Tackling the persistent disadvantage gap

A new approach to deprivation funding

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About the Education Policy Institute

The Education Policy Institute is an independent, impartial, and evidence-based research institute that promotes high quality education outcomes, regardless of social background. We achieve this through data-led analysis, innovative research and high-profile events.

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Foreword

Natalie Perera, Chief Executive, Education Policy Institute

Our annual reports on the disadvantage gap in England have become the 'go-to' source of information about the state of educational inequalities. Our headline measure in reporting the gap is the difference in attainment between pupils who have been on free school meals at any point in the last six years, and their peers. This reflects the measure used by the Department for Education in allocating funding (including the pupil premium) and in school performance tables.

In the first few years of reporting the disadvantage gap between 2016 and 2018, we were cautiously pleased that the gap had been closing over several years, particularly so in the primary phase. However, in the couple of years prior to the Covid-19 pandemic we saw that progress in closing the gap began to stagnate before then widening. That widening of the gap accelerated in the post-Covid years as a result of inequalities in the home learning environment and deepening poverty. Disadvantaged pupils are now, on average, around 19 months behind their peers by the end of secondary school.

While this data alone requires us to think deeply about how we are supporting disadvantaged pupils, there is a hidden story that lies beneath it that is much more worrying.

Pupils who have been on free school meals for the vast majority of their school lives are, on average, nearly two years behind their peers. Even more distressing is that, for this very vulnerable group, the gap today is as wide as at any point in our time series. For all our efforts from national policy to the classroom, we have not made any real impact for children living in persistent poverty.

This report looks at how we can make some efforts to change that, through increased and targeted funding to disadvantaged pupils. It recommends that the government targets at least £640 million to this group by the end of the spending review period, money which can be found from the forecast reduction in pupil numbers. So, there is no excuse to not make at least a modest start.

As ever, we also recognise that schools alone cannot fix the inequalities that have arisen as a result of austerity and a global pandemic. The newly formed cross-government Child Poverty Taskforce must adopt policies that lift children out of poverty, provide them with safe and warm housing, give them better access to health care (particularly mental health care) and support their families at the earliest possible opportunity.

Executive summary

There is a clear case for additional support for persistently disadvantaged pupils.

- In 2023, the latest year for which we have data, disadvantaged pupils (those eligible for free school meals at any point in the previous six years) were on average the equivalent of 10 months behind their peers by the end of key stage 2 and 19 months behind their peers by the end of key stage 4.
- But there is variation within this disadvantage group. Pupils who are "persistently disadvantaged", which we define as being eligible for free school meals for at least 80 per cent of their time in school are even further behind – the equivalent of nearly a year at key stage 2, and nearly two years at key stage 4. The gap at key stage 4 is wider than at any point in our time series.

Despite these differences, the school funding system does not distinguish between different levels of disadvantage.

- The majority of school funding is delivered via the national funding formula (NFF). In 2023-24, the national funding formula allocated £4,062 million of deprivation funding – funding for the delivery of free school meals, as well as additional funding for those eligible for free school meals at any point in the last six years and those living in disadvantaged neighbourhoods to pay for interventions to support their attainment. This represents just under 10 per cent of all national funding formula funding.
- In addition, the pupil premium provides additional funding for pupils from disadvantaged backgrounds (again, this refers to pupils who have been eligible for free school meals at any point in the last six years), worth a total of £2,533 million in 2023-24.
- None of these mechanisms, however, target additional funding to persistently disadvantaged pupils, despite a clear relationship with lower outcomes.

Over the course of this parliament and spending review, falling pupil rolls present an opportunity to consider how funding is allocated.

- By the end of the current spending review period (2028-29), pupil numbers in primary schools are expected to be around 200,000 lower than they currently are, and while pupil numbers in secondary schools are expected to be slightly higher than currently (by around 20,000) they will also be in decline.
- If the Department for Education were to maintain per pupil funding in real terms, we estimate that this would yield a saving of around £750 million in the final year of the spending review.
- We argue that the Department for Education should instead increase per pupil funding in real terms and in particular use some of this "saving" to fund increased support for persistently disadvantaged pupils, the level at which it can do this will build up over the course of the spending review period.

We present three potential approaches to funding persistently disadvantaged pupils through the national funding formula or the pupil premium (modelled using data from 2023-24).

- In the first scenario, we add new factors to the national funding formula for persistent disadvantage in primary and secondary schools. We calculate how much money we should target to persistently disadvantaged pupils by looking at how much further they are behind their disadvantaged peers and scaling the national funding formula disadvantage factors accordingly. These amount to £128 for each persistently disadvantaged pupil in primary school, and £216 for each persistently disadvantaged pupil in secondary school.

- Adding these factors to the national funding formula would be a relatively low-cost option at **£80 million per year** – equivalent to increasing average per pupil funding by £11 per pupil overall and £17 per persistently disadvantaged pupil.[1]

- In our second scenario we fund persistent disadvantage through the pupil premium. We calculate how much money we should target to persistently disadvantaged pupils by looking at how much further they are behind their disadvantaged peers and scaling the pupil premium values accordingly. These amount to £265 per persistently disadvantaged primary pupil and £217 per persistently disadvantaged secondary pupil Iat a cost of around **£200 million per year**.

- Our third scenario again funds persistent disadvantage through the pupil premium, but also reverses the real terms cuts in the value of the pupil premium since 2014-15. This means that the primary pupil premium is uplifted from £1,455 to £1,693 and the secondary pupil premium is uplifted from £1,035 to £1,218. The resulting factor values for persistently disadvantaged pupils are an additional £308 per pupil in primary, and £255 in secondary. We estimate that **this would cost around £640 million per year.**

- Whilst the pupil premium is not ringfenced for disadvantaged pupils alone, schools are expected to spend it in such a way to improve outcomes for disadvantaged pupils and there are various accountability mechanisms to support this. Therefore, **we would expect expenditure to be better targeted towards persistently disadvantaged pupils by funding through the pupil premium than through the national funding formula**.

Recommendations

- There is a clear case for targeting school funding on persistently disadvantaged pupils and, as part of the spending review process, the Department for Education should use falling rolls as an opportunity to better target funding towards this group.

- Because of the complexities of the NFF and its roll-out, and the greater transparency provided by the pupil premium, additional funding should come via an enhanced pupil

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[1] Note that in any scenario, persistently disadvantaged pupils do not receive the full benefit of the formula values since it is averaged across all pupils in a school. This is because funding in the national funding formula is not ringfenced towards individuals or groups of pupils. In addition, the operation of the national funding formula means that certain factors "interact", meaning increasing one can decrease another. This is because of protections in place which set the overall minimum any school should receive per pupil, or the minimum increase it should receive from one year to the next.

premium which could be set at a value of £308 per primary pupil and £255 per secondary pupil. We estimate that this would cost around £640 million a year. The Department could build up to this value over the course of the spending review period to ensure affordability. This funding for persistently disadvantaged pupils would be in addition to, not instead of, the funding they attract by being disadvantaged.

▪ Given the lack of progress in closing both the disadvantage and persistent disadvantage gap, and that disadvantage funding through the pupil premium has not kept pace with rising costs, this should be viewed as a minimum benchmark for government investment. It should come alongside the additional targeted support that we have called for in the early years and in 16-19 education (including an additional student premium, set at the same level as the secondary pupil premium).

▪ We have highlighted that there are strengths and weaknesses to each approach, and that the operation of the national funding formula affects how much funding reaches the pupils for which it is intended. The Department for Education will need to be transparent in how funding will work in practice including showing the distributional effects of changes to the national funding formula and the pupil premium in terms of average per pupil funding to different pupil groups. It should also consider the extent to which funding protections – such as minimum funding levels and funding floor – can limit the flexibility of the national funding formula to respond to need.[2]

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[2] Minimum funding levels set a minimum per pupil amount that schools receive regardless of pupil characteristics. The funding floor sets a minimum increase (or in theory a maximum decrease) in per pupil funding that a school receives from one year to the next, regardless of any change in the make-up of its pupil population or other changes to the national funding formula.

Part 1

Introduction

Part 1: Introduction

The case for change

It is now 13 years since the pupil premium was introduced into the funding system for schools in England. This grant, worth a total of £2.5 billion in 2023-24, targets additional funding at pupils from low-income backgrounds.[3] Whilst not strictly ringfenced for spending on these pupils, it has to be used in a way that is expected to raise the outcomes of disadvantaged pupils. The national funding formula for schools, which is used to distribute the bulk of revenue funding, contains similar factors for disadvantaged pupils.[4] In 2023-24, the national funding formula allocated a total of £4.1 billion on the basis of deprivation.

The rationale for this additional funding is well established. On average, pupils from low-income backgrounds achieve lower results than their peers. Less than half of disadvantaged pupils leave primary school having achieved the expected standard in reading, writing and maths (compared with two-thirds of other pupils)[5] and by the time they sit their GCSEs, disadvantaged pupils are on average 19 months of learning behind their peers.[6]

However, this grouping of disadvantaged pupils itself masks a range of different circumstances. The disadvantage measure used to distribute funding via the pupil premium captures any pupil that has been eligible for free school meals at any point in the previous six years. This means that pupils who experience long-term, sustained, low-income are funded in the same way as pupils who move in and out of low-income, and those who had one short period of low-income several years ago.

All of these groups achieve lower results than non-disadvantaged pupils, but results for persistently disadvantaged pupils – who we define as those eligible for free school meals for at least 80 per cent of their time in school – are particularly low. Our annual report showed that in 2023, the GCSE gap between these pupils and non-disadvantaged pupils was equivalent to 22 months of learning. The equivalent gap in primary school has narrowed but is still the equivalent of nearly a year of learning by the end of key stage 2.

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[3] Department for Education, 'Pupil premium – overview', (September 2024). Note that the pupil premium is also used to target additional funding at looked after children, post-LAC, and service children. The total here relates to funding related to disadvantage, the majority of the pupil premium.
[4] Department for Education, 'The national funding formula for schools and high needs', July 2022.
[5] Department for Education, 'Key stage 2 attainment: academic year 2023/24', September 2024.
[6] Education Policy Institute, 'Annual report 2024', July 2024.

