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**Research Report**

## Does funding follow need? An analysis of the geographic distribution of public spending in England

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Institute for Fiscal Studies

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# Preface

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## Executive summary

In 2019–20, the last financial year before the COVID-19 pandemic, government spending that can be specifically attributed to England amounted to £541 billion or £9,650 per person. Of this, around £185 billion (£3,290 per person) was for social security benefits such as the state pension, universal credit and disability benefits. The remaining £356 billion (£6,320) was spent on a range of public services. This includes spending on health (£137 billion), education (£74 billion), transport (£28 billion), public order and safety (£26 billion), adult social care (£19 billion), and housing and community amenities (£10 billion) – services that are vital both directly and indirectly to the health, well-being and life chances of the population. Indeed, recent years have seen increasingly robust evidence emerge that the amount of funding such services receive matters particularly for the outcomes they deliver for people from more deprived backgrounds.

## Context and purpose of this report

Ensuring that funding for public services is allocated across places in an effective and fair manner is therefore vital. But it is of particular importance now given two pressing policy issues.

The first is that a decade of austerity during the 2010s, rising demands and costs associated with an ageing population, and an aim of cutting taxes by the current government mean that funding for public services is – and will continue to be – constrained. When resources are limited, it is particularly important to ensure that they are used effectively.

The second is an ambition to reduce geographical inequalities across England and the UK – the ‘levelling up’ agenda. This is about more than just productivity, earnings and employment – the government’s White Paper sets ambitious targets for both overall improvements and a narrowing in geographical gaps in health, educational attainment, housing quality, crime and local pride. Public services have a key role to play in addressing these dimensions of inequality, but the government has so far said little about one of the biggest direct levers it has in the context of limited overall funding: changes to how funding is allocated between places.

The starting point of changing how funding is allocated is a thorough understanding of the effects of current allocation processes. That is the focus of this report. It reviews both the systems of funding and the resulting funding outcomes for different parts of England for five key service areas: health services; schools; local government services; police services; and housing

investment. Each of these contribute to the health and well-being of the population – not only by directly diagnosing and treating illnesses in the case of the NHS, but also by helping create the wider conditions that allow people to live healthier lives.

A key question is the extent to which the funding needs of different places for different public services, as well as existing inequalities in health-related and other outcomes, are taken into account in funding allocations. Are differences in socio-economic conditions and local economies that affect the demand for – and cost of providing – services considered? Are these measured in an appropriate and up-to-date way? And just how much are needs assessed to vary across England?

### The principles for allocating funding

The allocation of funding in line with local funding needs is only one of the objectives the government may have for its funding allocation processes though. It may wish to provide local service providers with a degree of discretion on how much to spend in total and how to allocate budgets between service areas, given their better knowledge about local circumstances. It may wish to provide financial incentives to achieve particular objectives – including boosting local economies, and addressing factors that drive demand for public services. And it may aim to give service providers a degree of stability in funding to avoid the practical and political difficulties generated by rapid large cuts or increases to funding.

There are important trade-offs between these objectives that mean it is not possible to simultaneously fully achieve each of them. For example, if funding is immediately and fully redistributed when assessed spending needs change, successfully tackling the drivers of spending needs would be offset by reductions in funding; this would significantly reduce the financial incentive to tackle the social issues that drive spending needs. There is also a tension between being responsive to changes in the relative spending needs of different places, and the aim of providing funding stability and certainty. In addition, local discretion, if utilised, inevitably means less consistency in funding and service provision across the country as decision-makers in different places prioritise different services and outcomes.

Funding systems therefore must reflect compromises between different objectives. For example, funding systems can partially rather than fully account for differences in assessed spending needs, and can update these assessments with a lag in order to balance the redistribution of funding with the provision of financial incentives. Funding systems can be hybridised and include both needs-based and outcome (or competition-based) elements. Ceilings and floors can be placed on annual changes in funding to smooth changes in funding associated with changes in assessed spending needs. And the government can use targets, statutory duties and the partial

ring-fencing of funding to help set minimum standards and influence spending decisions, while giving local areas discretion on how to achieve these standards and set overall budgets. The priority placed on different objectives may change over time, changing the optimal funding system.

Funding systems must also reflect and, if possible, address a number of challenges in implementing their objectives. Assessing local areas' spending needs in particular is difficult: the relationship between local characteristics and spending needs cannot be directly observed, but instead must be estimated or assumed. Historic relationships between spending and local characteristics can be heavily influenced by past funding allocations, although using neighbourhood- or individual-level spending or service activity data can help address this. Relationships between spending and certain characteristics may not be reflecting variation in actual needs but variation in unmet needs or other factors, so subjective judgement is needed to decide what characteristics to include in spending needs formulae. Data may not be available on a timely basis or may not be at a sufficient level of granularity. And the use of certain characteristics in needs formulae or outcomes in outcomes-based funding regimes can distort the decisions of service providers if they can easily manipulate these variables in order to obtain more funding.

These considerations mean we should not expect – and, indeed, it is probably not desirable for – funding to be allocated fully and accurately in line with spending needs. They do, however, provide a way of conceptualising and appraising the funding systems used for different services. How do they trade off different objectives? And how do they address the challenges in implementing the objectives?

## How funding is allocated in practice

Formal assessments of different areas' spending needs play a role in the allocation of funding for each of the services considered in this report, with the exception of housing services. Other objectives also play a clear role.

### Spending needs assessment in practice

Spending needs assessments are most well developed and play the biggest role in allocating funding for health services. Needs are estimated separately for different types of NHS services (e.g. hospital care, mental health care, primary care). For each service, the relationship between individual usage (or a proxy for usage) and individual and local-area characteristics is estimated. This approach, while better than using relationships estimated using data aggregated to the Clinical Commissioning Group (CCG) or Integrated Care Board (ICB) area, may be biased if certain types of people in certain places are not receiving the care they need, as it is based on



historic service usage. An explicit adjustment, therefore, is made for both unmet need and health inequalities: 10% of the funding stream is allocated based on neighbourhood standardised mortality rates, as a proxy for these factors.

School funding is allocated to councils using a new national funding formula, and to schools using councils' own formulae. The national formula includes factors relating to differences in needs and costs, such as pay levels, deprivation, low prior attainment of pupils, and sparsity. The formula accounts for actual differences in the cost of employing teachers (mainly London weighting), but funding for disadvantage and most other needs is largely based on differences in assumed needs. Indeed, when introducing the new formula, the government deliberately sought to minimise turbulence in funding across schools and areas. The new formula also includes a range of minimum funding levels and floors, which mainly benefit schools in less-deprived areas, at the expense of schools in more deprived areas. On top of the main formula, there is a series of other funding pots going directly to schools, such as the Pupil Premium, which is a fixed extra amount for pupils from disadvantaged backgrounds

The majority of local government and police funding was also historically allocated to account for differences in the assessed spending needs of areas and their capacity to raise revenue themselves via council tax. Needs were assessed using different formulae for different services – some estimated using neighbourhood-level data and others based on assumed relationships between needs and local characteristics, informed by consultation with councils. However, the way spending needs and revenue-raising capacity were accounted for in funding allocations was significantly flawed from 2006–07 onwards, following the introduction of the 'four-block' funding model. Assessments have not been updated since 2013–14, which means that while they are no longer regularly used, when they are, they now use data that are at least 10 years old, and sometimes over 20 years old.

### **Pace-of-change/damping rules have caused problems**

For each of the services considered, spending needs assessments have been used in conjunction with, and have sometimes been superseded by, 'pace-of-change'/'damping' rules designed to limit changes in the relative funding levels of different areas.

Such rules have made it harder for funding to be reallocated to better match the (changing) distribution of spending needs in the context of funding cuts or slow funding growth. For the NHS, the resulting 'misallocations' have not been too significant: funding for different areas in 2019–20 was generally within 5% of assessed spending needs, on a relative basis, although in cash terms these discrepancies could be significant (e.g. a 2.5% difference from target is still equivalent, on average, to £14 million a year). But, for other service areas, these 'misallocations' have had a much bigger impact, reflecting larger initial differences in levels of funding and

assessed spending needs and/or long periods of applying fixed changes in funding across all areas.

For example, between 2003–04 and 2017–18, the core funding provided by the government to councils for schools in their areas was changed by the same fixed amount per pupil, without reference to changes in local needs or circumstances. For police and, particularly, local government, the ‘damping’ block and flaws in the aforementioned four-block model led to much bigger cuts in overall funding in areas with high levels of assessed spending needs in the early 2010s. And from 2013–14 onwards, each police force or council area has seen the same change in grant funding (sometimes adjusted for how much council tax revenue they raise) each year, which does not even account for differences in population growth. Grants to councils for public health services have likewise been reduced or increased by the same percentage for all councils, irrespective of changes in population or needs, since 2013–14. This has embedded big discrepancies between funding and assessed spending need for public health, with some councils receiving almost twice and others less than two-thirds the amount implied by the spending needs formula.

These approaches have over-prioritised funding stability by not accounting for changes in spending needs at all. In the case of police and councils, they have also, until very recently, worked against the ‘levelling up’ agenda by cutting funding more in areas with higher assessed needs and higher levels of deprivation. Indeed, the issues with police, local government and public health funding allocations are so significant that the amounts allocated to different places are essentially arbitrary. Funding is correlated with assessed need, and is higher in areas with higher levels of deprivation and other factors one might consider to be associated with need. But the gradient is less than one-for-one: levels of funding increase by less than levels of assessed spending needs as deprivation rises, meaning that more deprived places are typically under-funded relative to more affluent places.

### **The role of financial incentives and funding-level discretion**

The police and, particularly, local government funding systems provide local Police and Crime Commissioners (PCCs) and councils with greater financial discretion and incentives than in the case of schools and the NHS.

Both police and councils set and retain the income from council tax levied on the occupiers of local properties – setting higher or lower council tax rates allows them to raise more or less to fund services in their area. In recent years, PCCs and councils wishing to increase their council tax by more than set percentages or amounts need to hold and win a referendum of local voters. The use of percentage limits means councils that historically set lower council tax rates are more constrained from raising additional revenues themselves. Given that national taxes are not

decided by referendums, it is difficult to justify why local taxes should be – rather than as part of normal local electoral politics.

Councils also retain a proportion of local business rates revenue growth through the business rates retention scheme. This aims to provide councils with a financial incentive to support the development of new commercial property, and thereby boost economic growth – although evidence is that the link between the two is weak. Compared with allocating the equivalent funding in line with assessed spending needs, councils in London and the East Midlands gained the most proportionately, while those in the North East lost the most proportionately. County councils, responsible for social care services and public health, have lost relative to shire district councils, which are responsible for housing, leisure and economic development.

### Competitive bidding is used particularly for capital programmes

Competition and outcomes-based approaches are also used to allocate some funding, particularly related to capital investment and service innovation.

For example, grant funding to construct new social housing, improve the energy efficiency of existing social housing, and fund enabling infrastructure for new housing developments is allocated to councils on the basis of competitive bidding. This means that there is no formal assessment of the need for such interventions in different areas, and areas with the highest housing needs may not receive funding if their funding bids are deemed to be not of sufficient quality. But the value-for-money approaches used in appraising bids do account for differences in the expected benefits of projects, which are higher in areas where land for housing is more expensive, and housing affordability more an issue, for instance.

Outcomes-based funding is more rarely used, with the Supporting Families Programme being a key example. This is set to provide a maximum £200 million of funding to councils this year, with each family reported to be successfully supported to improve its outcomes attracting a payment of £800. The maximum amount per council is capped by a needs-assessed amount, with most councils receiving their maximum amounts, which may reflect the difficulty central government has in vetting councils' reported success rates.

### Summary of approach by service area

Table E.1 summarises the approach to funding different service areas, including the role and design of needs assessment, the discretion service providers have over funding-levels, the importance of financial incentives, competitive-bidding and outcomes-based funding, and the nature of damping and pace-of-change rules.

**Table E.1. Summary of the approach to allocating funding to different service areas**

Service area	Needs assessment	Funding discretion	Incentives, competition and outcomes	Damping and pace-of-change rules
Health	<p>The need for different healthcare services in different areas of England – previously covered by Clinical Commissioning Groups (CCGs) and now by larger Integrated Care Boards (ICBs) – is assessed, by service, based largely on relationships between past service utilisation and local and individual characteristics. Unavoidable differences in costs of providing services are accounted for using estimates of the differences in staff costs, property costs and other costs of healthcare providers in different parts of the country. In addition, a proportion of funding is allocated on the basis of mortality data, with those areas with the worst outcomes receiving the most, with the aim of helping reduce health inequalities.</p>	<p>Funding levels are determined by the amount of central government grant provided, with no local revenue-raising powers. Local commissioning bodies (previously CCGs and now ICBs) have discretion over how they allocate this funding to different healthcare services and providers in their area, subject to nationally set prices for treating a range of conditions.</p>	<p>The use of fixed national prices for most services is designed to incentivise cost-effective provision, with additional payments for providers meeting ‘best practice’ service standards. Some tariffs are negotiated locally, and firm overall funding limits for CCGs/ICBs help encourage cost-effective commissioning. Additional funding for providers and CCGs/ICBs is available for those in financial difficulty, which may undermine these incentives, but typically are conditional on agreeing plans to improve financial performance.</p>	<p>Pace-of-change (now termed ‘convergence’) rules provide for minimum and maximum increases in funding. Until recently, these guaranteed all areas real-terms increases in overall funding, limiting the extent to which funding could be redistributed when overall funding growth was low. This was reformed this year.</p>
Schools	<p>Spending needs by council area are assessed using assumed relationships between needs and local and child characteristics by a new national funding formula introduced in 2018–19. Unavoidable differences in costs are accounted for using estimates of differences in staff costs, and actual business rates bills. School-level allocations are determined by each council using assumption-based formulae based on local and child characteristics. In addition, a minimum level of funding per pupil is applied at the school level. There is specific funding for children with special educational needs and school-level top-ups to funding based on the number of children in receipt of free school meals.</p>	<p>Funding is overwhelmingly in the form of ring-fenced central government grants, and is effectively separate from the rest of council spending. Councils retain responsibility for determining the allocation of funding between schools, but this has been subject to increasing restrictions over time, with plans to eventually move to a national school-level funding formula. Schools themselves control a growing share of overall school funding.</p>	<p>While funding is based on inputs and local characteristics rather than outputs, its per-pupil nature creates strong incentives to maintain pupil numbers, which in turn creates strong incentives to maintain educational standards. Extra funding for disadvantaged pupils is meant to compensate for extra costs and to reduce perceived higher costs of teaching such pupils. Schools that run into financial difficulty are subject to intervention from the Education and Skills Funding Agency.</p>	<p>Between 2003–04 and 2017–18, changes in relative levels of funding from the core schools grant were fully damped at a council level; funding per pupil was rolled forward by a fixed percentage for all councils. Since the introduction of the new national funding formula in 2018–19, guaranteed minimum increases have applied at the council and school level; this year, these are 2% and 0.5%, respectively.</p>

Local government	<p>Historically, the main central government grant for councils was allocated in order to fully account for differences in assessed spending needs and councils' varying ability to raise revenues via local taxation. Needs were assessed separately by service using both estimated and assumed relationships between needs and local characteristics. Unavoidable differences in costs were accounted for using estimated differences in labour and property costs. Reforms led to this system breaking down in the late 2000s and early 2010s, before it was mostly abandoned in 2013–14. The old formulae continue to be used to allocate some specific grants for social care, but the data have not been updated and are now 10–20 years out of date.</p> <p>Specific needs assessments are used to allocate a number of other specific grants, such as for homelessness services.</p>	<p>Councils are funded via a combination of central government grant, local tax revenues and sales, fees and charges income. Control over council tax rates provides councils with discretion over overall funding levels, subject to holding a local referendum if they wish to increase council tax by more than a certain percentage. Councils also have significant discretion over allocation of funding between services despite the formal ring-fencing of certain funding streams for particular services.</p>	<p>The provision of financial incentives to support the development of commercial and residential property have played a key role in council funding in recent years. Under the business rates retention scheme, councils retain a proportion of the change in revenues resulting from the development, improvement and demolition of non-domestic property. The New Homes Bonus matches council tax receipt on new residential properties, but this is soon to be replaced by new measures to incentivise housing provision. A number of pots of funding are allocated on the basis of bids or outcomes. For example, funding for the Supporting Families Programme is allocated on the basis of the number of families successfully supported,</p>	<p>Historically pace-of-change rules provided for minimum increases (or maximum cuts) in funding from the main general-purpose grant. The ending of annual assessment of spending needs in 2013–14 has seen this grant either change by a fixed percentage across England, or a percentage designed to generate the same percentage change in funding from the grant and council tax combined. This has not only effectively damped any changes in assessed spending needs but resulted in larger cuts to funding in more deprived parts of England.</p>
Housing	<p>Formal assessments of needs play a limited role in the allocation of funding for maintaining, improving and building houses. The main exception is funding for adaptations required by disabled people, which is allocated to councils based on an assumption-based formula using local area characteristics. Appraisal of bids for funding takes account of proxies of demand for housing such as local property values.</p>	<p>Funding for housing and associated enabling infrastructure is provided by central government grants, council and housing association borrowing, rental and service charge income, and the proceeds of property sales under the Right-to-Buy scheme. Councils and social housing providers have discretion on how much to borrow (subject to affordability) and how much grant funding to bid for.</p>	<p>The majority of central government funding is allocated following bids by councils and social housing providers. Bids are appraised according to a range of grant-specific criteria depending on the purpose of the grant (e.g. improving energy efficiency, providing enabling infrastructure, constructing new properties).</p>	<p>The project and/or bid-based nature of most funding for housing means pace-of-change rules are not applicable.</p>

Police	<p>Historically, the main central government grant for the police was allocated to fully account for differences in assessed spending needs and police forces' varying ability to raise revenues via local taxation. Needs were assessed separately by type of police activity using estimated relationships between needs and local characteristics. Unavoidable differences in costs were accounted for using estimated differences in labour and property costs. Reforms led to this system breaking down in the late 2000s and early 2010s, before it was mostly abandoned in 2013–14.</p>	<p>Control over council tax rates provides PCCs with discretion over overall funding levels, subject to holding a local referendum if they wish to increase council tax by more than a certain percentage.</p>	<p>A small proportion of police funding is allocated via competitive bidding. The aims and scale of these bid-based funds have varied over time. Currently, the focus is on targeted crime prevention interventions, including via installing CCTV and improved streetlighting, and working with residents to improve home security to reduce burglaries.</p>	<p>Historically, pace-of-change rules provided for minimum increases (or maximum cuts) in funding from the main general-purpose grant. The ending of annual assessment of spending needs in 2013–14 has seen this grant change by a fixed percentage across England. Not only has this effectively damped any changes in assessed spending needs but it has also resulted in larger cuts to funding in more deprived parts of England.</p>
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## Funding allocations for different services across England

- 1 The distribution of NHS funding in 2019–20 ranged from £1,427 per head in Berkshire West to £2,282 per head in Knowsley, 55% more than in Berkshire West. Average funding was highest in the North of England and lowest in the South East and East of England. The distribution of public health funding was much wider: Kensington and Chelsea council received £130 per head in 2019–20, 340% more than the lowest funded council, Surrey, which received £30 per head. Average funding was highest in the North East and London, and lowest in the South and East of England.
- 2 NHS funding was relatively well aligned with assessed spending needs in 2019–20, with the vast majority of areas within 5% of their target allocations. But the requirement at the time that no area can receive real-terms cuts to overall funding, even if their assessed spending needs fall significantly relative to other places, means that some areas in London were substantially overfunded: West London received 14% more funding than its assessed spending needs in 2019–20, and Camden, Tower Hamlets and Kingston received 6%–7% more. In contrast, Blackpool and Blackburn received 5% less, despite special top-ups to bring them closer to their target allocations. Public health funding allocations differ much more significantly from assessed needs than NHS funding: some London councils receive almost double the amount implied by the spending needs formula, while other councils receive less than two-thirds of the amount.
- 3 There are large differences in school funding across council areas and individual schools. Spending per pupil is highest in inner London to reflect the costs of London weighting and deprivation, with spending per pupil about 40%–50% above the national average in some inner London councils, such as Lambeth, Southwark, Islington, Hackney and Tower Hamlets. Even adjusting for differences in costs, this is higher than in deprived inner-city councils in the North, such as Liverpool and Manchester, where schooling outcomes are worse.

- 4 School funding is heavily skewed towards schools with more disadvantaged pupils. However, this targeting has reduced over time, partly as a result of policy choices, such as cash-terms freezes in the Pupil Premium, and the design of the new national funding formula. In 2010–11, spending per pupil in the most-deprived set of schools was 34%–35% higher than in the least-deprived schools. By 2019–20, this difference was still substantial, but much reduced (23%).
- 5 There was wide variation in per capita funding for council services in 2019–20, with the lowest-funded tenth of areas receiving £691, around a quarter less than the highest-funded tenth (£909). Actual funding is highest in the North West and North East, although it would be highest in London if all councils set their council tax level at the national average. The most-deprived tenth of areas received only 18% (£134) more per capita than the least-deprived tenth. This is starkly different from 2013–14, when the most-deprived tenth of areas received a third (£271) more. This significant change resulted from a substantial 13% (£116) cut in real-terms per capita funding for council services over those six years, with larger cuts falling on more-deprived areas, which were more dependent on government grants.
- 6 Funding for council services in 2013–14 was relatively well aligned with assessed spending needs. If all areas had set the same council tax level, the average relationship between assessed needs and funding would have been one-to-one, and 70% of areas would have received per capita funding within 5% of their 'target allocation'. While no up-to-date measures of relative needs exist, areas with higher per capita needs in 2013–14 on average saw larger funding cuts. This means that, by 2019–20, funding allocations were only weakly related patterns of 2013–14 assessed needs, adjusted for population growth. Even if all areas set their council tax level at the national average in 2019–20, only 40% of areas would have received funding within 5% of those 'target allocations', with the largest shortfalls in London (£45 per capita) and the North East (£41).
- 7 Spending on social care services was relatively protected from funding cuts in the 2010s: net expenditure per person in 2019–20 was similar to 2013–14 levels. Both adult and children's social care spending per capita is lower than assessed spending needs per capita in areas with



high assessed needs, high levels of deprivation and high population density. Conversely, relative levels of spending are above relative levels of assessed need in areas with low assessed needs, low levels of deprivation and low population density. For example, relative levels of spending per capita were over 10% lower than relative levels of assessed spending need for the most-deprived tenth of councils, but 20% higher for the least-deprived tenth of councils.

- 8 Spending on other council services fell significantly during the 2010s: net expenditure per person in 2019–20 was around a third lower than in 2013–14 for transport and for leisure and culture services, and around one-quarter lower for housing and planning and for development services, for example. Cuts to these other services were larger in more-deprived areas, averaging over 25% for the most-deprived three-tenths and less than 15% for the least-deprived three-tenths. In contrast to social care services though, there was no systematic relationship between gaps in spending and assessed needs and deprivation. For example, relative levels of spending per capita were around 8% above relative levels of assessed needs per capita in both the least- and most-deprived tenth of council areas in 2019–20.
- 9 Little of the funding for improving and building housing is allocated on explicit *ex ante* assessments of the needs of different areas. However, the use of cost–benefit analysis and land value uplift in assessing investments related to housing means that, on average, a greater share of investment goes to areas where property prices are particularly high – a key signal of high demand and affordability issues. For example, whereas Housing Infrastructure Funding was allocated to two-thirds of council areas outside of London where property values average £300,000 or more, it was to only just over one-third where they averaged £200,000 or less.
- 10 Core police funding from government grants and locally raised council tax ranged from £159 per person in Lincolnshire to £276 per person in London in 2019–20. Because core grant funding has been changed at the same rate for all police force areas since 2013–14, those that serve more-deprived and more-urban areas have received larger reductions in funding; they rely more on grants for their overall funding. This approach also means that funding has become less well

aligned with assessed spending needs since 2013–14, although for the majority of police forces, funding is still relatively close to the levels implied by the old spending needs formulae. Council tax rates are higher in areas that receive more funding than implied by the spending needs formulae. This could mean that the spending needs formulae are underestimating their ‘needs’, that there is a local political preference for higher spending in such areas, or that historically high levels of spending have helped reduce crime.

## Ongoing and proposed reforms

One of the biggest changes is the introduction of the new national funding for schools in 2018. Previously, school funding levels across councils were based on historical levels of need, with funding levels just rolled forwards from about 2003 onwards. The new national funding formula ensures that funding is again linked to contemporary levels of needs and costs. The government has also set out a plan to use the formula to allocate funding to schools based on a single national funding formula, removing the role of councils almost entirely. This change would provide more consistency in school funding across the country, but herald the end of local discretion in school funding. However, this transition to a ‘hard’ national funding formula will happen very gradually over time.

Plans for reforming council funding were put in train in 2015, including updated assessments of spending needs and revenue-raising capacity, and changes to the business rates retention scheme. The updated assessments, in particular, are much needed but have been significantly delayed: an initial implementation date of April 2019 has been pushed back several times, and reform is now not expected until after the next general election at the earliest. This should be rectified. Given changes in the composition of councils’ spending since existing formulae were designed, a simple update to the data used in the formulae will be insufficient – the system must reflect what councils do now and are expected to do in future, not their activities in the 2000s.

Councils’ funding allocations will also have to be updated to account for the impact of upcoming reforms to adult social care services. The cap on care costs and the relaxation of financial means tests planned from April 2023 will most benefit older households with middle to high levels of income and wealth. This will mean the reforms will increase spending needs for councils serving relatively more affluent areas with older populations. A formula was estimated for similar reforms originally planned in the mid-2010s, which may be updateable.

If insufficient funding is made available to fund the reforms, either nationally or for particular local areas, councils may respond to the shortfall by further tightening care needs assessments. This would mean some low-income/wealth people who would currently be deemed eligible for care would lose access to care, in order to fund care for high-income/wealth people who have higher care needs.

## Lessons for policy

Looking to the future, what are the key lessons, in relation to specific services, from our analysis for policy?

- For schools and police, a change in direction in relation to funding is warranted if the government is serious about levelling up and tackling geographical inequalities that contribute to the big differences in health and well-being seen in England. Recent years have seen funding cut by more (or increase by less) in poorer areas due to active policy decisions by central government. In future, targeting funding increases at schools serving more-deprived communities, especially outside London, could help meet the government's ambitious targets on reducing inequalities in children's life chances.
- For councils, 2022–23 saw funding increase for more councils serving more-deprived places for the first time in more than a decade. Continuing this new approach could help start to undo the impact of bigger cuts in poorer areas over the preceding years. But, so that funding responds to changes in local circumstances and reflects differences in local revenue-raising capacities, it is important to update the funding system as well. A proper funding system as opposed to ad hoc year-to-year funding decisions would also help councils plan their spending and service provision on a longer-term basis.
- For the NHS, 10% of funding is allocated on the basis of differences in age-standardised mortality rates, as a proxy for health inequalities and unmet health needs. This share of funding could be increased, and a wider basket of measures accounted for (e.g. related to morbidity) if a higher priority is now placed on reducing inequalities. Funding for public health services could also be increased and/or brought closer into line with spending needs assessments.

Recent experience suggests that aligning funding policy with the 'levelling up' agenda will be difficult if funding is constrained. Pace-of-change rules, at least as have been applied historically, are more likely to have a big impact on allocations when funding is constrained, and it is politically difficult to cut funding for some areas in order to increase it for others – which can be necessary when budgets are flat or growing very modestly. The government will therefore have to invest either more political capital – by making the tough choices to

redistribute funding to areas with entrenched health, educational, crime and other issues – or more funding, to guarantee all areas at least some funding increase.

When reforming and redistributing funding, the government should avoid the temptation of avoiding scrutiny through overly complex and opaque arrangements. In the past, the government has used complex systems or reforms to claim that its decisions on local government and school funding have channelled available funding to poorer areas or in a way consistent with ‘levelling up’, while doing the opposite.

The government should also consider the role that devolution could play in tackling inequalities in health, wealth and well-being across the country. Devolution of tax and spending powers, without appropriate systems to assess areas’ spending needs and to redistribute funding, could make tackling inequalities more difficult, by shifting funding from more-deprived to more-affluent places. With such systems in place, devolution could potentially give policymakers in different parts of England greater scope to decide how best to address the issues in their areas, whether through higher spending on particular services or, indeed, lower tax levels.

# 1. Introduction

In 2019–20, the last financial year before the COVID-19 pandemic, government spending that can be specifically attributed to England amounted to £541 billion or £9,650 per person. Of this, around £185 billion (£3,290 per person) was for social security benefits such as the state pension, universal credit and disability benefits. The remaining £356 billion (£6,320) was spent on a range of public services. This includes spending on health (£137 billion), education (£74 billion), transport (£28 billion), public order and safety (£26 billion), adult social care (£19 billion), and housing and community amenities (£10 billion) – services that are vital both directly and indirectly to the health, well-being and life chances of the population. Indeed, recent years have seen increasingly robust evidence emerge that the amount of funding such services receive matters for the outcomes that they deliver for people from more-deprived backgrounds. This is true of health, social care, schools and early-years provision.<sup>1</sup>

Ensuring that funding for public services is allocated across places in an effective and fair manner is therefore vital. But it is of particular importance now given two pressing policy issues.

The first is that a decade of austerity during the 2010s, rising demands and costs associated with an ageing population, and an aim of cutting taxes by the current government mean that funding for public services is – and will continue to be – constrained. When resources are limited, it is particularly important to ensure that they are used effectively.

The second is an ambition to reduce geographical inequalities across England and the UK – the ‘levelling up’ agenda. This is about more than just productivity, earnings and employment – the government’s White Paper sets ambitious targets for both overall improvements and a narrowing in geographical gaps in health, educational attainment, housing quality, crime and local pride. Public services have a key role to play in addressing these dimensions of inequality, but the government has so far said little about one of the biggest direct levers it has in the context of limited overall funding: changes to how funding is allocated between places.

The starting point for changing how funding is allocated is a thorough understanding of the effects of current allocation processes. That is the focus of this report. It reviews both the systems of funding and the resulting funding outcomes for different parts of England for five key service areas: health services; schools; local government services; police services; and housing

<sup>1</sup> See Cattan et al (2021), Crawford, Stoye and Zaranko (2021), Jackson, Johnson and Persico (2016) and Martin et al. (2021).

investment. Each of these contribute to the health and well-being of the population – not only by directly diagnosing and treating illnesses in the case of the NHS, but also by helping to create the wider conditions that allow people to live healthier lives.

This report, funded by the Health Foundation, is part of a wider programme of work on the role of public services in supporting people to live healthier, happier and more productive lives. We hope to build on it with further work on the total funding available for public services in different parts of England, and on the impact of local government funding in particular on service provision and local health and well-being.

The rest of the report proceeds as follows.

Chapter 2 provides an overview of changes in public spending in England in recent decades: how it has changed over time; and how it varies across the nine regions of England. The patterns will reflect the amounts spent on different service areas and how these have changed over time, the characteristics of the different regions of England, and reforms to how funding for different services is allocated to different places.

Chapter 3 then looks at the principles and potential objectives that public service funding systems are designed to meet. This includes not only allocation in accordance with assessed spending needs, but also stability and certainty of funding, the provision of financial incentives for particular behaviours, and enabling a degree of discretion in funding and spending decisions by local policymakers. It explains how there are trade-offs between these objectives and difficulties in implementing them in practice.

Chapters 4–8 then look at the funding systems and allocations for five major areas of public service spending in England in turn: health, schools, local government, housing, and police. What are the objectives? To what extent are they achieved? What are the resulting funding allocations? And how do these compare to assessed spending needs and vary across England?

Chapter 9 concludes and draws out lessons for policy and future research. Overall, we find that while funding systems for some services are coherent and well designed (such as the main NHS funding allocations) or have improved in recent years (such as schools), others need significant reform (such as for police, local government and public health services). During the 2010s, changes to funding allocations often worked to exacerbate rather than reduce geographic inequalities, with higher-needs, more-deprived areas seeing bigger cuts to funding.

## 21 An analysis of the geographic distribution of public service spending in England

The report is accompanied by a full spreadsheet appendix, which includes the data underlying the charts included in the report, as well as additional analyses of funding, assessed spending needs, and local area characteristics.

Upfront, it is also worth defining several terms that we use throughout the report.

- ‘Funding’ is the amount of funding available to the broad service areas we examine (such as health, schools and other local government services), from government grants and, where relevant, locally raised tax revenues (such as from council tax and business rates).
- ‘Spending’ is the amount spent on specific narrower service areas we analyse as part of Chapter 6 on other local government services.
- ‘Assessed spending needs’ are the official assessments of how much needs to be spent on providing a particular set of services in geographical areas to meet the government’s objectives for service provision. This is generally to be able to provide the same range and quality of services in different places, given differences in local service demand and cost factors. But it may also reflect an objective to reduce inequalities in outcomes between places.
- ‘Actual spending needs’ is the underlying, unobservable level of spending that would actually be needed to meet the government’s objectives for service provision. Assessed spending needs may differ from actual spending needs.

## 2. Public service spending in England

This chapter provides an overview of the levels and trends in public service spending in England, showing how this is split between different services and how this split has evolved over time. It then turns to differences between regions, which reflect not just variation in underlying needs and the costs of providing services across regions, but also choices over how to allocate funding in response to this variation.

Spending on public services – which includes health, adult social care, education, the police, prisons, and much else besides – is of clear and obvious relevance for any policy programme seeking to improve health. The overall level of spending increased rapidly during the 2000s, and then fell slightly during the 2010s. But whereas spending on the health service increased steadily over the 20-year period, spending on recreation, culture and religion – which cover a diverse range of services that can affect the wider determinants of health, including the provision of sporting facilities (e.g. playing fields or swimming pools) and support for civic and youth organisations – has fallen considerably over the past two decades.

### 2.1 Trends in public service spending

#### Trends up to 2019–20

In 2019–20, the final financial year before the COVID-19 pandemic, UK government spending amounted to £884 billion. Of that, £728 billion was attributed to England. Within *that*, £541 billion was classified as ‘identifiable’: spending that was incurred specifically for the benefit of individuals, enterprises or communities within England.<sup>2</sup> It is this spending – which includes major spending items such as social security, health, education and local government – that is the focus of this report and this section.

Of the total £541 billion pot of ‘identifiable’ spending in England in 2019–20, almost 90% (£485 billion) is classified as current spending: the day-to-day running costs of government,

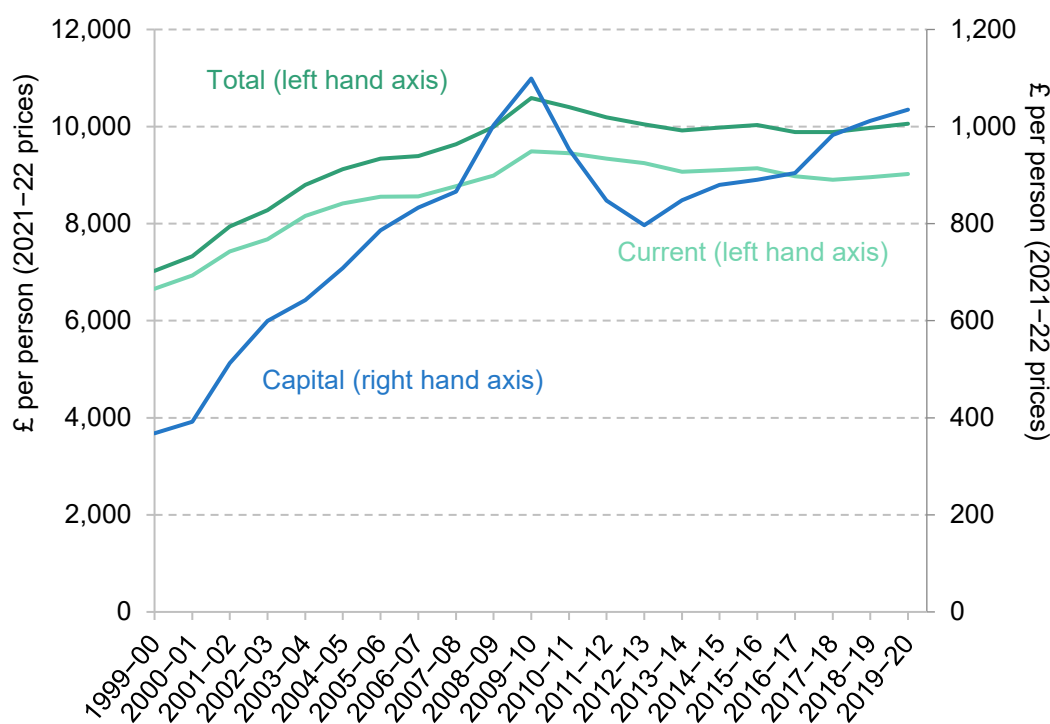
<sup>2</sup> The remaining £187 billion is made up of non-identifiable spending (such as debt interest spending, or spending on defence), spending that took place outside of the UK, and accounting adjustments. These items are inherently UK-wide in nature and/or of UK-wide benefit, but are apportioned to each nation and region of the UK on a population basis.



spent on goods and services consumed within a year. This spending, which was equivalent to £8,616 per person in England in 2019–20 (£9,025 in 2021–22 prices), includes things such as benefit payments and the pay bill for public sector workers. The remaining 10% of all identifiable spending (£56 billion) is classified as capital spending, which covers money spent building or maintaining physical government assets. This spending was equivalent to £988 per person in 2019–20 (£1,035 in 2021–22 prices).

Figure 2.1 shows how both current and capital identifiable spending per person have evolved over time. Both types of spending grew rapidly over the 2000s: capital identifiable spending per person almost trebled in real terms between 1999–2000 and 2009–10, while current spending increased by a more modest, but still substantial, 43% per person.

**Figure 2.1. Identifiable spending per person in England, 1999–2000 to 2019–20**



Source: Authors' calculations using ONS country and regional public finances expenditure tables (<https://www.ons.gov.uk/economy/governmentpublicsectorandtaxes/publicsectorfinance/datasets/countryandregionalpublicsectorfinancesexpendituretables>), ONS mid-year population estimates (<https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/annualmidyearpopulationestimates/previousReleases>), and GDP deflators, March 2022 (HM Treasury, 2022a).

After 2010, under the coalition government's austerity programme, both capital and current spending budgets were cut back. Capital spending was cut by 27% per person between 2009–10 and 2012–13, from £1,099 to £797 (in 2021–22 prices), before rising gradually to reach £1,035 per person in 2019–20, 6% below its 2009–10 peak. Current spending – which represents the majority of the total – was cut more gradually, and fell by 5% over the decade between 2009–10 and 2019–20. Taking the two items together, total identifiable spending per person fell by 5% in real terms over the decade, but more or less flatlined after 2013.

The total of £541 billion of total identifiable spending can be broken down into spending on different functions. This is shown in Figure 2.2.

The largest single component is spending on social security which, at £185 billion, accounted for more than one-third (34%) of the total. A further 25% (£137 billion) was spent on health, and 14% (£74 billion) was spent on education. Between them, these three items of spending represent almost three-quarters for the total. Other notable items include: transport spending (£28 billion, 5% of the total); public order and safety, which includes the police (£26 billion, 5%); and adult social services, which includes most adult social care services (£19 billion, 3%). Spending by some departments and by local governments will span across more than one of these functions.

Table 2.1 summarises how spending on a subset of these functions changed over the 20 years to 2019–20. Health spending almost doubled, from £1,300 to £2,543 per person, and increased its share of total identifiable expenditure from 18.5% to 25.3%. Per-person spending on adult social services (social care) increased by 71% over the 20-year period (from £204 to £375), though, notably, fell back in real terms after 2010. Similarly, education spending increased over the period as a whole (by 25%, from £1,106 to £1,381), but fell between 2009–10 and 2019–20.<sup>3</sup> Per-person social security spending also fell (by 4%) between 2009–10 and 2019–20,<sup>4</sup> with spending on pensioner benefits cut by less than spending on benefits for people of working age and children.<sup>5</sup> Spending on other areas – such as public order and safety, environmental

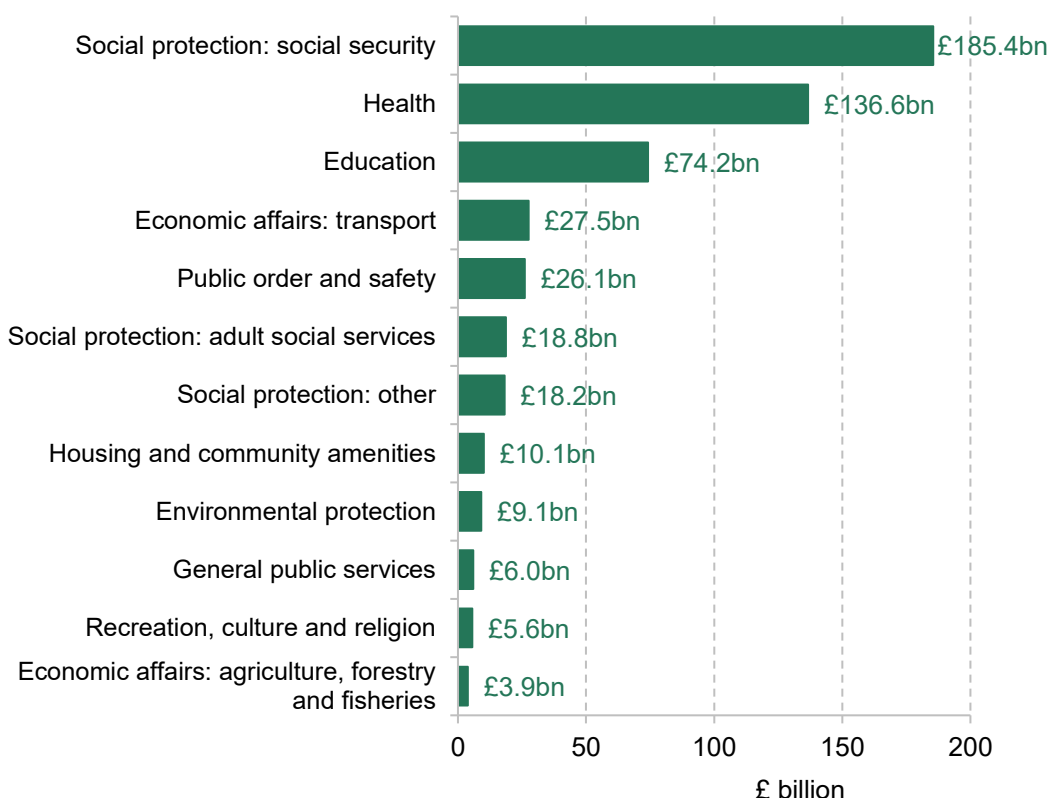
<sup>3</sup> Note that the substantial reduction in this measure of education spending in England was largely driven by changes to higher education funding, and in particular by the decision to increase the cap on university tuition fees from £3,000 to £9,000 in 2012. The reduction in the long-run government contribution to spending on higher education will be considerably smaller than is implied by these numbers and the amount spent upfront on higher education students actually increased; see Belfield, Farquharson and Sibieta (2018) for a discussion.

