Who has been registered for free school meals and pupil premium in the National Pupil Database?

Implications for research and policy

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exactly reproduce National Statistics aggregates. Analysis was carried out in the Secure Research Service, part of the Office for National Statistics.

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For publications, see: https://www.researchgate.net/profile/Tammy-Campbell-2

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Executive summary

Introduction

This paper is part of a larger project – *What has 'Free School Meals' measured and what are the implications?* – funded by the Nuffield Foundation.[1] Throughout this project, we are investigating which pupils are registered for free school meals and represented by the free school meals (FSM) measure, and how this changes over age, time, and place. We are considering implications in terms of measurement for policymaking and research, and in terms of identifying and serving educationally disadvantaged and under-resourced pupils. We are also considering ways to improve uses of the FSM measure, and potential alternatives and complementary measures.

Our review and discussion of existing evidence was published last year.[2] We have also published a number of shorter pieces, which we refer to and draw on throughout this report.[3] Later this year, we will publish details of our ongoing in-depth qualitative work, as well as analyses of cohort studies, and messages from a deliberative event which will explore the issues raised throughout the project for the research and policy communities.

The current report

This report uses records spanning all children in pre-school, primary, and secondary state education from 2003 to 2023, who are included in the National Pupil Database (NPD; where FSM-registration is recorded). We also make some comparisons to poverty estimates from the Households Below Average Income (HBAI) dataset, derived from the Department for Work and Pensions' Family Resources Survey.

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[1] https://www.nuffieldfoundation.org/project/what-has-free-school-meals-measured

[2] 'What's Cooking? A review of evidence and discussion on the Free School Meals (FSM) measure in the National Pupil Database.'
https://epi.org.uk/publications-and-research/whats-cooking-a-review-of-evidence-and-discussion-on-the-free-school-meals-fsm-measure-in-the-national-pupil-database/

[3] 'Can machine learning using cross-government administrative and census data help us understand area-level under-registration for free school meals?'
https://epi.org.uk/publications-and-research/can-machine-learning-using-cross-government-administrative-and-census-data-help-us-understand-area-level-under-registration-for-free-school-meals/
'Under-registration for free school meals in early primary school: How could this be tackled?'
https://epi.org.uk/publications-and-research/under-registration-for-free-school-meals-in-early-primary-school-how-could-this-be-tackled/
'Exploring the free school meals measure in the English National Pupil Database.'
https://www.bera.ac.uk/blog/exploring-the-free-school-meals-measure-in-the-english-national-pupil-database

We look at levels of registration (and under-registration) for FSM over time and by age-group; at compositional changes to the groups of children flagged as FSM-eligible and Pupil Premium (PP)[4]; at patterns of registration for FSM throughout school careers; and at how FSM compares to area-based measures of income deprivation (IDACI). We also look at measures of low-income in the pre-school years.

Key messages and implications

Throughout the chapters of this paper, several key messages emerge. Firstly, **the proportion of children recorded as FSM-eligible in the NPD has risen since 2018, and the composition of the FSM group is now more diverse and uncertain**. Some children are in the group because of protections of legacy FSM-status under Universal Credit roll-out, while contemporary peers whose families have a similarly low income are not.[5] Not knowing the basis on which children are included and flagged as FSM-eligible means the data on these pupils are less useful for research, and that policy is targeted less efficiently than is optimal.

Overall, across all years, **fewer children are registered for FSM than are estimated to be in poverty**. This is partly by design: because the family income threshold for registration is so low (£7,400 per annum). It is also because there is under-registration among eligible children. Additionally, FSM eligibility criteria do not account for factors such as housing costs and family size, which are heavily associated with poverty.

The under-registration of eligible pupils is not equally distributed across areas and pupil groups. The youngest primary children in particular are less likely to be registered, and this is problematic because investment in the earliest years lays important foundations. FSM registration confers funding through pupil premium as well as other substantial entitlements including to the Holiday Activities and Food Programme. Children in more deprived local areas also appear, on average, at a higher risk of under-registration: again, this leads to a sub-optimal distribution of resources when distribution is dependent on FSM status and rates of registration.

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[4] Children are denoted Pupil Premium if they have ever been registered for FSM in the past six years
[5] Since 2018, 'pupils who were eligible on 1 April 2018, or who became eligible since then, continue to receive free meals, even if their household is no longer eligible under the benefits/low-earnings criteria, up until March 2025 and then until the end of their phase of education.'
https://assets.publishing.service.gov.uk/media/65fdad5965ca2f00117da947/Free_school_meals.pdf

Very few nursery-aged children are registered for FSM, despite higher rates of poverty and food insecurity are at this stage. We have previously published research which explores the prevalence of food poverty amongst the under-5s, and ways to tackle the problem.[6] We will investigate issues around FSM registration in the early years further in our qualitative paper later this year. Meanwhile we emphasise here issues with lack of registration for FSM amongst this age group, given the importance of early development and nutrition. In section five of this report, we discuss methodological implications of this lack of coverage for proxying poverty and low-income in research on the early years, and alternative measures.

Nationally, the non-FSM and non-pupil premium recorded groups have become more ethnically and linguistically diverse over the past decade, according to other data collected in the NPD. Change has been slower in the FSM/PP groups (though these groups were more diverse to begin with). For example, in 2012, 65 per cent of children receiving PP in late primary school (years 3-6) were recorded as of White British ethnicity, compared to 76 per cent of non-PP children. By 2023, 61 per cent of PP children were White British, and 64 per cent of the non-PP group. In secondary school, in 2012, 67 per cent of PP children were recorded as White British, falling to 59 per cent in 2023 – but the drop is far steeper among non-PP children, from 80 per cent (2012) to 66 per cent (2023).

In terms of comparisons over time, this means that factors such as language background and ethnicity are useful to account for in research, as they will explain some of observed differences between groups. This is particularly important as **estimated poverty rates far exceed the percentage of children registered for FSM and PP within some ethnic groups** (but not others). Among children recorded as Pakistani, Bangladeshi or Indian ethnicities, estimated poverty rates are far higher than the percentage of children registered for FSM, and, to a lesser but still large extent, for PP.

In terms of geographies, there has been a slow shift over the past decade where children recorded as FSM are more likely to live in rural areas. Throughout the decade, there are very different relationships between the percentage of children estimated to be in poverty and the percentage

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[6] https://epi.org.uk/publications-and-research/how-can-we-reduce-food-poverty-for-under-fives/

registered for FSM, across different regions. This also differs within many regions over the years, and varies according to children's ages.

Turning to trajectories of FSM-registration over time, within cohort, well over half of the PP children in both cohorts inspected at Year 11 (in 2023 and 2016) had been FSM eligible and registered at points throughout their school career. They lived in very low-income families, and were eligible and registered, at times during both the primary and secondary school phases. In the 2023 cohort, White British children were much more likely than children of other ethnicities to always be recorded as FSM-registered throughout their school careers. This was not the case for the 2016 cohort, when children recorded as Pakistani or Bangladeshi were more likely, emphasising the shifting nature of the FSM and PP registered groups. **Children in London were much less likely than most other regions to always be registered for FSM at every point during primary and/or secondary school, despite London's overall child poverty rates being high**.

Children who are missing from the data and therefore not registered in state school in one term within an educational phase (primary or secondary) are particularly likely to have been registered for FSM at least at one other point. Alongside other research, this may suggest that children who experience time out of school are more likely, on average, to be economically or otherwise disadvantaged.

Aside from this, on average, **the more frequently a child is registered with a state school in the January spring census, the more likely they are ever to be registered for FSM**. This adds to evidence that children whose lives are more transient and who have less stability and continuity of contact with the education system are less likely to access the services and provisions to which they are entitled within it.

Variations across groups of children and individuals in times and timing of being recorded as FSM-eligible may reflect at least three things, at the family-level:

- timing and persistence of poverty experienced;
- differences in tendencies to claim, and underclaiming of FSM, among eligible children living in poverty; and
- transience and instability in school attendance – if children are missing from school, they will not be registered for FSM, regardless of family finances.

There are vast differences between local authorities and schools in the number of times children who are registered for pupil premium have been registered for FSM. In some schools, only 1 per cent of pupil premium children have been registered for FSM at every January spring census of the phase, in others, virtually all (99 per cent). In some local authorities, fewer than 1 per cent of Year 11 pupil premium children have always been registered for FSM, since reception; in others, 37 per cent. To the extent to which number of registrations for FSM represents persistence of poverty, this presents problems for comparisons between schools and LAs that rely only on using PP to proxy disadvantage.

In some local authorities, rates of registration for FSM are much lower than would be expected given the average recorded deprivation level (IDACI) of children in the authority, and this has been more pronounced at some time points than others. Discrepancies between FSM and IDACI are lowest in the most recent years, and there is less variation by LA. To some extent this is probably because protections of legacy FSM status under Universal Credit roll-out have resulted in more children from income-deprived families being registered for FSM for longer. Discrepancies are lower in terms of PP registration. Nonetheless, some remain, meaning again that some local areas are treated as serving a more advantaged population than they actually cover.

Overall, **FSM/PP are a better proxy for poverty and educationally-relevant disadvantage in some areas than in others, and for children of some ethnicities and language backgrounds than others, and for children of some ages rather than others**. This has implications for research, policymaking, and the fairness and efficiency of resource distribution.

Recommendations

It is important for research and policymaking to use accurate data, and for resources to be targeted precisely and efficiently, in order to help build evidence, tackle inequalities, and compensate for disadvantages. To help achieve this, if recorded FSM eligibility is to continue to be utilised as a key measure, the government needs to better identify and quantify which children meet its criteria for FSM registration. Care also needs to be taken when making comparisons between FSM/PP pupils and their peers, with additional measures factored into analysis and interpretations to account for changes in composition and varying patterns of school enrolment across groups.

If the government intends to continue using FSM for policy and resourcing purposes, it should analyse linked cross-government individual-level administrative data to explore and more exactly

quantify the composition of the current FSM-denoted group, and how this has changed over time. The composition of the group, in terms of current as opposed to legacy FSM-eligibility, should be made explicit so that a more nuanced understanding of the children now recorded as FSM (and not) can assist research, policymaking and resource distribution.

The government should also repeat previous exercises (last carried out in 2013) using linked cross-government data to accurately quantify under-claiming of FSM and under-registration for PP, including by individual LA. [7] Again, this up-to-date information is necessary if FSM and PP are to continue to be used instrumentally in resourcing and policy.

The government should move towards greater coverage of FSM eligibility for pre-schoolers, removing restrictive conditions, and resourcing provision.

Given known under-registration, the government should, as very recently recommended by Education Select Committee, consider centralised auto-enrolment for FSM to render coverage more complete, particularly for the youngest children.[8] This could be extended by joining up information at the statutory stage of education with preceding information in the pre-school years.

In analyses, depending on the exact research question, comparisons of the FSM/PP groups to the non-FSM/PP groups across time, age, or place would often benefit from accounting explicitly for composition according to ethnicity and language background (EAL). This is because these factors are not stable within the groups over time, age, and place, and may often explain apparent differences in outcomes according to FSM/PP status. Depending on the question and analyses, this may either be through factoring in the information on ethnicity and EAL statistically, or by using it in interpretation of patterns by FSM/non-FSM and PP/non-PP.

Depending on the exact research question, construction of measures using the FSM variable in historical NPD data would often benefit from incorporating both number of times registered for FSM, and time missing from education (when no FSM status is recorded). Not incorporating this

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[7] https://assets.publishing.service.gov.uk/media/5a7b8bbaed915d414762113c/DFE-RR319.pdf

[8] 'Schools Bill' should auto-enrol children for free school meals – Education Committee report https://committees.parliament.uk/committee/203/education-committee/news/205506/schools-bill-should-autoenrol-children-for-free-school-meals-education-committee-report/

information can result in underestimates of disadvantage for many children who miss some schooling.

Comparisons of schools and areas should be cautious in relying solely on PP as a measure of disadvantage. This is because there is wide variation in the number of instances of registration for FSM among PP children (and, to some extent, this reflects differences in persistence of poverty).

In the early years, in terms of measurement for research and picking up children known to be living in low-income families, FSM by itself is inadequate for many purposes. Using different amalgamations of markers of low income, including early years FSM, early years PP, known pre-school funding on the basis of low income, and known FSM in early primary school, can result in indicators with no false positives: because all children who have been registered for these provisions have lived in low-income families at a proximal time. But a substantial proportion of false negatives (children in poverty who cannot be flagged in the data) remain in the groups not picked up by these measures during the early years.

Discussion points

Universal Credit protections mean that while the number of instances FSM-registered can be used (in combination with other factors, including missingness, as above) to better proxy disadvantage for earlier cohorts of children, this option is no longer viable for current cohorts. In future cohorts, even the measure of whether a child has ever been registered for FSM/PP will begin to change year by year, losing stability and precision across time.[9]

What then is the best way to continue to research the experiences of economically and otherwise disadvantaged children within the education system, to allocate resources, and to target and prioritise children in policymaking – given the growing limitation of FSM as a measure? What is or may become possible, given advances in data collection and linkage? Should individual children in fact be targeted in a data-driven manner – is this optimal? – or is decentralised, school-led prioritisation (with area-level distribution of resources) the way forward? These questions and others will be deliberated in the coming stage of our project and reported on later in 2025.

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[9] See here for further detail on the mechanisms behind this: https://files.eric.ed.gov/fulltext/ED627800.pdf

Section one: National levels of registration for free school meals and pupil premium over time and age-group

Section one: National levels of registration for free school meals and pupil premium over time and age-group

In this section, we firstly explore how national percentages of children registered for free school meals (FSM) and pupil premium (PP) have changed over the years and across age groups. Figure 1 shows the percentage of pupils at each stage of education – nursery, early primary (reception to year 2), late primary (year 3 to year 6), and secondary (year 7 to year 11) – who were recorded as FSM-eligible in the January spring census each year from 2003 to 2023 in the National Pupil Database (NPD).

Figure 2 reports the percentage of pupils recorded as FSM6 from 2012 onwards. This flags an individual having been recorded as FSM at any point over the past six years. It is used to confer pupil premium (PP) status to pupils, and attracts additional funding for a pupil's school.[10]

Figure 1: Percentage of pupils at each stage of education recorded as FSM-eligible in the National Pupil Database

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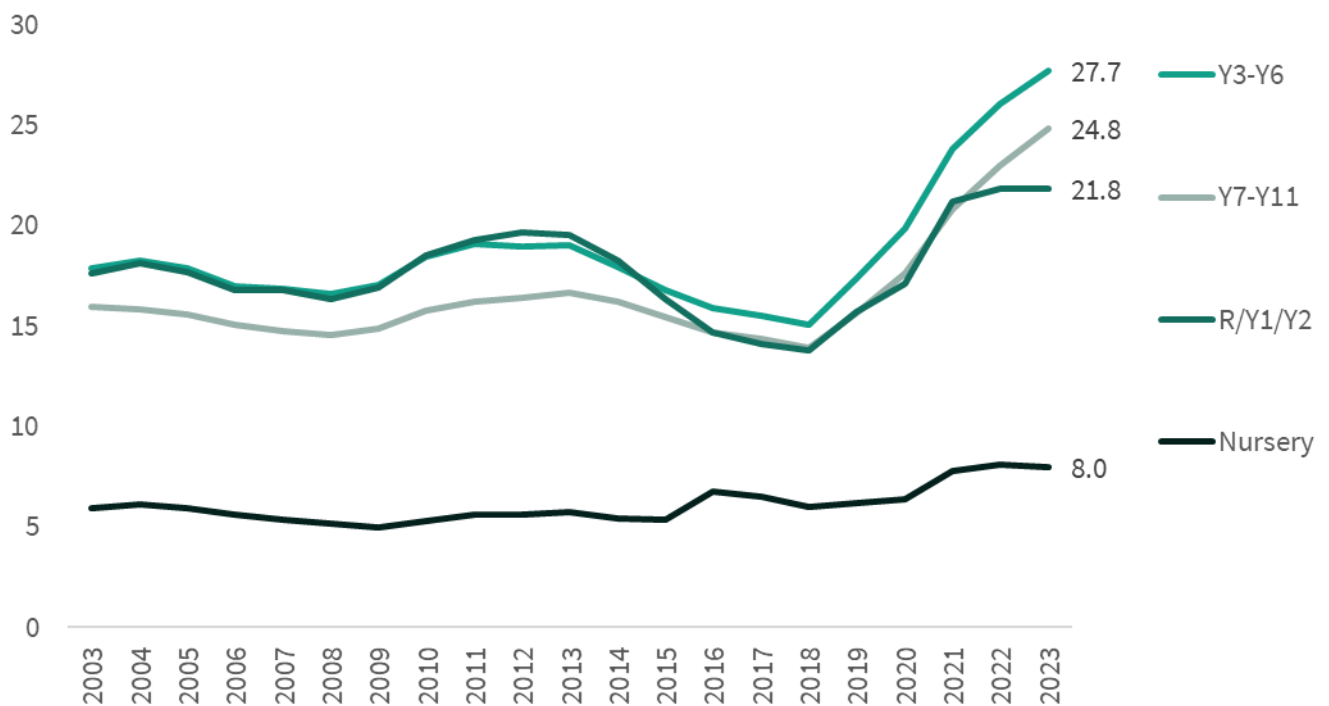
[10] See Campbell and Cooper (2024) for more detail on the intentions and functions of the Pupil Premium

Figure 2: Percentage of pupils at each stage of education recorded as FSM6 in the National Pupil Database
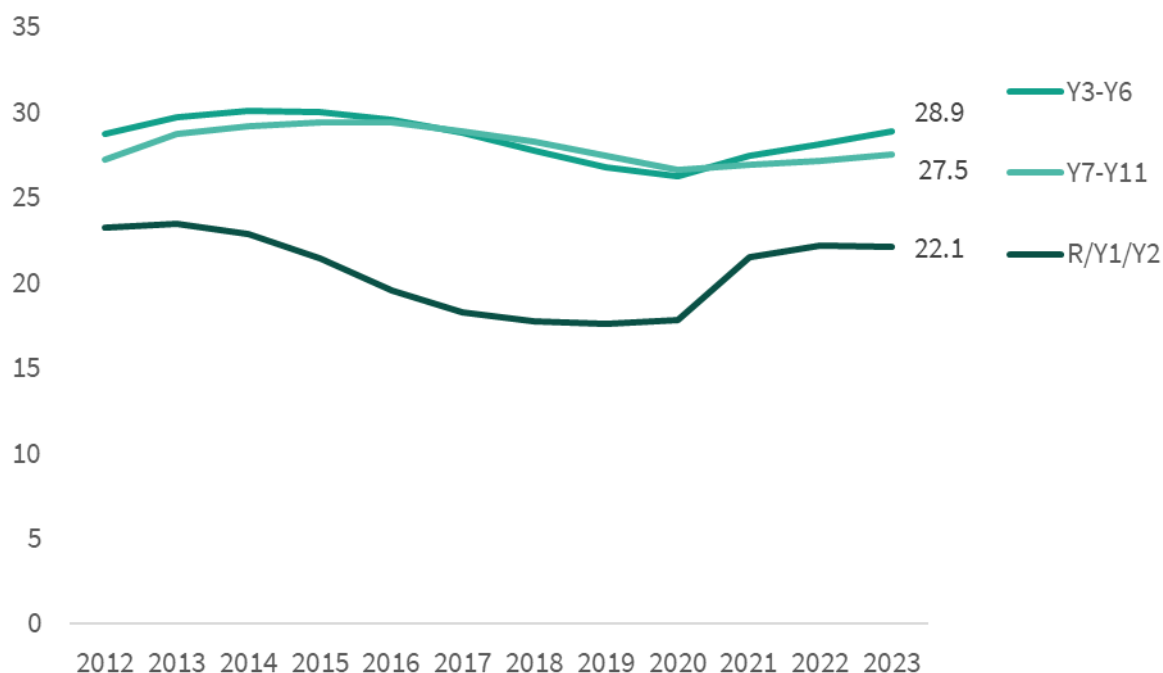
Drivers of changes and differences in rates

Figures 1 and 2 highlight a number of shifts that underpin differences over time and between age groups. As we discussed in our evidence review (Campbell and Cooper, 2024), the national percentage of pupils registered for FSM depend on factors including global economic and societal conditions that impact families' work and income (such as the financial crisis in 2008, and the Covid pandemic of 2020 onwards), and welfare benefits regimes and policies under successive governments (because receipt of benefits determines entitlement for FSM).[11] For example, the rise in the proportion of school-aged children registered for FSM after 2008 corresponds to worsening family circumstances due to the global financial crisis.

More recently, part of the rise in the percentage of primary and secondary children denoted FSM after 2018 is due to protections introduced during changes in the underlying system of welfare benefits that confer FSM-eligibility (the implementation of Universal Credit). From 2018 to 2025,[12] pupils whose low family income, coupled with passporting benefits receipt, make them FSM-

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[11] Campbell and Cooper (2024)
[12] Latter date correct to our knowledge at the time of writing

eligible will remain so even if their financial circumstances improve.[13] So certain children who, pre-2018, would no longer have retained FSM status once their families' income increased, will post-2018 still be recorded as FSM under this system.

At the same time, because the income threshold for FSM-eligibility has remained frozen over this period, and because the new system of benefits under Universal Credit does not provide for an equivalent group of families to those supported under the old system, other pupils who in real terms are living in equivalent poverty to their pre-2018 predecessors cannot become eligible.[14]

Additionally, interacting with all this, part of the rise in the percentage of late-primary and secondary children registered for FSM after 2020 corresponds to the Covid pandemic. This is firstly because increased unemployment levels may have pushed previously ineligible families into eligibility for FSM.[15] Secondly, due to pandemic era hardship, the government of the time conferred eligibility to families with no recourse to public funds (NRPF). This has been made permanent, with a different (higher) income threshold criteria for NRPF families than for families with recourse to public funds.[16] Alongside this, our qualitative interviews suggest that awareness of FSM was heightened during the pandemic, resulting in families applying who previously lacked knowledge and information regarding their entitlement.[17]

This is all likely to result in a more economically heterogeneous and socially diverse group of pupils recorded as FSM post-2018, and particularly post-2020, compared with the preceding period. In terms of FSM's use as a consistent measure, this poses methodological challenges. From 2024, the FSM6/PP measure will also be impacted, because it will begin to include children who have ever met FSM eligibility criteria within the past seven years (then the past eight years in 2025, the past nine in 2026, and so on). As Sharp et al (2023) lay out, for the FSM6/PP group, 'the impact in 2023/24 itself will be minimal, but the magnitude of impacts will increase over time.'[18]

To our knowledge, neither the Department for Education nor any other agency or researcher has a concrete sense of the exact proportions of children who are recorded as eligible for different reasons post-2018 (for example, the proportion who have legacy eligibility due to protections,

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[13] NFER (2023)
[14] Campbell and Cooper (2024)
[15] Blundel et al (2021)
[16] Department for Education (2024)
[17] Cooper et al (forthcoming)
[18] NFER (2023)

rather than still or newly meeting current criteria, or the number of FSM children from families with NRPF who have registered). This has implications for FSM as a measure and for the practicalities of implementing policy around FSM locally. Our qualitative interviews warn of perceptions of impending difficulties for local authorities in identifying currently eligible children particularly once Universal Credit is fully rolled out and protections end.[19] Nor is there a robust up-to-date estimation of the percentage of eligible families who are not claiming the FSM to which they are entitled. This was last estimated by the Department for Education in 2013.[20]

Low numbers at the nursery stage

Figure 1 also highlights that pre-school-aged children attending maintained/school-based nurseries – who are theoretically eligible to receive FSM – are registered as FSM-eligible at far lower rates than those that at any other stage of education. This is for several reasons including a requirement that nursery children attend a 'full' day, before and after lunch, to be eligible. We have written elsewhere about the implications of this, and also delve further into it in section five[21]

In terms of use of recorded FSM as a proxy for disadvantage in the data for children of this age attending maintained settings in the NPD, this effectively renders the information unusable for many purposes by itself. It is clearly incomplete and potentially biased. Previous research, including our own work, has therefore relied on 'future FSM' once children begin primary school: though using registration at this stage has its own limitations – one of which we expand upon below.[22] In section five, we look at how other information in combination with FSM can be used to identify children in low income families at the pre-school stage.

Aside from measurement for research, as a concrete indicator of the extent to which food poverty is being addressed through provision of meals to children from low-income families attending maintained/school nurseries, the numbers here are potentially worrying. Children from low-income households are more likely to attend maintained/school nurseries than private/voluntary/independent sector pre-school provision.[23] And levels of food poverty are at their highest for families with children of this age.[24] So were all children meeting eligibility criteria

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[19] See Cooper et al (forthcoming) for explanation and detailed discussion of this point.
[20] Lord et al (2013)
[21] Cooper and Jimenez (2024)
[22] For example, we use 'future FSM' in Campbell et al (2019) and Campbell et al (2018)
[23] Stewart and Reader (2020)
[24] Cooper and Jimenez (2024)

registered at nursery age, the percentage here would be far higher. We have explored implications of this in depth in related work.[25]

Under-registration in early primary school

A third issue highlighted by Figures 1 and 2 is the extent of under-registration of reception and key stage 1 children as FSM-eligible. Figure 3 shows estimated poverty levels, according to various measures, experienced by children at each age/stage (taken from the Households Below Average Income dataset). This indicates that pupils are just as likely to be in poverty in early primary school as in the later years.[26]

Figure 1 shows a dip in percentage of early primary children registered as FSM-eligible after introduction of Universal Infant Free School Meals. Before this point, similar numbers were recorded among these younger children and peers in later primary school. Figure 2 also shows a fall in those recorded FSM6 post-2014, and that a lower proportion of early primary pupils were recorded FSM6 even before this point.

This all makes sense for several reasons, not least because the fewer years a child has been in school, the less time they have to acquire an instance of FSM registration that will confer FSM6 status and therefore pupil premium. Families may not be aware of their entitlements at the beginning of primary school, meaning higher under-registration at this stage. Section five delves deeper into this issue and the transition from pre-school to primary school.

In terms of consistency of measurement, this is an issue because children with equivalently poor families are less likely to be flagged as FSM-eligible or FSM6/Pupil Premium in early primary school compared to their older counterparts.

In terms of practice – for example, targeting of children for additional support for children, as intended through the pupil premium – it is sub-optimal for children to be under-identified, particularly as the earlier years of education are foundational for later learning and development. And in terms of funding allocations, the imbalance here is problematic – with FSM and FSM6 being

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[25] Cooper and Jimenez (2024)

[26] Data here are for the years to 2020 because survey documentation recommends, 'users exercise caution when interpreting any data published for [the 2021 and 2022] years, particularly when making comparisons with years prior to the coronavirus (COVID-19) pandemic.' https://www.gov.uk/government/statistics/households-below-average-income-for-financial-years-ending-1995-to-2022/households-below-average-income-series-quality-and-methodology-information-report-fye-2022

used not only to denote pupil premium but in other components of the national funding formula – again, particularly because the earlier years are foundational.[27]

Figure 3: Percentage of pupils at each stage of education estimated to be living in poverty according to different measures (England only)[28]

Percent pupils at each stage of education estimated to be living in families with relative low income after housing costs

Percent pupils at each stage of education estimated to be living in families with anchored low income after housing costs

Percent pupils at each stage of education estimated to be living in families with relative very low income after housing costs

Percent pupils at each stage of education estimated to be living in families with anchored very low income after housing costs

What might the solution be to this apparent under-registration for FSM particularly among the youngest pupils? The most obvious and simplest solution – should FSM continue to be used as it is to channel funding and prioritise pupils – may be centralised auto-enrolment.

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[27] See Department for Education (2023) for more information on funding allocations

[28] 'Relative low income' refers to those in households with net income less than 60% of the median in that year. 'Relative very low income' refers to those in households with net income less than 50% of the median in that year. 'Anchored low income' (also known as 'Absolute low income') refers to those in households with net income below 60% of the median in the 2010/11 financial year, adjusted for inflation. See https://lordslibrary.parliament.uk/poverty-in-the-uk-government-policy/#heading-3 and https://tinyurl.com/HBAIinfo

Estimates produced using DWP's Households Below Average Income Dataset. R/Y1/Y2 = children aged 5-7; Y3-Y6 = aged 8-10; Y7-Y11 = aged 11-15.

Auto-enrolment is not without its own stumbling blocks – not least questions around the ethics of an opt-out system that removes families' choices around whether to have aspects of their personal circumstances disclosed within the education system, and have their child be identified and targeted at school. On the other hand, this must be balanced against the inefficiencies of the current set-up where public money is being spent in some instances on much more arduous and less efficient auto-enrolment-like processes at the local authority level,[29] and against the probability that some families are not registering their child for FSM due to lack of knowledge of the system rather than active choice.[30]

Additionally, auto-enrolment would not capture all FSM-eligible children, because not all families sign up for the welfare benefits to which they are entitled. Nevertheless, it could capture a higher number of children, and is increasingly advocated for in parliament and beyond.[31] We discuss these issues further in a linked publication.[32]

Section summary and recommendations

- The proportion of children registered for FSM has risen since 2018 in part because of continued status under Universal Credit protections. Simultaneously, however, some families who would previously have been eligible under the old welfare regime are no longer eligible to be registered. Since 2020, other children have become newly eligible both due to (un)employment patterns and due to expansion of entitlement to families with NRPF. This results in a mixed and uncertain FSM group, and further information on its exact composition is not currently available.

- If the government intends to continue using FSM for policy and resourcing purposes, it should use linked cross-government administrative data to explore the composition of the current FSM-denoted group.

- Very few nursery-aged children are registered for FSM, though poverty and food insecurity are higher at this stage.

- The government should move towards greater coverage of FSM eligibility for pre-schoolers, removing restrictive conditions, and resourcing provision.

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[29] Polovina (2024); Sustain (2024)
[30] Campbell and Cooper (2024)
[31] UK Parliament (2024); UK Parliament (2025); Sustain (2024); The Food Foundation (2024)
[32] Campbell, Cooper and Hodge (2024)

- There is particular under-registration for FSM in early primary school. This renders FSM more problematic as a measure of poverty, in its use of targeting pupils for pupil premium, and in resource allocation and funding.
- The government should consider centralised auto-enrolment for FSM, to render coverage more complete, particularly for these youngest children

Section two: changes in composition of the free school meals and pupil premium groups over time, age and cohort

Section two: changes in composition of the free school meals and pupil premium groups over time, age and cohort

How have the compositions of the FSM and non-FSM groups (and FSM6, i.e. pupil premium, and non-FSM6/PP groups) changed over the years? Research such as time series analyses comparing the experiences and outcomes of FSM/PP to non-FSM/PP-recorded children sometimes assume a compositional equivalence and stability. This can be necessary in order to attribute apparent differences between groups (such as widening or narrowing of 'gaps') to polices or other factors external to the cohorts of children themselves.

In the figures below, we begin to explore compositional change using data recorded in the NPD. Again we look separately at children in early primary school (reception – year 2), in late primary school (year 3 – year 6) and secondary school (year 7 – year 11), and we look at patterns over the years 2003 – 2023 (2003 is the first year for which individual-level FSM is available for all children in the data).

Changes in composition according to language background (EAL)

Figures 4 to 6 show the proportion of children recorded as having English as an additional language (EAL) within each of four groups: those who are registered as FSM, registered as PP, not registered as FSM, and not registered as PP. The overall pattern is that, among children **not** recorded as FSM/PP, the proportion with recorded EAL has risen over the past two decades, flattening in the most recent years. Changes in the FSM/PP groups have been less dramatic, but have generally been in the opposite direction: in the past decade, fewer FSM/PP children were recorded with EAL, though there is an uptick in the most recent years.

In these most recent years, Figure 4 shows that the proportion of children recorded with EAL is greater in the non-FSM/PP groups in early primary school, while Figure 5 shows a convergence between FSM/non-FSM groups at the later primary stage. Figure 6 shows that, in contrast to early primary, the FSM and Pupil Premium groups are **more** likely to be recorded with EAL in the secondary years.