Figure 1.1: The attainment gap in months for persistently disadvantaged pupils (solid line) and all disadvantaged pupils (broken line), relative to non-disadvantaged pupils in both cases[7]
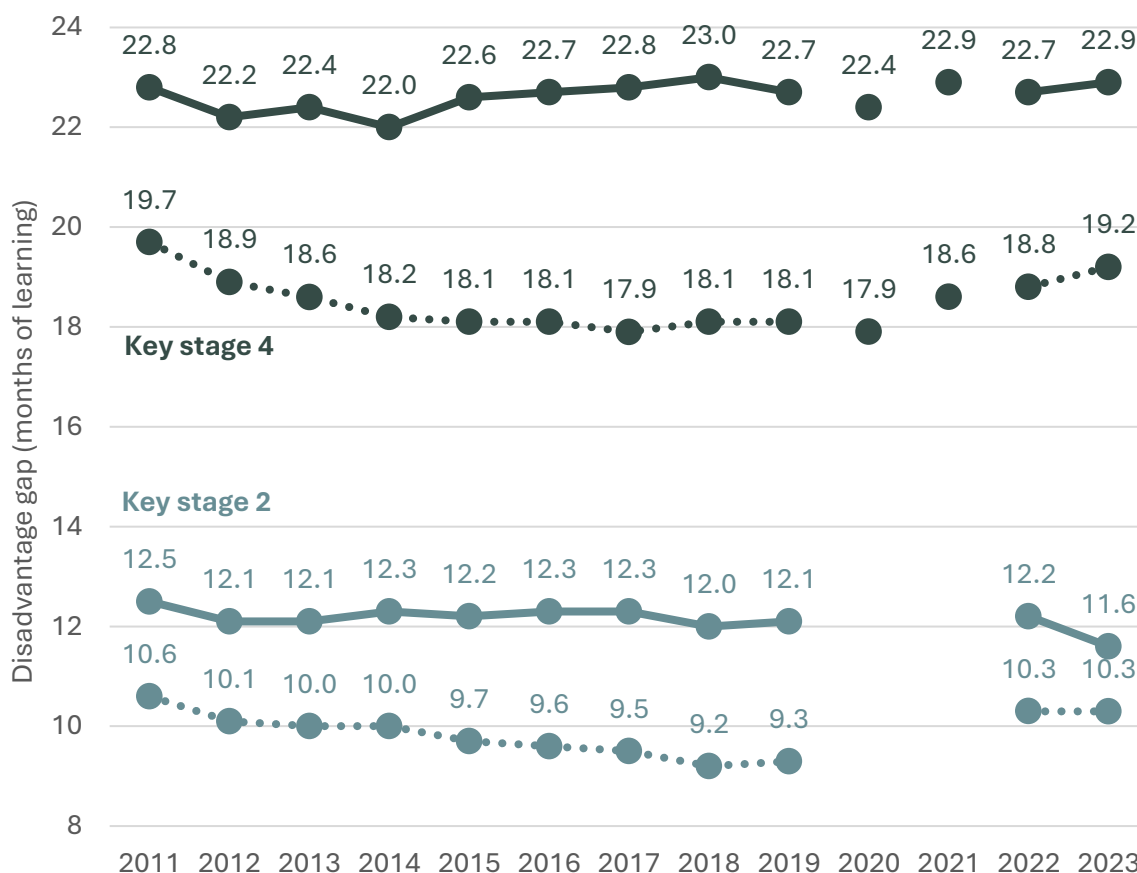
The size of this group of persistently disadvantaged pupils is significant. Figure 1.2 shows that one-in-ten pupils can be defined as persistently disadvantaged, with rates that are slightly higher in primary than in secondary schools. Improving their outcomes therefore has the potential to help close the disadvantage gap and raise outcomes overall.

The extent to which pupils are in persistent poverty varies across the country (figure 1.3). At primary, Camden (27.2 per cent) and Manchester (25.1 per cent) have the highest rates of persistent disadvantage, while Central Bedfordshire (4.2 per cent) and Bracknell Forest (4.6 per cent) have the lowest rates. At secondary, Knowsley (25.4 per cent) and Islington (23. 7 per cent) have the highest rates of persistent disadvantage, while Rutland (2.7 per cent) and Wokingham (3.1 per cent) have the lowest rates.[8]

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[7] Education Policy Institute, 'Annual report 2024', July 2024. Note that in 2020 and 2021 there were no key stage 2 assessments and outcomes at key stage 4 were measured through centre assessed and teacher assessed grades.
[8] A full list of local authorities with persistent disadvantage rates is provided in the annex.

Therefore, providing funding towards persistent disadvantage will disproportionately benefit some areas but the extent to which it does will depend on the allocation mechanism used as discussed in Part 2.

Figure 1.2: Proportion of pupils identified as disadvantaged and persistently disadvantaged by phase, Spring 2022
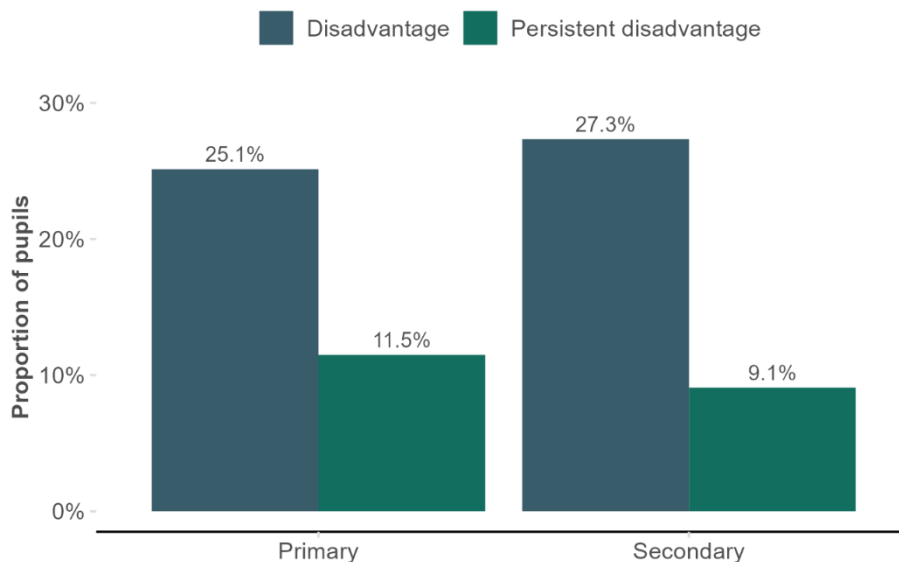
Figure 1.2: Proportion of persistently disadvantaged pupils by local authority, primary and secondary, Spring 2022[9]

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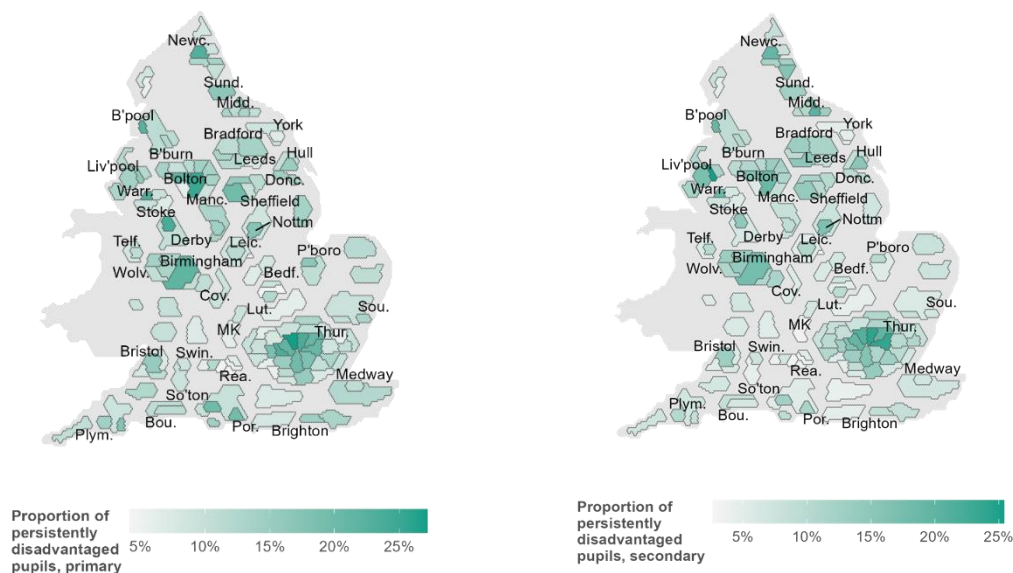
[9] These 'non-contiguous cartograms') show areas approximately scaled in size according to their populations and grouped according to recognisable subnational areas. Lines between adjacent areas represent boundaries between areas. Labels are provided for some large towns and cities to help locate areas on the map (e.g. 'Lut' = Luton).

Persistent disadvantage as an imperfect, but reasonable measure

Whilst there is no official definition of pupils in long-term poverty, we define this group as pupils who are eligible for free school meals (FSM) for 80 per cent or more of their school lives. This means that they are a subgroup of pupils already attracting funding through the current NFF via the "FSM6" factor.

We are able to identify these pupils in the National Pupil Database by using pupils' school census records in the spring term to create a longitudinal picture of each pupil's length of time being eligible for FSM.

The nature of this 'persistence' of disadvantage changes across key stages – being FSM-eligible for 80 per cent of a pupil's time in school by the end of secondary school is a longer period of time than for a pupil at the end of primary school. As a result, younger pupils are more likely to be identified as persistently disadvantaged, even if their circumstances are such that later in their school life, they may no longer be eligible for FSM.

Accurately estimating persistent disadvantage is complicated by wider changes to the welfare system with the roll out of Universal Credit (UC). Prior to April 2018, UC claimants with school-aged children were eligible to claim FSM. From April 2018, an income threshold was introduced so that new UC claimants were only eligible if they earned less than £7,400 per year. To ease this transition the government put in place protections during the period of UC roll out. This meant that any pupil eligible for FSM in April 2018, including those whose eligibility came from legacy benefits, or who became eligible after this point, would retain free school meals until at least March 2025 – even if their family income increased above the threshold during that time.[10] After this period, they will remain on free school meals until they complete the phase of education that they are in.

This means that since 2018, there has been an increasing number of pupils who are eligible for FSM due to transitional protections, rather than their financial circumstances. As a result, our method for identifying persistent disadvantage is capturing a larger group of pupils than those in the deepest poverty. For example, a pupil who is eligible for free school meals in reception would remain eligible for free school meals throughout their time in primary school – and hence be labelled as in persistent poverty – even if their financial circumstances had improved significantly.

Our measure of persistent disadvantage is therefore an imperfect measure. Just as free school meal eligibility itself does not fully reflect those who are in income poverty, our persistent poverty measure does not fully reflect those in the deepest poverty.

However, on balance we still believe it would be a reasonable measure to use at this time.

Firstly, there is currently no other measure available for the Department for Education to use. Whilst new measures could be developed, with improved identification and recording of

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[10] This date was pushed back over the course of the roll-out of Universal Credit.

disadvantage, this would ideally form part of a wider review of free school meal eligibility and take-up. This would take time and delay the implementation of any proposal.

Secondly, whilst the persistently disadvantage group is imperfectly captured, we know that this group, on average, achieves lower results than other disadvantaged pupils and significantly lower results than non-disadvantaged pupils. As our ultimate aim is to raise attainment, it is not unreasonable to consider this group.

Finally, we know that the group we have identified would include those we *would* have identified as persistently disadvantaged had Universal Credit protections not been in place. In other words, we know that we are directing funding towards all pupils that would have been labelled as persistently disadvantaged without protections in place, even though those protections mean we are also reaching other pupils.

By funding these pupils now, we are establishing the principle of targeting support towards some of the most disadvantaged pupils in schools. Over time, the measures could be improved (and will improve once protections are ended) and ensure that that targeting is more efficient.

Using falling rolls as an opportunity to redistribute funding

In an earlier report, we examined how pupil numbers are expected to change over the course of the next decade.[11] Trajectories from the Department for Education suggested that pupil numbers in state-funded primary and secondary schools would fall from a peak of 7.57 million in 2022-23, and then decrease at an average rate of 1.0 per cent each year until they reached 7.14 million in 2028-29.

We used these projections to estimate what that would mean for school funding – since the majority of funding at school level is based on pupil numbers. Using our version of the Department for Education's school funding model we found that even under a scenario where per pupil funding is increased by 0.5 per cent per year in real terms, overall funding would still fall by £1 billion by 2029-2030. Total funding would peak in 2024-25 at £42.7 billion but would then decrease by a yearly average of 0.5 per cent until 2029-30, where it would fall to £41.6 billion – 2.6 per cent lower than its peak in 2024-25. This would mean that the government could make small increases in per pupil funding and still release savings of £1 billion at the end of the decade.

Since that publication, the Department for Education has revised its pupil number projections.[12] Following revisions to the estimated birth rate by the Office for National Statistics, the number of pupils is not expected to fall by as much as previously thought – though we can still expect substantial falls overall.

Figure 1.3 shows the original and revised pupil number projections. Given concerns about the reliability of long-term estimates, projections are now only provided to 2028-29. These projections show that number of pupils in primary schools is expected to fall by 200,000 by 2028, coming on

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[11] Robbie Cruikshanks, 'School funding model: effect of falling school rolls', April 2024.
[12] Department for Education, 'National pupil projections: reporting year 2024', July 2024.

top of declines that began in 2018. By the same point, the number of pupils in secondary schools is expected to be slightly higher (20,000) than current numbers but in decline from its high point.

