in real terms up to 2009–10, reaching a high-point of £7,200 per pupil. After 2009–10, spending per pupil fell by 9% in real terms to reach £6,550 in 2019–20, taking spending per pupil back to about the level last seen around 2005 and 2006.¹

As Table 1.1 shows, over the six years up to 2009–10, each component rose by roughly a quarter in real terms. After 2009–10, the different components evolved very differently. Per-pupil spending by schools rose by around 4% in real terms. In contrast, local authority spending on services fell by 57% in real terms between 2009–10 and 2019–20. A large part of this contrasting pattern is mechanical, reflecting a transfer of funding and responsibilities from local authorities to both

¹ Unfortunately, this specific series cannot be extended to 2020–21 as the data source was not collected due to the COVID-19 pandemic.

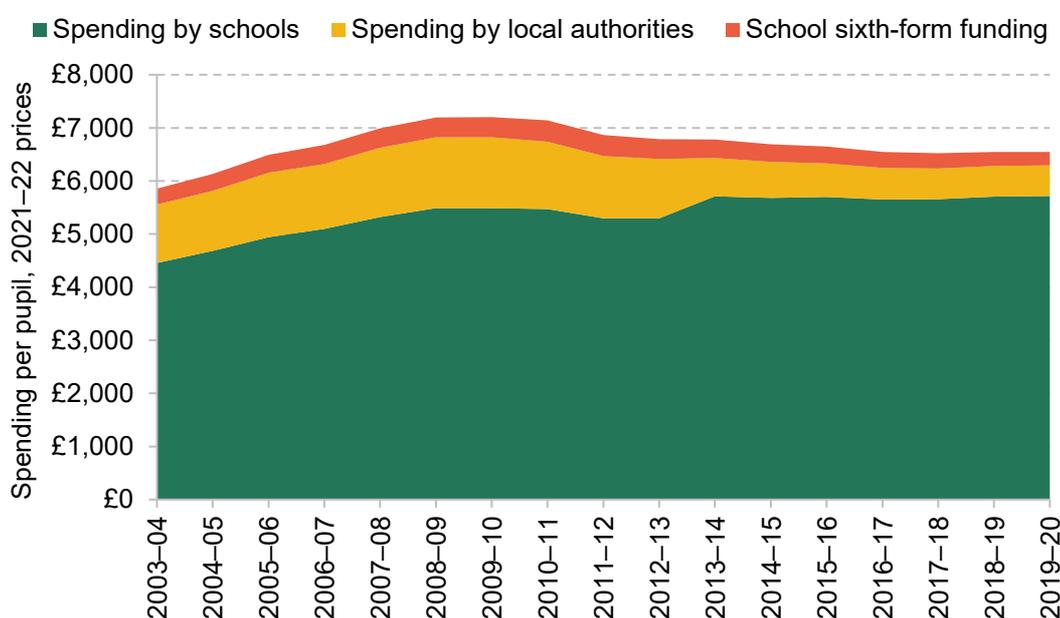
5 School spending in England: trends over time and future outlook

academies and maintained schools. School sixth-form funding per pupil aged 3–19 fell by about 33% (since student numbers in sixth forms have fallen faster than the number of pupils aged 3–19, this is larger than the 25% cut in sixth-form funding per pupil aged 16–18 we have shown in our analysis of 16–18 spending – Sibieta and Tahir (2021)).

Looking over the long run, these changes leave total school spending per pupil about 12% higher in real terms than at the start of our series in 2003–04.

These figures represent the best measure of the change in total public spending available for school services in England over this period. They include the effect of cuts to local authority services since 2009–10 and cuts to school sixth-form funding, which will have put pressure on secondary school budgets. (If we exclude school sixth-form funding, school spending per pupil aged under 16 has fallen by 8% in real terms between 2009–10 and 2019–20.)

Figure 1.1. Total school spending per pupil by component (2021–22 prices)



Note and source: See the appendix. HM Treasury GDP deflators, June 2021, <https://www.gov.uk/government/statistics/gdp-deflators-at-market-prices-and-money-gdp-june-2021-quarterly-national-accounts>.

Table 1.1. Summary of levels and changes in different components of total school spending per pupil (2021–22 prices)

	Spending by schools	Spending by local authorities	School sixth-form spending	Total spending
2003–04	£4,456	£1,099	£297	£5,853
<i>Real-terms growth</i>	23%	21%	27%	23%
2009–10	£5,490	£1,334	£378	£7,202
<i>Real-terms growth</i>	4%	–57%	–33%	–9%
2019–20	£5,717	£576	£252	£6,545

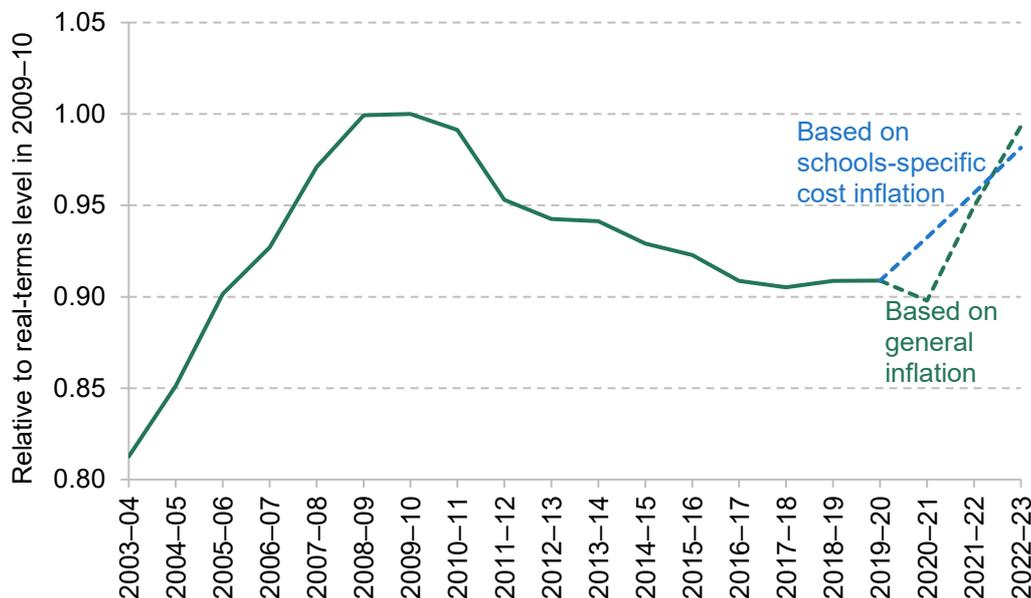
Note and source: See the appendix. HM Treasury GDP deflators, June 2021, <https://www.gov.uk/government/statistics/gdp-deflators-at-market-prices-and-money-gdp-june-2021-quarterly-national-accounts>.