Figure 4: Percentage of children who are recorded as non-FSM vs FSM and non-PP vs PP who are recorded as EAL in the NPD: those in reception to year 2
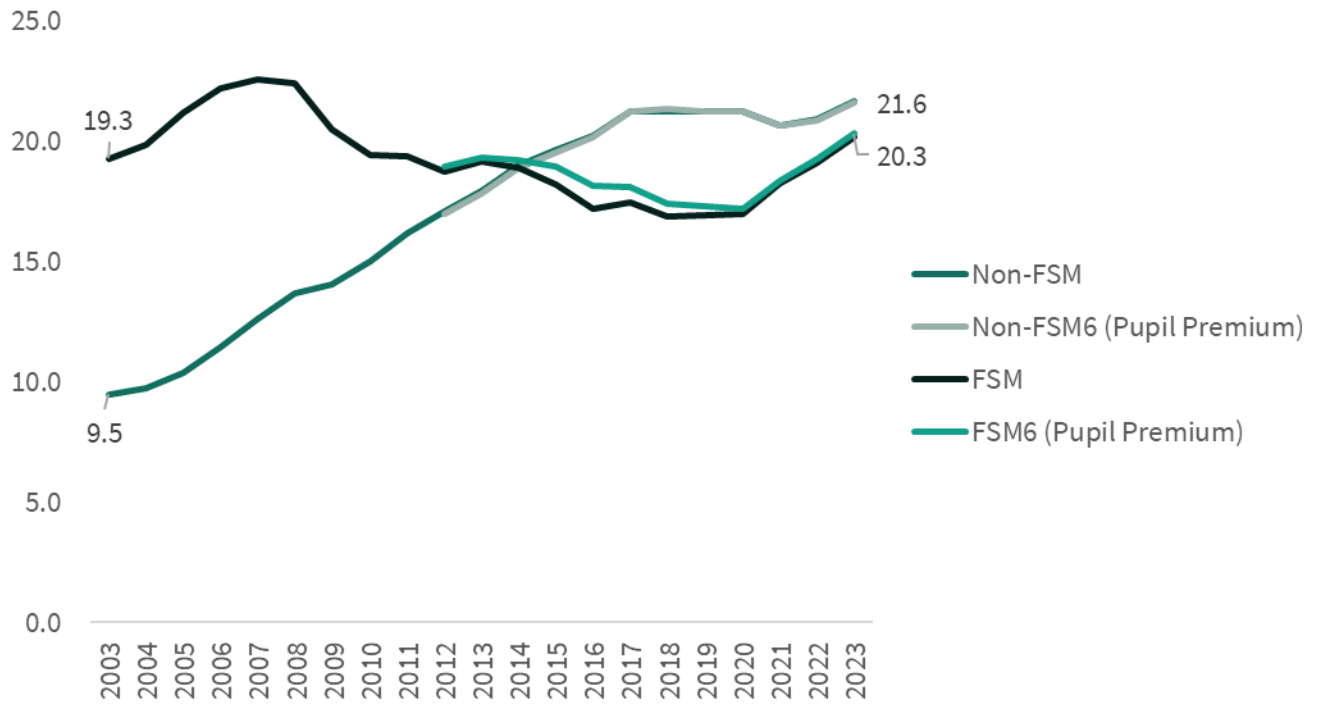

Figure 5: Percentage of children who are recorded as non-FSM vs FSM and non-PP vs PP who are recorded as EAL in the NPD: those in year 3 to year 6
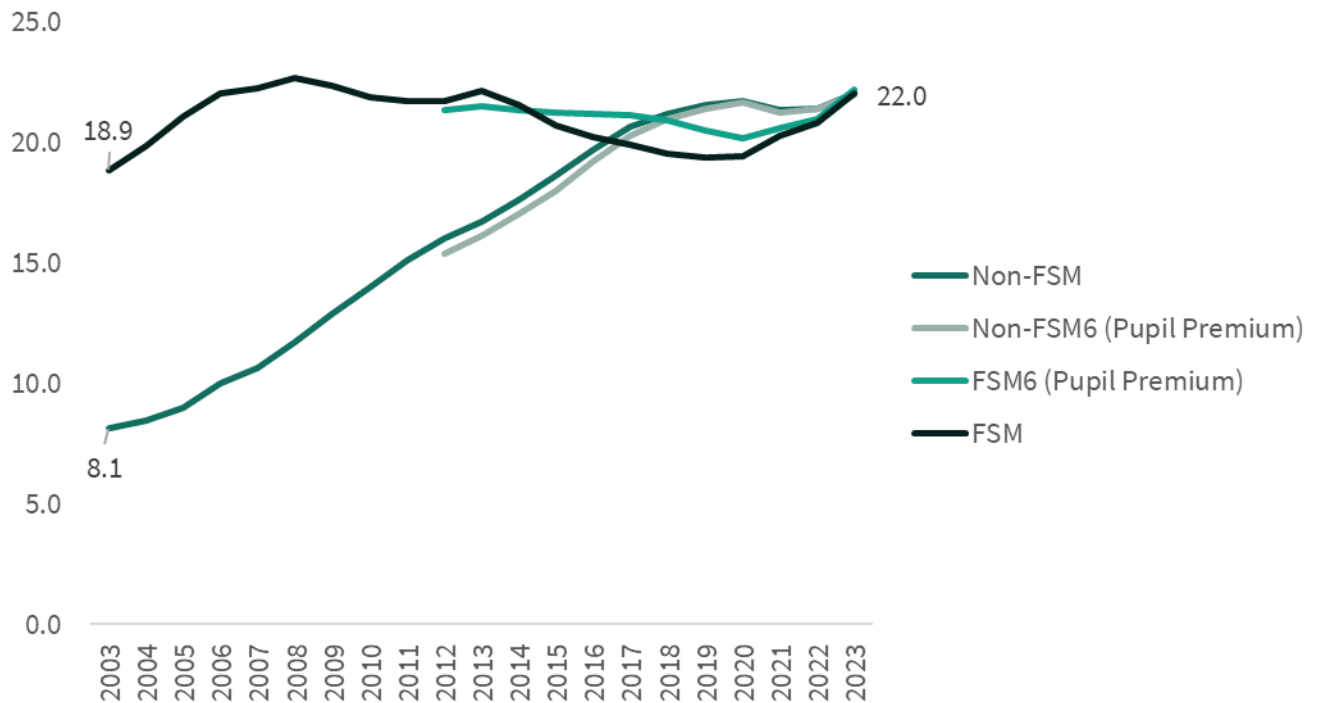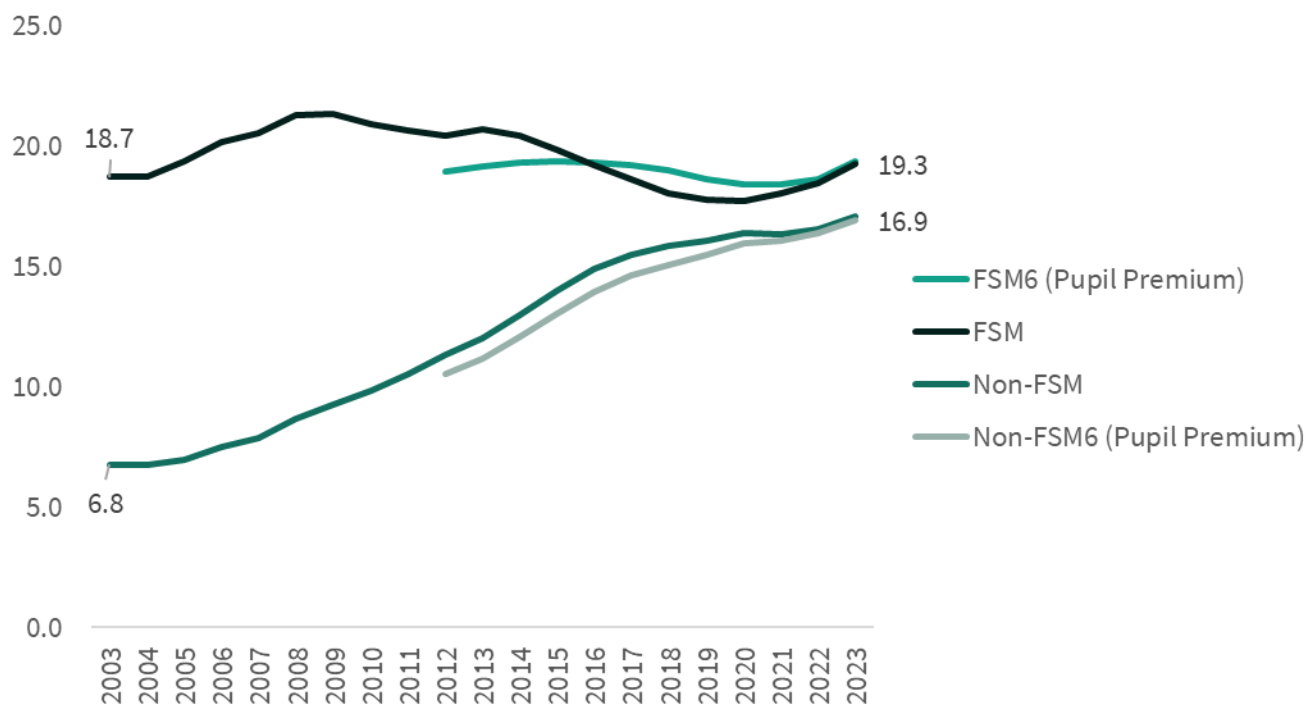
Figure 6: Percentage of children who are recorded as non-FSM vs FSM and non-PP vs PP who are recorded as EAL in the NPD: those in year 7 to year 11

This raises questions about the extent to which FSM/PP and non-FSM/PP groups are similar and comparable across stages of education, as well as years and cohorts. According to their composition in terms of recorded EAL, they are not equivalent.[33]

Changes in composition according to recorded ethnicity

Figures 7 to 12 below go on to consider children's ethnicity, again as recorded in the NPD. Here, we initially concentrate on the make-up of the FSM6/PP group compared to the non-FSM6/PP group over the past decade, and look at the percentage of pupils recorded as White British (the red bars and right axis) and the percentage recorded as a number of additional ethnicities, for comparison (the lines and the left axis).

We see that among children at the beginning of primary school, there has been a fall in the proportion of non-PP children recorded as White British over the past decade (from 70 per cent of the group in 2012 to 62 per cent in 2023. Correspondingly, the proportion of non-PP children of other ethnicities has risen – for example, the proportion recorded as of 'any other White

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[33] It is also possible, however, that there are shifts and inconsistencies in who is recorded with EAL at different stages, as well as actual compositional change – so this should be borne in mind in interpretations.

background' has increased. The proportion in this later group has also risen among PP children, but we see a different pattern in terms of the percentage of PP children recorded as White British. This rose, then fell slightly, over the decade. At the beginning of the decade, more non-PP children we recorded as White British; by the end, roughly similar proportions of PP and non-PP children were recorded as White British. In terms of ethnicity, then, there have been shifts in the composition of the PP and non-PP groups that are not equivalent between the groups.

Among children in later primary school, we see a still steeper fall in the percentage of those non-PP who are recorded as White British over the decade – from 76 per cent (2012) to 64 per cent (2023). Again this is a flatter fall among PP children, from 65 per cent to 61 per cent. There are other differences in ethnic composition between groups – for example, across all ages, the largest minority ethnic group among non-PP children is those recorded as 'any other white background'. Though this group is increasing proportionally over the decade among PP children, for most of the time period, the largest group is Black African children. The proportion of children recorded as Black African is increasing among those non-PP as well, however (though falling for PP children in primary school).

Among secondary children, we see a yet steeper drop in the proportion of non-PP/FSM6 children recorded as White British – from 80 per cent in 2012 to 66 per cent in 2023. Again, this is less pronounced among PP/FSM6 pupils (67 per cent to 59 per cent) – though it is greater than the drop among late primary pupils (65 per cent to 61 per cent) and early primary pupils (64 per cent to 61 per cent).

These findings regarding changes in the recorded ethnicity of the PP and non-PP groups are congruent with patterns shown earlier in Figures 4 to 6, indicating a general rise over time in the percentage of non-FSM and non-PP children who are recorded with English as an additional language (EAL). While complexities lie beneath these overall trends, at the national level, the picture is one where the non-FSM and non-pupil premium groups have become more ethnically and linguistically diverse, while change has been slower in the FSM/PP groups (though these groups were more diverse to begin with).

This has large implications for comparisons over time (and educational stage) of the FSM/PP and non-FSM/PP groups, because the composition of the groups has been shifting. Composition in terms of ethnicity and language background (which to some extent reflect immigration recency

and associated factors) has strong relationships with, for example, attainment.[34] As Burgess (2014) argued (while discussing analyses showing that much of the 'London effect' could be accounted for by the ethnic composition), changes and differences due to composition are sometimes treated as 'somehow uninspiring and disappointing,' compared to those that can be attributed to 'some innovative policy'.[35] But they are interesting and can be learned from in themselves, and should be accounted for. This has also been recommended based on other analyses including those by Treadaway (2017), who emphasised that, 'when comparing different groupings such as schools, local authorities and regions we cannot simply treat all disadvantaged pupils as a single group.'[36]

[34] Burgess (2014)
[35] Burgess (2014)
[36] Treadaway (2017)

Figure 7: Percentage of PP children who are recorded as each ethnicity in the NPD: those in reception to year 2

Figure 8: Percentage of non-PP children who are recorded as each ethnicity in the NPD: those in reception to year 2

Figure 9: Percentage of PP children who are recorded as each ethnicity in the NPD: those in year 3 to year 6
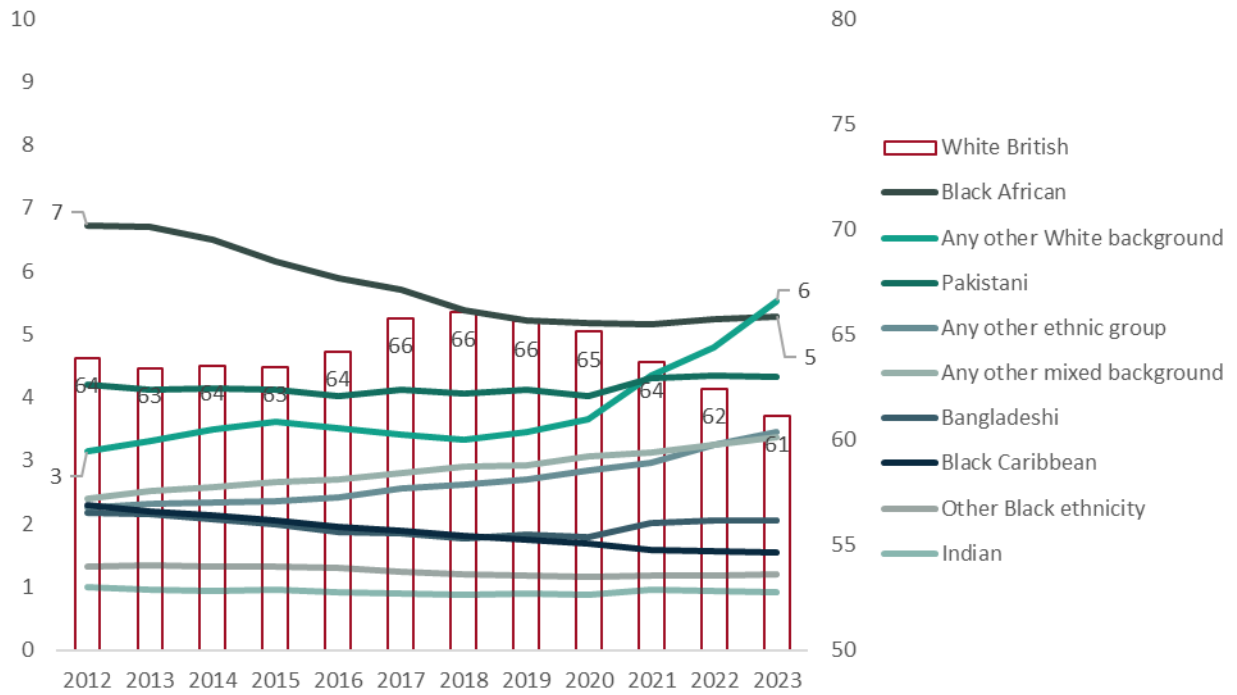

Figure 10: Percentage of non-PP children who are recorded as each ethnicity in the NPD: those in year 3 to year 6
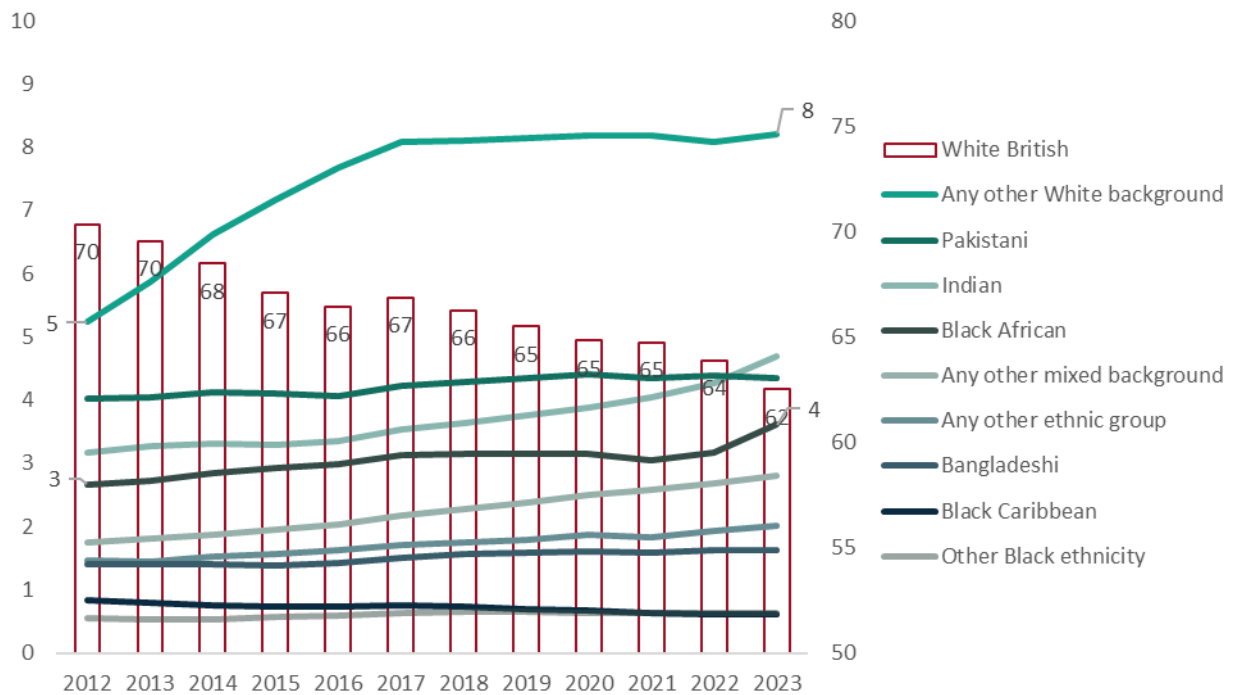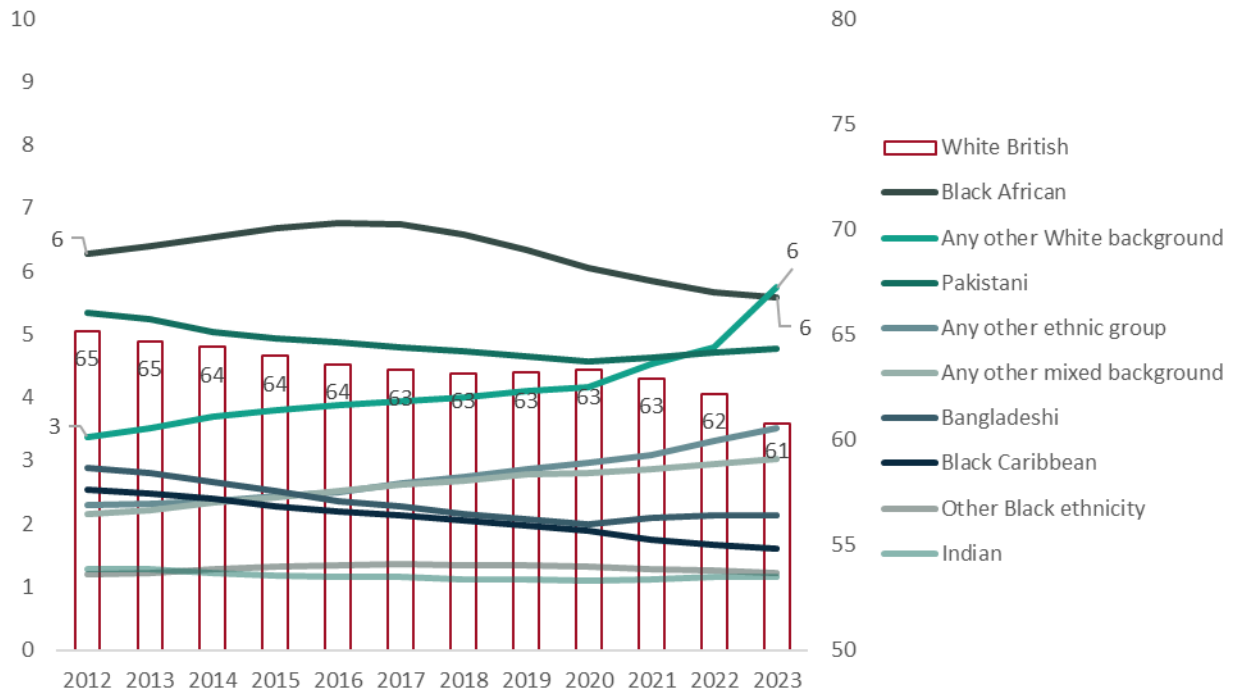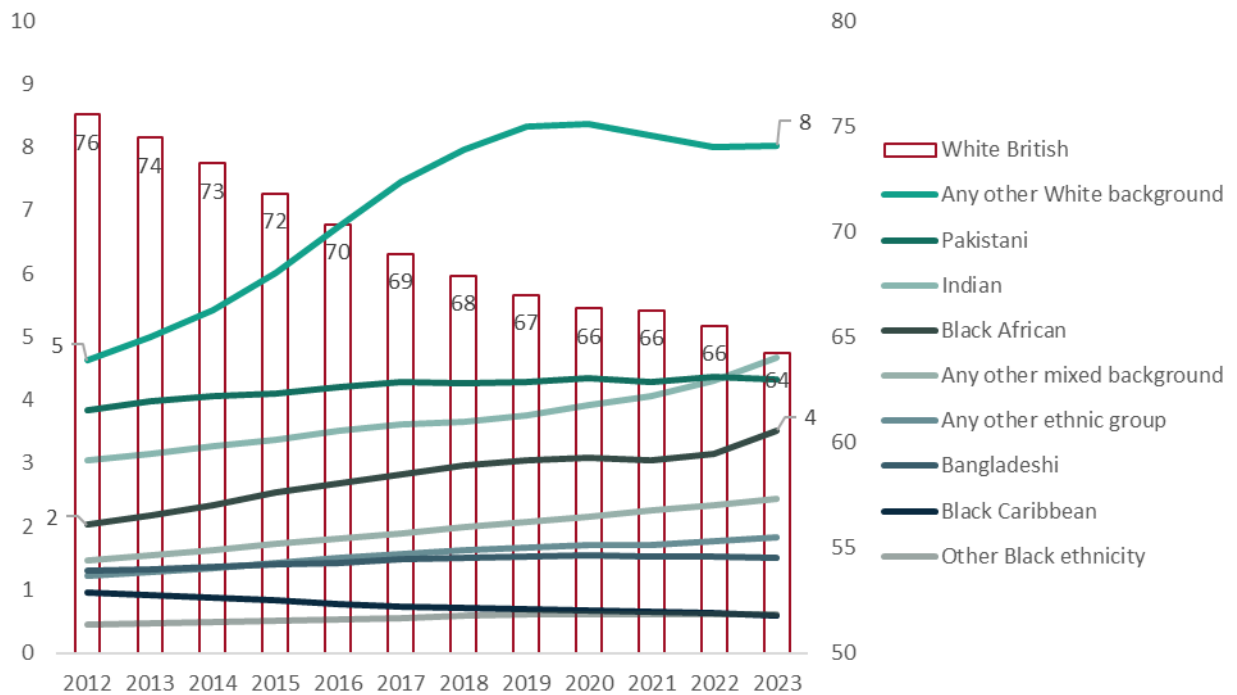
Figure 11: Percentage of PP children who are recorded as each ethnicity in the NPD: those in year 7 to year 11
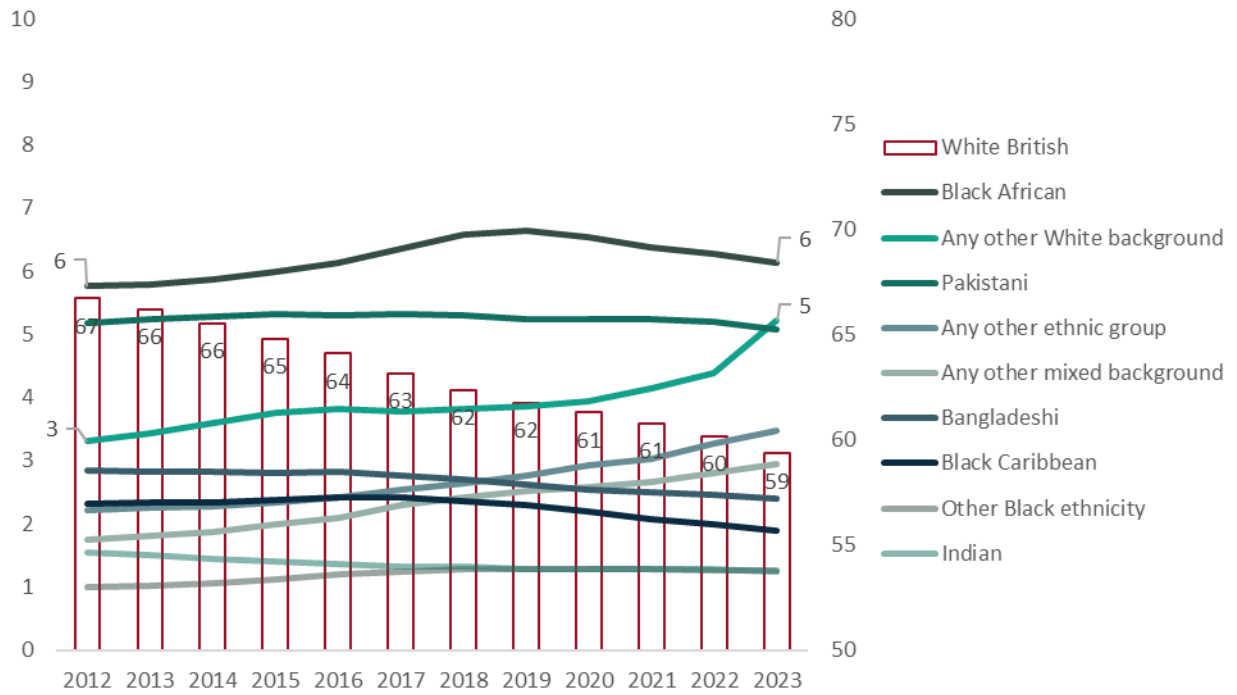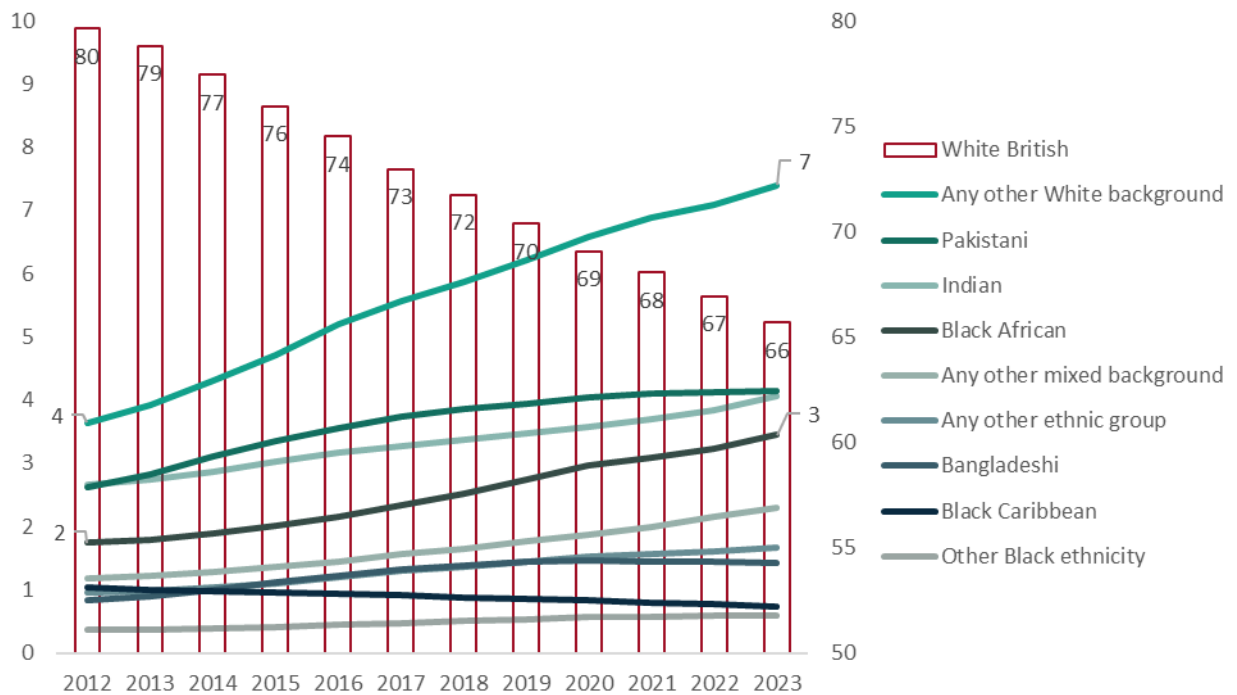

Figure 12: Percentage of non-PP children who are recorded as each ethnicity in the NPD: those in year 7 to year 11

To examine relationships between recorded ethnicity and FSM denotation from a different angle, we now compare rates of FSM and FSM6/PP registration with poverty-level estimates as reported within the Households Below Average Income (HBAI) dataset. This dataset is derived from the Department for Work and Pensions' annual Family Resource Survey, and is not without its own measurement issues.[37] However, as the HBAI 'statistics are the UK's primary source of poverty estimates and, with a large sample size, are also the main source on household incomes,' we use them as our point of comparison nonetheless.[38] Disconnects between information within the HBAI and information within the NPD can point to issues with the FSM measure, and incongruities in measurement and assumed knowledge about families' financial circumstances across different parts of government and public services.

Figure 13 below shows the percentage of children recorded as of White ethnicity in the HBAI who are estimated to be in anchored poverty after housing costs, set against the percentage of children in the NPD recorded as White British and registered for FSM/PP, respectively, for each age group, each year up to 2019.[39][40] Pupil Premium status was recorded for all children from 2012.