Figure 1.3: Actual and projected number of primary and secondary pupils (FTE) with broken line showing DfE's revised estimates
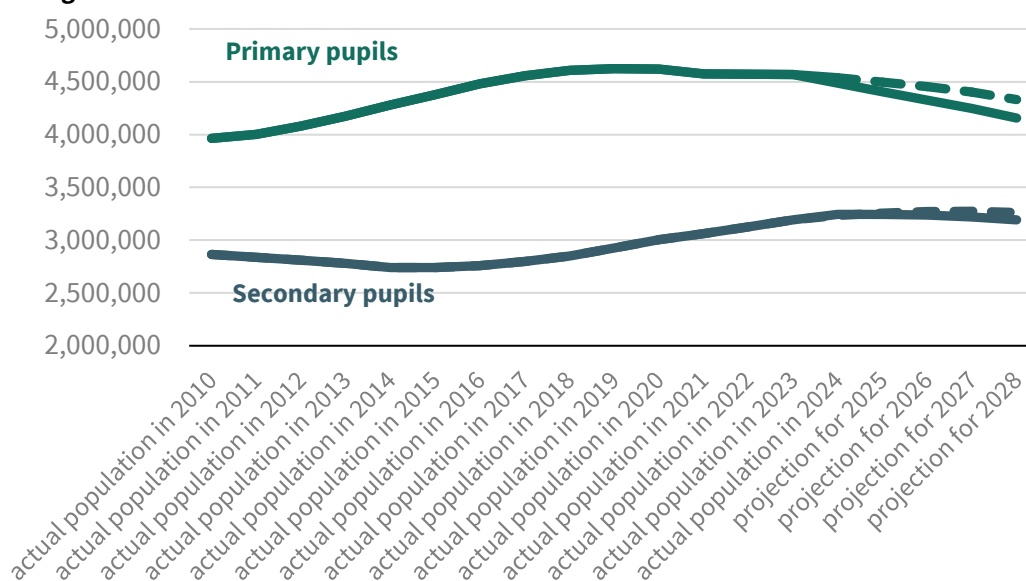
These changes in pupil number projections affect the scope for savings under the national funding formula – i.e. the extent to which you can spend the same on a per pupil basis but still reduce overall spending. Figure 1.4 shows how funding changes with these revised projections. The first line shows the same savings we identified in our earlier report. The second line shows how increasing per pupil funding at the level we proposed now represents a cost until the end of the decade. However, we can still yield significant savings if we decide not to increase per pupil funding (i.e. hold all formula values flat in real terms). This would allow us to recycle funding elsewhere (and in turn, increase per pupil funding overall).

Figure 1.4: Reduction in total funding through the NFF after 2024-25 under three alternative scenarios[13]

	2025-26	2026-27	2027-28	2028-29	2029-30
Original estimate - using DfE pupil projections from 2023 and assume a 0.5% increase each year in per pupil funding	£160m	£360m	£640m	£820m	£1,110m
Revised estimate (1) - using DfE pupil projections from 2024 and assume a 0.5% increase each year in per pupil funding	-£150m	-£250m	-£220m	-£35m	£10m
Revised estimate (2) - using DfE pupil projections from 2024 but assume no real terms increase in per pupil funding	£50m	£145m	£370m	£750m	£985m

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[13] Note that in this table a negative value indicates an additional cost.

Data and modelling approach

Our modelling is based on our own version of the Department for Education's school funding model. It largely follows the method used by the DfE to calculate notional school-level allocations for the schools block as set out in the Department for Education's technical note.[14] While the NFF and the related allocations have now been updated to 2024-25, we are unable to fully replicate this due to the availability of underlying pupil and school level data and we therefore take 2023-24 as our baseline and make all policy changes relative to that model and related allocations. The changes to the national funding formula for 2024-25 were relatively minor and largely reflected the rolling in of the mainstream schools additional grant into the schools block.

There are some other minor differences in approach.

When calculating notional allocations, the DfE is required to publish these allocations well in advance of funding being distributed to schools. This allows local authorities and schools to plan their budgets ahead of time. As a result, notional allocations in any given year are calculated using census data from two years prior. When final allocations are distributed however, they are adjusted using census data from just one year prior. The same is true for NFF 'baselines' – calculations of pupil counts and the sum the school would have received through the NFF the previous year, required to apply the protective mechanisms of the NFF.

In our model however, we use data from just one year prior. The first year in our analysis, 2023-24, uses pupil data from the October 2022 census, and baselines from the 2022-23 NFF, which uses October 2020 census data. In the following year, we project forward the pupil data to get a projected 'October 2023' census and use the outputs of the model from the previous year as baselines.

When we project the NFF forward, we make the following assumptions:

- Other than changes explicitly set out in a modelling scenario, the funding factor values of the NFF remain unchanged in real terms from the 2023-24 NFF; schools will continue to receive the same amount per pupil for each of the pupil-led factors.
- Pupil demographics (such as the percentage identified as disadvantaged) remain the same over time.
- School-led factors such as the lump sum, sparsity funding and premises funding also remain unchanged in real terms.
- Area cost adjustments remain as they are for local authorities in the 2023-24 NFF.
- Minimum-per-pupil amounts remain unchanged in real terms.
- The funding floor (the minimum increase a school can receive in pupil-led funding) is set according to the specific scenario.

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[14] Department for Education, 'Schools block national funding formula 2024 to 2025: technical note', October 2023.

- Growth and falling rolls factors, which are allocated at the LA level and not included in notional school allocations, are not modelled.

Our model essentially represents notional allocations to schools under a projection of the 2023-24 NFF – either adjusting the 2023-24 factors to show what would have happened under different approaches to the NFF or applied to projected pupil numbers to model funding over time. Note that additional funding grants outside the schools block such as the National Tutoring Programme funding, COVID-19 recovery funding, and the mainstream schools additional grant are also not included in this analysis. The pupil premium is used in modelling of different approaches to funding in 2023-24 but not in future projections.

Data sources

There are three key data sources used in this analysis to collect school-level information on funding allocations and pupil characteristics:

- **Annual school funding allocations** published each financial year in the DfE publication 'School funding statistics'.[15] These figures represent total allocations across each funding factor for schools based on the factor values set by the school's local authority.
- **Notional funding allocations** published in the DfE's 'Impact of schools NFF' summary tables.[16] These figures are notional school-level allocations used to inform the final allocations to local authorities. This publication is released in advance of final allocations to assist schools and local authorities with budget planning.
- **Local authority proforma allocations** published by the DfE.[17] These figures represent final allocations to local authorities based on pupil and school information collected via the authority proforma tool (APT), and reflect the different allocations made to schools by local authorities if they choose to diverge from the NFF.
- **Pupil premium allocations** published by the DfE. These figures show the pupil premium allocations made to schools for 2023-24 based on the number of disadvantaged pupils that they had.[18]

Used in conjunction, these data sources allow us to calculate the number of eligible pupils for each funding factor, school-led funding factors and baseline funding amounts at the school level.

Data on the number of pupils identified as persistently disadvantaged was calculated from the National Pupil Database at the school level to estimate the prevalence of persistent disadvantage in 2022, the same year that is used in the NFF to calculate 2023-24 notional funding allocations.

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[15]Department for Education, 'School funding statistics (Financial year 2023-24)', January 2024.
[16] Department for Education, 'National funding formula tables for schools and high needs: 2023 to 2024', July 2022.
[17] Department for Education, 'Schools block funding formulae 2023 to 2024', July 2023.
[18] Department for Education, 'Pupil premium: allocations and conditions of grant 2023 to 2024', March 2024.

In this analysis, we have also linked funding with school level attainment (key stage 2 and key stage 4) data.

Contending with small numbers

Our estimates of persistent disadvantage at school level are based on data in the National Pupil Database. Analysing data at such a granular level requires the suppression of small numbers to protect the identity of data subjects. This suppression has been implemented in line with Office for National Statistics rules, suppressing counts that are ten or fewer. As a result, for smaller schools and those with low rates of disadvantage, counts for the number of persistently disadvantaged pupils within those schools has been imputed using data on the rate of persistent disadvantage in the local authority in which the school is based.

This caveat, along with this analysis reviewing all pupils (rather than the cohorts finishing primary and secondary school) means that the overall number of persistently disadvantaged pupils identified in this analysis differs slightly from the figures published in our annual report but reflects the best available school-level data on persistent disadvantage that can be matched to DfE school funding allocations.

Part 2

Approaches to funding persistent disadvantage

Part 2: Approaches to funding persistent disadvantage

In this section we consider three approaches to funding persistent disadvantage and summarise what they mean in terms of additional cost to school funding, and how they would affect average per pupil funding for different groups.

- A modified NFF – introduce an additional factor into the national funding formula and increase the schools budget to fund it.
- Pupil premium extra – introduce additional factors into the pupil premium based on scaling up existing pupil premium values.
- Pupil premium extra with uplift – introduce additional factors into the pupil premium but first restore the real terms value of the pupil premium as a whole.

All of these scenarios are presented relative to our baseline case of funding allocated through the national funding formula and the pupil premium as in 2023-24 (the latest year for which we have complete data).

Complexities in using the national funding formula

Under the national funding formula, every pupil, regardless of any other characteristics, attracts a basic entitlement dependent on the key stage they are in. In 2023-24 the basic entitlement was worth £3,394 for each primary aged pupil, £4,785 for each key stage 3 pupil, and £5,393 for each key stage 4 funding. This factor accounts for the majority of schools block funding, £31,342 million in 2023-24 or 75.5 per cent of the core total.

Pupils then attract further additional needs funding for characteristics such as deprivation, low prior attainment, English as an additional language and mobility. In 2023-24 these factors were worth a total of £7,209 million or 17.4 per cent of the core total. Of this, deprivation funding accounted for £4,062 million or 9.8 per cent of the total.

Figure 2.1 provides a simplified illustration of how the national funding formula operates. Note that here we focus on the pupil level factors, there are also school level factors covering a lump sum, sparsity, and premises.

Figure 2.1 Simplified illustration of how the national funding formula is applied[19]

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┌─────────────────────────────────────┐
│  A "basic entitlement" allocated to  │
│  every pupil dependent on key stage. │
└─────────────────────────────────────┘
                  ↓
┌─────────────────────────────────────┐
│  Additional needs funding based on   │
│    pupil characteristics and phase.  │
└─────────────────────────────────────┘
                  ↓
┌─────────────────────────────────────┐
│  Is per pupil funding at least as    │
│  high as the "minimum funding level" │
│  for the phase? If not, then         │
│  increase to this level.             │
└─────────────────────────────────────┘
                  ↓
┌─────────────────────────────────────┐
│  Has per pupil funding increased     │
│  from last year by at least the      │
│  "funding floor"? If not, then       │
│  increase per pupil funding to       │
│  this level.                         │
└─────────────────────────────────────┘
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These final two factors play an important role in how the national funding formula operates in practice.

The minimum per pupil funding is a minimum per pupil amount that any school should attract, and it varies by phase. In 2023-24, this minimum funding level was £4,405 for primary aged pupils, and £5,715 for secondary aged pupils.

In 2023-24, the minimum per pupil for each school was the sum of:

- £4,405 multiplied by the number of primary year groups; plus
- £5,503 multiplied by the number of KS3 year groups; plus
- £6,033 multiplied by the number of KS4 year groups

divided by the total number of year groups in the school.

If a school does not attract this level of funding through other factors alone (for example if it has very few pupils who attract disadvantage funding) then it is provided additional funding to bring it up to this level. While a relatively small proportion of overall funding, this factor was worth £223 million in 2023-24.

The second factor is a "funding floor". This ensures that every school receives an increase in per pupil funding of at least a given percentage from one year to the next. In 2023-24 it was set at 0.5 per cent and was worth a total of £326 million.

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[19] This is a very simplified illustration. For example, it excludes school led factors such as sparsity funding, and the lump sum.