<sup>4</sup> A consistent measure of social security spending (which includes spending on items such as child benefit and personal tax credits by HM Revenue & Customs, as well as broader benefit payments by the Department of Work and Pensions) is not available for the period before 2010. Looking just at benefits paid by the Department for Work and Pensions, spending per person increased by 31% in real terms between 1999–2000 and 2019–20, and by 2.2% between 2009–10 and 2019–20. This measure does not reflect the reductions in the coverage of child benefit after 2010, or the shift in spending from personal tax credits (paid by HM Revenue & Customs) to universal credit (paid by the Department for Work and Pensions).

<sup>5</sup> Across Great Britain as a whole, looking at spending per total household, welfare spending on pensioners was cut by 0.4% in real terms between 2009–10 and 2019–20. Spending on welfare for those of working age and children was cut by 15.4% over the same period (Department for Work and Pensions, 2022).

protection, housing and community amenities, and recreation, culture and religion – was also cut after 2010 (and, in the case of the latter, cut over the entire 20-year period). The overall trend has been towards ever-higher health spending and a state increasingly dominated by the NHS, and with less to spend on services that create the conditions for people to stay healthy in the first place.

Figure 2.2. Total identifiable spending in England in 2019–20, by sub-function



Note: Numbers denote nominal total identifiable spending in England in 2019–20 (total of £540.6 billion). ‘Adult social services’ is defined here as total spending on personal social services, less the family and children and unemployment components. This falls within the overall ‘social protection’ function. ‘Social security’ is defined as identifiable benefit expenditure (from the Department for Work and Pensions), plus spending by HM Revenue & Customs on child benefit, personal tax credit, guardian’s allowance, tax-free childcare, Saving Gateway and child trust funds.

Source: Authors’ calculations using ONS country and regional public finances expenditure tables (<https://www.ons.gov.uk/economy/governmentpublicsectorandtaxes/publicsectorfinance/datasets/countryandregionalpublicsectorfinancesexpendituretables>), ONS mid-year population estimates (<https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/annualmidyearpopulationestimates/previousReleases>), HM Treasury Country and Regional Analysis 2020, and GDP deflators, March 2022 (HM Treasury, 2022a).

**Table 2.1. Total identifiable spending on selected functions in England**

	Spending per person (£, 2021–22 prices)			Share of total identifiable expenditure (%)		
	1999–2000	2009–10	2019–20	1999–2000	2009–10	2019–20
Health	£1,300	£2,294	£2,543	18.5%	21.7%	25.3%
Education	£1,106	£1,759	£1,381	15.7%	16.6%	13.7%
Adult social services	£204	£375	£349	2.9%	3.5%	3.5%
Public order and safety	£392	£635	£485	5.6%	6.0%	4.8%
Transport	£208	£433	£513	3.0%	4.1%	5.1%
Environmental protection	£105	£195	£169	1.5%	1.8%	1.7%
Recreation, culture and religion	£191	£151	£104	2.7%	1.4%	1.0%
Housing and community amenities	£114	£301	£189	1.6%	2.8%	1.9%
Social security	–	£3,603	£3,451	–	34.0%	34.3%

Note: ‘Adult social services’ is defined here as total spending on personal social services, less the family and children and unemployment components. This falls within the overall ‘social protection’ function. ‘Social security’ is defined as identifiable benefit expenditure (from the Department for Work and Pensions), plus spending by HM Revenue & Customs on child benefit, personal tax credit, guardian’s allowance, universal credit, tax-free childcare, Saving Gateway and child trust funds. This measure of social security spending is not available for 1999–2000.

Source: Authors’ calculations using HM Treasury Country and Regional Analysis (various), HM Treasury Public Expenditure Statistical Analyses (various), ONS country and regional public finances expenditure tables (<https://www.ons.gov.uk/economy/governmentpublicsectorandtaxes/publicsectorfinance/datasets/countryandregionalpublicsectorfinancesexpendituretables>), Department for Work and Pensions (2021), ONS mid-year population estimates (<https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/annualmidyearpopulationestimates/previousReleases>), and GDP deflators, March 2022 (HM Treasury, 2022a).

## Decisions since 2019–20

Government spending trends (and decisions) in 2020–21 and 2021–22 were focused on the COVID-19 pandemic.<sup>6</sup> Decisions over departmental spending in 2022–23, 2023–24 and 2024–25 were made at the October 2021 Spending Review. The Chancellor, Rishi Sunak, announced that departmental resource (current, or day-to-day) budgets would increase by at an average real-terms rate of 3.3% per year between 2021–22 and 2024–25. Figure 2.3 places this in context, by comparing this planned average annual growth rate to what was planned at previous Spending Reviews. 3.3% is a slower rate than what was announced at the 2019 and 2020 Reviews (both of which covered a single financial year), but considerably more generous than during the 2010s, and more generous than the Labour government’s final Spending Review, held in 2007. These planned settlements were less generous in their growth rate, however, than the Spending Reviews of the early 2000s, when growth of more than 4% per year in real terms was the norm.

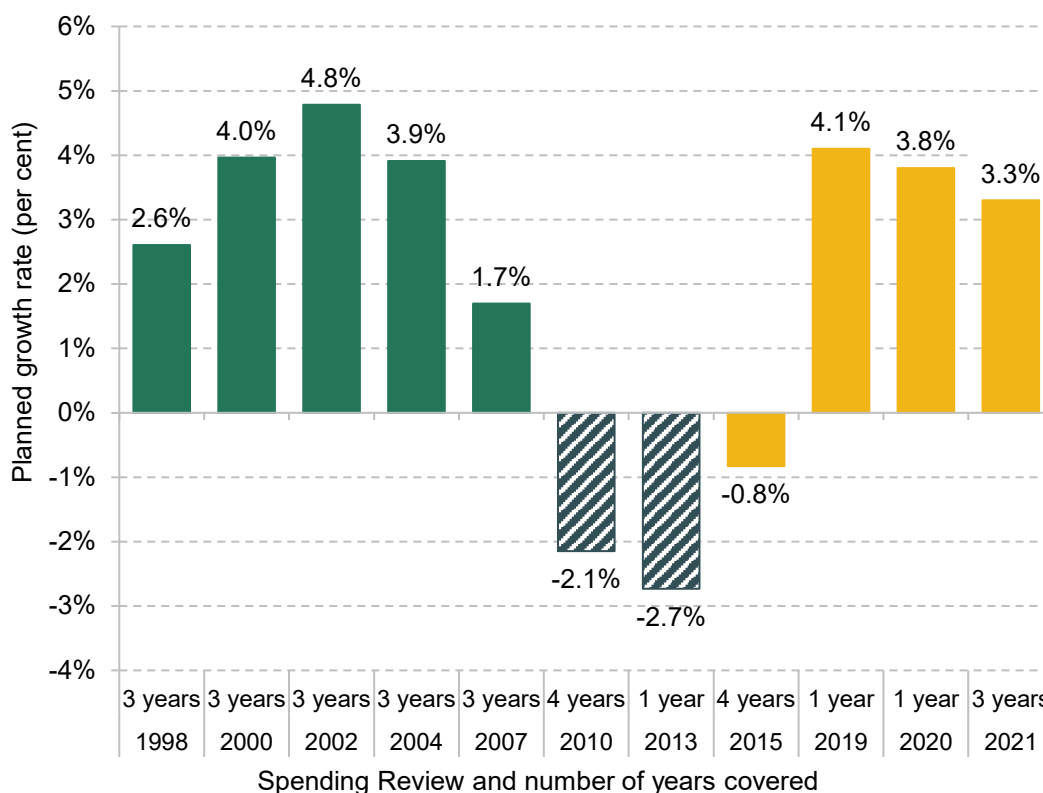
Importantly, these numbers refer to what was *planned*. The experience of the past two years or so teaches us that things do not always turn out as planned. The hundreds of billions spent on COVID-19 support programmes are testament to that. And because these plans were fixed (in cash terms) in October 2021, the outlook for inflation has changed dramatically. A higher rate of inflation means that the same cash budgets are able to purchase fewer goods and services – they are worth less in real terms. Precisely how much less depends on how you measure inflation.

This is illustrated in Figure 2.4. The measure of inflation typically used to assess the real-terms generosity of public spending plans is the GDP deflator, which is a broad measure of economy-wide inflation. Using the latest Office for Budget Responsibility (OBR) forecasts for the GDP deflator (from the March 2022 Spring Statement), the 3.3% average annual growth in resource budgets would drop to 2.9%. There are good reasons, however, to suppose that the GDP deflator might under-state the ‘true’ cost pressures on public services.<sup>7</sup> If the government’s cash spending plans are instead deflated using the Consumer Price Index (CPI, which provides an upper bound of the likely ‘true’ rate of cost inflation for public services), the growth rate drops to 1.7%. The outlook for inflation continues to evolve and so these numbers are subject to further change. The key point is that what initially appeared to be a relatively generous set of spending plans, in which all departments bar one (the Ministry of Defence) would see real-terms budget increases, is becoming steadily less generous as inflation eats into departments’ spending power.

<sup>6</sup> For a discussion of pandemic-related spending, see Zaranko (2020, 2021).

<sup>7</sup> For a discussion, see <https://twitter.com/BenZaranko/status/1508852409271046145?s=20&t=EJYpHmjDtFZ1b1IH4dV35g>.

**Figure 2.3. Real-terms average annual growth in departmental resource budgets, as planned at each Spending Review**

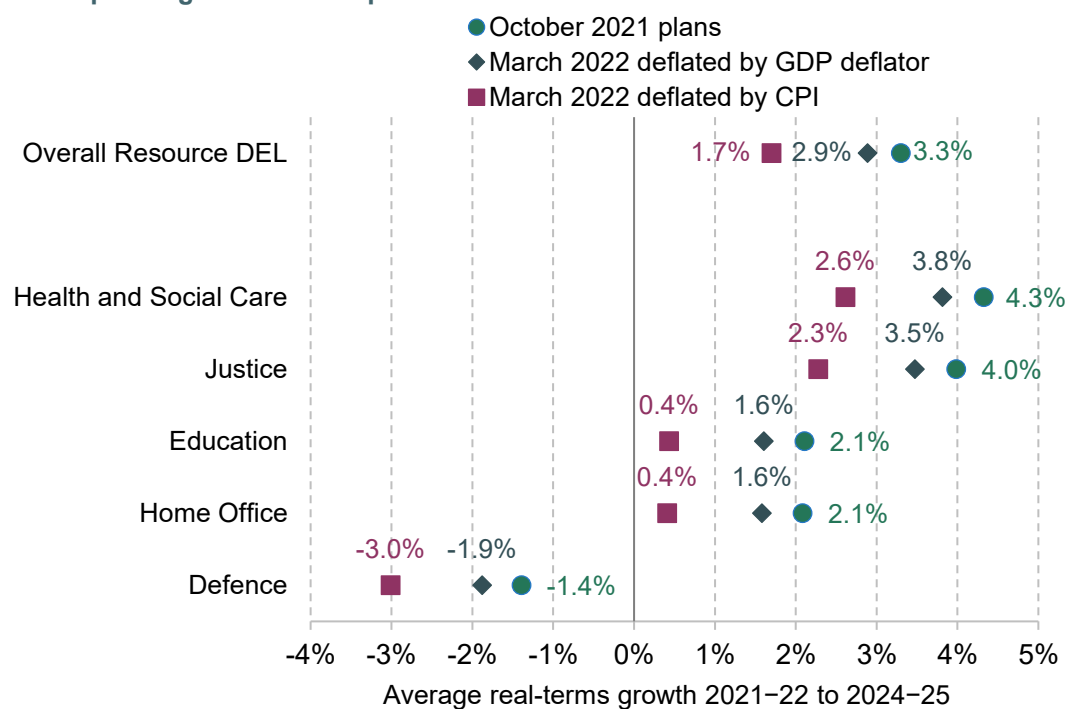


Note: Numbers denote the *planned* average real-terms growth rate in resource departmental expenditure limits, excluding depreciation. The Spending Review 2020 value is the average real-terms growth rate between 2019–20 and 2021–22 due to the atypical movement of the GDP deflator during the pandemic. The Spending Review 2021 value is the average real-terms growth rate between 2021–22 and 2024–25.

Source: Authors' calculations using HM Treasury Spending Review documents (various), HM Treasury GDP deflators (various), and OBR Economic and Fiscal Outlook (various).

Figure 2.4 also shows that within the total, some areas are to set to do better than others. The Department of Health and Social Care (DHSC) budget was planned to grow by 4.3% per year (down to 3.8% per year under the latest deflator forecasts). The Home Office and Department for Education budgets were set to grow by 2.1% (down to 1.6%). Health spending is therefore set to continue to grow as a share of the total spent on public services in the years to come.

Figure 2.4. Planned average real-terms growth in selected resource (day-to-day) budgets over Spending Review 2021 period



Note: October 2021 plans refer to the real-terms growth rate associated with the latest cash resource spending settlements for the 2021 Spending Review period, under GDP deflator forecasts as of October 2021.

Source: Author's calculations using HM Treasury Spring Statement 2022 and Spending Review 2021, and OBR Economic and Fiscal Outlook, March 2022.

## 2.2 How does spending vary across the regions of England?

The analysis so far has focused on spending across the entirety of England. But the level of spending varies substantially across different parts of the country, as does the composition.

These patterns for 2019–20 are illustrated in Figure 2.5. Overall spending per person is highest in London (£13,744) and lowest in the East Midlands (£11,319).<sup>8</sup> Per-person current spending on health and education are higher in London than anywhere else (£2,951 and £1,373, respectively, versus £2,422 and £1,250 for England as a whole), driven at least in part by the higher cost of providing services in the capital. Health spending is also higher than the national average in the North East (£2,609) and North West (£2,610), which reflects the deprivation and

<sup>8</sup> Note that these amounts refer to total expenditure on services, which is equal to total spending (total managed expenditure), less accounting adjustments. Under this terminology, social security is treated as a 'service' (as does debt interest spending, and all other forms of spending that are not classified as an accounting adjustment).

relatively poor health of those regions. Current spending on other services follows a similar pattern.

Regional differences in capital spending are particularly stark. Per-person capital spending is also highest in London (£1,556), 40% higher than in the region with the second highest level of spend (the South East, with £1,085) and 50% higher than the English average (£1,035). This is driven by much higher public investment in transport in London than in other parts of the country (Davenport and Zaranko, 2020).

In contrast, social security spending is lower in London than in any other region. It is highest in the North East and North West. This reflects the relative youth of the capital (and thus lower levels of spending on pensioner benefits), as well as differential patterns of disability and unemployment.

Figure 2.6 examines how the gaps in per-person spending between regions have evolved over the past 20 years. Panel (a) shows how current identifiable spending per person has compared to the English average in each region between 1999–2000 and 2019–20. There has been clear convergence over time. Whereas current identifiable spending in London and the North East was 13.1% and 13.7% higher than the English average in 1999–2000, respectively, this fell to 8.5% and 9.6% higher by 2019–20. Over the same period, the South East and East of England went from spending 12.0% and 12.1% less than the national average, respectively, to 8.5% and 6.8% less.

This convergence was not driven by nationwide trends in spending during the 2010s. In 2009–10, health spending represented a greater fraction of total spending in London than anywhere else in the country. Given that, at a national level, health budgets were increased and protected from the cuts imposed on other areas, we might have expected per-person spending in London to pull further way from the English average. Instead, we observed the opposite, because London and the North East (another high spending area) experienced the largest cuts to education and other public service spending. Similarly, while the South East and East of England may have appeared *ex ante* less likely to benefit from a nationwide increase in the health budget, other public service budgets in these areas performed much better than the English average over the decade to 2019–20. This convergence in current identifiable spending therefore occurred in spite of national trends in spending composition, not because of them. The picture for capital spending (panel (b)) is less clear, with the degree of regional dispersion more or less stable since the mid-2000s. One notable trend in recent years has been a steady increase in capital spending in the South East, such that per-person spending rose from 22.0% *below* the English average in 2011–12 to 4.9% *above* by 2019–20.



Looking within the category of current spending, there has been a remarkable divergence between London and everywhere else in social security spending over the past 10 years (panel (c)). Per-person social security spending in London fell from being 1.3% lower than the English average in 2009–10 to 9.4% lower a decade later. Spending in all other regions, with the exception of the West Midlands, increased relative to the English average. Expressed a different way, while spending per person in London increased by 4.6% in cash terms over the decade to 2019–20, it increased by 15.7% in the rest of the country.

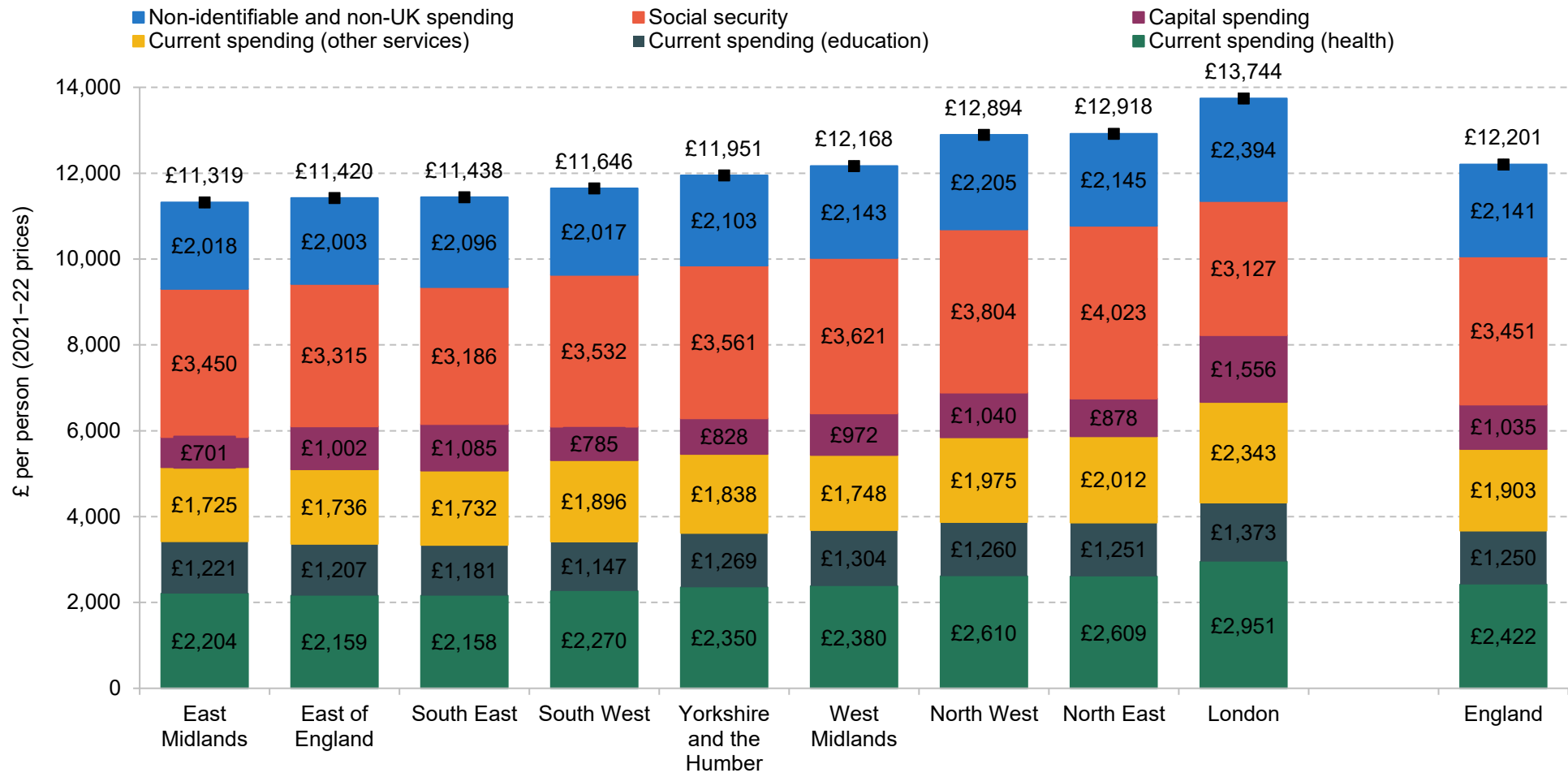
There was a general convergence in day-to-day public service spending per head over the 2010s (panel (d)). The South East (the lowest spending region) went from 12.1% below the English average in 2009–10 to 9.0% below in 2019–20; London (the highest spending region) went from 25.6% to 19.6% above the average over the same period; and the North East (the second-highest spending region) went from 9.1% to 5.4% above.

To make sense of these trends, we must remember that regional spending differences and differential regional trends stem from three things:

- (1) differing patterns of and changes in underlying need, driven by variation in demographic composition and trends, economic performance and other factors;
- (2) differences in local price and wage levels and, in turn, the cost of providing services;
- (3) choices over how to allocate funding, in response to (1), (2), and historic allocations.

To understand the differences in spending across places – differences that will matter for local health outcomes and will influence health inequalities – we therefore need to understand these funding allocations. We now turn to an in-depth discussion of how funding is allocated in a number of key service areas.

Figure 2.5. Breakdown of total expenditure on services and social security benefits per person by region of England, 2019–20

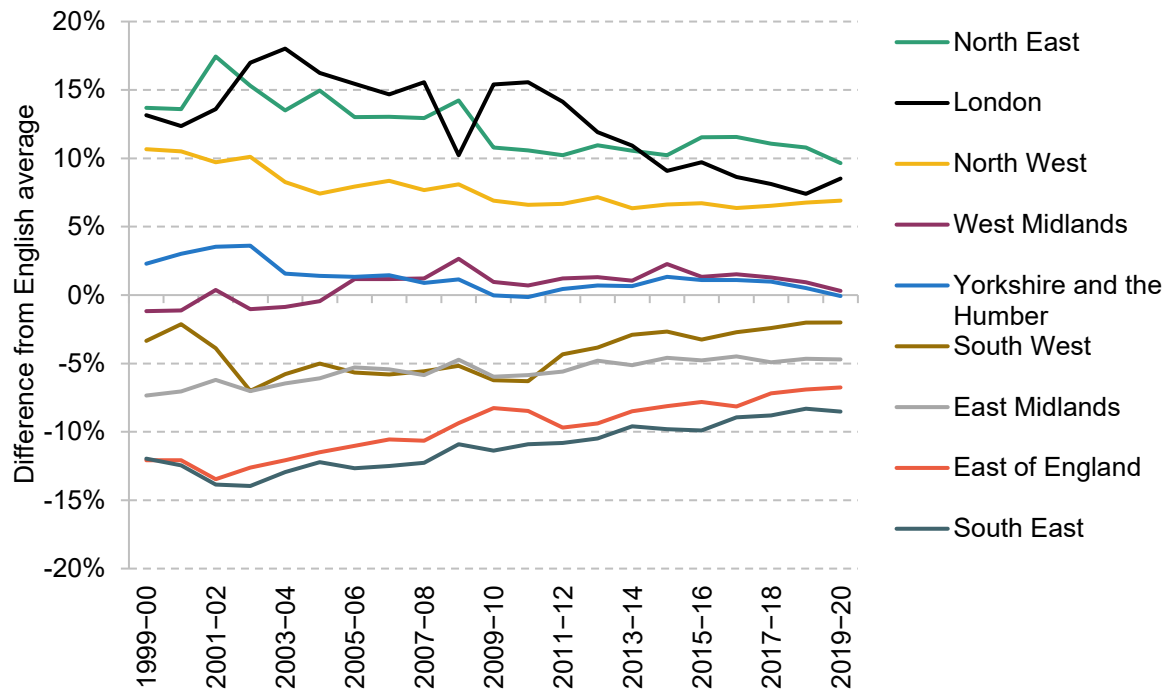


Note: Total expenditure on services is equal to total spending (total managed expenditure), less accounting adjustments. ‘Social security’ is defined as identifiable benefit expenditure (from the Department for Work and Pensions), plus spending by HM Revenue & Customs on child benefit, personal tax credit, guardian’s allowance, universal credit, tax-free childcare, Saving Gateway and child trust funds.

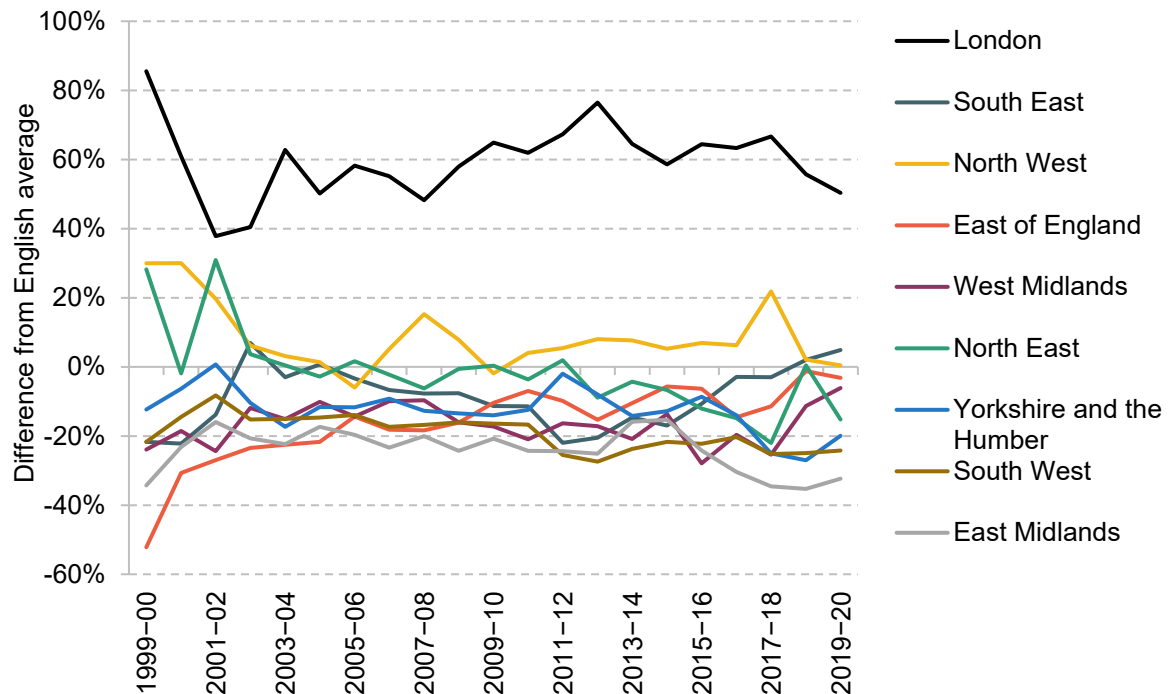
Source: Authors’ calculations using HM Treasury Country and Regional Analysis (various), HM Treasury Public Expenditure Statistical Analyses (various), ONS country and regional public finances expenditure tables (<https://www.ons.gov.uk/economy/governmentpublicsectorandtaxes/publicsectorfinance/datasets/countryandregionalpublicsectorfinances/expendituretables>), Department for Work and Pensions (2021), ONS mid-year population estimates (<https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/annualmidyearpopulationestimates/previousReleases>), and GDP deflators, March 2022 (HM Treasury, 2022a).

Figure 2.6. Regional spending per person relative to the English average

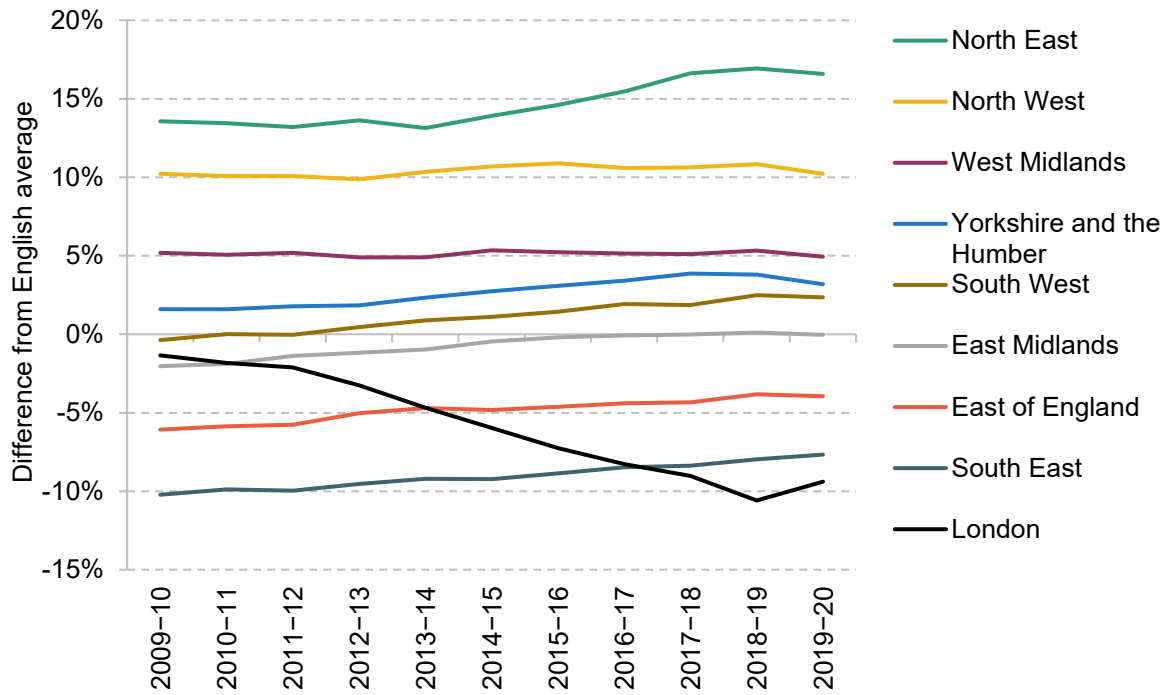
(a) Current identifiable spending



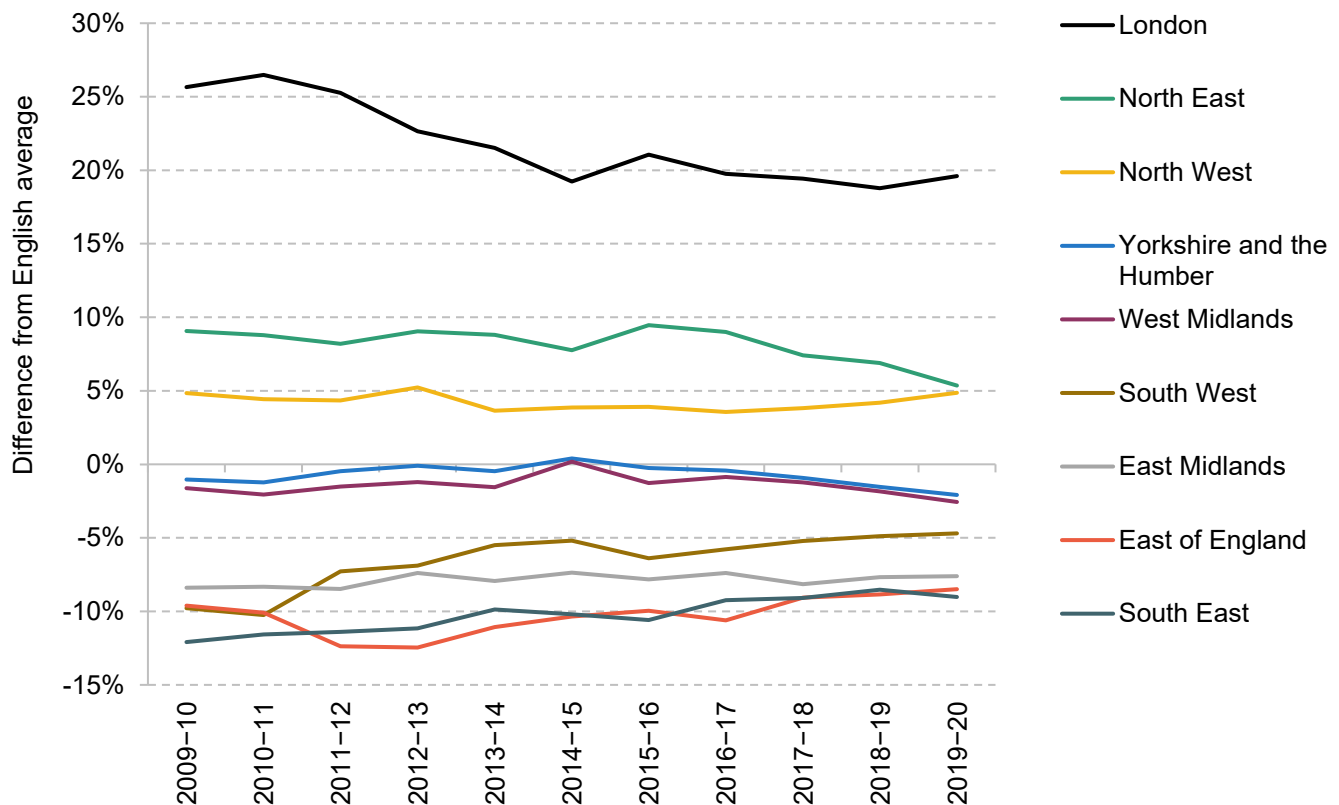
(b) Capital identifiable spending



(c) Current identifiable expenditure: social security



(d) Current identifiable expenditure: public services



Note: 'Public services' is defined here as current identifiable spending, less social security.

Source: As for Figure 2.5.

## 3. The principles for allocating funding

Systems for allocating funding across places and between services typically try to address or balance several different objectives. Before looking at how funding is allocated for specific service areas, we therefore discuss the different principles and objectives that can underlie funding allocation mechanisms. In doing so, we highlight a number of the challenges in implementing these principles and objectives in practice, and the trade-offs between the objectives.

### 3.1 Typical objectives for funding systems

Systems for allocating funding between different local areas may try to meet several objectives.

#### Accounting for variation in funding needs

Local areas differ in their geographic and socio-economic characteristics, which may affect both the demand for and the cost of providing public services. In addition, areas differ in their capacity to raise revenues from local residents and businesses, affecting the range and quality of services that could be funded from local sources alone. One common objective of funding systems is to equalise for differences in the spending needs and/or the revenue-raising capacity of different local areas in order to achieve more similar levels of overall funding or service provision across places. This is achieved through two main means: first, by allocating central government grant funding ('vertical equalisation'), which provides most funding for public services in England; second, by redistributing locally raised revenues from areas with relatively high revenue-raising capacity and/or low assessed spending needs to areas with relatively low revenue-raising capacity and/or high assessed spending needs ('horizontal equalisation'), for those services partly funded by locally raised revenues.

**Revenue equalisation** refers to the case when differences in the ability of different local areas to raise revenues through taxation are offset by the funding system. For councils and PCCs, which levy and collect local taxes, this is achieved through vertical flows of grant funding or horizontal transfers of tax revenues between areas. If such differences are fully offset, each area would have the same funding per resident (or per household) if they all set the same tax rates, irrespective of differences in their tax bases. For English local government, this was historically

the approach used to redistribute business rates revenues between council areas: revenues were first pooled at a national level and then allocated on a per-person basis across local areas.

Revenue equalisation can also be achieved by funding a service from central government grants, so that the funding an area receives does not depend on local revenue-raising capacity – the approach taken for health services and schools in England.

**Spending equalisation** goes a step further. Rather than provide different areas with the same level of funding per person (or household), the aim is to offset differences in the demand for and cost of providing services in different areas. Full equalisation with respect to spending needs is defined as when each local area is assessed to be able to provide the same range and quality of public services from the funding provided to it. For example, historically, the aim of the English local government finance system was to fully equalise with respect to both spending and revenue such that if each local authority set the same council tax rate it could afford the same range and quality of services, despite differences in local demands and costs.

Efforts to offset differences in spending needs plays a key role in the funding allocation mechanisms of each of the main service areas discussed in this report. For example, as discussed in Chapter 4, the health funding system provides additional funding to areas with sicker populations who typically make greater use of health services. And as discussed in Chapter 5, school funding is targeted at areas with more deprived pupils.

The aim may be to go further than simply offset differences in the demand for and cost of providing services in different areas, though. Instead, one may want to provide more or higher-quality services in areas with high assessed needs, hoping to help **reduce inequalities** in outcomes or **address unmet needs** for services that are not being picked up in spending needs assessments (the difficulties in assessing spending needs are discussed below). Indeed, as highlighted in the introduction to this report, there is a growing body of high-quality evidence that increasing spending on schools, health, and social services, leads to improved educational and health outcomes. As discussed in Chapter 4, the health funding system has the explicit aim of reducing inequalities and addressing unmet needs.

### Allowing local discretion

A funding system may be designed to provide local policymakers with a degree of **discretion** over both the overall spending envelope and how the overall envelope is spent. There are three main reasons why this may be beneficial, at least up to a point.

First, preferences over overall levels of spending (and taxation), over spending on different service areas, and over different ways to deliver services may differ across places. For example, residents of some areas may, on average, prefer a bigger range and higher quality of services,

funded by higher taxation, than residents of other areas. Some areas may favour prioritising local cultural and recreation facilities more, while others may prefer to prioritise street cleaning and the public realm. And some areas may prefer services to be delivered in a small number of large ‘hubs’, but others prefer a larger number of small ‘nodes’ in each community.

In principle, these differences could be taken into account by central government, which could make different decisions for different local areas. However, in practice, such centrally controlled variation in provision is difficult to implement, not least due to a lack of information centrally on how preferences vary by local area. Through local elections (for local councillors, mayors or PCCs) or simply local knowledge, decisions made locally may be able to better reflect preferences in an area. To work effectively, this requires local residents to engage with local political and policy issues, rather than vote based on national political issues.

Second, and related to this, even if preferences did not differ between areas, local policymakers will almost certainly have better information on the context and needs of their area than central government. The best way to tackle certain issues (e.g. poor health behaviours, or high levels of crime) are likely to differ between places, potentially making flexibility to reallocate funding between services beneficial.

Third, there can be benefits from having different local areas try different policies – while some may be unsuccessful, provided there are effective mechanisms for peer-to-peer learning and benchmarking, having different areas try different policies provides greater opportunity to identify and adopt the most effective policies.

### Providing financial incentives

While local discretion may mean decisions reflect local preferences and information, it also means the government depends on local policymakers to deliver its own policy aims. A third objective of funding systems may therefore be to provide **financial incentives** for councils and service providers to deliver particular outcomes.

For example, if councils and service providers are able to retain a proportion of the revenues generated from local economic growth, they have a financial incentive to help boost economic growth. Similarly, if they are able to retain funding even if estimates of their spending needs decline, they have a financial incentive to tackle the drivers of assessed spending needs, hopefully improving outcomes for local residents and businesses, in the process. Such financial incentives could bolster the professional and political incentives that also help encourage councils and service providers to improve local outcomes.

More generally, outcomes-based funding provides a tool for central government to incentivise local government to prioritise particular outcomes or objectives that central government

mandates, without being prescriptive about how funding is spent or how the outcomes or objectives are achieved. It can therefore help central government give greater operational discretion to local government and service providers, while still targeting a set of consistent (minimum) outcomes it expects services to deliver in each local area.

### Funding stability

Significant year-to-year changes in funding can be difficult from both a practical and political perspective, and systems often aim to minimise these. Large cuts to spending can be difficult to make in the short term, given fixed costs associated with existing facilities and services, and rapid large increases in funding can be difficult to spend efficiently, given the potential need for new facilities and staff hiring and training. Minimising changes in funding, where possible, may therefore help ensure more equitable and efficient service provision. In addition, areas losing from changes to funding allocations are likely to be more politically vocal than those gaining, which has undoubtedly affected government decision-making for certain services.

## 3.2 The trade-offs between objectives

There can be trade-offs between meeting these different objectives.

### Between redistribution and incentives

For example, it is not possible both to fully redistribute funding to offset differences in local revenue-raising capacity and/or assessed spending needs, and to provide financial incentives for local policymakers to take action to boost local revenue-raising capacity and/or to reduce assessed spending needs. This is because if they successfully increase revenue-raising capacity or reduce assessed spending needs, their efforts are offset by reductions in the funding their bodies receive from central government. Funding systems may therefore aim to strike a balance between these two objectives by only partially accounting for differences in revenue-raising capacity or assessed spending needs, or updating these assessments with a lag. This allows local areas to benefit financially on a partial or time-limited basis from increases in revenue-raising capacity or reductions in assessed spending needs, while ensuring that funding is partially or eventually updated to account for changes in local circumstances. As we discuss in Chapter 6, this is the approach being taken for the main components of local government funding in England. Alternatively (or in addition), spending needs assessments may purposefully account for only some of the assumed drivers of spending needs – often those that local policymakers are least able to manipulate – so that there are still financial incentives to tackle other drivers.

Similarly, funding systems may be hybridised and include both needs-based and outcomes-based (or competition-based) elements. This may take the form of allocations that are partly based on



outcomes (or competitive bidding) and partly based on assessed needs, or involve restricting the outcomes-based (or competition-based) funding to only certain kinds of places. For example, one option would be for all areas with high assessed needs to receive funding but, among those areas with low assessed needs, only those with particularly good outcomes or strong bids would receive funding. This guarantees funding for even the poorest performing high needs areas, but it means that high needs areas do not benefit from the incentive effects of outcomes- or competition-based funding. Alternatively, outcomes- or competition-based funding might be made available only to areas with high assessed needs. This provides the strongest financial incentives to these areas, but means those that perform poorly would lose out on funding.

### Between responsiveness and stability

There are similar trade-offs between stability of funding and responsiveness to changes in local revenue-raising capacity and spending needs. This leads to the use of damping or pace-of-change rules in health, school, local government and police funding. Under these rules, local areas do not get the funding they are assessed to need. Instead, the ‘needs’ assessments are treated as ‘target’ funding allocations, and an area’s funding is based on its prior year funding and its target allocation. Those local areas with funding above their target allocation typically receive a smaller-than-average increase (or a larger-than-average cut), while those areas with funding below their target allocation typically receive a larger-than-average increase (or smaller-than-average cut). Often, a series of floors and ceilings are put in place to guarantee at least a minimum funding increase (or maximum funding cut), and cap maximum funding increases (or minimum funding cuts).

The aim of this is to prevent areas from facing large and rapid changes in their relative funding levels, necessitating rapid cut backs in services or risking inefficient use of very large funding increases – with the ceilings also helping to fund the floors. Over time, provided that assessed spending needs are not changing too rapidly, funding allocations should converge towards (or at least not diverge too far from) their target levels. However, as we shall see, these mechanisms often make funding systems less responsive to changes in local areas’ circumstances when overall funding is limited, which is precisely when one may be most concerned that funding is going to the areas that need it most. This is because the floors and ceilings tend to be more binding in such circumstances.

### Between consistency and discretion

Finally, there are obvious tensions between ensuring consistency in service provision and standards across the country, and providing local policymakers with discretion to determine both overall local spending levels and how spending is shared across services.

As discussed in Phillips (2018), one response to this is to provide local policymakers with different degrees of discretion for different services depending on the extent to which one believes local preferences or knowledge matter, and the extent to which one is willing to tolerate differences in provision across places. For example, decisions on the amount to spend on health services has been centralised since the advent of the NHS, potentially reflecting one of the ideas driving the foundation of a *national* health service: the right of people to access a consistent set of health services irrespective of both their means and where they live. For schools spending, local government traditionally had significant discretion over both the overall level of spending and the allocation between different schools. However, this discretion has been progressively reduced: by the ring-fencing of most school funding in the Dedicated Schools Grant since 2006–07; by rules governing the formulae councils use to allocate funding to specific schools; and by minimum per-pupil funding levels for schools. The government has also been ring-fencing a growing pot of local government funding specifically for adult social care services, although there are tensions between the desire for more consistent funding of social care services and wider local government finance reform (Amin-Smith et al., 2018a; Phillips, 2018).