Figure 14 show the same for children recorded as Indian, Figure 15 for children recorded as Pakistani or Bangladeshi, and Figure 16 for children recorded as Black ethnicities.[41]

Comparing the percent of children recorded as FSM in the NPD to poverty rates, we see a general pattern where, among all ethnic groupings, across the years, a lower percentage of children are registered for FSM than are estimated to be in poverty. This is not surprising: firstly, because the

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[37] Department for Work and Pensions (2018/19)

[38] Department for Work and Pensions (2024)

[39] We chose this poverty measure because it is one of those used by the DWP (see Department for Work and Pensions [2024]) and because housing costs are a key driver of poverty (Cribb et al, 2023). We chose the anchored rather than relative measure because it is more conservative in estimating poverty and therefore we can generally be more certain that indications of gaps when comparing with FSM are genuine. Note however that patterns of disconnect by ethnicity are similar regardless of the poverty measure chosen.
Our analyses here go up to the 2019/20 survey year because HBAI documentation advises issues with comparability in the subsequent two years due to Covid and a change in survey mode (Department for Work and Pensions [2023]).

[40] Note that while ethnicity is recorded according to reports for the individual child in the NPD, it is recorded for the main parent / carer respondent in the household in the HBAI. This may contribute to incongruence between estimates using the two datasets, but we do not think that this is likely to be sizable enough to account for much of the discrepancies we observe.

[41] These groupings were chosen of necessity according to classifications and sample sizes in the HBAI data, and in order to map as closely as possible on to classifications within the NPD.

income threshold for FSM eligibility is extremely low, and secondly, because FSM is known to be under-claimed even among eligible families.[42]

PP status is based on whether children have ever been registered for FSM in the past six years, and is therefore more inclusive, and closes some of the gap between poverty rates and FSM6/PP registration. In fact, among older children recorded as White British or as Black ethnicities in the NPD, nationally, more children are recorded as PP than are estimated to be in poverty. It is important to note, however, that there will still be children who are in poverty, and/or who are very close to the extremely low threshold for FSM-eligibility, who remain outside of the PP measure: because they are not quite eligible, or because they are eligible but not registered for FSM. This is masked by the overall percentages.

Additionally, it is not the case for children recorded as Pakistani, Bangladeshi, or Indian ethnicities that national percentages recorded as PP catch up with percentages in poverty. For these groups, both the percentages recorded as FSM and to a lesser but still large extent PP are much lower than the percentage estimated to be in poverty. This suggests that many of the non-PP children in these groups may be living in situations of similar low income and financial hardship to their FSM/PP peers, but not receiving FSM or provision through the PP.

It indicates that the take-up gap – the proportion of children entitled to FSM but not registered for FSM – may be larger for children recorded as Pakistani, Bangladeshi or Indian. It is also possible, however, that because FSM-eligibility is based upon an income threshold, regardless of family composition, part of the disconnect for Pakistani and Bangladeshi families may be due to these qualifying criteria. The poverty estimates equivalise for family size, while FSM-eligibility does not. However, while Pakistani and Bangladeshi children tend to live in larger families, Indian children do not, on average.[43] Whatever the (combination of) explanation(s), this raises questions both in terms of measurement for research and policymaking and in terms of fair and effective resource allocation and access to meals and other support for children who live in under-resourced households.

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[42] Campbell and Cooper (2024)
[43] Stewart et al, 2021

Figure 13: Percentage of children reported as White British who are recorded as FSM or FSM6/PP in the NPD, compared to percentage estimated as living in households in anchored poverty after housing costs in the HBAI[44]

FSM: Reception - Year 2

FSM6/PP: Reception - Year 2

FSM: Year 3 - Year 6

FSM6/PP: Year 3 - Year 6

FSM: Year 7 - Year 11

FSM6/PP: Year 7 - Year 11

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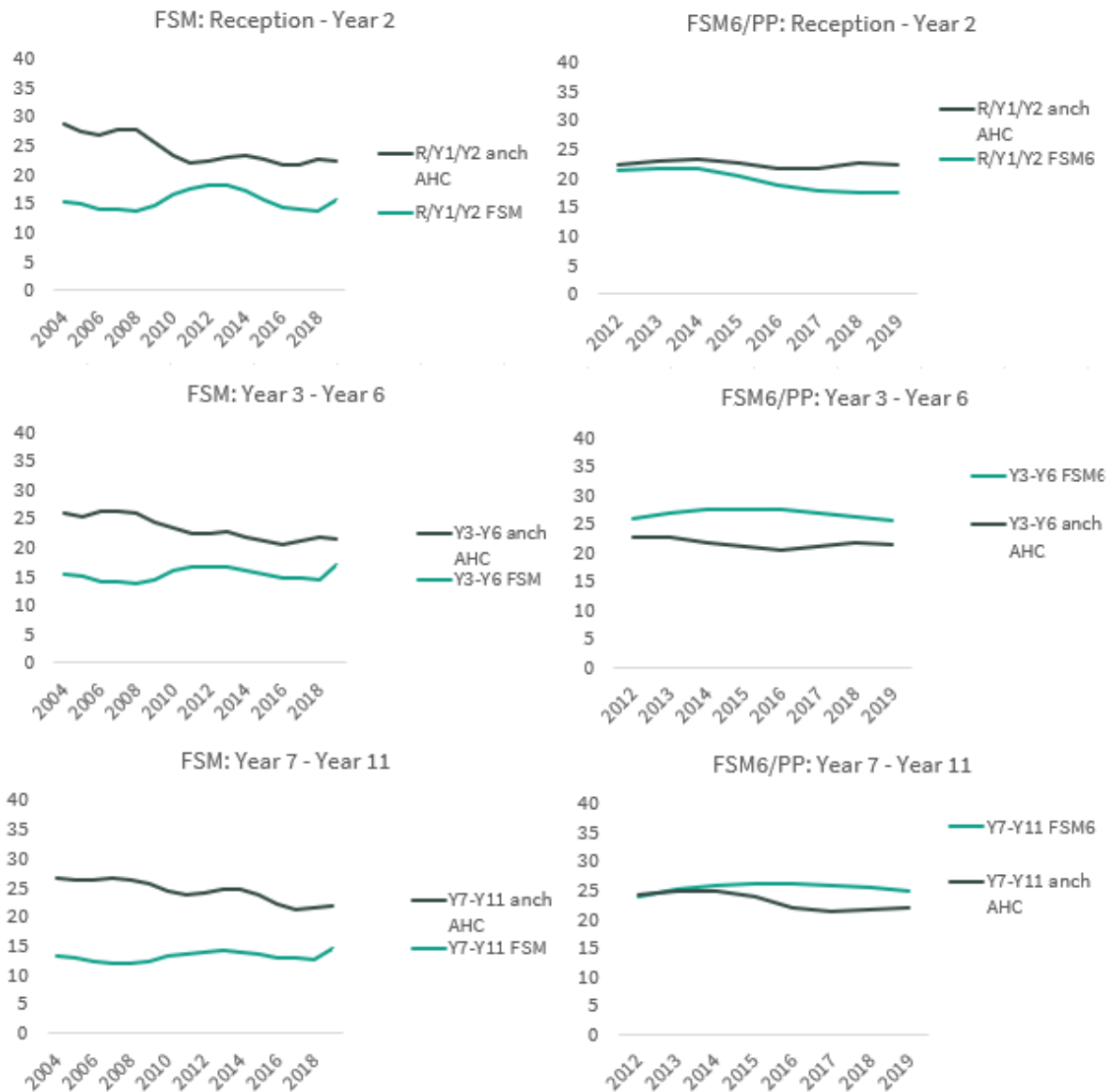
[44] Note that estimates from HBAI are three year averages (for example, the estimate for 2019 combines estimates from 2018, 2019, and 2020)

Figure 14: Percentage of children reported as Pakistani or Bangladeshi who are recorded as FSM or FSM6/PP in the NPD, compared to percentage estimated as living in households in anchored poverty after housing costs in the HBAI[45]

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[45] Note that estimates from HBAI are three year averages (for example, the estimate for 2019 combines estimates from 2018, 2019, and 2020)

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Figure 15: Percentage of children reported as Indian who are recorded as FSM or FSM6/PP in the NPD, compared to percentage estimated living in households in anchored poverty after housing costs in the HBAI[46]

[46] Note that estimates from HBAI are three year averages (for example, the estimate for 2019 combines estimates from 2018, 2019, and 2020)
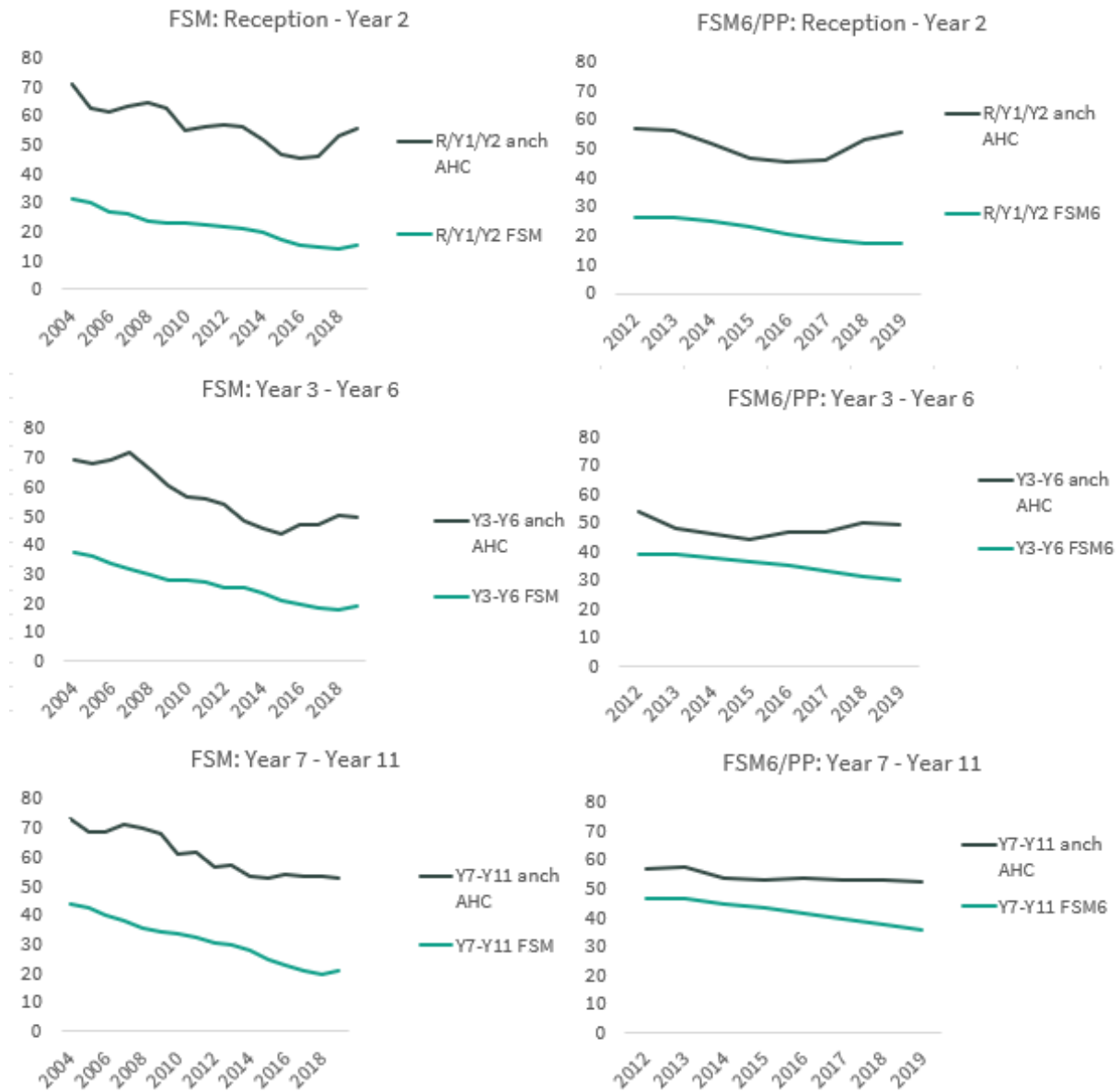
Figure 16: Percentage of children reported as Black who are recorded as FSM or FSM6/PP in the NPD, compared to percentage estimated as living in households in anchored poverty after housing costs in the HBAI[47]

FSM: Reception - Year 2

FSM6/PP: Reception - Year 2

FSM: Year 3 - Year 6

FSM6/PP: Year 3 - Year 6
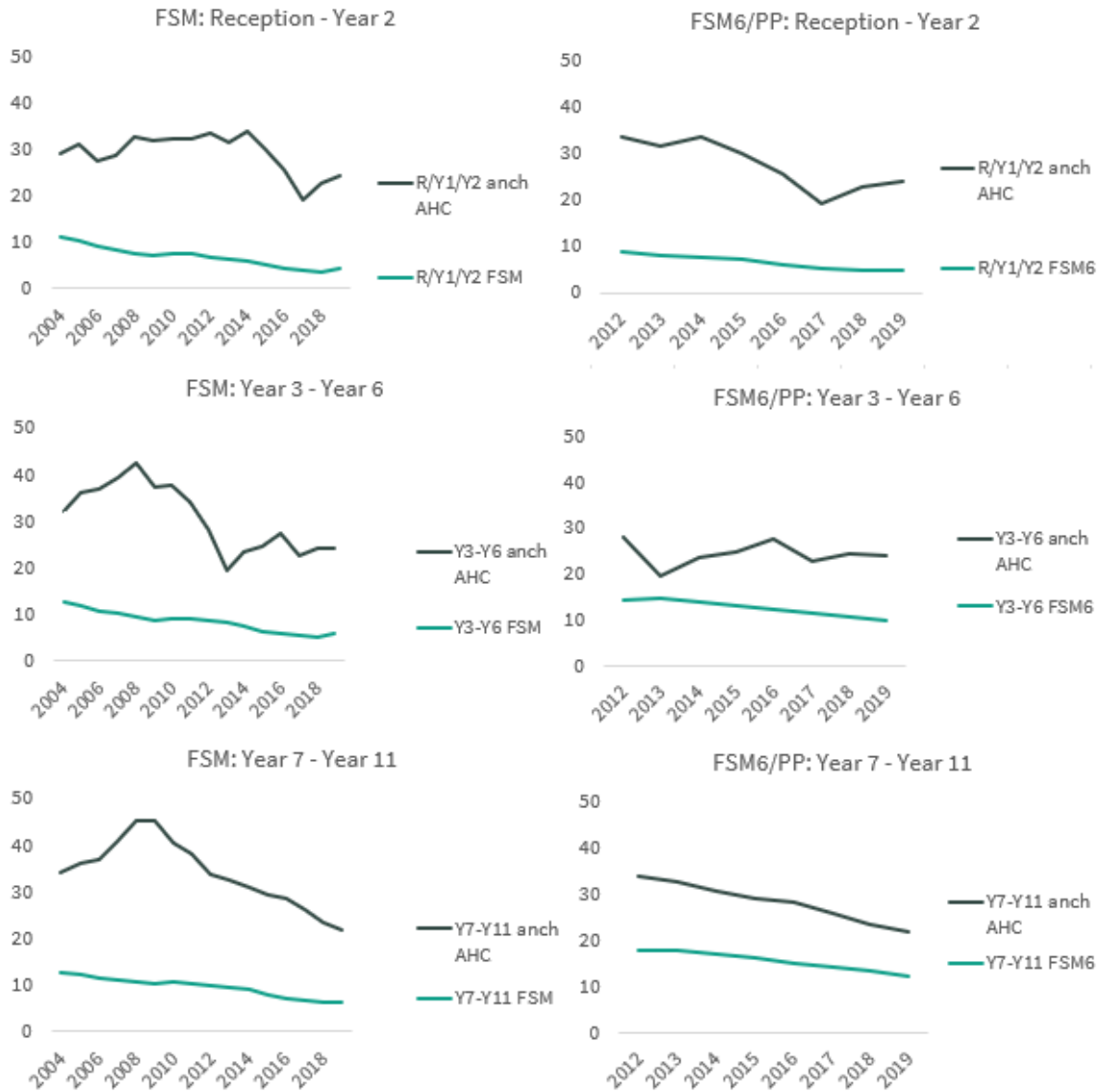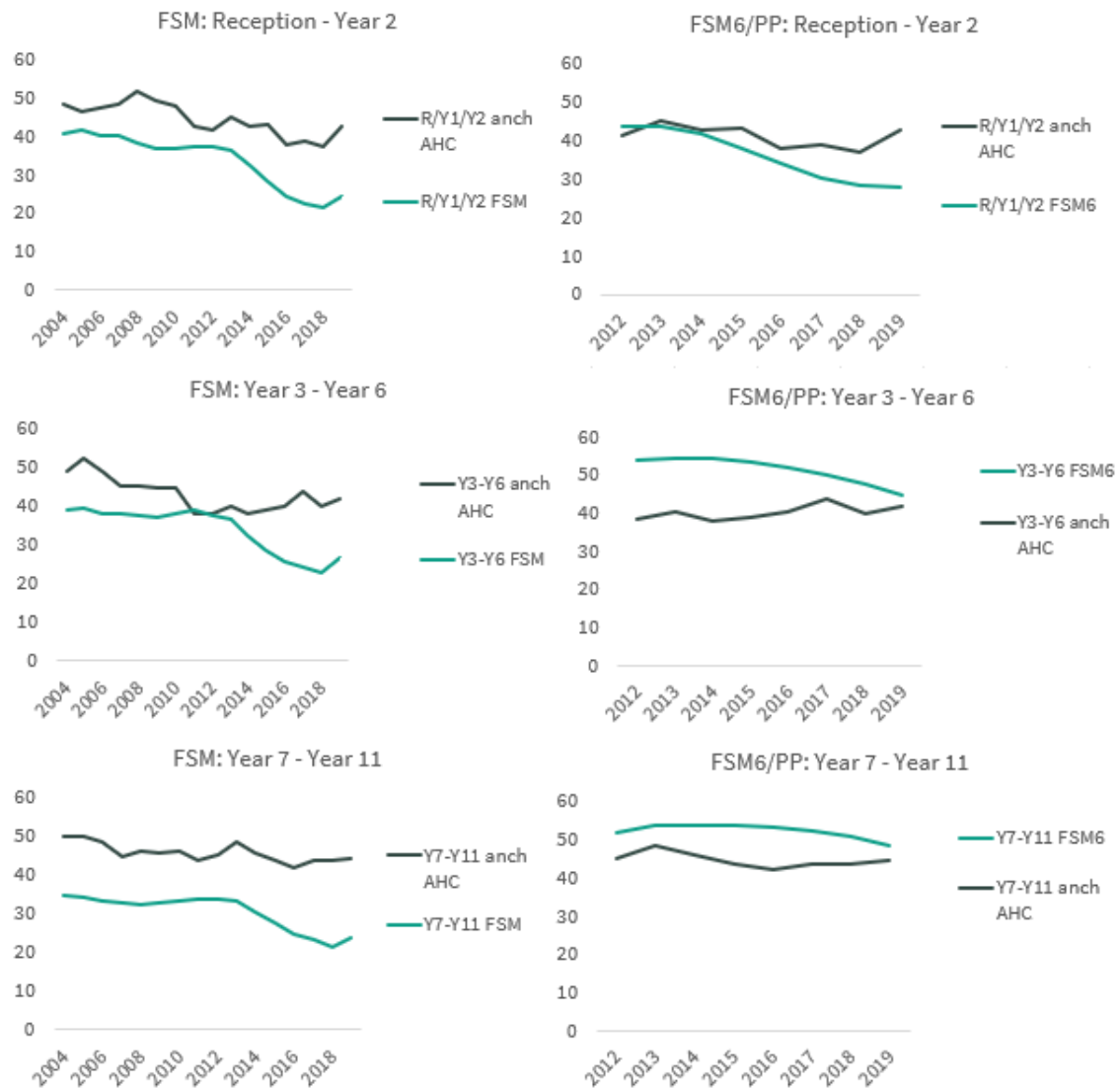
FSM: Year 7 - Year 11

FSM6/PP: Year 7 - Year 11

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[47] Note that estimates from HBAI are three year averages (for example, the estimate for 2019 combines estimates from 2018, 2019, and 2020)

Differences in composition according to geographical factors

Rurality

Figures 17 to 19 consider the composition of the groups of children recorded in the NPD as FSM/PP and not, according to whether they live in an urban or rural area.[48] They show, across age groups, a slow shift over the past decade where children recorded as FSM are more likely to live in a rural area. The opposite is true, in older age groups, for children never recorded as FSM: they become less likely to live in rural areas.

It is possible that this may reflect differences or biases, for example in registration processes, between areas, rather than reflecting a shifting composition in terms of rurality in the FSM group. There may be changes over time in administrative processes of or support for registration or tendencies to sign up that differ according to area-type. But we think on balance that it is likely to reflect to some extent a tendency of poorer families to become less likely to live in some urban areas and more likely to live in rural areas over time, because this is evidenced through other studies.[49] It is also likely to reflect changing social and economic conditions disproportionately impacting and increasing poverty in rural areas.[50]

If children who are low-income and FSM-eligible are increasingly proportionately less likely to live in urban areas and more likely to live in rural areas, this has numerous implications: both for stability of measurement over time and the composition of the FSM group, but also practically in terms of conceptualisation of the FSM group for policymaking. Low-income families in rural areas are under-resourced in many different ways relative to families in urban areas, for example in terms of transport, opportunities for education, and access to public services.[51]

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[48] Data on rurality is linked in to the NPD based on each pupil's LSOA of residence each year
[49] Shucksmith et al (2023a)
[50] Shucksmith et al (2023); Gov.uk (2019)
[51] Taylor (2024); Vera-Toscano et al (2024)

Figure 17: Percentage of children who are recorded as non-FSM vs FSM and non-PP vs PP who are recorded as living in a rural area: those in Reception to Year 2
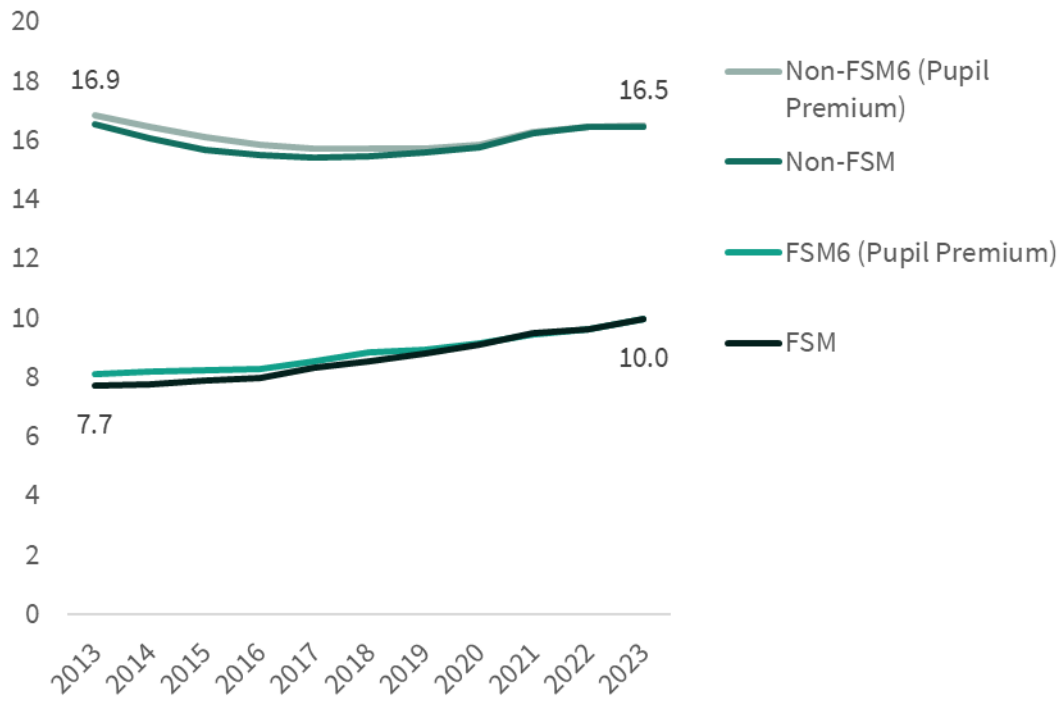

Figure 18: Percentage of children who are recorded as non-FSM vs FSM and non-PP vs PP who are recorded as living in a rural area: those in Year 3 to Year 6
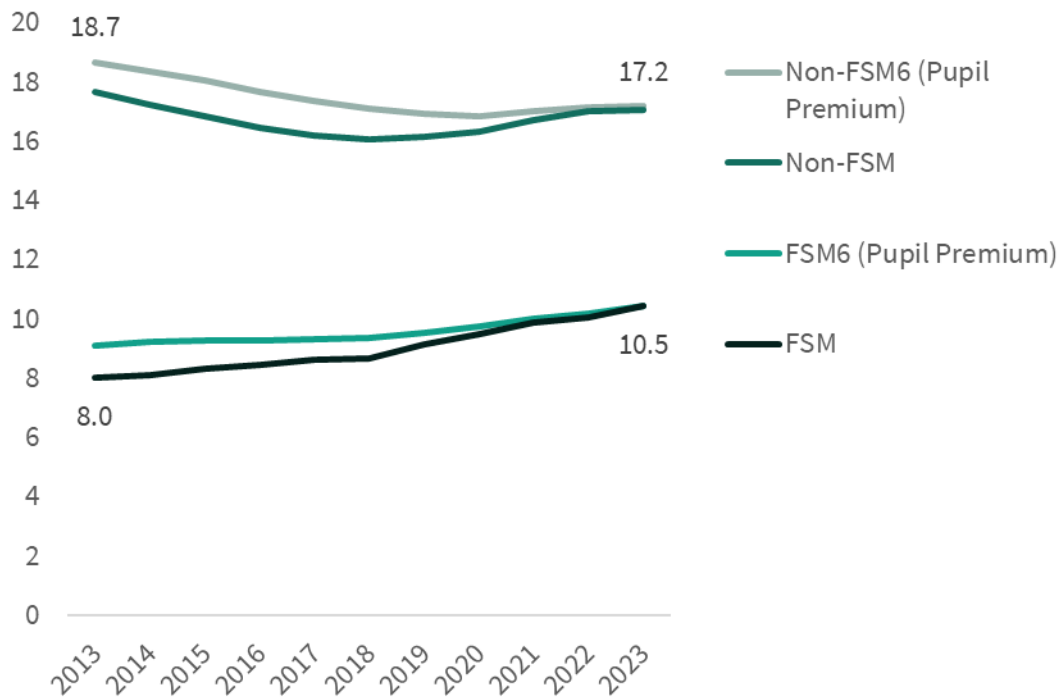
Figure 19: Percentage of children who are recorded as non-FSM vs FSM and non-PP vs PP who are recorded as living in a rural area: those in Year 7 to Year 11
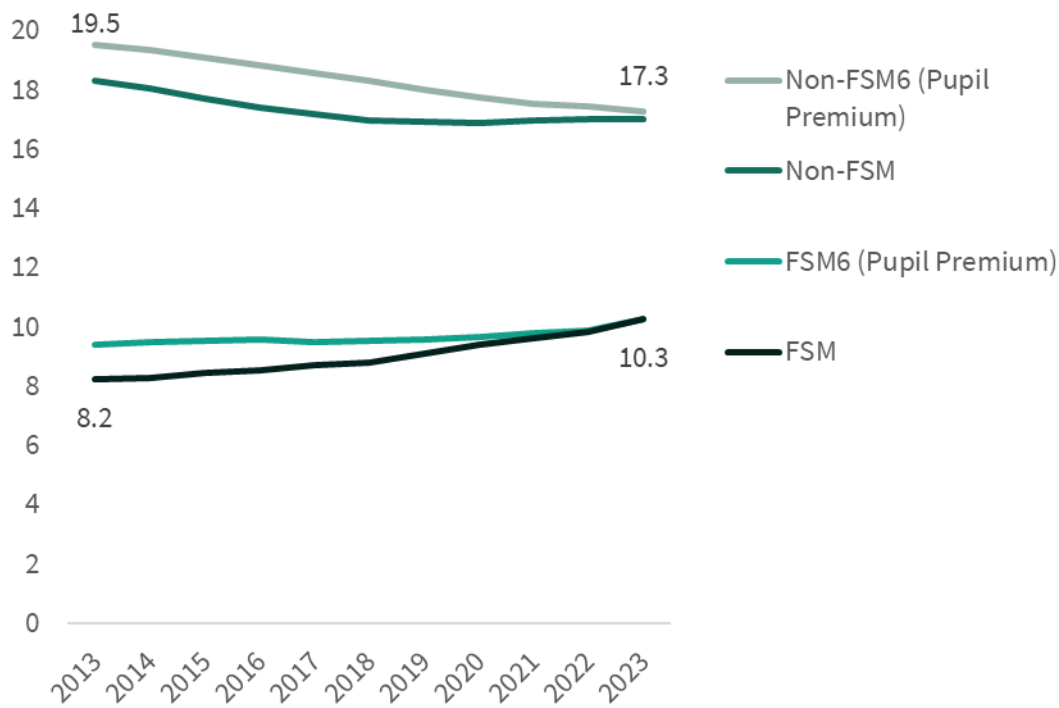
Region

Below we compare the proportion of children within English regions who are recorded as FSM and FSM6/PP to the percentage estimated as living in poverty in the same region.[52] Note that we use data to the 2019/20 HBAI survey year, and that rates of child poverty have increased nationally since that time, as well as the distribution shifting between regions. [53] The figures below highlight contrasts and disparities over the period 2013-2019.

Figure 20 shows that London has the highest estimated rate of child poverty over this period. We are using anchored poverty after housing costs as our measure here, so London's high housing costs, which are instrumental in causing poverty, will be a significant factor in this.[54] Across all

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[52] As earlier, we chose anchored poverty after housing costs as our measure, because it is one of those used by the DWP (see Department for Work and Pensions [2024]) and because housing costs are a key driver of poverty (Cribb et al, 2023). We chose the anchored rather than relative measure because it is more conservative in estimating poverty and therefore we can generally be more certain that indications of gaps when comparing with FSM are genuine.

[53] Because we use three year averages for regional rates, and as the DWP cautions, as noted earlier, against comparing data for 2020 and 2021 with earlier years, and as our NPD data stretches to 2023, it is not possible to extend beyond this frame using three year averages.

[54] Joseph Rowntree Foundation (2022)

years and age groups, there is a gulf between the percentage of children reported to be living in poverty and the percentage registered for FSM. However, in many years, for those in late primary school and secondary school, the gap is closed by the FSM6 measure, meaning that PP designation is potentially much more inclusive in coverage of children living in poverty. In early primary school, however, PP rates are still far below poverty estimates.

The East of England, the South East, and the South West have estimated poverty rates relatively lower than other areas for school-aged children, over this period. These areas are also similar because FSM6/PP rates pull very close to poverty rates, except for children at the beginning of primary school. In fact, in the earlier part of the period, in the South West, FSM6 rates pull above estimated poverty rates for children in late primary school.