Whilst a relatively small proportion of overall funding, the operation of these two factors has the potential to affect other changes that might be made to formula factors elsewhere. For example, suppose a school was in receipt of additional funding through the minimum funding level factor then:

- lowering funding on another factor would have no effect on its funding and would simply be compensated by an additional cost to the minimum funding level factor; and
- increasing a factor, or adding an additional factor, would not necessarily increase funding for that school since it would lose some or all of the value of the minimum funding level.

A similar argument can be made with the funding floor.

Therefore, while the national funding formula has increased transparency in how schools are funded, analysis of how all of the factors interact to give a final allocation is required to see the true effect of a change in a factor. We do this through the use of our own version of the Department for Education's school funding model.

Measuring overall impact

When we present analysis of the changes, we also consider the average per pupil funding for groups rather than the implied allocation through the NFF or pupil premium.

Firstly, this is because we believe it better represents the reality of how much money is available to be spent on a pupil since, within the national funding formula, funding is not ringfenced to any characteristic or any individual. There is certainly an argument to treat pupil premium funding as allocated towards a particular group, but even this is not strictly ringfenced towards them (money can be spent on all pupils, but it must be done with the intention of raising attainment for disadvantaged pupils).

Secondly, the funding available for any given pupil cannot be measured by one factor alone. Pupils from low-income backgrounds are disproportionately more likely to be affected by other factors too – such as low prior attainment, or living in areas of high disadvantage – and therefore it is better to consider the totality of how funding is allocated rather than consider factors in isolation.

How much do schools currently receive for persistently disadvantaged pupils?

Figure 2.2 shows the average per pupil funding through the schools block of the national funding formula and the pupil premium in 2023-24 by level of disadvantage.

Amongst primary school pupils, non-disadvantaged pupils received on average, £5,184 in funding. Disadvantaged pupils received £5,652 per pupil – a premium of £468. Persistently disadvantaged pupils received only a small additional premium of £35. Amongst secondary school pupils, non-disadvantaged pupils received £6,505 in funding, while disadvantaged pupils received £6,986 per pupil – a premium of £481. Persistently disadvantaged pupils received an additional premium of £109.

There are therefore several things of note:

- Even in the absence of explicit persistent disadvantage funding, pupils from persistently disadvantaged backgrounds already receive more funding than non-disadvantaged pupils, and other disadvantaged pupils.
- The extent to which disadvantaged pupils attract additional funding varies across phases. In primary schools, disadvantaged pupils attract 9 per cent more funding per pupil than non-disadvantaged pupils, in secondary schools they attract 7 per cent more than non-disadvantaged pupils.
- Persistently disadvantaged pupils in primary schools attract a small premium of £35 per pupil above average disadvantaged funding. This is equivalent to a further 7.4 per cent of the additional per pupil funding that all disadvantaged pupils attract (£468). Persistently disadvantaged pupils in secondary schools attract a premium of £109, which is equivalent to 22.6 per cent of the additional per pupil funding that all disadvantaged pupils attract (£481).
- But overall, persistently disadvantaged pupils in primary schools attract 10 per cent more in per pupil funding than non-disadvantaged pupils, while in secondary schools they attract 9 per cent more than non-disadvantaged pupils.
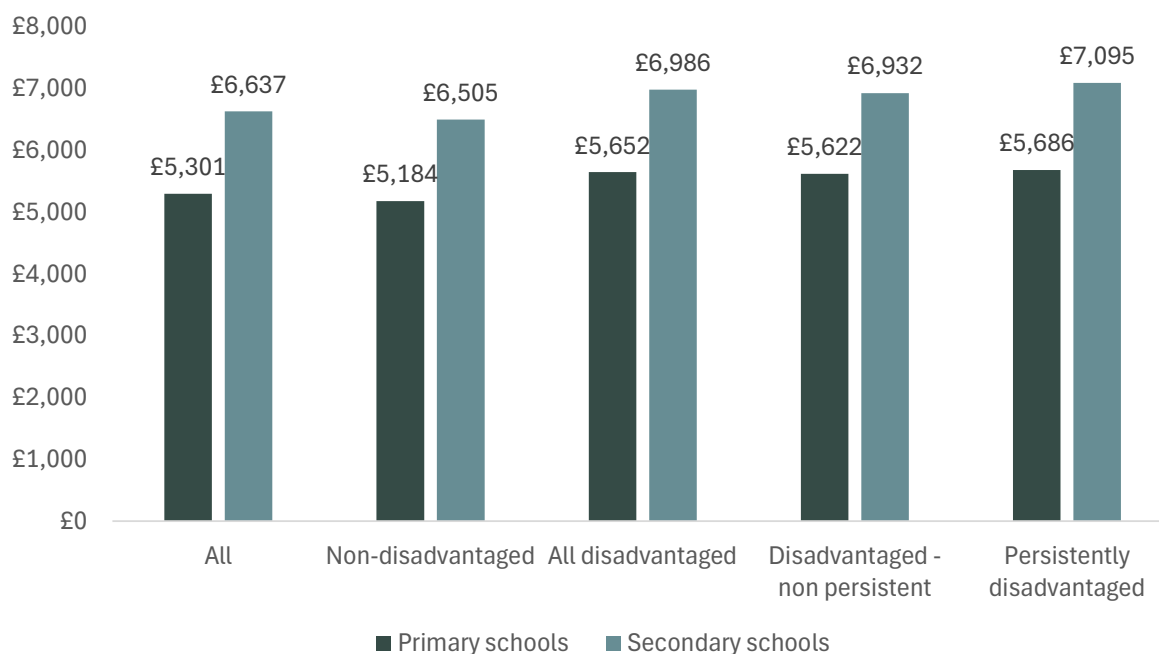
Figure 2.2: Average per pupil funding through the schools block of the national funding formula and pupil premium in 2023-24 by disadvantage[20]

Chart legend: ■ Primary schools ■ Secondary schools

Category	Primary schools	Secondary schools
All	£5,301	£6,637
Non-disadvantaged	£5,184	£6,505
All disadvantaged	£5,652	£6,986
Disadvantaged - non persistent	£5,622	£6,932
Persistently disadvantaged	£5,686	£7,095

How much additional funding should a school receive for a persistently disadvantaged pupil?

The factor values in the national funding formula are not a direct representation of how much each child costs to teach based on their characteristics but instead act as proxies for additional needs.

Consequently, there is no precedent for how much funding persistently disadvantaged pupils should attract, nor any concrete evidence on the additional costs when compared to disadvantaged. This is made more challenging by the fact that the evidence on how much should be spent on disadvantage overall is also not clear.[21]

When including a persistent disadvantage factor in the national funding formula, we have chosen to set the persistent disadvantage formula factor at a value tied to the size of the national disadvantage and persistent disadvantage gaps. We take existing FSM6 funding and rescale it according to the relative size of the disadvantage gap, and the persistent disadvantage gap.[22] This approach provides a reference point for a persistent disadvantage factor value but, given that

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[20] These are the two sources of funding that we are focussed on in this report but note that this does not represent total per pupil funding since it excludes funding received via the high needs block, and additional grants made outside of the main funding allocations. Hence these estimates will be lower than per pupil amounts published by the Department for Education.

[21] National Audit Office, 'Improving educational outcomes for disadvantaged children', July 2024

[22] Note that we have used the gap in 2022 though data is available for 2023. This is because we are modelling the effects on a hypothetical 2023-24 funding allocation. In practice this would mean that 2022 would be the latest performance data available.

current rates of funding have not been sufficient to narrow the gap, this should be seen as a minimum.

Figure 2.3: Derivation of illustrative national funding formula values for persistently disadvantaged pupils

Phase	Disadvantage gap in months (2022) [a]	FSM6 factor value [b]	£ per month of learning behind [c]	Persistent disadvantage gap in months (2022) [d]	Proposed, persistent disadvantage factor value [(d – a) x c]
Primary	10.28	£705	£68.60	12.15	£128
Secondary	18.78	£1,030	£54.90	22.71	£216

We have taken two approaches to set an additional amount to add to the pupil premium for those in persistent disadvantage.

The first approach is to the set the premium values using a similar approach to above but basing them on pupil premium rates in 2023-24. For pupils in secondary schools there is very little difference between the two approaches, offering a rate that is only different by £1. The difference for primary schools is more substantial with the rate being more than doubled. This reflects that the pupil premium gives greater weighting to primary aged pupils, whereas the national funding formula gives higher rates to secondary aged pupils.

The second approach reflects the fact that the value of the pupil premium has fallen in real terms since 2014-15. We first return the pupil premium to its previous level in real terms – with an associated increase in the funding provided to disadvantaged pupils as a whole – before then calculating a new persistent disadvantaged premium based on these updated formula values.

Figure 2.4: Derivation of illustrative pupil premium values for persistently disadvantaged pupils

Phase	Disadvantage gap in months (2022) [a]	Pupil premium value in 2023/24 [b]	£ per month of learning behind [c]	Persistent disadvantage gap in months (2022) [d]	Proposed persistent disadvantage factor value [(d – a) x c]
Primary	10.28	£1,455	£141.54	12.15	£265
Secondary	18.78	£1,035	£55.11	22.71	£217

Figure 2.5: Derivation of illustrative pupil premium values for persistently disadvantaged pupils if pupil premium is returned to 2014/15 level in real terms

Phase	Disadvantage gap in months (2022) [a]	Pupil premium value in 2023/24 if returned to previous value in real terms [b]	£ per month of learning behind [c]	Persistent disadvantage gap in months (2022) [d]	Proposed persistent disadvantage factor value [(d – a) x c]
Primary	10.28	£1,693	£164.70	12.15	£308
Secondary	18.78	£1,218	£64.84	22.71	£255

Scenario 1: A modified NFF – introduce an additional factor into the national funding formula and increase the schools budget to fund it.

In this scenario we introduce additional factors into the national funding formula for persistently disadvantaged pupils, set at £128 for primary aged pupils and £216 for secondary aged pupils. Increasing NFF funding this way means that no school, and indeed no pupil, would see a decrease in funding, as this scenario is purely additive.

Of note is the relatively modest cost of £80 million. If we simply multiplied the number of persistently disadvantaged pupils in our model by the relevant factor values, we would expect a total cost of around £130 million. However, the interaction with the protective mechanisms in the model (the minimum funding levels and the funding floor) mean that some schools would simply lose from other formula values (despite there being no visible change in other elements of the NFF) with little or even no change in their overall level of funding.

The changes in per pupil funding are relatively modest (unsurprisingly given that £80 million represents around 0.2 per cent of school revenue funding) but are reasonably well targeted with persistently disadvantaged pupils receiving, on average, about twice what non-disadvantaged pupils would receive.

Figure 2.6: Summary of the effects of Scenario 1.

Additional factors in the national funding formula	Two additional factors for persistently disadvantaged pupils in primary school (£128) and persistently disadvantaged pupils in secondary schools (£216)
Changes to other national funding formula factor values	None
Changes to the pupil premium	None
Change in total cost of schools block and pupil premium	The total cost would increase by £80 million.
Change in per pupil funding by pupil characteristics	Persistently disadvantaged pupils: +£17 Other disadvantaged pupils: +£14 Non-disadvantaged pupils: +£9 All pupils: +£11

We further tested the national funding formula approach by considering two "cost-neutral" approaches where we changed other factors in the model to release the funding required to increase funding on persistent disadvantage by £80 million (using the same factor values for persistent disadvantage as above).

In our first variant we reduced the basic entitlement factors – the amounts that all pupils receive regardless of other characteristics. The changes in per pupil funding for persistently disadvantaged pupils are fairly minimal in this scenario (a gain of about £5 per pupil, with non-disadvantaged pupils losing around £1 per pupil). Therefore, on average, using this approach is unlikely to make any material change to outcomes for persistently disadvantaged pupils, even though the formula values suggest a significant increase.

Our second cost-neutral approach was to take money from existing deprivation funding within the NFF. Alongside support for individual pupil characteristics such as FSM eligibility and low prior attainment, the NFF also includes area-based deprivation funding based on the Income Deprivation Affecting Children Index (IDACI).