In contrast, the early 2010s saw a more general reduction in the ring-fencing and labelling of local government funding, to provide more flexibility to councils in how they allocate their funding (and to reduce the paperwork associated with demonstrating compliance with ring-fencing). In addition, various ‘devolution deals’ have provided local government (including newly created ‘combined authorities’ covering city regions) with greater flexibility over spending and policy related to economic development, business and employment support, further and adult education, and transport (Ogden, Phillips and Sion, 2021).

It is also common to distinguish between discretion over funding levels and high-level policy objectives, and discretion over how funding is spent and how those objectives are achieved in practice. For example, funding for local health services is determined centrally, and health service providers are subject to a range of targets (e.g. related to waiting times). However, local NHS bodies have significant discretion on how they spend their budgets and organise their services in order to meet these targets. In the case of councils, central government requires them to meet a number of statutory duties, for example by: providing a range of specific services such as social care, waste collection and disposal, public health services, planning and housing services, road maintenance and library services; setting out how eligibility services should be assessed; and setting minimum standards and service offerings. However, councils have a degree of discretion in the interpretation of these duties, and have high levels of discretion over how they spend their funding and organise the delivery of services to meet these duties.

### 3.3 Challenges in implementing the objectives

As well as trade-offs between objectives, there are also challenges in operationalising the objectives – especially in relation to assessing spending needs (and, increasingly, revenue-raising capacity).

#### Difficulties in assessing spending needs

The first thing to note is that spending needs cannot be directly measured – they must be either estimated or assumed. Harris and Phillips (2018) provide a detailed analysis of the technical issues involved in estimating spending needs from observed patterns of public service spending or usage, and discuss ways to address these issues. Here we summarise the key points.

**The first issue is that assessments of spending needs based on past spending patterns may reflect previous funding decisions rather than differences in ‘spending need’.** Suppose, for example, that the government previously chose to allocate funding to council areas with high levels of deprivation and high levels of ill-health. If the resulting pattern of spending across council areas was used to estimate a spending needs formula, this would show a positive relationship between deprivation and ill-health and spending levels. But this formula would largely reflect these past funding allocations, and reveal little about the relative spending needs of different areas. Similar issues may arise when looking at service utilisation rather than spending – they may pick up where past funding has created the capacity to provide services, rather than the need (and unmet need) for the services.

One way to at least partially address this problem is to estimate spending needs formulae using individual- or neighbourhood-level spending or utilisation patterns and individual or neighbourhood characteristics. This allows one to use statistical controls for each council, for example, and to estimate the formulae using relationships between spending and individual/neighbourhood characteristics *within* councils. This allows one to strip out the effect of other factors – such as availability of funding, or local preferences or efficiency – that can affect the average level of spending by different councils. And if councils allocate their spending between residents and neighbourhoods on the basis of needs, the within-council relationships between spending and individual/neighbourhood characteristics would provide useful information on spending needs.

The approach is not fully robust to non-needs factors, though. For example, suppose that some councils receive more funding relative to their ‘true’ needs than others. Including and stripping out council ‘fixed effects’ in the regressions used to estimate spending needs formula can control for the impact of this on the average spending of these councils. But a higher level of spending

may be associated with a different distribution of spending across individuals or neighbourhoods with different characteristics – perhaps allowing spending on better-off less-needy groups than in councils with more constrained budgets. In such circumstances, the estimated formulae can still be distorted by the availability of funding in different types of councils.

It is also not always feasible to estimate spending needs formulae using neighbourhood- or individual-level data; data at a sufficient level of granularity may not exist and may be expensive and difficult to collect. For example, while councils and the NHS may have good data on the users of social care and hospital services (including their place of residence, age, and other characteristics), they may not have such data for the users of leisure and cultural facilities.<sup>9</sup>

**A second issue is that assessments of spending need can be sensitive to the choice of local characteristics included in the formulae.** An illustration of this for local authority spending is provided by Harris and Phillips (2018), who show that the choice of characteristics included matters, particularly for areas with ‘extreme’ characteristics.

One might be tempted to include any characteristic that has a statistically or economically meaningful impact on the spending needs formula. However, doing this can be problematic: a characteristic may not be correlated with spending because of its relationship with spending needs, but instead because of its relationship with other factors (such as past funding availability or local preferences); correlations may also reflect patterns of *unmet* needs if certain groups are less likely to use services despite those services potentially being of benefit to them. Subjective judgement about whether a characteristic is likely to be largely capturing variation in spending needs or other factors must play a key role in the process of selecting characteristics.

Formulae with many characteristics can also become complicated, and encourage councils and service providers to lobby for the inclusion of very specific indicators that they anticipate would lead them to receive additional funding.

**A third issue is that analysis of the relationship between spending and individual or local characteristics can at best tell you about relative not absolute spending needs.** If one wants to estimate the absolute spending needs of different areas, two further pieces of information are required: first, the level of service provision or set of outcomes that one is seeking to achieve; second, the relationship between funding and the provision or outcomes one is targeting. Estimating the relationship between funding and provision or outcomes is even more difficult than estimating relative spending needs – one requires a change in funding that is unrelated to

<sup>9</sup> Atkins and Hoddinott (2022) highlight how even at a council level, indicators of service activity are unavailable for a range of services.

any other factors that could affect the provision or outcome measures, in order to isolate the effect of funding.

For this reason, funding systems are based on the assessment of relative spending needs – with absolute funding levels determined on a more ad hoc basis. This also allows HM Treasury to set overall funding levels as part of its Spending Review and budget processes, based on its assessment of overall fiscal policy.

### Difficulties in assessing revenue-raising capacity

**Assessing the revenue-raising capacity of different local areas has historically been less problematic – but is becoming more difficult.**

Rather than use each local area's tax revenues, the key thing is to assess revenue-raising potential based on a benchmark tax system – a common set of tax rules such as rates, exemptions and reliefs – applied to all areas. This avoids incentivising local policymakers with tax-setting powers to cut taxes in order to appear to have a lower revenue-raising capacity.

Estimating revenues under a benchmark tax system has become harder for English local government over the last decade. In particular, since April 2013, councils must design and fund their own systems of means-tested financial support to help low-income households pay their council tax bills. These schemes differ across councils and there is no easy way, given available data, to estimate how much a common benchmark scheme would cost to operate in each council area. Amin-Smith and Phillips (2019) discuss various proxies that could be used.

### Timeliness of data

**Data on some local characteristics relative to the need for public service spending are collected on a very infrequent basis (such as at Censuses held every 10 years), making it difficult to keep spending needs assessments up-to-date.**

This is particularly problematic for characteristics that can change rapidly and in significantly different ways in different parts of the country, especially if these are key drivers for need for services. A recent pertinent example is the daytime population used in local government spending needs formulae, estimates of which based on the 2021 Census will be significantly affected by (part-temporary, part-permanent) COVID-19 induced changes to commuting patterns. In such circumstances, there are broadly three options: use alternative indicators that are more frequently updated; use national or regional data, where available, to project forward local data; or accept that the spending needs assessments will rely partly on data that can be over 10 years old.

## Distortions to local authority and service provider behaviour

**Needs-based and outcomes-based approaches to funding may distort the behaviour of local policymakers in undesirable ways.**

In both instances, they may seek to ‘game’ the system by manipulating activity in order to maximise funding, potentially even to the detriment of local residents. In needs-based systems, this is because funding is higher when assessed needs are higher. For outcomes-based systems this is because local policymakers may focus on the outcomes specifically targeted rather than a broader range of outcomes.

In needs-based systems, one can avoid this by basing spending needs assessments on characteristics that it is difficult for councils to manipulate, but which are still likely to be highly correlated with spending needs. Blochliger et al. (2007) suggest that physical geographical characteristics (such as topography, the share of an area’s border that is made up of coastline) can be suitable for some services, although they may explain only a small degree of the variation in demand for and cost of providing services across areas. Concerns about ‘gaming’ may also mean that it makes more sense to use socio-economic characteristics (such as health, education, age structure, employment status, housing tenure), than indicators of service usage, which may be more easily ‘gamed’. However, indicators of service usage for services provided by other organisations are less at risk of ‘gaming’ than indicators relating to the organisation in question. For example, the share of the population claiming disability benefits from the Department for Work and Pensions is used to proxy disability-related needs for council-funded adult social care services, as this is less manipulable by councils.

For outcomes-based funding, it is important that targeted outcomes are ones that councils or service providers can influence. To avoid an overly narrow focus on very specific targets, a range of complementary outcome indicators could be used. Too many targets can also be difficult for councils and service providers to manage though.<sup>10</sup>

## 3.4 Summary

This chapter has set out the principles and objectives guiding systems that allocate funding between places, and has highlighted the trade-offs and challenges in implementing these principles and objectives in practice.

<sup>10</sup> Davies, Atkins and Sodhi (2021) discuss in more detail how targets can be most appropriately used to improve the quality of public service provision.

Ensuring that funding is allocated according to local spending needs is far from the only objective that funding systems may try to meet. Other objectives include the provision of financial incentives for certain types of behaviours, a degree of discretion in the use of funding, and stability in funding allocations. However, needs-based approaches to funding allocation play a key role in health, schools, local government and police funding.

Because the relationships between local characteristics and spending needs cannot be directly observed, they must be either estimated or assumed. Doing the latter clearly relies on subjective judgement, but so does the former – in the choice of indicators to include, for example. It is also difficult to strip out the effects of past funding decisions on estimated relationships between spending and local area characteristics, although using neighbourhood- or individual-level data can help to address this problem. We therefore highlight areas where systems for assessing spending need are likely to be more or less robust – and where subjective decisions are likely to play a particularly important role in driving funding outcomes.

The trade-offs between objectives have been made differently for different services. The health and school funding systems reflect a trade-off between an ultimate aim of allocating funding in such a way as to account for differences in spending needs (and, in the case of health, ‘unmet need’), but also, at the same time, ensuring stability and minimising large and disruptive changes in funding. The assessment of spending needs plays a crucial role in the local government and police funding systems, but local tax-raising powers provide a greater role for local political discretion. The last decade has also seen an increased focus on the provision of financial incentives to councils to grow local tax bases and to tackle the drivers of spending needs. The rest of this report explains and assesses in detail how funding is allocated for these different service areas, and analyses the resulting distribution of funding across England.

## 4. Health funding

In this chapter, we consider the allocation of health funding in England, the largest area of public spending after social security benefits. In particular, we examine the allocation of funding for NHS services that until this summer went through Clinical Commissioning Groups (CCGs) and the allocation of public health grants to local authorities (LAs). In the first section, we consider the objectives and details of the approach to allocating funding for each of the two funding streams. In the second section, we then consider the actual distribution of funding in 2019–20, how funding differs with characteristics of local areas, and how funding differs from the assessments of spending needs that are used in the allocation process.

Following reforms in July 2022, NHS funding is now allocated through Integrated Care Boards (ICBs), part of the new Integrated Care Systems (ICSs). The methodology used to allocate funding to ICBs is very similar to that used for CCGs. However, ICSs are much larger than CCGs – there are currently 42 ICSs in England, covering populations from 520,000 to 3.1 million, compared to 192 CCGs in 2019–20, covering populations from 97,000 to 1.9 million. The shift to much larger areas means that how funding is distributed within areas matters more than it has done historically, though there are very limited data on this. In what follows, we describe the approach used to allocate funding to CCGs prior to this year, which we use as the basis of our empirical analysis, highlighting where the allocation methodology has subsequently changed.

For both NHS and public health funding, the underlying approach is to assess need for different services, and then adjust for differences in cost and (in the case of NHS funding) health inequalities and unmet needs. However, for operational reasons, in neither case are areas simply given the funding that the formulae assessed was needed. Instead, funding is determined by previous funding patterns and pace-of-change rules, which means that actual funding differs, sometimes substantially, from assessed spending needs. When funding is growing relatively rapidly, the pace-of-change rules should lead funding to converge to assessed spending needs. But when funding is growing slowly (or declining) for health services, as we saw during much of the 2010s, these rules prevent funding from being redistributed to areas with rising assessed needs.



## 4.1 The approach to allocating funding

### NHS funding

Prior to summer 2022, the majority of NHS funding was allocated to CCGs, which were responsible for commissioning services for the population of their local geographical area. At the beginning of 2019–20, there were 192 CCGs, with an average catchment population of 310,000, to which allocations totalling £104 billion were made: more than three-quarters of the total £134 billion Department of Health for current expenditure in 2019–20.

CCGs used their funding to contract medical services from providers, such as NHS hospital trusts and GP practices,<sup>11</sup> that were then provided to their residents. However, some CCG funding was earmarked for specialised services, which were commissioned by NHS England rather than CCGs. And expenditure on some very high cost and rare specialised services was excluded from the CCGs' allocations entirely and was funded nationally. Finally, in some cases, providers also received funding directly from NHS England – we discuss the reasons for this below.

As highlighted above, from July 2022, ICSs and their ICBs have absorbed the responsibilities of CCGs to plan and fund health services, and CCGs have been disbanded. In this section, we focus on the methodology that was used to allocate funding to CCGs in 2019–20, noting the few cases where methods have since been updated.

The total funding for the NHS in England is determined by HM Treasury at Spending Reviews and budgets, but the allocation of funding between different areas is the responsibility of NHS England, the NHS's parent body. There is a complex process to determine the allocations received by each area, which is developed by an independent committee, the Advisory Committee on Resource Allocation and confirmed by NHS England's board.<sup>12</sup>

### Objectives

NHS England's responsibilities are determined by its mandate from the DHSC, which includes principles for how funding should be allocated between areas. The 2019–20 mandate, as shown below, explicitly sets out four different principles for the allocation of funding.

<sup>11</sup> During this period NHS England and CCGs co-commissioned primary care services to varying degrees in different areas. From April 2021, all CCGs have lead responsibility for commissioning primary care services.

<sup>12</sup> The following sections are based on a number of government documents describing the current, and previous, allocation methodologies for NHS funding: NHS England and Improvement (2019, 2021), NHS England (2016b, 2016c, 2016d), and Advisory Committee on Resource Allocation (2022a, 2022b).

**‘The Government expects the principle of ensuring equal access for equal need to be at the heart of the approach to allocating budgets. The process must be transparent, and must ensure that changes in allocations do not result in the destabilising of local health economies.**

**[...]**

**as well as ensuring the allocations formulae are more responsive to the greatest health inequalities and unmet need in areas such as Blackpool.’**

The government’s revised 2019–20 Accountability Framework with NHS England and NHS Improvement, Department of Health and Social Care (2020).

The first is that the allocations should adhere to the governing principle of ensuring equal access for equal need. In practice, this means that most of the allocation methodology is focused on assessing the relative need for healthcare among the populations served by different CCGs, such that areas with higher need for medical services are allocated more funding to provide them. Because different population groups use different types of medical services, needs for different services are assessed separately. But an accurate assessment of need is not sufficient to ensure equal access for equal need, because different areas with the same level of need may have different costs of providing healthcare. The allocation therefore adjusts for unavoidable differences in the cost of providing services (such as local wage levels, property costs, and the degree of geographic dispersion), and allocates areas with higher costs more funding.

The second objective is that the allocations should be made transparently and the third is that changes in allocations should not destabilise local health economies. Although the need for healthcare will change and fluctuate over time in different areas, it may be important for operational and planning reasons that funding does not change substantially year to year. In practice, this means that areas are not given the funding allocation that they are assessed to need (their target allocation). Instead, there is a complex set of pace-of-change rules that govern how, and how quickly, funding allocations grow over time. In particular, there is a lower limit on funding growth to ensure that all areas receive real increases in funding each year, and an upper limit on funding growth in an effort to ensure that funding does not grow faster than local provider capacity can keep pace with.

The final objective is that allocations are responsive to health inequalities and unmet need. This is separate from ensuring equal access for equal need. In fact, it is possible that even if such a condition were met, health inequalities would stay constant – or even widen – over time. This is especially true if funding allocations are based on historic associations between local area

characteristics and healthcare utilisation, where any ‘unmet need’ (which does not show up in utilisation statistics) risks being locked in. To reduce health inequalities over time, the allocation methodology must take explicit account of this additional objective.

These principles are implemented in practice through the four main elements of the NHS funding allocation system: an assessment of each areas’ population’s relative need for medical services; an adjustment for local factors that affect the cost of providing medical services in different areas; funding aimed at reducing health inequalities and unmet need; and pace-of-change rules that place floors and caps on year-to-year changes in funding. We now discuss each of these in turn.<sup>13</sup>

### Estimating relative need for different services

For the purpose of assessing spending needs, funding is split into three streams: core services (including hospital and mental health care), primary care (such as GP services) and specialised services (treatment for rare and complex conditions). For the core services stream (75% of the overall total as of 2019–20), five models of utilisation are used: a model for acute services (44.9%), mental health (9.9%), prescribing (9.1%), community health (8.5%) and maternity (2.8%). For primary care (8.0%), a single utilisation model is used.

For specialised services (16.8%), a single utilisation model is used to determine 49% of the estimated need, and past funding is used to determine the remaining 51% of need due to limited data on specialised services. This means, however, that past funding remains a key determinant of specialised service funding and so funding will be less responsive to changes in need. And if past funding did not reflect genuine need for care, current funding will also not reflect need. As part of the new ICB allocation methodology, a new utilisation model is being developed for specialised services, but has yet to be used to allocate funding.

In each utilisation model, the relationship between healthcare usage and individual and local characteristics is estimated by regressing individuals’ past usage of services on their characteristics. As discussed in Chapter 3, the idea is that by looking at the relationship between a range of metrics and healthcare use in the past, we can use the predicted level of those metrics in future years to estimate how much healthcare the population in each area will use (or need) in those years. It is worth noting that in some cases, such as for primary care and community healthcare, there are insufficient data on past healthcare usage, so a proxy variable is instead used.

<sup>13</sup> CCGs also receive some funding on top of this formula-based funding for their ‘running costs’ as well as occasional adjustments for particular services, which are not discussed further. Running costs include the costs of forecasting and assessing the health needs of the population, managing procurement contracts and improving system integration.

Table 4.1 summarises the utilisation (or proxy) variables and individual and local characteristics used in each model. The selection of these variables and characteristics affects the predictions of spending needs produced by this approach. Several rules are used to determine which characteristics are included, and the included characteristics differ in each utilisation model. Some characteristics are excluded because their effect is in an unexpected direction. For example, in the general and acute services model, the percentage claiming Job Seekers Allowance predicts lower need and so is removed.

**Table 4.1. Examples of variables used in utilisation models, 2019–20**

	Measure of usage	Individual-level explanatory variables	Local area explanatory variables
General and acute	Hospital usage	Age, gender, ethnicity, physical health variables, household composition	Deprivation decile; proportion in receipt of benefits; proportion of students; prevalence of severe mental illness; proportion of those aged 70+ claiming disability living allowance
Mental health	Hospital and specialised mental health services usage		
Prescribing	Medicines prescribed in primary care		
Community health	District nursing (as a proxy)		
Maternity	Hospital usage for births		
Primary care	Time patient file is open (as a proxy) <sup>14</sup>		
Specialised services	Hospital, mental health, maternity and prescribing usage for specialised conditions		

Note: This does not include all explanatory variables used in each model, and not all explanatory variables listed here are used in all the models.

Source: NHS England and Improvement (2019).

This variable selection process used is limited for several reasons. It is sensible to omit variables if they are not capturing actual need for services, perhaps because of unmet need. But if a variable has an effect in an unexpected direction, this does not necessarily mean that it is driven by unmet need. It may be that the true effect is in a surprising direction – this is particularly

<sup>14</sup> The time a patient's file is open is used as a proxy for the amount of primary care they receive. This is measured as the number of minutes that each patient's electronic medical record is viewed by a member of the GP practice's staff. This is weighted by the staff group that is looking at the file (GPs, practice nurses and practice administrators) to reflect differences in their salaries.

likely when conditioning on many other correlated variables, as this analysis does. Moreover, if we are concerned about the influence of unmet need, this can substantially change the magnitude of estimated relationships without changing the sign from the expected direction. Eliminating variables based on them having the ‘incorrect’ sign therefore risks eliminating variables that are not biased by unmet need, and leaving variables that are biased by unmet need.

A more fundamental issue with this approach is that later in the allocation process an explicit adjustment is made for estimated unmet need and health inequalities. Indirectly adjusting for unmet need in a piecemeal way here too makes the process less transparent, and risks dealing with unmet need in an inconsistent way for different population groups.

The variable selection approach has been updated for the general and acute utilisation model in the new ICB allocation methodology. There are improvements in how local area variables are selected to be included compared with the approach previously used, but the unmet need issue we have discussed here remains, as this is an issue that is fundamental to utilisation models.

Another important issue when estimating need with utilisation models is that the relationships estimated can be contaminated by past funding allocations and decisions. For example, it may be that past funding was targeted to areas with higher deprivation and so those areas have higher usage because the higher funding made services easier to access. The formula would then predict that these areas have higher need, but this may be only because of past funding rather than genuinely higher need.

This problem is at least partially addressed in two related ways. First, as discussed in Chapter 3, by using individual-level (rather than CCG-level) regressions, the impact of past funding and provision on the estimated relationships between utilisation and individual and local characteristics can be reduced. Second, measures of local service provision are included in the utilisation models to control directly for differences in provision; for example, the general and acute model includes the distance to the nearest hospital, as well as CCG indicators to control for permanent differences in provision between CCGs. However, the generalisability of some specific measures of past provision (such as median waiting times for dermatology patients and 95<sup>th</sup> percentile waiting times for neurosurgery patients) used until recently is unclear.<sup>15</sup> The number of indicators used has been cut back in the new ICB allocation methodology, with only CCG indicators and median waiting times for non-admitted patients included as supply side variables in the general and acute utilisation model.

<sup>15</sup> Measures such as overall waiting times are excluded from the analysis due to their ‘incorrect’ signs, which highlights the problems with the way that variables are selected to be included in the utilisation models.

Notwithstanding these issues, the estimated models can be used to predict needs for each area based on the full set of population and local area characteristics included in the models. However, when forecasting future healthcare needs, the ability to take account of future changes in population and local area characteristics is limited; official ONS projections exist for the size and age and gender structure of the population, but not the other characteristics included in the models, such as local area deprivation or rates of comorbidities.

The methodology uses a multi-stage approach to overcome this. First, the average characteristics for each age and gender group (such as average local area deprivation for males aged 30–34) are calculated for each local area in the period that is used to estimate the model. Second, the amount of care needed by each age and gender group in each local area is estimated. This is done by plugging into the model the age and gender of the group plus the average of other characteristics calculated in the previous stage. Third, this information is combined with ONS projections of the age and gender populations of each local area to predict future need. This effectively assumes that the other characteristics of each age and gender group of each local area remains constant in future; the predictions only account for projected changes in population by age and gender.

More generally, the utilisation models assume that the relationships between usage and population characteristics originally estimated continue to be relevant and can be used for forecasting future assessed needs, provided updated population projections are plugged into them. Given that most of the models, including the general and acute model, were originally estimated using data from 2013–14, and were not updated until this year, it is likely that assessments of needs were becoming less accurate over time. The new allocation methodology for ICBs from 2022–23 onwards has refreshed the utilisation models for many of these services. For most services, this involved running the same statistical model using more up-to-date data. For general and acute services, this also involved updating which variables were used in the model. This means that assessed needs will be closer to actual needs if these relationships have changed over time.

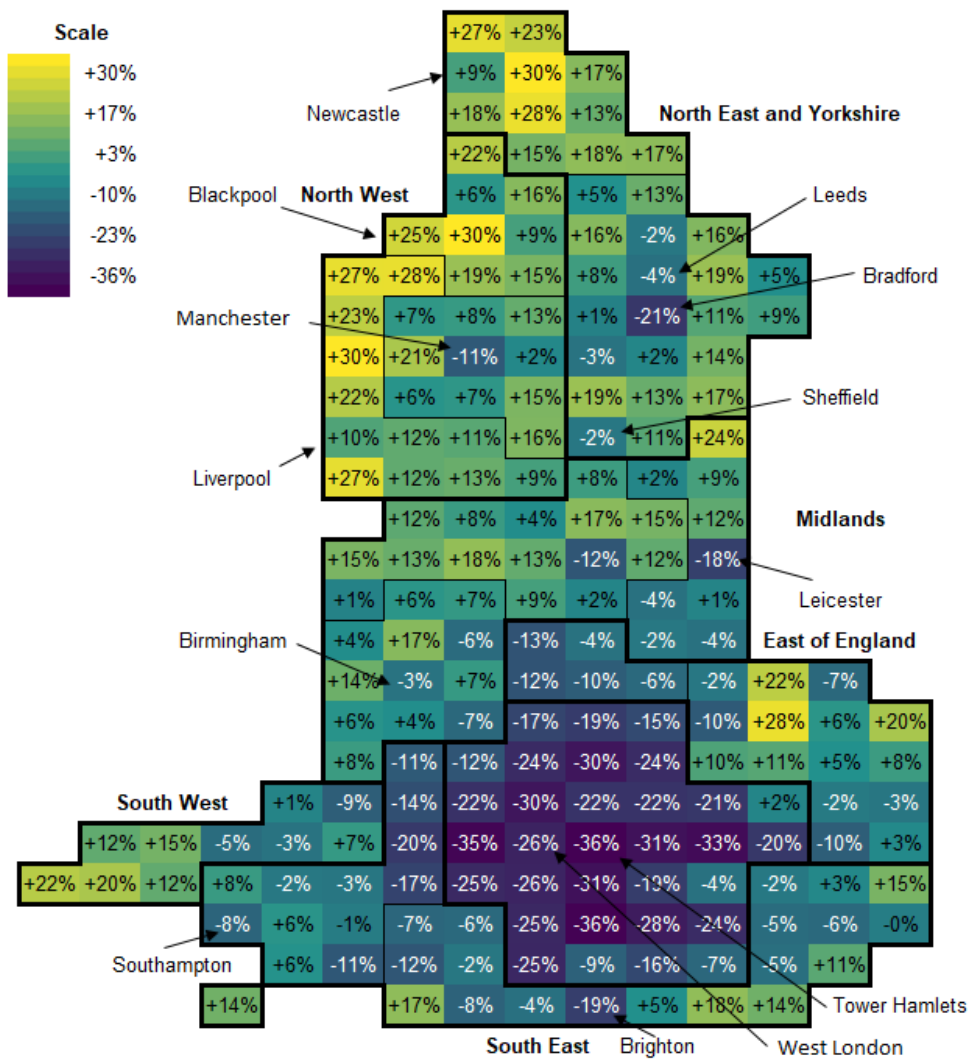
Bearing this in mind, Figure 4.1 shows the estimated need for general and acute services and mental health services for each CCG in 2019–20. For each CCG, the number in the map is the relative demand per capita compared to the national average, so a value of 1.2 would indicate that estimated need is 20% higher per capita than the national average and a value of 0.8 would indicate that estimated need is 20% lower than the national average. Both maps show that there was a large degree of variation in estimated need across CCGs and regions of England, but also that relative need for different services can differ substantially within the same CCG.

For general and acute services, estimated relative need was highest in the North West and the coasts of England, while relative need is lowest in London. The CCG with the highest estimated

need was Fylde and Wyre, at 30% above the national average, while the CCG with the lowest estimated need was Tower Hamlets, at 36% below the national average. For mental health, the pattern of estimated need is substantially different: the North West continued to have relatively high need, but so too did London. The CCG with the highest estimated relative need was Southwark, at 62% above the national average, and the CCG with the lowest estimated relative need was Surrey Heath, at 35% below the national average. Some areas had very different estimated needs for general and acute and mental health services, while others had similarly high or low estimated needs. The correlation between estimated general and acute need and mental health need was  $-0.15$ , which means that areas with above average estimated general and acute needs on average had slightly below-average estimated mental health needs, and vice versa.

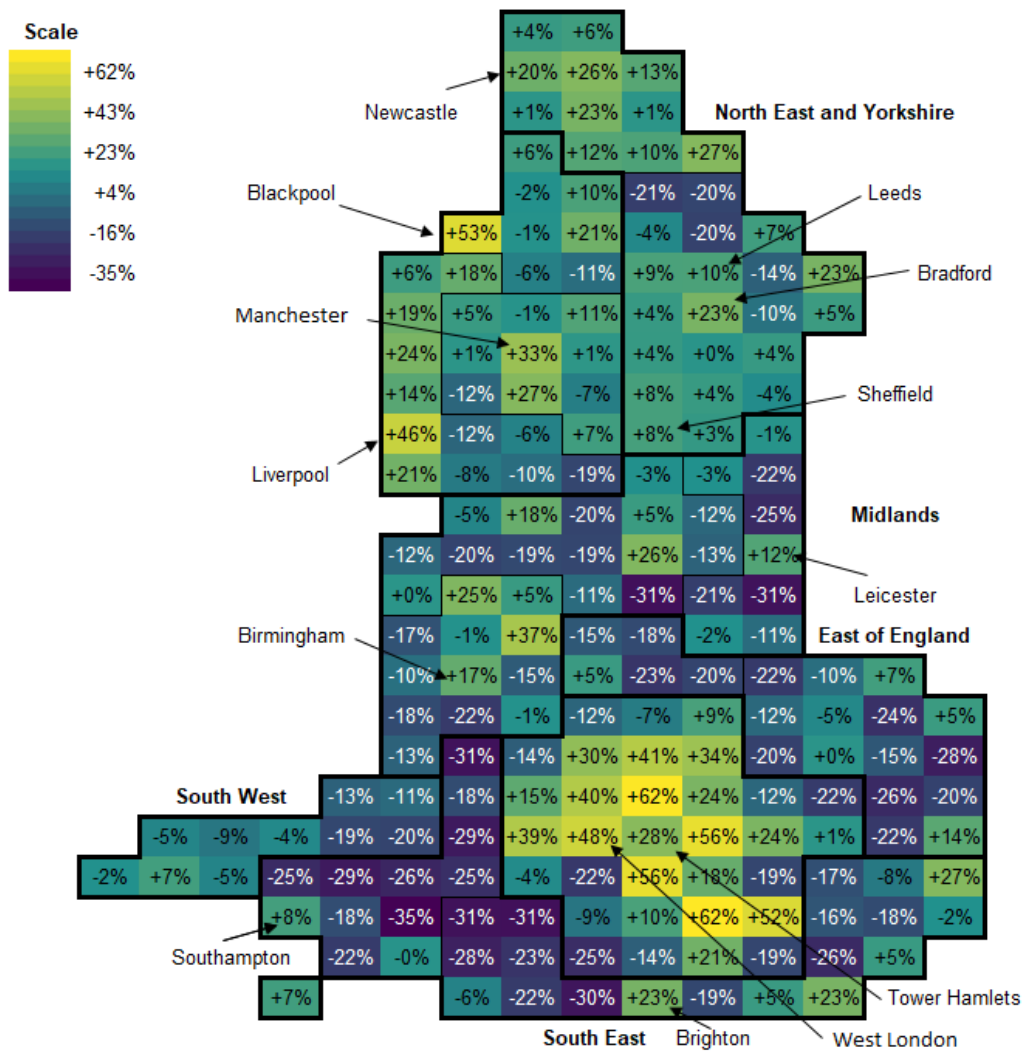
**Figure 4.1. Estimated need per capita for different medical services by CCG in 2019–20 relative to national average**

(a) General and acute utilisation





(b) Mental health utilisation



Note: Both panels show estimated relative need, where a larger percentage indicates that the CCG has a higher estimated need relative to the national average. Each square represents a CCG. This map gives each CCG equal size but, in reality, their geographic and population sizes vary significantly across the country. Maps throughout this report use colour schemes generated by <https://cran.r-project.org/web/packages/viridis/>.

Source: NHS England (2019a, spreadsheets C1 and D). Map design based on NHS England and Improvement's CCG Cartogram.

### Health inequalities and unmet need adjustments

The next part of the process is to estimate health inequalities and unmet need for healthcare services in each area. A combination of estimated need from the utilisation models and this estimate of health inequalities and unmet need then determines the total estimated need for each area. For the core services stream, the estimate of health inequalities and unmet need is given a 10% weight; for the primary care stream, it is given a 15% weight; and for the specialised services stream, it is given a 5% weight. (This implies 90%, 85% and 95% weights, respectively,



for the main utilisation-based estimates of need.) These weights are not based on recommendations from the Advisory Committee on Resource Allocation, due to a lack of available high-quality evidence. Instead, the weights are set by NHS England to reflect its view of the relative contribution of each stream in reducing unmet need and health inequalities.

Health inequalities and unmet need are clearly broad concepts with many possible ways of being measured. In practice, until recently it was measured using the standardised mortality ratio for those aged under 75 (SMR<75). A standardised mortality ratio is a measure of how many deaths there are in a local area, having adjusted for differences in the age profile of the population. The idea is that areas with a higher mortality ratio have worse overall population health. Differences in mortality (and its counterpart, life expectancy) are therefore a common measure of inequalities in health, and could also reflect differences in unmet demand for healthcare services.

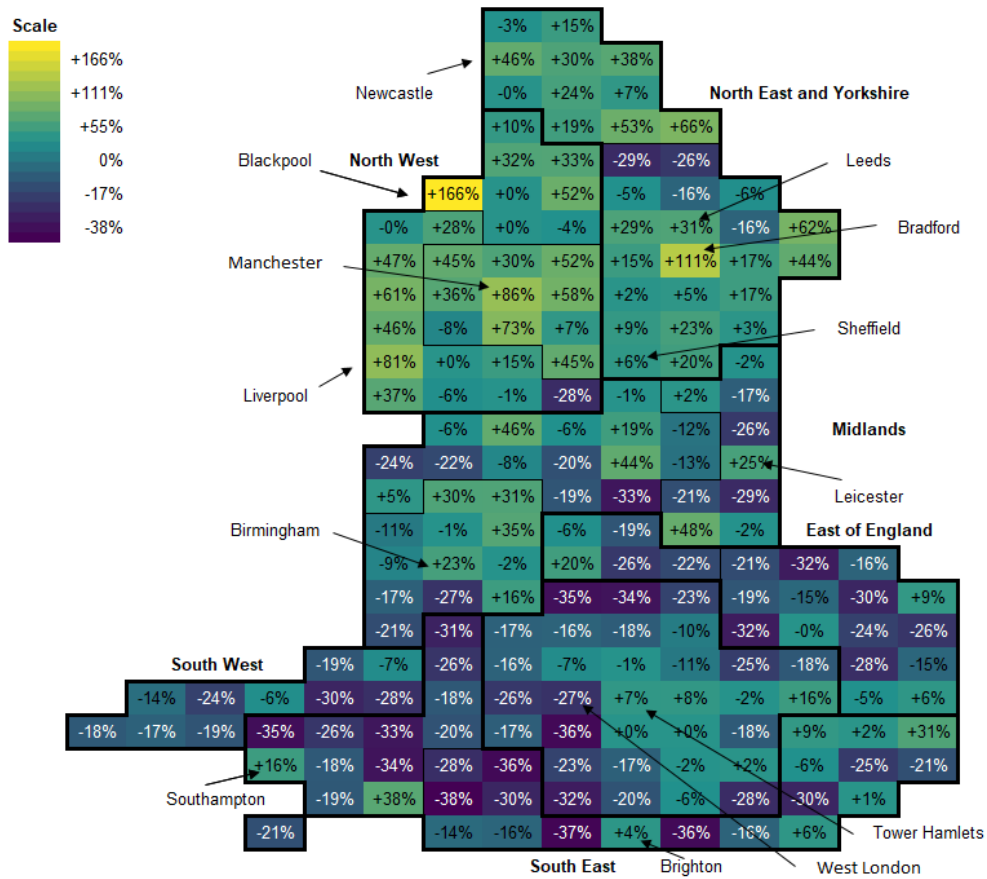
The new methodology for ICB allocations has changed how health inequalities and unmet demand are measured. Rather than using SMR<75, a measure of avoidable mortality is now used. This more closely captures health inequalities and unmet need because it only includes causes of death that have been judged to have been avoidable, either through healthcare intervention or public health measures. Neither of these measures, however, is perfect. Evaluation by the Advisory Committee on Resource Allocation suggests that both SMR<75 and avoidable mortality predict physical morbidity relatively well, but neither predict mental health need well.

Returning to the approach used in 2019–20, the SMR<75 was measured at the Middle Layer Super Output Area (MSOA) level, a census geographical unit with a mean population of 8,300. Each MSOA was then split into 16 groups based on its level of mortality, and each group given a weight between 1 and 10. The weighting for each group was exponentially increasing so that resources are targeted at the areas with the highest SMR<75. The final weight for each CCG was then the average of each MSOA within its borders. This had important implications because some CCGs with low average SMR<75 may have some areas with very high SMR<75, and so by using small geographical units to measure health inequalities and unmet need, such CCGs received more funding than if average SMR<75 in the whole CCG was used.

Figure 4.2 shows the distribution of estimated health inequalities and unmet demand across the country (CCG weighted averages of SMR<75 values) as of 2019–20. As in Figure 4.1, values are relative to the national average. Blackpool had by far the highest level, at 166% above the national average while Bradford City, the second highest, was 111% above the national average. Regions such as the South West and the South East have the relatively low levels of estimated health inequalities and unmet demand (i.e. low rates of SMR<75) despite having relatively high levels of estimated general and acute need, whereas London had relatively high inequalities and unmet need (as measured by a high SMR<75) despite lower estimated general and acute need.

The CCG with the lowest estimated health inequalities and unmet demand was Guildford and Waverley, at 38% below the national average.

Figure 4.2. Map of estimated health inequalities and unmet demand relative to national average, 2019–20



Note: Each square represents a CCG. This map gives each CCG equal size but, in reality, their geographic and population sizes vary significantly across the country.

Source: NHS England (2019a, spreadsheet G). Map design based on NHS England and Improvement’s CCG Cartogram.

### Unavoidable cost adjustments

All the adjustments so far have focused on assessing relative differences in assessed need between CCGs. But the main objective of the allocation process is equal access for equal need, not equal funding for equal need. This is important because the costs of providing healthcare services differ substantially between different areas with the same need, and so equal funding for equal need would not result in equal access for equal need.

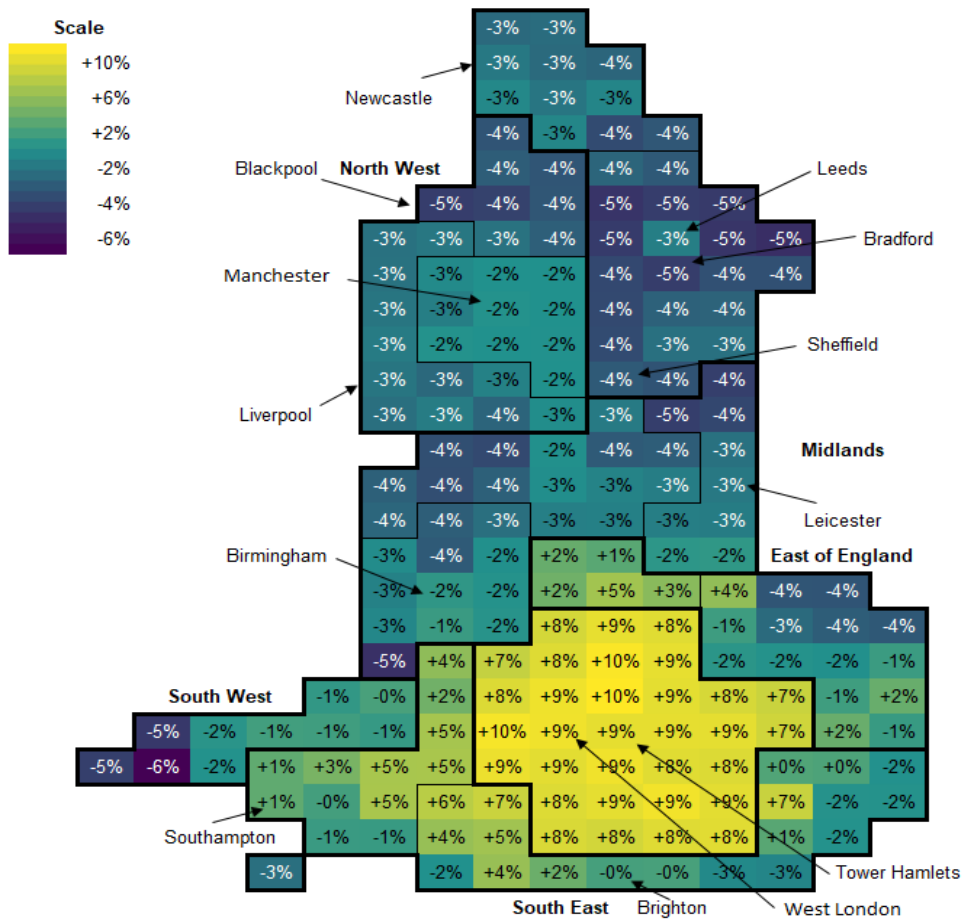
The main cost adjustment uses the Market Forces Factor (MFF), which measures unavoidable differences in input costs between different geographic areas. This is broken down into

differences in staff costs, land costs, buildings costs, business rates and other costs. The MFF is calculated for each NHS provider as it is also used to calculate how much each provider is paid for healthcare services via the National Tariff. The MFF for each area is then calculated as the average of providers' factors, weighted by how much each spends with each provider.

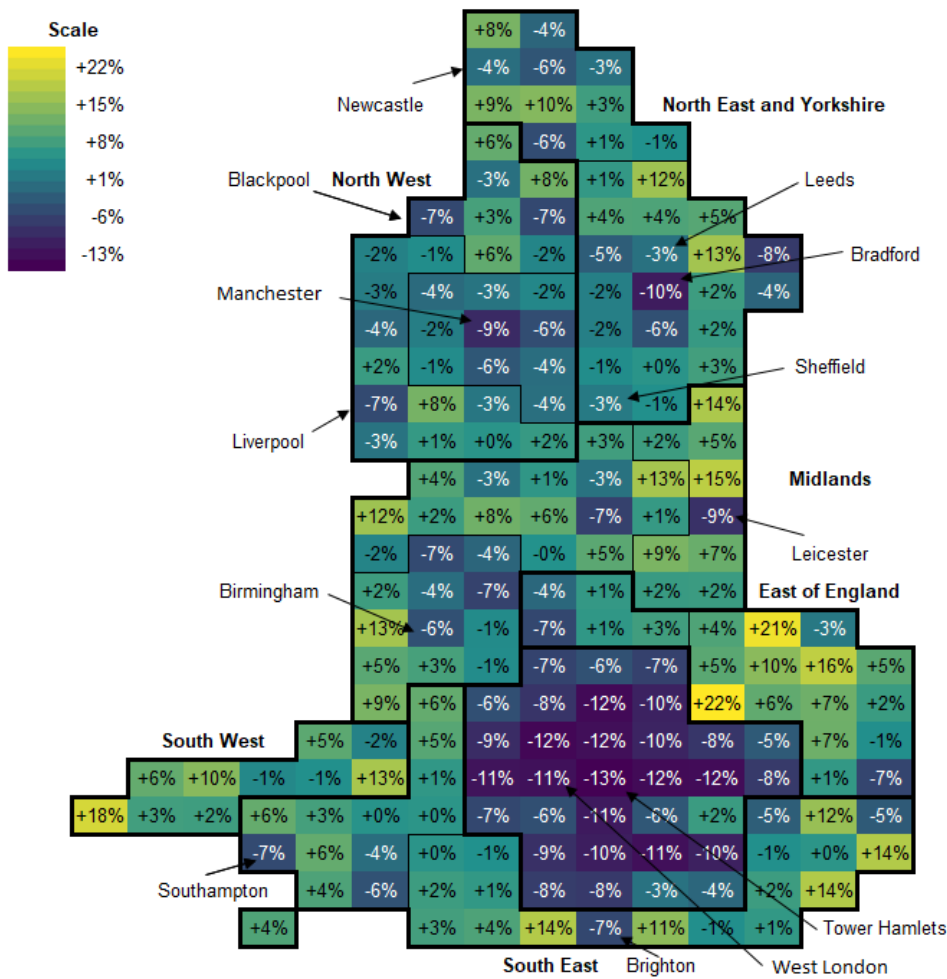
There are two other cost adjustments. The first is the higher costs of providing ambulance services in sparsely populated areas. Areas that are further from A&E departments and with lower population density are given more funding relative to those closer to A&E departments and with a higher population density. The second adjustment is the cost of providing A&E services in remote areas where demand may be too low to operate at an efficient scale. Eight hospitals have been identified as being in this group, based on having a small nearby population and no nearby alternative provider, and so the areas they are located in receive additional funding.