In the 2019 Spending Round, the government announced a three-year settlement for day-to-day spending on schools in England up to 2022–23. This included a cash-terms rise in the schools budget (covering pupils aged 5–16) of £7.1 billion between 2019–20 and 2022–23, which was confirmed in the 2020 Spending Review.

After accounting for expected growth in pupil numbers of just under 2% between 2019–20 and 2022–23, we project that spending per pupil will grow by 9% in real terms between 2019–20 and 2022–23. As shown in Figure 1.2, this would take total spending per pupil back to about 1% below its level in 2009–10. (The reason a 9% rise does not take spending per pupil back to 2009–10 levels is that 9% of a smaller number in 2019–20 is less than 9% of a larger number in 2009–10.)

These figures are based on economy-wide inflation as captured by the GDP deflator. As discussed in our 2020 annual report (Britton et al., 2020), the GDP deflator provides the best measure of inflation for making consistent comparisons over different areas of spending over the long run. However, general inflation and growth in the specific costs faced by schools can be very different in the short run, especially during periods of economic uncertainty and when the government chooses to make substantial changes to teacher pay. This is particularly true for the period covered by the COVID-19 pandemic.

Figure 1.2. Total school spending per pupil (actual up to 2019–20, projected to 2022–23), 2009–10 = 1



Note and source: HM Treasury, *Spending Review 2020*, <https://www.gov.uk/government/publications/spending-review-2020-documents/spending-review-2020>; HM Treasury GDP deflators, June 2021, <https://www.gov.uk/government/statistics/gdp-deflators-at-market-prices-and-money-gdp-june-2021-quarterly-national-accounts>. Forecasts assume that early years and sixth-form funding per pupil aged 3–19 follow the same path as school spending per pupil. School-specific cost inflation assumes that teacher and other staff expenditure grows by 3% per year (excluding pay freeze in September 2021) and non-staff costs grow in line with CPI projections in the Office for Budget Responsibility's March 2021 Economic and Fiscal Outlook, (<https://obr.uk/efo/economic-and-fiscal-outlook-march-2021/>). See the appendix for further details on school spending up to 2019–20.

Judged against the GDP deflator, school spending per pupil appears to show a real-terms fall in 2020–21, followed by a large real-terms rise in 2021–22. The fall results from a large rise in economy-wide inflation as the price of providing the same output in 2020 rose substantially during multiple lockdowns and restrictions. One could argue that the price of providing the same quality of education *outputs* rose substantially in 2020–21 due to schools being closed for most pupils and most schooling occurring remotely. Indeed, the evidence on lost learning would suggest that the output of the school sector fell substantially during the pandemic, with pupils falling 2–4 months behind in their educational progress.²

² <https://educationendowmentfoundation.org.uk/ef-support-for-schools/covid-19-resources/best-evidence-on-impact-of-school-closures-on-the-attainment-gap/>.

That said, the GDP deflator is a poor measure of the real value of *inputs* going into schools over this period, given that the number and pay of staff continued largely at pre-pandemic levels. Figure 1.2 therefore also shows a series based on the likely growth in input costs faced by schools. This accounts for teacher pay settlements up to September 2020, as well as the freeze in teacher salaries for September 2021. We then assume a return to 3% growth in teacher pay scales for September 2022. Given the effects of the pandemic and furlough pay on average earnings changes, we assume pay per head for other staff follows the same profile as for teachers. Non-staff costs are assumed to follow Consumer Prices Index (CPI) inflation.

Using this series, we see a more constant real-terms rise in school spending up to 2022–23. Under our assumptions, school costs would grow slightly faster than economy-wide inflation, leaving school spending per pupil about 2% lower than its 2009–10 level in real terms. Nevertheless, the two measures provide broadly similar pictures, with spending per pupil in 2022–23 about 1–2% lower than in 2009–10.

The planned increases in school spending per pupil up to 2022–23 represent a clear turnaround as compared with the last decade. However, a 1–2% fall in spending per pupil over 13 years between 2009–10 and 2022–23 represents a significant squeeze on school resources as compared with recent history. Prior to 2010, the previous lowest growth over a 13-year period was 19% for secondary schools between 1987–88 and 2000–01 (see Figure 2.1 later).

These figures exclude the £1.5 billion cost of compensation for schools for increases in employer contributions to the Teachers' Pension Scheme. If one included the £1.5 billion grant for employer pension contributions, school spending per pupil would increase by about 3% in 2022–23. This would leave spending per pupil about 1–2% higher in real terms than in 2009–10. Even including the pension contributions grant, spending per pupil will have still seen a significant squeeze in historical terms between 2009–10 and 2022–23.³

³ In future years, funding to cover these higher employer pension contributions will be included in funding and spending data. We will therefore seek to highlight the role played by this inconsistency.

2. Primary and secondary school spending per pupil

Figure 2.1 shows our estimates for the level of primary and secondary school spending per pupil in England over time (in 2021–22 prices). The data we use to calculate these figures allow us to track spending per pupil by phase and further back in time to the late 1970s. To do this, we must focus on spending by individual schools, which excludes spending undertaken by local authorities and on special schools. The figures are therefore lower than those implied by Figure 1.1.