IDACI measures the proportion of children living in income deprived families in small local areas (called 'lower-layer super output areas', or LSOAs) of around 1,500 people. Each LSOA receives a score from 0 to 1 based on the proportion of pupils living in income-deprived families. These scores are ranked and split into 'bands' from A to G, and schools attract amounts of funding depending on the number of pupils living in each band that attend the school as shown below.

Figure 2.7: IDACI bands within national funding formula 2023-24

IDACI band	Primary	Secondary
A (most deprived 2.5% of LSOAs)	£670	£930
B (next 5% most deprived LSOAs)	£510	£730
C (next 5% most deprived LSOAs)	£480	£680
D (next 5% most deprived LSOAs)	£440	£620
E (next 10% most deprived LSOAs)	£280	£445
F (next 10% most deprived LSOAs)	£230	£335
G (next 62.5% most deprived LSOAs)	£0	£0

Under the current 2023-24 NFF, 62.5 per cent of LSOAs received no additional funding. We build on this principle by reducing the value of the next band (Band F) to make the scenario cost neutral – this equates to reducing the primary value from £230 to £69, and the secondary value from £335 to £101. In other words, in this scenario, the most deprived 27.5 per cent of LSOAs will see no reduction in their factor values, but the next 10 per cent of LSOAs will lose the majority of their value.

As with removing from the basic entitlement, the changes in per pupil funding for persistently disadvantaged pupils are fairly minimal in this scenario (a gain of about £5 per pupil, with non-disadvantaged pupils losing around £1 per pupil). Again, on average, using this approach is unlikely to make any material change to outcomes for persistently disadvantaged pupils, even though the formula values suggest a significant increase.

It is clear that should the government choose to fund persistent disadvantage through new factors in the national funding formula it will have to set out what the overall effect of all of the factors in combination is, as simply presenting the formula values for persistently disadvantaged pupils can cover a wide range of impacts.

Scenario 2: Pupil premium extra – introduce additional factors into the pupil premium based on scaling up existing pupil premium values.

This scenario is much simpler. We add an additional element to the pupil premium where we apply an additional factor value (on top of their existing allocation) using a rate of £265 in primary schools and £217 in secondary schools. We have derived these values based on current pupil premium allocations and the relative size of the gap for persistently disadvantaged pupils when compared with all disadvantaged pupils (see figure 2.4).

Unlike the first scenario, the rates are higher for primary pupils than they are for secondary pupils. This reflects the fact that this is how the current pupil premium operates (greater weighting to primary pupils). We estimate that it would cost around £200 million to extend the pupil premium in this way.

The changes in per pupil funding are reasonably well targeted with persistently disadvantaged pupils attracting an additional £41 per pupil and non-disadvantaged pupils receiving an uplift of £23 per pupil. However, unlike funding via the national funding formula, funding via the pupil premium makes it more explicitly intended for persistently disadvantaged pupils, so in practice

the difference between the two may be much greater. Overall, it would represent an increase in per pupil funding of 0.5 per cent.

Figure 2.8: Summary of the effects of Scenario 2

Additional factors in the national funding formula	None
Changes to other national funding formula factor values	None
Changes to the pupil premium	Two additional factors for persistently disadvantaged pupils in primary school (£265) and persistently disadvantaged pupils in secondary schools (£217)
Change in total cost of schools block and pupil premium	Additional cost of around £200 million
Change in per pupil funding by pupil characteristics	Persistently disadvantaged pupils: +£41 Other disadvantaged pupils: +£32 Non-disadvantaged pupils: +£23 All pupils: +£26

In order to make direct comparisons between our NFF approach and our pupil premium approach, we carried out an additional test scenario where we used the same factor values in scenario 1 (of £128 per persistently disadvantaged primary pupil and £216 per persistently disadvantaged secondary pupil). Figure 2.9 sets out these two approaches and illustrates how using two different funding mechanisms can affect the amount of money going into schools and the resulting effect on per pupil funding, even if the formula values appear to be the same.

Figure 2.9: Comparison of delivering the same factor values through the national funding formula and the pupil premium in 2023-24

	Additional factors in the national funding formula	Additional factors in the pupil premium
Factor for persistently disadvantaged primary pupils	£128	£128
Factor for persistently disadvantaged secondary pupils	£216	£216
Net change in per pupil funding		
Persistently disadvantaged pupils	+£17	+£25
Other disadvantaged pupils:	+£14	+£21
Non-disadvantaged pupils:	+£9	+£14
All pupils	+£11	+£17
Total cost	**£80 million**	**£130 million**

Scenario 3: pupil premium extra with uplift – introduce additional factors into the pupil premium but first restore the real terms value of the pupil premium as a whole.

This final scenario takes a similar approach to Scenario 2 in which we apply additional factors to the pupil premium based on the relative size of the gap for persistently disadvantaged pupils when compared with all disadvantaged pupils. But in this scenario, we first increase the value of the pupil premium to restore it to its 2014-15 value in real terms as set out in Part 1.

This means that the primary pupil premium is uplifted from £1,455 to £1,693 and the secondary pupil premium is uplifted from £1,035 to £1,218. The resulting factor values for persistently disadvantaged pupils are an additional £308 per pupil in primary, and £255 in secondary.

Given the significant increase in pupil funding for all disadvantaged pupils this is inevitably the costliest option. We estimate that it would cost around £640 million to reform the pupil premium in this way, based on 2023-24 pupil numbers.

The changes in per pupil funding are reasonably well targeted with persistently disadvantaged pupils attracting an additional £124 per pupil and non-disadvantaged pupils receiving an uplift of £74 per pupil. However, as in Scenario 2 and unlike funding via the national funding formula, funding via the pupil premium makes it more explicitly intended for persistently disadvantaged pupils, so in practice the difference between the two may be much greater. Overall, it would represent an increase in per pupil funding of 1.4 per cent.

Figure 2.10: Summary of the effects of Scenario 3

Additional factors in the national funding formula	None
Changes to other national funding formula factor values	None
Changes to the pupil premium	Two additional factors for persistently disadvantaged pupils in primary school (£308) and persistently disadvantaged pupils in secondary schools (£255) as well as restoring the value of the pupil premium to 2014-15 levels in real terms.
Change in total cost of schools block and pupil premium	Additional cost of around £640 million
Change in per pupil funding by pupil characteristics	Persistently disadvantaged pupils: +£124 Other disadvantaged pupils: +£107 Non-disadvantaged pupils: +£74 All pupils: +£84

Part 3

Further analysis of funding options

Part 3: Further analysis of funding options

Overall cost and impact on per pupil funding

Figure 3.1 sets out the total cost of each of these scenarios in 2023-24, assuming no changes to pupil numbers. The spending commitments of the first two proposals are relatively modest within the context of overall school funding. Restoring the value of the pupil premium to its level in 2014-15 in real terms before then applying a persistent disadvantage factor would be the most expensive at a cost of just under £640 million a year – equivalent to a real terms increase of 1.4 per cent in school revenue funding.

Figure 3.1: Estimated total cost of the three scenarios of funding persistent disadvantage
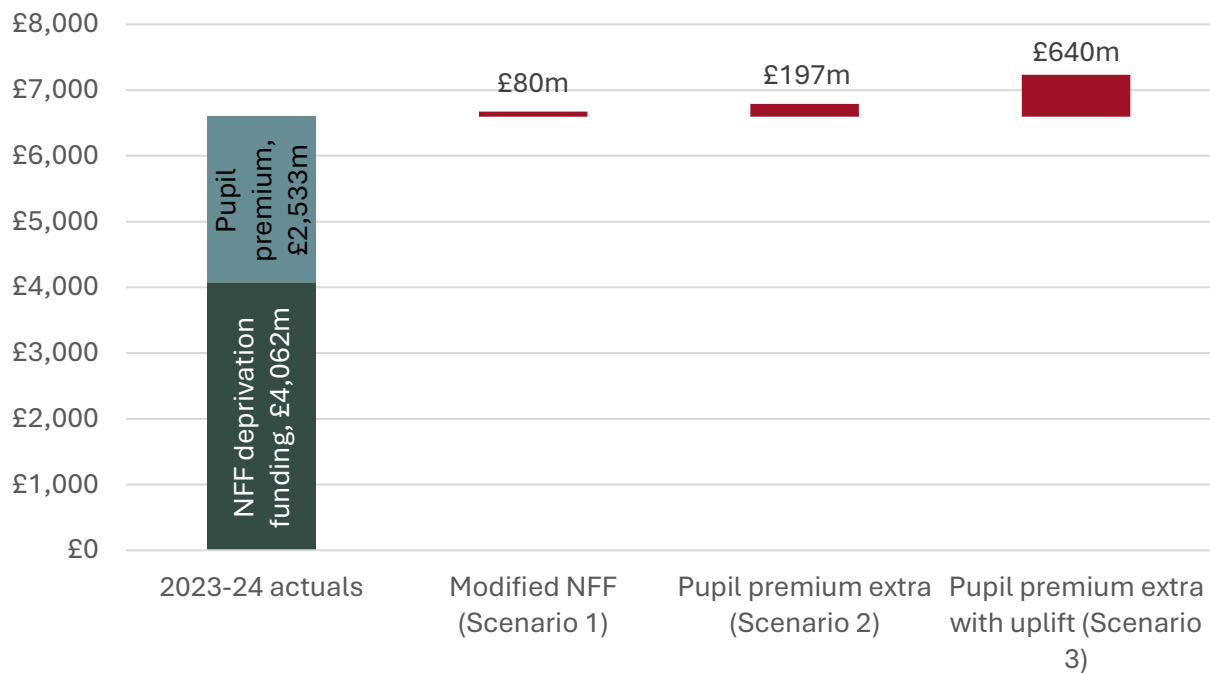
As set out in Part 1, this could potentially be realised in the third year of the spending review period (2028-29) by redistributing money saved through falling rolls if the overall schools budget is maintained at current levels in real terms – though the extent to which this is possible will depend on how the Department for Education protects school budgets from year to year falls, and the extent to which pupil projections are accurate.

Figure 3.2 and figure 3.3 set out the changes in per pupil funding that would result under each of these three scenarios. Each show, as expected, that persistently disadvantaged pupils would benefit the most from these changes, with benefits to persistently disadvantaged pupils generally being about 40 to 60 per cent greater than the increases for all pupils (the first, modified NFF scenario has a higher ratio in primary – with gains for persistently disadvantaged pupils that are 71 per cent higher than all pupils – though this is based on relatively modest increases all round).

As set out in Part 2, the increased transparency of the pupil premium and clear link with disadvantage pupils may mean the gaps between persistently disadvantaged pupils and others

may be much wider in practice – i.e. the pupil premium money is less likely to be "pooled" between all pupils than funding from the national funding formula is.