Figure 4.3. Maps of cost adjustments

(a) Market Forces Factor



(b) Remote ambulance costs



Note: Panels (a) and (b) show the relative cost of each CCG, where a higher number indicates a higher relative cost of providing the same service. Each square represents a CCG. This map gives each CCG equal size but, in reality, their geographic and population sizes vary significantly across the country.

Source: NHS England (2019a, spreadsheets H and J). Map design based on NHS England and Improvement’s CCG Cartogram.

Figure 4.3 shows how these cost adjustments vary across the country. The MFF is highest in London and its periphery (up to 10% above the national average), and lowest in the rest of the country, particularly in areas further away from other major cities. Ambulance costs are lowest in London and other major cities, and highest in more rural areas such as Suffolk, Norfolk, Sussex, Cornwall and Lincolnshire.

### Pace-of-change rules

The three previous sections – on assessments of relative need for medical services; adjustments for health inequalities; and adjustments for differences in the cost of providing medical services – cover the way NHS England calculates each area’s *target* funding allocation. But the *actual*

allocations received by areas differ from their target allocations because of a complex set of what have historically been called pace-of-change rules. These rules specify minimum and maximum growth rates for funding relative to the previous year's level. For each stream, a minimum allocation is set based on previous funding and minimum growth rules. For the core services stream, growth rates were set such that no area would be more than 5% below target in 2019–20. Areas between –2.5% and +5% from their target were given equal per-capita growth rates, and areas more than 5% above their target received lower per-capita growth, falling to a lower limit for those more than 10% above target, equal to inflation (as measured by the GDP deflator).

This final rule meant that areas could never receive real-terms cuts in funding, even if they had more than 10% more funding than what the NHS estimated that they needed; so, any increase in funding was permanent, because funding cannot subsequently fall even if healthcare need in a local area falls. Moreover, this meant that spending could only be significantly redistributed between areas when funding growth was much faster than inflation; so, areas that were assessed to need more funding could receive larger increases than areas assessed to have too much funding, who would still receive an increase at least in line with inflation.

Similar pace-of-change rules applied for the primary care stream. For specialised services, all areas received the same increase per person, which effectively fixed the distribution of funding between areas at its historic level and did not account at all for whether an area was estimated to be below or above its target funding level, or for changes in assessed spending needs.<sup>16</sup> Pace-of-change rules were also applied to the total allocation (the sum of the three streams), with excess funding allocated to whichever stream was most below target. In a later section, we analyse the implications of these pace-of-change rules for CCG distances from target allocations, how this related to other factors and how this changed over time.

In the new ICB allocation methodology, the pace-of-change rules have been renamed 'convergence rules'. Applying such rules is more complicated for the 2022–23 allocations because the 2021–22 baseline funding levels have to be adjusted for both COVID-19 funding and the transition from CCGs to ICBs. The convergence rules themselves are similar to the previous CCG rules. Each funding stream starts with a base growth rate that each ICB receives. This is set based on expected cost pressures. Then areas that are below their target after this base growth receive an additional increase, while those above their target receive a decrease in funding. In both cases, ICBs further from their targets receive larger adjustments. An important change is that ICBs are not guaranteed real-terms funding increases.

<sup>16</sup> Fixing the distribution in per-capita terms is better than fixing the distribution at the CCG level, as it allows the distribution of CCG funding at least to adjust to reflect differential population growth rates.

### The commissioning process and additional funding for providers

Thus far, we have focused on the allocations to the main commissioning bodies (historically, CCGs and now ICBs), which form the vast majority of NHS spending. But as mentioned earlier, these bodies use their allocations to commission medical services from different NHS providers. The distribution of funding to providers therefore depends on how these bodies allocate their funding, rather than a national formula.

For the services funded under the core services stream, including hospital and community care, CCGs historically estimated the quantity and type of different medical services their population would require. They then contracted different providers, including NHS trusts, to provide a given quantity of these services. For most services, CCGs paid providers an amount for each unit of treatment specified by the National Tariff (adjusted for cost differences using the MFF), but for some services CCGs negotiated prices with providers. This system was designed to separate the commissioning process from the healthcare delivery process, and therefore increase efficiency and quality as different providers compete to provide the same services.

During 2019–20, both NHS England and CCGs commissioned GP practices to provide primary care services. For providing core commissioned services, practices are remunerated using the Carr–Hill formula. This is a different formula to the utilisation model that is used to allocate primary funding to CCGs, though it is also based on the composition of each GP practice’s patients. GP practices can also receive additional funding for providing additional services, and for performance against a number of indicators via the Quality and Outcomes Framework.<sup>17</sup>

The transition from CCGs to ICSs has changed the commissioning process.<sup>18</sup> Commissioning responsibilities have been transferred from CCGs to ICBs. ICBs have also received some commissioning responsibilities from NHS England, such as primary care, that were previously shared between CCGs and NHS England. The ultimate goal is that the commissioning process moves towards strategic commissioning, where ICSs work more closely with other partners across the wider healthcare system. For example, ICSs can work more formally with local government and local charities through Integrated Care Partnerships (ICPs).

Other NHS providers can also receive additional funding directly from NHS England outside of the CCG allocation process. This adds an additional layer of complexity to how much funding each local area receives, particularly given the many (similarly named) schemes that are used to top-up provider funding. For example, the Provider Sustainability Fund and Financial Recovery Fund have been used to provide additional funding to NHS trusts. In 2019–20, the Provider Sustainability Fund budgeted £1.1 billion for acute and specialist trusts and £155 million for the

<sup>17</sup> For more information about GP practice commissioning and finances, see Beech and Baird (2020).

<sup>18</sup> This section draws upon Charles (2022), who give much more detail on the new ICSs.

non-acute sector. This funding was allocated to providers that agreed to NHS England's limits on their expenditure and other targets. The Financial Recovery Fund had a budget of £1.05 billion, which could be allocated to trusts that were in deficit and that agreed to NHS England's expenditure limits (NHS Operational Planning and Contracting Guidance 2019–20). An additional £1 billion was used to subsidise urgent and emergency care prices paid by CCGs to providers. When national decisions are taken that have an impact on the costs of providers, NHS England or the DHSC will also provide additional funding to providers. For example, in 2018–19, as part of the Agenda for Change pay deal, providers received an additional £800 million in funding directly from the DHSC.

In the new ICB allocations for 2022–23 onwards, sustainability funding for NHS providers and commissioners is now part of the main funding allocations, rather than an additional top-up. This should increase the transparency of the total NHS funding allocations to different local areas.

### Past changes to the allocation process

CCGs were created as part of the 2012 Health and Social Care Act, and replaced primary care trusts from 2013–14. However, the general approach to allocating NHS funding between places predates the creation of CCGs, with the Department of Health using estimates of different areas' spending needs since 1977–78. For example, primary care trusts were allocated funding via a similar set of formulae, based on assessing the needs of their population and adjusting for cost differences.<sup>19</sup>

Perhaps the largest change in the allocation process in recent years, implemented from 2014–15, was the inclusion of an additional adjustment for unmet need and health inequalities rather than relying only on utilisation models, which may miss unmet need. This was a consequence of the 2012 Health and Social Care Act, which gave the NHS responsibility for reducing health inequalities for the first time.<sup>20</sup>

### Public health funding

One area of health funding that is not allocated to CCGs is funding for public health services. This funding has, since 2013–14, been allocated directly by the DHSC to councils rather than through NHS bodies. This money is then ring-fenced within councils' budgets to be spent on public health measures, including but not limited to: sexual health services; children's health;<sup>21</sup>

<sup>19</sup> Department of Health (2011).

<sup>20</sup> NHS England (2015).

<sup>21</sup> Prior to October 2015, councils were only responsible for children's health services for children older than five. In October 2015, the responsibility for some children's 0–5 services was also transferred to councils, as discussed further below.



and services relating to obesity, drugs, alcohol and smoking.<sup>22</sup> However, unlike CCGs/ICBs, councils have other streams of funding and other areas of expenditure that can interact with public health spending, which means that dedicated public health funding from the DHSC does not have to match spending for public health services. In particular, councils can pay into and draw down public health reserves over time, can utilise public health funding for other services provided it serves a public health function (e.g. leisure facilities, parks, youth centres), and can top up spending on public health services from other revenue streams. Council spending on different services is discussed in more detail in Chapter 6.

As with the allocations to CCGs/ICBs, the main objectives of the allocation of council public health funding are to ‘support equal opportunity of access to services for equal need’ and to ‘contribute to the reduction in avoidable health inequalities’. The initial allocations for public health spending were based on planned NHS spending in each council area. Similar to CCG/ICBs, the plan was then to move towards target allocations based on estimated spending needs, calculated using formulae that depend on local characteristics that were developed by the Advisory Committee on Resource Allocation when public health was devolved to councils in 2013–14, and updated in 2014–15.<sup>23</sup>

The methodology used to determine estimated spending needs and hence target funding is very similar to the methodology for CCG/ICB funding, whereby a need- and cost-weighted population is calculated for each local authority. Public health services are split into three components: mandatory services (some sexual health services, child health, public health), non-mandatory services (other sexual health services, obesity and physical activity services, smoking services) and substance misuse services (alcohol and drugs).

For six of the largest services, historic need is estimated for age and gender groups, based on a number of different measures, as summarised in Table 4.2. The model for drug misuse services is like the models used in the CCG allocations, because it uses past utilisation as a predictor of need. The models for the five other services, however, differ from this utilisation approach and instead use proxies of need. For example, the sexual health services model uses the rates of sexually transmitted infections, a clear measure of the need for such services. Because these measures are closer to need than measures based on past utilisation, they also better capture unmet need and health inequalities. For example, the percentage of people who smoke captures both the need for tobacco misuse services but also inequalities in the smoking rate between

<sup>22</sup> Councils can also spend their own resources, from central government funding or local revenue, on these public health services, but cannot spend the allocations from DHSC on other services.

<sup>23</sup> This section is based on Department of Health (2013a), which explains the formulas in use in 2014–15. These did not estimate needs for spending on children under 5, responsibility for which was only devolved in October 2015. As discussed further below, updated spending needs formulas incorporating these responsibilities were estimated but never implemented.



different areas. The exception to this is the model for children’s services, which uses the percentage of the population aged between 5–19, which captures a key driver of need but not inequalities in, for example, children’s outcomes.

**Table 4.2. Data used to estimate age and gender profiles of need**

Service	Adults	Children aged 5–16	Children aged <5
Nutrition, obesity and physical activity	Percentage in each group who eat fewer than five portions of fruit and vegetables per day		Same measure but for parental age groups
Alcohol misuse	Percentage in each group who engage in binge drinking	Percentage of 14–15 year olds who have drunk an alcoholic drink in the last month	Same measure but for parental age groups
Tobacco misuse	Percentage in each group who smoke	Percentage of 14–15 year olds who report smoking or being near smokers at home	Same measure but for parental age groups
Sexual health	Rates of diagnoses for sexually transmitted infections	N/A	
Children’s services	Percentage aged 5–19		N/A – responsibility of NHS England prior to October 2015
Drug misuse	Activity data of treatment activity for drug misuse for 12+	Same measure but for parental age groups for those under 12	

Source: Department of Health (2013a).

For the remaining services, funding is based on the standardised mortality rate for those under 75 (SMR<75), which is used to measure health inequalities and unmet need in the CCG allocation process. In the case of public health, differences in the standardised mortality rate capture both the need for public health services and inequalities in health outcomes, which may be addressed using public health funding. Standardised mortality rates are measured at the MSOA level, so each MSOA is assigned a weight based on which one of ten groups it belongs in. As with the CCG allocations, the weight for each group is exponentially increasing so that funding is targeted at areas with the highest need, with the group with the highest mortality assigned a weight five times larger than the weight for the group with the lowest mortality. These weights are then aggregated to the council level.

These needs-based population weights are then adjusted for differences in the costs of providing services using the MFF. The target allocation is then calculated as the national funding stream multiplied by the relative weight of each local authority.

Pace-of-change policies were then applied to determine actual allocations in 2013–14 and 2014–15. These policies were similar to the policies used for CCGs, where minimum and maximum growth rates were set, and councils further away from their allocations were given faster growth rates. However, in 2015–16, the overall budget for public health spending was cut, and the DHSC decided to cut the allocation in equal percentage terms for all councils.

In addition, in October 2015, some responsibilities for public health services for children aged between 0–5 were transferred from NHS England to councils. Services were still delivered by primarily NHS providers, but councils were responsible for their commissioning.<sup>24</sup> Funding for these services in 2015–16 was allocated to councils based on planned spending by NHS England Area Teams on these services. Councils were also given a minimum floor of funding of £160 per population aged 0–5.<sup>25</sup>

In 2015, the Advisory Committee on Resource Allocation proposed an updated formula for public health allocations for 2016–17.<sup>26</sup> This included a new component to estimate the need for children’s 0–5 services, newly transferred to councils, as well as updates to data used to estimate need and new formulae for substance misuse and sexual health treatment services. However, this updated formula was not used to allocate funding, and instead funding continued to be reduced by the same percentage for all councils between 2016–17 to 2019–2020, in effect freezing the relative distribution of public health funding between different councils.<sup>27</sup>

## 4.2 The resulting funding allocations

### NHS funding

#### Overall funding distribution

Figure 4.4 shows the geographical distribution of overall funding to CCGs in 2019–20 relative to the national average and Figure 4.5 shows the distribution of funding levels.

<sup>24</sup> Department of Health (2015a)

<sup>25</sup> Department of Health (2015b)

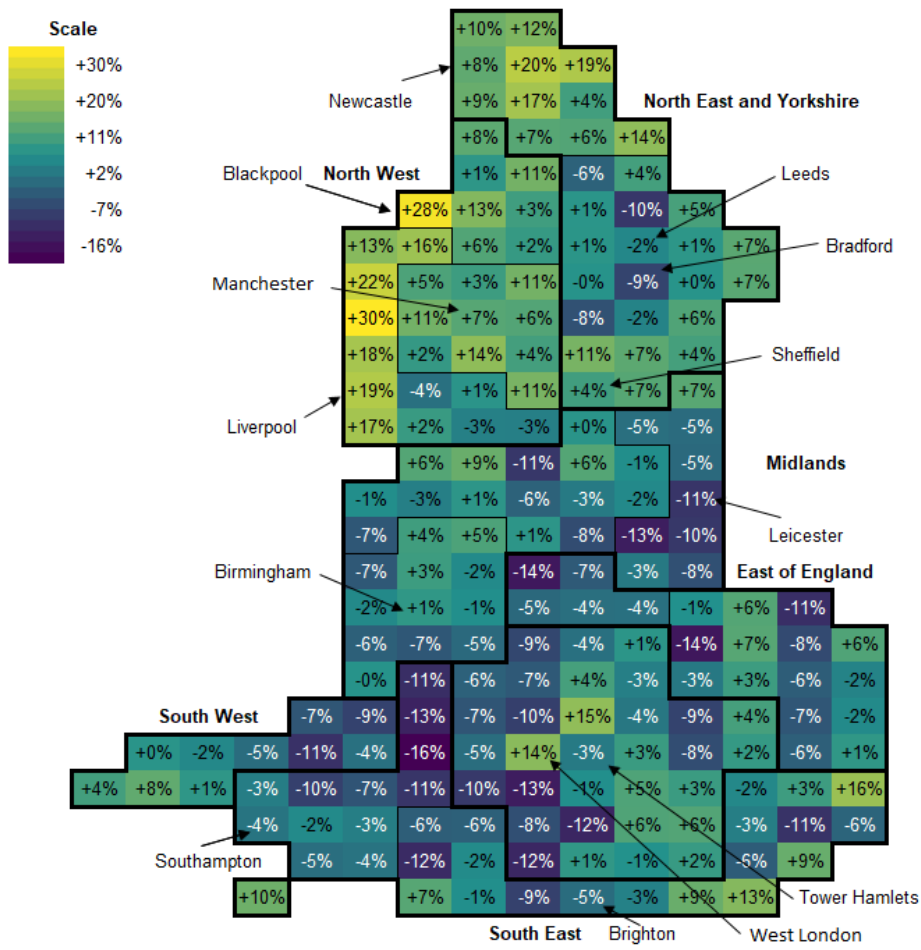
<sup>26</sup> Department of Health (2015c)

<sup>27</sup> Since 2020–21, the public health grant has risen in cash terms again, and this is planned to continue until at least 2022–23.

There are clear regional differences in funding, with CCGs in the North West receiving average funding of £1,923 per capita compared to £1,840 in the North East and Yorkshire, £1,720 per capita in London and £1,668 in the East of England. These regional differences are even starker once we adjust for differences in the costs of providing healthcare services, because London and the South East have higher estimated costs than the North of England. Having adjusted for differences in costs, the North West received £1,983 per capita compared to £1,585 in London.

The majority of CCGs received between £1,600 and £1,900 per person but there are some CCGs that received substantially more or less. At the extremes, Berkshire West received the lowest funding per capita, at £1,472 per head, while Knowsley received the most funding, £2,282 per head – 55% more per head than Berkshire West. This again understates the true differences in services that can be provided, as the estimated cost of providing healthcare services in Berkshire West is 5% above the national average, while the estimated cost of providing services in Knowsley is 4% below the national average. Having adjusted for this difference, Knowsley received 68% more per head than Berkshire West in 2019–20.

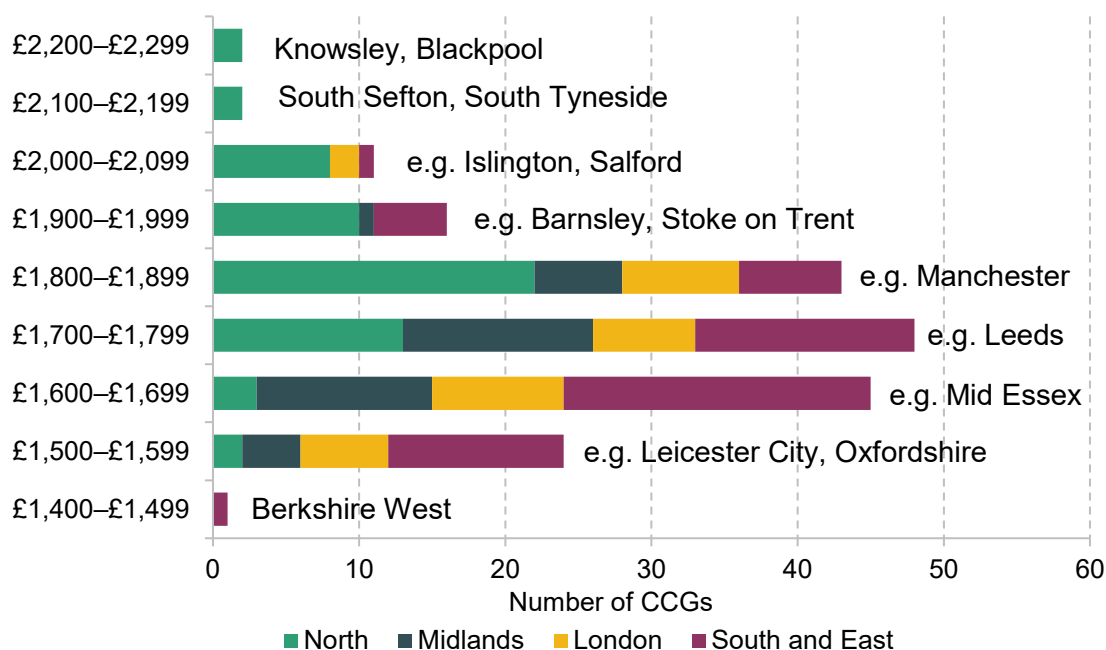
Figure 4.4. Map of CCG overall funding per capita 2019–20 relative to national average



Note: The value for each CCG is the percentage difference between their total funding allocation in 2019–20 and the national average. Each square represents a CCG. This map gives each CCG equal size but, in reality, their geographic and population sizes vary significantly across the country.

Source: NHS England (2019b). Map design based on NHS England and Improvement’s CCG Cartogram.

Figure 4.5. Distribution of CCG overall funding per capita 2019–20



Source: NHS England (2019b).

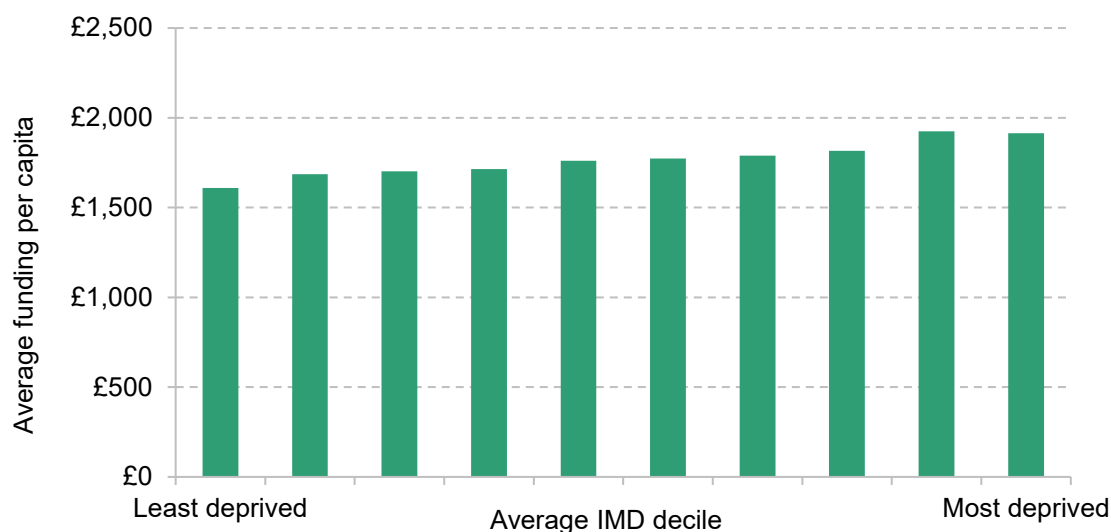
### Distribution of funding by CCG characteristics

In this section, we consider how average CCG funding in 2019–20 differed by different CCG characteristics. Figure 4.6 shows how funding differed by the socio-economic deprivation of CCGs. Panel (a) shows how funding differs by the average index of multiple deprivation (IMD) score of each Lower Layer Super Output Area (LSOA) in each CCG. Average funding increases with deprivation, and the CCGs in the most-deprived decile had an average funding allocation 19% higher than CCGs in the least-deprived decile. Panel (b) instead shows how funding differs by the percentage of LSOAs in each CCG that are the most deprived (in the 20% most-deprived MSOAs in the country). This gives a very similar pattern, with the most-deprived decile of CCGs receiving 18% higher funding on average than the CCGs in the least-deprived decile.

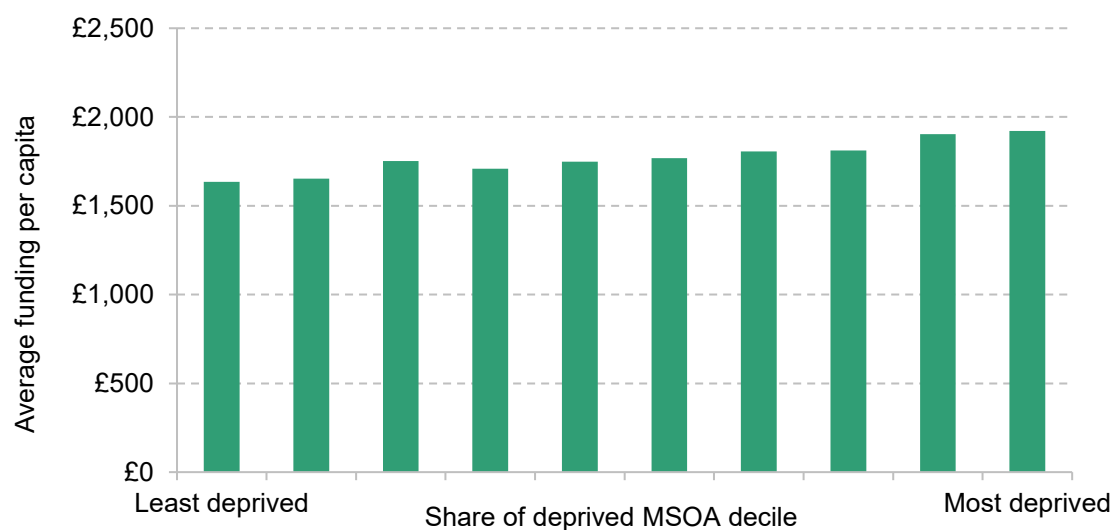
Figure 4.7 repeats this exercise for population density of CCGs (i.e. how urban or rural they are) and shows that there is no relationship between funding and population density. Figure 4.8 shows average CCG funding per capita in 2019–20 by the decile of standardised mortality rates for those under 75 (SMR<75). Unsurprisingly, as this is a variable used for allocation funding, those with higher mortality rates receive more funding. CCGs in the highest mortality decile receive funding 19.0% higher than CCGs in the lowest mortality decile.

Figure 4.6. Average CCG overall funding per capita 2019–20 by deprivation

(a) Average deprivation levels



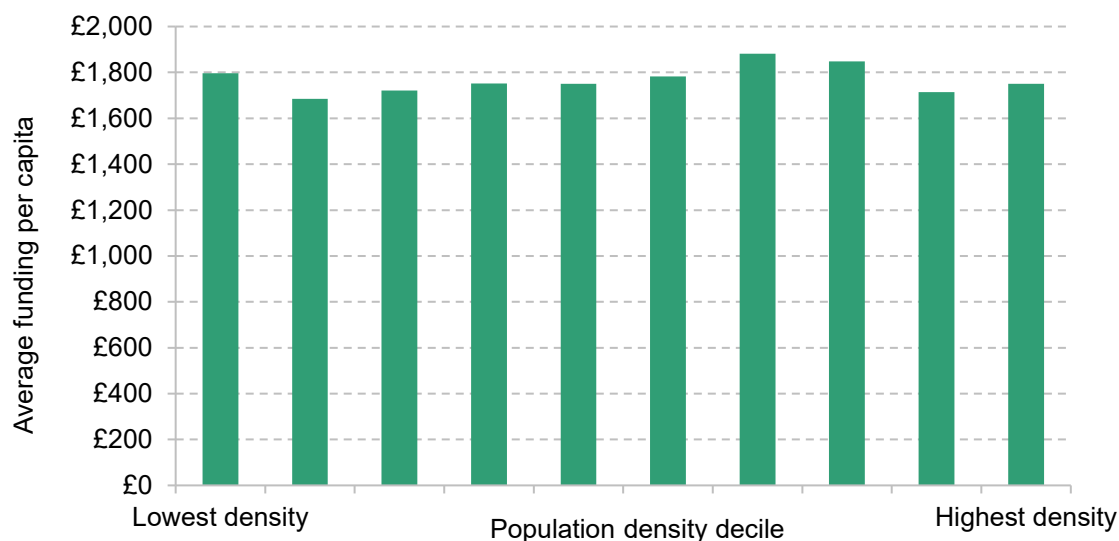
(b) Share of most-deprived MSOAs



Note: In Panel (a), CCG deprivation is calculated as the population-weighted IMD score of each LSOA in the CCG. Both CCGs in Devon are assigned the same IMD score, for the whole of Devon, as they received separate allocations but then merged in 2019. In Panel (b), CCG deprivation is calculated as the share of LSOAs in the CCG that are in the 20% most-deprived MSOAs nationally.

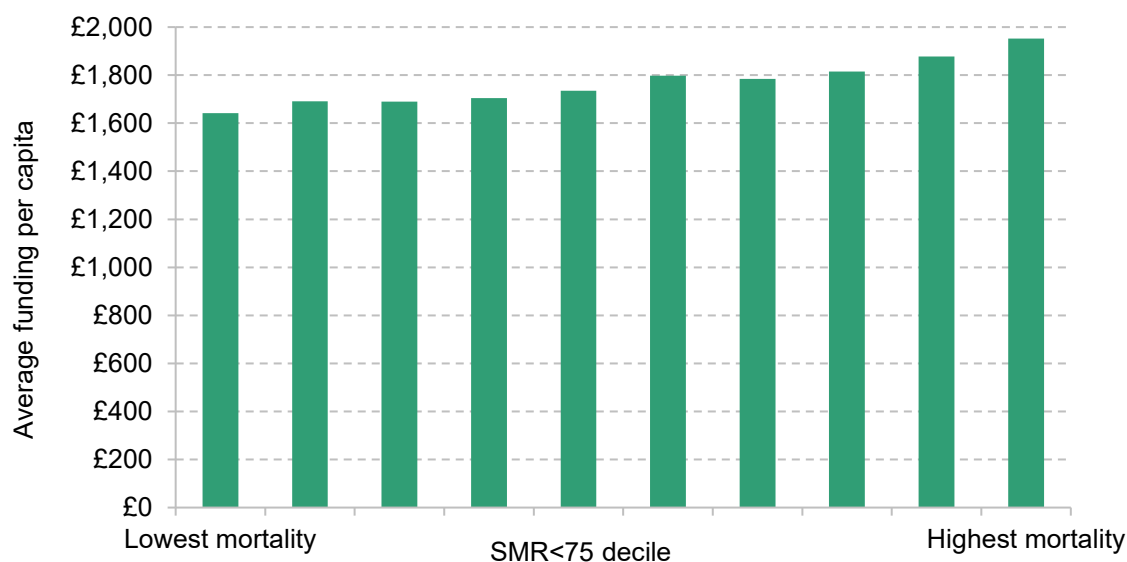
Source: Authors' calculations using NHS England (2019b) and Ministry of Housing, Communities and Local Government (2019d).

Figure 4.7. Average CCG overall funding per capita 2019–20 by population density decile



Note: Both CCGs in Devon are assigned the same population density, for the whole of Devon, as they received separate allocations but then merged in 2019.

Source: Authors' calculations using NHS England (2019b) and ONS's mid-2019 LSOA population density (see <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/lowersuperoutputareapopulationdensity>).

Figure 4.8. Average CCG overall funding per capita 2019–20 by SMR<75 decile<sup>28</sup>

Note: SMR<75 decile is using the allocation definition of exponentially weighting MSOAs within a CCG.

Source: Authors' calculations using NHS England (2019b) and NHS England (2019a, spreadsheet G).

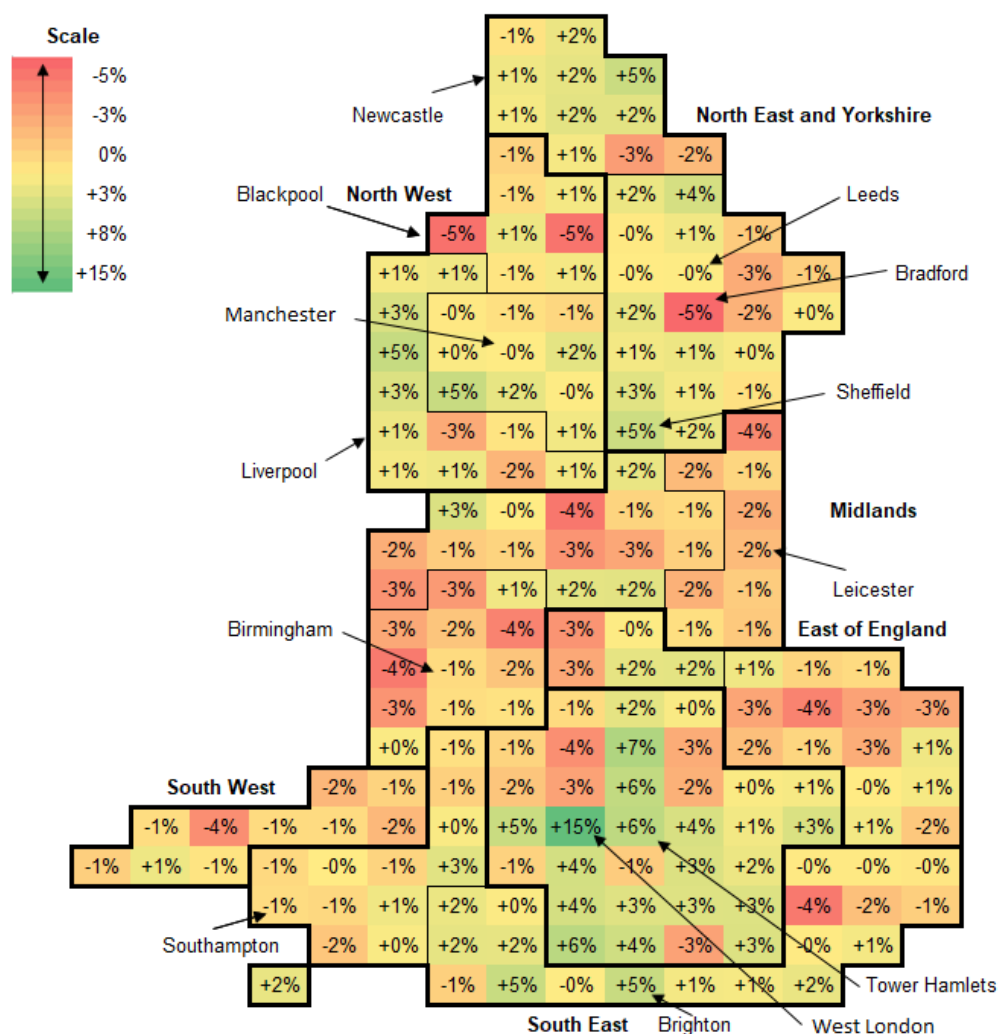
<sup>28</sup> We do not use healthy life expectancy as there is no up-to-date measure at geographies we can use for this analysis.

### Distance from target allocations

However, these actual allocations can differ substantially from the *target* allocations (the amount that the NHS formulae suggest that each area needs) due to the complex set of pace-of-change rules discussed in the previous section.

Figure 4.9 shows the geographical distribution of percentage distance from target in 2019–20 for overall CCG allocations, and Figure 4.10 shows the number of CCGs at different distances from their target allocations.

**Figure 4.9. Map of CCG percentage distance from target allocation 2019–20**

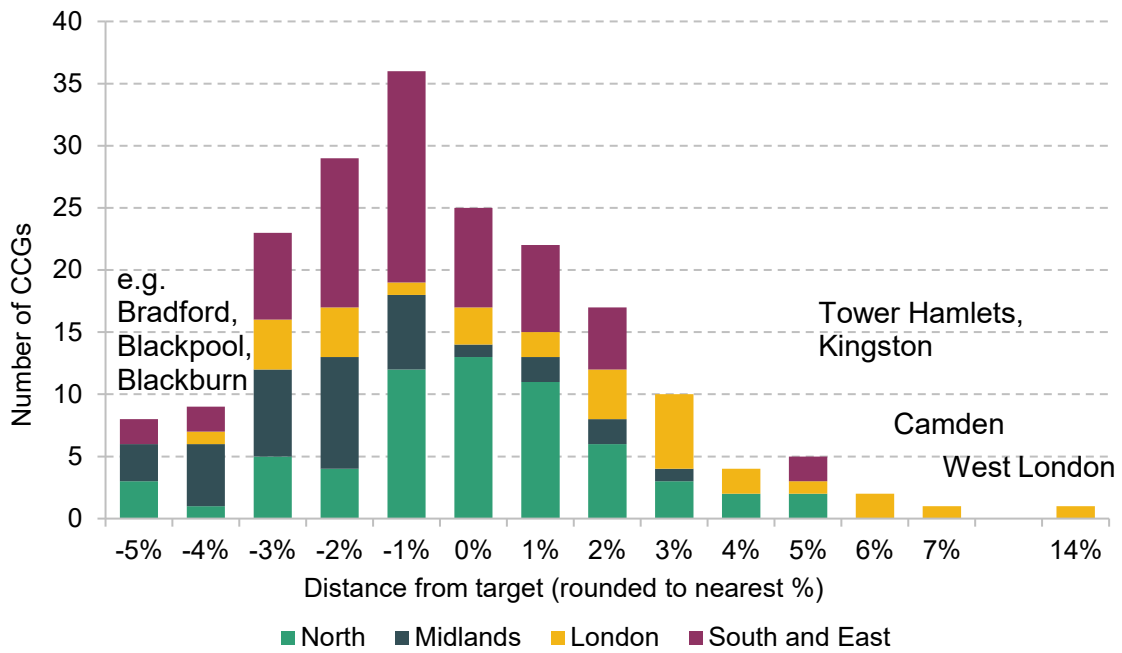


Note: The value for each CCG is their percentage distance from target in 2019–20. Each square represents a CCG. This map gives each CCG equal size but, in reality, their geographic and population sizes vary significantly across the country.

Source: NHS England (2019b). Map design is based on NHS England and Improvement’s CCG Cartogram.

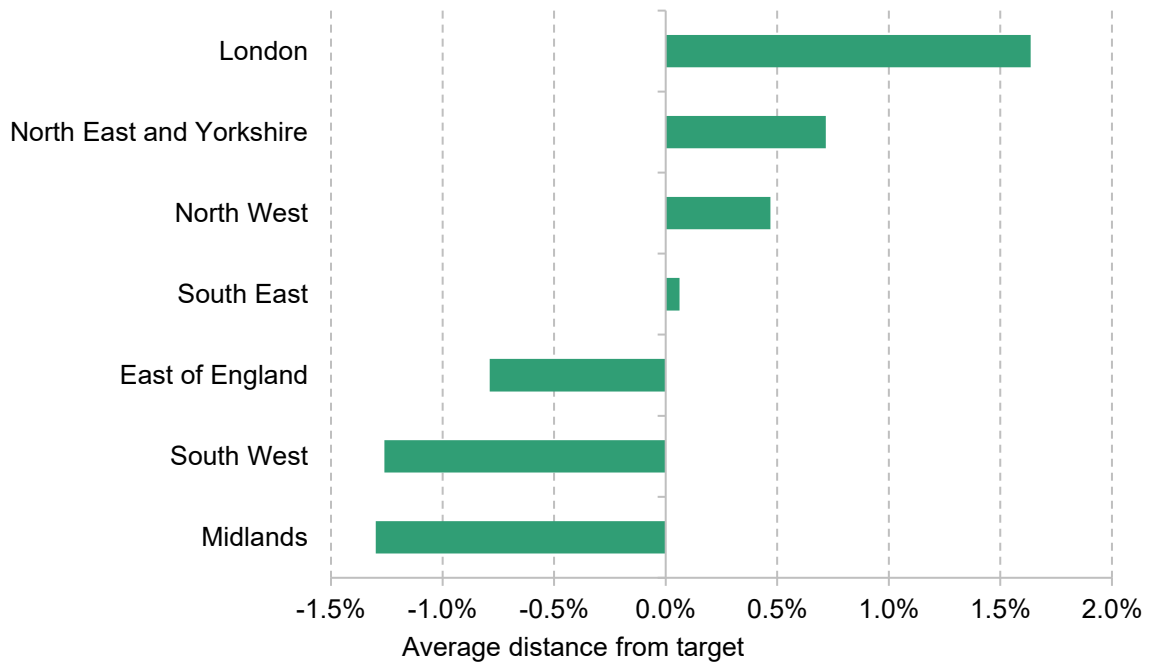


Figure 4.10. Distribution of percentage distance from target allocation in 2019–20



Source: NHS England (2019b).

Figure 4.11. Average percentage distance from target allocation by region in 2019–20



Source: NHS England (2019b).

Regionally, as Figure 4.11 shows, London's CCGs are on average 1.6% above their targets, while CCGs in the North East and Yorkshire, and the North West are on average 0.7% and 0.5% above their targets, respectively. At the other end, CCGs in both the Midlands and South West are on average 1.3% below their targets. This is equivalent to London's CCGs receiving £276 million more funding than their target allocations, compared to the Midlands' CCGs receiving £251 million less than their target allocations.

At the extremes are Bradford City and Blackpool, which are 5.0% and 4.7% below their target allocations, respectively. At the other end, West London is 14.8% above its target, Camden is 7.4% above and Kingston is 6.4% above its target. There are a number of CCGs especially far above their target allocations because the pace-of-change rules ensure that all CCGs see real funding increases in each period, even when local healthcare needs might be falling.