Figure 20: Percentage of children living in London who are recorded as FSM or FSM6/PP in the NPD, compared to percentage estimated living in households in anchored poverty after housing costs in the HBAI[55]

FSM: Reception - Year 2

FSM6/PP: Reception - Year 2

FSM: Year 3 - Year 6

FSM6/PP: Year 3 - Year 6

FSM: Year 7 - Year 11

FSM6/PP: Year 7 - Year 11

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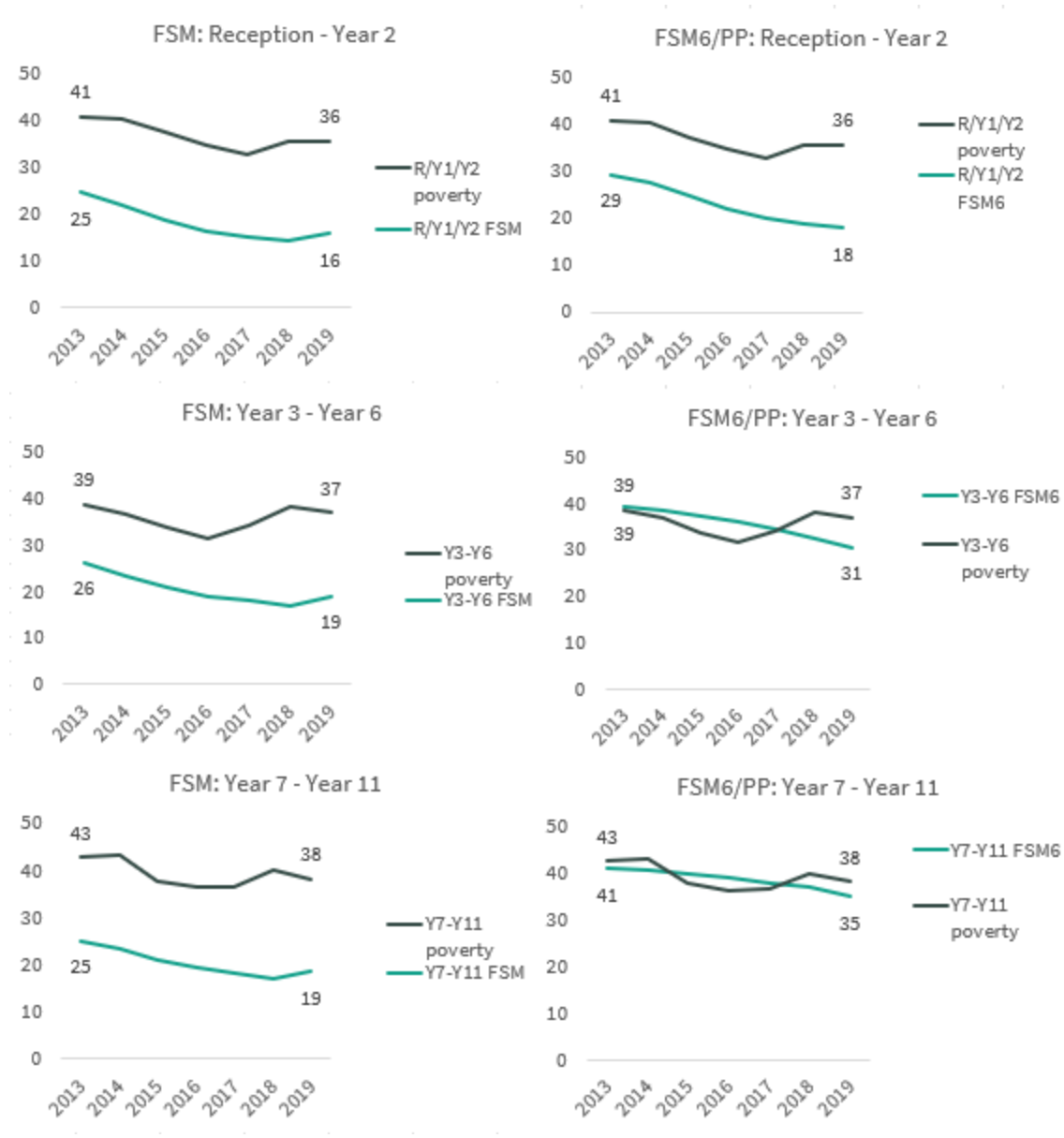
[55] Note that estimates from HBAI are three year averages (for example, the estimate for 2019 combines estimates from 2018, 2019, and 2020)

Figure 21: Percentage of children living in the East of England who are recorded as FSM or FSM6/PP in the NPD, compared to percentage estimated living in households in anchored poverty after housing costs in the HBAI[56]
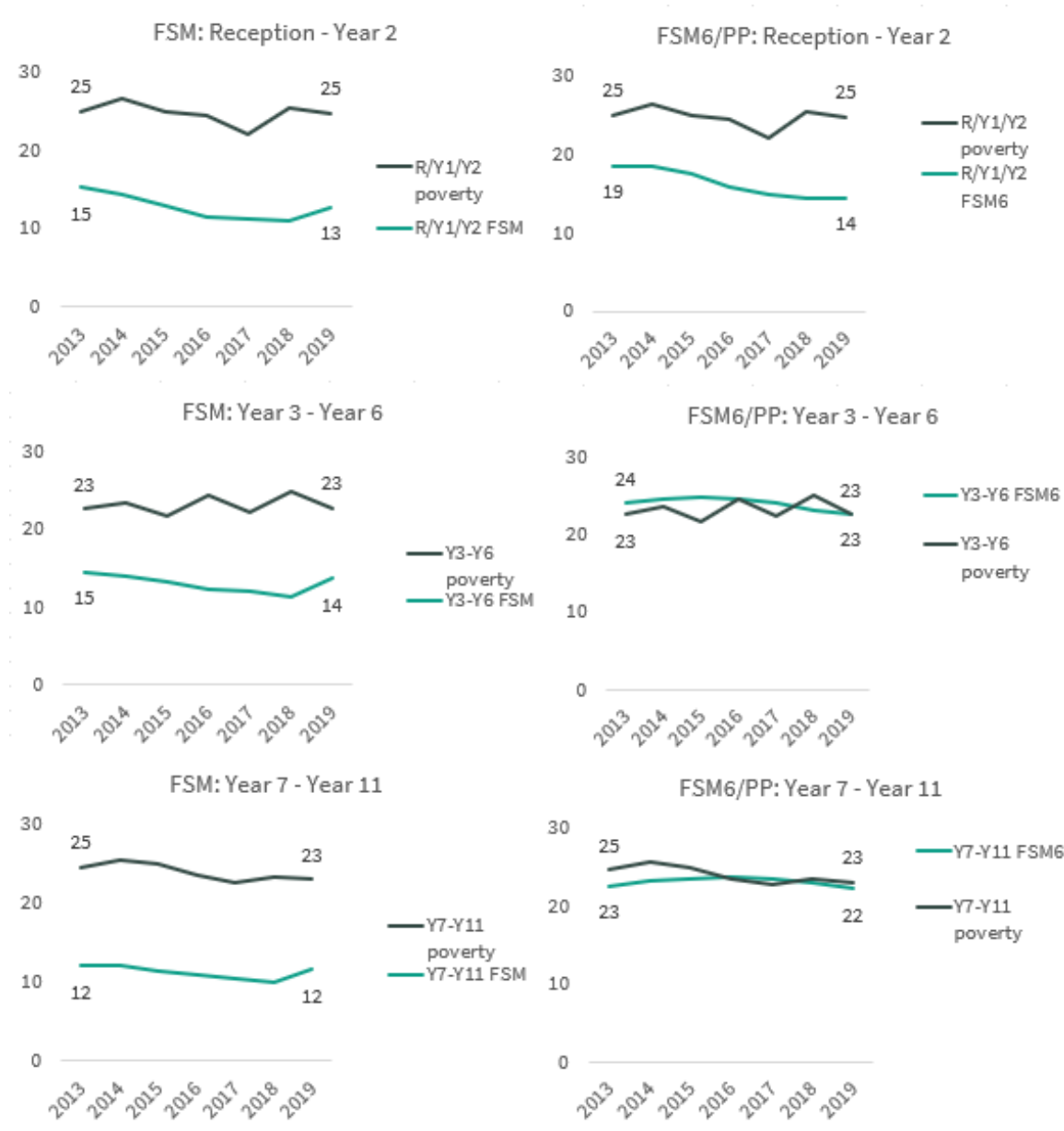
[56] Note that estimates from HBAI are three year averages (for example, the estimate for 2019 combines estimates from 2018, 2019, and 2020)

Figure 22: Percentage of children living in the South East who are recorded as FSM or FSM6/PP in the NPD, compared to percentage estimated living in households in anchored poverty after housing costs in the HBAI[57]

FSM: Reception - Year 2

FSM6/PP: Reception - Year 2

FSM: Year 3 - Year 6

FSM6/PP: Year 3 - Year 6

FSM: Year 7 - Year 11

FSM6/PP: Year 7 - Year 11

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[57] Note that estimates from HBAI are three year averages (for example, the estimate for 2019 combines estimates from 2018, 2019, and 2020)

Figure 23: Percentage of children living in the South West who are recorded as FSM or FSM6/PP in the NPD, compared to percentage estimated living in households in anchored poverty after housing costs in the HBAI[58]
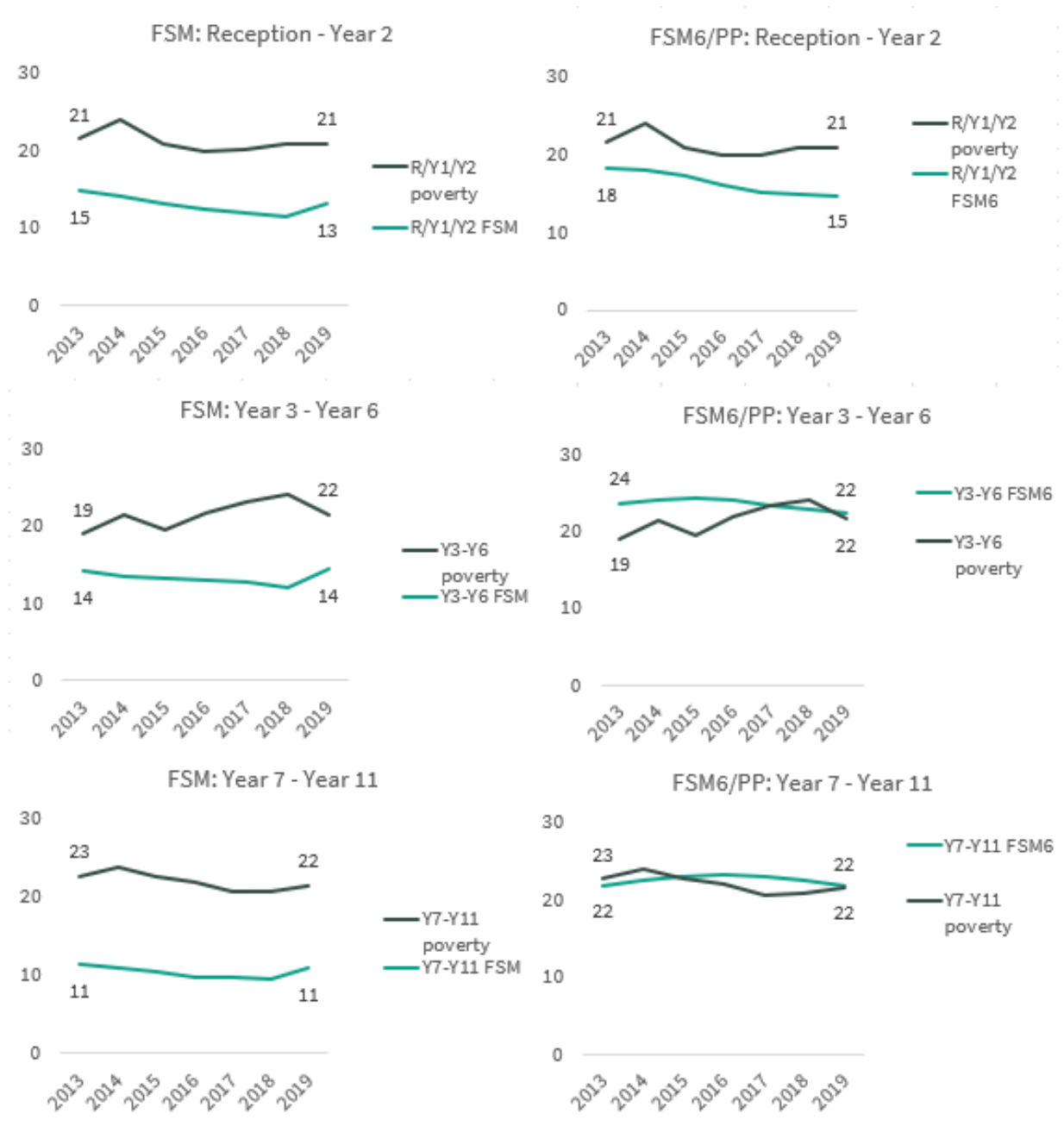
This can also be seen in the West Midlands and Yorkshire and the Humber, where FSM6 rates pull above estimated poverty rates in the older age groups.

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[58] Note that estimates from HBAI are three year averages (for example, the estimate for 2019 combines estimates from 2018, 2019, and 2020)

The West Midlands is, however, unusual because there is congruence between FSM6 rates and poverty rates for the youngest children, in the earlier part of the period. This is reflected in the rare, relatively small gap between estimated poverty rates and FSM registration during the same period.

Figure 24: Percentage of children living in the West Midlands who are recorded as FSM or FSM6/PP in the NPD, compared to percentage estimated living in households in anchored poverty after housing costs in the HBAI[59]
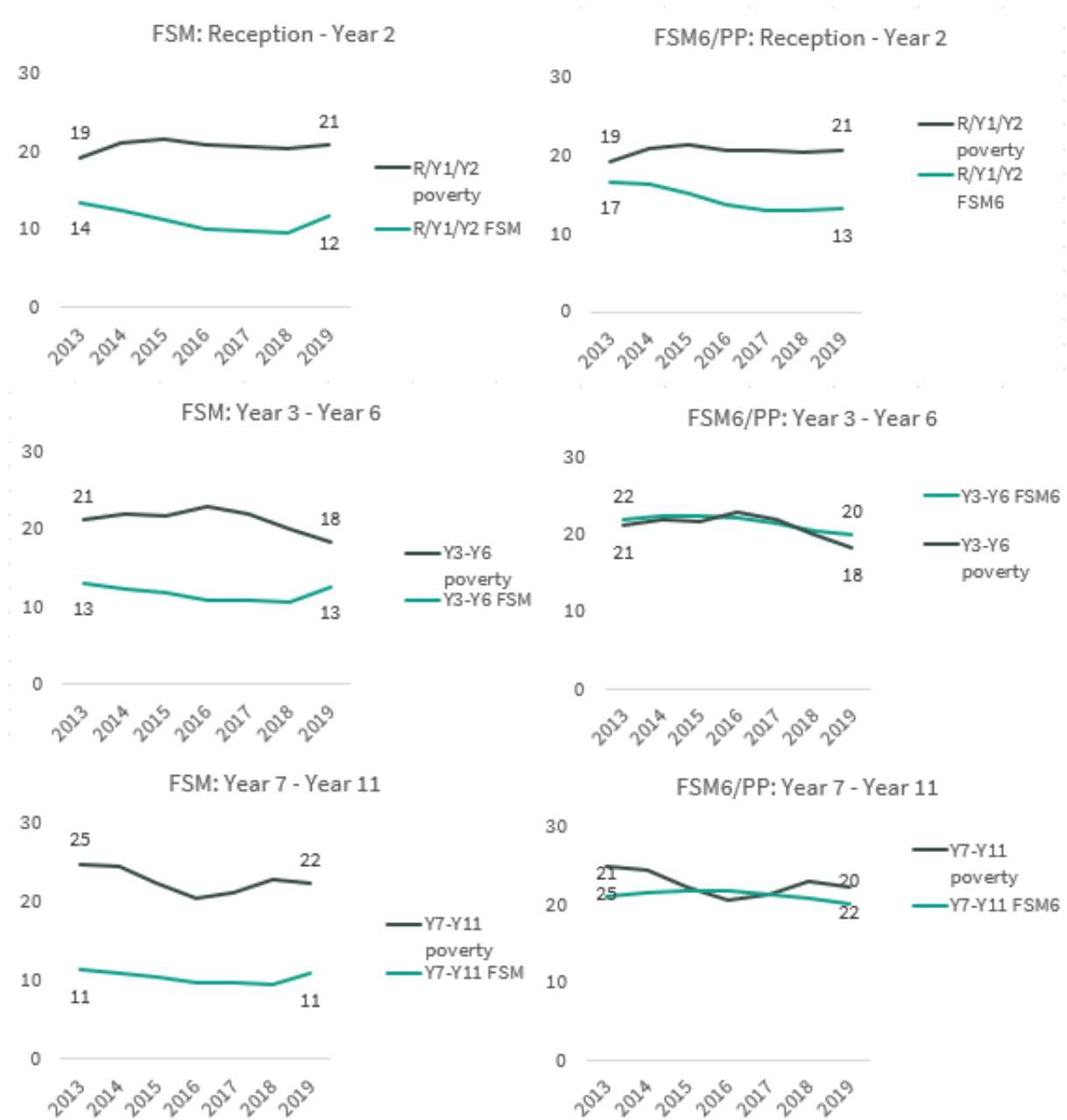
Figure 25: Percentage of children living in Yorkshire and Humber who are recorded as FSM or FSM6/PP in the NPD, compared to percentage estimated living in households in anchored poverty after housing costs in the HBAI[60]


A more extreme and unusual pattern related to this can be seen in the North East (Figure 26). Here, in the earlier part of the period covered, the percentage of children registered for FSM in early

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[60] Note that estimates from HBAI are three year averages (for example, the estimate for 2019 combines estimates from 2018, 2019, and 2020)
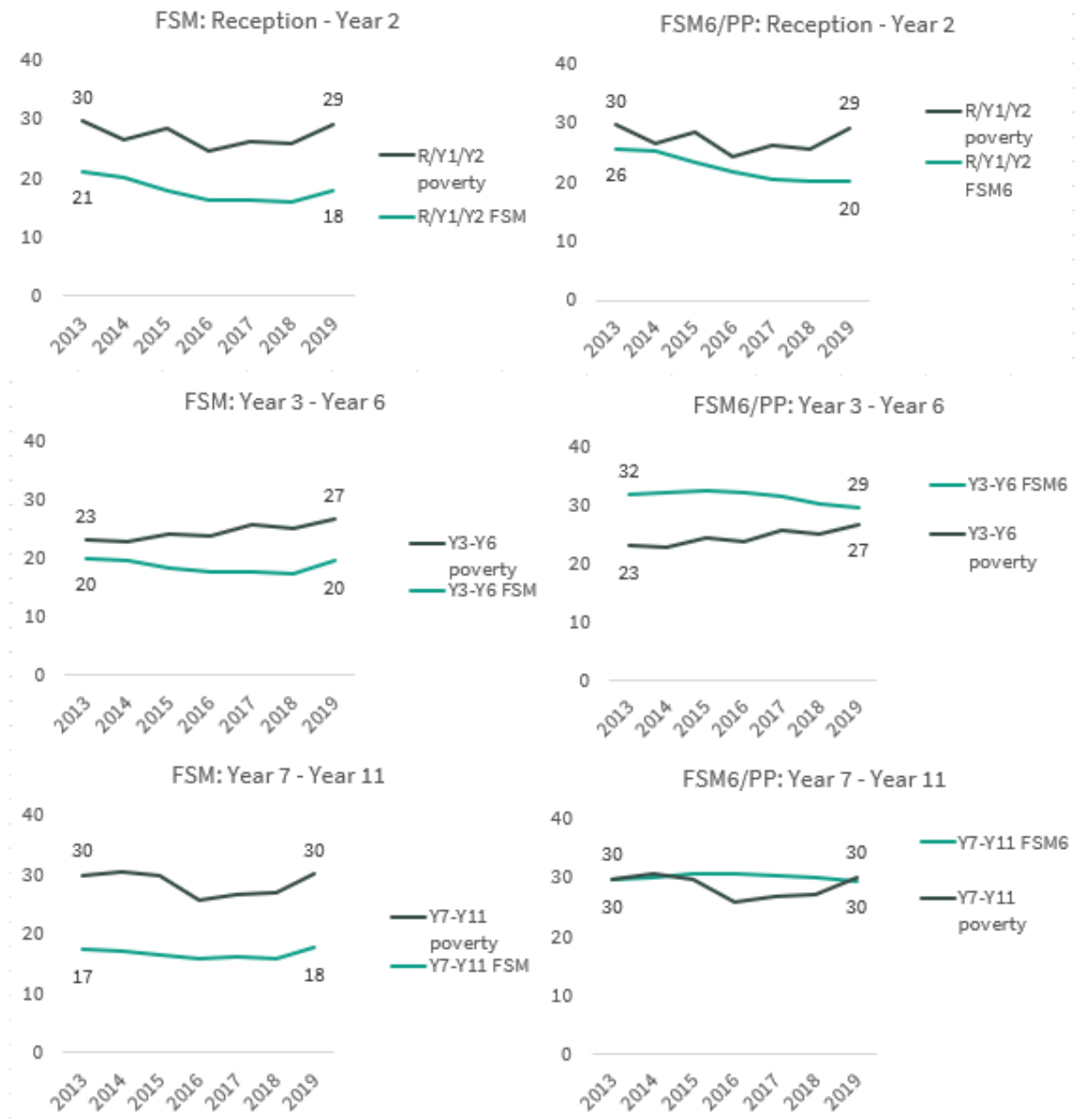
primary school and the percentage recorded as FSM6/PP is higher than the estimated poverty rate.

This may be for several reasons, including the ethnic make-up of the North East, meaning higher rates of registration among eligible children. The North East contains more White British children than the national average, and Figure 13 showed that gaps between FSM rates and poverty estimates are smaller for children of this ethnicity than for some other ethnic groups.

Differential distributions of income and poverty in different regions may also explain this pattern to some extent: if more children in the North East are in deep poverty with a family income below the very low threshold for FSM-eligibility, more may be included in it.[61] Other potential explanations may include differential claiming patterns for the welfare benefits that gateway FSM-eligibility: if there is less under-claiming of social security benefits in the North East, this may lead to higher FSM registration.[62]

Whatever the weight of the combination of reasons, for older children in the North East, the percentage registered for FSM6/PP pulls well above the percentage estimated to be in poverty according to the measure we use here. This is also the case for older children in the North West (Figure 27) – though, like most other regions, not those in early primary school.

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[61] Fitzpatrick et al (2023)
[62] We also considered whether lower housing costs in the North East may provide some explanation, but set this idea aside as the disparity between before and after housing costs measures of poverty is similar in the North East to that in many other regions (Joseph Rowntree Foundation, 2022)

Figure 26: Percentage of children living in the North East who are recorded as FSM or FSM6/PP in the NPD, compared to percentage estimated living in households in anchored poverty after housing costs in the HBAI

Figure 27: Percentage of children living in the North West who are recorded as FSM or FSM6/PP in the NPD, compared to percentage estimated living in households in anchored poverty after housing costs in the HBAI
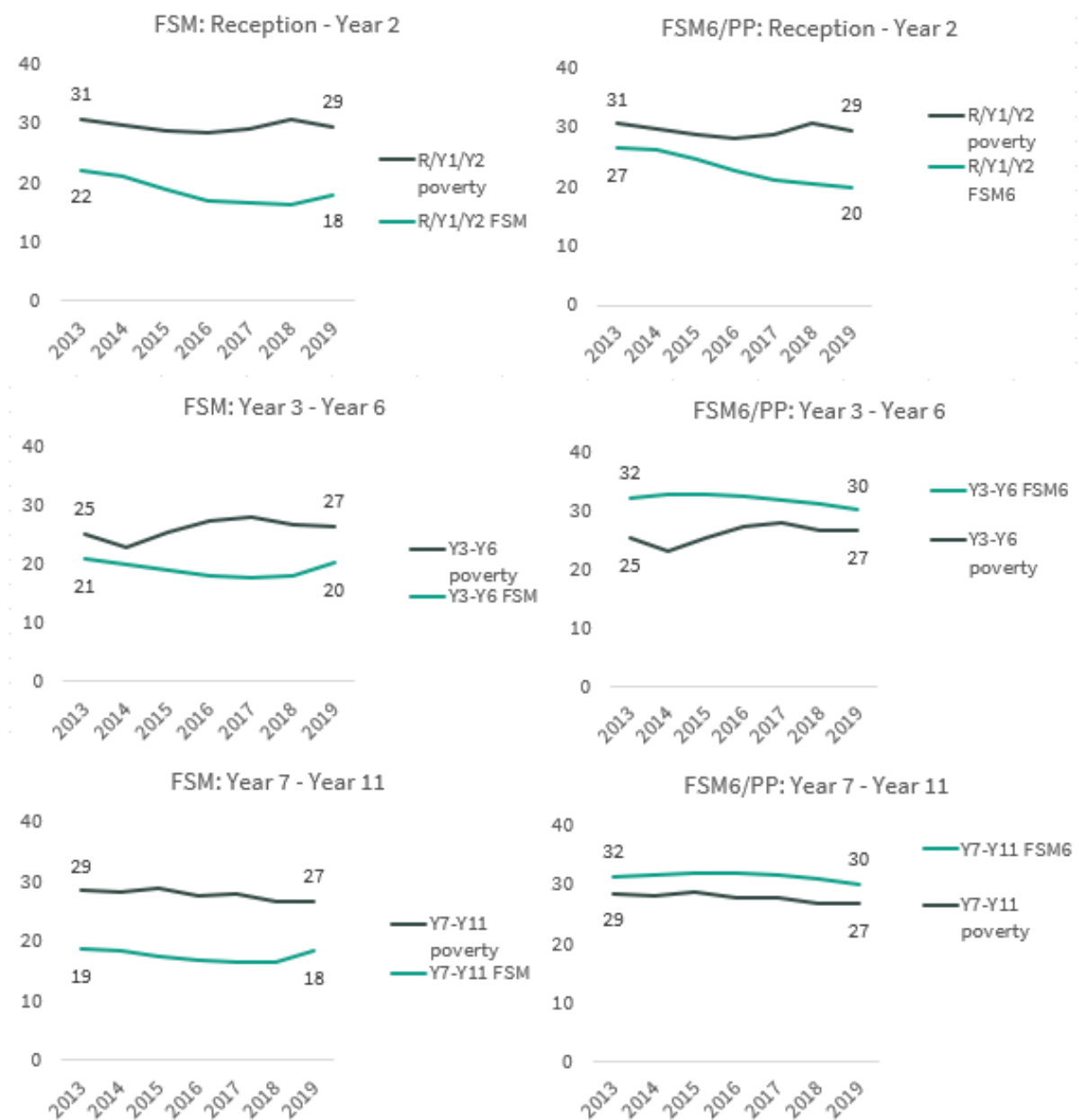
Lastly, Figure 28 looks at the East Midlands. Here there is quite a lot of volatility in estimated poverty rates across time and age groups, and subsequently volatility in the correspondence between FSM and FSM6/PP rates and the poverty estimates. While FSM rates remain fairly consistent, particularly in the older age groups, estimated poverty rates have followed a different pattern.

Overall, then, the geographical breakdowns above highlight a number of points about FSM and FSM6/PP as proxy measures of poverty. They show that there is a very different relationship

between the percentage of children estimated to be in poverty and registered for FSM in different regions, and that this also differs within many regions over time and according to children's ages. In some regions, the FSM6/PP measure pulls rates closer to poverty estimates, and in some above – but again, there is a lot of variation here over time and place. It is likely that FSM/PP are a better proxy for poverty in some regions than in others, which has implications for research and the fairness and efficiency of resource distribution.

If the meaning of FSM and its accuracy as a proxy for poverty varies according to region, what might this mean at lower levels of geography? We do not compare HBAI estimates with FSM rates at the LA level here because of volatility and uncertainty due to small sample sizes in the FRS/HBAI, but we can infer that there is likely to be even more variation at this level.

This is not only because of the variation at the regional level, but because previous research included in our evidence review, and the analyses above, show that other area compositional factors such as ethnicity impact propensity among eligible families to claim FSM.[63] Without access to the detailed LA-level information on welfare benefits receipt held by central government it is not possible for us to fully calculate under-claiming by individual LA, but we recommend that previous government research undertaking these calculations should be updated and repeated.[64] We also explore variation by LA from a different angle in section five.

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[63] https://epi.org.uk/publications-and-research/whats-cooking-a-review-of-evidence-and-discussion-on-the-free-school-meals-fsm-measure-in-the-national-pupil-database/

[64] https://assets.publishing.service.gov.uk/media/5a79faf540f0b66a2fbff077/DFE-RR235.pdf

Figure 28: Percentage of children living in the East Midlands who are recorded as FSM or FSM6/PP in the NPD, compared to percentage estimated living in households in anchored poverty after housing costs in the HBAI

Section summary and recommendations

By examining other data within the NPD, we can see several indications of changes to the composition of the FSM and PP groups over the years, and variations in who falls into the groups across place and pupil characteristics.

- Among children **not** recorded as FSM/PP, the proportion with recorded EAL has risen over the past two decades, flattening in the most recent years. Changes in the FSM/PP groups

have been less dramatic – but have often been in the opposite direction, with fewer children recorded with EAL over time.
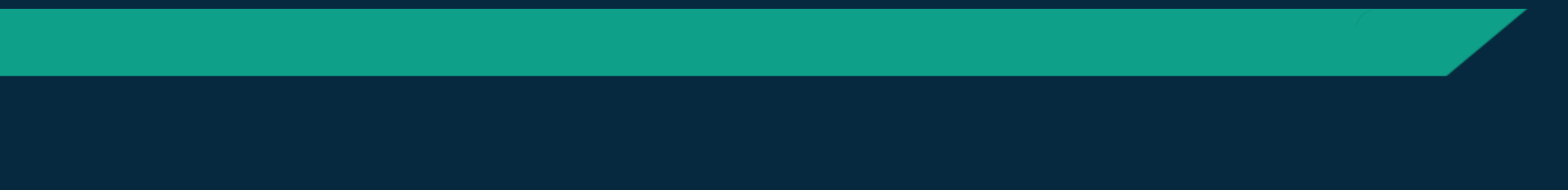
- The proportion of children recorded with EAL is comparatively lower in the FSM/PP groups in early primary school, while in contrast the FSM/PP groups are more likely to be recorded with EAL in the secondary years.

- According to their composition in terms of both recorded EAL and recorded ethnicity, the FSM/PP and non-FSM/PP groups are not equivalent across stages of education, years, and cohorts.

- At the national level, the picture is one where the non-FSM and non-PP groups have become more ethnically and linguistically diverse, while change has been slower in the FSM/PP groups (though these groups were more diverse to begin with).

- Overall, across all years, fewer children are registered for FSM than are estimated to be in poverty.

- Because PP is based on ever being registered for FSM in the past six years, PP rates pull above poverty rates for some but not all groups of older children. This includes those who are who are recorded as White British or Black, and those who live in the West Midlands, Yorkshire and the Humber, and the North East.

- PP rates do not pull above poverty rates for children recorded as of Pakistani, Bangladeshi or Indian ethnicities, and often they do not for those living in the South West, the South East, London, and the East of England.

- Among children recorded as Pakistani, Bangladeshi or Indian ethnicities, estimated poverty rates are far higher than the percentage of children registered for FSM, and, to a lesser but still large extent, for PP.

- There has been a slow shift over the past decade where children recorded as FSM are more likely to live in rural areas.

- There are very different relationships between the percentages of children estimated to be in poverty and the percentages registered for FSM across different regions. This also differs within many regions over time, and according to children's ages.

- All of the above findings, alongside previous evidence, raise questions both in terms of FSM's utility and accuracy in measurement for research and policymaking, and in terms of resource allocation, including access to meals and other support, for children. [65]

- The probability is that FSM/PP are a better proxy for poverty and educationally-relevant disadvantage in some areas than in others, and for children of some ethnicities and language backgrounds than others, and for children of some ages rather than others: which has implications for research, and the fairness and efficiency of resource distribution.

- There is likely to be even more variation and inconsistency at the LA level. Without access to the detailed local information on welfare benefits receipt held by central government, it is not possible for us to fully explore this: for example, to accurately quantify under-claiming by individual LAs. We recommend that previous government research undertaking these calculations is updated and repeated, to provide up-to-date information, if FSM and PP are to continue to be used instrumentally in resourcing and policy. [66]

- Depending on the research question, comparisons of the FSM/PP groups to the non-FSM/PP groups across time, age, and place would often benefit from accounting for composition according to ethnicity and EAL, because these factors are not stable within the groups, and may often explain to some extent apparent differences in outcomes according FSM/PP status.