Figure 3.2: Estimated change in per pupil funding of the three scenarios – primary aged pupils
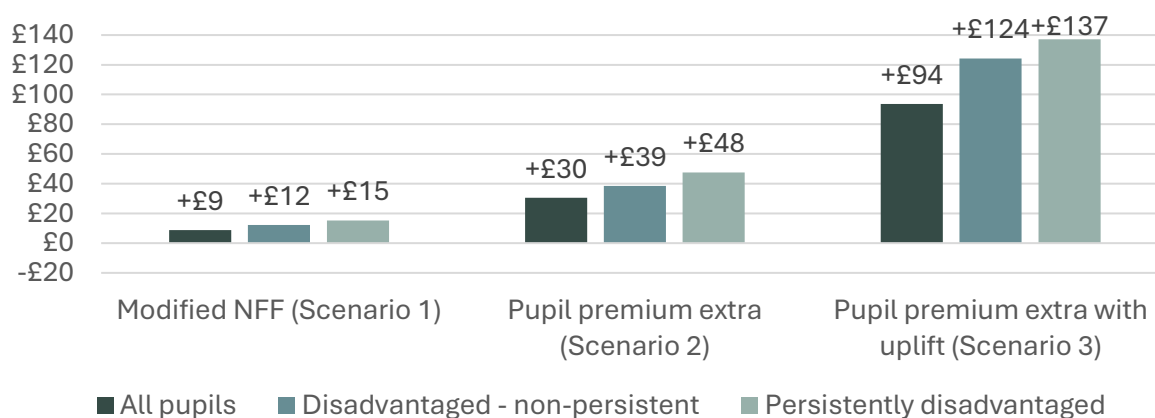
Figure 3.3: Estimated change in per pupil funding of the three scenarios – secondary aged pupils
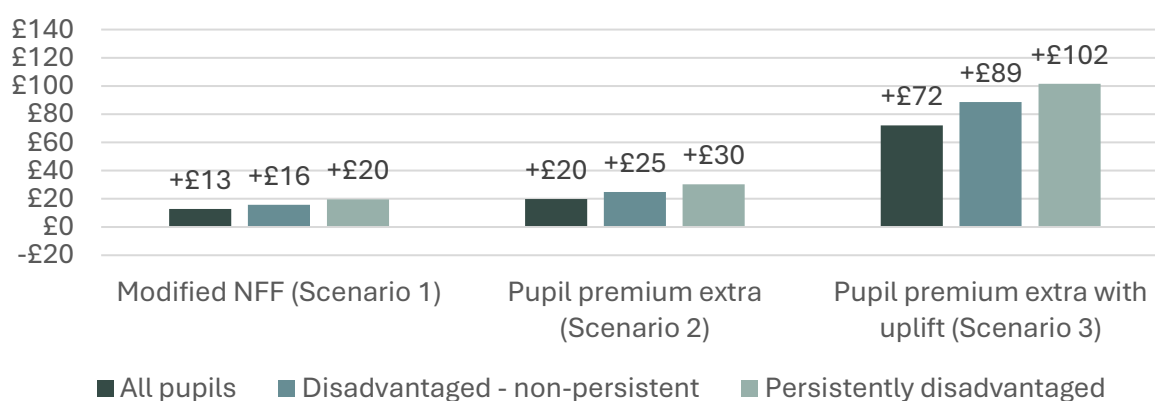
In addition to our three scenarios, we considered two further options that are cost neutral by redistributing existing funding within the national funding formula – from the basic entitlement and from area deprivation funding.

However, the formula values we have proposed for those scenarios here, while rational and consistent with deprivation funding more generally, would unfortunately yield very small increases in funding for persistently disadvantaged pupils overall of between £4 and £6 per pupil. Particularly in the case of basic entitlement, for a given school we would simply be moving funding from one pupil to another with limited overall gain (i.e. we give a large increase to a small number of pupils while also making a small decrease to a large number of pupils.)

Approaches such as these will also be constrained by the minimum funding levels in the national funding formula, which protect schools from having funding that falls below a certain level. At the other end, there are many schools that currently receive funding to make sure that their funding *increases* by at least a fixed percentage each year. If the government did want to use factors in the national funding formula it will have to be mindful of how these protections operate to ensure that the changes had the intended consequence.

Regional differences in impact

There are differences between regions in terms of how the scenarios would affect funding per pupil – though there will also be considerable variation within regions. Figure 3.4 shows the average change in per pupil funding in primary and secondary schools by region (all values are rounded to the nearest pound).

The extent to which regions are affected will be determined by their level of persistent disadvantage, and, for Scenario 1 their existing funding – because this will determine the degree to which minimum funding and funding floor protections operate. The tables highlight the regions that would benefit the most, and the least from any of these proposals.

The north east is the greatest beneficiary under all of the scenarios in both primary and secondary – though there are instances where it is the joint highest or where there is not that much of a difference. The north east has amongst the highest rates of persistent disadvantage at both primary (13.5 per cent) and secondary (12.8 per cent) and while its per pupil funding in primary school is relatively high, at secondary it is not that different from average.

Under the first scenario where funding is allocated via the national funding formula, London sees no overall change to its per pupil funding. We identified just 13 schools in London were there was any difference at all.

In most cases in London this likely to be as a result of the funding floor, the protective mechanism within the NFF that ensures that, in 2023-24, all schools received a 0.5 per cent increase in their pupil-led per-pupil funding compared to the previous year. The purpose of this mechanism is to prevent schools that see substantial changes in their pupil numbers or characteristics from drastic changes in funding. As a result, historic spending patterns are 'baked into the formula'. As London has been historically the recipient of higher funding, the vast majority of London schools receive funding through the funding floor, meaning an increase in their pupil-led funding is in turn offset by the funding received through the funding floor.

However, London does gain substantially under the pupil premium scenarios at both primary and secondary (where it is the second biggest gainer), this is despite attainment gaps in London being lower than elsewhere in the country. The wider south east gains the least, despite having relatively wide attainment gaps at the end of secondary school.

Figure 3.4: Changes in per pupil funding under the three scenarios by region

	Primary			Secondary		
	Modified NFF (Scenario 1)	Pupil premium extra (Scenario 2)	Pupil premium extra with uplift (Scenario 3)	Modified NFF (Scenario 1)	Pupil premium extra (Scenario 2)	Pupil premium extra with uplift (Scenario 3)
East Midlands	+£11	+£29	+£90	+£14	+£17	£66
East of England	+£7	+£25	+£79	+£9	+£14	£56
London	+£0	+£31	+£98	+£0	+£24	£87
North East	+£15	+£36	+£118	+£26	+£28	£92
North West	+£13	+£34	+£104	+£19	+£24	£82
South East	+£7	+£26	+£77	+£8	+£13	£52
South West	+£9	+£28	+£80	+£13	+£16	£59
West Midlands	+£13	+£36	+£111	+£19	+£24	£85
Yorkshire and the Humber	+£13	+£32	+£101	+£20	+£24	£81

Benefit the least
Benefit the most

The situation is though likely more complex than this table would suggest. To carry out our modelling we have applied our scenarios to the make-up of schools in 2023-24 and illustrated what it would have meant for schools in that year.

However, we are ultimately interested in what would happen over the next multi-year spending review period. Pupil numbers will fall over this period, in particular at primary, presenting an opportunity to redistribute funding while still increasing per pupil funding overall. Our previous report suggests that the falls are going to be greatest in London, the north east and Yorkshire and the Humber, we also saw that there may be small increases in the secondary population in the east of England, the south east, and the west midlands.[23]

So, for example, while schools in London may be gaining funding from this new pupil premium factor, they may be losing funding elsewhere because of falling rolls, so it is not necessarily the case that schools in London, or the other apparent "gainers", are necessarily the biggest gainers overall.

Robust projections of pupil demographics to the end of the spending review period are beyond the scope of this report, but it is a clear illustration of how it is necessary to consider the impact of changes to school funding overall rather than changes to one stream, or even one formula value.

The reach to different schools

We saw above that under the NFF scenario very few schools in London received any increase at all. However, schools not seeing any change in funding is by no means unique to London. In fact, we

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[23] Robbie Cruikshanks, 'School funding model: effect of falling school rolls', April 2024.

estimate that around 40 per cent of schools in England would see no change in their funding if we funded the NFF at the level we have done under our first scenario.

There are three reasons why a school would not see any change in their funding: simply not having any persistently disadvantaged pupils (a relatively small number of schools), the funding floor, or because they already receive additional funding through the minimum funding levels. Because the group of persistently disadvantaged pupils remains relatively small, increasing their funding typically has a relatively limited impact on the overall per pupil rate of a school, this is the rate to which the protections are applied.

A further consideration is how well additional funding targets those schools where attainment for disadvantaged pupils is lowest. In figure 3.5 and figure 3.6 below we look at how per pupil funding overall is changed under each of the scenarios, grouping schools by the attainment of disadvantaged pupils. We create quintile cut-offs for the attainment of *all* pupils and then categorise a school based on its attainment for disadvantaged pupils relative to those cut-offs.[24] We do it this way rather than taking the quintiles of attainment for disadvantaged pupils because a relatively high score for disadvantaged pupils can still be relatively low overall. Because of this, over half of schools fall within the first quintile grouping.

In both primary and secondary schools, the modified NFF scenario (Scenario 1) would appear to provide the greatest discrimination between low and high performing – i.e. there is a clear gradient between schools with low and high attainment for disadvantaged pupils. Amongst primary schools, the lowest attaining schools would receive an additional £11 per pupil and the highest attaining would receive £6 per pupil, the equivalent figures for secondary schools are £17 and £4.

However, we saw in the previous analysis that London was quite different from the rest of the country with no gains under a scenario that used the national funding formula. In figure 3.7 and figure 3.8 we present the same results but excluding London. When we exclude London from the analysis, the relationship between attainment and additional funding weakens considerably. There is still a clear difference amongst secondary schools, but the distinction between high and low attaining schools amounts to £2 per pupil in primary school.

This suggests that the clear gradient between high and low performing schools is driven by differences between London (disproportionately fewer low performing schools) and the rest of the country rather than effective targeting of funding.

So overall, and particularly at primary, none of the mechanisms would appear to be particularly efficient at distinguishing between high and low performing schools. This potentially adds weight to an argument to deliver through the pupil premium where funding at school level is more likely to be targeted towards those who need it the most through school pupil premium strategies.

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[24] Note that we have had to use disadvantaged rather than persistent disadvantaged here as attainment data for persistent disadvantaged pupils is not available at individual school level.

Figure 3.5: Estimated change in per pupil funding of the three scenarios by current attainment of disadvantaged pupils – primary

Legend: 1st quintile (lowest) | 2nd quintile | 3rd quintile | 4th quintile | 5th quintile (highest)

Modified NFF (Scenario 1): +£11, +£10, +£9, +£8, +£6
Pupil premium extra (Scenario 2): +£34, +£35, +£34, +£33, +£31
Pupil premium extra with uplift (Scenario 3): +£105, +£108, +£107, +£104, +£101

Figure 3.6: Estimated change in per pupil funding of the three scenarios by current attainment of disadvantaged pupils – secondary

Legend: 1st quintile (lowest) | 2nd quintile | 3rd quintile | 4th quintile | 5th quintile (highest)

Modified NFF (Scenario 1): +£17, +£10, +£9, +£6, +£4
Pupil premium extra (Scenario 2): +£22, +£18, +£19, +£19, +£16
Pupil premium extra with uplift (Scenario 3): +£77, +£66, +£70, +£71, +£62

Figure 3.7: Estimated change in per pupil funding of the three scenarios by current attainment of disadvantaged pupils – primary excluding London