As can be seen, spending per pupil has evolved in a number of distinct phases:

- **Modest growth over the 1980s and 1990s.** During the 1980s and 1990s, primary school spending per pupil grew by 2.3% per year, on average, in real terms and secondary school spending per pupil grew by slightly less (around 1.5% per year, on average). There was also a fall of 6% in real terms in secondary school spending per pupil between 1992–93 and 1995–96.
- **Rapid growth over the 2000s.** From 1999–2000 onwards, spending per pupil grew rapidly, with growth of 6% per year in real terms for primary and secondary schools over the 2000s. This led primary school spending per pupil to rise from £2,900 per pupil in 1999–2000 to reach £5,100 by 2009–10, whilst secondary school spending per pupil grew from £3,800 to £6,800 per pupil.
- **Real-terms protection between 2010 and 2015.** Under the coalition government, spending per pupil grew by 7% in real terms in primary schools and was largely frozen in real terms in secondary schools between 2009–10 and 2015–16. This equates to total real-terms growth of about 3–4% across primary and secondary schools. Whilst existing spending per pupil was frozen in cash terms, the creation of the Pupil Premium allowed for some real-terms growth, with a higher rate in primary schools. Secondary schools saw a worse picture than primary schools mainly due to big reductions in school sixth-form funding.

Funding for individual schools was also boosted as they took on responsibility for services previously provided by local authorities (this was a transfer of funding, rather than an increase in funding for existing activities). Analysis by Sibieta (2015) suggests this transfer of funding equated to about 4% of school budgets.

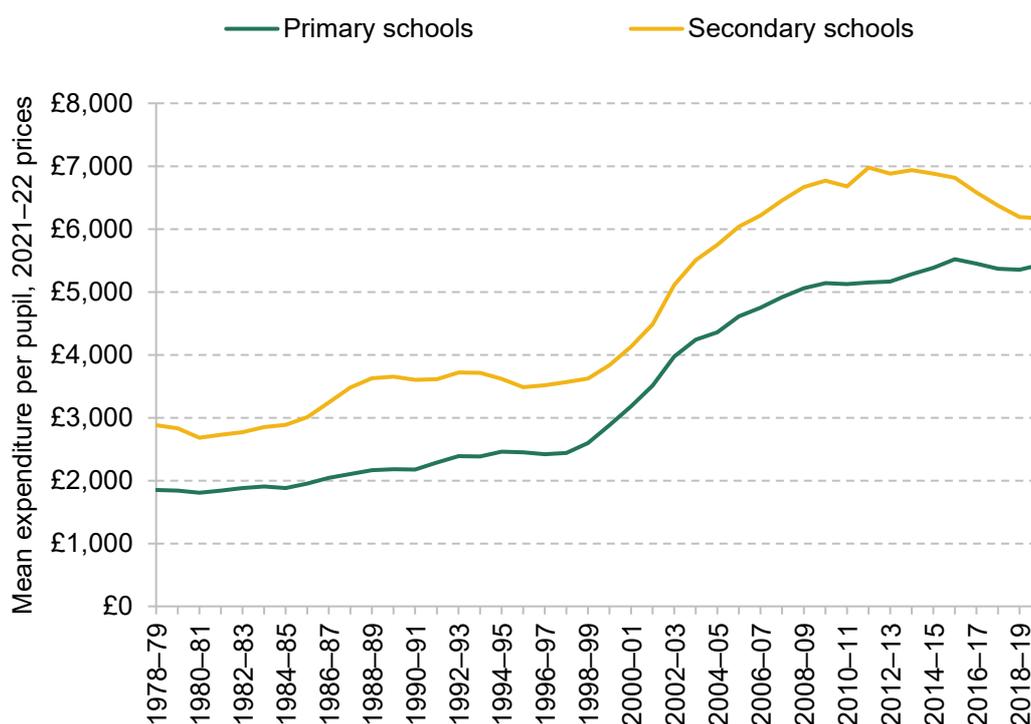
- **Real-terms falls between 2015 and 2019.** School funding per pupil was frozen in cash terms between 2015–16 and 2017–18 and largely protected in real terms from 2017–18 onwards. This translated into a 2% real-terms fall in primary school spending per pupil and a 9% real-terms fall in secondary school spending per pupil between 2015–16 and 2019–20. The faster fall in secondary school spending can be partly accounted for by the continued falls in school sixth-form funding. Whilst smaller, the cuts to primary school spending per pupil are the first sustained real-terms cuts in primary school spending since at least the 1970s. The 9% cut to secondary school spending per pupil is larger than the last real-terms cut to secondary school spending, of 5% in the mid 1990s.
- **Contrasting patterns in 2019.** Despite a real-terms freeze in overall funding per pupil from central government, the most recent year of data (2019–20) show real-terms growth of 1.6% for primary schools and a real-terms fall of 0.3% for secondary schools. There are two main explanations for this slightly surprising and contrasting pattern. First, schools received extra funding from September 2019 to cover the cost of higher employer pension contributions. The total size of the grant is about £1.5 billion or 3% of total school spending. The data for academies relate to the period from September 2019 to August 2020 and thus include a full year of the grant, but the data for maintained schools cover April 2019 to March 2020 and thus include 7 months of the grant. With over half of pupils in academies, one would therefore expect to see real-terms growth of 2% or more across the system. This is close to what we do see for primary schools (1.5%), but the picture for secondary schools is very different (a fall of 0.3%). This more negative picture for secondary schools is likely to be explained by the effects of the pandemic on recorded school spending levels, particularly given that we see real-terms growth in funding per pupil in 2019–20. About half of the financial year for academies will have been affected by lockdowns and restrictions from March 2020 onwards and the academies data show in-year surpluses rising from 4% of school expenditure in 2018–19 to 7% in 2019–20, suggesting that academies were able to save money over the first period of England-wide lockdown and reopening in Spring 2020.

11 School spending in England: trends over time and future outlook

This could have been shaped by savings on catering, free school meals, utilities and other daily school costs, and by the fact that there was support from the government for exceptional costs. It is not clear whether this pattern of savings will be repeated for September 2020 onwards, or whether schools will have faced rising costs related to the pandemic.