[65] Campbell and Cooper (2024); Burgess (2014)
[66] Iniesta-Martinez and Evans (2012); Lord, Easby and Evans (2013)

Section three: Trajectories of free school meals registration

Section three: Trajectories of free school meals registration

In this section, we explore trajectories of registration for FSM throughout a child's school career — from Reception to Year 11[67]. We focus here on two cohorts of children: those born in 2006-07, who were in year 6 in 2018 and year 11 in 2023; and those born in 1999-2000, who were in year 6 in 2011 and year 11 in 2016.

Figure 29 shows the pattern of FSM registration recorded in the January Spring Census in the NPD each year for each cohort. In the year 11 2023 cohort, 70.3 per cent of children present in any January census were **never** registered for FSM compared to 69 per cent in the 2016 cohort. The proportion **ever** registered is therefore similar across cohorts.

Figure 29 shows that being registered for FSM between five and eleven times spanning both the primary and secondary phases was the most common pattern according to our typology, followed by registration in secondary only. More children overall, however, were registered in primary school only (when we combine Reception to year 2 only, later primary only, and instances across the primary phase). Slightly more children were always recorded as FSM-eligible in the later, 2023 cohort; this is consistent with the cohort being subject to protections under the roll-out of Universal Credit, under which children retain FSM status even when a family's income improves.

Figure 30 looks only at those children who are present in Year 11 and registered for Pupil Premium (PP)/FSM6. Again, the most common trajectory is registration at least five times over the primary and secondary phases: well over half of the children in both cohorts have been FSM eligible and registered at points throughout their school career.

We also looked at the mean number of years registered for PP/FSM6 pupils (based on the January census; figures not shown here). For those in Year 11 in 2023, the average during secondary school was 3.9 times out of a possible 5 years; for the same cohort, the average at year 6 in primary school was 3.9 times, out of a possible 7 years. Correspondingly, Year 11 FSM6/PP pupils in the cohort were registered an average of 7.4 times (of a possible 12 years) between Reception and Year 11 (rising to 7.8 times for those present in every January census). In the younger cohort, who were in

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[67] Section five looks separately at the pre-school years

Year 11 in 2016, the average time registered was lower: 6.5 (of a possible 12), rising to 6.9 among those always present.

Given the very low income threshold for FSM eligibility, the long-lasting effects of poverty, and the estimate that around 17 per cent of children are living in persistent long-term poverty in the years 2005–2022,[68] concerns that Universal Credit protections for recent cohorts will result in an overly 'non-disadvantaged' group may be less worrying — at least for the purposes of targeting and resource allocation. Many FSM6 children, even in the earlier cohort not subject to Universal Credit protections, seem to have moved in and out of registration or been registered for over half their time in education, across phases, indicating precarious forays into and proximity to low income and economic insecurity among the majority of children ever registered for FSM.

Figure 29: Pattern of registration for FSM each January from Reception to Year 11 – children ever present in cohort
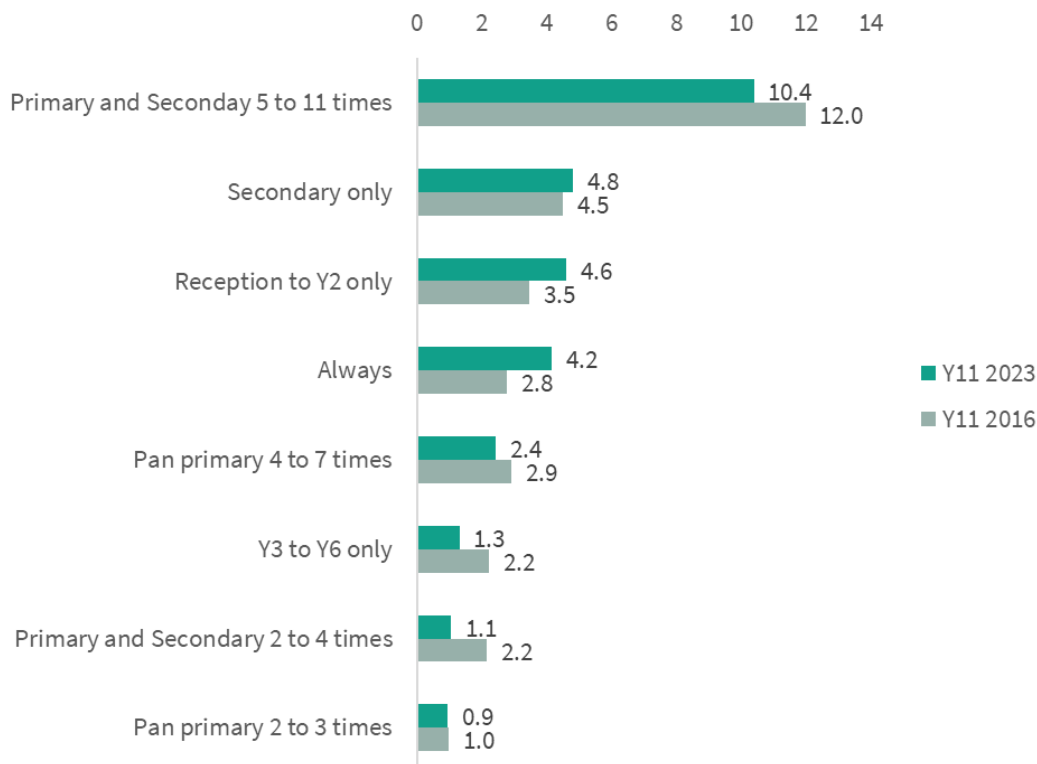
Figure 30: Pattern of registration for FSM each January from Reception to Year 11 – children registered for Pupil Premium/FSM6 in Year 11 only

Category	Y11 2023	Y11 2016
Primary and Seconday 5 to 11 times	46.0	46.4
Secondary only	22.2	17.6
Always	20.4	11.6
Primary and Secondary 2 to 4 times	4.3	8.2
Pan primary 4 to 7 times	3.5	6.5
Y3 to Y6 only	2.0	5.3
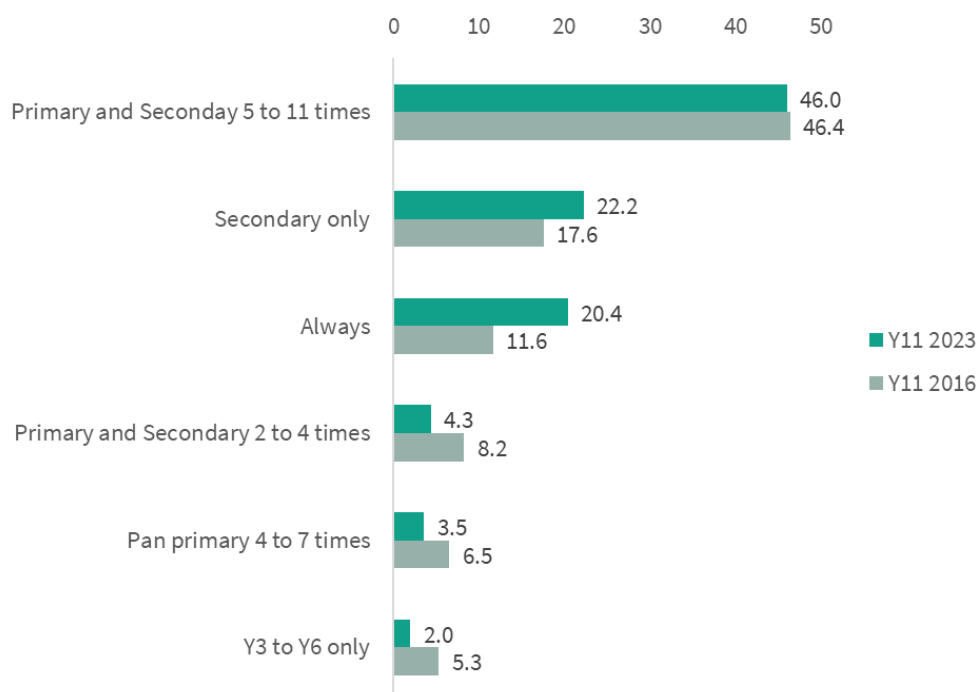
Do these patterns of FSM registration among PP/FSM6 children vary according to other characteristics? Figure 31 shows the typologies based on whether children have ever been recorded with English as an additional language (EAL), and distinguishes between those **always** present at every January census from Reception to Year 11, and those **ever** present. This distinction is necessary because a child must be present to be 'counted' as registered for FSM. Failing to account for time out of school can therefore lead to underestimating periods when a child was FSM-eligible. This is particularly relevant for children recorded with EAL, who are more likely to attend for fewer years.

A few differences emerge. Firstly, PP/FSM6 children recorded with EAL who are ever present in the data are more likely to have been registered in secondary school only – particularly in the 2023 cohort. When the data is limited to those who have been present every year since Reception, this difference from non-EAL-recorded children is much smaller, and in fact reverses for the 2016 cohort.

In the 2023 cohort, PP/FSM6 children who are not recorded with EAL are more likely to have always been registered for FSM than EAL children, even among those who have been present throughout. However, the reverse is true for the 2016 cohort, where EAL children present throughout are more likely to have been registered for FSM.

In the 2023 cohort, the mean number of January census registrations for FSM for among FSM6/PP children in year 11 is 7.8 (out of 12) for non-EAL children, and 6.3 for EAL children, increasing to 8 and 7.4 respectively among those always present. In the 2016 cohort, the average number of registrations for FSM in Year 11 was similar between non-EAL (6.5) and EAL (6.3) children. However, among those present throughout, the pattern reverses: non-EAL children averaged 6.7 registrations, while EAL children averaged 7.5 (figures for averages not shown).

Together, these patterns suggest that the composition of the PP/FSM6 group with EAL may have changed over time. They also suggest the need for research and policymaking to account for missing data—instances where a child was absent from the state school system in England and thus neither registered nor not registered for FSM. This is considered further later in this section.

Figure 31: Pattern of registration for FSM each January from Reception to Year 11 – children registered for Pupil Premium/FSM6 in Year 11 only, by EAL

Children ever present: 2023

	2023: Not EAL	2023: EAL
Primary and Seconday 5 to 11 times	48.3	40.4
Secondary only	17.5	34.0
Always	23.2	13.4
Primary and Secondary 2 to 4 times	4.3	4.5
Pan primary 4 to 7 times	3.6	3.3
Y3 to Y6 only	1.8	2.5
Pan primary 2 to 3 times	0.5	0.6

Children ever present: 2016

	2016: Not EAL	2016: EAL
Primary and Seconday 5 to 11 times	47.2	44.0
Secondary only	15.8	22.5
Always	11.7	11.6
Primary and Secondary 2 to 4 times	8.7	7.1
Pan primary 4 to 7 times	6.6	6.2
Y3 to Y6 only	5.6	4.2
Pan primary 2 to 3 times	1.1	0.8

Children always present: 2023

	2023: Not EAL	2023: EAL
Primary and Seconday 5 to 11 times	47.1	45.6
Secondary only	16.4	20.2
Always	25.5	20.9
Primary and Secondary 2 to 4 times	4.2	4.6
Pan primary 4 to 7 times	3.7	4.6
Y3 to Y6 only	1.7	2.4
Pan primary 2 to 3 times	0.5	0.7

Children always present: 2016

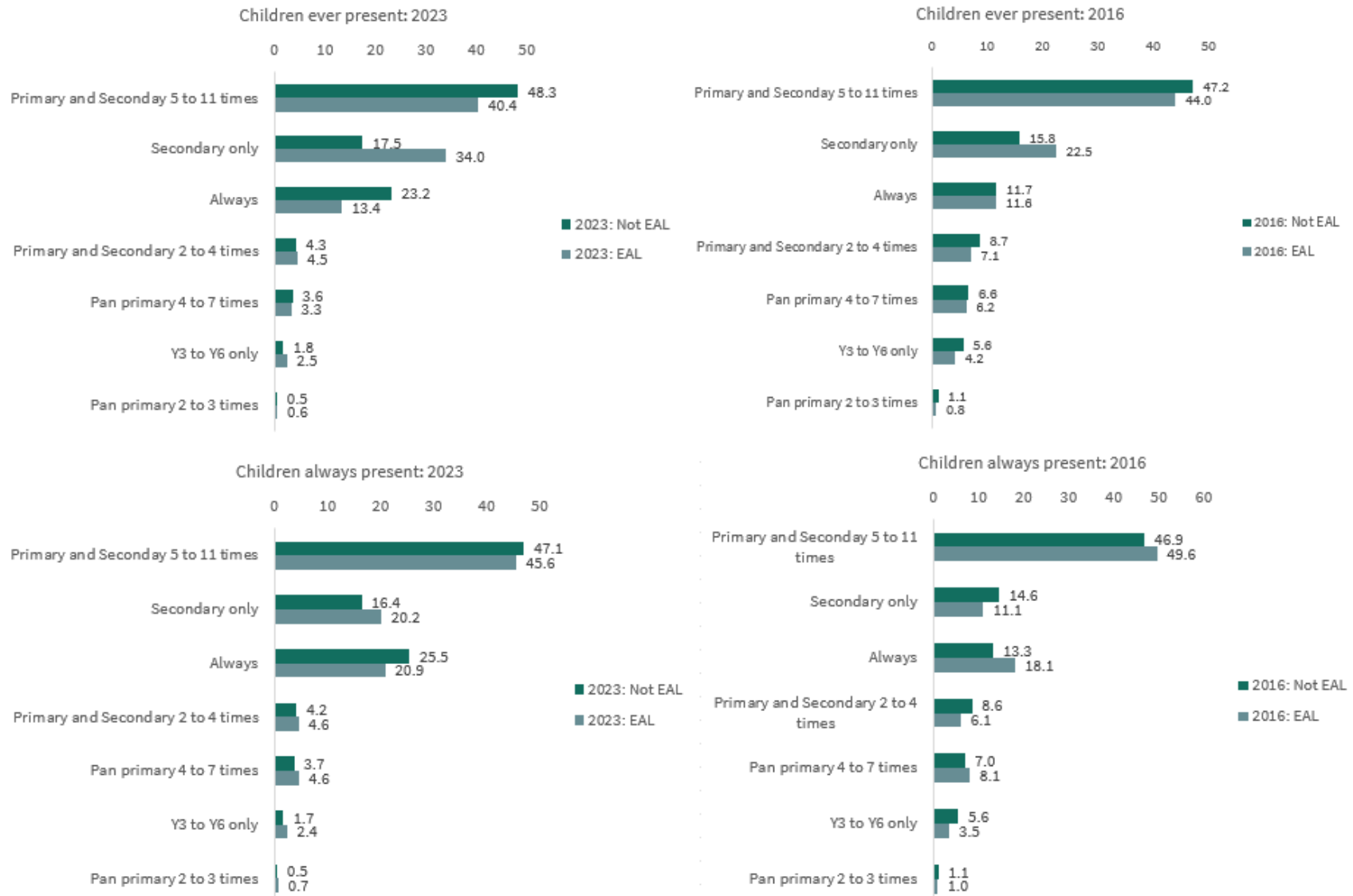|	2016: Not EAL	2016: EAL
Primary and Seconday 5 to 11 times	46.9	49.6
Secondary only	14.6	11.1
Always	13.3	18.1
Primary and Secondary 2 to 4 times	8.6	6.1
Pan primary 4 to 7 times	7.0	8.1
Y3 to Y6 only	5.6	3.5
Pan primary 2 to 3 times	1.1	1.0

Figure 32 shows trajectories for selected ethnic groups. There are several differences between groups among children who are FSM6/PP in Year 11. Firstly, in the 2023 cohort, White British children are much more likely to always be recorded as FSM registered throughout their school careers. This was not the case for the 2016 cohort. Correspondingly, the average number of times recorded as FSM for Year 11 White British children in 2023 was 7.8 times (7.9 for those always present), compared to 6.5 (also 6.5 for those always present) in 2016 (figures not shown).

Indian children are less likely to have been registered as FSM-eligible throughout both primary and secondary school, and more likely to have been recorded in secondary school only – particularly in the 2023 cohort. There has also been an increase in the proportion of Pakistani/Bangladeshi children and Black children recorded as FSM-eligible only in secondary, with a smaller rise for White children.

Variations in the frequency and timing of being recorded as FSM-eligible may reflect at least three family-level factors:

- timing and persistence of poverty;

- transience and instability in school attendance – if children are missing from school, they will not be registered for FSM regardless of their family's income;

- bias and/or underclaiming of FSM among eligible children (as discussed in section three, earlier).

These patterns also reflect wider social and economic conditions at both local and national levels, as explored in our evidence review.[69]

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[69] Campbell and Cooper (2024)

Figure 32: Pattern of registration for FSM each January from Reception to Year 11 – children registered for Pupil Premium/FSM6 in Year 11 only, by ethnicity
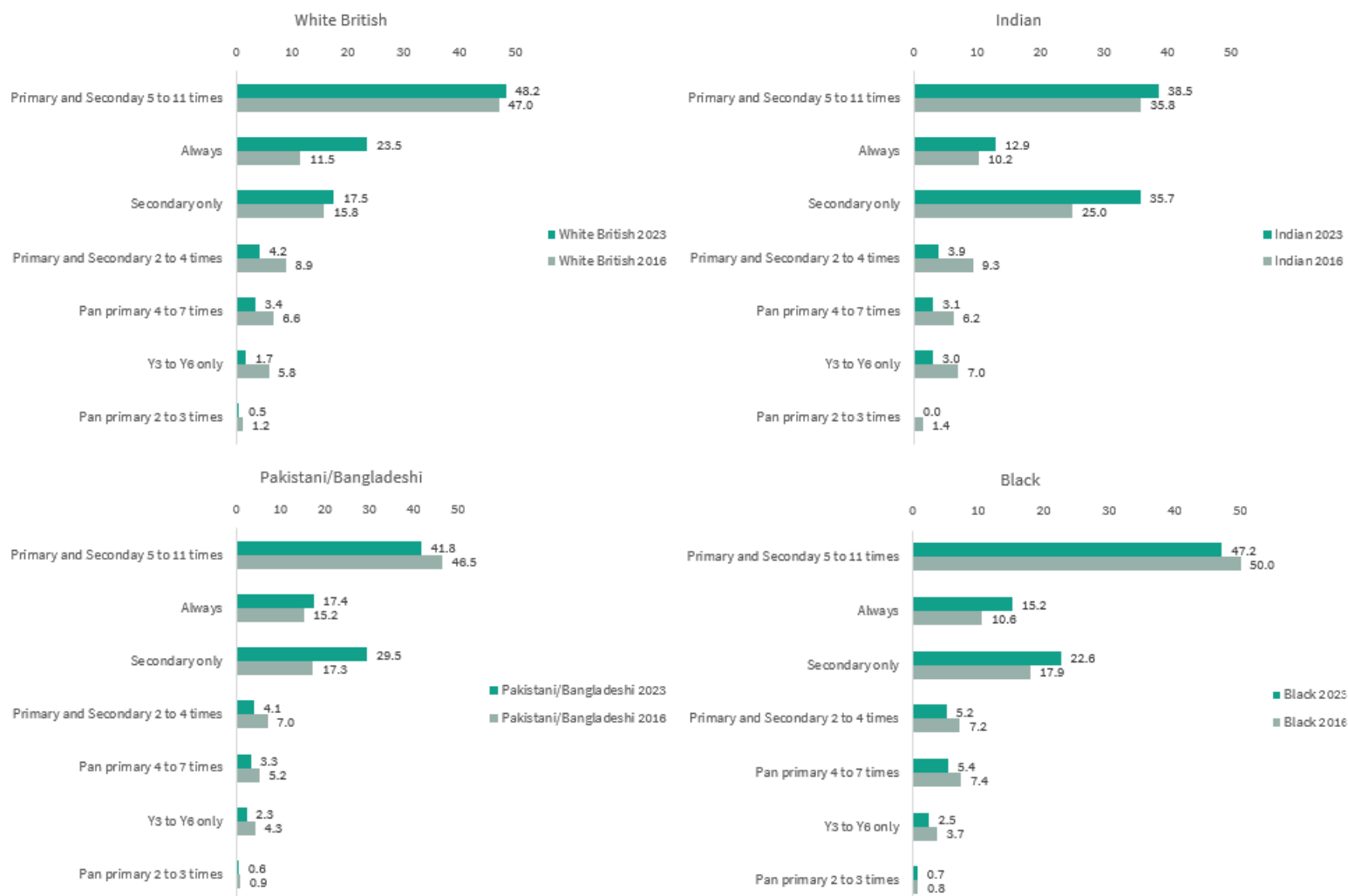

White British

	2023	2016
Primary and Seconday 5 to 11 times	48.2	47.0
Always	23.5	11.5
Secondary only	17.5	15.8
Primary and Secondary 2 to 4 times	4.2	8.9
Pan primary 4 to 7 times	3.4	6.6
Y3 to Y6 only	1.7	5.8
Pan primary 2 to 3 times	0.5	1.2

Indian

	2023	2016
Primary and Seconday 5 to 11 times	38.5	35.8
Always	12.9	10.2
Secondary only	35.7	25.0
Primary and Secondary 2 to 4 times	3.9	9.3
Pan primary 4 to 7 times	3.1	6.2
Y3 to Y6 only	3.0	7.0
Pan primary 2 to 3 times	0.0	1.4

Pakistani/Bangladeshi

	2023	2016
Primary and Seconday 5 to 11 times	41.8	46.5
Always	17.4	15.2
Secondary only	29.5	17.3
Primary and Secondary 2 to 4 times	4.1	7.0
Pan primary 4 to 7 times	3.3	5.2
Y3 to Y6 only	2.3	4.3
Pan primary 2 to 3 times	0.6	0.9

Black

	2023	2016
Primary and Seconday 5 to 11 times	47.2	50.0
Always	15.2	10.6
Secondary only	22.6	17.9
Primary and Secondary 2 to 4 times	5.2	7.2
Pan primary 4 to 7 times	5.4	7.4
Y3 to Y6 only	2.5	3.7
Pan primary 2 to 3 times	0.7	0.8

Figure 33: Pattern of registration for FSM each January from Reception to Year 11 – children registered for Pupil Premium/FSM6 in Year 11 only, by region
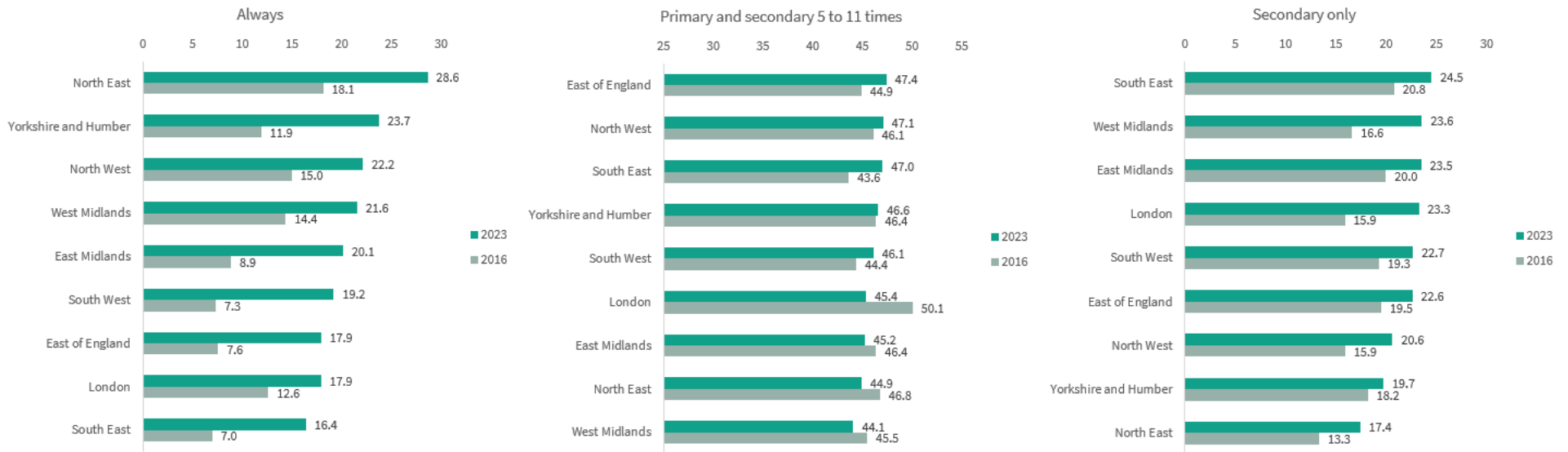
The regional patterns shown in Figure 33 may relate to all of these possibilities. Here we see that children who are FSM6/PP in Year 11 are most likely to always be registered for FSM in the North East, where the average times registered in the 2023 cohort (among those always present) is 8.1 out of 12. In contrast, children in London are less likely to always be registered for FSM, with an average count of 7.1, despite the city's higher overall child poverty rates. As discussed earlier, this may reflect the ethnic make-up of the regions, but it may also reflect transience, migration, and stability of populations within them, or working patterns and income fluctuations. Children in the South East are most likely to be registered for FSM at the secondary stage only (with an average count of 7 out of 12 in 2023), whereas those in the North East — who are more likely to always be registered — are least likely.

Between local authorities, there are large variations in FSM6/PP registration patterns over time. For example, Table 1 and Figure 34 show the range and distribution in terms of the percentage of children within a local authority who are FSM6/PP who are always registered for FSM, each year.

Among FSM6/PP children in year 6, the percentage within an LA who have been FSM-registered every January census since Reception ranges from 0.4 per cent to 38 per cent (rising to 41 per cent when only those who have been present every January census are considered). In secondary school, the percent within an LA always registered within the phase ranges from 37 to 74 per cent (based on all cases) or 40 to 79 per cent (based on those present every January). So there are vast differences in tendencies in persistence of registration for FSM within LAs which are masked by the FSM6 metric which confers Pupil Premium. Beynon (2023) has shown that persistence of registration incrementally predicts not only short-term educational outcomes but also many in the longer-term, including qualification rates, further and higher education participation, and employment and earnings.[70]

Gorard et al (2021) have pointed out that, notwithstanding the other factors that may lie beneath registration rates flagged above (under- and differential registration, and transience in school attendance), to the extent to which persistence of registration represents persistence of poverty, this presents vast problems for comparisons between LAs relying only on using PP to proxy disadvantage. For instance:

> …simply computing an attainment gap between ever- and never-FSM pupils will seriously misrepresent the challenges faced by poorer areas, by schools with poorer intakes, and the chances of their pupils making good progress… to be fair, comparisons between schools, regions and years should take into account the depth and duration of poverty of the pupils involved.[71]

At the school-level, variation is even greater, as shown in Table 2 and Figure 35. In some schools, as few as one per cent of Pupil Premium children have been registered for FSM at every January of the phase, while in others, virtually all (99 per cent) have been consistently registered. Again, this will result in 'unfair' comparisons between schools if Pupil Premium status is used as the sole measure of disadvantage.

[70] Beynon (2023)
[71] Gorard et al (2021)

Table 1: Range of percentage of pupils who are always registered for FSM each year among those FSM6/PP, across local authorities

	Percentage in LA with lowest always FSM	Percentage in LA with highest always FSM
A. Children who are FSM6/PP in Year 6: always FSM in primary	0.4%	38%
B. Children who are FSM6/PP in Year 6: always FSM in primary – only those present all years from Reception	0.4%	41%
C. Children who are FSM6/PP in Year 11: always FSM in secondary	37%	74%
D. Children who are FSM6/PP in Year 11: always FSM in secondary – only those present all years from Year 7	40%	79%
E. Children who are FSM6/PP in Year 11: always FSM in primary and secondary	0.4%	37%
F. Children who are FSM6/PP in Year 11: always FSM in primary and secondary – only those present all years from Reception	0.4%	42%

Figure 34: Distribution of percentage of pupils who are always registered for FSM each year among those FSM6/PP, across local authorities (see Table x for reference)
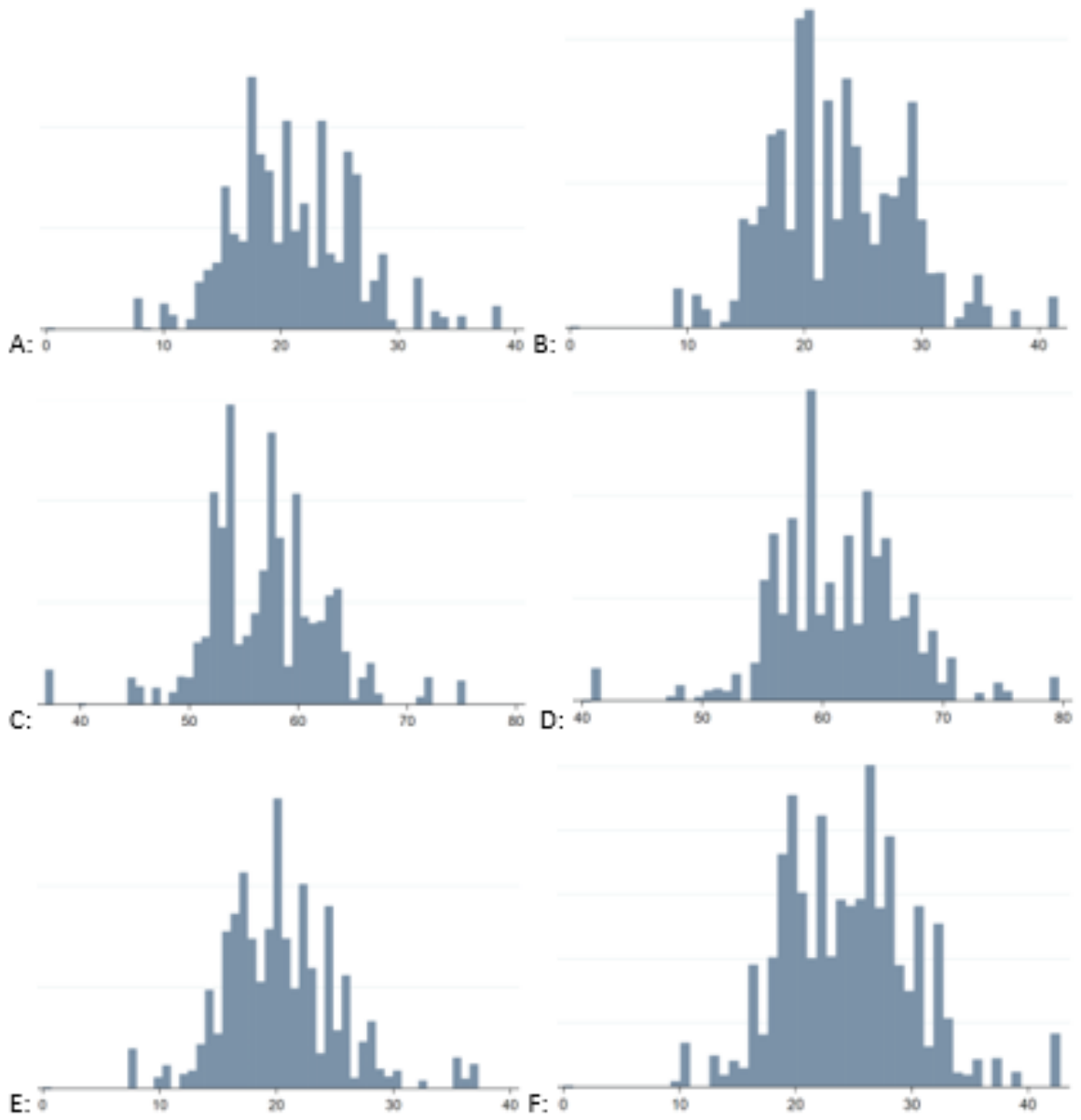
Table 2: Range of percentage of pupils who are always registered for FSM each year among those FSM6/PP, across schools