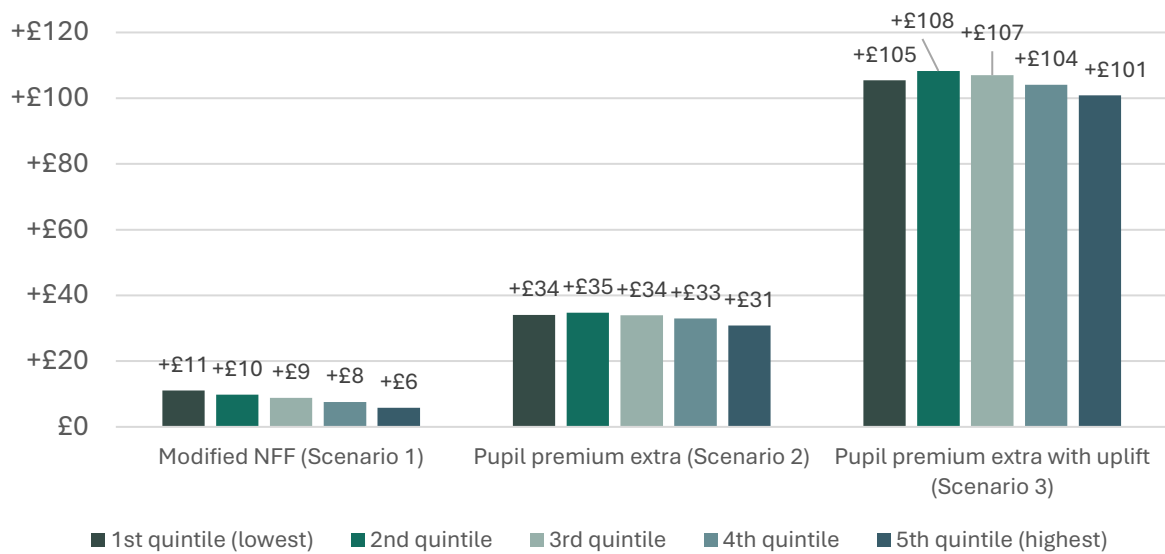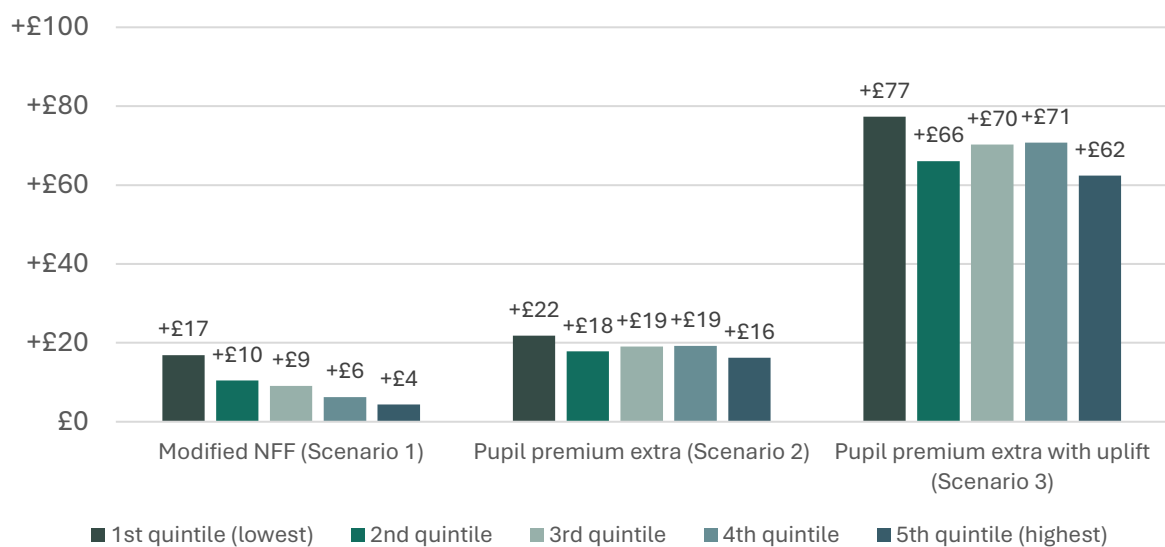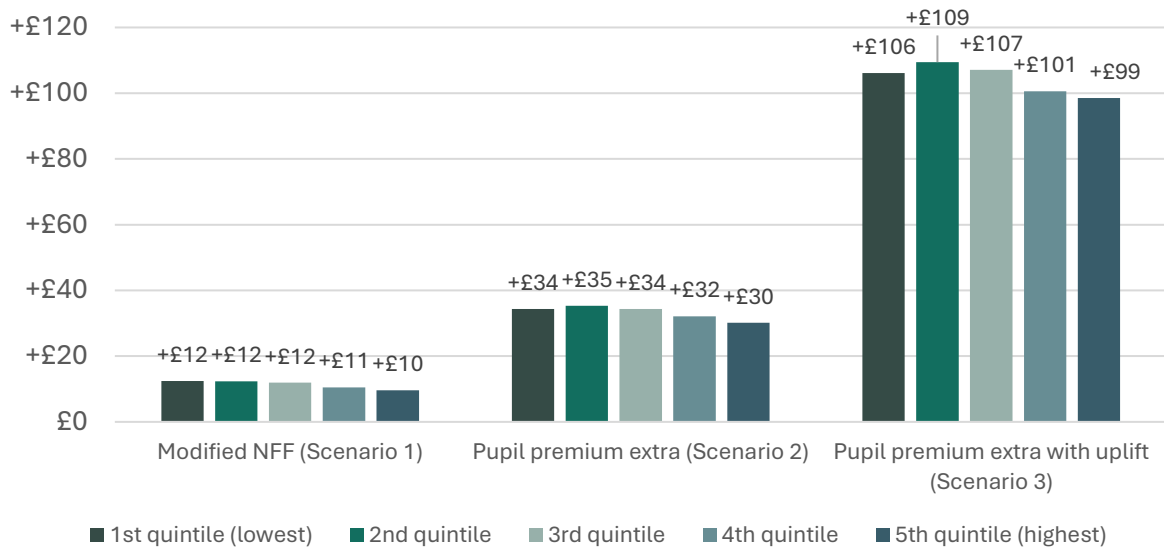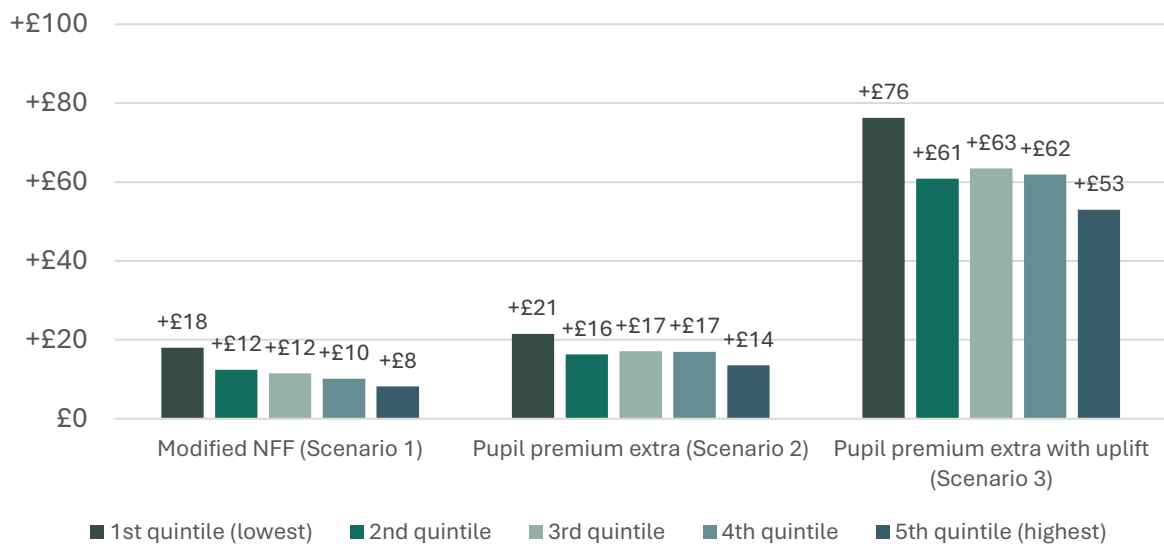Legend: ■ 1st quintile (lowest) ■ 2nd quintile ■ 3rd quintile ■ 4th quintile ■ 5th quintile (highest)

Figure 3.8: Estimated change in per pupil funding of the three scenarios by current attainment of disadvantaged pupils – secondary excluding London

Legend: ■ 1st quintile (lowest) ■ 2nd quintile ■ 3rd quintile ■ 4th quintile ■ 5th quintile (highest)

Part 4

What should the government now do?

Part 4: What should the government now do?

There is a clear case for a focus on persistent disadvantage in school funding and the Department for Education should now commit to better targeting funding to where it is needed most. In 2023, the attainment gap between disadvantaged pupils and their non-disadvantaged peers was equivalent to just over 10 months at key stage 2, and 19 months at key stage 4. Attainment gaps for pupils identified as persistently disadvantaged were wider still, equivalent to nearly a year of learning at the end of primary school, and nearly two years of learning by the end of secondary school. Despite this variation within the disadvantage group, the school funding system makes no distinction between persistent disadvantage and short-term disadvantage in allocating nearly £6.6 billion (in 2023-24) of funding earmarked for disadvantage through the national funding formula, and the pupil premium.

As part of the spending review process, the Department for Education should use falling rolls as an opportunity to better target funding for persistently disadvantaged pupils. The October 2024 Budget set the overall level of school funding in 2025-26, the subsequent three years will be set by the government's spending review that is expected to report in spring of 2025. Government finances and competing priorities could suggest that the settlement for schools will be tight. However, the number of pupils at schools in England is expected to fall over the course of this parliament, and while these falls are not likely to be as large as previously thought they do provide the opportunity to consider how funding is targeted to where it is needed most. We estimate that in the final year of the spending review period (2028-29), the Treasury would save around £750 million if it simply held per pupil funding flat in real terms. It should use this saving to support greater expenditure on persistently disadvantaged pupils – the exact amount available would depend on how the Department for Education adjusted other factors in the national funding formula, and in particular, the extent to which it protects schools with falling rolls.

There are strengths and weaknesses to each approach, and the Department for Education will need to be transparent in how funding will work in practice. There are two main mechanisms by which the Department for Education delivers funding to schools in England, the national funding formula and the pupil premium. In this report we have considered the strengths and weaknesses of each including comparing with approaches that are "cost-neutral" – i.e. where funding is redistributed from other formula values. Whilst on first appearances, different approaches can appear to fund persistently disadvantaged pupils to the same degree (i.e. a set formula value), the reality is that the cost the Department and the final level of per pupil funding for persistently disadvantaged pupils, varies significantly. With any scenario, the Department for Education must be transparent about the distributional effects of changes to the national funding formula and the pupil premium in terms of average per pupil funding.

Because of the complexities of the NFF and its roll-out, additional funding should come via an enhanced pupil premium. As we have shown in this analysis, there is no simple or obviously correct way to target persistent disadvantage. Roll-out through the national funding formula (through additional funding for a persistent disadvantage factor) would mean funding would appear to be reasonably well targeted at schools where attainment is currently lowest, but the

overall picture is distorted by London – where attainment is relatively high, and where the overwhelming majority of schools would receive no additional funding under our NFF scenario – and less clear elsewhere. The protection mechanisms in the NFF such as the minimum funding levels and the funding floor make it difficult to target funding in a consistent way (despite the apparent transparency that the national funding formula is supposed to bring). Therefore, until the point at which the NFF is fully rolled out and less reliant on protections, we would recommend that any additional funding should come via an extended pupil premium instead – the resulting factor values for persistently disadvantaged pupils are an additional £308 per pupil in primary, and £255 in secondary.

In addition, the value of the pupil premium has fallen in real terms. The disadvantage gap, as well as the persistent disadvantage gap, is not closing and this adds weight to the argument that the pupil premium should be increased to its previous value in real terms as well as extended to give more support to persistently disadvantaged pupils. This would come at a total additional cost of around £640 million a year.

But in the longer term, the Department for Education must not be afraid to take hard decisions about protections and minimum funding levels to ensure that the funding system is responsive to need – with a strong rationale for funding for different pupil groups. The national funding formula is intended to be a transparent mechanism by which schools in England are funded. However, because of factors such as the minimum funding levels and the funding floor, the introduction of new factors or changing the value of factor values of existing factors does not necessarily result in the change to school funding that might be expected (e.g. increasing the funding received from disadvantage, may mean losing funding from the funding floor if these are not also adjusted).

The use of protective mechanisms has been a sensible consideration in the roll-out of the national funding formula to date to ensure that schools have not experienced significant year to year changes in their funding due simply to changes in the funding system. However, it does make the funding system less responsive to need. In addition, around three quarters of schools block funding is allocated on the basis of pupil counts alone, so the ability to flex the system to "additional need" is somewhat constrained. As the Department for Education continues to move towards a "hard NFF", it should also consider the extent to which the NFF should reflect the composition of schools today with a reduced role for funding protections. In doing so, it should consider the rationale for factor values and in particular the apparent contradictions between the national funding formula and the pupil premium.