Looking over the long run, one of the big changes is the shrinking of the ratio between secondary and primary school spending per pupil. Secondary school spending per pupil was over 60% higher than primary school spending per pupil at the end of the 1980s, about 30% higher in 2009–10 and only 14% higher in 2019–20. Such a shift is part of a more general trend towards a flatter profile of spending per pupil with age and is in line with increasing evidence emerging over this period suggesting a bigger impact of education investments at earlier ages.

Figure 2.1. Spending per pupil in primary and secondary schools (2021–22 prices)



Note and source: See the appendix for a full list of sources and methods for school spending. HM Treasury GDP deflators, June 2021, <https://www.gov.uk/government/statistics/gdp-deflators-at-market-prices-and-money-gdp-june-2021-quarterly-national-accounts>.

3. Spending by deprivation

In this section, we move beyond average spending to examine differences in spending per pupil by levels of deprivation. This represents a key consideration given the government's focus on 'levelling up' poorer areas of the country. Recent evidence also suggests that school spending can deliver a bigger boost to the long-run outcomes of children from poorer families than from richer ones (Jackson, Johnson and Persico, 2016; Jackson, 2018; Gibbons, McNally and Viarengo, 2018). This suggests that focusing additional resources on schools facing higher levels of deprivation could be an important tool in narrowing the achievement gap between children from rich and poor families.

Table 3.1 shows the level of spending per pupil for primary and secondary schools in five equally sized groups or quintiles of deprivation based on the share of pupils eligible for means-tested free school meals in each individual year. This is shown for 2009–10 and 2019–20, together with real-terms changes over time. Figure 3.1 shows the level of spending per pupil relative to the least deprived quintile and therefore provides a good guide to the extent to which spending is being targeted on more deprived schools.

Between 2009–10 and 2019–20, spending per pupil fell by more amongst deprived schools. Amongst primary schools, spending per pupil rose by 7% in real terms amongst the least deprived schools, but fell by 1% amongst more deprived schools. For secondary schools, the least deprived schools saw a 9% real-terms fall in spending per pupil, whilst the most deprived schools saw a 14% drop.

Figure 3.1 makes clear that this represents a sharp turnaround compared with recent history. Over the 2000s, all schools saw increases in spending per pupil, but they were largest for the most deprived schools. This partly reflected the effect of a range of specific grants directly targeted at more deprived schools. As a result, the gap in spending per pupil between the most and least deprived schools rose from around 20% in 2000 for primary and secondary schools to reach nearly 35% by

13 School spending in England: trends over time and future outlook

2010. This was mostly maintained up to 2015 with the introduction of the Pupil Premium. Since 2015, however, the most deprived schools have seen larger drops in spending. The extra spending targeted at the most deprived schools stood at 23% in 2019–20, only just above the level in the early 2000s.

Table 3.1. Spending per pupil by quintile of eligibility for free school meals (2021–22 prices)

a) Primary schools

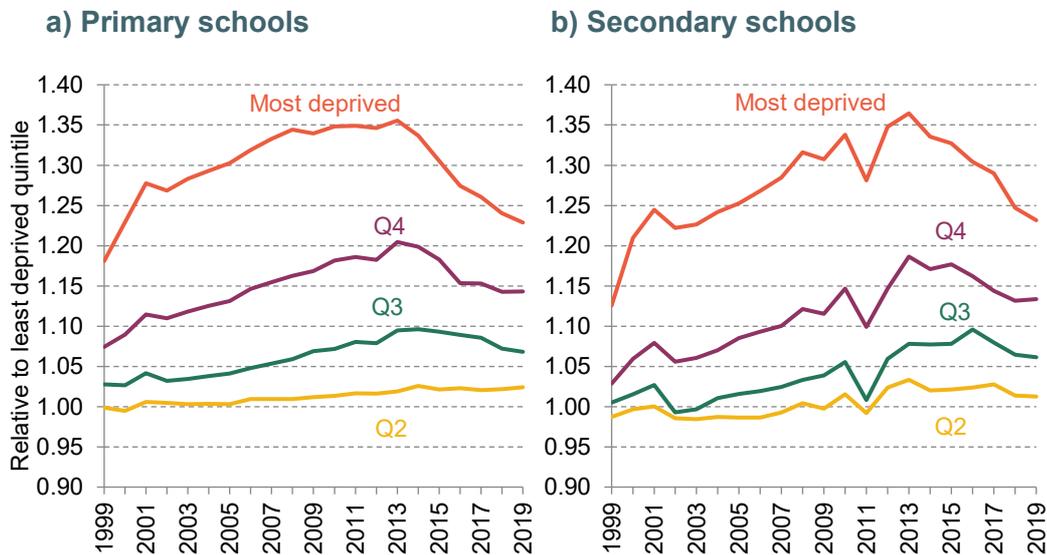
	Q1 (least deprived)	Q2	Q3	Q4	Q5 (most deprived)	All schools
2009–10	£4,633	£4,687	£4,951	£5,413	£6,205	£5,140
<i>Change</i>	£342	£408	£362	£273	–£91	£295
<i>Real-terms growth</i>	7%	9%	7%	5%	–1%	6%
2019–20	£4,975	£5,094	£5,314	£5,687	£6,113	£5,436

b) Secondary schools

	Q1 (least deprived)	Q2	Q3	Q4	Q5 (most deprived)	All schools
2009–10	£6,249	£6,232	£6,491	£6,968	£8,169	£6,772
<i>Change</i>	–£568	–£480	–£463	–£530	–£1,173	–£602
<i>Real-terms growth</i>	–9%	–8%	–7%	–8%	–14%	–9%
2019–20	£5,680	£5,753	£6,028	£6,439	£6,996	£6,170

Note and source: Spending based on methods and data described in the appendix. Share of pupils eligible for free school meals calculated using LEASIS 1993–2009 as per Belfield and Sibieta (2016) and data downloaded from annual performance tables for 2010–19 (<https://www.compare-school-performance.service.gov.uk/>). HM Treasury GDP deflators, June 2021, <https://www.gov.uk/government/statistics/gdp-deflators-at-market-prices-and-money-gdp-june-2021-quarterly-national-accounts>.

Figure 3.1. Spending per pupil by quintile of eligibility for free school meals, relative to least deprived quintile



Note and source: See Table 3.1.