	Percentage in school with lowest always FSM	Percentage in school with highest always FSM
1. Children who are FSM6/PP in Year 6: always FSM in primary	1%	99%
2. Children who are FSM6/PP in Year 6: always FSM in primary – only those present all years from Reception	1%	99%
3. Children who are FSM6/PP in Year 11: always FSM in secondary	1%	99%
4. Children who are FSM6/PP in Year 11: always FSM in secondary – only those present all years from Year 7	1%	99%
5. Children who are FSM6/PP in Year 11: always FSM in primary and secondary	1%	99%
6. Children who are FSM6/PP in Year 11: always FSM in primary and secondary – only those present all years from Reception	1%	99%

Figure 35: Distribution of percentage of pupils who are always registered for FSM each year among those FSM6/PP, across schools (see Table x for reference)
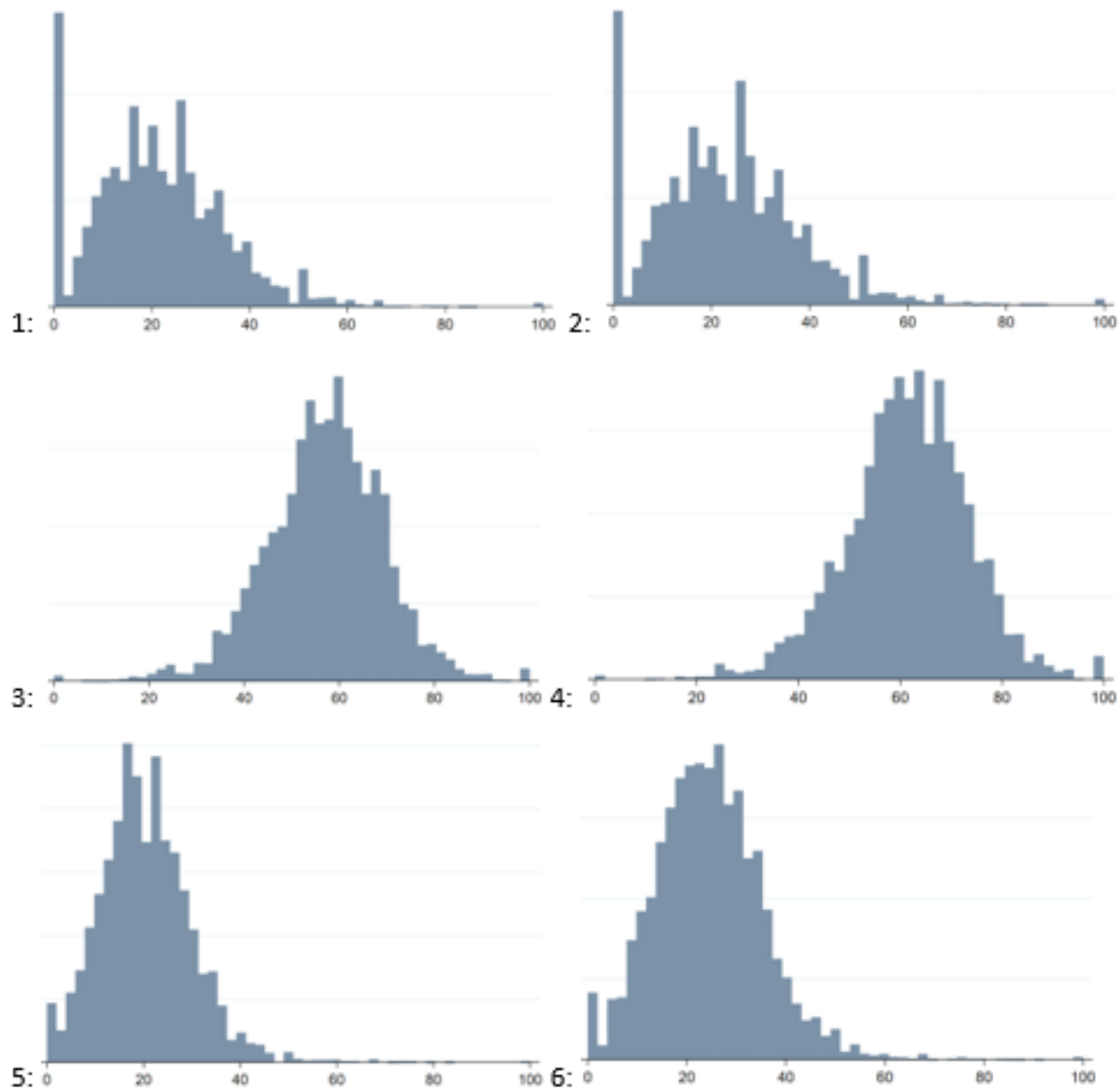
We now return to the point that when a child is missing from state education and not recorded in the NPD, their family circumstances are not picked up through FSM registration, even though they may be equally or more disadvantaged during this period and upon their return. While there are many reasons that a child may not be in a state school (and therefore missing from the NPD) that do not necessarily indicate disadvantage – such as some elective home education, travel, private schooling, and so on – there are also substantial indications that many children not in state education are missing out for negative reasons, and that this is detrimental.[72] So not only might a

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[72] Children's Commissioner (2024); Crenna-Jennings, Joseph and Hutchinson (2024)

child who was previously recorded as FSM (and is now absent from school) still live in a low-income family, they may be subject to other negative circumstances that ideally should be accounted for.

FSM-based measures, such as the number of times registered for FSM, fail to capture this when they do not account for periods of non-enrolment. An advantage of the FSM6/PP metric is that it captures children registered as FSM at any point over the past six years, circumventing issues with missing years and aiding inclusiveness. However, it also has drawbacks, such as its inability to capture nuanced patterns in FSM registration. Potentially, then, missingness should be included in its own right as a key third status when constructing measures using FSM to indicate or proxy disadvantage.

Figure 36 shows the proportion of children ever registered for FSM based on the number of times they were enrolled (as recorded in the January censuses) during each school phase (with a maximum of seven – Reception to Year 6 – in primary, and five – Year 7 to Year 11 – in secondary). The general pattern suggest that the more frequently a child is enrolled in school, the more likely they are to be registered for FSM. However, there is a notable peak in both primary and secondary school, where children who miss one January census are particularly likely to have been registered for FSM at least at one other point.

Figure 36: Percent children ever registered for FSM according to number of Januaries present in school phase
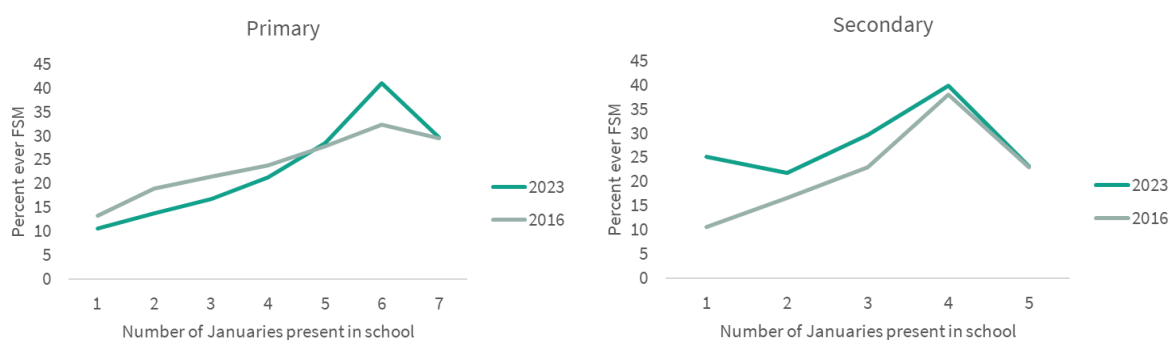
This may suggest that children who miss a year of school are likely to be economically disadvantaged. The otherwise incremental relationship between school enrolment and likelihood of FSM registration might suggest that lack of registration may stem from lack of familiarity or opportunity. This chimes with research suggesting that children who are mobile, who have high absence rates from school, and who are in contact with children's social care services, are less

likely to receive support for special educational needs and / or disabilities.[73] Perhaps children who are more transient and who have less stability and continuity of contact with the education system are less likely to access the services and provisions they are entitled to. This leads back to the potential, as outlined in section one, for auto-enrolment to ensure all eligible children access provisions through FSM and PP.

These nuanced patterns, along with research on the importance and complexities of being missing from education,[74] suggest that being missing from the data should itself be accounted for as a proxy for disadvantage, alongside FSM. Non-linearities can be accounted for methodologically, for example, by using categorical classifications, and interacting number of years missing with FSM variables. From both a measurement and policy perspective, it is logical to consider missingness as a key factor, as children who miss substantial time in education often require greater support when they return.

Figures 37 to 39 delve further into the relationships between missing school and ever being registered for FSM with breakdowns according to EAL, ethnicity, and region. Figure 37 shows (lines) that it is mostly among children who are **not** recorded with EAL that the pattern where children who miss one January are particularly likely to have been registered for FSM at other points holds. The pattern is less pronounced for EAL children, possibly reflecting differences in reasons for non-presence according to other background factors; it may be that children recorded with EAL are more likely to miss a period of school because of travel or migration, while non-EAL children are more likely to miss a period because of factors related to disadvantage.

On the other hand, Figure 37 (bars) also shows that children recorded with EAL are less likely to attend at all five or seven points during the educational phase – again emphasising the need to consider this aspect of children's educational experience alongside FSM.

[73] Hutchinson (2021)
[74] Children's Commissioner (2024); Crenna-Jennings, Joseph and Hutchinson (2024)

Figure 37: Percent children ever registered for FSM according to number of Januaries present in school phase, by EAL
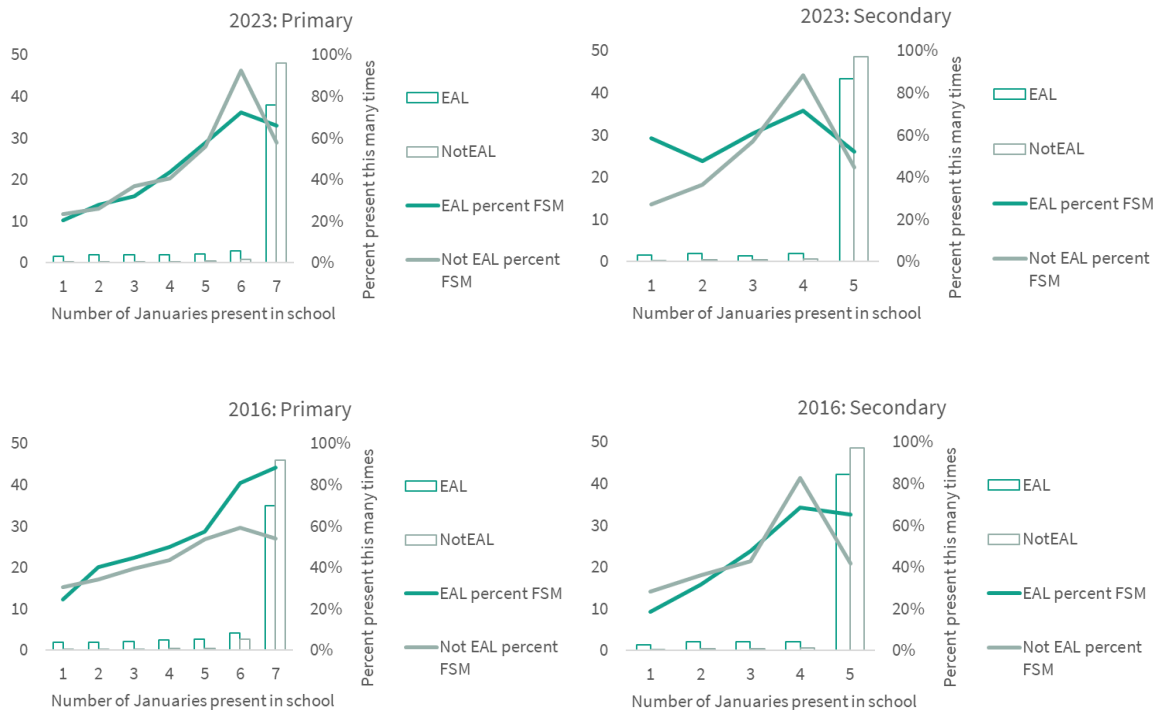
Relationships between FSM registration and missing school are also nuanced by ethnicity. For example, Figure 38 below compares children recorded as White British to those recorded as Indian in the NPD, for the cohort finishing Year 11 in 2023.

Figure 38: Percent children ever registered for FSM according to number of Januaries present in school phase – White British and Indian children
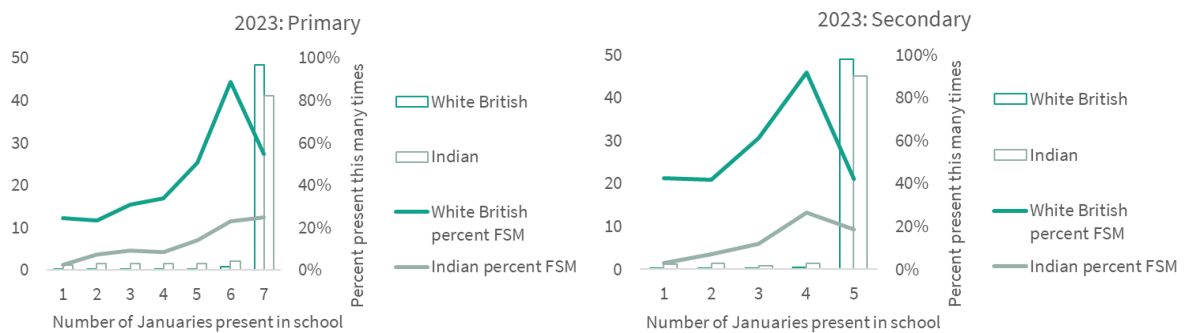
We see that Indian children are less likely to be enrolled every year in each phase, and that the peak in FSM registration among those who are enrolled in all but one January census is most pronounced among White British children – again, perhaps reflecting underlying differences in reasons for missing education. As in Figure 15, earlier, we see that Indian children are much less likely than White British children to ever be registered for FSM – regardless of times present.

There are also regional differences. For example, Figure 39 shows that primary children in London who miss at least one January census are less likely than those in Yorkshire and the Humber to ever be registered for FSM. While fewer children in London are enrolled every year, those who are consistently enrolled are more likely to be registered for FSM compared to those in Yorkshire and the Humber. Among secondary pupils, the spike among those missing one January census is notably more pronounced in Yorkshire and the Humber compared to London.

Figure 39: Percent children ever registered for FSM according to number of Januaries present in school phase – children in London and Yorkshire/Humber
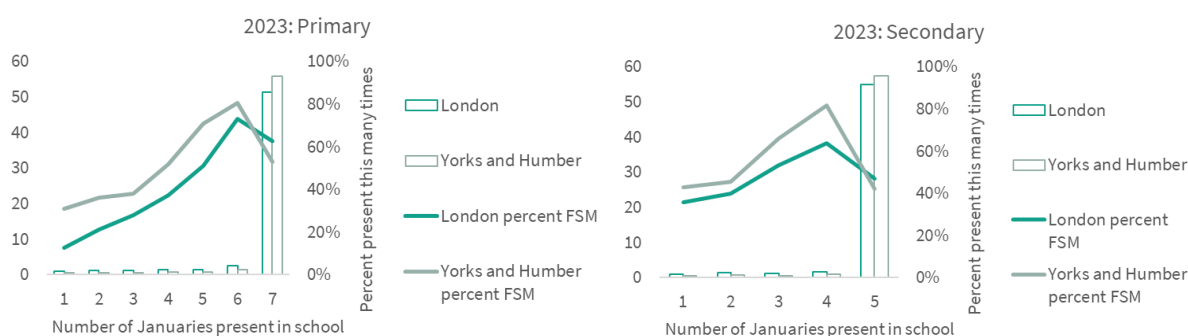
Section summary and recommendations

- Well over half of the FSM6/PP children in both cohorts inspected at Year 11 (in 2023 and 2016) have been FSM eligible and registered at points throughout their school career, that is, in both primary and secondary school.

- Ever being registered for FSM, even among the younger cohort covered by the Universal Credit transition protections, likely serves as a proxy for significant and persistent disadvantage spanning beyond the instances pinpointed by FSM registration.

- FSM6/PP children who are recorded as having English as an additional language (EAL) are more likely to have been registered for FSM for fewer times and in secondary school only. However, when considering only children who have been present in every January census, the picture is different – suggesting patterns of school attendance should be factored in to measures using FSM.

- In the 2023 cohort, White British children are much more likely than children of other ethnicities to always be recorded as FSM registered throughout their school careers. This was not the case for the 2016 cohort.

- There has also been a rise in the more recent cohort among Pakistani/Bangladeshi children and Black children in the percent recorded only in secondary as FSM-eligible.

- Children who are FSM6/PP in Year 11 are most likely to always be registered for FSM in the North East, and least likely in the South East.

- Children in London are much less likely than most other regions to always be registered for FSM, despite the city's high overall child poverty rates.

- On average, the more frequently a child is enrolled in a state school, as recorded in the January Spring Census, the more likely they are ever to be registered for FSM. This adds to evidence that children who are more transient and who have less stability and continuity of contact with the education system are less likely to access the services and provisions to which they are entitled.

- However, there is a notable peak in both primary and secondary school where children who miss just one January census are particularly likely to have been registered for FSM at another point. This may suggest that children who miss a year of school are particularly likely to be economically disadvantaged.

- This peak is more pronounced for children who are not recorded as EAL and White British children, and less pronounced for those living in London - possibly reflecting difference in reasons for non-presence according to other background factors and circumstances.

- Variations across groups of children and individuals in the frequency and timing of being recorded as FSM-eligible may reflect at least three family-level factors:

  o timing and persistence of actual poverty experienced
  o bias in tendencies to claim, and underclaiming of FSM, among eligible children living in poverty
  o transience and instability in school attendance – if children are missing from school, they will not be registered for FSM

- It is important for research and policymaking to consider whether a child has been present in state school and had a 'chance' to be registered for FSM, and their enrolment pattern, alongside FSM registrations, when attempting to proxy disadvantage.

- Non-linearities and heterogeneity should ideally be accounted for methodologically, for example:

  o by using categorical classifications to represent periods of missing data
  o interacting number of years missing with FSM variables

- o and / or trialling alternative specifications where missing a year is assumed to represent probable low-income during that time
- o by accounting for available intersecting characteristics, including EAL status, ethnicity, and geographic area

- There are vast difference between local authorities and schools in the number of times children who are registered for Pupil Premium have been registered for FSM. In some schools, only 1 per cent of Pupil Premium children have been registered for FSM at every January of the phase, in others, virtually all (99 per cent). Comparisons of schools and areas should therefore exercise caution when relying solely on Pupil Premium as a measure of disadvantage, because, to the extent to which number of registrations reflects persistence of poverty, this results in 'unfair' comparisons.

Section four: Comparing Free School Meals to the Income Deprivation Affecting Children Index (IDACI)

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In previous work (Campbell and Obolenskya, 2021), we explored whether we can learn anything about the FSM measure by comparing it to the Income Deprivation Affecting Children Index (IDACI).[75] IDACI scores are produced by the Ministry of Housing, Communities & Local Government, and linked within the NPD to individual children's records using the postcode of their home address. They are produced at the small Lower Super Output Area (LSOA) level, and intended to measure the proportion of all children aged 15 or under living in income-deprived households in the area.

As an area-level measure, the scores do not depend on individual children being defined, registered, or identified in the school context; by the same token however, in many ways they do not apply at the individual level. They are limited in their ability to act as a proxy for the likely family circumstances of individual children, though they can be interpreted as providing information about the area and experiences of children living there.

IDACI scores are calculated and produced at intervals, and re-baselined each time they are produced. In terms of the linked information in the NPD, new versions of the scores have become available after re-baselining in 2005 (2004 IDACI), 2008, 2011, 2016, and 2020 (2019 IDACI). The IDACI is based on criteria very similar to those used for FSM-eligibility, save for a different (and effectively higher, more generous) definition of the income threshold. As detailed in the 2019 technical report accompanying the IDACI statistics:

> The Income Deprivation Affecting Children Index is the proportion of all children aged 0 to 15 living in income deprived families, here defined as families that either receive Income Support or income-based Jobseekers Allowance or income-based Employment and Support Allowance or Pension Credit (Guarantee) or Universal Credit (in the 'Searching for work', 'No work requirements', 'Planning for work', 'Working – with requirements' and 'Preparing for work' conditionality groups) or families not in receipt of these benefits but in receipt of Working Tax Credit or Child Tax Credit with an equivalised income (excluding

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[75] Campbell and Obolenskya (2021)

housing benefit) below 60 per cent of the national median before housing costs. Child asylum seekers are not included in the Income Deprivation Affecting Children Index.[76]

This compares to the following for FSM-eligibility:

In England in 2020, children in state-funded schools were entitled to receive free school meals if a parent or carer were in receipt of any of the following benefits:

- Income Support
- Income-based Jobseekers Allowance
- Income-related Employment and Support Allowance
- Support under Part VI of the Immigration and Asylum Act 1999
- The guaranteed element of State Pension Credit
- Child Tax Credit (provided they were not also entitled to Working Tax Credit and had an annual gross income of no more than £16,190, as assessed by Her Majesty's Revenue and Customs)
- Working Tax Credit run-on - paid for 4 weeks after you stop qualifying for Working Tax Credit
- Universal Credit - if you apply on or after 1 April 2018 your household income must be less than £7,400 a year (after tax and not including any benefits)[77]

Therefore a high correspondence between the national proportion of children defined through the IDACI as living in deprived areas and the percentage registered for FSM is to be expected. But this relationship shifts over time and place, and it is these shifts that are potentially interesting.[78]

Figure 40 shows the Pearson correlation coefficient representing the strength of the relationship in an LA between the percentage of state school children from Reception to Year 11 registered for FSM and the mean average IDACI of these children. This is nationally, for all LAs each year.[79] It also shows the correlation with IDACI using the percentage of children in an LA recorded as Pupil Premium (PP).

[76] Ministry of Housing, Communities and Local Government (2019)
[77] Gov.uk (2021)
[78] Note that there are also large disparities in and between individual schools in terms of percent FSM-registered and the average IDACI of the children within the school. This often tells us more about selection into schools than about the measures themselves – for example because certain schools are more likely than others to take children from economically advantaged families who live in mixed areas with high levels of deprivation (see e.g. Sutton Trust, 2024)
[79] City and Isles of Scilly are excluded from all LA-level analyses

The IDACI generally becomes less accurate between recalculations, and the correlation with FSM sometimes – though not always – strengthens when a new version is released (in 2008, 2016, and 2020). The correspondence between percentage children PP and IDACI is generally stronger than that with FSM – probably reflecting the more stringent income criteria for FSM that is somewhat circumvented by PP, as it reflects children ever being registered for FSM over a period. Although the correlation between FSM and IDACI has weakened over time, it has remained strong, never falling below 0.92. This continues to raise questions about how much extra additional information FSM / PP offer for some of the purposes for which they are used – for example, in distributing resources at the local authority level.

Figure 40: Correlation between percentage children Reception – Year 11 in an LA registered for FSM / PP and the mean IDACI of the areas these children live in
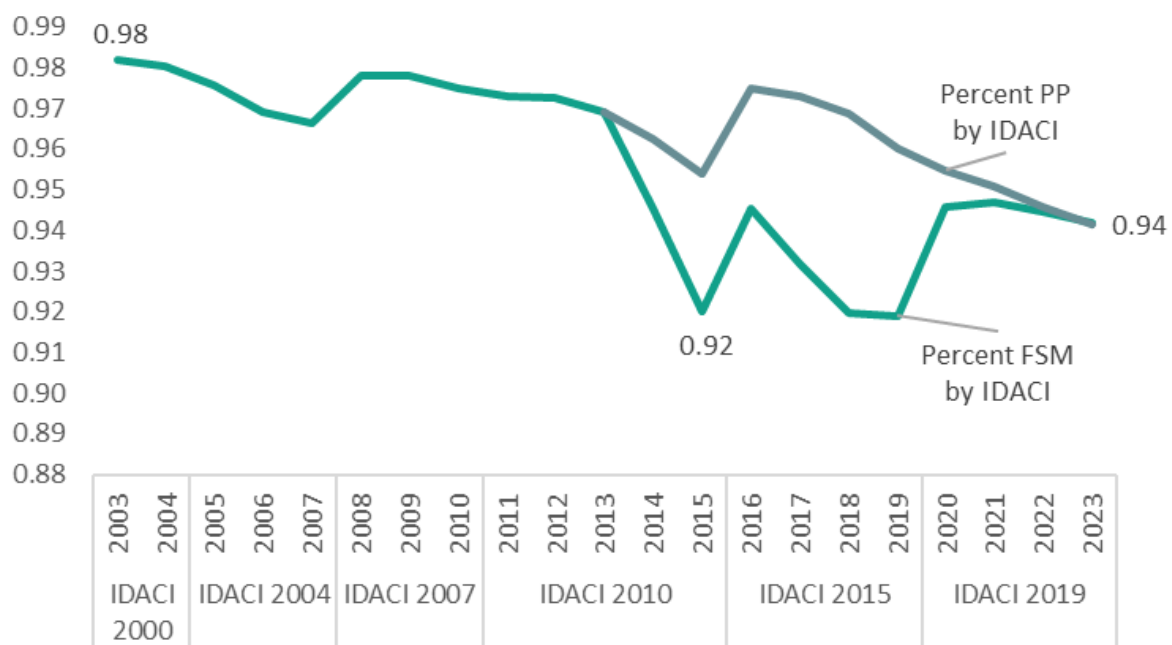
Beneath this strong national correlation, there is variation by LA. In some areas, FSM registration rates are much lower than expected based on the average IDACI of the children attending school within the authority; in others, there is more alignment between the two measures. Figure 41 illustrates this. It shows, each year, the national average percentage difference between mean IDACI of pupils in Reception-Year 11 in the authority, and the percentage FSM in the LA.[80] It also shows the difference each year for the authority with the highest positive value (which means the

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[80] Calculated as (mean IDACI - %FSM) / %FSM

IDACI in the area is relatively higher than the FSM-rate, potentially indicating more under-registration), and the authority with the lowest value (which means the IDACI in the area is more aligned with or, in the latest years, relatively lower than the FSM-rate). See Annex B for descriptive statistics on the range of percentage FSM across LAs, and the range of IDACI scores.

Figure 41: Differences between average IDACI of state school children in LA and percentage registered for FSM[81]
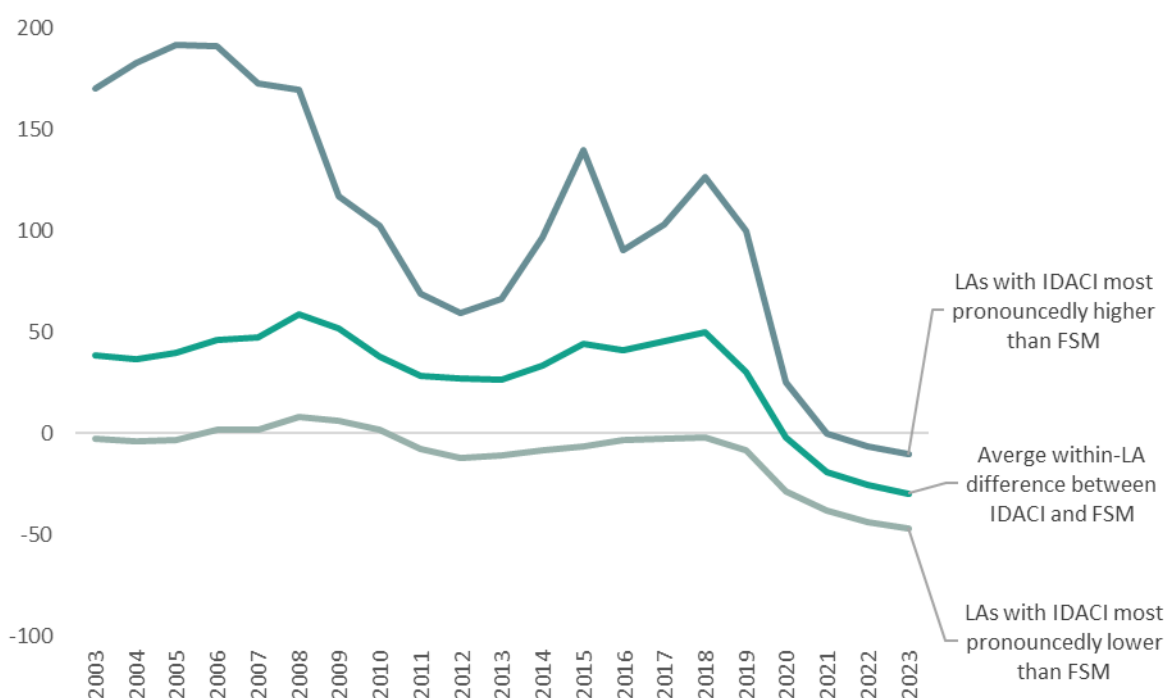
The gap between the outlier LAs with probable high under-registration for FSM (the top line) closed over time, until 2013, before widening from 2014, then narrowing again by the end of the period. This suggests that at certain points there have been large variations by LA in terms of rates of under-claiming FSM (as evidenced through previous analyses), and that these variations have been particularly pronounced in some years compared to others.[82] By 2023, the percentage of children registered for FSM in all LAs more closely reflects deprivation levels measured by IDACI, and there is far less variation by LA.

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[81] Y-axis is: (mean IDACI - %FSM) / %FSM

[82] It is also feasible that the FSM-IDACI disconnect picks up other aspects of the local area, such as the extent to which it contains children who are just above the FSM threshold but who are counted by the IDACI measure. However, as there is a particular widening from 2014, when registration for FSM fell among eligible pupils due to the introduction of Universal Free School Meals (see section one), this adds confidence that the disconnect represents probable under registration to a meaningful degree.

This is possibly due to Universal Credit roll-out protections, which extended legacy eligibility periods, combined with FSM's lower and less generous income threshold compared to the IDACI. However, this seemingly reassuring picture of current affairs should be treated with caution, as the IDACI becomes less accurate over time and was last re-baselined in 2019 — before the Covid-19 pandemic. As a result, it cannot reflect poverty caused by Covid-19, and likely under-estimates deprivation in this period.

Figure 42 shows predicted averages (estimated marginal means) from LA-level regressions, where the outcome is the disconnect between mean IDACI and the proportion of children registered for FSM or FSM6/PP in each LA, using IDACI as the predictor. This uses data from the 2020 Spring Census in the NPD. The closer the estimated disconnect is to zero, the more likely there may be under-registration in an LA. The regression specifications with controls (right panels of Figure 42) account for ethnic composition, proportion of pupils with EAL, and rurality of the LA. Both with and without controls, there is a pattern where the more deprived the area according to IDACI, the more likely there is to be apparent under-registration both for FSM and for FSM6/PP.