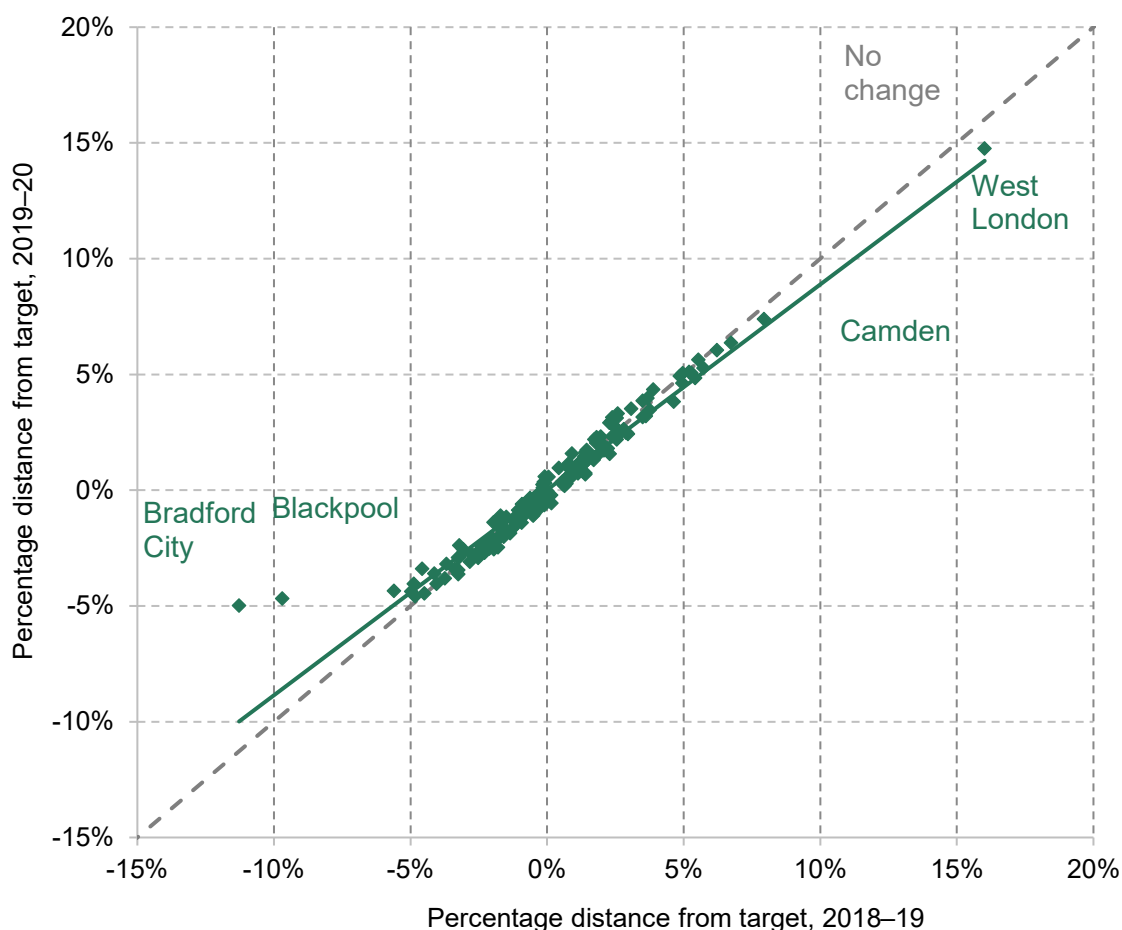
One concern with these large deviations from target allocations is that they may be correlated with assessed needs, meaning that areas with high assessed needs are systematically underfunded, for instance. In this case, even if the *target* allocations are well designed to ensure equal access for equal need, it may be that the *actual* allocations fail to achieve this because of historic differences in funding and restrictive limits on the pace of change driving persistent deviations. However, there is no strong relationship between percentage distance from target and estimated general and acute services need, health inequalities and unmet demand, and local area deprivation. This suggests that although the pace-of-change methodology creates sometimes substantial deviations from target allocations, areas with greater need are not on average disadvantaged by the process, which is a sign that the system is allocating funding in line with assessed needs *on average*.

Another important concern with these large deviations from target allocations is whether the average distance is decreasing over time. In other words, are allocations converging to their targets? Figure 4.12 shows the relationship between each CCG's distance from target in 2018–19 and in 2019–20. The grey line shows what would happen if the distance from target did not change over time, that is, if each CCG had the same distance from target in 2018–19 and 2019–20. The green line shows the average relationship between actual distance from target, and is slightly rotated clockwise. This means that CCGs with above average distances from target in 2018–19 had, on average, slightly lower distances from target in 2019–20, and thus there was a small degree of convergence towards targets over time. This convergence is mainly driven by CCGs far above or below their target allocation, as all CCGs between –2.5% and +5% received equal per-capita growth in 2019–20 and so there was no convergence for these CCGs.

At the top, West London CCG's distance from target fell from 16.0% above target in 2018–19 to 14.8% above in 2019–20. At the bottom, for Blackpool and Bradford City, the distance from target fell from 9.7% and 11.3% below in 2018–19 to 4.7% and 5.0% below in 2019–20

respectively. This increase, however, was not because of the pace-of-change rules, but rather an explicit decision by NHS England that no CCG should be more than 5% below target in 2019–20. No such decision was made, for example, to reduce West London’s distance above its target allocation or increase other CCGs closer to their target level of funding.

**Figure 4.12. Change in percentage distance from target allocation between 2018–19 and 2019–20**



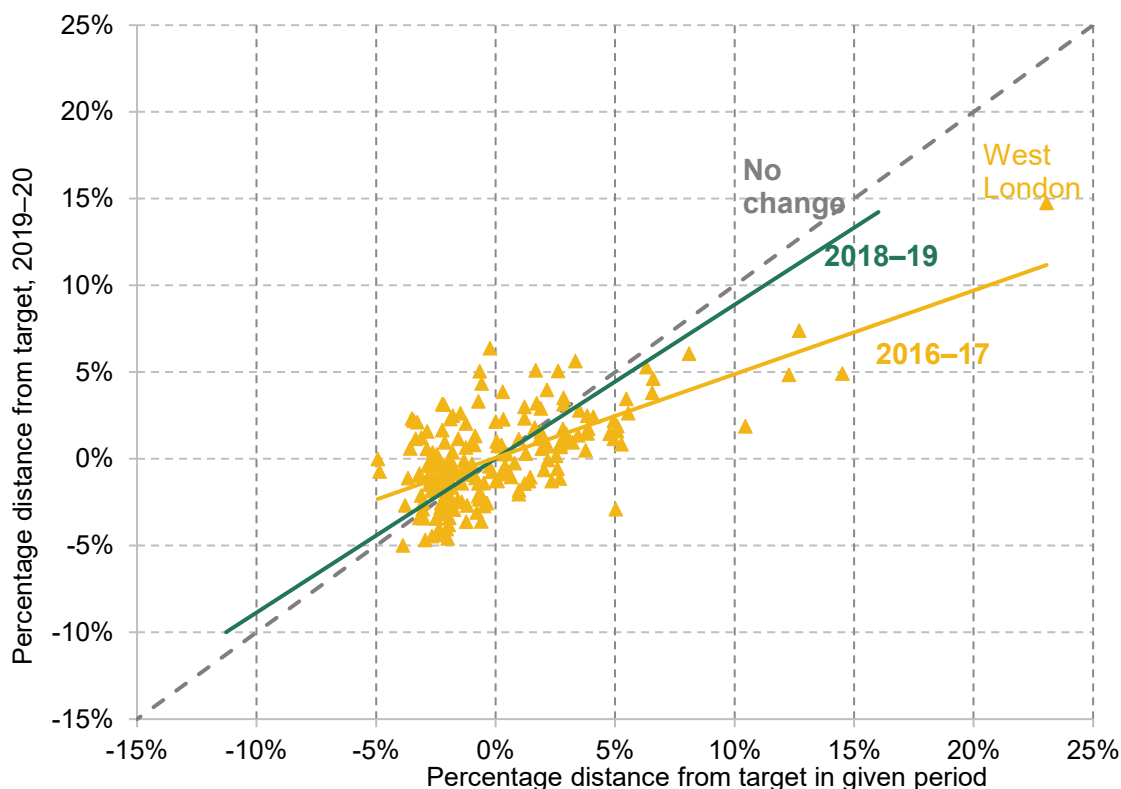
Source: NHS England (2019b).

Figure 4.13 takes this one step further and looks at the relationship over a longer time period. The grey line again shows what would happen if there was no change over time, and the green line shows what happened between 2018–19 and 2019–20, as shown in Figure 4.12. The yellow line shows the average relationship between distance from target in 2016–17 and distance from target in 2019–20.

It is hard to compare funding over time because of changes in how needs are assessed, and hence target allocations change over time. This means that we cannot necessarily distinguish between changes driven by pace-of-change rules and changes driven by changes to the allocation

methodology. For example, unlike in Figure 4.12, Blackpool and Bradford City are not outliers in this figure. Prior to 2019–20, their distance from target was much smaller, not because of changes to funding, but instead because updates to how need was assessed meant that these areas had much larger estimated needs in 2019–20 than had been estimated in previous years.

**Figure 4.13. Change in percentage distance from target allocation between 2016–17 and 2019–20**



Note: Adjusted for CCG mergers over this period. Scatter plots are for 2016–17 only.

Source: NHS England (2016a, 2019b).

Bearing this in mind, the 2016–17 line is rotated further clockwise than the 2018–19 line. This means that over a longer period of time (three years in this case), CCG allocations have moved closer to their target allocations than they did over one year. Nonetheless, this convergence towards target is relatively slow, as a CCG 10% above its target allocation in 2016–17 is still expected to be 5% above its target allocation in 2019–20. At the top end, West London's allocation has fallen from 23.1% above target in 2016–17 to 14.8% above target in 2019–20. This is a substantial reduction, although at this rate it would take another six years for funding to return to its target.

Another difference compared with Figure 4.12 is that the relationship between distance from target in 2016–17 and 2019–20 is much noisier than the relationship between distance from target in 2018–19 and 2019–20. Although, on average, CCGs have moved closer to their target, there are many CCGs that have moved further away from target. An example is Kingston CCG,

which was only 0.25% below its target in 2016–17 but 6.4% above target in 2019–20. Such increases in distance from target could occur if estimated need in a CCG is falling or growing very slowly, because the pace-of-change rules guarantee minimum funding growth rates. This could also be driven by changes to the way that need is assessed over time.

### Public health funding

#### Overall funding distribution

Figure 4.14 shows the geographical distribution of council public health funding from the DHSC in 2019–20. Figure 4.15 shows the distribution of funding per capita. As discussed earlier, this funding does not necessarily equal spending on public health services as councils can use the funding for certain other services with a public health function (e.g. leisure, parks) and can use their other revenue sources to fund public health services.

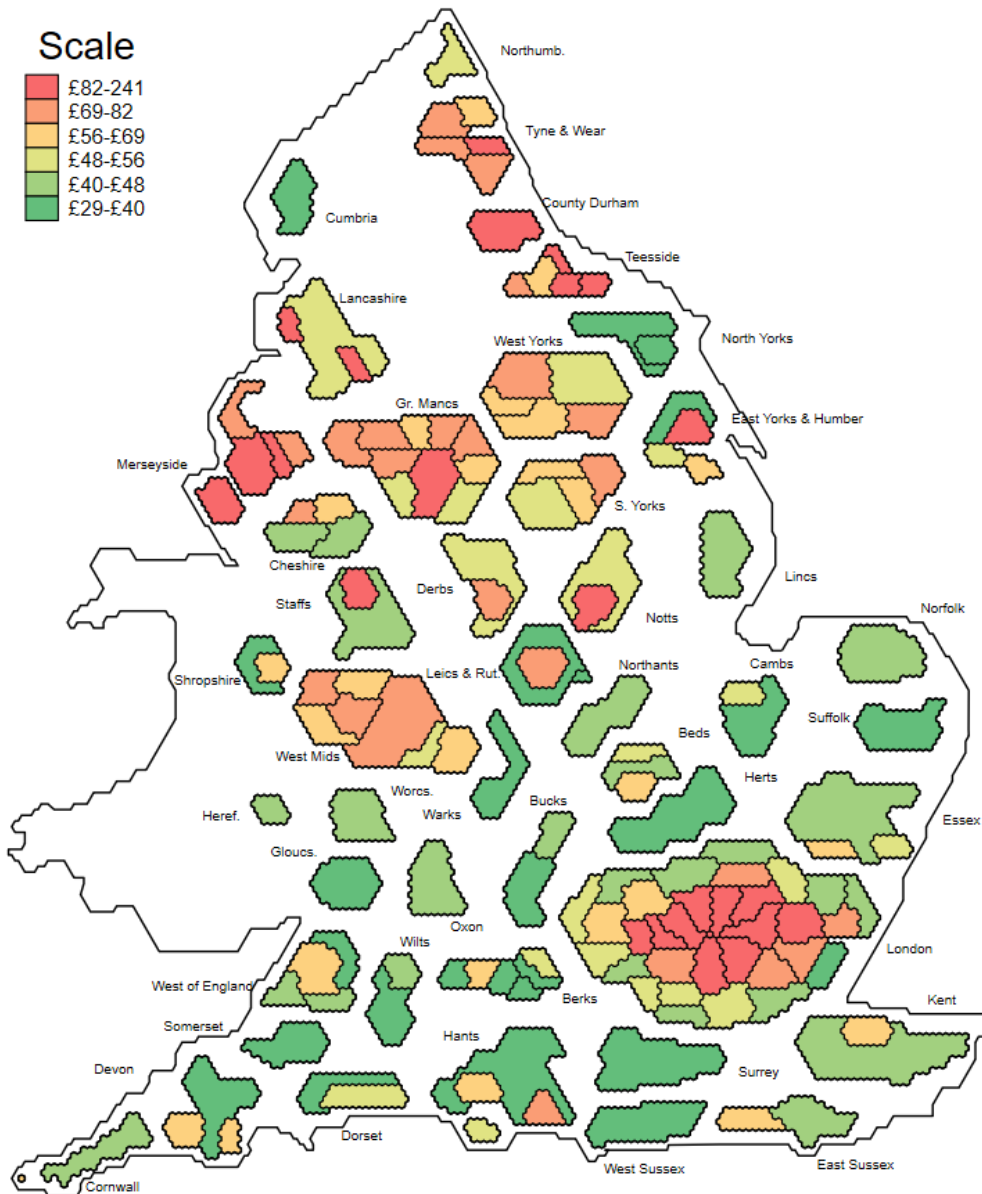
At the top of the distribution is the City of London (with a very small population), which received £241 per person in 2019–20. Next are Kensington and Chelsea, Blackpool and Westminster, which received £130, £129 and £121 per capita, respectively. At the other end of the distribution, Surrey received £30 per capita in 2019–20. Therefore, the highest-funded council excluding the City of London (i.e. Kensington and Chelsea) received 340% more than the lowest-funded council. This is over six times larger than the gap between the highest- and lowest-funded CCG, which was 55%.<sup>29</sup>

If we adjust for the different costs of providing services in different areas, the difference between the highest- and lowest-funded areas reduces. This is the opposite result to what we found with the CCG allocations because, for public health, London councils receive both the highest funding and face the highest costs of providing services. Having adjusted for differences in costs, the highest-funded council excluding the City of London (i.e. Kensington and Chelsea) received 312% more than the lowest-funded council, Surrey.<sup>30</sup> This is despite Surrey also having relatively high estimated costs of providing public health services.

<sup>29</sup> This is not necessarily a bad thing: it may be a sign that the allocations for public health are less well targeted than for CCGs, but it might also be a sign that the distribution of genuine need for public health services is much less equally distributed across the country.

<sup>30</sup> This adjusts for estimated costs in 2014–15, the last year that such costs were estimated for public health services provided by councils.

Figure 4.14. Map of council allocations in 2019–20



Source: Department of Health and Social Care (2018) and ONS' Counties and Unitary Authorities 2019 Boundaries. Map design is based on non-contiguous hexagon-based cartograms of the UK (see House of Commons Library, 2022).

Figure 4.15. Distribution of funding per capita 2019–20



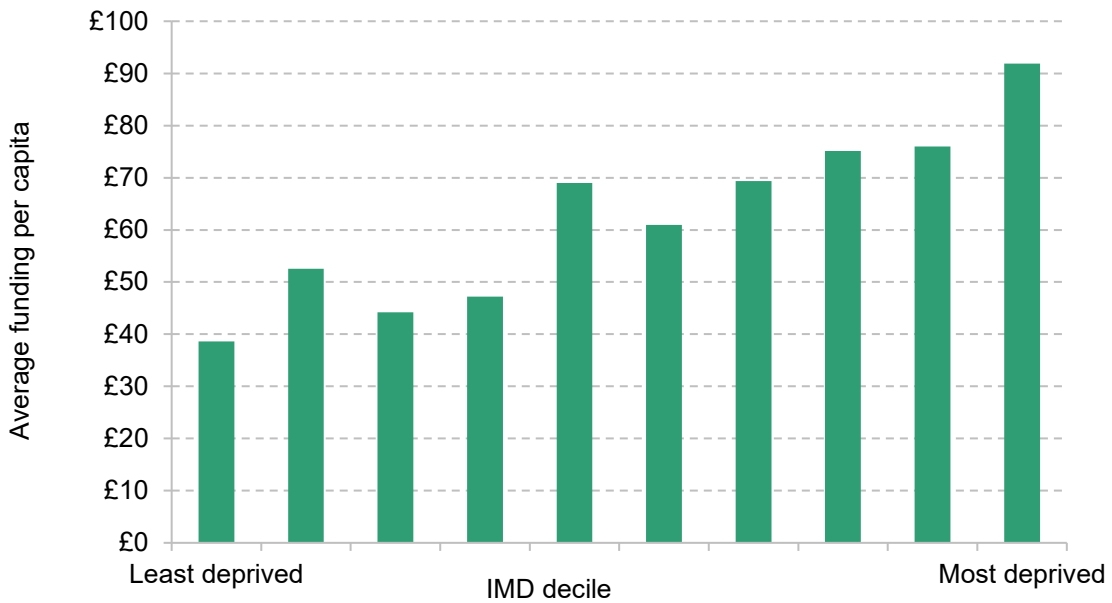
Source: Department of Health and Social Care (2018).

### Distribution by council characteristics

As with CCG allocations, we can also examine how funding per capita in 2019–20 varies with other characteristics of councils. This is particularly relevant because relative levels of public health funding for different councils have been fixed since 2015–16. As discussed earlier, this means that current funding depends on out-of-date council characteristics, has been distorted by differential population growth, and indeed was already far from target funding for many councils in 2014–15. Figure 4.16 shows average council funding for public health per capita in 2019–20 by decile of socio-economic deprivation. Despite the issues with the allocation methodology, there is a broadly positive gradient, with more-deprived councils receiving more funding. For example, the most-deprived decile of councils received 139% more per capita on average than the least-deprived decile of councils in 2019–20. This gradient is much larger than for CCG funding allocations, as shown in Figure 4.6.

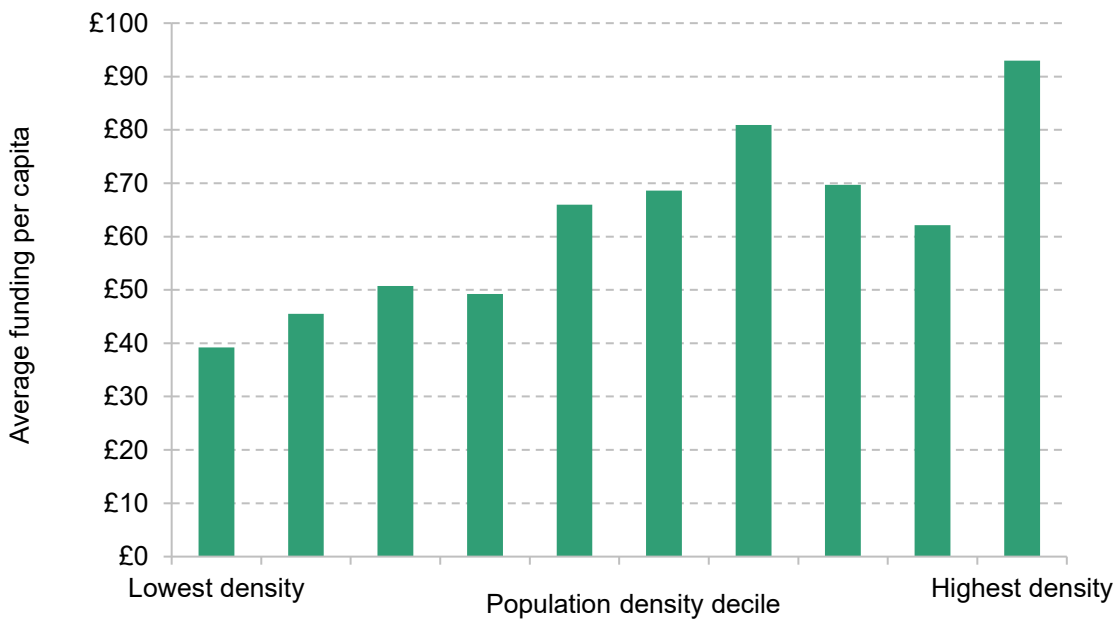
Figure 4.17 repeats this exercise but instead groups councils into deciles of population density (i.e. how urban or rural they are). There is also a broadly positive gradient, with the decile of councils with the highest population density receiving 137% more funding per capita on average than the decile of councils with the lowest population density. This is very different from CCG funding allocations, where there is no gradient by population density, as shown by Figure 4.7. This is perhaps because the need for public health services is more strongly linked to deprivation and urbanity than for general health services. It may also reflect differences in historic spend if public health facilities, such as sexual health clinics, have been concentrated in urban areas.

Figure 4.16. Average council funding per capita 2019–20 by deprivation decile



Source: Authors' calculations using Department of Health and Social Care (2018) and Ministry of Housing, Communities and Local Government (2019d).

Figure 4.17. Average council funding per capita 2019–20 by population density decile



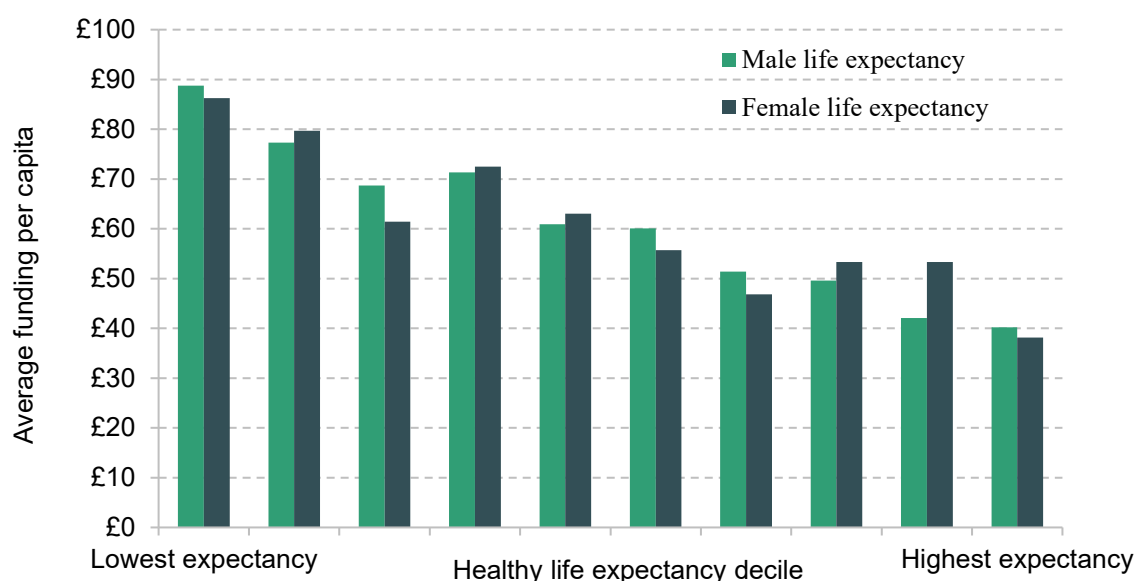
Source: Authors' calculations using Department of Health and Social Care (2018) and Office for National Statistics (2020a).



Figure 4.18 examines how average council public health funding differs by average male and female healthy life expectancy at birth. In both cases, the councils with worse life expectancy receive higher public health funding on average. For male life expectancy, the councils in the lowest decile receive 121% more funding on average than councils in the highest decile. For female life expectancy, this difference is 126%.

Figure 4.19 repeats this analysis but uses the ONS Health Index (Office for National Statistics, 2020c). This is an experimental index that aims to capture a broad definition of health, including health outcomes, health-related behaviour and wider determinants of health. There is a strong negative gradient, with areas with a worse health score receiving higher public health funding on average. Councils with the worst scores received 116% more funding per capita in 2019–20 compared with the councils with the best scores. Both measures, therefore, suggest that public health funding is very targeted towards the areas with the worst overall health.

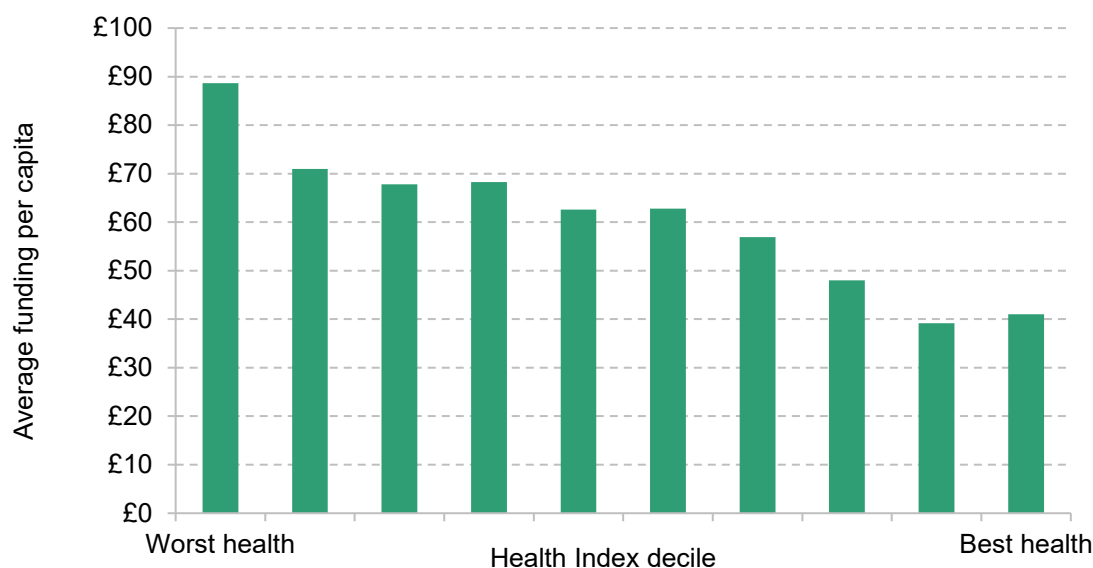
**Figure 4.18. Average council funding per capita 2019–20 by healthy life expectancy at birth decile 2016–18**



Note: City of London and Isles of Sicily are excluded as life expectancy data are not available.

Source: Authors' calculations using Department of Health and Social Care (2018) and Office for National Statistics (2019).

Figure 4.19. Average council funding per capita 2019–20 by ONS Health Index for 2018



Note: The ONS Health Index for this period is provisional and an experimental statistic. Cornwall and the Isles of Scilly, and Hackney and the City of London are excluded because they have separate local authorities but the same Health Index score.

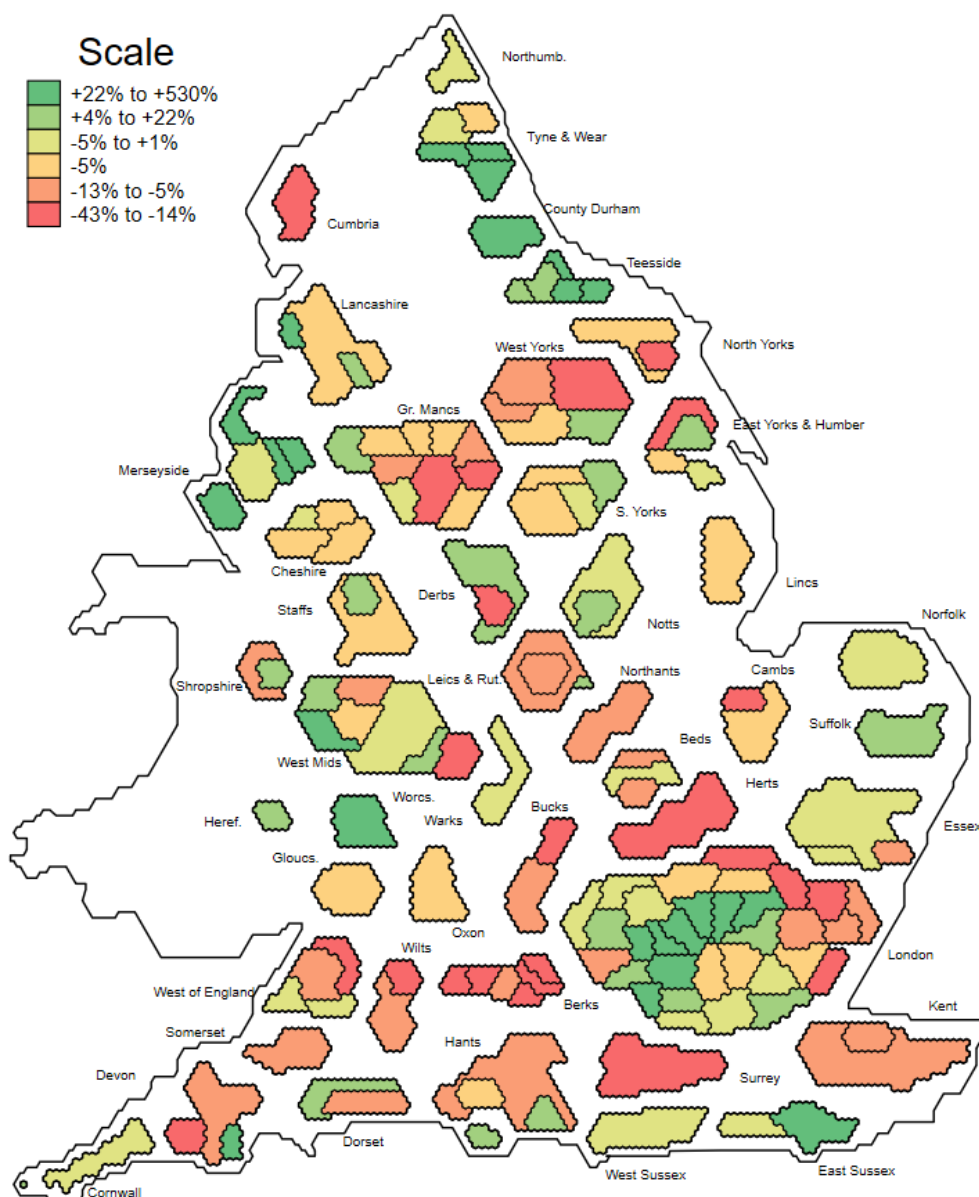
Source: Authors' calculations using Department of Health and Social Care (2018) and Office for National Statistics (2020c).

### Distance from target allocations

As discussed earlier, the relative allocations for public health allocations to councils have been frozen since 2015–16. The government has subsequently stopped publishing the target allocations, which means it is hard to assess how far councils are from their current allocation using the previous formula. The Health Foundation has previously updated the formula using more recent data and shown how far councils are from target (Finch, Bibby and Elwell-Sutton, 2018). In this section, we instead consider how far councils were from their targets in 2014–15, before the distribution of funding was frozen (and before under 5s services were devolved to councils), and how various relevant factors have changed since then.

Figure 4.20 shows the geographic distribution of the percentage distance from target allocations for local authorities in 2014–15 and Figure 4.21 shows the number of councils at different distances from target. At the extremes are the City of London, with funding 530% above target, Kensington and Chelsea with funding 191% above target and Westminster with funding 127% above. Because the distribution of funding has been fixed, both City of London and Kensington and Chelsea remain the highest funded councils in 2019–20, in part because they were far above target when the distribution was frozen. At the other end of the distribution is Slough, 43% below its target allocation in 2014–15. Surrey was also one of councils furthest below target, at 37% below, and was the lowest funded council in 2019–20.

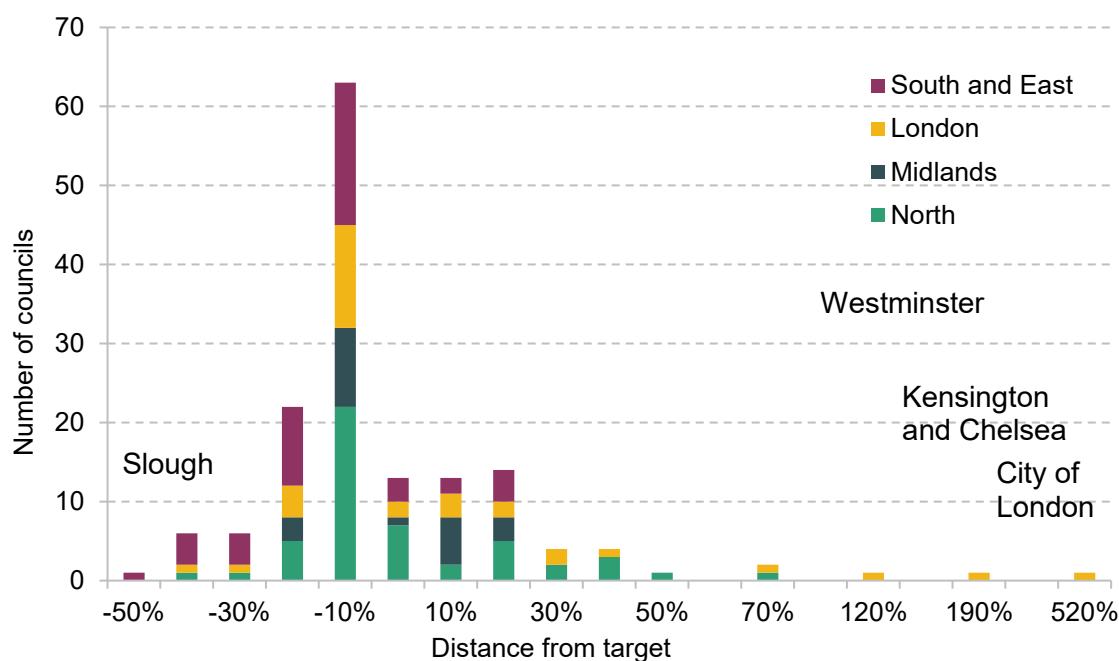
Figure 4.20. Map of percentage distance from target allocation 2014–15



Source: Department of Health (2013b) and ONS' Counties and Unitary Authorities 2011 Boundaries. Map design is based on non-contiguous hexagon-based cartograms of the UK (see House of Commons Library, 2022).

However, as with CCG distances from targets in 2019–20, there is no correlation between council distances from targets in 2014–15 and council deprivation measured in 2015. However, there is a weak negative correlation of  $-0.2$  between distance from target in 2014–15 and councils' standardised mortality rates for the under 75s (SMR<75) in 2014. This suggests that councils with the most need (at least by this measure) were slightly more likely to be below their target allocation. Because this distribution has been locked in since 2015–16, this suggests that these councils remain somewhat underfunded relative to councils with lower standardised mortality rates in 2014.

Figure 4.21. Percentage distance from target allocation 2014–15



spectrum, Slough was still the council with the lowest funding relative to its target, with funding 33% below its new proposed target in 2016–17.

## 4.3 Summary

This chapter has examined the allocation methodologies for NHS spending and councils' public health grants, and analysed the resulting funding distributions. The guiding principle for both allocations is spending equalisation, so that areas with equal health needs have the funding to provide equal access to health services. Unlike some other services discussed in this report, the objectives of health spending go further and also aim to reduce health inequalities and unmet need. This requires places with higher need to receive additional funding on top of what they 'need' so that they can provide more health services to reduce health inequalities and unmet need.

The allocation of health spending does not consider several objectives that are used for other services discussed in this report. In part, this is because health services are almost completely funded by central government, and so differences in the ability of different local areas to raise tax revenues are not relevant for health spending. There are also fewer concerns about the incentives of the funding allocation, in part because NHS funding goes to CCGs who then commission providers to provide healthcare services. NHS providers are regulated separately, outside of the funding allocation process, by NHS England and Improvement. Funding that goes directly to NHS providers, outside of the CCG allocation methodology, is often conditional on achieving or agreeing to performance targets. The nationally set prices that CCGs pay to providers (using their allocations) are also in some cases designed with incentives in mind, in particular to encourage certain treatment methods (best practice tariffs). This is likely to change with the change from CCGs to ICSs, with more focus on local healthcare systems working together through strategic commissioning, rather than the previous stark commissioner–provider split.

The allocations face a significant trade-off between their responsiveness and stability. This means that although many of the allocation methodologies are focused on estimating the local need for different health services, in practice much of the allocation depends on past funding. Stability of funding allocations is important, but some of the rules may be too conservative. The requirement that no CCG can ever receive a real-terms funding cut is restrictive when overall national funding is constrained, given that some areas are facing (predictable) reductions in relative need and population size. This has been improved in the ICB allocation methodology, giving NHS England more control over the lower limit on funding growth.

These rules also exemplify the trade-off between consistency and discretion, as the funding allocation process is the sole responsibility of NHS England (for the CCG allocations) and the DHSC (for the public health grants), unlike the rest of the methodology. The increase in funding for Blackpool and Bradford City CCGs outside of the normal rules in 2019–20 is such a discretionary decision. NHS England could also have increased their funding further, or removed funding from the CCGs far above their targets, but decided not to do so. Similar questions can be raised about the DHSC’s policy decision to fix the distribution of councils’ public health grants since 2015–16, in direct conflict with the other objectives of ensuring equal access for equal need and reducing health inequalities.

## 5. School funding

After healthcare, school spending is the second largest area of public service spending in England, representing around £45 billion in 2019–20. Policymakers also attach a high importance to the role of schools, and education more broadly, in reducing inequalities and promoting social mobility. This has led to a school funding system that provides higher levels of funding to schools with more disadvantaged pupils. Such a system is well rooted in empirical evidence, with recent research showing that students from disadvantaged schools benefit more from higher levels of school spending (Jackson et al., 2016). Whilst there are also strong associations between education and health outcomes, the causal effects of education on health outcomes and behaviours are generally modest and complex (Galama, Lleras-Muney and van Kippersluis, 2018; Hamad et al, 2018). Indeed, a recent UK study found little evidence of positive effects of education on health, with the very notable exception of reductions in diabetes (Janke et al., 2020a). Education is, however, clearly important for income and broader life chances, which themselves are strong determinants of health outcomes.

The school funding system is very different to the funding systems for other public services considered in this report. There are no complex models that set the funding values or parameters. Most funding is allocated on the basis of pupil characteristics, with the values largely determined by the priorities of policymakers and a general aim to reduce turbulence in funding from year to year.

The school funding system in England is also in transition. Up to the 2000s, it was a system very much led by councils, with spending assessments used to determine grants to councils, who could then set their own funding formulae, with limited regulation. Since then, the role of councils has been gradually reduced and central government has sought to make funding formulae more consistent across England. This culminated in the introduction of the National Funding Formula (NFF) for schools in England in 2018. This is currently only really used to determine the funding levels different councils receive. But even this is a significant policy achievement, given that there had been no proper assessment of the funding required by different areas for around 15 years. Instead, levels of funding per pupil between 2003–04 and 2017–18 had been mostly rolled forward by a fixed percentage, despite changing levels of deprivation across the country. Such an approach was driven by a desire to maintain stability and avoid political controversy. Looking forward, the government has also set out a plan to eventually move to a school-level funding formula, with almost no role for councils in funding allocations. The government is sensibly planning a relatively lengthy transition for this major reform.

In what follows, we describe the overall structure and approach in the school funding system in England, paying particular attention to the way in which the system seeks to address inequalities and the shifting structure over time. We then describe the resultant funding allocations across councils and schools.

## 5.1 The school funding system

In 2019–20, school funding totalled about £44.8 billion, which was provided through various grants as listed in Table 5.1. Most of these grants are provided to schools via councils or directly to schools from the Education and Skills Funding Agency. Schools are then responsible for spending the vast majority of this funding, given the significant reduction in the role of council-provided services over time.

The largest grant to schools is money provided through the NFF (over £41 billion in 2019–20), which was introduced in April 2018. This has three elements.

- **Schools block.** This represents core school funding and is determined by a national school-level formula based on pupil and school characteristics (more details below). Councils are allocated the sum of funding for state-funded schools located in their area. They then use their own local funding formulae to allocate funding to schools in their area. Maintained schools, Academies and Free Schools are effectively treated in an identical way.
- **High-needs block.** This is funding to support pupils with special educational needs and disabilities across all state-funded schools, including pupils at special and mainstream schools.
- **Central services block.** This is funding provided to councils to provide a set of core central services to all state-funded schools, such as school admissions, transport for pupils with special educational needs and termination of employment costs with respect to premature retirement.

In addition, schools receive money directly through the Pupil Premium, which provides fixed amounts for pupils from disadvantaged backgrounds. This funding totalled about £2.4 billion in 2019–20, with primary schools receiving £1,320 for every child who has been eligible for free school meals in the past six years, and secondary schools £935 in that year (these figures have since increased to £2.7 billion, £1,385 and £985, respectively). The higher rate in primary schools was originally introduced on the basis that early intervention can be more effective. Schools also receive extra Pupil Premium funding for children in care or children whose parents are in the armed forces.



For 2019–20, schools also received extra funding to cover additional in-year costs. This included the Teachers’ Pay Grant to cover additional costs associated with the teacher pay settlement for September 2019, and the Teachers’ Employer Pension Contribution Grant to cover increases in employer pension contributions from September 2019 onwards. These were provided on a largely fixed rate per pupil and have now been folded into the NFF. These additional grants meant that total school funding in 2019–20 was £44.8 billion.

**Table 5.1. Summary of school funding in England in 2019–20 and 2022–23**

	2019–20	2022–23
<b>National Funding Formula (NFF)</b>	<b>41.25</b>	<b>49.92</b>
<i>Schools block</i>	34.50	40.54
<i>High-needs block</i>	6.28	8.98
<i>Central services block</i>	0.47	0.40
<b>Pupil Premium</b>	<b>2.41</b>	<b>2.67</b>
<b>Teachers’ Pay Grant</b>	<b>0.29</b>	n/a
<b>Teachers’ Employer Pension Contribution Grant</b>	<b>0.83</b>	n/a
<b>Supplementary Grant</b>	n/a	<b>1.17</b>
<b>Total school funding (ages 5–16)</b>	<b>44.78</b>	<b>53.76</b>

Source: Dedicated School Grant allocation tables for 2019–20 (<https://www.gov.uk/government/publications/dedicated-schools-grant-dsg-2019-to-2020>) and 2022–23 (<https://www.gov.uk/government/publications/dedicated-schools-grant-dsg-2022-to-2023>), Pupil Premium allocations for 2019–20 (<https://www.gov.uk/government/publications/pupil-premium-allocations-and-conditions-of-grant-2019-to-2020>) and 2022–23 (<https://www.gov.uk/government/publications/pupil-premium-allocations-and-conditions-of-grant-2022-to-2023>), Teachers’ Pay Grant allocations 2019–20 (<https://www.gov.uk/government/publications/teachers-pay-grant-allocations-for-2019-to-2020-financial-year>) and HM Treasury Spending Round 2019 (<https://www.gov.uk/government/publications/spending-round-2019-document/spending-round-2019>).

For the current financial year, 2022–23, total school funding is planned to have risen to about £53.8 billion, mainly reflecting underlying increases in core school funding. This total also includes a new Supplementary Grant worth £1.2 billion. This is partly to cover the extra costs associated with the new Health and Social Care Levy from April 2022, as well as an increase in school funding announced in the 2021 Spending Review (which was announced too late to be included in the NFF). This Supplementary Grant is expected to be rolled into the NFF for future years.

On top of the grants listed above, schools also received other grants over this period to cover additional costs and activities that fall outside the core schools budget. This includes the free school meals supplementary grant to cover the additional costs of providing free school meals

during the roll-out of universal credit (about £36 million in 2019–20), which has now ended.<sup>31</sup> It also includes funding to cover universal infant free school meals (about £617 million in 2019–20<sup>32</sup>) and the PE and Sport premium for primary schools (about £325 million in 2019–20<sup>33</sup>).

In the following subsections, we focus on explaining how the NFF operates.

## National Funding Formula

The NFF for schools in England was introduced in April 2018. By this point, reform to the school funding system was long overdue.

Up until 2003, school funding was allocated in much the same way as other core funding for councils. Spending Share Assessments (SSAs) were calculated based on measures of need across areas. Councils could then determine actual spending levels, with potential to spend less than their SSA on schools (rare in practice) or more than their SSA. They could also determine how much was spent centrally on services for all schools and how much to allocate to individual schools via their own local funding formulae.