As shown by Britton et al. (2020), this decline in the extra funding for more deprived schools can partly be explained by the changing geography of deprivation over this period, such as reduced levels of deprivation in London, and a funding system that did not respond to these changes (with most funding for local areas based on what they received in the previous year, irrespective of changes in deprivation). This would have reduced actual funding received by the most deprived schools for deprivation (given some are newly deprived) and led deprived schools to be less likely to be located in London (where spending per pupil is higher due to London weighting for staff salaries).

This is an important reason why the National Funding Formula (NFF) was introduced in 2018, as it has allowed funding differences across local authorities to respond to changes over time.

The changing geography of deprivation is not the sole explanation, however. Deprived schools outside of London have seen the fastest falls in spending per pupil over time, with a 16% real-terms cut in spending per pupil between 2010–11 and 2019–20. Furthermore, whilst the new NFF will ensure that funding responds to changes in deprivation over time, the reduced level of deprivation funding has continued under the first two years of the NFF in 2018–19 and 2019–20. Some of

the choices within the formula will also directly contribute to the overall pattern of reduced funding targeted at deprivation.

Effect of the National Funding Formula

The National Funding Formula was introduced for 2018–19 and calculates a notional funding allocation for each school based on the number and characteristics of pupils attending each school. The NFF incorporates various funding factors, including pupil numbers, the number of pupils from deprived backgrounds, the number of pupils with low prior attainment and extra funding for smaller schools, as well as a range of other factors.

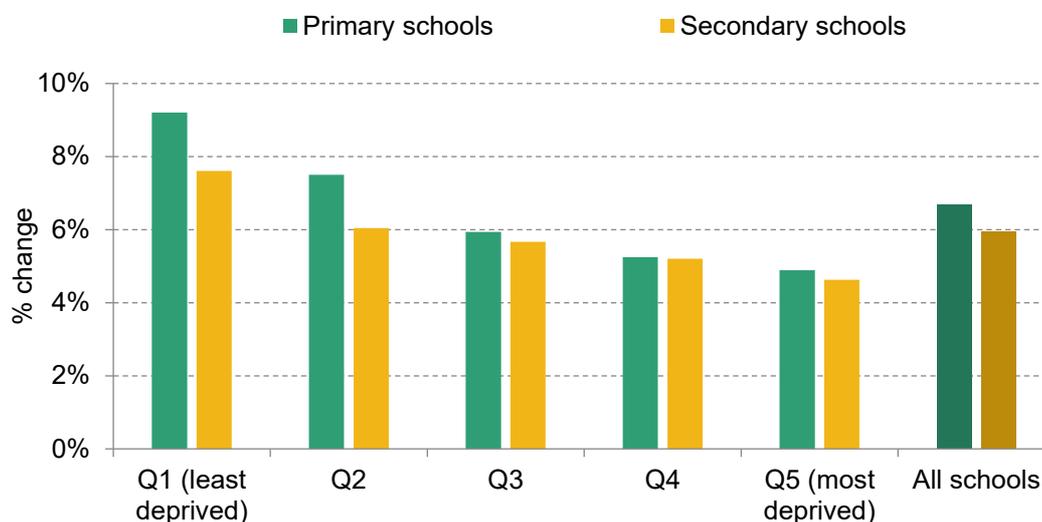
The notional funding allocations are then summed across the schools in a local authority to determine the local authority's budget. Local authorities can then use these NFF allocations or implement their own local funding formulae. Actual funding allocations to schools currently still reflect local authority choices.

Importantly, the NFF includes statutory minimum funding levels for primary and secondary schools. These minimum funding levels have been gradually increased over time and now stand at £4,265 per pupil for primary schools and £5,525 per pupil for secondary schools (with pupils in Years 7–11) in 2021–22 (Department for Education, 2021a). They have played an increasingly important role in the school funding system. Indeed, Andrews (2020) shows that one in five schools received the minimum funding levels in 2021–22.

These minimum funding levels were originally framed by the Prime Minister as part of the levelling-up agenda.⁴ However, they have had precisely the opposite effect. Schools benefiting from them tend to be less deprived schools with lower levels of funding. As the National Audit Office (2021) has shown, the most deprived quintile of schools did not benefit from these minimum funding levels at all, whilst 37% of schools in the least deprived quintile received extra funding as a result of them in 2020–21.

⁴ <https://www.gov.uk/government/news/pm-guarantees-minimum-funding-levels-for-all-schools>; <https://www.gov.uk/government/speeches/the-prime-ministers-levelling-up-speech-15-july-2021>.

Figure 3.2. Real-terms changes in NFF allocations by quintile of eligibility for free school meals, 2017–18 to 2022–23



Source: Britton et al. (2020); Department for Education, National Funding Formula allocations for 2022–23, <https://www.gov.uk/government/publications/national-funding-formula-tables-for-schools-and-high-needs-2022-to-2023>; HM Treasury GDP deflators, June 2021, <https://www.gov.uk/government/statistics/gdp-deflators-at-market-prices-and-money-gdp-june-2021-quarterly-national-accounts>.

With these changes in mind, Figure 3.2 shows the real-terms increases in NFF allocations by school deprivation quintile (based on the percentage of pupils eligible for free school meals) between 2017–18 and 2022–23. We can see that more deprived schools are due to receive lower real-terms increases in funding per pupil. NFF funding per pupil will increase by 4 percentage points less in real terms amongst the most deprived primary schools (4.9%) than amongst the least deprived ones (9.2%) between 2017–18 and 2022–23. We see a similar picture for secondary schools, with 3 percentage points lower growth amongst the most deprived secondary schools (4.6%) than amongst the least deprived ones (7.6%). These changes will reflect the increasingly important role played by minimum funding levels, as well as other changes to NFF factors over time (Andrews, 2020).