Figure 42: Estimated marginal means from regressions predicting differences between average IDACI of state school children in LA and percentage registered for FSM and FSM6(PP), according to deprivation level of the authority
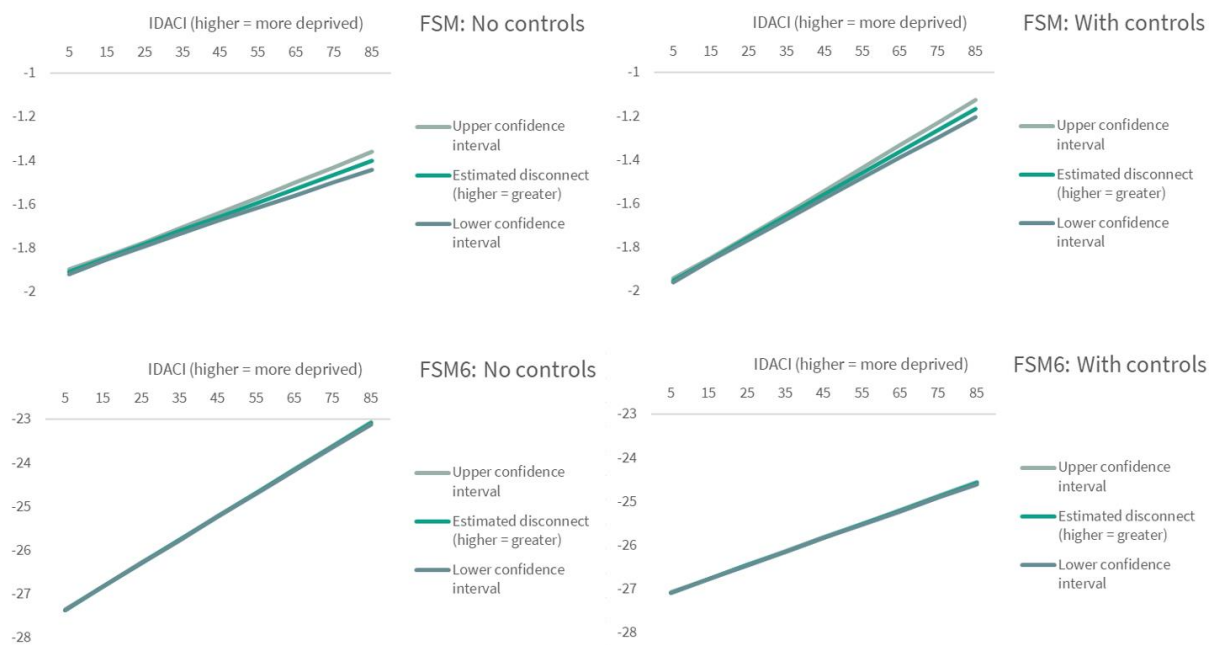

This pattern persists when the analysis is reversed and we account for non-linearity. Figure 43, for example, shows the average IDACI of children in areas with different levels of IDACI-FSM

disconnect (split into five equal strata). In the areas with the highest levels of likely underclaiming, average IDACI-measured deprivation levels are higher, though there is substantial variation (as indicated by the error bars representing one standard deviation).

Potentially, then, it is children in the most deprived areas who are most likely to miss out on FSM and accompanying provisions, and their entitlements under PP: a double- if not triple-disadvantage, at the family, area, and educational-resourcing levels. This aligns with our previous work and the wider literature on 'inverse care law', which indicates that, though levels of need are highest in the most deprived areas, the likelihood of receipt of public provisions and services is lower for disadvantaged people within these areas, compared to disadvantaged people in more affluent localities.[83]

Figure 43: Average IDACI of children in areas with each level of FSM-IDACI disconnect
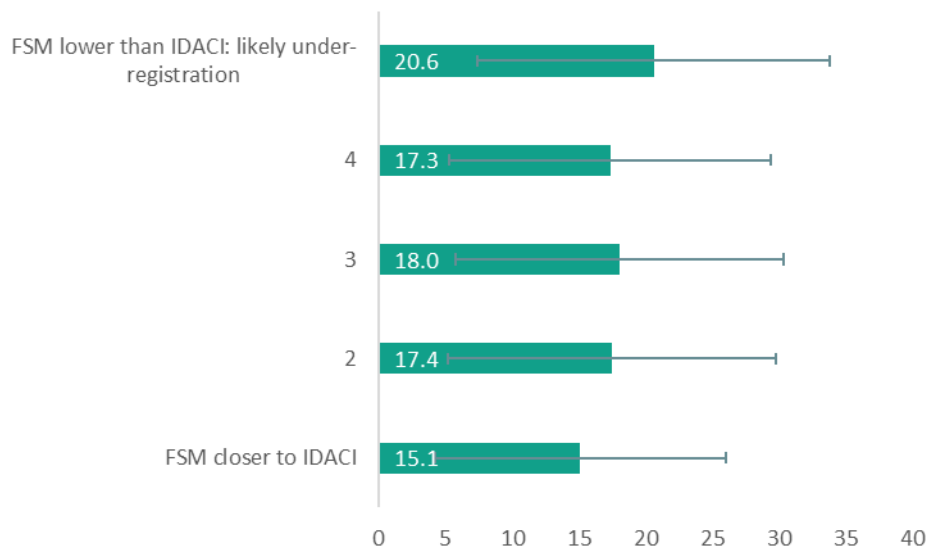
In previous work, we further explored the relationship between IDACI and FSM registration in terms of what it can tell us about who is less likely to register, again using data from January 2020 (therefore before the pandemic and using the most recent version of the IDACI).[84] The main findings from this analysis (which used various machine learning methods, comparing results from different models, and which is discussed further in the full blog) are represented in the word cloud below. We linked information from the NPD with information for 2019-20 on economic and

[83] Campbell, 2023
[84] Fowler (2024)

employment activity from the ONS and NOMIS.[85] We also linked additional contextual information from the 2021 census, under the assumption that there have been minimal changes between 2020 and 2021.

We found that LAs with FSM-IDACI disconnects in the direction that suggests a probability of under-registration seemed to have a lower percentage of children registered for FSM, which chimes with previous research suggesting that social norms and / or lack of local information can deter claims.

Figure 44: Factors predicting a local authority having rates of FSM registration lower than would be expected given the average IDACI of the children in the area (red = higher likelihood of under-registration, green = lower likelihood of under-registration)

Into this dataset, we also matched information gained through an Freedom of Information request on LAs' use of the Eligibility Checking Service— a service provided to assist authorities in determining which families are eligible for FSM. We found that areas with less frequent use of the service tended to have lower rates of FSM registration than expected based on their average IDACI. Potentially this is a positive finding, because it indicates that it is possible for local authorities to

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[85] https://www.nomisweb.co.uk/

influence and improve sign-up rates – though, as we discuss elsewhere,[86] there are questions about the extent to which there should be an onus on the LA to do this, rather than centralised administrative processes identifying eligible children.

Section summary and recommendations

- In some local authorities, rates of registration for FSM are much lower than might be expected given the average deprivation – measured by IDACI – of children in the authority, and this has been more pronounced at some time points than others
- Discrepancies between IDACI and PP registration rates are generally smaller
- Discrepancies between FSM and IDACI are lowest in the most recent years, and there is less variation by LA. To some extent, this is probably because protections of FSM status under Universal Credit roll-out have resulted in more children from income-deprived families or those with insecure incomes being registered for FSM each year
- On average, there are indications that entitled children in more deprived LAs may be less likely to be registered for FSM and Pupil Premium despite being eligible, leading to missed support intended to compensate for economic hardship

[86] Campbell, Cooper and Hodge (2024)

Section five: Free School Meals, Early Years Pupil Premium, and other low-income markers: the pre-school years

Section five: Free School Meals, Early Years Pupil Premium, and other low-income markers: the pre-school years

In the pre-school years, before Reception, three separate entitlements can be allocated to children based on individual family low-income. Firstly, those accessing early years provision in a state school or a state-maintained nursery are eligible to receive free school meals (FSM) – but only if they attend sessions both before and after lunch.[87] Children attending Private/Voluntary/Independent (PVI) sector settings are ineligible. Secondly, Early Years Pupil Premium (EYPP) is awarded according to criteria on low-income and welfare benefits receipt that mirror those conferring free school meals (both at the school nursery stage, and the primary/secondary stage).[88] This applies to those attending early education and care in any setting. Thirdly, since 2013, children in low-income families have been entitled to funded hours of early education from the term after they turn two. Only children who receive state-funded hours appear in the NPD; for those with higher-income parents/carers who pay privately, there is no record at age two (though all children are recorded from the term after they turn three, when universal funded hours apply). In the cohorts we examine below, presence in the NPD at two thus indicates funded hours and therefore low income.[89]

So the early years NPD data contains three potential markers of low-income for each child: registration for FSM; receipt of EYPP; and attendance at age two. FSM and EYPP are based upon the same stringent eligibility criteria, while entitlement for funded hours at two captures a larger proportion of children, because the income-threshold is higher.[90]

In this section, we compare records across these different entitlements with later FSM-registration in primary school, and discuss implications of disparities and inconsistencies. We focus mainly on two cohorts of children: those born in 2015-16, who were in their last year of pre-school in 2020,

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[87] Department for Education (2024)

[88] Gov.uk (online). We focus on this group in our analyses and do not include the small number of children getting EYPP for other reasons.

[89] From April 2024, the criteria for funding at two expanded to include children in higher-income, working families, but this does not impact our cohorts, data, and inferences here (Early Years Alliance, 2024)

[90] Essentially, £15,400 for two-year-old funding, and £7,400 for FSM and EYPP: Gov.uk (online); Gov.uk (online_b); Gov.uk (online_c)

and year 2 in January 2023; and those born in 2011-12, who were in their last year of pre-school in 2016, and year 2 in January 2019.

Figure 45 shows, firstly, the cross-sections of children in pre-school and primary school in 2016 and 2020. It shows far fewer children are registered as EYPP or FSM-eligible in the early years compared to in primary school – and also that far fewer children are registered as Pupil Premium in early primary school compared to late primary school (we have written about this more extensively elsewhere).[91]

In itself, this is conceptually problematic from the point of view of policy-coherence: because the early years are a crucial formative stage laying the foundations for future development, but both receipt of free meals and funding allocation through (EY)PP is least likely at this stage. Yet poverty-levels are higher among the youngest children, and there is most (unmet) need among pre-schoolers.[92]

In terms of measurement, and the suitability of FSM/EYPP markers as a proxy for family circumstance in the pre-school years, these records are therefore highly problematic and not comprehensive in capturing many of those who may meet criteria.

[91] Campbell, Cooper and Hodge (2024)
[92] Cooper and Jimenez (2024)

Figure 45: Percent children of different ages registered as receiving (Early Years) Pupil Premium and FSM: all those of different ages attending pre-school and primary school in January 2016 and January 2020
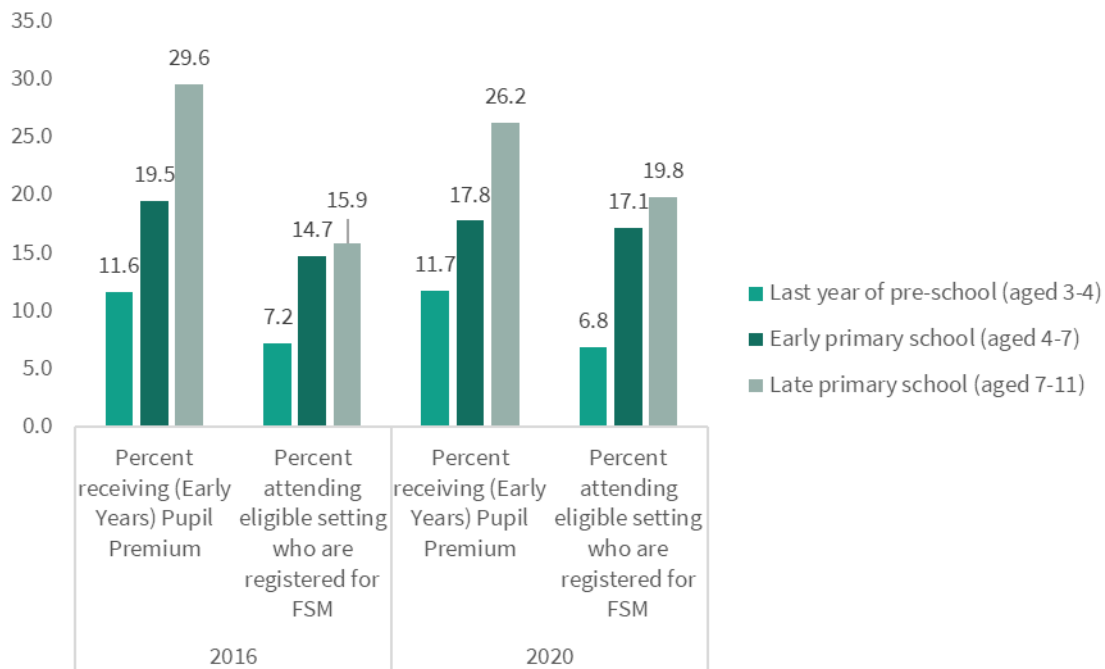
Presence in the NPD at age two more is also problematic and incomplete as a flag for early low income, because not all children who are eligible to attend funded early education access their place, and take-up varies according to demographic and area characteristics, introducing bias to the measure.[93] Particularly, less socio-economically advantaged children seem less likely to attend. However, among those children present at two, there should be no 'false positives' – they are all being funded on the basis of their family's low income level and welfare benefits receipt.

Figure 46 shows, for the two cohorts, the proportion of these children who were present at two (and not present) who receive EYPP in the last year of pre-school, at age three/four. While we would not expect all children within this group to receive EYPP, because its income threshold is more stringent than that for funded hours, the difference is larger than can be accounted for by this disparity. For both the earlier and later cohorts only around 31% registered to attend at age

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[93] La Valle et al (2024)

two received EYPP at age three/four.[94] Very few children who did not attend at two receive EYPP. Together with the comparisons with primary school PP receipt, shown in Figure 45, above, this emphasises the incompleteness of coverage of EYPP.

Figure 46: Percent of children who attended / did not attend funded pre-school at two on the basis of low income, who are registered for Early Years Pupil Premium at age three/four
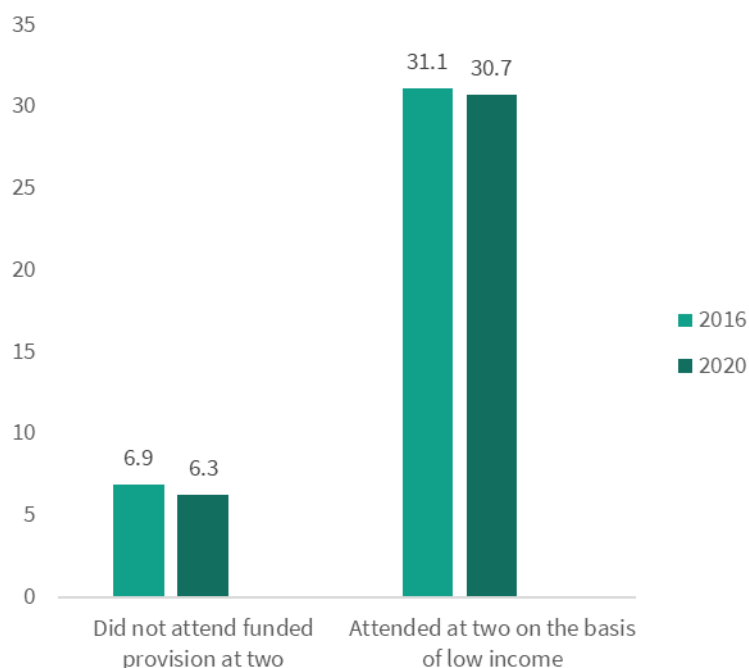

Figure 47 shows the percentage of children attending school nurseries / maintained nursery schools in their final year of pre-school who receive / do not receive FSM, who also receive EYPP. As criteria overlap, all those registered for FSM should theoretically also receive EYPP. In the earlier cohort, this is not the case. This is likely to be at least partly because of 'bedding in' of systems of identification and registration after EYPP's introduction in 2015.[95] By 2020, the vast majority of children registered for FSM are also registered for EYPP.

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[94] In fact, in the earlier cohort, criteria for funded two-year-old hours were more stringent, as they were subject to the first year of the policy, when fewer children were eligible. So for this cohort, attending at two represents a very low income – and means the lack of overlap with EYPP is still more problematic. (See Gov.uk [2013] for more information on roll-out of funding for two-year-olds.)
[95] Gov.uk (2015)

Figure 47: Percent of children who are / are not registered for FSM, who are also registered for Early Years Pupil Premium at age three/four
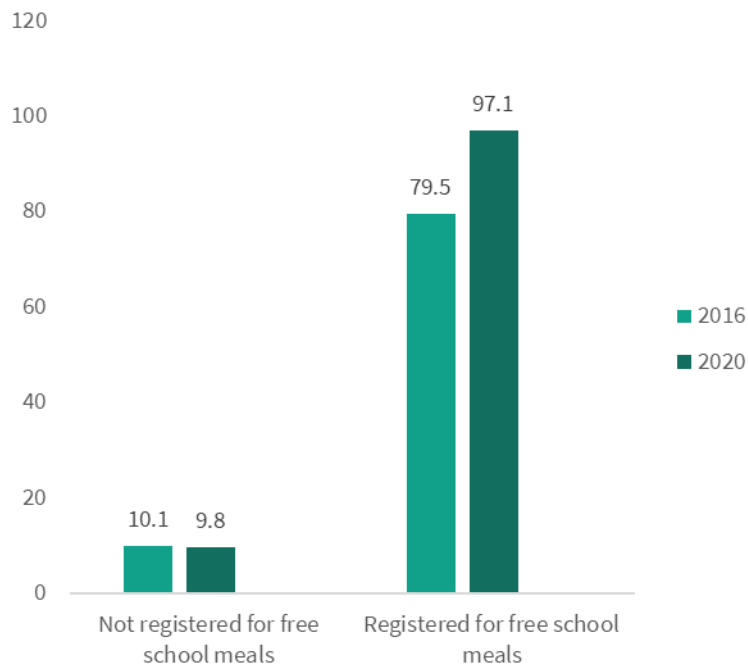
However, inversely, Figure 48 shows a much lower proportion of children who receive EYPP are registered to receive FSM in nursery – 40% in the earlier and 42% in the later cohort. While this is not surprising given restrictions on eligibility for FSM at this stage according to attendance patterns, it highlights the high percentage of children from very low income families who receive no support through meals provision, but who may benefit from it – something we explore in depth in a separate publication.[96]

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[96] Cooper and Jimenez (2024)

Figure 48: Percent of children who are / are not registered for Early Years Pupil Premium, who are also registered for FSM at age three/four
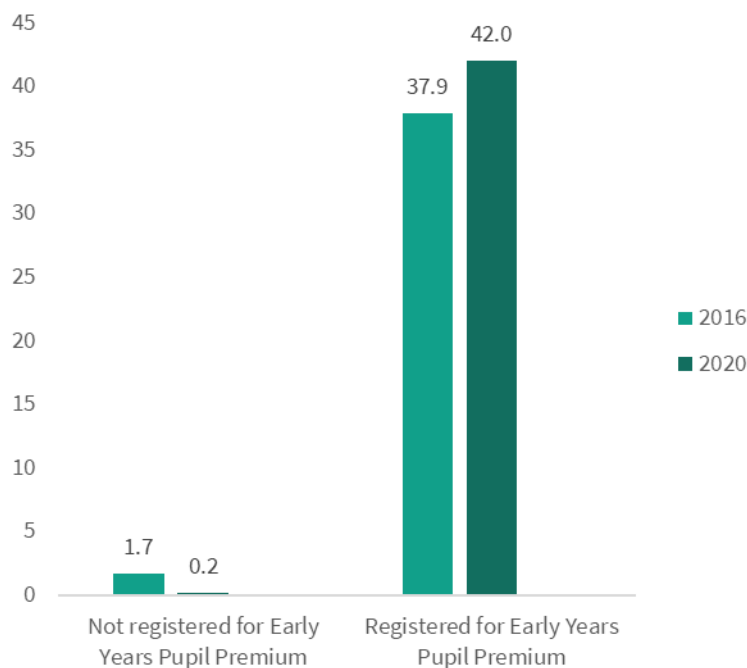
In Figure 49, we show the percentage of Reception children at 2021 and 2017 who were registered for either FSM or EYPP the previous year, in their last year of pre-school (2020 and 2016), and who are also registered for FSM in Reception. Among the 663,523 Reception children in 2017, 11.9% received either FSM at or EYPP in the previous year; among the 629,832 Reception children in 2021, a similar proportion at 11.5%. A substantial proportion of these children are not subsequently registered for FSM in Reception despite the overlap in criteria.

While some of this mis-match may be due to a change of family circumstance between years, the misalignment here also underlines a discrepancy in the way Pupil Premium funding-eligibility is allocated at different stages of education. While information on a child's FSM / PP status follows them once they enter primary school, conferring continued PP-eligibility, this does not always seem to happen at the transition from pre-school to primary school. Given the importance of the

earliest years, this is not optimal in terms of distributing resources and support. We will explore reasons for this further in our upcoming publication on this project's qualitative work.[97]

We have written elsewhere about the problem of under-registration for FSM and therefore PP in early primary school, and suggested that centralised auto-enrolment may provide some solution to this situation.[98] Potentially, any auto-enrolment could also capture information at the pre-school stage, as well.

Figure 49: Percent of Reception children who were / were not registered for either Early Years Pupil Premium or FSM, who are also registered for FSM in Reception
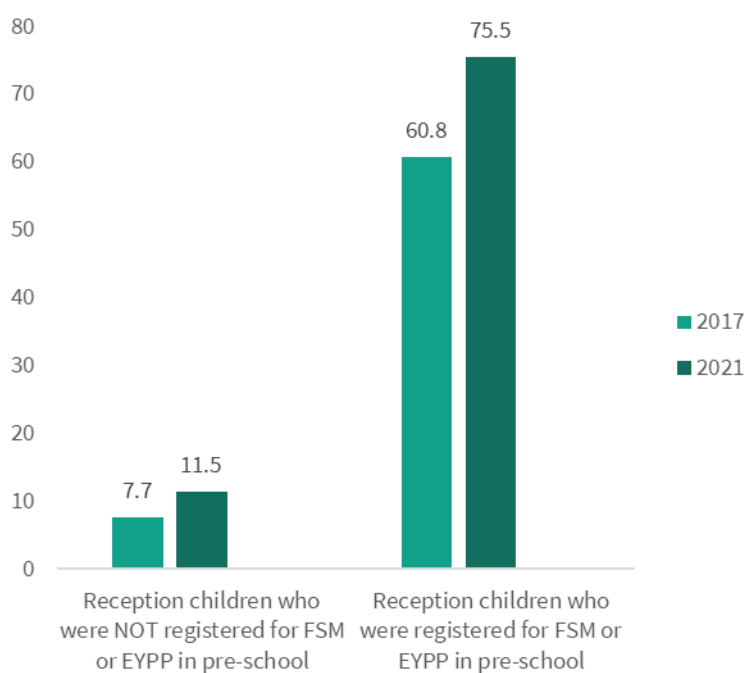

In Figure 50, we look for the later cohort at the correspondence between FSM registration in Reception and pre-school FSM/EYPP registration for children who attended maintained school nurseries / nursery schools and, respectively, those who attended PVI settings. We see that misalignment between the pre-school and Reception stages is greater for those who attended in the PVI sector and less for those who attended maintained settings.

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[97] Cooper et al (forthcoming)
[98] Campbell, Cooper and Hodge (2024)

Again this may reflect differential pathways of family circumstance that relate to pre-school choices, but it may also suggest that when a child attends a school nursery, there is better continuity of information sharing and knowledge – both with parents and within settings, as some children attend a nursery in the same school to which they will transition for Reception. Guidance from the Department for Education stipulates that known FSM-eligibility should follow children from school nursery into Reception.[99] Processes at the local authority level will also play a part in retaining FSM-status, and we discuss this further in an upcoming publication.[100]

Figure 50: Percent of Reception children who were / were not registered for either Early Years Pupil Premium or FSM, who are also registered for FSM in Reception: according to pre-school setting sector
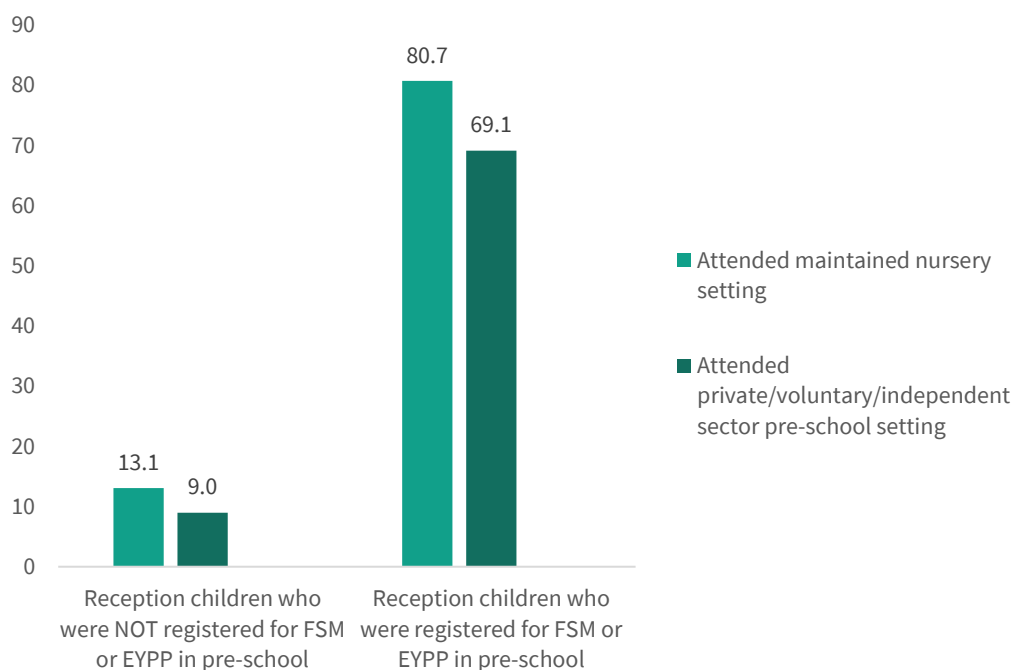
Figure 51 expands Figure 50 and shows the same information for cohort children once they are in year 2 and year 6 (the latter for the earlier cohort only). For all children, there is a higher chance of being allocated PP the further they progress through school. This is true both for those who were registered for FSM or EYPP during pre-school, and those who were not. As we have discussed elsewhere, this suggests that auto-enrolment and joined up administrative systems that follow

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[99] Department for Education (2018)
[100] Cooper et al (forthcoming)

each child (including in the pre-school years) may better identify and provide for economically disadvantaged children.[101] If later systems joined up with the pre-school years, more children intended to be prioritised could be picked up. This would still not be complete, however, as not all eligible children receive FSM or EYPP during pre-school – so strategies at this stage are also needed.

In terms of measurement and data, what this all emphasises is the bittiness throughout a cohort's NPD trajectory. Combining and pooling all indicators from pre-school into primary school and beyond can improve identification of economically disadvantaged children, but is still imperfect. There is also potential for adding bias through different proxies, for example because some children are less likely to access their two-year-old entitlement, or more likely to attend maintained settings, where EYFSM registration is possible: and this varies by factors including ethnicity, EAL, and area – highlighting, as in section two, the importance of accounting for these factors. [102]

[101] Campbell, Cooper and Hodge (2024); Crenna-Jennings et al (2024)
[102] Campbell et al (2018); Campbell et al (2019)

Figure 51: Percent of children who were / were not registered for either Early Years Pupil Premium or FSM, who are also registered for FSM in Reception / for Pupil Premium in Year 2 / for Pupil Premium in Year 6
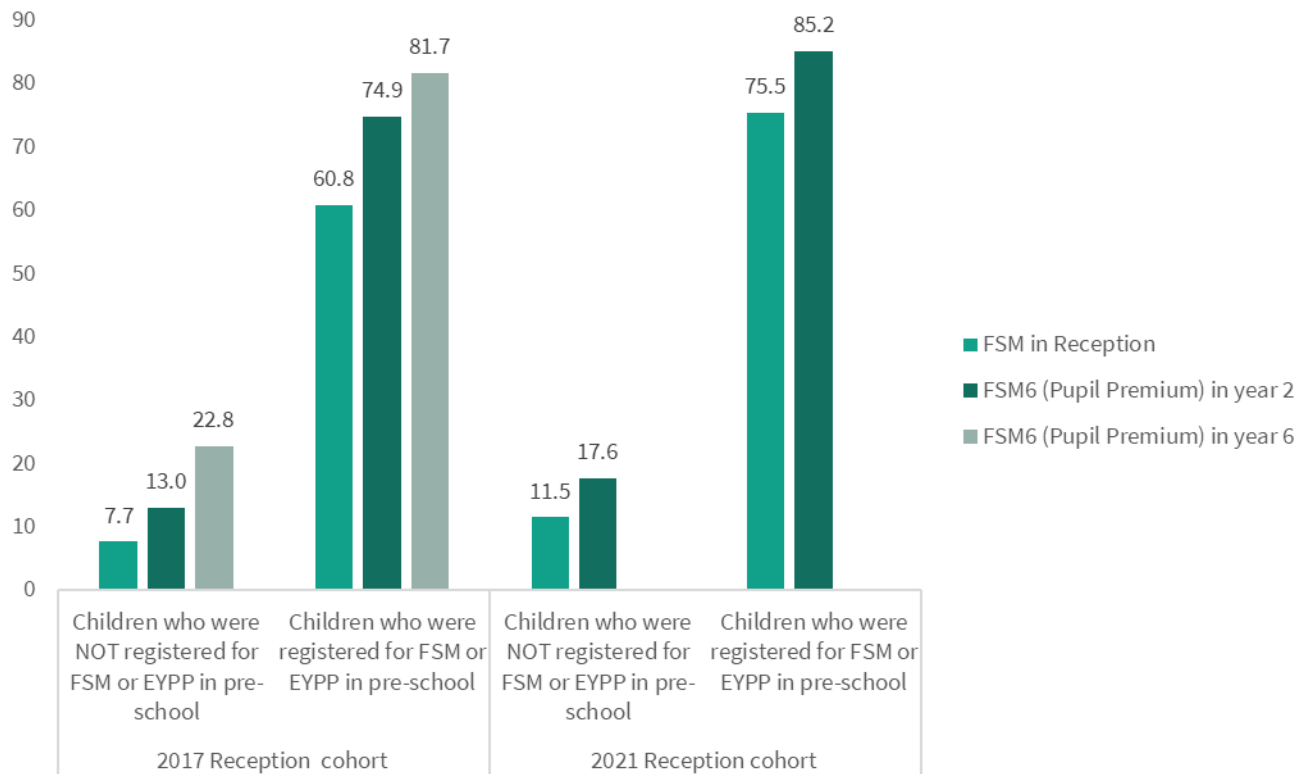
Lastly, Figure 52 expands the group of children flagged as low income at the pre-school stage by including all who were registered for EYFSM, EYPP, or attended a funded place at age two. This group is bigger; among the 663,523 children in Reception in 2017, 25.6% lived or had lived in a low-income family during the pre-school period according to at least one of these measures. Among the 629,832 in Reception 2021, 27.08%. It is worth noting that this aligns better with percentages of children estimated to be living in poverty than the percentage eligible FSM/PP in early primary school, as well as with the percentage estimated to be experiencing food poverty,[103] so is more inclusive and arguably better defines groups in alignment with poverty measures, at least nationally.