Following on from the so-called school funding crisis of 2003, policymakers attached more weight to ensuring stability in funding levels across schools and areas. This led to the creation of the Dedicated Schools Grant in 2006, which was ring-fenced for school spending and based on previous *expenditure* levels, such that topping up from other revenue sources became very rare. It also led to the creation of the Minimum Funding Guarantee, which provided a minimum per-pupil increase in funding across all schools. Increases in grants to councils were determined using the ‘spend-plus’ approach. This took previous spending levels, increased them by a fixed percentage and added some small amounts of additional funding based on changing policy priorities. As a result, the distribution of school funding was largely fixed according to measures of need in approximately 2003–04. Despite numerous attempts at reform, this approach largely continued through to the introduction of the NFF in 2018. As a result, the distribution of school funding across schools and areas became increasingly decoupled from actual measures of need and deprivation.

The NFF was introduced in April 2018. This was motivated by a desire to re-link funding to measures of needs and costs across schools and areas, and by a longer-term ambition to create a simpler national school-level formula. Such a school-level formula would effectively replace the over 150 local funding formulae with a single national formula.

<sup>31</sup> See <https://www.gov.uk/government/publications/free-school-meals-supplementary-grant-2019-to-2020>.

<sup>32</sup> See <https://www.gov.uk/government/publications/universal-infant-free-school-meals-uifsm-2019-to-2020>.

<sup>33</sup> See <https://skillsfunding.service.gov.uk/view-latest-funding/national-funding-allocations/PSG/2019-to-2020>.

As described above, the NFF is currently broken into three different elements: the schools block, the high-needs block, and the central services block.

### Schools block

The schools block is the largest element, which has risen from £41 billion in 2019–20 to reach nearly £50 billion in 2022–23. This is allocated according to a school-level formula based on pupil and school characteristics. Currently, councils receive the sum of funding determined by this formula for all state-funded schools in their area and then can use their own funding formula to allocate funding to schools in their area (though this is tightly regulated and they can effectively only vary the value of the formula factors). These local authority funding formulae apply in the same way to Maintained Schools, Academies and Free Schools (the only difference being how the money actually flows to schools).

The formula for the schools block in 2022–23 is summarised in Table 5.2.

These funding factors were determined on the basis of an attempt to minimise turbulence and funding changes, and on the subjective priorities of policymakers for funding increases. Unlike most other service areas considered in this report, the formula is not based on an econometric or statistical model.

Naturally, the main factor is a basic amount allocated per pupil, which is about £3,200 in primary schools, rising to £4,500 for pupils in in Key Stage 3 (ages 11–14) and £5,100 for pupils in Key Stage 4 (ages 14–16).

The government then allocates extra funding to schools with more disadvantaged pupils using a range of measures in order to capture different types of disadvantage, including: eligibility for free school meals; whether pupils have ever been eligible in the past six years; whether pupils live in a neighbourhood classified as suffering from high levels of income deprivation affecting children (the Income Deprivation Affecting Children Index, IDACI); whether they have low prior attainment; and whether they have English as an additional language (EAL). Councils allocate funding to individual schools on the basis of these factors, though they do so to differing degrees.

In the case of the low prior attainment factor, pupils are eligible for this factor in primary schools if they did not achieve the expected levels in the Early Years Foundation Stage, and in secondary schools if they did not achieve the expected level in Key Stage 2 reading, writing or maths. Given the cancellation of assessments during the COVID-19 pandemic, these factors have been imputed for recent years.

Table 5.2. National Funding Formula schools block in 2022–23

Funding factor	Primary (£ per pupil)	Secondary (£ per pupil)
<b><u>Pupil-led factors</u></b>		
<b>Basic per pupil amount</b>	<b>£3,217</b>	<b>KS3, £4,536; KS4, £5,112</b>
<b>Additional needs</b>		
Eligible for free school meals	£470	£470
Eligible for free school meals in past six years	£590	£865
IDACI band A	£640	£890
IDACI band B	£490	£700
IDACI band C	£460	£650
IDACI band D	£420	£695
IDACI band E	£270	£425
IDACI band F	£220	£320
<b>Low prior attainment</b>	<b>£1,130</b>	<b>£1,710</b>
<b>English as an additional language</b>	<b>£565</b>	<b>£1,530</b>
<b>Pupil mobility</b>	<b>£925</b>	<b>£1,330</b>
<b><u>School-led factors</u></b>		
<b>Lump sum</b>	<b>£121,300</b>	<b>£121,300</b>
<b>Sparsity funding</b>	<b>£0–£55,000</b>	<b>£0–£80,000</b>
<b><u>Area Cost Adjustment</u></b>	<b>1–1.186</b>	<b>1–1.186</b>
<b><u>Minimum factors</u></b>		
<b>Minimum school-funding levels</b>	<b>£4,265</b>	<b>KS3, £5,321; KS4, £5,831</b>
<b>Funding floor</b>	<b>2%</b>	<b>2%</b>
<b><u>Premises Factors</u></b>		
Rates	Historical	Historical
Private Finance Initiative	Historical	Historical
Split sites	Historical	Historical
Exceptional circumstances	Historical	Historical

Note: The IDACI is a measure of the share of children in an area in low-income families. Band A is the highest band of deprivation and Band F is the lowest to receive additional funding. Collectively, these cover the 37.5% of areas with the highest deprivation levels.

Source: Department for Education, National funding formula tables for schools and high needs: 2022 to 2023, <https://www.gov.uk/government/publications/national-funding-formula-tables-for-schools-and-high-needs-2022-to-2023>.

The last pupil-led factor is pupil mobility. Pupils are classed as eligible for the mobility factor if their pupil census record is ‘atypical’. In this context, this means that a pupil first entered a school late during the school year in the past three years. Schools receive pupil mobility funding for each extra pupil classed as mobile over a threshold of 6% of pupils currently at the school.

There are then a range of school-led factors. This includes a lump sum to cover fixed costs and a sparsity factor to provide extra funding to small schools. This factor is calculated on the basis of average year group size and average road distance travelled to schools.

To account for differences in the cost of employing staff across the country, an area cost adjustment is also applied. This is a combination of the differences in teacher pay scales across the country and an adjustment for difference in general labour market costs for non-teaching staff (as used in the local government settlement). This is applied to both pupil-led and school-led factors

There are then a range of minimum factors that are applied. First, the government created a set of minimum funding levels for schools. Since 2020, these are statutory and have to be applied by councils in their funding formulae too. If schools' pupil-led funding is below the minimum funding level, then they receive additional top-up funding to bring them up to that minimum. This effectively overrides much of the NFF and councils' own formulae for a large share of schools, and principally benefits schools with fewer disadvantaged pupils. It would be more coherent to use the funding provided through these minimum funding levels to increase the basic amounts provided per pupil, which would benefit all schools.

Second, there is a funding increment floor, which provides for a minimum increase in each councils' pupil-led funding, which was 2% in 2022–23, and which plays a similar role to the pace-of-change element of NHS funding. Councils are then expected to provide a Minimum Funding [Increase] Guarantee of between 0.5% and 2% for schools in their area. This flexibility at the school level (relative to the funding increment floor at the council level) allows for funding per pupil at individual schools to change more based on changing school characteristics and needs.

In addition, there are then a range of premises-related costs that are determined on the basis of historical levels of spending, such as the cost of Public Finance Initiative (PFI) contractual commitments, schools with split sites, non-domestic rates bills, and exceptional circumstances (e.g. sports facilities). This makes sense as these are often costs that schools have little control over.

Finally, councils also receive extra top-up funding for within-year pupil growth. This is calculated based on the number of small areas (MSOAs) within council areas that have recently seen large growth in pupil numbers. Given that the main funding allocations are based on pupil numbers in the previous year, this growth funding allows councils to support schools seeing fast rises in pupil numbers.

This then fully determines the school-level formula for the schools block. Councils then effectively receive the sum of this funding for all schools in their area. They can redistribute it using their own local funding formula, which effectively applies to Maintained Schools, Academies and Free Schools alike. However, these funding formulae are tightly regulated. Since 2013, councils have had to use simpler funding formulae. They are provided with a list of needs factors they can use and they determine the value of each factor. This is a very similar list of factors to those used in the NFF.

The government has indicated a long-term ambition to implement a single national funding formula for the schools block, replacing over 150 different formulae with a single central formula. As a step in this direction, it has proposed a gradual step towards this ambition in 2023–24, with councils required to move their local school-level funding formula factors 10% closer to the NFF. This will be monitored, with further gradual movements in future years.

### High-needs block

The second element of the NFF is the high-needs block, which has risen from £6.3 billion in 2019–20 to reach £9 billion in 2022–23.

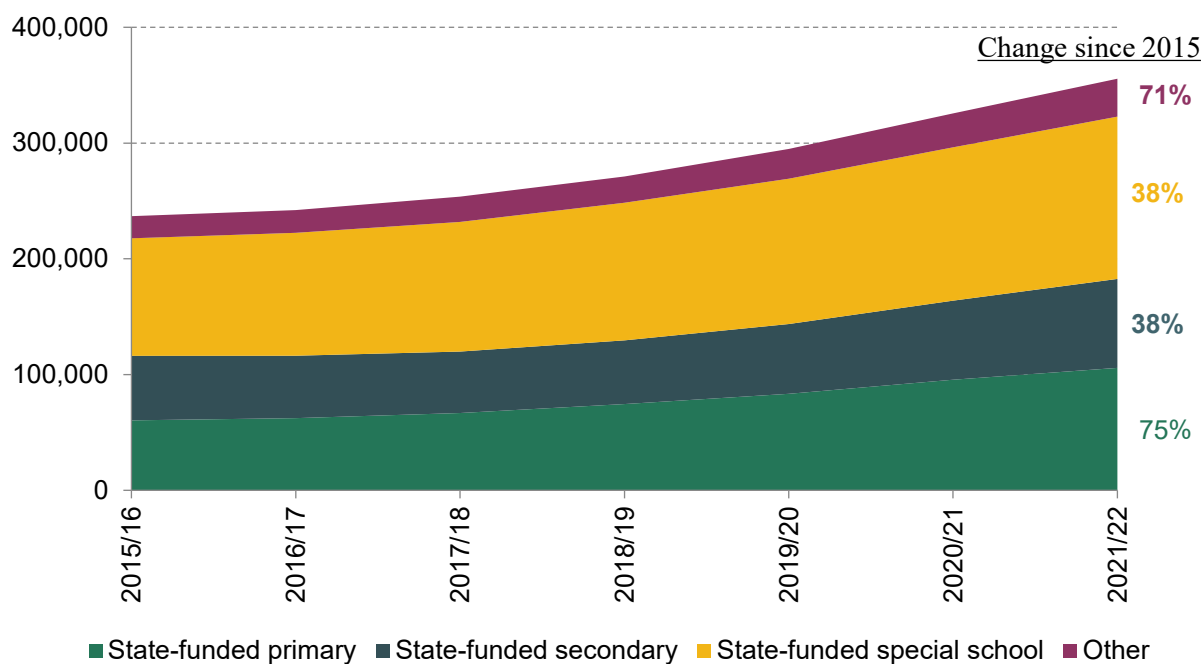
This covers funding for pupils with special educational needs and disabilities across special schools, mainstream schools and support for pupils in the independent sector.

The high-needs block is comprised of three key factors. First, like the schools block, there is a basic amount per pupil in special schools, which is subject to an area cost adjustment. Second, about 50% of funding is allocated based on historic spending patterns in 2017–18. Third, funding is allocated for a range of proxy factors, including population numbers, free school meals eligibility, IDACI, indicators of poor child health, disability, Key Stage 2 low attainment and Key Stage 4 low attainment. A combination of historic and proxy factors is used as it can be quite difficult to predict levels of need based on objective factors. A further set of adjustments is then applied for specific spending needs, such as pupils attending schools or provision in other local authorities.

The high-needs block is under considerable pressure at present due to rising numbers of pupils with statements of Special Educational Needs (SEN) or Education and Healthcare Plans (EHCPs). As shown in Figure 5.1, the number of pupils with statements of SEN or EHCPs has risen by 50% or 120,000 since 2015, with a rise of 75% in primary schools.

This high growth has prompted large recent increases in the high-needs budget, with cash-terms growth of 14% in 2022–23. However, even this will be quickly taken up, with numbers increasing by 9% in 2022 as well.

Figure 5.1 Number of pupils in England with a statement of SEN or EHCPs



Source: Department for Education, Special Educational Needs Statistics, January 2022, <https://www.gov.uk/government/statistics/special-educational-needs-in-england-january-2022>.

## Central services block

The final element of the NFF is the central services block, which is used to fund central spending by councils. This is the smallest element, up £400 million in 2022–23.

This is made up of two parts. The first element is for ongoing responsibilities and is funded on the basis of a fixed per-pupil amount (90%) and a deprivation factor based on the number of pupils ever eligible for free school meals in the past six years (10%). An Area Cost Adjustment based on the general labour market approach is also applied to the ongoing responsibilities component. The second component relates to historic commitments, such as pension or termination of employment costs. However, funding for these commitments has been gradually wound down from 2020–21 onwards.

It should be noted that councils spend more than £400 million on central services, with some central funding on the high-needs budgets and some services (such as education psychology and home-to-school transport) supported by the main local government settlement. However, there has been a long-run clear trend towards less central spending. As Figure 5.2 shows, the total school spending per undertaken by councils has fallen from 19% in 2003 to 9% in 2020.

Figure 5.2. Share of school spending undertaken by councils in England



Source: Sibieta (2021).

This low level of central spending in England stands in stark contrast to other nations in the UK. In Scotland, local government is responsible for one-third of school spending, whilst in Northern Ireland, local government or central government agencies are responsible for 40% of total school spending. The picture in Wales is more similar to England, but local authorities are still responsible for 16% of spending.<sup>34</sup>

## 5.2 The resulting funding allocations

In Figures 5.3 and 5.4, we show how average primary and secondary school spending per pupil varied across council areas in England in 2019–20. All values are shown relative to the national average.

In both cases, the highest levels of spending per pupil are seen in London. In some areas of inner London, spending per pupil is 40%–50% higher than the national average, including Lambeth, Southwark, Islington, Hackney and Tower Hamlets. Elsewhere, in inner and more deprived parts of outer London, spending per pupil is about 10%–20% higher, such as in Barnet, Barking and Dagenham, Brent, Lewisham and Wandsworth. These differences are partly extra funding to cover higher salaries for teachers in London, with the area cost adjustment providing about 18%–19% extra for inner London council and about 10%–15% extra in outer London councils.

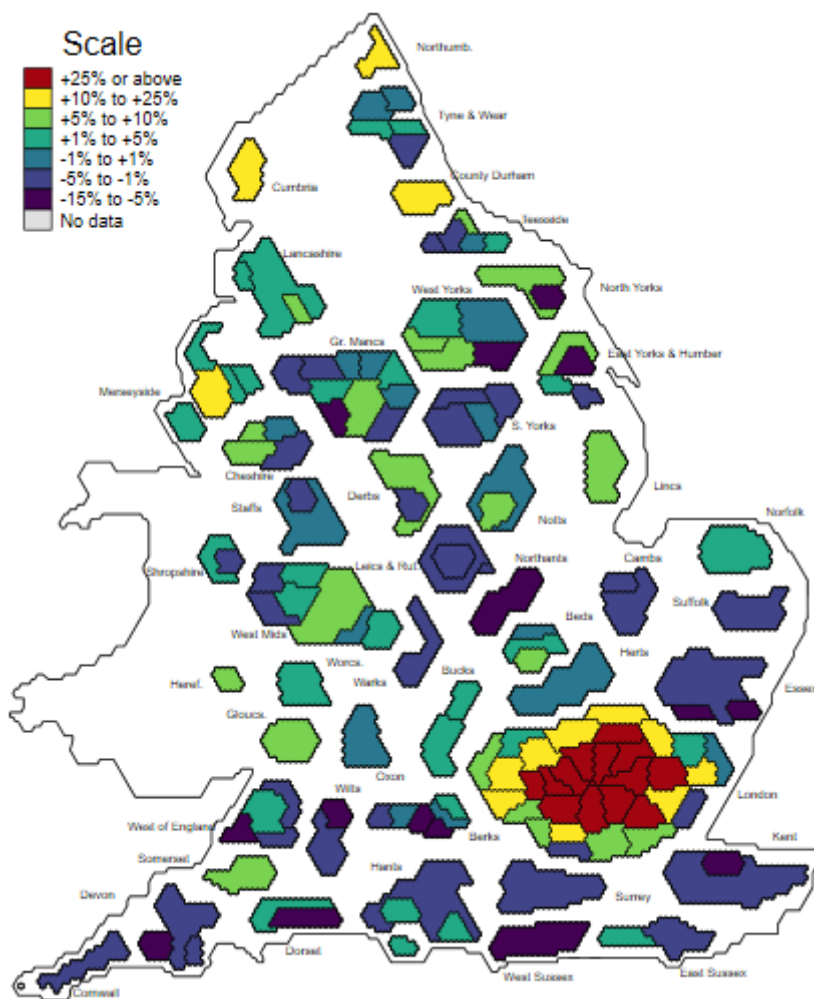
<sup>34</sup> See Sibieta and Jerrim (2021).



However, this is clearly not the whole story with the extra spending per pupil also reflecting higher levels of deprivation seen in London.

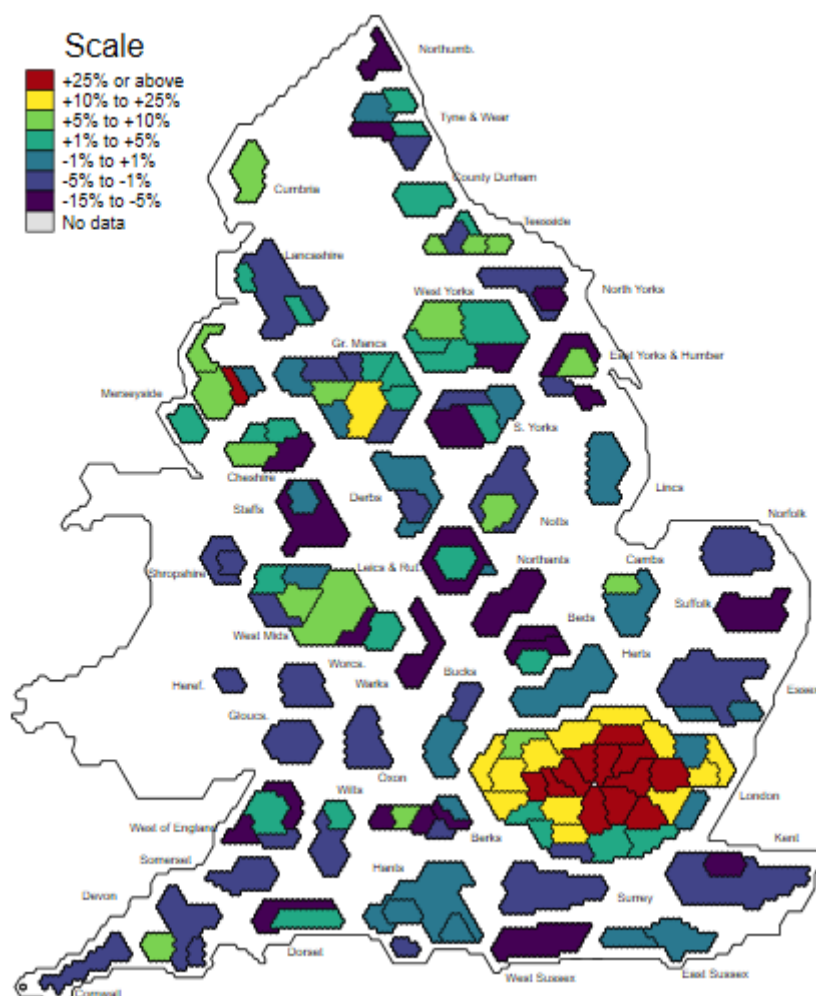
School spending is also relatively high in more-deprived urban areas of northern England, such as Merseyside, much of Greater Manchester and West Yorkshire. For example, spending per pupil in Liverpool is about 11% above the national average at primary school level and 5% above at secondary school level. In Manchester, spending per pupil is 8% above the national average in primary schools and 19% at secondary schools. These differences purely reflect differences in deprivation and educational need.

**Figure 5.3. Distribution of primary school spending per pupil across local authorities in England, 2019–20**



Source: Consistent Financial Reporting and Annual Academy Returns Data for 2019–20; ONS' Counties and Unitary Authorities 2019 Boundaries. Map design is based on non-contiguous hexagon-based cartograms of the UK (see House of Commons Library, 2022).

Figure 5.4. Distribution of secondary school spending per pupil across local authorities in England, 2019–20



Source: Consistent Financial Reporting and Annual Academy Returns Data for 2019–20 (see <https://schools-financial-benchmarking.service.gov.uk/Help/DataSources>); ONS' Counties and Unitary Authorities 2019 Boundaries. Map design is based on non-contiguous hexagon-based cartograms of the UK (see House of Commons Library, 2022).

There are also some rural councils with relatively high levels of primary school spending per pupil, but low secondary school spending per pupil. This includes areas such as Northumberland, Cumbria, Somerset, County Durham and Gloucestershire. This reflects high levels of spending per pupil for small primary schools. This is not then reflected in higher levels of secondary school spending per pupil as secondary schools are closer to the average size in these areas.

Spending per pupil is generally below the national average in more wealthy rural counties and rural areas across the south of England.

Figures 5.5 and 5.6 analyse the relationship between spending per pupil and deprivation and population density, respectively, at the council level. As shown in Figure 5.5, spending per pupil is generally higher in councils in the 5<sup>th</sup> to 8<sup>th</sup> deciles of the IMD, with spending per pupil about 7%–13% above the national average. This reflects the fact that spending per pupil is much higher in London (particularly inner London) to compensate schools for higher teacher salaries and higher levels of deprivation. However, London councils have become less deprived over time relative to other areas. As a result, London councils tend to be concentrated in the 5<sup>th</sup> to 8<sup>th</sup> deciles, with spending per pupil lower in the most-deprived areas (all outside London). Furthermore, the IMD reflects the deprivation of the overall population, rather than school children in particular. In the next section, we examine the distribution of spending per pupil by the share of pupils eligible for free school meals at individual schools. This is a finer and more accurate measure of how spending per pupil varies by levels of educational disadvantage.

Figure 5.6 further emphasises the role played by London in shaping the distribution of spending per pupil across councils. Across most deciles by population density, there are few differences in spending per pupil. However, spending per pupil in the most densely populated councils is about 35% above the national average. This entirely reflects the effect of higher spending per pupil in inner London.

A natural follow-on question to ask is whether the distribution across councils is in proportion to the level of assessed spending needs across councils. Due to the nature of education and the funding system, it is hard to provide an objective answer to this question.

The creation of the NFF means that funding flowing to councils now directly reflects pupil and school characteristics that are assumed to drive spending needs, such as teacher salary levels, deprivation and sparsity. Councils receive the full funding given by the NFF for all state-funded schools in their area. The only exceptions are the minimum funding levels, which effectively override the formula for some schools, with the proportion affected varying across councils. Unfortunately, one cannot discern the significance of these minimums for individual councils based on public data. Councils can also still use their own funding formulae for schools in their own area, so actual school funding levels can differ from that given by the formula. In any case, these effects will be gradually unwound as part of the transition to a ‘hard’ NFF. How fast these effects are unwound will depend on how quickly the transition occurs. The government will require all councils to move 10% closer to NFF values in their formulae for 2023–24 and is currently consulting on a plan to have a direct NFF in place by 2027–28. Given the scale of the changes involved, this seems like a sensible timetable.

Figure 5.5. Distribution of school spending per pupil across local authorities in England by level of deprivation, 2019–20

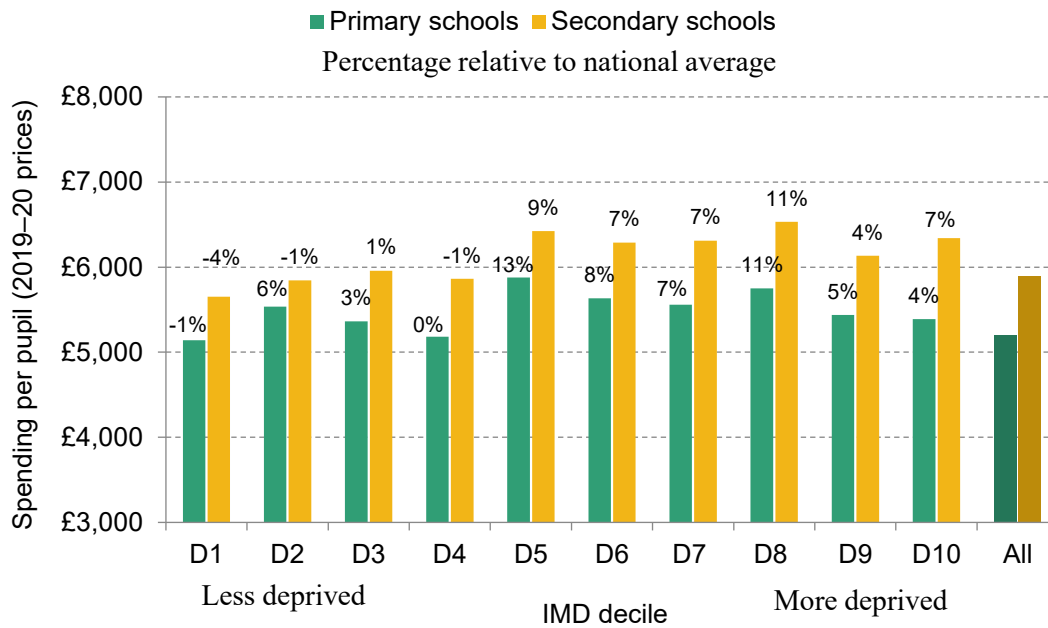
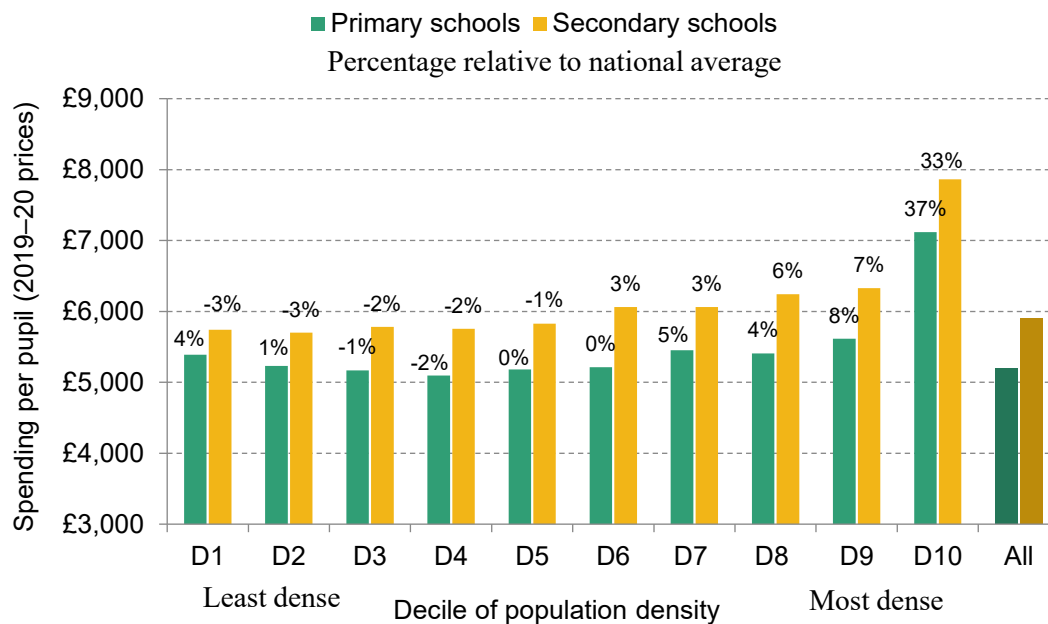


Figure 5.6. Distribution of school spending per pupil across local authorities in England by population density, 2019–20



Source: Consistent Financial Reporting and Annual Academy Returns Data for 2019–20 (see <https://schools-financial-benchmarking.service.gov.uk/Help/DataSources>).

The NFF itself was only partially set with respect to actual differences in costs and need. The new area cost adjustment was set directly with respect to the actual differences in teacher salaries and the costs of other staff. This is more accurate than the previous general labour

market approach. However, levels of funding for disadvantage were set so as to minimise changes in funding across schools and areas, effectively replicating the average levels of disadvantage and deprivation implicit in the old system. Minimum funding levels are also essentially arbitrary.

It is almost impossible to say whether this distribution of funding is ‘fair’ or in proportion to wider notions of need. On the one hand, evidence shows that higher school spending can improve educational outcomes, particularly for disadvantaged pupils (Jackson and Mackevicius, 2021). This suggests that extra funding for schools with more disadvantaged pupils would be a sensible way to help reduce educational inequalities, which are wide and have failed to close significantly over the last 20 years. On the other hand, school funding is only one of the drivers of outcomes. Parental investments, demographics and the quality of schools all play important roles. As argued in the recent IFS Deaton Review chapter on educational inequalities (Farquharson, McNally and Tahir, 2022), one cannot close educational inequalities through the education system alone. They will, to some extent, always reflect the wider inequalities in society and access to different levels of parental investments. Furthermore, the desirable distribution of educational outcomes across areas and schools is also a subjective question, bound up with the level of inequality one is willing to accept in society.

To provide further context on educational inequalities, Figures A.1 and A.2 in the Appendix show the distribution of primary and secondary school outcomes across areas. This shows that primary school outcomes are highest in London and wealthy areas outside London, such as Trafford and Wokingham. The share of pupils achieving the expected standards in primary schools is lowest across urban, deprived areas in North West England, the West Midlands, the south coast some parts of East England (such Norfolk and Peterborough).

The highest GCSE results are again seen in the London area, particularly west and south-west London, and in much of the South East of England. Results are also generally high for wealthy areas outside London, such as Trafford and Cheshire. GCSE outcomes are lowest across Merseyside, Birmingham, South and West Yorkshire, much of Greater Manchester and the south coast of England. Despite relatively high primary outcomes, GCSE outcomes are also relatively low in Tyne and Wear.

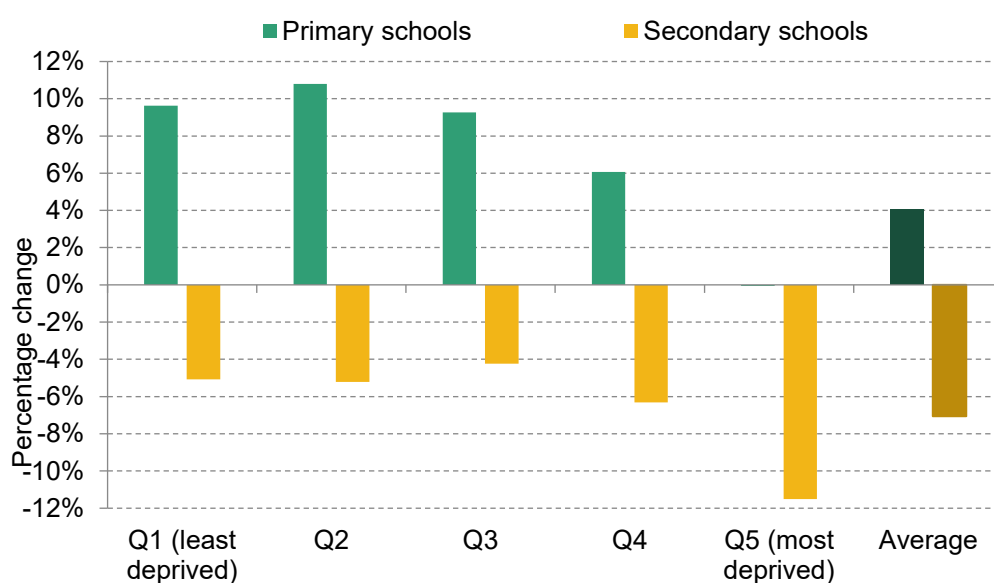
It is obviously notable that outcomes are highest in London, where funding is also highest. Further research also confirms that inequalities and the disadvantage gap in GCSE outcomes are significantly lower in London (Coleman et al., 2022). However, it does not follow that outcomes are highest in London because of high funding. Funding has long been high in London, with recent dramatic improvements attributed to rising school quality and a changing ethnic mix (Burgess, 2014; Blanden et al., 2015). Outcomes are also low in many deprived areas outside London that have high levels of spending. This emphasises the complexity of the education

production function, reflecting both government and parental investments. One could also identify ‘unmet need’ in many deprived areas outside London on the basis of lower educational outcomes and higher levels of inequality in these areas.

## 5.3 Changes in the distribution of funding across schools

Given the operation of the NFF, it is potentially more informative to examine the distribution of spending per pupil across schools. In Figure 5.7, we show how spending per pupil has changed across schools according to the share of pupils from disadvantaged backgrounds between 2010–11 and 2019–20. In particular, we divide primary and secondary schools into quintiles by the share of pupils eligible for free school meals, with Q5 being the most-deprived set of schools. This is likely to be a finer and more accurate measure of how spending per pupil varies with levels of educational disadvantage as it reflects the distribution at school level and concerns, in particular, the level of deprivation amongst families with children.

**Figure 5.7. Real-terms changes in school spending per pupil by quintile of eligibility for free school meals, 2010–11 to 2019–20**



Source: Sibieta (2021); GDP deflators, June 2022 (HM Treasury, 2022b).

As can be seen, primary school spending per pupil increased in real terms over this period. This growth mostly reflects the fact that responsibilities for many services (and associated funding) moved from councils to individual schools (such as school improvement, behaviour support services and more of the provision for pupils with high needs). Therefore, one can see that spending per pupil increased for less-deprived schools by about 10% in real terms, but this came

with extra responsibilities. Amongst the most-deprived primary schools, spending per pupil was largely unchanged in real terms, but this will have had to cover more services and responsibilities.

Amongst secondary schools, spending per pupil fell in real terms across all quintiles. However, there were larger falls amongst more-deprived secondary schools (nearly 12%) than amongst less-deprived school (5%). As with primary schools, secondary schools took on more responsibilities over this period too and these numbers will likely understate the extent of pressure on school resources. It is therefore clear that more-deprived schools saw larger falls in or greater pressures on spending per pupil in the decade up to 2019–20.

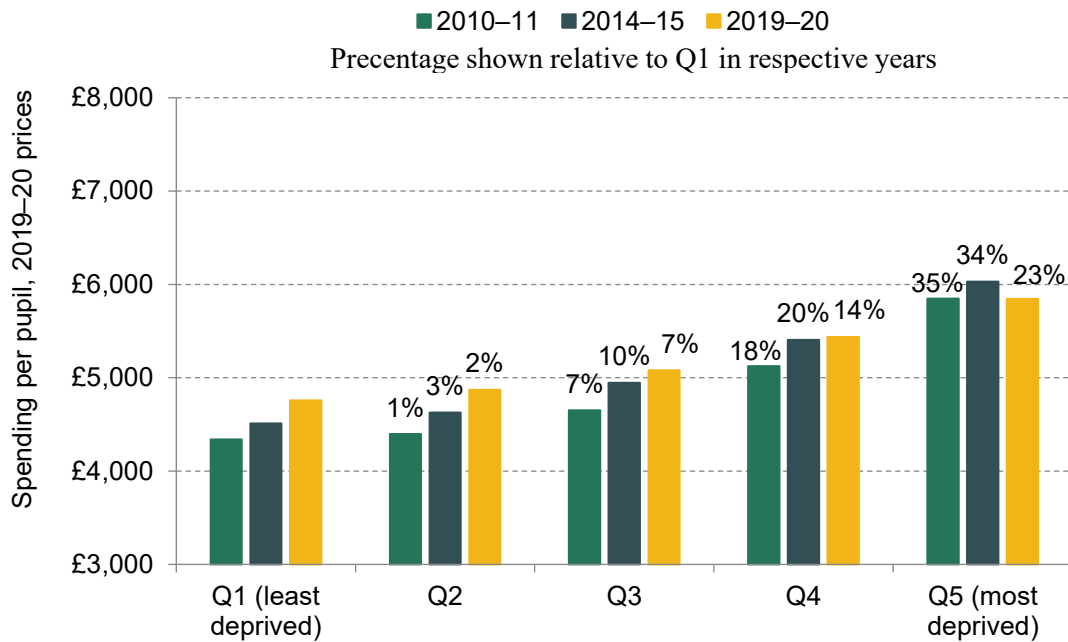
Figure 5.8 shows how this has changed the distribution of spending per pupil across schools. In 2010–11, spending per pupil was about 34%–35% higher for the most-deprived quintile of schools compared with the least-deprived quintile. By 2019–20, this had fallen to about 23% extra. Spending per pupil is still higher amongst the most-deprived set of schools, but the extra targeting is smaller than it was in 2010.

Figure 5.8 shows that most of this drop in targeted funding happened in the five years after 2014–15. This is unsurprising, as the Pupil Premium was frozen in cash terms from 2015 onwards, and its real value was thus gradually eroded by inflation. It also reflects lower increases in funding for more-deprived schools under the NFF.

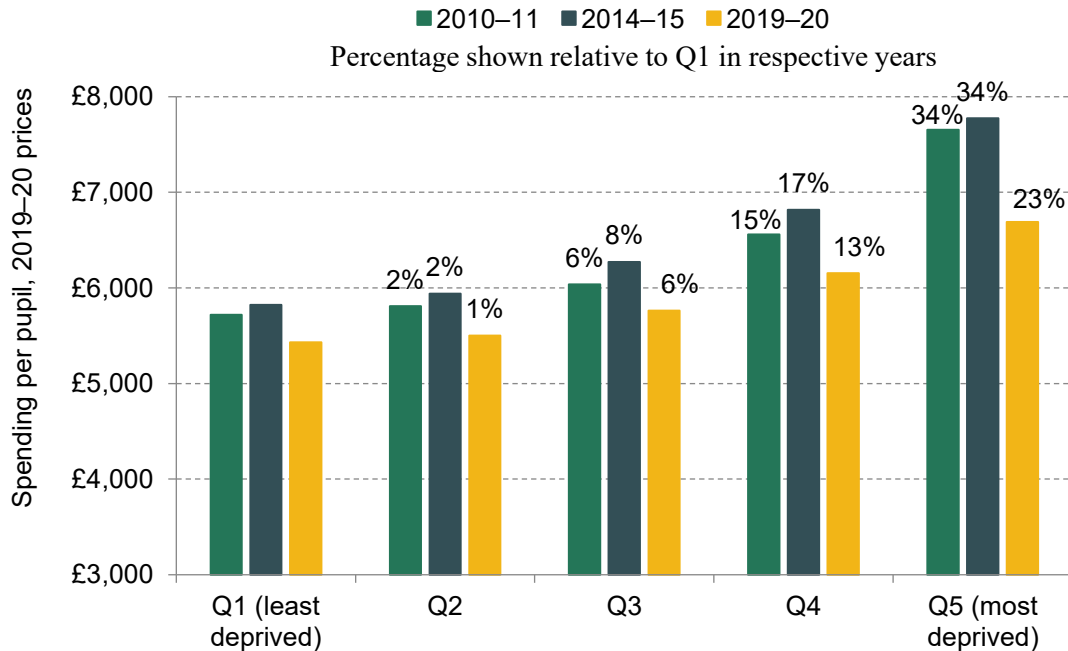
This latter point is illustrated directly in Figure 5.9, which shows the real-terms change in NFF allocations between 2017–18 and 2022–23 for schools experiencing different levels of deprivation. We can see that more-deprived schools received lower real-terms increases in funding per pupil. NFF funding per pupil will increase by 4 percentage points less in real terms amongst the most-deprived primary schools (0.7%) than amongst the least-deprived ones (4.8%) between 2017–18 and 2022–23. We see a similar picture for secondary schools, with 3 percentage points lower growth amongst the most-deprived secondary schools (3.3%) than amongst the least-deprived ones (0.4%). Indeed, more-deprived primary and secondary schools received barely any real-terms increase over this period. These changes will reflect the increasingly important role played by minimum funding levels, as well as other changes to NFF factors over time (Andrews, 2020). Actual school funding levels will have been determined by councils' choices and were topped up the Supplementary Grant. However, the NFF's council-level allocations have played an important role in determining the budgetary choices available to councils and minimum funding levels represent a hard constraint.

Figure 5.8. Level of school spending per pupil by quintile of eligibility for free school meals, 2010–11 to 2019–20

(a) Primary schools



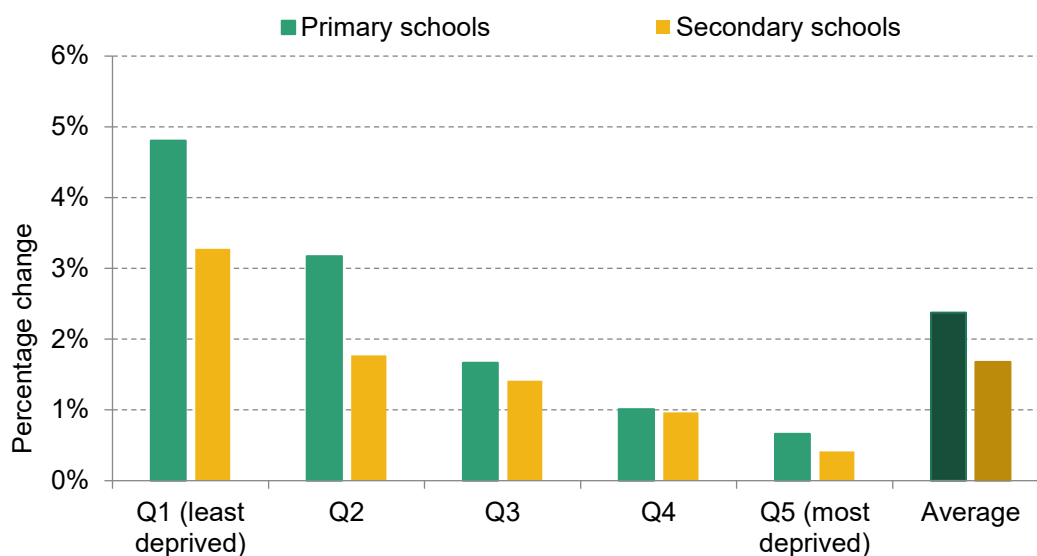
(b) Secondary schools



Source: Sibieta (2021); GDP deflators, June 2022 (HM Treasury, 2022b).



**Figure 5.9. Real-terms changes in NFF allocations by quintile of eligibility for free school meals, 2017–18 to 2022–23**



Source: Sibieta (2021); GDP deflators, June 2022 (HM Treasury, 2022b).