Actual school funding levels will be determined by local authority choices. However, NFF allocations will play an important role in determining the budgetary choices available to local authorities and minimum funding levels will represent a

clear constraint. Indeed, about 50% of all local authorities were exactly mirroring the NFF in 2021–22.⁵

Looking to the future, the government is currently consulting on plans to move towards a ‘hard’ NFF, where funding to individual schools directly reflects NFF allocations. As a first step, the government proposes to require all local authorities to move their formula factors 10% closer to the NFF values in 2023–24 and, subject to reviewing the impact, 15% closer in 2024–25 and 20% closer in 2025–26 (Department for Education, 2021b). Given the turbulence that would be caused by moving to a ‘hard’ NFF over a single or even two years, a slower pace of transition – such as this – is sensible.

In the consultation, the government restates a commitment that no school will see cash-terms falls in per-pupil funding as a result of the NFF. However, this still leaves open the possibility of real-terms cuts if funding increases are below inflation. For many schools, this may come on the back of real-terms cuts over a significant number of years. The extent of real-terms cuts will largely be shaped by the minimum funding guarantees that local authorities set within their funding formulae, which will in turn be shaped by the average increase in funding. If the overall schools settlement were to increase in cash terms by 2% in per-pupil terms in 2023–24, it would be much more costly to implement a minimum funding guarantee of 1% than if per-pupil funding were going up by 5% in cash terms.

Pupil Premium

In addition to the NFF, schools also received funding for more deprived pupils through the Pupil Premium, which currently stands at £1,345 for pupils in primary schools eligible for free school meals in the past six years and £955 in secondary schools (as well as amounts for other vulnerable and disadvantaged pupils).⁶

⁵ <https://www.gov.uk/government/publications/schools-block-funding-formulae-2021-to-2022/schools-block-funding-formulae-2021-to-2022>.

⁶ <https://www.gov.uk/government/publications/pupil-premium-allocations-and-conditions-of-grant-2021-to-2022/pupil-premium-conditions-of-grant-2021-to-2022-for-local-authorities>.

Partly due to the effects of the pandemic on benefit receipt, about 60,000 extra pupils are now eligible for the Pupil Premium for 2021–22 than in 2020–21, and spending on the Pupil Premium has risen by about £65 million.⁷ However, this rise would have been about 60,000 larger and provided a further £90 million in funding if the date for determining eligibility for the Pupil Premium had not been brought forward from January 2021 to October 2020.⁸ The increase in cost from October 2020 to January 2021 has a bigger financial cost than the rise from January 2020 to October 2020 as the rise from October 2020 onwards was concentrated in primary schools (where the Pupil Premium is set at a higher rate).

This change in the date for determining eligibility was made for the broadly sensible reasons of bringing it into line with the rest of the school funding system and of enabling allocations to be published sooner. However, the change was announced very late (December 2020) and might have been better received if it had been made during a year when there were not large in-year increases in eligibility for benefits as a result of a global pandemic. Furthermore, the effects of this change in date will largely be temporary as the extra pupils eligible for the Pupil Premium in January 2021 will still be eligible in October 2021 and for at least a further six years in the school system, given that eligibility for the Pupil Premium is determined based on whether a pupil was eligible for free school meals in any of the past six years.

Of greater impact is the fact that the Pupil Premium has not kept pace with inflation over the last few years. If the Pupil Premium had been increased approximately in line with the GDP deflator since 2014–15, it would now be about £150 higher in primary schools and £120 higher in secondary schools. This would have provided over £260 million extra in Pupil Premium funding, an increase of more than 10% over what it currently provides.

⁷ <https://www.gov.uk/government/publications/pupil-premium-allocations-and-conditions-of-grant-2020-to-2021>; <https://www.gov.uk/government/publications/pupil-premium-allocations-and-conditions-of-grant-2021-to-2022>.

⁸ <https://www.gov.uk/guidance/pupil-premium-effective-use-and-accountability#allocation-changes-from-the-2021-to-2022-financial-year>.

Summary

The deprivation funding premium has fallen over recent years. By 2019–20, this meant that the most deprived schools only received about 23% more per pupil than the least deprived, the lowest figure since the early 2000s. Other things being equal, the net effect of the changes to National Funding Formula allocations between 2017–18 and 2022–23 will be a further reduction in the deprivation funding premium. The fact that the Pupil Premium has not kept pace with inflation over the last seven years will also have disproportionately reduced real-terms spending for more deprived schools. This overall pattern runs counter to the government’s stated ambitions to level up poorer parts of the country. Indeed, the government’s school funding reforms have provided a much larger boost in funding to richer parts of England.

4. Discussion and future challenges

School spending per pupil has seen a significant squeeze over the past decade, with a bigger real-terms drop than at any point in the last 40 years (and probably longer) – though this did follow a decade of sizeable increases in spending for both primary and secondary schools. Since 2019, spending per pupil has begun to grow again, but by 2022 it will still be 1–2% lower than in 2009. Looking to the Spending Review due this autumn, what are the main pressures and challenges for school spending?

One of the biggest pressures over the last decade has been a growing pupil population in England, with a 14% or 900,000 increase in the pupil population aged 5–16 between 2009–10 and 2022–23. Following this large rise, the pupil population is now expected to fall by 1% between 2022–23 and 2024–25 and 2% by 2025–26.⁹ This will ease pressure on the school budget to some extent. However, this could create resource pressures too if falling pupil numbers – and consequent falls in funding – are concentrated in particular parts of the country.

Taking up over half of school budgets, the other main pressure is the cost of employing teachers. As Cribb and Sibieta (2021) have shown, teacher pay has fallen significantly in real terms over the last decade, particularly for more experienced teachers. In 2021, pay levels for experienced teachers remain about 8% lower in real terms than in 2007, just before the financial crisis. And they are still about 4–5% lower for less experienced teachers. These represent declines relative to average earnings, which have now recovered to be just above the level seen in 2007.

There is some logic to the freeze in public sector pay for 2021, but this will not be sustainable for long, and even in 2022 is not risk free. The STRB report for 2021

⁹ <https://www.gov.uk/government/statistics/national-pupil-projections-july-2021>.

warns of ‘a severe negative impact’ if the pay freeze lasts longer than a year (School Teachers’ Review Body, 2021).