Annex

Rates of disadvantage and persistent disadvantage by local authority

Annex: Rates of disadvantage and persistent disadvantage by local authority

	Primary		Secondary	
	Percentage ever6FSM	Percentage persistently disadvantaged	Percentage ever6FSM	Percentage persistently disadvantaged
East Midlands	**24.6%**	**10.9%**	**25.7%**	**7.9%**
Derby	35.3%	14.4%	33.9%	9.0%
Derbyshire	29.1%	13.0%	27.5%	8.2%
Leicester	26.3%	11.2%	30.1%	10.9%
Leicestershire	15.1%	8.4%	18.1%	5.1%
Lincolnshire	27.8%	13.7%	25.9%	7.0%
North Northamptonshire	20.4%	7.9%	22.5%	6.6%
Nottingham	38.7%	17.3%	42.8%	16.6%
Nottinghamshire	22.8%	8.6%	24.0%	7.6%
Rutland	11.1%	5.0%	14.9%	2.7%
West Northamptonshire	16.1%	6.8%	19.7%	5.7%
East of England	**21.2%**	**9.6%**	**22.2%**	**6.3%**
Bedford	21.0%	9.1%	23.1%	7.0%
Cambridgeshire	21.4%	10.7%	21.0%	5.5%
Central Bedfordshire	13.0%	4.2%	16.5%	4.7%
Essex	21.4%	9.4%	22.1%	5.8%
Hertfordshire	16.4%	6.1%	16.8%	4.4%
Luton	26.6%	12.1%	31.1%	9.5%
Norfolk	23.7%	11.6%	25.1%	7.9%
Peterborough	28.7%	16.6%	30.5%	9.8%
Southend-on-Sea	27.0%	12.8%	23.7%	6.8%
Suffolk	22.3%	10.7%	24.2%	7.5%
Thurrock	24.8%	9.9%	27.3%	7.8%
London	**26.7%**	**11.7%**	**32.5%**	**10.9%**
Barking and Dagenham	28.0%	10.0%	33.5%	10.7%
Barnet	22.6%	9.3%	25.6%	7.5%
Bexley	20.9%	9.7%	23.3%	6.8%
Brent	21.0%	7.8%	25.6%	8.4%
Bromley	15.6%	7.2%	20.0%	6.2%
Camden	43.2%	27.2%	49.8%	21.2%
Croydon	30.5%	15.3%	38.6%	14.0%
Ealing	27.3%	9.5%	30.5%	9.7%
Enfield	32.2%	12.7%	33.1%	10.6%
Greenwich	31.0%	12.9%	34.0%	9.7%

	Primary		Secondary	
	Percentage ever6FSM	Percentage persistently disadvantaged	Percentage ever6FSM	Percentage persistently disadvantaged
Hackney	39.3%	20.7%	49.4%	20.0%
Hammersmith and Fulham	32.8%	18.8%	32.8%	12.7%
Haringey	26.7%	10.4%	35.2%	11.0%
Harrow	15.5%	6.4%	24.3%	8.2%
Havering	19.8%	9.7%	24.3%	8.3%
Hillingdon	22.5%	9.7%	27.4%	7.6%
Hounslow	22.8%	9.1%	28.6%	10.6%
Islington	45.0%	23.7%	53.9%	24.2%
Kensington and Chelsea	34.1%	23.2%	38.6%	16.3%
Kingston upon Thames	15.3%	5.6%	15.9%	4.5%
Lambeth	39.0%	19.6%	45.9%	15.9%
Lewisham	27.0%	10.1%	38.0%	12.7%
Merton	25.0%	11.1%	32.1%	8.8%
Newham	32.4%	8.5%	44.5%	9.8%
Redbridge	15.4%	5.5%	23.0%	8.0%
Richmond upon Thames	12.6%	5.7%	17.6%	5.5%
Southwark	38.0%	18.3%	42.4%	11.1%
Sutton	17.8%	7.9%	18.4%	6.0%
Tower Hamlets	39.5%	20.9%	53.5%	23.7%
Waltham Forest	25.0%	8.5%	32.4%	10.1%
Wandsworth	27.7%	15.2%	35.7%	13.1%
Westminster	39.5%	21.6%	43.6%	19.3%
North East	**33.0%**	**13.2%**	**34.2%**	**13.2%**
County Durham	33.5%	16.5%	32.9%	12.7%
Darlington	30.2%	13.2%	30.3%	9.7%
Gateshead	30.2%	12.4%	32.0%	12.0%
Hartlepool	41.0%	14.9%	42.1%	18.1%
Middlesbrough	43.0%	13.0%	48.7%	20.3%
Newcastle upon Tyne	40.3%	22.9%	44.1%	19.2%
North Tyneside	28.2%	8.8%	27.7%	7.8%
Northumberland	24.6%	8.0%	24.3%	8.4%
Redcar and Cleveland	34.1%	9.9%	32.8%	13.0%
South Tyneside	36.1%	13.4%	36.1%	12.3%
Stockton-on-Tees	30.1%	11.1%	31.9%	10.8%
Sunderland	30.9%	9.8%	35.5%	15.8%
North West	**28.0%**	**12.9%**	**30.3%**	**11.2%**
Blackburn with Darwen	27.3%	12.0%	29.6%	10.3%
Blackpool	40.6%	22.3%	49.3%	19.1%

	Primary		Secondary	
	Percentage ever6FSM	Percentage persistently disadvantaged	Percentage ever6FSM	Percentage persistently disadvantaged
Bolton	27.6%	9.6%	31.0%	10.7%
Bury	22.6%	11.2%	26.6%	10.2%
Cheshire East	16.0%	7.0%	17.7%	5.3%
Cheshire West and Chester	19.9%	9.5%	22.5%	7.1%
Cumberland	22.7%	8.2%	24.6%	7.8%
Halton	38.5%	23.6%	39.9%	18.8%
Knowsley	39.7%	16.0%	52.3%	25.4%
Lancashire	23.4%	11.0%	24.8%	9.2%
Liverpool	35.9%	13.8%	40.5%	17.0%
Manchester	43.4%	25.1%	48.9%	18.7%
Oldham	33.4%	13.4%	36.0%	12.0%
Rochdale	31.2%	14.1%	36.2%	13.5%
Salford	34.2%	21.5%	39.7%	16.3%
Sefton	25.8%	11.7%	28.3%	10.7%
St. Helens	28.0%	11.8%	30.7%	11.7%
Stockport	19.1%	9.0%	24.3%	8.6%
Tameside	32.7%	13.6%	34.4%	11.1%
Trafford	16.2%	6.0%	17.8%	5.6%
Warrington	24.4%	9.3%	21.1%	6.3%
Westmorland and Furness	17.0%	5.5%	16.5%	4.7%
Wigan	27.8%	13.4%	27.7%	9.6%
Wirral	30.2%	12.8%	31.1%	12.0%
South East	**20.0%**	**9.8%**	**20.7%**	**5.8%**
Bracknell Forest	12.7%	4.6%	15.4%	4.0%
Brighton and Hove	24.3%	14.5%	24.9%	8.6%
Buckinghamshire	15.7%	6.2%	14.2%	3.4%
East Sussex	25.1%	13.0%	25.5%	8.3%
Hampshire	18.5%	9.7%	19.8%	5.1%
Isle of Wight	25.2%	14.5%	27.7%	9.3%
Kent	24.3%	12.1%	23.9%	6.9%
Medway	26.7%	10.7%	25.4%	6.9%
Milton Keynes	22.3%	9.2%	25.9%	6.4%
Oxfordshire	16.2%	7.1%	18.2%	5.2%
Portsmouth	34.4%	19.5%	36.2%	11.7%
Reading	24.0%	11.9%	22.5%	6.7%
Slough	21.1%	6.5%	22.3%	5.2%
Southampton	34.3%	19.9%	36.4%	12.6%
Surrey	14.7%	7.5%	15.3%	4.1%
West Berkshire	15.1%	6.2%	16.8%	3.8%

	Primary		Secondary	
	Percentage ever6FSM	Percentage persistently disadvantaged	Percentage ever6FSM	Percentage persistently disadvantaged
West Sussex	15.4%	7.9%	17.1%	4.5%
Windsor and Maidenhead	14.1%	5.3%	15.7%	3.3%
Wokingham	9.6%	4.6%	11.6%	3.1%
South West	**20.7%**	**10.7%**	**22.4%**	**7.1%**
Bath and North East Somerset	17.7%	10.7%	18.1%	5.9%
Bournemouth, Christchurch & Poole	20.4%	11.1%	21.0%	6.5%
Bristol, City of	28.2%	15.5%	32.6%	13.0%
Cornwall	22.2%	10.2%	24.3%	7.0%
Devon	19.3%	9.1%	23.1%	6.8%
Dorset	19.0%	10.7%	22.3%	8.3%
Gloucestershire	18.9%	9.8%	19.0%	5.9%
North Somerset	16.8%	7.9%	18.6%	5.3%
Plymouth	28.4%	14.1%	28.8%	10.3%
Somerset	21.7%	12.3%	21.8%	6.6%
South Gloucestershire	14.1%	7.3%	18.5%	5.9%
Swindon	21.2%	8.8%	23.9%	7.2%
Torbay	31.2%	17.6%	26.0%	8.7%
Wiltshire	16.5%	9.1%	17.8%	4.4%
West Midlands	**29.8%**	**13.5%**	**32.0%**	**11.1%**
Birmingham	42.1%	21.7%	45.2%	17.8%
Coventry	26.8%	10.5%	31.7%	11.6%
Dudley	26.3%	10.3%	29.5%	10.9%
Herefordshire, County of	18.6%	9.3%	19.5%	5.3%
Sandwell	33.1%	13.0%	38.0%	14.1%
Shropshire	18.5%	8.1%	20.0%	5.6%
Solihull	24.2%	9.9%	29.5%	10.9%
Staffordshire	19.3%	10.1%	21.6%	6.2%
Stoke-on-Trent	40.2%	23.7%	37.4%	14.5%
Telford and Wrekin	29.3%	10.7%	30.1%	9.8%
Walsall	37.7%	12.3%	38.6%	13.3%
Warwickshire	21.6%	9.1%	21.8%	5.4%
Wolverhampton	41.9%	13.8%	44.4%	13.2%
Worcestershire	20.4%	9.8%	22.4%	6.8%
Yorkshire and the Humber	**27.4%**	**12.3%**	**29.7%**	**10.7%**
Barnsley	30.8%	15.5%	32.7%	11.5%
Bradford	29.5%	10.8%	35.1%	13.0%
Calderdale	26.8%	13.1%	27.3%	9.4%

	Primary		Secondary	
	Percentage ever6FSM	Percentage persistently disadvantaged	Percentage ever6FSM	Percentage persistently disadvantaged
Doncaster	30.4%	11.2%	32.0%	10.1%
East Riding of Yorkshire	19.4%	9.9%	23.3%	8.3%
Kingston upon Hull, City of	35.3%	14.9%	37.0%	15.2%
Kirklees	25.6%	11.8%	28.9%	14.9%
Leeds	27.3%	13.7%	31.3%	11.6%
North East Lincolnshire	33.2%	13.1%	34.9%	9.8%
North Lincolnshire	29.1%	14.0%	30.5%	9.4%
North Yorkshire	18.1%	8.6%	18.1%	4.7%
Rotherham	28.5%	9.8%	31.1%	10.0%
Sheffield	34.3%	19.7%	35.2%	13.9%
Wakefield	25.4%	7.3%	27.3%	8.7%
York	16.4%	6.6%	17.0%	4.7%

Note: the local authority rates in this table have been calculated from the pupil counts in the 2023-24 schools block allocations which is a different basis to published pupil premium rates for the 2023/24 academic year (available from https://www.gov.uk/government/publications/pupil-premium-allocations-and-conditions-of-grant-2023-to-2024). There are therefore small differences between the two sets of figures.