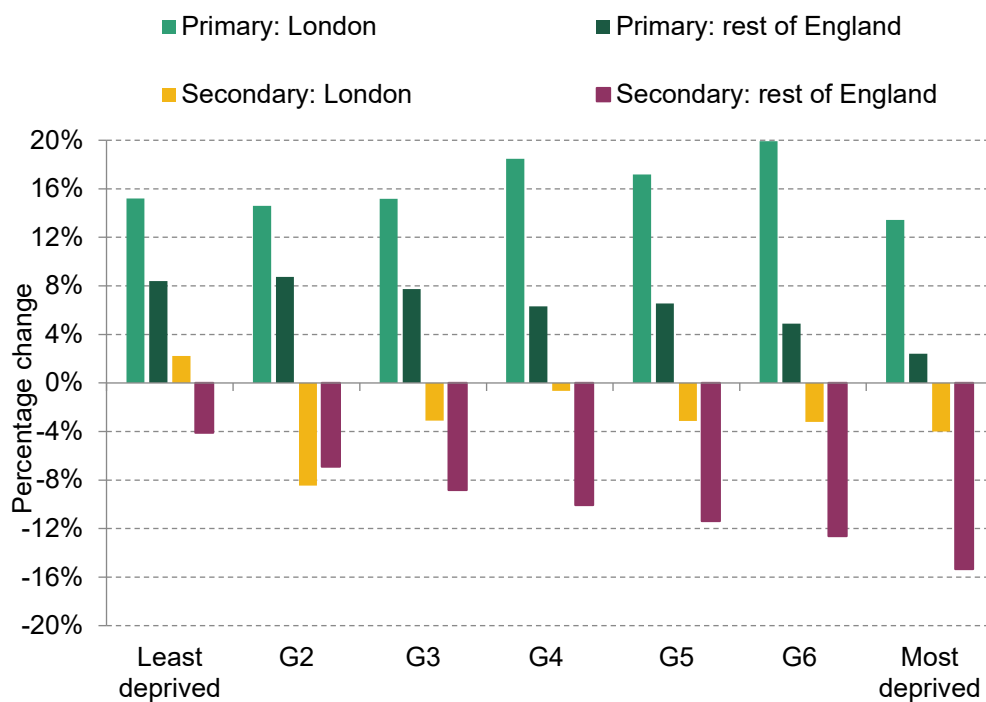
Figure 5.10 explores this pattern further by dividing schools into seven groups based on the share of pupils eligible for free school meals in each year, and then further subdividing them into whether they are located in London or not. The boundaries of the free school meals groups are fixed so that schools can be in different free school meals groups over time as the level of deprivation changes over time. This allows for the fact that schools in London have become less deprived over time.

This confirms the finding that more-deprived schools saw larger cuts up to 2019–20. It then further shows that more-deprived schools outside London have seen the largest spending cuts over this period, with a 15% real-terms fall in spending per pupil amongst the most-deprived secondary schools outside London. This is naturally a concerning pattern given that these are the other areas with the lowest educational outcomes and potentially the highest extent of any ‘unmet need’.

The reasons for this pattern are complex. It partly reflects the changing patterns of deprivation across the country over time. In the decade up to 2019–20, schools in London were becoming less deprived over time, but the funding system did not start reflecting this until the introduction of the NFF from 2018 onwards. This means that some schools in London would have seen higher funding because they were historically more deprived. Many London schools have therefore moved to lower deprivation groups, but still have funding levels based on historic levels of deprivation. This pattern will be gradually corrected as part of the ongoing transition to the new formula. However, as we have seen, the new formula also provides lower increases to more-deprived schools as a result of the policy choices made in the new formula. Combined

with the lower educational outcomes in more-deprived areas outside London, this suggests that the areas in most need of extra funding at present are likely to be more-deprived areas outside London.

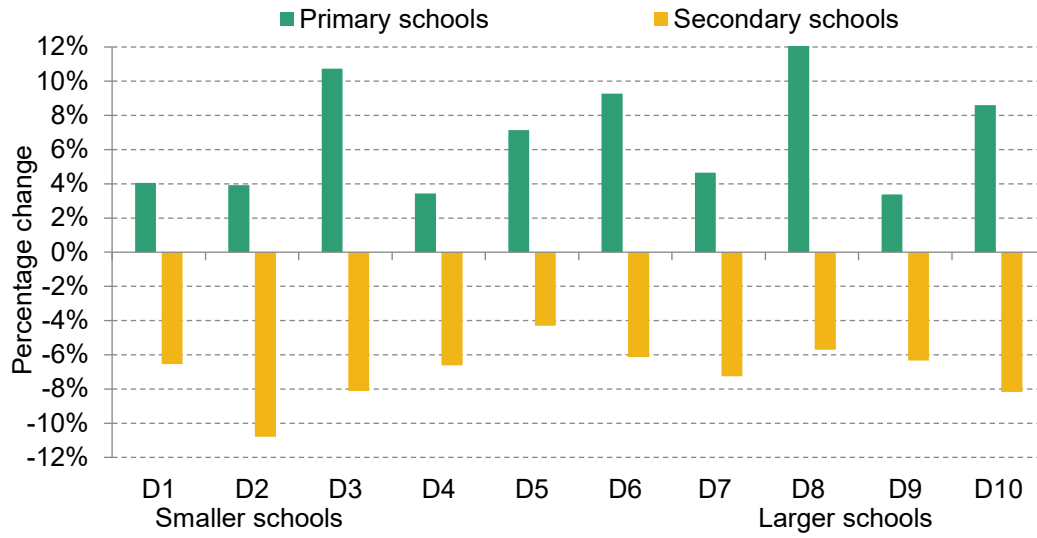
**Figure 5.10. Real-terms changes in school spending per pupil by quintile of eligibility for free school meals, 2010–11 to 2019–20**



Source: Sibietta (2021); GDP deflators, June 2022 (HM Treasury, 2022b).

Figures 5.11 and 5.12 complete the picture by showing the change in primary and secondary spending per pupil by size of schools between 2010–11 and 2019–20, with D1 representing the smallest 10% of schools and D10 the 10% largest schools in terms of pupil numbers. The largest primary schools appear to have received slightly larger funding increases than the smallest ones, but there is no clear discernible pattern by size of schools. As a result, the gaps in spending per pupil by school size have only changed very slightly over time, as shown in Figure 5.12. In 2010–11, spending per pupil in the smallest primary schools was about 16% higher than the largest primary schools, with little difference across other schools. The extra funding for small primary schools fell slightly over time, but was still about 11% extra in 2019–20. This reflects higher funding for small primary schools serving sparsely populated areas. Small secondary schools also receive slightly extra levels of funding per pupil, with about 14% extra in 2019–20 compared with the biggest secondary schools, on average. This difference is also largely unchanged over time.

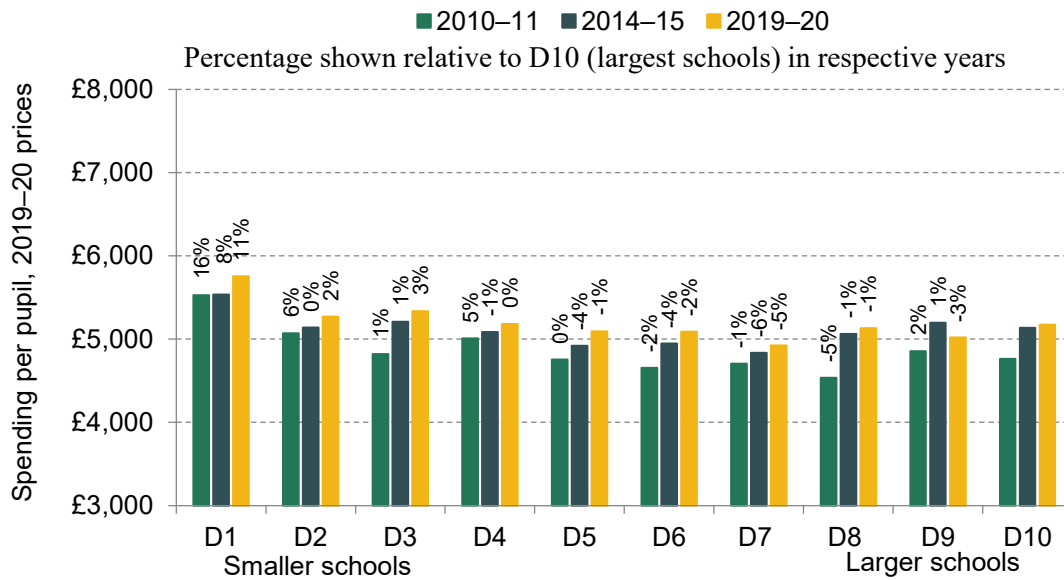
Figure 5.11. Real-terms changes in school spending per pupil by decile of school size, 2010–11 to 2019–20



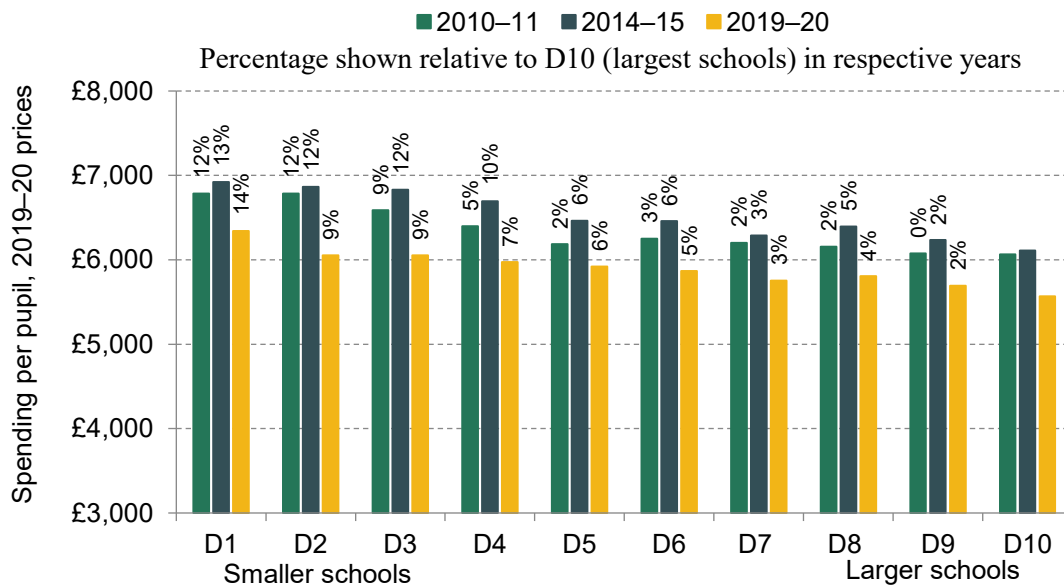
Source: Sibieta (2021); GDP deflators, June 2022 (HM Treasury, 2022b).

Figure 5.12. Level of school spending per pupil by decile of school size, 2010–11 to 2019–20

(a) Primary schools



(b) Secondary schools



Source: Sibieta (2021); GDP deflators, June 2022 (HM Treasury, 2022b).

## 5.4 Summary

The school funding system allocated about £45 billion to schools in England in 2019–20, rising to almost £54 billion this year. Most of this goes direct to schools, with only about 8% of spending undertaken by councils in 2019–20. This follows a long-term trend of devolving more funding and responsibilities from councils to individual schools.

There are large differences in spending per pupil across schools and areas. Spending is higher for schools in the London area to reflect higher salary scales for teachers and other staff. In an effort to combat educational inequalities, a large amount of extra funding is targeted at deprivation and disadvantage. Spending per pupil is also higher at small schools in sparsely populated areas to reflect the higher costs of running such schools.

Up until 2018, there was effectively no formula for allocating funding to different councils based on needs. Instead, funding levels were rolled forward since the mid-2000s, with differences in funding per pupil based on historical levels of needs and costs. In 2018, a new NFF for schools was introduced, which restored a clear link between funding per pupil and differences in needs and costs across areas. This only currently affects the total amount of funding flowing to councils, with councils free to vary the formula for schools in their area. However, the government is planning a transition to a ‘hard’ NFF that will determine the funding levels of all state-funded schools across England.

Following the introduction of the new formula, funding remains highly targeted at schools with more pupils from disadvantaged backgrounds, which is motivated by policy aims to reduce educational inequalities. However, the degree of targeting has reduced over the last decade. This is partly the result of policy decisions, such as cash-terms freezes in the Pupil Premium since 2015 and targeting more funding in the new NFF towards less-deprived schools.

Whilst it is not possible to establish levels of ‘unmet’ need within the school funding system, it is clear that deprived areas outside London generally have lower outcomes, higher levels of inequality and have seen larger cuts in spending per pupil over the last decade.

## 6. Funding for other council services

As well as public health and schools, councils are responsible for a wide range of other services that are crucial to people's well-being and health, and their capacity to live productive and meaningful lives. These include: providing social care for adults and children; housing and homelessness services; local parks, leisure and cultural facilities; environmental and local regulatory services; local public transport; planning services; and supporting economic development.

Adults' and children's social services are vital for the well-being and safety of some of the most vulnerable members of society. Evidence also shows that such services have wider health impacts, including reducing the use of emergency health services (Cattan et al., 2021; Crawford, Stoye and Zaranko, 2021). Having a home that is safe and suitable in terms of size and accessibility is important for health and well-being (Marsh et al., 1999). Recreation, leisure and cultural services provide opportunities for people to exercise and socialise, and enhance the natural environment, all of which are beneficial for health (Valtorta et al., 2016; World Health Organization, 2016). Local transport and planning services play a vital role in allowing people to access other services, enable people to access employment opportunities and generally support the economic prosperity of areas, all of which play an important role in health and well-being (Janke et al, 2020b; Venkataramani et al., 2020).

The differing socio-economic characteristics of different local authority areas in England means that the funding they need to provide a given range and quality of services is likely to differ, before one even considers trying to reduce socio-economic inequalities. This chapter therefore considers the funding arrangements for council services, excluding schools and public health considered in the last two chapters. Broadly speaking, councils are funded via six main mechanisms:

- general-purpose grant funding from central government;
- special and specific grant funding;
- council tax revenues, based on locally set tax rates;
- retained and redistributed business rates revenues;
- income from sales, fees and charges (SFCs) that they can charge for particular services; and
- commercial and investment income.

As we discuss below, this system was initially designed so as to allocate funding between places according to their assessed need for spending on the range of services provided by councils, while still providing councils with significant discretion whether to spend more or less than the centrally determined assessment, and to allocate funding between services in response to local preferences and knowledge. Over time, the role of both redistribution and discretion has been curtailed, with a greater emphasis on the provision of financial incentives for councils to grow local tax bases and tackle the socio-economic drivers of high spending needs. In addition, a series of government decisions means that England currently lacks a proper way to assess the spending needs and revenue-raising capacities of different local areas and allocate funding accordingly. As a result, funding allocations are increasingly out of date and arbitrary in relation to local socio-economic circumstances.

## 6.1 How council services are funded

As highlighted in the introduction to this chapter, councils are funded via a range of different mechanisms. In order of size, as of 2019–20, these are the following.

- (1) Council tax (£25.7 billion in 2019–20) is a tax levied on the occupiers of properties based on their assessed values as of April 1991. Each property is in one of eight tax bands, with the relative tax rates applied to each band and a set of core discounts and exemptions determined by central government. Councils have a degree of discretion on the absolute rate of tax to charge and certain discounts and premia on standard tax rates.
- (2) Retained business rates (£14.2 billion) are a proportion of the tax revenue raised from taxes charged on non-domestic property. Central government sets the tax rate and a range of mandatory reliefs for particular types of businesses and properties, but councils can also offer discretionary reliefs.
- (3) Special and specific grant funding (£3.4 billion) are labelled, and sometimes ring-fenced, for particular purposes.
- (4) SFCs income (£11.4 billion), which councils are able to collect from users of certain services that they offer. The amounts they can charge are often regulated – either with fixed maximum rates, or cost-recovery or earmarking rules.
- (5) General grant funding (£0.5 billion), which councils are able to allocate across services as they see fit, as with council tax and retained business rates revenues.
- (6) Commercial and investment income (£1.5 billion), including via council-owned trading and investment companies. Councils generally have greater flexibility over the pricing and use of profits from commercial activities than they do for service-related SFCs.

Funding sources (1), (2) and (5) can be considered the core elements of the local government funding system. In the rest of this section, we first explain how the approach to allocating this ‘core funding’ has evolved over time, including the changing role of spending needs and

revenue-raising capacity assessments and local discretion on tax rates. This includes a discussion of proposed reforms of the system, which are long overdue. We then describe the approach to allocating the main special and specific grants, and rules governing SFCs and commercial activities.

### The evolving system of core funding

Historically, the main general-purpose grant for councils (the Revenue Support Grant) was allocated between councils in order to offset differences in their assessed relative spending needs and their capacity to raise revenue via council tax. A series of reforms led to this system breaking down from the mid-2000s until it was effectively abolished from 2013–14. At that point, Revenue Support Grants were reduced, with councils instead retaining a proportion of business rates revenues. The remaining Revenue Support Grants have been updated each year by various ad hoc approaches, none of which has fully compensated for differences in council tax revenue-raising capacity. The underlying spending needs assessments have not been updated since 2013–14 and so are increasingly out of date and arbitrary in relation to *current* needs. Increases in council tax beyond certain limits also now require local referendums to be won; to date, no councils have held such referendums.<sup>35</sup>

### How spending needs and revenue-raising capacity were assessed prior to 2013–14

Up to and including 2005–06, the Revenue Support Grant was allocated with the aim of, in principle, fully offsetting differences in assessed spending needs and capacity to raise revenue via council tax. This was done via the following calculations.

- Each council's share of overall assessed spending need was calculated using the spending needs formulae then in place.
- The amount each council could raise if it set its Band D council tax rate at some centrally determined notional rate was calculated. This was summed across councils to calculate total national council tax revenues. This was then added to the amount of Revenue Support Grant to be provided in total across England to calculate 'total notional funding'.
- Each council's share of total notional funding was then calculated as its share of overall assessed spending need multiplied by total notional funding.
- Each council's revenue support grant amount was equal to its share of total notional funding minus the amount it could raise from council tax if it set its Band D council tax at the notional rate.

<sup>35</sup> One council tax referendum has taken place to date. Bedfordshire's Police and Crime Commissioner proposed an increase in the police's share of council tax in 2015, but was unsuccessful, with 69.5% voting against the rise.



This would fully equalise for differences in both assessed spending needs and revenue-raising capacity. In practice, equalisation was not full after 2002–03, as damping arrangements were introduced, which put floors and ceilings on year-to-year changes in grants. And councils could always choose to set their council tax rates higher or lower than the notional rate to spend more or less than their share of ‘total notional funding’. The system therefore tried to balance a focus on redistribution with a degree of local discretion and latterly a desire to smooth changes in relative funding levels.

2006–07 saw big changes, mostly for the worse.

First, a set of new formulae to assess spending needs for different services was introduced. As discussed in Box 6.1, some of these made use of subcouncil-level data in order to reduce the biases associated with past funding decisions. However, others were based on assumed relationships and hence reflected purely subjective decisions about the drivers of spending needs.

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### **Box 6.1. The 2006–07 to 2013–14 spending needs formulae**

Under the formulae used to assess spending needs since 2006–07, services are grouped into 15 service blocks and subblocks, each of which has a separate formula. These include: older adults’ social care; younger adults’ social care; children’s social care; youth and community services; central education functions; upper- and lower-tier environmental protective and cultural services (EPCS); and fire services. Different approaches were used to construct the formulae for the different services; and different indicators included in each formula.

For example, the formulae for social care services were based on statistical analysis of the relationship between spending and population socio-economic characteristics of individual neighbourhoods, rather than councils. As discussed in Chapter 3, this reduces the extent to which past funding decisions will bias estimated spending needs formulae, but may not eliminate the problem entirely. However, the weights placed on the different needs indicators used in the EPCS formula were assumed rather than estimated; this formula therefore represents a purely subjective judgement on the relationship between local characteristics and need for spending on EPCS.

Full information on the indicators used in the formulae can be found in the 2012–13 Local Government Finance Report (Department for Communities and Local Government, 2012). Let’s take four examples.

- The older adults’ social care formula uses: the number of people aged 65 or over; the share of these aged 90 or over; the share in receipt of attendance allowance; the share in rented accommodation; the share living on their own; the share in receipt of means-tested benefits; and a

measure of the sparseness of the local population. These indicators reflect the fact that social care services are most commonly used by the very oldest adults, and are subject to both needs tests and financial means tests.

- The younger adults' social care formula uses: the number of people aged 18–64; the share receiving disability allowance; the share who are long-term unemployed or who have never worked; the share working in routine or semi-routine occupations; and the share of households with no family. Again, these reflect the nature of social care.
- The children's social care formula uses: the number of children aged 0–17; the share of children not in good health; the share of children who are from black ethnic groups; the share living in out-of-work families receiving child tax credit; the number of adults aged 18–64 claiming income support or income-based jobseeker's allowance; and a measure of the local cost of fostering services.
- The upper-tier EPCS formula uses: the total population; population density; the number of net in-commuters and day visitors; the number of unemployment and means-tested benefit claimants; the number of incapacity and severe disablement allowance claimants; and the number of people born outside the UK

The assessed spending needs for different service blocks and subblocks are then adjusted for differences in labour costs and property costs. The calculation of these 'area cost adjustments' differ across services, depending on average labour and property cost shares. Finally, each council's overall assessed spending need is equal to a weighted sum of its need for each service it has responsibility for.

One problem with these formulae is that even at the point the formula was introduced, some of the data used in it were several years old. For example, information on the share of older adults living on their own or in rented accommodation, the share of working age adults in routine or semi-routine jobs, and the share of children from black ethnic groups was based on the 2001 Census. By the time the formulae stopped being regularly used and updated in 2013–14, these data were already 12 years out of date; they are now over 20 years out of date.

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Second, a new system for accounting for differences in assessed spending needs and revenue-raising capacity was introduced: the four-block model. Box 6.2 explains and evaluates this model in detail. However, in summary, this model and its implementation were deeply flawed: target funding allocations were very sensitive to small changes in data for individual councils; the weights applied to different blocks were not properly updated to account for increases in the share of overall funding provided by council tax, leading to much bigger cuts for more deprived areas of England; the damping component often exacerbated these inequalities; and it was so complex and opaque that the government of the time was able to misrepresent the funding choices it was making as favouring rather than penalising deprived areas.

### Box 6.2. The flawed four-block model

The four-block model was introduced in 2006–07 following concern that the previous approach to allocating Revenue Support Grant was misunderstood and did not provide the government with discretion over the degree to which differences in assessed spending needs and revenue-raising capacity should be accounted for. However, this new system was incredibly complex and poorly understood, had inherent design flaws, and was inappropriately implemented. By the time it was last used in 2013–14, effective equalisation of spending needs and revenue-raising capacity had broken down.

The four components of the model were the following.

- The ‘relative need block’, which allocates a proportion of funding to councils based on the extent to which their assessed need for spending different services exceeds the council with the lowest assessed need.
- The ‘relative resource block’, which is a deduction from funding based on the council tax base of a council area relative to the area with the lowest council tax base.
- The ‘central allocation block’, which distributes the remaining grant funding to councils on the basis of population.
- The ‘floor damping block’, which guarantees all councils a minimum increase (or maximum cut) in funding, paid for by scaling down grants for other councils.

The weights applied to the first three blocks were set by the government and helped determine the extent to which differences in spending needs and revenue-raising capacity would be offset, providing the flexibility ministers had desired.

But this design suffered significant inherent problems. The fact that the ‘relative need block’ was based on above-minimum needs caused two issues. First, the components of councils’ overall needs that were above and below these minimums were funded at different rates. This meant that funding per unit of assessed need varied across councils given variation in the extent to which their needs exceeded the minimum needs. In particular, funding was higher per unit of need up to the minimum level than above it, giving more funding per unit of need for councils with relatively lower needs. Second, and related to this, allocations were very sensitive to the circumstances of the council with the lowest assessed spending needs. For example, Gibson and Asthana (2011) show that, for example, if Wokingham borough council (the council with the lowest assessed needs for a number of services) was assumed not to exist and its funding reallocated to the rest of local government, the working of the four-block model would have seen Richmond-upon-Thames actually lose 44% of its pre-damping funding. Analogous issues arose for the ‘relative resources block’ given it was based on the extent to which councils’ revenue-raising capacities were above the minimum level. This time, the amount

clawed back was lower per unit of tax base above the minimum level, meaning that revenue-raising capacity was taken into account less for councils with high revenue-raising capacity.

Further problems arose due to how the model was implemented during a period of big cuts to grant funding, and hence big increases in the share of overall funding provided by council tax. To continue to equalise to the extent as previously, the *share* of grant funding clawed back to account for differences in revenue-raising capacity via the ‘relative resources block’ would have to increase to offset the smaller size of the grant. But this was not done between 2010–11 and 2012–13, meaning that as grant funding was cut and council tax loomed larger in overall funding, grant allocations offset less of the variation in revenue-raising capacity. However, the complexity of the system allowed the government to claim it was actively targeting funding at the most grant-dependent, most-deprived councils.

Decisions related to the ‘floor damping block’ exacerbated this. For example, the government capped cuts in grants to those that were most grant-dependent at 11.3% compared to 14.3% in 2011–12. But the extent to which councils relied on grant funding varied by much more than a factor of 1.26 (14.3/11.3), and so these caps led to funding being redistributed to the least grant-dependent councils. Moreover, when the government did finally update the weight applied to the ‘relative resources block’ in 2013–14 to account for the fact that council tax was now a bigger share of overall funding, the ‘floor damping block’ undid much of the effect by capping cuts in grant funding for the least grant-dependent councils.

While the four-block model is now redundant, it is vital that future funding systems avoid the fundamental flaws, lack of transparency, and poor implementation associated with this former system.

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These issues meant that even before the four-block model was abandoned in 2013–14, the system for allocating grant funding to offset differences in assessed spending need and revenue-raising capacity had broken down.

Following the decision to stop using the model to update councils’ funding each year, changes in Revenue Support Grant funding have been calculated using different ad hoc approaches, as follows

- In 2014–15 and 2015–16, no effort was made to account for differences in councils’ relative needs and tax bases. Instead, all councils of a given type (for instance, a district or a county) faced the same percentage cut in grant. This implied much larger reductions in overall spending power for councils highly reliant on grants than for those that relied more on their own council tax revenues.
- Between 2016–17 and 2019–20, changes in Revenue Support Grant funding accounted for differences in how much councils actually raised in council tax in 2015–16. This led to more equal cuts in spending power across councils than previously, but did not fully equalise cuts: it did not account for the fact that councils that raised more council tax in

2015–16 could also raise more from subsequent increases in tax rates. In addition, while the calculations implied some councils with particularly large tax bases should get negative amounts of Revenue Support Grant, the government decided not to do this. By using actual rather than notional council tax revenues, it also provided relatively more grant funding to councils that had lower council tax rates as of 2015–16. On the one hand, this could be seen as unfairly subsidising lower tax rates; on the other hand, it could be seen as a practical response to the difficulty in raising council tax under the current local government finance system (see below).

- Since 2020–21, the Revenue Support Grant has been increased in line with inflation for all councils. Like the approach used in 2014–15 and 2015–16, this takes no account of differences in grant-dependency, but this has mattered much less, given that grants and council tax have increased by similar rates recently.
- Finally, in 2022–23, the government introduced an additional ‘one-off services grant’, allocated on the basis of councils’ share of Revenue Support Grant and retained business rates revenues as of 2013–14. This allocates most of the funding to deprived areas that relied (and continue to rely) most on these other sources of funding. As a result, funding for more-deprived councils increased at a faster rate than for less-deprived councils in 2022–23, for the first time in over a decade.

### The introduction and evolution of the business rates retention system

As well as being the last year of the four-block model, 2013–14 saw the introduction of the business rates retention system. English local government as a whole was allocated 50% of business rates revenues, with the Revenue Support Grant cut by a commensurate amount.

However, individual councils do not retain 50% of the business rates raised in their area. Instead, at the time the scheme was set up, an assessment was made of how much funding each area needed, based on the amount of grant it would now forgo. This ‘baseline funding level’ was subtracted from the initial value of business rates devolved to a council, termed its ‘business rates baseline’. Those councils for whom ‘baseline funding levels’ were lower than their ‘business rates baselines’ pay tariffs equal to the difference to pay for top-ups to councils whose ‘baseline funding levels’ were higher than the ‘business rates baselines’. In the years since, these baselines, tariffs and top-ups have effectively been uprated in line with inflation. This means that under the business rates retention system, councils bear 50% of the real-terms change in business rates collected in their areas—gaining if revenues grow more quickly than inflation, and losing otherwise. In practice, such changes largely reflect changes in the stock of non-domestic property in an area; the effects of changes in values when properties were revalued in April 2017 were stripped out, by updating the ‘business rates baselines’ and associated tariffs and top-ups. Changes in revenues can also be driven by changes in the fraction of properties eligible for certain reliefs, such as charities relief, and successful appeals against the rateable values assigned to properties.

Harris, Hodge and Phillips (2019) find that, in 2019–20, above-inflation growth in business rates revenues was forecast to be £1.9 billion across England as a whole, with total accumulated above-inflation growth amounting to £5.9 billion between 2013–14 and 2019–20. Around £0.7 billion of the £1.9 billion growth in 2019–20 (and £1.8 billion of the £5.9 billion cumulative growth between 2013–14 and 2019–20) was the result of additional growth retained by areas piloting higher retention rates. Most of those pilots have since come to an end, and therefore above inflation growth will have fallen back slightly since then.

There are big differences across councils in the amount of growth retained, reflecting both differences in growth in business rates across the country, and the design of the business rates retention system. In particular, a given rate of real-terms growth in underlying business rates revenues translates into a higher rate of real-terms growth in retained rates and overall funding for councils with large tax bases and low assessed funding needs. Harris et al. (2019) find the biggest increases in funding for London and East Midlands, and the smallest increases in funding in the North East of England. Increases were bigger for shire districts than shire counties, reflecting the fact that in two-tier areas, districts retain 40 percentage points of the 50% local share, and counties 9 or 10 percentage points. Indeed, over the period between 2013–14 and 2019–20, one-in-ten shire districts retained growth equal to 8.5% or more of their overall funding. In contrast upper-tier counties, with responsibility for social services and public health, have nearly all received less funding than if the same overall funding has been allocated according to assessed spending needs. Councils serving populations with low levels and the highest levels of deprivation have generally done better from the business rates retention system than councils with middle to high levels of deprivation.

The objective of the business rates retention system is to provide councils with stronger financial incentives to grow local economies: they now retain a proportion of the growth in business rates revenues that would results from this. However, there is remarkably little evidence about how much impact this has had in practice; and research shows that the relationship between local economic growth and changes in the stock of non-domestic property is very weak (Amin-Smith et al, 2018b).

### Changes to council tax

The 2010s also saw changes to how central government attempts to limit council tax increases. In particular, since 2012–13, councils have had to hold and win a referendum if they want to increase council tax by more than a given percentage, which varies by year. In the first few years of the 2010s, most councils froze their council tax, incentivised by grants from central government that covered the revenue that councils would have received from 1%–2% increases in council tax. However, since 2015–16, and the ending of this incentive, most councils have increased their council tax by the maximum allowable without a referendum.

These referendum limits have also generally been higher for councils with social care responsibilities since 2016–17. In particular, in addition to a 2% limit for ‘standard’ council tax increases, councils with social care responsibilities have been able to levy additional increases of 1%–3% a year (depending on the year) to raise additional revenues that are ring-fenced for adult social care services (Sandford, 2022). These ‘social care precepts’ raise different amounts in different parts of the country, although, as discussed below, special and specific grants for social care services offset much but not all of these differences.

The council tax referendum requirements undoubtedly provide local residents with more direct control over local council tax rates than would otherwise be the case. However, the legislation governing referendums restricts the information councils can provide during referendum campaigns, which councils argue would make it very difficult to win a referendum. No other taxes, including those set by central government, are subject to referendums; democratic accountability is instead via regular elections, where voters consider a full range of policy issues in the round. In addition, referendum limits that are expressed in percentage terms mean that councils that historically set lower rates are more constrained in their ability to raise council tax, even if the political priorities of the council have subsequently changed. The constraints imposed by the referendum requirements are also likely to be one of the factors why, between 2016–17 and 2019–20, the Revenue Support Grant was allocated taking account of actual rather than notional council tax revenues. This was arguably unfair, as councils setting lower tax rates received more grant funding; but, with the percentage-based referendum limits particularly constraining the ability of low-tax councils from offsetting cuts in grants via council tax increases, such an approach may have been seen as a necessary evil.

The other major change to council tax during the 2010s was the localisation of responsibility for designing and funding means-tested council tax discounts for low-income families in 2013–14. This aimed to save money (councils were provided with grant funding equivalent to only 90% of the cost of the former centrally designed and funded £4.2 billion scheme) and to provide councils with stronger financial incentives to help their residents into work and increase their incomes – as doing so would reduce the cost of means-tested council tax support. Adam, Joyce and Pope (2019) looked at the design choices made by councils and found that, as of 2018–19, councils in more-deprived areas and controlled by Labour were more likely to introduce minimum payments for even their poorest residents, although this was because they received larger cuts in funding. Controlling for this, Labour councils were substantially *less* likely to introduce minimum payments than Conservative councils. They also found that around one-quarter of the council tax due from cuts to support made by councils was left unpaid, and that minimum payments led to a 15%–20% increase in people contacting Citizen’s Advice about council tax. However, there is no evidence it led to more people falling behind on other bills or unable to afford other items.



### Appraising the current core funding system

The core council funding system has evolved significantly in the last decade or so. Central government funding was cut substantially during the 2010s in an effort to reduce the government's budget deficit. The core objective of reform was to give councils' stronger financial incentives to boost growth and tackle factors that drive spending needs – through the retention of a portion of business rates revenue growth, and the ending of annual updates to spending needs assessments.

An increased emphasis on financial incentives relative to redistribution according to assessed spending needs is a legitimate objective. However, the way the reforms have been implemented and the continued use of spending needs formulae that use data that are between 10 and 21 years out of date are undesirable. Cuts to grant funding have led to bigger cuts to funding and spending in more-deprived parts of the country; no account is taken of big differences in population growth in the nine years since spending needs formulae were last updated, penalising councils with fast-growing populations; and spending needs and revenue-raising capacity are taken into account in an ad hoc (and, in the case of council tax, arguably unfair) way. Thus, while there may be issues with how special and specific grants for certain services are allocated, the biggest priority for reform is how 'core' funding from the Revenue Support Grant, council tax and business rates is distributed across England.

### Potential reforms under the 'fair funding review'

In recognition of the unsatisfactory state of the council funding system, plans for reforming it were put in train in 2015. This included updated assessments of spending needs and revenue-raising capacity and changes to the business rates retention scheme. Detailed consultations on the proposals were published in 2018,<sup>36</sup> with the broad approaches then being considered broadly sensible. This included a range of separate formulae for different service areas, the use of neighbourhood- or individual-level data for constructing the needs assessment formulae for social care services, and the use of notional (as opposed to actual council tax) for assessing revenue-raising capacity. In addition, stripping out the effects of appeals against valuations and updating business rates revenue-raising capacity on a rolling basis would both improve the business rates retention system. However, other aspects of the proposals were less well thought out: a plan to base needs assessments for many services on population only (not accounting for deprivation levels, for example) was poorly justified; and taking account of projected population growth when projecting forward assessed spending needs but not when projecting forward

<sup>36</sup> Ministry of Housing, Communities and Local Government (2018a, b).



revenue-raising capacity would potentially over-compensate areas with more rapidly growing populations for the extra recurrent costs incurred.<sup>37</sup>

Implementation of reforms has been significantly delayed though: an initial implementation date of April 2019 has been pushed back several times, and there is currently no firm date for when reform will take place, although recently Ministers confirmed that it would not be before April 2025 (and potentially much later than that given a general election must be held before January 2025). This should be rectified, as current allocations are increasingly out of date and arbitrary in relation to the likely spending needs of different areas.

### Special and specific grants

Special and specific grants, labelled and sometimes ring-fenced for particular purposes, historically sat outside historic assessments of councils general spending needs and revenue-raising capacity. Instead, bespoke allocation methods were, and continue to be, used to allocate them, including assessments of needs for the specific services in question, competitive bidding or outcomes-based payments. The main special and specific grants are currently the following.

- **Public health grant** is a ring-fenced grant to pay for services with a public health benefit. This amounted to £3.1 billion in 2019–20, and grew to £3.4 billion this year. Details of how this funding is allocated between councils is discussed in Chapter 4.
- **Grants for social care service**, including the Improved Better Care Fund, amounted to £2.5 billion in 2019–20, and have grown to £3.8 billion this year. The Improved Better Care Fund (just over half the total this year) is ring-fenced for adult social care services, and use of it must be jointly agreed by councils and local NHS bodies. However, because total spending on adult social services far exceeds the value of this grant, councils could change how much other funding they spend on social care services when these ring-fenced grants change. The Social Care Grant is not formally ring-fenced, but the government's intention is that it is spent on adults' or children's social care services.

The allocation of these grants between councils takes account of two things. First, each council's share of assessed spending needs for adult social care services as of 2013–14. No account is taken of how need may have changed in the last nine years – for example, due to differences in population growth – or of assessed spending needs for children's social care services. The second thing that is accounted for, albeit not fully, is differences in the amount that councils can raise themselves via the council tax social care precept. A portion of the funding each year is allocated so that the sum of the change in social care grant plus the

<sup>37</sup> Amin-Smith, Harris and Phillips (2019) and Amin-Smith and Phillips (2019).

change in revenue from the social care precept is equalised across councils. Full equalisation would require some councils to have a negative allocation for this portion of grant funding but this is not allowed. The councils with the lowest relative spending needs and/or highest revenue-raising capacities therefore receive a share of the total funding increase for social care services (from the grants and the social care precept) that is bigger than their share of assessed spending needs.

- **New Homes Bonus** is an un-ringfenced grant, which provides match-funding for the council tax that would be received from properties that are newly built or brought back into use after being empty for an extended period, if a council charged the national average Band D tax rate. It was worth just over £0.9 billion in 2019–20, but has declined to under £0.6 billion this year. This is because whereas up to 2019–20 councils received match payments for four years, for properties completed or re-used since October 2018 this has been reduced to one year.<sup>38</sup>

The aim of the Bonus is to incentivise councils to support the building and re-use of residential property. The design of the scheme means that payments are larger for new properties in higher council tax bands, and hence payments per property are generally higher in more-affluent than more-deprived areas, and in the south than in north of England. In addition, payments are only made when the number of properties in an area increases by at least 0.4% per year. This means areas where population growth and the demand for new housing are lower, including many deprived areas, do not receive any payments.

In areas with two-tier local government, shire districts receive 80% and shire counties 20% of the payment value. This split was chosen as shire districts are mainly responsible for the local planning system. However, council tax bills, on which overall payment amounts are based, are split approximately 12%/88% in favour of counties. This means shire districts receive an amount that far exceeds the council tax they themselves levy on the properties in question, whereas shire counties, which are responsible for the costliest local public services (including social care and public health services), receive an amount that is much less than the council tax they levy. The chosen split therefore provides a very strong financial incentive for district councils with planning responsibility, but relatively little in the way of 'reward' or 'compensation' for county councils with the most costly responsibilities for the residents of the new properties.

The government plans to end the grant in its current form from 2023–24 – what will replace it is currently unclear.

<sup>38</sup> As a result, this year payments are being received for properties built or re-used between October 2017 and September 2018 and between October 2020 and September 2021 but not the period in between.

- **Homelessness prevention grant** provides funding aimed at delivering the provisions of the Homelessness Reduction Act: reduce rough sleeping, reduce the use of unsuitable bed and breakfast accommodation, and prevent people becoming homeless in the first place. However, it is not formally ring-fenced for this purpose. Its predecessor grants amounted to £200 million in 2019–20 and it amounts to £316 million this year.

Funding is allocated between councils through a combination of rolling over the prior year's grant allocations and a formula for assessing the relative need for funding associated with new responsibilities related to homelessness. Rolled-over funding is ultimately based on homelessness service activity and expenditure from 2016–17 or 2017–18, as well as local deprivation levels, with adjustments made for differences in private rental costs. Several floors guaranteeing minimum allocations also apply. Full details of these calculations are not published though.

Rolling forward allocations in this way means that over time they will become out of date as patterns of need change across the country. However, simply updating the homelessness activity data used would also not be appropriate, as councils' financial incentives for measuring and tackling homelessness would be distorted (given that funding would depend on the data they report to the government).

In light of this, the government has recently consulted on a new approach to allocating funding from 2023–24 onwards (Department for Levelling Up, Housing and Communities, 2022a). In particular, it plans to allocate funding using three formulae: just under 30% would be allocated using a formula based on the number of housing benefit claimants, property rents and other costs in each council area; just under 10% using information on the share of adults homeless or owed a duty of care to prevent homelessness; and the remainder based on two possible formulae that would replace some of the historic data currently used with either more up-to-date data on homelessness spending or differences in costs across areas. If adopted, the proposals will significantly redistribute funding, with councils in London in particular losing if the third (and most important) formula is based on general differences in costs across areas (given homelessness spend has historically varied by more than this).

- **Supporting Families Programme grant** is a grant that aims to fund and incentivise councils to help eligible families achieve good outcomes related to education, health, financial stability, and the prevention of crime and abuse. Funding for its predecessor (the 'Troubled Families Programme') was worth £1.1 billion in total between 2015–16 and 2020–21 (annual allocations are not published), and total programme funding this year is set at a maximum of £203 million. A proportion of the funding is provided upfront on the basis of assessed need for support. Receipt of the rest is dependent on the number of

families successfully ‘supported’ by councils, with each family attracting a payment of £800. These ‘payments by results’ are capped for each local area based on the same needs assessment.

Needs are assessed on the basis of each upper-tier council area’s average IMD (deprivation) score and population that consists of families with dependent children. Families are deemed eligible for payment by results if they have identifiable needs or risks related to at least three of the outcomes targeted by the programme (e.g. related to education, financial stability, and prevention of abuse).

Councils self-certify whether they have successfully ‘supported’ a family to significantly address its problems. Concerns have been expressed about how truthfully councils have done this, with suggestions that they counted families’ circumstances that improved but who did not receive the intensive support provided by the programme (Crossley, 2015). However, evaluation of the programme does suggest reductions in the number of children being taken into care, the number of adults and children committing crime, and in the share of adults that are unemployed (Ministry of Housing, Communities and Local Government, 2019a).

- **Housing Benefit and Localised Council Tax Support administration grants** are grants to fund the administration of housing benefit and councils’ means-tested reductions to council tax. They amounted to £233 million in 2019–20, and the same amount this year as the increase in the grant for administering council tax support was offset by a reduction in the grant for administering housing benefit, as migration to centrally managed universal credit continues. Funding for the Housing Benefit administration grant is allocated based on prior year housing benefit caseloads adjusted for expected rates of migration to universal credit. Funding for the Council Tax Support administration grant is allocated based on claimant numbers and is adjusted for differences in labour costs and property costs across areas. Because councils design their own Council Tax Support schemes, in principle, basing grants on claimant numbers skews their incentives: the more people eligible and claiming their scheme, more funding they receive. However, the grant is small relative to the cost of these schemes, so this distortionary effect is likely to be very limited.
- **Former Independent Living Fund Recipient Grant** is a grant provided to councils to pay for services and equipment to help those disabled people who previously benefited from the centrally managed Independent Living Fund to live independently, following the Fund’s closure. Total funding amounted to £161 million in 2019–20, since when it has been frozen in cash terms.

Funding is allocated to councils in line with expenditure patterns of the former centrally managed fund at the point of its closure in 2015–16. This reflects the purpose of the grant: to fund services for former recipients of the fund. However, the government decided to close its centrally managed fund as it argued that changes to council-managed social care services following the Care Act (2014) meant that these services could meet disabled people's needs. Arguably, councils that previously had many people in receipt of the Independent Living Fund therefore receive too much funding relative to those that had few people in receipt: they both received the 'new burdens' funding for the Care Act, and the former receive much larger amounts of funding on top, despite the Care Act provisions supposedly superseding the need for the Independent Living Fund.