The government has postponed implementation of a manifesto commitment to raise starting salaries to £30,000 by one year from 2022 to 2023. Delivering this slower timetable would still require a 17% cash-terms rise in starting salaries over the next two years. Furthermore, unless salaries for more experienced teachers grow by 13% in cash terms over the next two years, they will still be lower in real terms than in 2007, which would be a remarkable squeeze on pay over 16 years (Cribb and Sibieta, 2021). To prevent significant problems recruiting and retaining teachers, the government would likely need to implement pay awards as fast as earnings growth seen elsewhere from 2022 onwards. But doing this would create a significant upward pressure on school budgets.

The pandemic has placed and will continue to place significant pressures on school resources. Over 2020–21 and 2021–22, the government will have provided about £1.5 billion in immediate support for schools during closures and to facilitate reopening (Farquharson, Sibieta and Waltmann, 2021). However, most of this relates to free school meal replacements and digital devices (over £1 billion in total). Just over £400 million has been provided to support direct costs associated with closures and reopening, such as £140 million for exceptional costs and £220 million for school transport. Particularly since September 2020, schools have had to meet a significant amount of COVID-related costs from their own budgets.

The only financial data from the pandemic that we have are for academies in the 2019–20 academic year. These data show falling spending levels and rising in-year surpluses in 2019–20, suggesting that academies were able to save money over the first period of England-wide lockdown and reopening in Spring 2020. This could have been shaped by savings on catering, free school meals, utilities and other daily school costs, and by the fact that there was support from the government for exceptional costs. Unfortunately, however, we have no financial data on how school finances changed during the 2020–21 school year. Social distancing requirements and restrictions could have created new additional COVID-safety spending measures and led to a drop in private income for schools (such as from renting out facilities), but there could also have been savings during the England-wide lockdown from January to March 2021. More data are required to understand the true picture.

Missed school and lost learning are likely to have large long-lasting effects on children's education and pose massive challenges for the education system for years to come. So far, the government has provided about £3 billion in catch-up funding (on top of the £1.5 billion of support provided during closures and for reopening). While a big sum, it works out at just £300 per pupil. It also falls significantly short of the £15 billion reportedly recommended by the Education Recovery Commissioner.¹⁰ It is also significantly less than packages provided in some other countries, such as the US at £1,800 per pupil and the Netherlands at £2,100 per pupil (Sibieta, 2021). Without significant additional spending that is well spent, it seems highly likely that the negative effects of lost learning will persist into the long run and potentially widen educational inequalities (see Crenna-Jennings, Perera and Sibieta (2021)).

With this in mind, it is particularly concerning that cuts in school spending over the last decade have been larger for more deprived schools, with the most deprived secondary schools seeing a 14% real-terms fall in spending per pupil between 2009–10 and 2019–20. This has already meant that the additional funding received by the most deprived schools relative to the least deprived schools has fallen back to the ratio of the early 2000s. The National Funding Formula has continued this trend by providing larger increases in funding to schools in richer areas between 2017–18 and 2022–23. This runs counter to the government's objective of levelling up poorer parts of the country and will make it that much harder for schools in deprived areas to catch up with lost learning after the pandemic.

¹⁰ <https://www.thetimes.co.uk/article/education-tsar-kevan-collins-quits-after-johnson-rejects-15bn-recovery-package-5nn9dp99t>.

Appendix. School spending methodology

We have two main methods for calculating school spending per pupil. The first relates to school-based spending per pupil, whilst the second additionally includes spending undertaken by local authorities. Here, we detail the underlying assumptions, methods and data sources for each measure.

School-based spending

Our measures of school-based spending per pupil are shown for both primary and secondary state-funded schools in Figure 2.1. The methods and data used for calculating these figures are updated from Belfield and Sibieta (2016). Spending includes all spending undertaken by state-funded schools, including academies and free schools where possible. Given that the data do not break expenditure down by pre-16 or post-16 categories, this will include spending on school sixth forms. We exclude special schools because funding arrangements for these schools are more complex and driven more by the needs of individual pupils.

We make use of five main data sources for expenditure: CIPFA Education Statistics Actuals between 1978–79 and 1999–2000; schools’ Section 52/251 returns between 1999–2000 and 2009–10; Consistent Financial Reporting data from 2010–11 to 2019–20; academies’ Accounts Returns from 2011–12 to 2019–20; and national school funding allocations for 2019–20.

The CIPFA Education Statistics Actuals compile data returned by each local authority (LA) in England and Wales. This includes information about the number

of pupils and teachers and a breakdown of expenditure on primary¹¹ and secondary schooling.¹² The CIPFA data include all expenditure by LAs on schooling.¹³ Prior to Local Management of Schools in 1990, this expenditure was primarily spent directly by the LA. After 1990, this expenditure is the amount allocated to schools directly through the LA formula plus the amount spent centrally by the LA. The CIPFA data thus combine school-based and LA-based expenditures. We are unfortunately not able to separate these two components.

From 1999–2000 to 2009–10, we use the Section 52/251 data. These data are compiled from the returns of individual schools about their levels of funding and expenditure each year. Differences between funding and expenditure may emerge when schools do not spend their entire budget. As we are interested in the amount of money spent on pupils' education, we use the expenditure data wherever possible. Importantly, this excludes central spending by LAs. As such, the data from Section 52/251 returns represent school-based expenditure. In all cases, we divide total expenditure in each financial year by the number of full-time-equivalent pupils in the January within the financial year to create per-pupil measures of school expenditure (for example, January 2003 for financial year 2002–03).

From 2010–11 onwards, we make use of Consistent Financial Reporting (CFR) data downloaded from the Schools Financial Benchmarking Service¹⁴ and annual performance tables.¹⁵ Spending per pupil is defined as total net expenditure divided

¹¹ The expenditure data for nursery and primary are combined for the years 1978–79, 1979–80 and between 1987–88 and 1995–96; therefore we estimate combined nursery–primary per-pupil funding. We then combine this with the primary per-pupil Section 52/251 data using the method outlined below. This is a reasonable assumption, as total nursery funding only constituted 1.2% of total nursery and primary funding in 1986–87.

¹² We use the Net Expenditure variable (available from 1978–79) for consistency across years. This includes spending on teaching staff, other staff, contributions to/from other local education authorities and other net expenditure.