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[103] Cooper and Jimenez (2024)

Figure 52: Percent of children who were / were not registered for Early Years Pupil Premium, FSM, or two-year-old pre-school attendance, who are also registered for FSM in Reception / for Pupil Premium in Year 2 / for Pupil Premium in Year 6
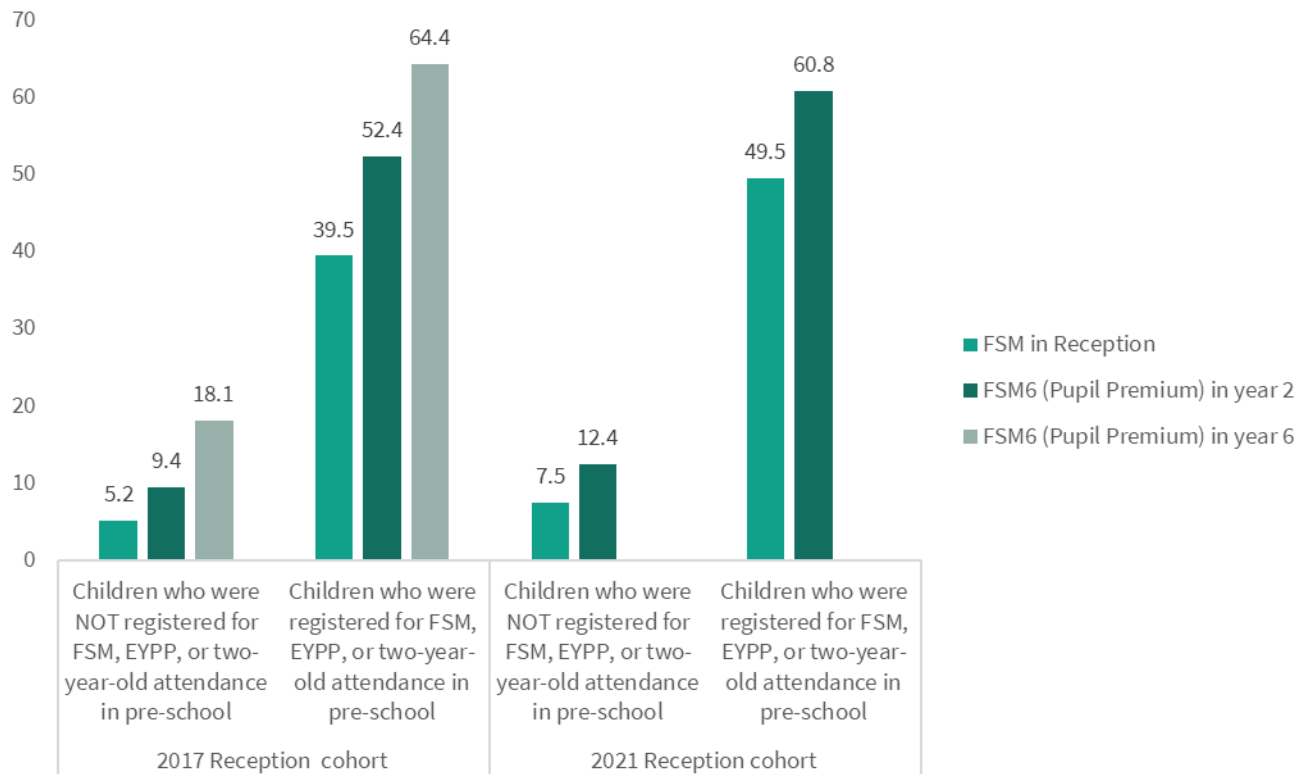
Section summary and recommendations

- There are three markers of low family income in the NPD in the pre-school years: receipt of free school meals, of early years pupil premium (EYPP), and funded attendance at age two based on low income.

- None of these markers pick up all eligible children. Far fewer children are registered as EYPP or FSM-eligible in the early years compared to in primary school, and many low-income families do not access their entitlement to attend at age two.

- As poverty levels are highest among pre-schoolers, this means that there is both a policy-incoherence and problems with policy implementation, meaning that targeting in the early years is unsuccessful and there is much unmet need.

- In terms of measurement for research, and picking up children known to be low-income, using different amalgamations of the pre-school markers (potentially in combination with known FSM in early primary school) can result in indicators with no false positives – but

still with a substantial proportion of false negatives in the non-identified group, and probable biases that should be accounted for in terms of pupil and area characteristics.

- There is a discontinuity and bureaucratic and administrative mis-match at the transition from pre-school to primary school, where many children who were recorded as registered for FSM or EYPP are no longer registered for FSM/PP in Reception.

  o Misalignment between the pre-school and Reception stages is greater for those who attended in the PVI sector and less for those who attended maintained settings.

  o In later cohorts, this mismatch seems to contradict guidance on transitional protection, as all those registered for FSM in nursery are protected to retain FSM status until the end of primary school.[104]

- There is potential for auto-enrolment and joined up administrative systems that follow each child to better identify and provide for economically disadvantaged children, though there are also costs and challenges to such systems.

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[104] Department for Education (2018)

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Annexes

Annex A: What else can the national Households Below Average Income dataset tell us about who is registered for Free School Meals?

In Sections one and two, above, we used the Households Below Average Income (HBAI) Dataset and compared its estimates of the poverty levels of groups of children of different ages to percentages of children registered for FSM and PP in the NPD. To recap, the HBAI is derived from the Department for Work and Pensions' annual Family Resource Survey (FRS). Its 'statistics are the UK's primary source of poverty estimates,' and it also contains a plethora of information on other aspects of people's lives and living situations.[105] Of particular interest is the fact that the FRS has, each year, asked the following question:

> In the last 7 days have ANY of you (including any of your children under 16) had… any free school meals.' (Asked to families with child under 19 at state school)

Therefore we wanted to explore the potential for the HBAI data to tell us more about changes to the FSM-registered group over time.

This question asked in the FRS is immediately problematic for our purposes for several reasons. It asks not about being registered as FSM-eligible but about receiving actual meals, and it covers only a seven day period. Therefore it captures a sub-group of reports from families with FSM-registered children; those whose child(ren) are known to have accessed meal in the past week. It may also capture non-FSM-eligible families who have received a meal, for example because of local universal or more generous policies.

Nonetheless, acknowledging caveats, informative previous research in the noughties used the FRS data to examine the characteristics of assumed FSM-eligible families.[106] We therefore explored whether there is potential to use it to examine changes in the composition of the FSM group in more recent years.

We find that the assumption that answering 'yes' to the question about receipt of meals reasonably proxies FSM-registration in the past decade is difficult to sustain after 2014, when

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[105] Gov.uk (2024)
[106] Hobbs and Vignoles (2010)

Universal Infant Free School Meals (UIFSM) were introduced. Because the question asks about whether ANYONE in a family has received meals, answers apply not only to individual infant(early primary)-aged children in the HBAI, but to their siblings. Because all early primary children can receive free meals from 2014, it is not only parents/carers in low-income families who reply 'yes.'

Figure A1 shows the percentage of all children aged 5 to 15 in the HBAI whose family was reported to contain someone who had accessed free school meals. There is a more-than-doubling of positive responses from 2015. It also shows the percentage among HBAI sample children who are secondary-aged and who do not have a sibling of UIFSM-eligible age (Reception-Year 2). There is no leap for this group in the years following 2014.

Figure A1: Percentage of children in the HBAI dataset living in a family where someone was reported to have received free school meals: those aged 5-15, and those aged 11-15 who do not have siblings in early primary school
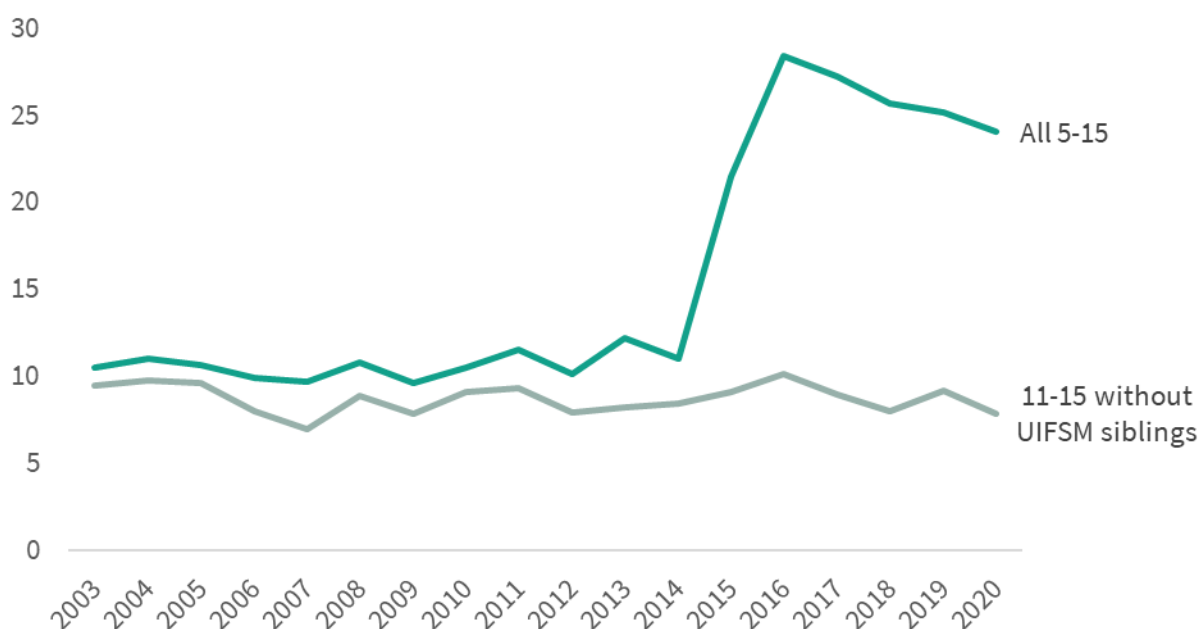

Figure A2 now shows the percentage of the secondary-aged HBAI sample who do not have a sibling of UIFSM-eligible age and who are flagged as receiving FSM according to the question. It also shows the percentage of children of the same age in the NPD who are registered for FSM (and, for completeness, Pupil Premium). The percentages are roughly parallel across years, indicating again that changes in the primary years are not having a large impact on measurement in the HBAI of FSM for secondary-aged children without young siblings. However, we also note that the uptick after 2018 in the percentage of children FSM-registered in the NPD is not reflected in the HBAI data.

Figure A2: Percentage of children aged 11-15 in the HBAI dataset living in a family where someone was reported to have received free school meals, compared to percentage of secondary aged children in the NPD registered for FSM and PP
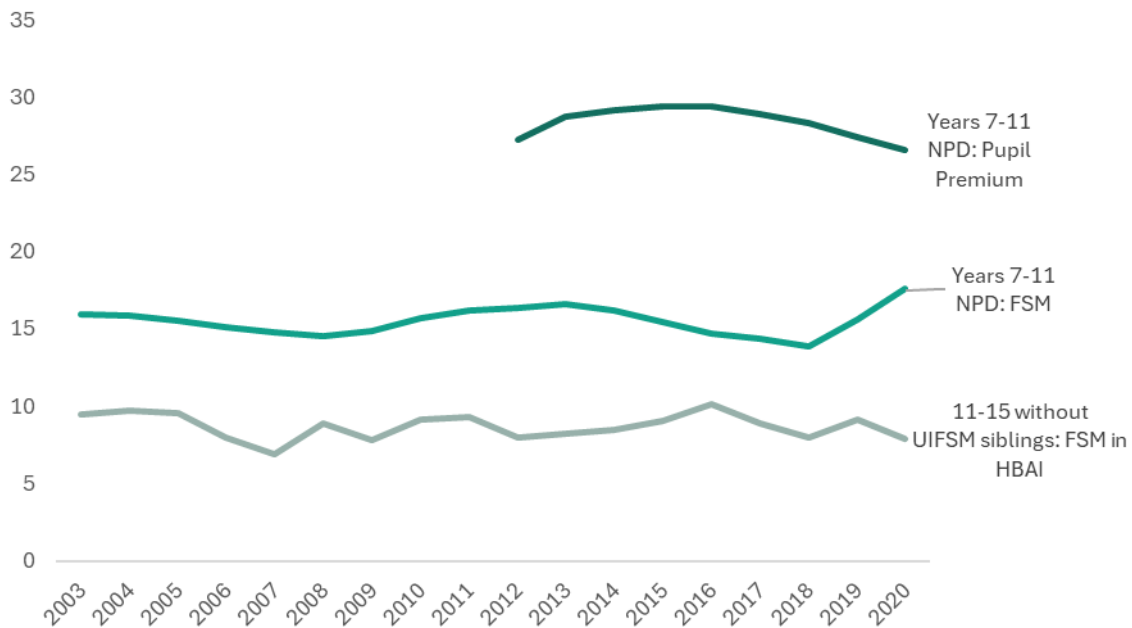
We think that it is this sub-group of secondary-aged children for whom the FSM information in the HBAI data is the most reliable proxy for their FSM registration in school. But we are limited now in inferences we can draw to inform knowledge about the FSM group and changes to composition over the years, because this is a sub-group of a sub-group, and different to all FSM-registered secondary aged children. It is those children whose family reports accessing a meal in the past week, and who do not have a sibling in early primary school.

As family size varies by ethnicity, and poverty varies by family size, for example, this will introduce bias.[107] Our checks (not shown here) found, for instance, that the sub-sample were slightly more likely to be of White ethnicity and less likely to live in families with 4+ children then all HBAI sample children of the same age; more likely to have a disabled adult in the family; and less likely to be in a 'workless' household, or one in material deprivation.
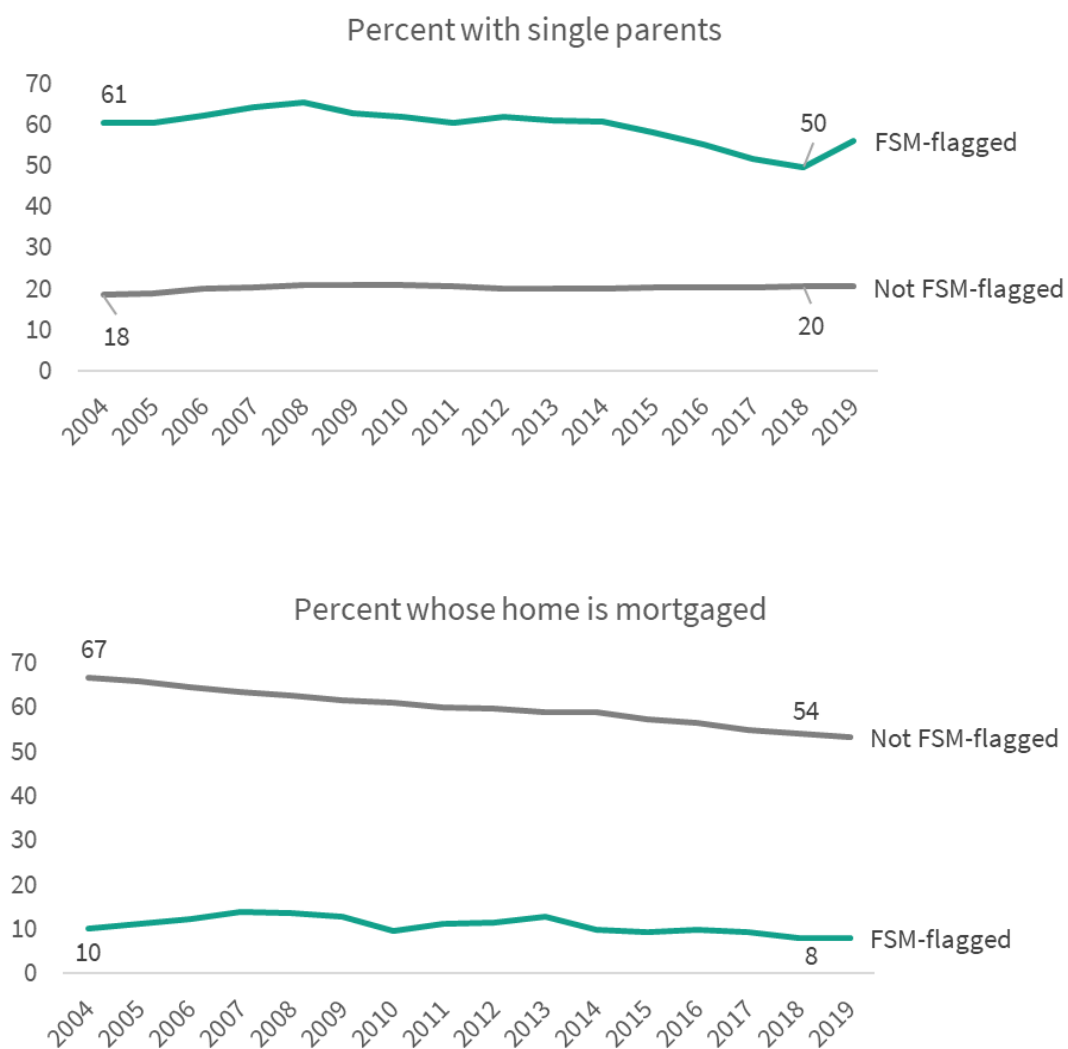
Therefore we have limited confidence in extrapolations from comparisons between the group who are flagged as probably FSM-registered and probably not FSM-registered on this basis. Figure A3 shows selected differences for illustration, and if possible, we will add to and discuss implications
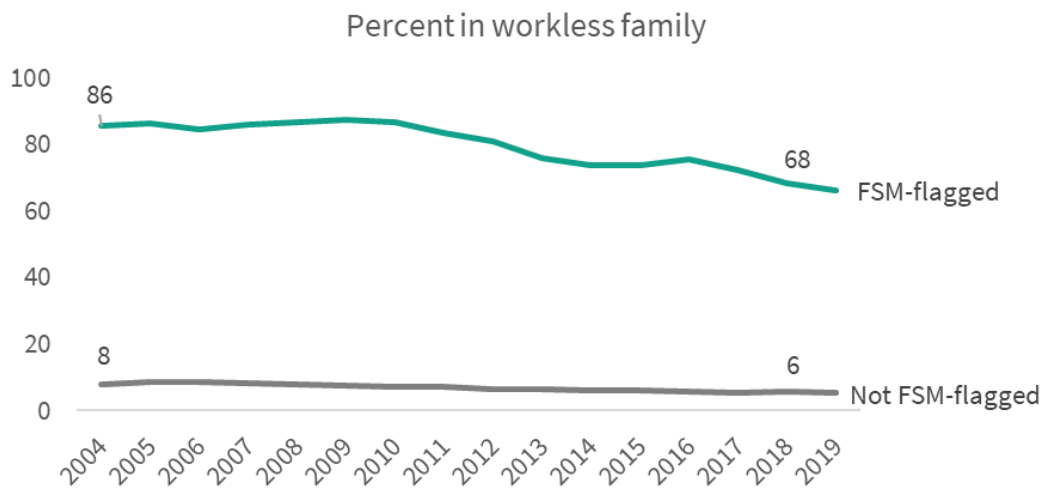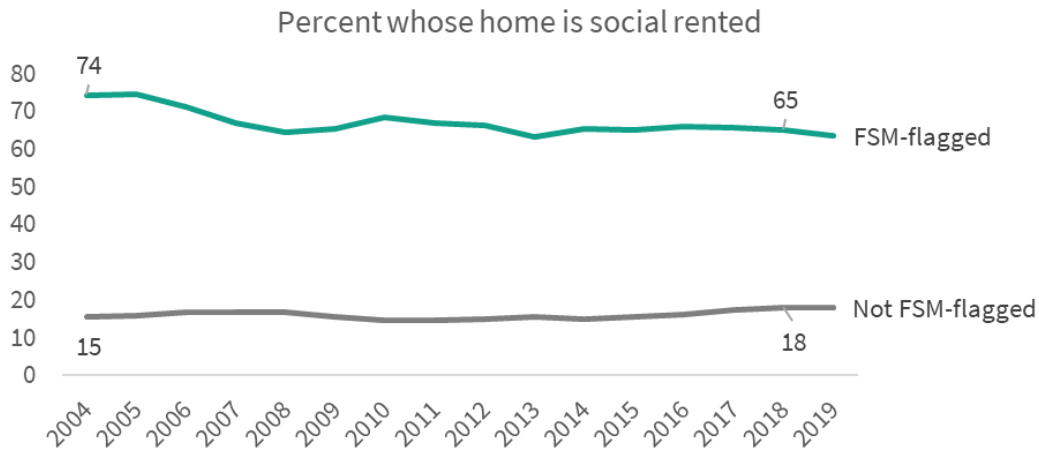
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[107] Cribb et al (2022)

of this analyses begun in the HBAI using alternative cohort study data linked to the National Pupil Database in this project's next output.

Figure A3 suggests that some secondary-aged FSM-registered pupils may have become less likely to live with single parents over the years. Both FSM-flagged and non-FSM-flagged sample pupils have become more likely to live in private rented accommodation, with a corresponding fall for those who are FSM-flagged in the percent in social rented homes and for those not FSM-flagged in mortgaged homes. Both groups, then, are likely to be experiencing more insecure housing situations. The FSM-flagged subsample have become less likely to live in a family where no one works.

Figure A3: Percentage of subgroup children aged 11-15 in the HBAI dataset flagged as probably FSM-registered, compared to percentage flagged as probably not FSM-registered

Percent with single parents

Percent whose home is mortgaged

Percent whose home is social rented

74

80
70
60
50
40
30
20
10
0

65

FSM-flagged

15

18

Not FSM-flagged

2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019

Percent in workless family

86

100

80

60

40

20

0

68

FSM-flagged

8

6

Not FSM-flagged

2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019

Section summary

- The national HBAI income dataset is limited in the extent to which it can inform understandings about who is registered for FSM in the years since 2014, because of the nature of the question which proxies FSM-registration, the data structure, and a change in the information picked up through the question since the introduction of UIFSM in early primary school.

- The 'cleanest' subgroup who can be examined is secondary-aged children who do not having siblings of early primary age, but as this is a limited cut of the school population, it is unwise to extrapolate estimates for this group beyond its boundaries.

Annex B: Descriptive statistics on the range of percentage FSM, percentage PP, and the range of mean IDACI scores – across LAs

Figure B1 shows the top (upper-bound) and bottom (lower-bound) of the range of the percentage pupils within an LA registered as FSM-eligible / registered for PP.

Figure B2 shows the shows the top (upper-bound) and bottom (lower-bound) of the range of the average IDACI of children living within an LA. Both span the years 2003-2003.

Figure B1: Top and bottom of the range of the percentage pupils within an LA registered for FSM/PP each year
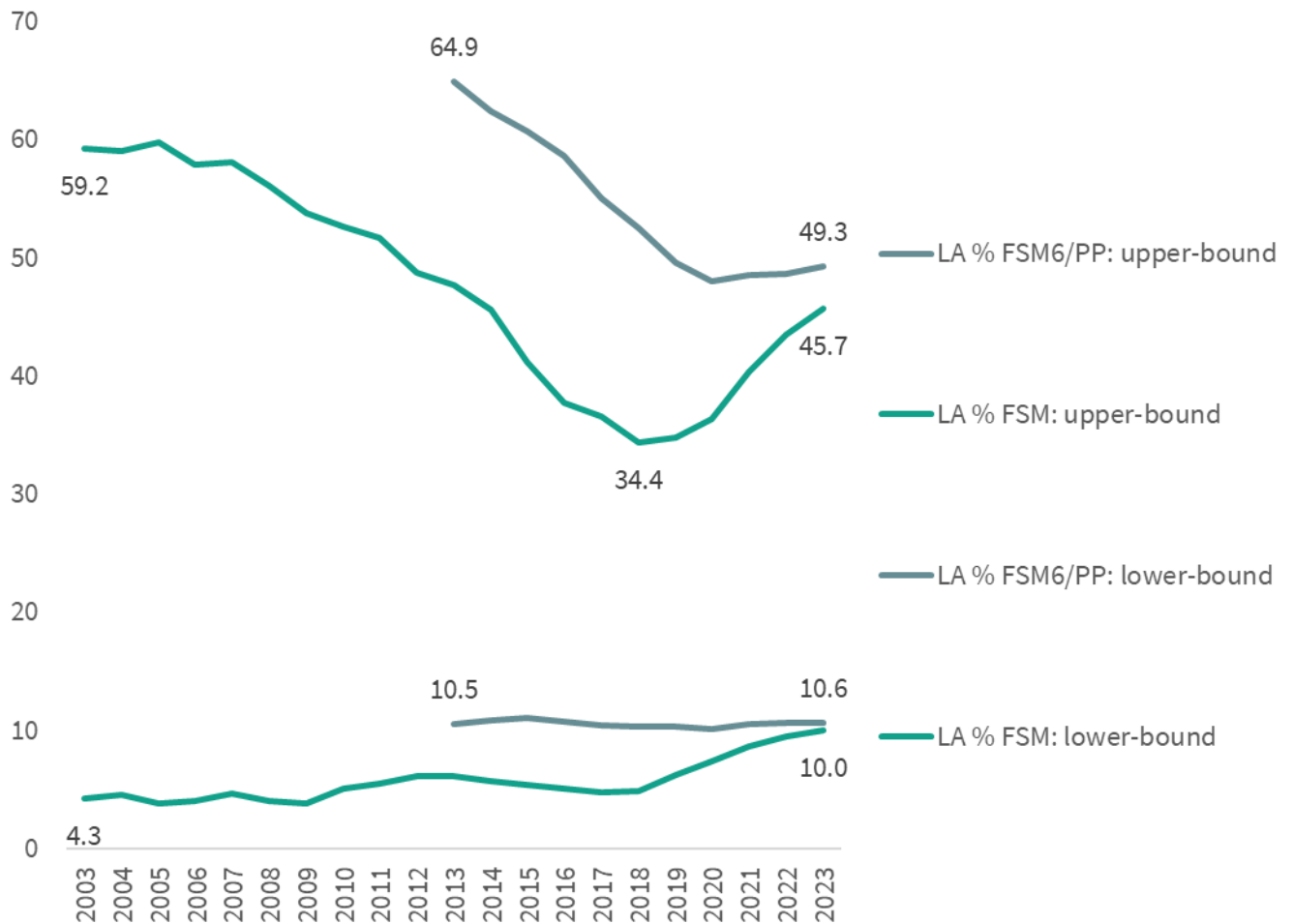
Figure B2: Top and bottom of the average IDACI of pupils within an LA each year
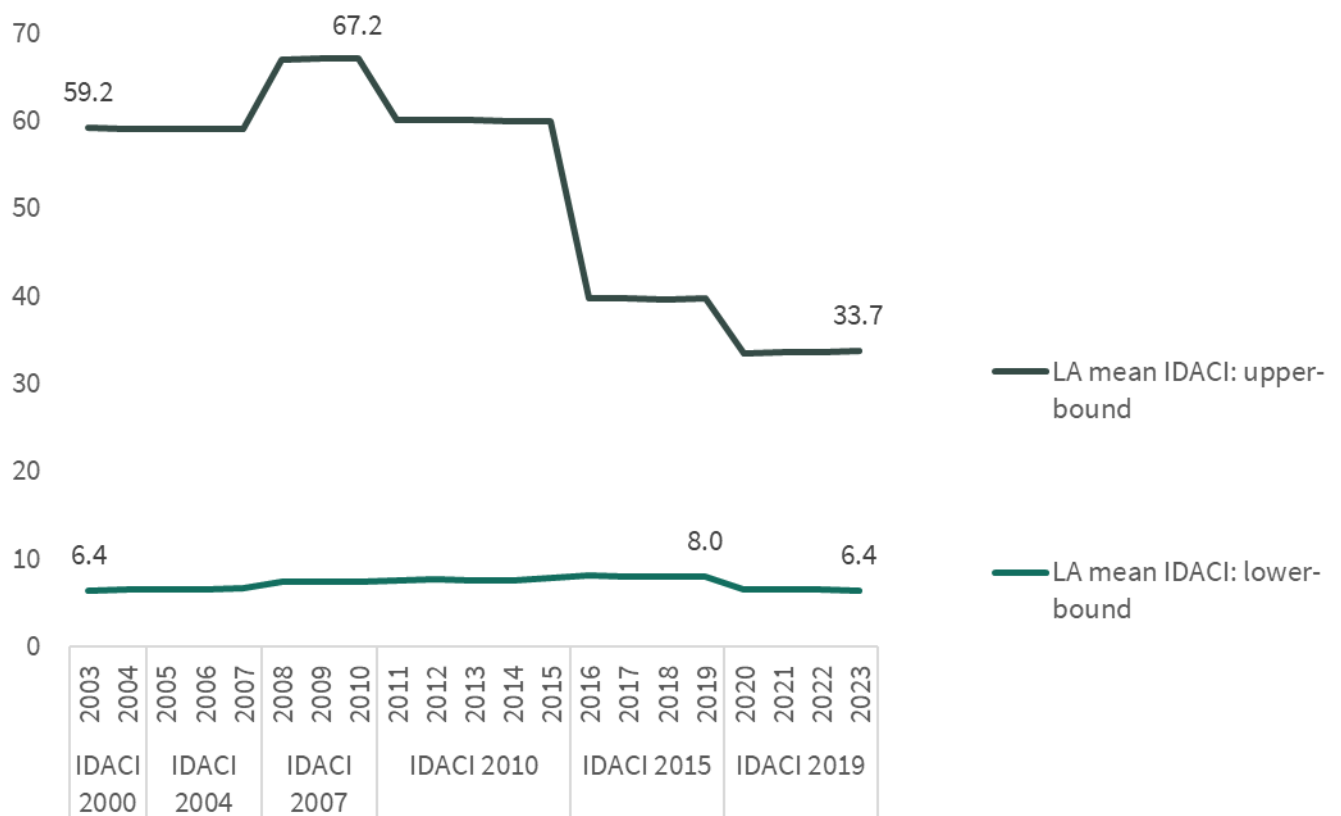

Figure B3 shows, for 2020, the number of LAs with each level of average IDACI among pupils aged 5-15 in the NPD. For example, 18 LAs had average IDACI rates of around 20-21. The highest rate within LA this year was 33.5 and the lowest 6.5.

Figure B4 shows, also for 2020, the number of LAs with each percent pupils aged 5-15 registered for FSM in the NPD. For example, 18 LAs had 15-17% of pupils registered. The highest percent within LA this year was 36% and the lowest 7.5%.

Figure B3: Number of LAs with each average IDACI rate within pupils in the NPD (aged 5-15)
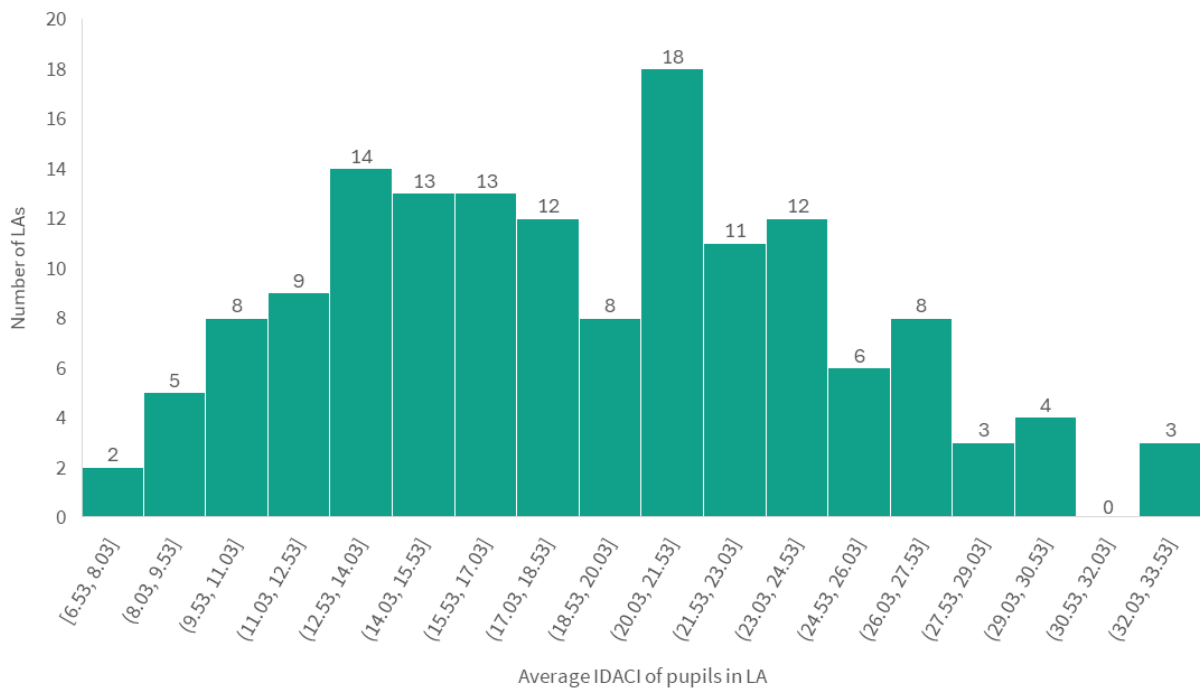

Figure B4: Number of LAs with each percent pupils FSM-registered in the NPD (aged 5-15)