¹³ In the years between 1993–94 and 1997–98, we add data on funding and pupils in grant-maintained schools (data kindly provided by Damon Clark). The CIPFA data are coded from scanned PDF documents available from the CIPFA website. Headings and definitions often change over time and there are a number of clear errors in the original data (for example, missing zeros, incorrect ordering and incorrect labelling of local authorities). We have made every effort to check and correct the data but a small number of errors may remain.

¹⁴ <https://schools-financial-benchmarking.service.gov.uk/Help/DataSources>.

¹⁵ <https://www.compare-school-performance.service.gov.uk/download-data>.

by the number of full-time-equivalent pupils. Net expenditure is defined as total expenditure net of income from catering, teacher supply insurance claims, community-focused income and capital expenditure from revenue account. These data are for maintained schools and extend up to 2019–20.

Academies' Accounts Returns (AAR) data are available from 2011–12 to 2019–20 from the Schools Financial Benchmarking Service¹⁶ and the income and expenditure of academies.¹⁷ This means all academies are missing from the data for any period between their foundation or conversion and 2011–12. We do not include schools where information is only available for part of the financial year. We only use spending recorded for individual academies, which will exclude any money retained centrally by multi-academy trusts. We use a similar definition of net expenditure to that used in CFR data. In particular, we define net expenditure as total expenditure minus income from catering, teacher supply insurance claims and capital expenditure from revenue account. Unfortunately, community-focused income can only be deducted for 2011–12.

A number of inconsistencies mean the spending per pupil will be higher for academies than for similar maintained schools. First, academies' financial data relate to the academic year rather than the financial year. Second, academies' expenditure will include funding for services provided by LAs for maintained schools (particularly in the years 2011–12 and 2012–13). Third, sponsor academies tend to be located in more deprived, urban areas, which typically receive higher levels of funding. This means the exclusion of academies before 2011–12 will likely depress the recorded measure of overall spending below its true level and their inclusion afterwards will create an artificial jump in spending per pupil (particularly for secondary schools).

To combine our data sets, we apply the LA-level expenditure-per-pupil growth rates implied by the CIPFA data to extrapolate the Section 52/251 data backwards from 1999–2000 (for unchanged local authority boundaries). This creates an LA-level data series for school-based spending from 1978–79 through to 2009–10. However,

¹⁶ <https://schools-financial-benchmarking.service.gov.uk/Help/DataSources>.

¹⁷ <https://www.gov.uk/government/collections/statistics-local-authority-school-finance-data>.

there are three inconsistencies that remain between our data sets. In creating this series, we therefore make the following assumptions:

- The inclusion of nursery data does not significantly affect the *growth* rate of nursery and primary funding per pupil in the CIPFA data. Given that nursery spending was relatively small over the period covered by the CIPFA data (up to 1999–2000), this assumption appears relatively minor.
- The growth rate of LA expenditure (equivalent to school funding plus central LA expenditure) provides a good approximation to the growth rate of school-based expenditure within the LA between 1990–91 and 1999–2000. This appears to be a relatively innocuous assumption. Between 1994–95 and 1998–99, national statistics on school-based spending and total school spending by LA show that both sets of figures for spending per pupil were largely frozen in real terms (Department for Education and Skills, 2004).
- The exclusion of central LA spending from the Section 52/251 data does not significantly affect the trends and levels. This is not a benign assumption. Belfield and Sibieta (2016) show that LA-based spending represented a shrinking share of total school spending over the 2000s and that most of this reduction occurred over the early 2000s, falling from 16% in 2000–01 to 11% by 2006–07. These results suggest that trends in school-based expenditure probably represent an overestimate of the growth rate in total school spending over time. We therefore calculate an additional measure of total school spending stretching back to 2003–04, which does include LA-based spending (see below).

This provides a broadly consistent measure of school-based spending per pupil between 1978–79 and 2019–20.

Total school spending

Total school spending (as presented in Figure 1.1) is intended to represent all spending by either schools or local authorities on children aged 3–19 in state-funded schools in England.

‘**Spending by schools**’ is calculated as the sum of (net) individual school budgets, any money delegated to schools for high needs, the Pupil Premium and the Teachers’ Pay Grant. Individual school budgets and high-needs delegated funding are calculated from Section 52/251 out-turn data up to 2012–13 and Section 52/251

budget data from 2013–14 to 2019–20. For years 2010–11 to 2012–13, we additionally include academies’ recoupment funding from Dedicated Schools Grant allocations. Pupil Premium allocations 2011–12 to 2019–20 and the Teachers’ Pay Grant are taken from the same sources as school-based spending above. For years 2013–14 to 2016–17, we also add imputed values of the Education Services Grant based on the published rate and pupil numbers.

This spending will include funding for delivery of the free entitlement for 3- and 4-year-olds, which cannot be excluded from individual school budgets in most years of data. We are, however, able to exclude funding for 2-year-olds as detailed in table 8 of Section 52/251 budget statements.

‘**Spending by local authorities**’ is calculated as the (net) schools budget minus any funding provided direct to schools via individual schools budgets or top-ups to providers for high-needs funding. We additionally include the wider education and community budget detailed in Section 52/251 out-turn and budget returns (excluding items 2.3.1 to 2.4 for consistency with school funding figures for Wales).

‘**School sixth-form funding**’ is based on allocations to school sixth forms as presented in Britton et al. (2020).

Pupil numbers in state-funded schools are calculated from Department for Education, ‘Schools, pupils and their characteristics’, January 2010 to January 2020.¹⁸ We then additionally include pupils aged 3–4 in private, voluntary and independent settings from Department for Education, ‘Education provision: children under 5 years of age’, January 2010 to January 2020.¹⁹

Unfortunately, the main data source used (Section 52/251 budget returns) was not collected for 2020–21 and so figures for this year will be missing in this and all future analysis of school spending.

¹⁸ <https://www.gov.uk/government/collections/statistics-school-and-pupil-numbers>.

¹⁹ <https://www.gov.uk/government/collections/statistics-childcare-and-early-years#provision-for-children-under-5-years-of-age-in-england>.

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