Other specific and special grants provide funding for a range of expenses including part-funding local bus subsidies, administering the localised 'Social Fund' programme, helping prevent local people's homes being repossessed, and supporting unaccompanied children seeking asylum. Each of these is allocated in its own specific way; describing and assessing each of these is beyond the scope of this project.

### **Sales, fees and charges and commercial income**

Councils are able to levy fees and charges to help cover the costs of many of the services they provide to local residents. This includes: charges for on- and off-street parking and fines for non-payment and parking offences; fees for using leisure facilities and hiring council-owned venues; charges for commercial waste collection, pest control, trading standards, licensing regimes and environmental health services; fees for planning applications and building control services; charges for burials and cremations; and co-payments for means-tested adult social care services. In total, these fees and charges were worth £11.4 billion in 2019–20.

Many of these charges are subject to regulations on their level and/or how they can be spent. For example, legislation requires that the fees should be set at a level to cover costs, rather than raise revenues. However, in practice, fees for certain services, most notably parking, typically exceed costs, generating net income for many councils. This reflects the need to set a price that properly manages supply and demand, which may exceed the cost of operating the relevant facilities/service.

In addition to regulated fees and charges, councils are able to generate income by selling products and services, and investing in property, including via council-owned businesses. Legislation restricts councils' commercial activities to discretionary services and requires commercial trading to be undertaken via a council-owned company as opposed to directly by the council.

The amounts raised from SFCs differ significantly across councils, which will partly reflect councils' choices over what services to offer and what level to set fees at, but also partly reflect local socio-economic characteristics. For example, the means-testing of adult social care services means that income from co-payments will be lower in areas where a large fraction of people have very low levels of income and assets, which mean they are entitled to full support. Fees from parking will be higher in local authority areas covering major cities, where many people drive to work and shop and where alternative parking is limited. Areas with many visitors will be able to raise more from leisure and cultural facilities than elsewhere.

As discussed above, SFCs income is netted off the measures of expenditure historically used to construct the formulae to assess councils' spending needs. Thus, while individual councils get to keep what they raise in income from SFCs, councils with characteristics associated with above (below) average levels of SFCs income receive lower (higher) central government funding than they otherwise would. However, commercial income was not netted off expenditure in the construction of these spending needs formulae. This reflects the much more variable level of commercial income across councils.

There is limited information available on councils' commercial activities, although many have purchased commercial property over recent years, some with the aim of generating a financial return (National Audit Office, 2020). By one measure, income from trading, interest and investments totalled £1.5 billion in 2019–20.<sup>39</sup> This seems to be especially important for a small minority of councils, and was worth more than £65 per capita in one-in-ten areas.

## 6.2 The resulting funding allocations

In this section, we examine how funding varies across upper-tier local authority areas, pooling data for lower-tier districts and upper-tier counties in areas with two-tier local government. We focus on funding from council tax, business rates, and the set of grants that are included in the governments measure of core spending power, which is wider than what we term core funding. Because councils can set their own Band D council tax rates, we look at funding both using the actual Band D rates they set and if they charged the national average Band D rate for all councils.

<sup>39</sup> This includes surpluses on a council's internal and external trading accounts, and any interest and investment income, but does not net off any related spending, such as interest payments made. See Ministry of Housing, Communities and Local Government (2021a).

## Variation in funding across councils

On average, councils received funding from these sources of £779 per capita in 2019–20, of which just under 60% (around £460) was from council tax and a further third (around £250) from business rates, with the remainder from government grants. There were large differences in per-capita funding between areas. Given the actual council tax charged by each council the highest-funded tenth of areas received per capita funding of more than £909, while the lowest-funded tenth received per capita funding of less than £691 – around a quarter less. Wandsworth received the least funding, £603 per capita, 23% below the national average. Knowsley received the most, at £1,107 per capita, or 42% more than the national average.

Figure 6.1 shows the geographical distribution of overall funding for areas in 2019–20 relative to the national average, again based on the actual council tax charged in each area. Funding is highest per capita in inner London and parts of Greater Manchester and Liverpool, as well as other relatively deprived urban areas, such as Blackpool, Middlesbrough and South Tyneside.

The costs of delivering services also vary across the country, with costs higher in London and the South East than elsewhere.<sup>40</sup> Adjusting for these relative costs makes a significant difference in inner London, where costs were assessed to be 20% higher than in more rural areas, such as Cornwall, Cumbria and Derbyshire. As shown in Figure A.4 in the Appendix, levels of funding in 2019–20, adjusting for differences in area costs, are close to the national average (rather than significantly above it) in inner London. Conversely, funding levels look relatively higher after adjusting for costs in most of the North and Midlands and rural areas of the South West of England.

## The role of differences in council tax rates

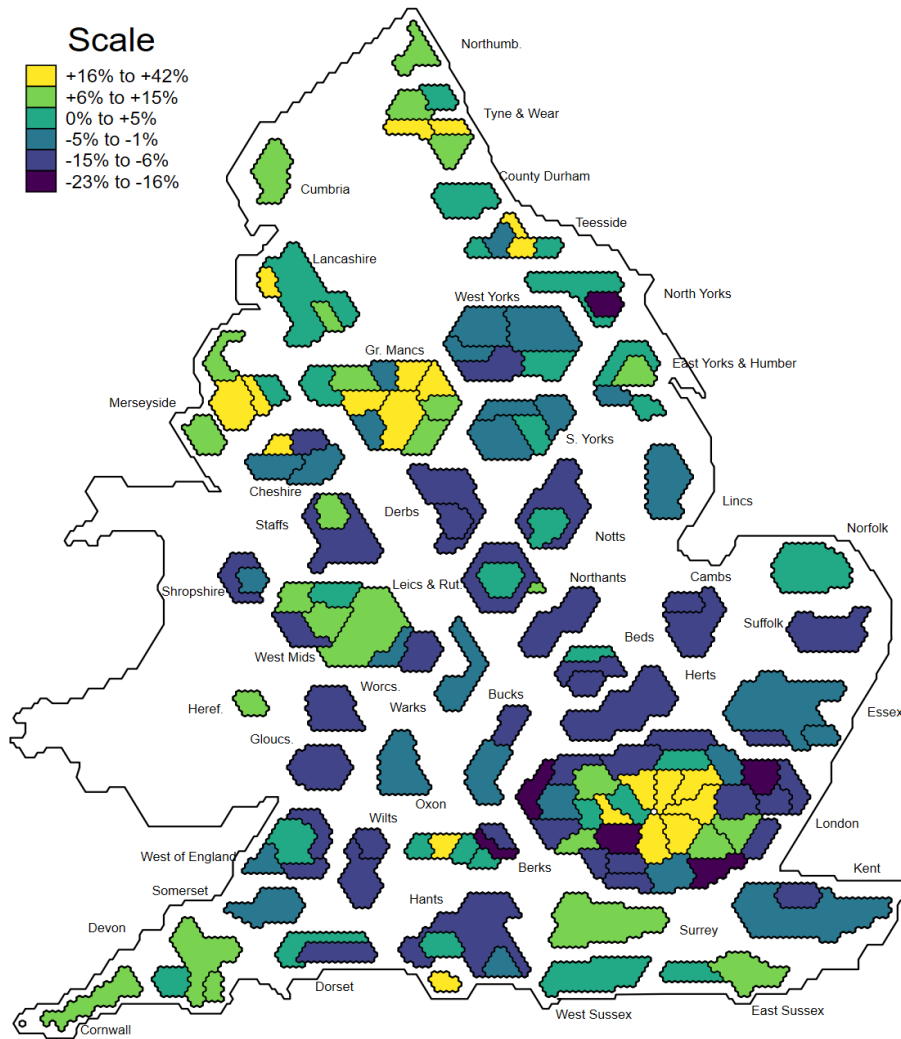
To some extent, levels of actual funding in 2019–20 reflect the impact of local discretion over the council tax levels set in each area. The average council tax level on a Band D property (to fund these core council services) was £1,431 in 2019–20, although it is below £1,170 in a tenth of areas, and above £1,568 in another tenth.<sup>41</sup> Of the 22 areas that set the lowest council tax levels in 2019–20, 21 of them were in London, including two extreme outliers: Westminster (£434) and Wandsworth (£450).

<sup>40</sup> These 2013–14 ‘area cost adjustments’ are discussed in Box 6.1, and were the latest available in 2019–20. See Figure A.3 for a map.

<sup>41</sup> This average is weighted by council tax base and, in areas where there is no separate fire authority, we have subtracted the average Band D council tax set by standalone fire authorities in 2019–20. In two-tier areas, the average is taken across the whole area, so the amounts understate variation across smaller areas.



Figure 6.1. Map of actual per capita funding in 2019–20, relative to national average



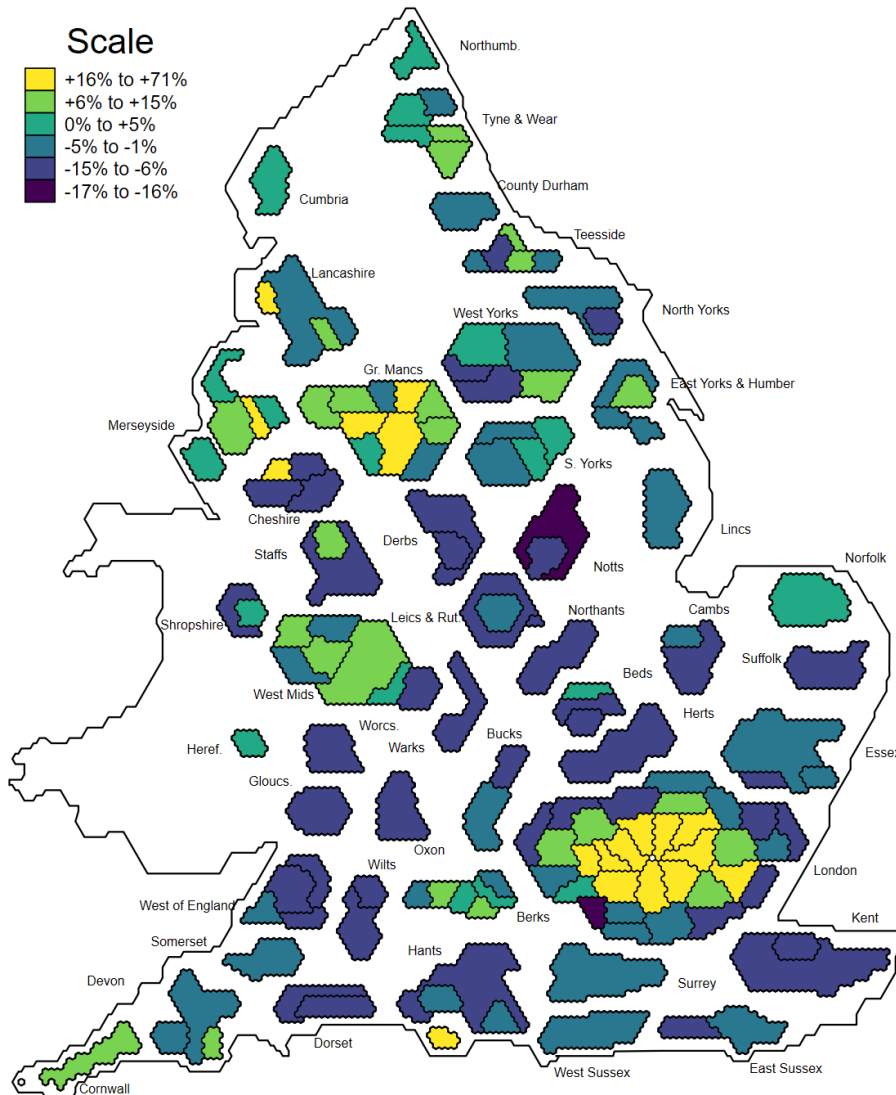
Note: Funding is calculated relative to the national population-weighted average, and includes both shire districts and shire counties in two-tier areas. Excludes Isles of Scilly and City of London. Retained business rates income is taken from outturn data for most councils in 2019–20, and budget data for 10 areas where outturns appeared to be unreliable.

Source: Authors' calculations using Council Taxbase statistics, the local government finance settlement, local authority revenue expenditure outturn and budget data, and levy account surplus final allocations (Ministry of Housing, Communities and Local Government, 2019b,c, 2020a, 2021a). Map design is based on non-contiguous hexagon-based cartograms of the UK (see House of Commons Library, 2022).



Figure 6.2 shows the geographical distribution of overall funding for areas in 2019–20 relative to the national average, if all areas instead set their council tax at the average level nationally. This removes differences arising from different local choices around council tax, and instead focuses on differences in funding, which arise more directly from the government’s choices about how to distribute funding between areas.<sup>42</sup>

**Figure 6.2. Map of per-capita funding in 2019–20, if each area set their council tax level at the national average, relative to national average**



Note: See note and source to Figure 6.1.

<sup>42</sup> Differences in council tax levels in 2019–20 to a large extent reflect existing differences as of 2013–14; there is a very strong correlation (+0.97) between Band D council tax levels in each area in 2013–14 and 2019–20. Indeed, much of the variation in current council tax levels reflects choices made in the 1990s and 2000s. Councils also have some influence over funding from other revenue sources, such as the New Homes Bonus, intended to incentivise councils to support local house-building.

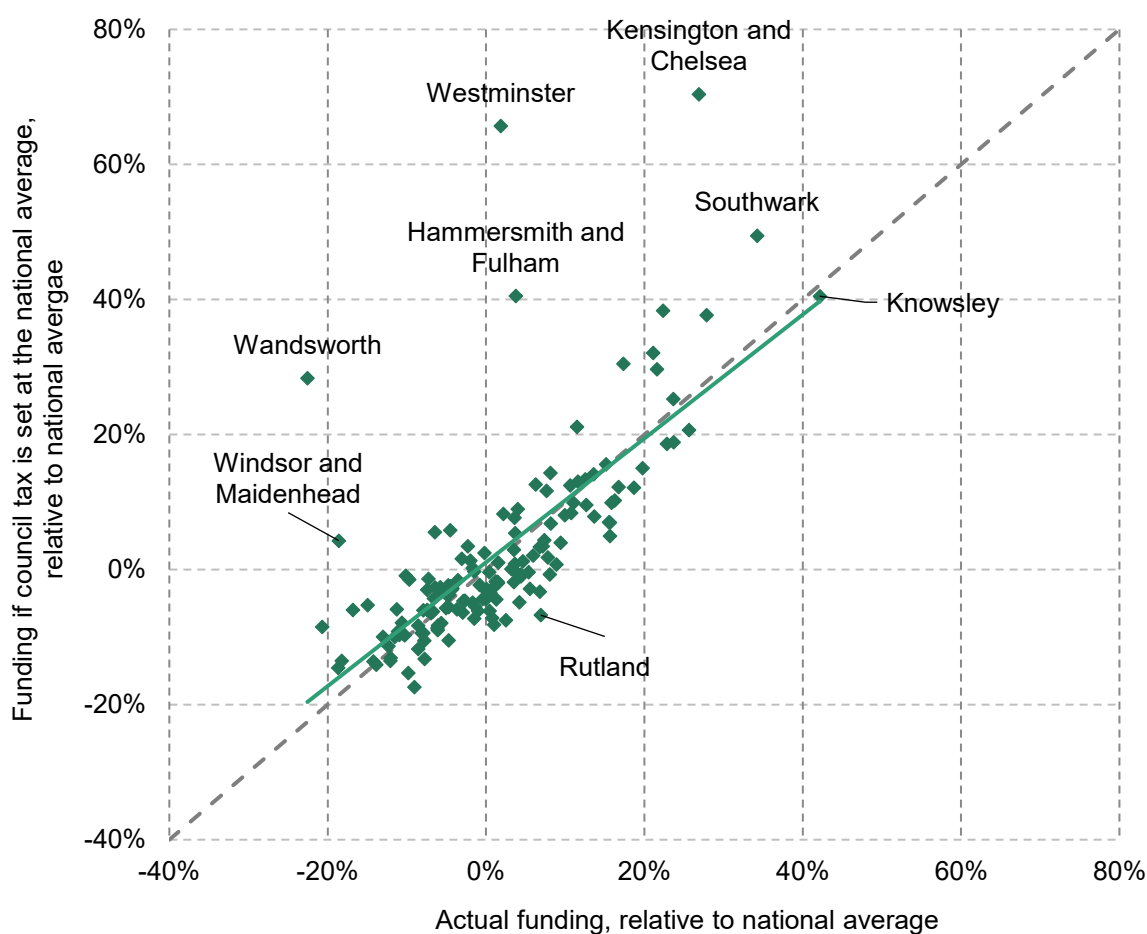
If the inner London boroughs were to set their council tax at the national average level (i.e. much higher than they currently do), they would receive significantly more funding than the national average. The most extreme examples, Westminster and Kensington and Chelsea, are not especially deprived, and would receive respectively 66% (£512) and 70% (£549) more than the national average level of per-capita funding. In contrast, Rutland, a small, rural and relatively affluent area in the East Midlands, sets one of the highest Band D levels in the country, and so is relatively well funded, receiving £833 per capita, 7% more than the national average. If it instead set only the average council tax level, it would receive £727 per capita – 7% less than the national average. In contrast, Knowsley – a relatively deprived area of Liverpool – actually receives 42% more funding than the national average, but would still receive 40% more if it set its council tax to the national average level. The high level of funding Knowsley receives is a result of government policy, rather than local choices over council tax.

Local discretion over council tax levels does have a significant impact on the level of funding for many councils, as shown in Figure 6.3. However, in general, the level of council tax set does not seem to relate to the level of per capita funding a council would otherwise receive. This means local discretion does not significantly widen or narrow overall differences in the distribution of funding across English councils.

Looking across regions, average actual per capita funding is highest in the North West (£846) and North East (£844) and lowest in the East Midlands (£728), as shown in Figure 6.4. Higher labour and property costs mean that, adjusted for area costs, London has the lowest actual per capita funding (£709).

All regions (with the exception of London) have higher than average council tax, although only in London are the differences particularly significant: funding would be £91 (12%) higher per capita if council tax levels were set at the national average before adjusting for differences in costs.

Figure 6.3. Per-capita funding in 2019–20 relative to the national average, based on actual council tax levels and if each area set their council tax level at the national average

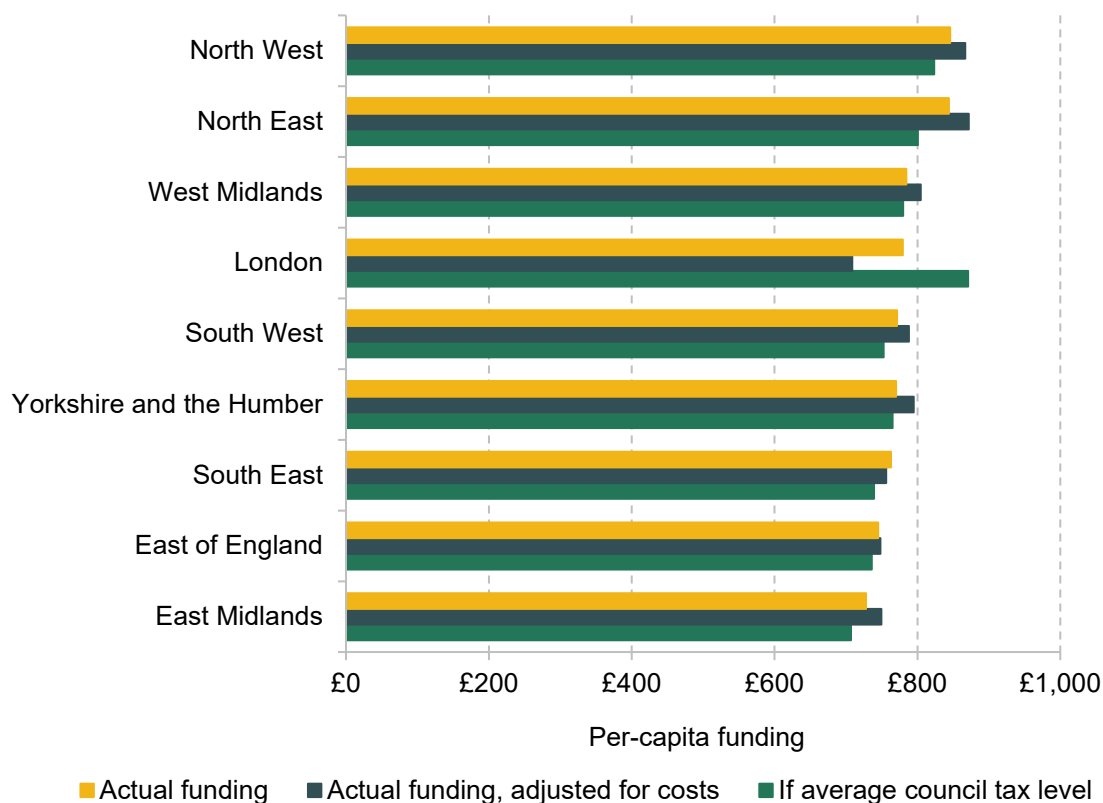


Note: See note and source to Figure 6.1.

London has long had lower council tax rates than the rest of England. In part, this may reflect the ability of councils in London to raise revenues from other sources, including from SFCs. On average, councils in London raised £168 per capita in SFCs relating to transport and ‘neighbourhood’ services in 2019–20, compared to an average of £110 in the rest of the country.<sup>43</sup> In particular, London boroughs raised £84 per capita from fees and charges relating to transport, mostly from on-street parking, more than 2.5 times the average elsewhere. This additional income from SFCs (£59) is equivalent to around two-thirds of the tax revenues per capita that London councils lose as a result of setting council tax rates below the national average.

<sup>43</sup> This includes fees relating to: highways and transport; environment and regulation; leisure and culture; planning and development; and central and other services. See Figure A.5 for a map.

Figure 6.4. Average actual funding per capita in 2019–20, and funding if council tax levels were set at the national average, by region



Source: See note and source to Figure 6.1.

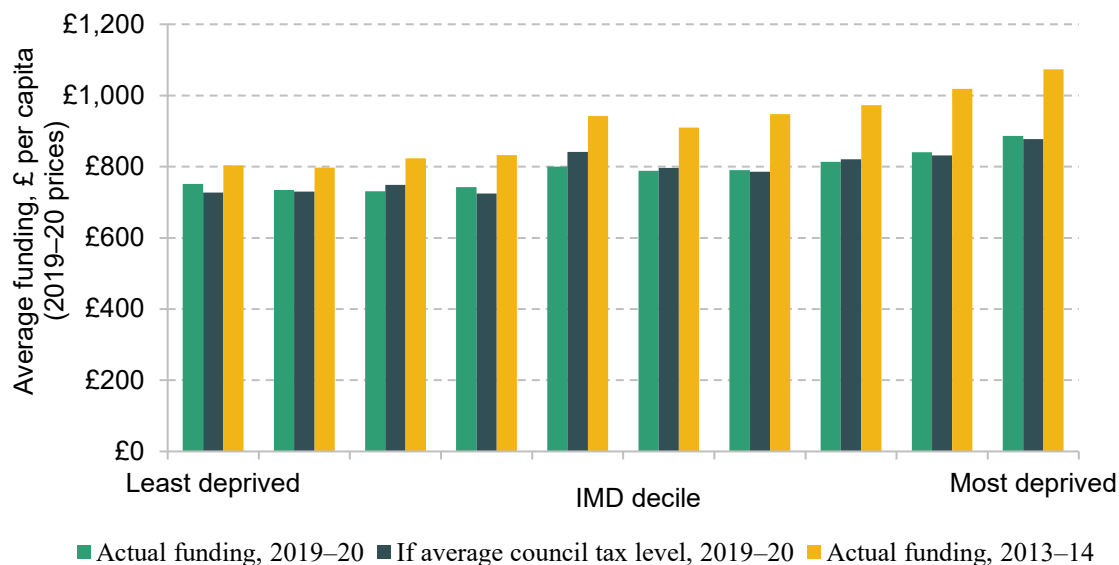
### Variation in funding by local characteristics

Arranging areas based on their characteristics, there is a slight gradient in actual per-capita funding by area deprivation, although this is much less steep than for other areas such as public health. In 2019–20, the least-deprived tenth of areas received £752 per-capita funding, and the most-deprived tenth £886, only around 18% more. As shown in Figure 6.5, this pattern is unchanged if we account for local discretion in setting council tax levels.

This is starkly different from the pattern of actual funding in 2013–14, when there was a much larger gradient by deprivation. The least deprived tenth areas received £803 per capita (in 2019–20 prices), and the most-deprived tenth £1,074, or a third more.<sup>44</sup>

<sup>44</sup> This is based on deciles of deprivation as measured in IMD2019. If areas are instead arranged into deciles based on an older measure of relative socio-economic deprivation from IMD2015 (Ministry of Housing, Communities and Local Government, 2015), the pattern is very similar although slightly stronger, with the most deprived tenth of areas receiving 37% more funding than the least deprived tenth.

**Figure 6.5. Actual funding per capita in 2019–20 and 2013–14, and funding in 2019–20 if council tax was set at national average levels, by decile of area deprivation**



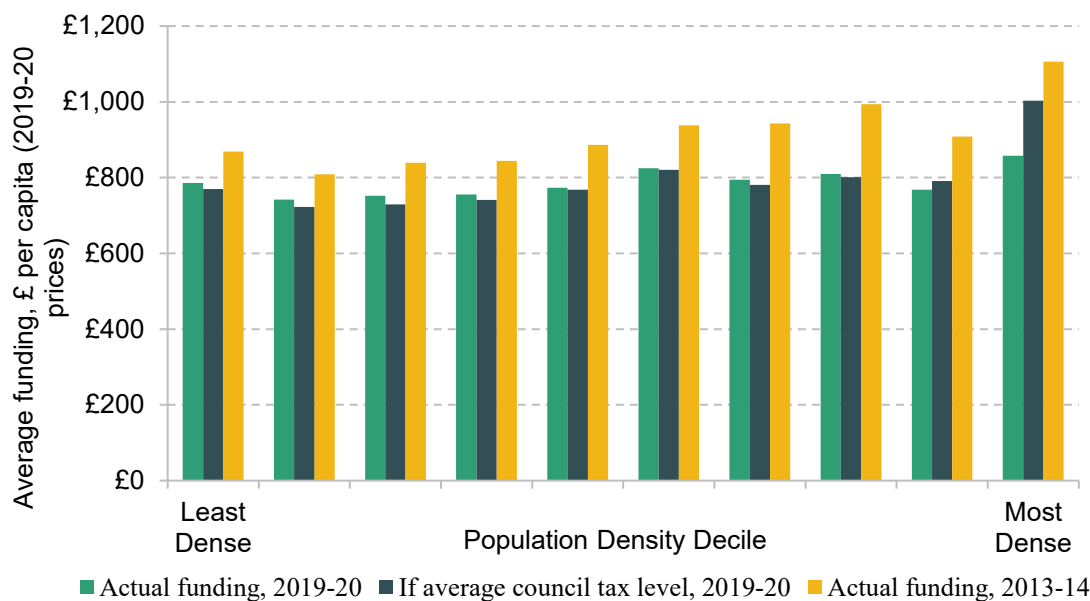
Note: See note to Figure 6.1. All figures are in 2019–20 prices, and deprivation deciles are based on average score from IMD 2019.

Source: See source to Figure 6.1. Also HMT GDP deflators and Ministry of Housing, Communities and Local Government (2019d).

As explained earlier in this chapter, the overall level of funding for local government fell significantly during the 2010s, with more deprived areas – which typically relied more on grant funding – facing larger average cuts. While the largest cuts took place before 2013–14, even in that year, the councils that were the most deprived tenth in 2019–20 received £482 per capita in grant funding, which accounted for 45% of their core spending power. This compares to only £190 per capita on average for the tenth of councils which would be least deprived in 2019–20, or 24% of the funding they received. Those more reliant on grant funding in 2013–14 saw much larger proportional cuts to their overall funding in subsequent years – the tenth of areas most reliant on grants saw their funding fall by £209 (19%) in real-terms per capita over the following 6 years, compared to a £62 (8%) fall for the tenth of areas least depending on grants. This means that, in the years since the current funding system took shape, funding has become notably less targeted towards socio-economic deprivation.

As in earlier sections, we use population density as a proxy for urbanity. Given the actual council tax rates set, there was little relationship between funding and population density in 2019–20, as shown in Figure 6.6. Based on the average council tax rate though, the most densely populated tenth of areas would have received significantly more funding – the difference reflecting inner London councils' much lower-than average tax rates. The relationship between per capita funding and population density was much stronger in 2013–14, when more densely populated areas received more funding on average.

Figure 6.6. Actual funding per capita in 2019–20 and 2013–14, and funding in 2019–20 if council tax was set at national average levels, by decile of population density



Note: See notes to Figure 6.1. All figures are in 2019–20 prices, and population density deciles are based on population estimates in mid-2019.

Source: See source to Figure 6.1; also HM Treasury GDP deflators and ONS population estimates.

## Comparing funding with assessed spending needs

To assess whether funding is well targeted, we would have liked to compare the distribution of funding in 2019–20 with an up-to-date measure of relative spending needs across areas – but this does not exist.

Instead, we compare the distribution of spending to relative assessed spending needs in 2013–14 (as discussed in Section 6.1), adjusted to account for different rates of population growth across areas between 2013 and 2019. These would only be good estimates of relative needs in 2019–20 if patterns, and so relative levels, of per-capita need and relative costs had not changed across areas since the formulae were estimated. Given the age of some of the data used, the shifts in what councils do, and the changes in demographic and socio-economic patterns across the country, this seems unlikely. For instance, growth in the proportion of the population aged over 75 has been much faster in more rural areas than in urban areas, particularly outside London. Patterns of socio-economic deprivation have also shifted, with many London boroughs becoming relatively less deprived over recent years.<sup>45</sup> However, it may still be helpful to consider how closely the distribution of funding matches even these out-of-date needs

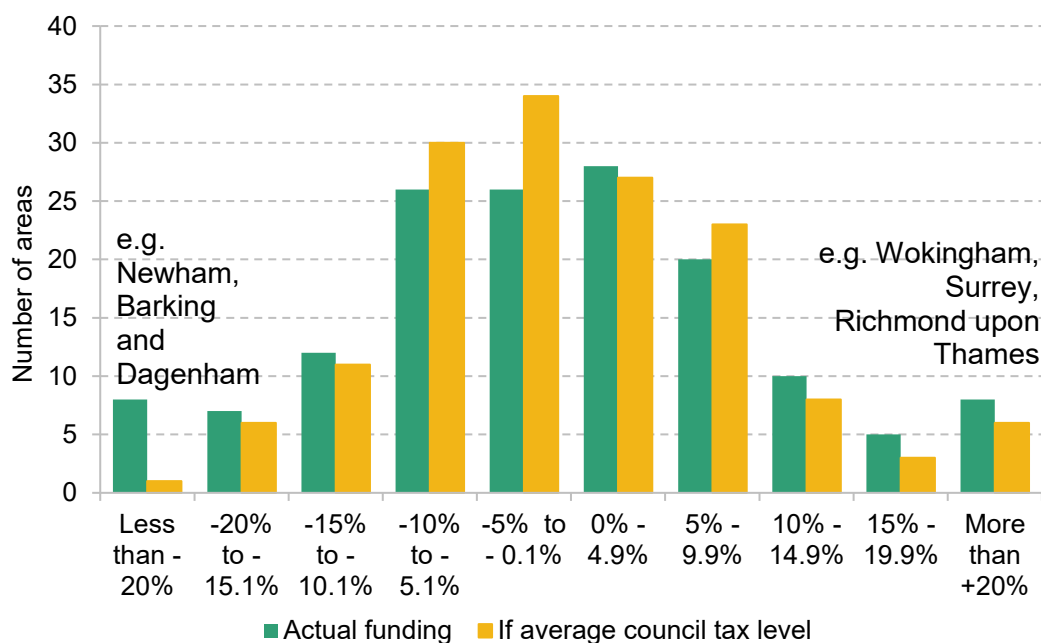
<sup>45</sup> This change took place between IMD2015 (which was based mostly on data from 2012–13) and the latest assessment (IMD2019). See Ministry of Housing, Communities and Local Government (2019d) for a discussion.

assessments, given these are the latest available, and have been used even in the years after 2019 to distribute various social care grants.

By 2019, there were some substantial differences between how much funding areas received, and what they would have received had the funding instead been distributed in line with these population-adjusted needs assessments, as shown in Figure 6.7. In 26 areas, per-capita funding was more than 10% lower. As shown in Figure 6.8, the vast majority of these were London boroughs, along with Luton and Thurrock in the East of England, Coventry in the West Midlands, and Nottingham and Leicester in the East Midlands.

A similar number of areas (23) received more than 10% more funding than they would have based on these shares. These were predominantly in the South East, and some of the most affluent areas in the country. In the starkest examples, Wokingham received 48% (£263 per capita) and Surrey 32% (£198 per capita) more funding than if the national total of funding had been distributed based on those shares of assessed spending needs.

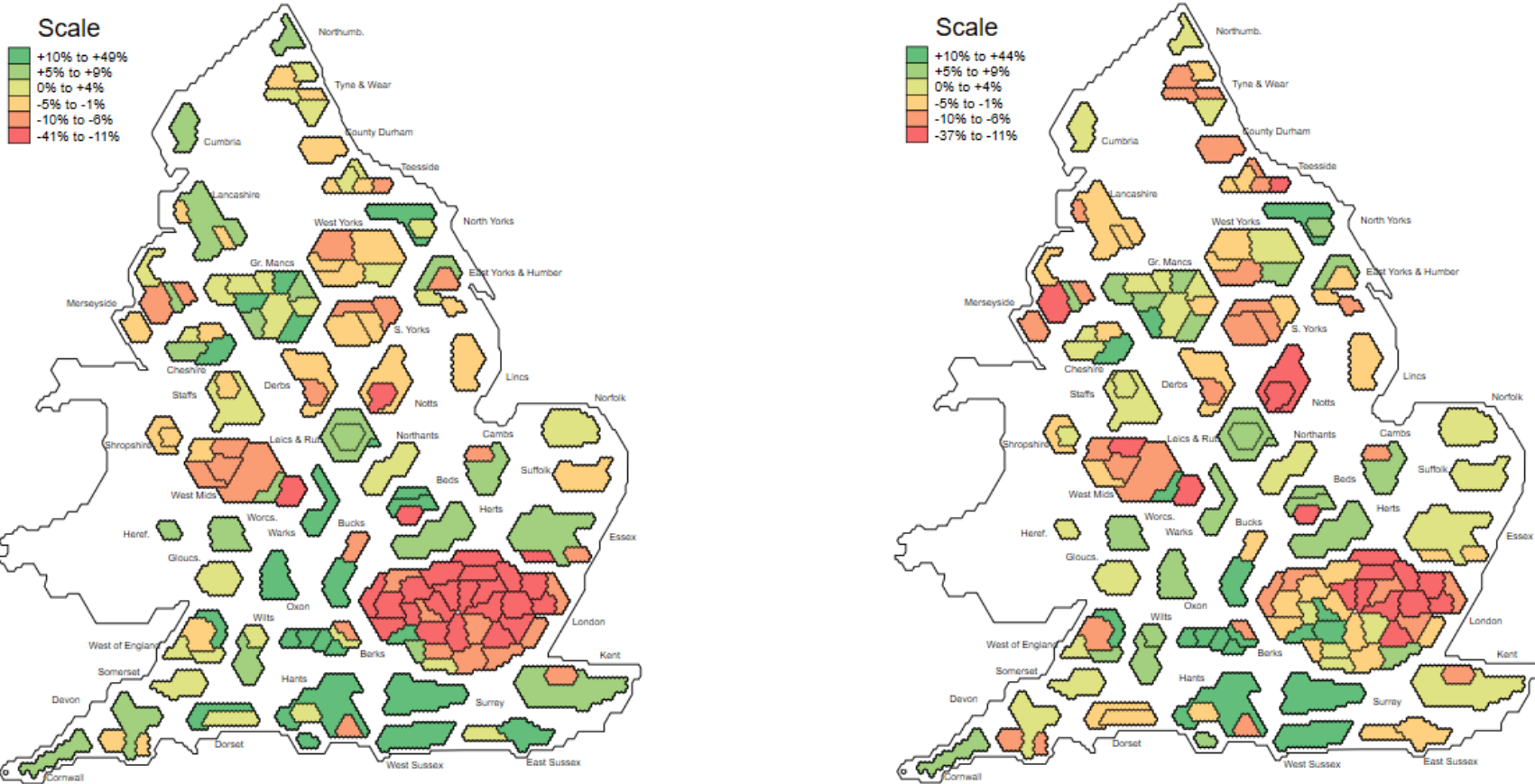
**Figure 6.7. Distribution of percentage difference between funding in 2019–20, and funding if distributed in line with population-adjusted needs assessments**



Note: See note to Figure 6.1.

Source: See source to Figure 6.1; also DCLG 2013–14 Relative Need Formulae by service.

**Figure 6.8. Map of per capita funding in 2019–20, relative to funding if distribution was in line with population-adjusted assessed needs, comparing (a) actual funding, and (b) funding if council tax levels were set at the national average**



Note: Actual funding is compared to the funding an area would receive if funding was distributed in line with shares of relative need as assessed in 2013–14, adjusted only to reflect differential population growth. Excludes Isles of Scilly and City of London.

Source: See source to Figure 6.7. Map design is based on non-contiguous hexagon-based cartograms of the UK (see House of Commons Library, 2022).

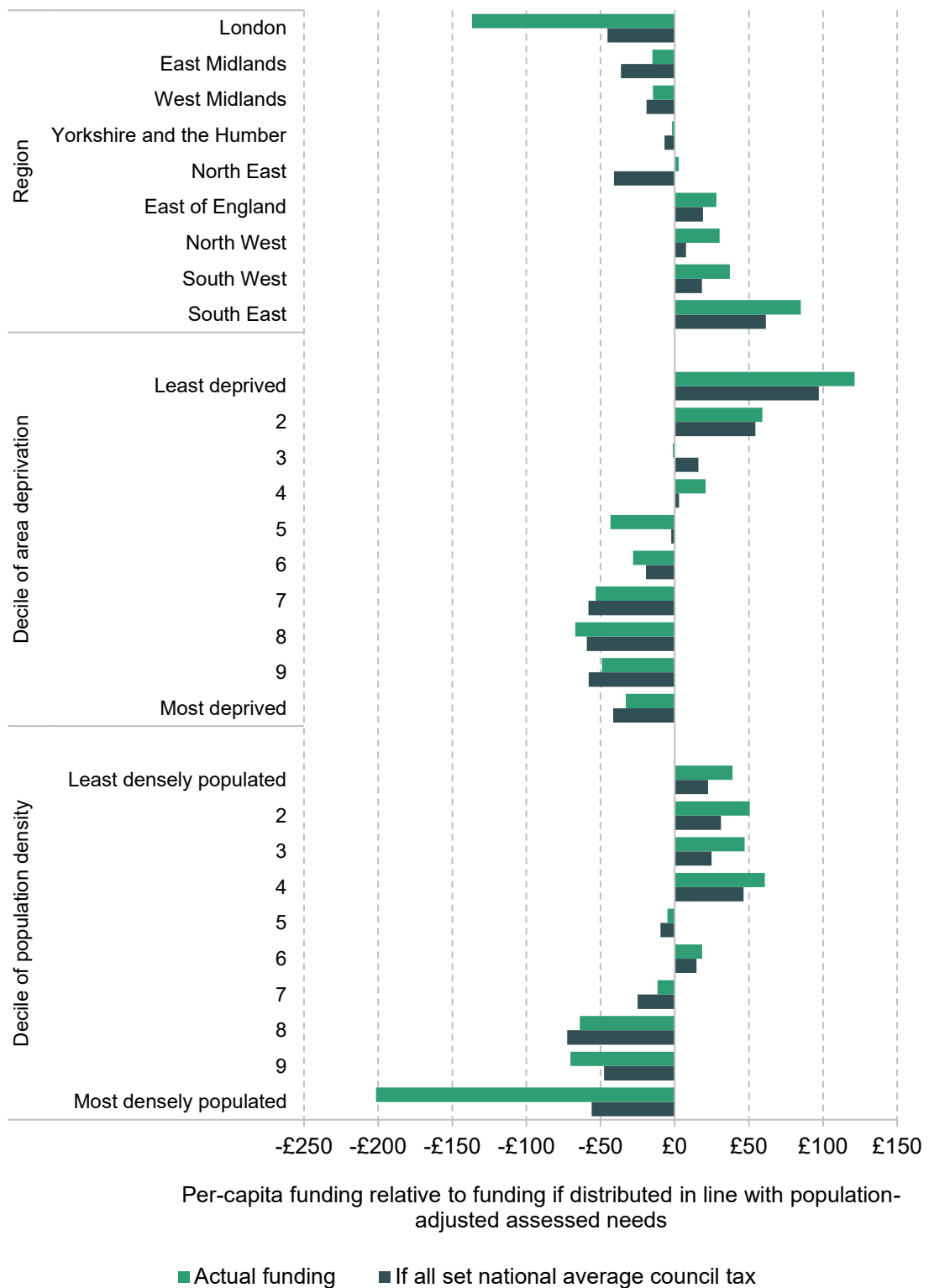


As shown in Figure 6.9, on average, London received £137 per capita less in 2019–20 than if funding had been distributed in line with population-adjusted needs shares, and those in the South East received £85 more per capita. To some extent, these differences may reflect changes in the pattern of underlying relative needs since the formulae were estimated. Socio-economic changes mean some areas of London may have seen their relative needs fall since 2013–14. Changes in what councils do, and particularly a significant fall in the share of council spending nationally, which is on EPCS, would also imply lower relative spending needs in 2019 for areas that had high assessed per-capita spending needs for EPCS in 2013 (again, affecting London boroughs).

If we instead consider funding if all areas instead set their council tax at the average level nationally, some of these differences do narrow slightly. The biggest changes are at the tails of the distribution, in areas where council tax was set at a very different level to the national average, notably in West London. However, even without differences in their council tax levels, a quarter of areas would still have received more than 6% less funding in 2019–20 than they would have if funding had been distributed in line with assessed needs. On this measure, London still saw the biggest shortfall between its funding per capita and its assessed needs (£45 less per capita in 2019–20), closely followed by the North East region (£41 less) and the East Midlands (£36 less).

The bigger reductions in funding in more-deprived areas shown in Figure 6.5 unsurprisingly means that such areas received, on average, a share of funding that was below their share of assessed spending needs in 2019–20, although those with middle to high levels of deprivation appear to have done slightly worse than those with the very highest levels of deprivation. However, the least-deprived tenth of areas received significantly more funding overall on average than they would have if central government funding had been allocated in line with assessed spending needs: by £121 per capita given their actual tax rates, or £97 if their council tax was set at the national average level.

Figure 6.9. Per-capita funding in 2019–20, relative to funding if distribution was in line with population-adjusted assessed needs, by region and deprivation/population density deciles



Note: Deprivation deciles are based on average score from IMD2019, and population density deciles are based on population estimates in mid-2019. Excludes Isles of Scilly and City of London.

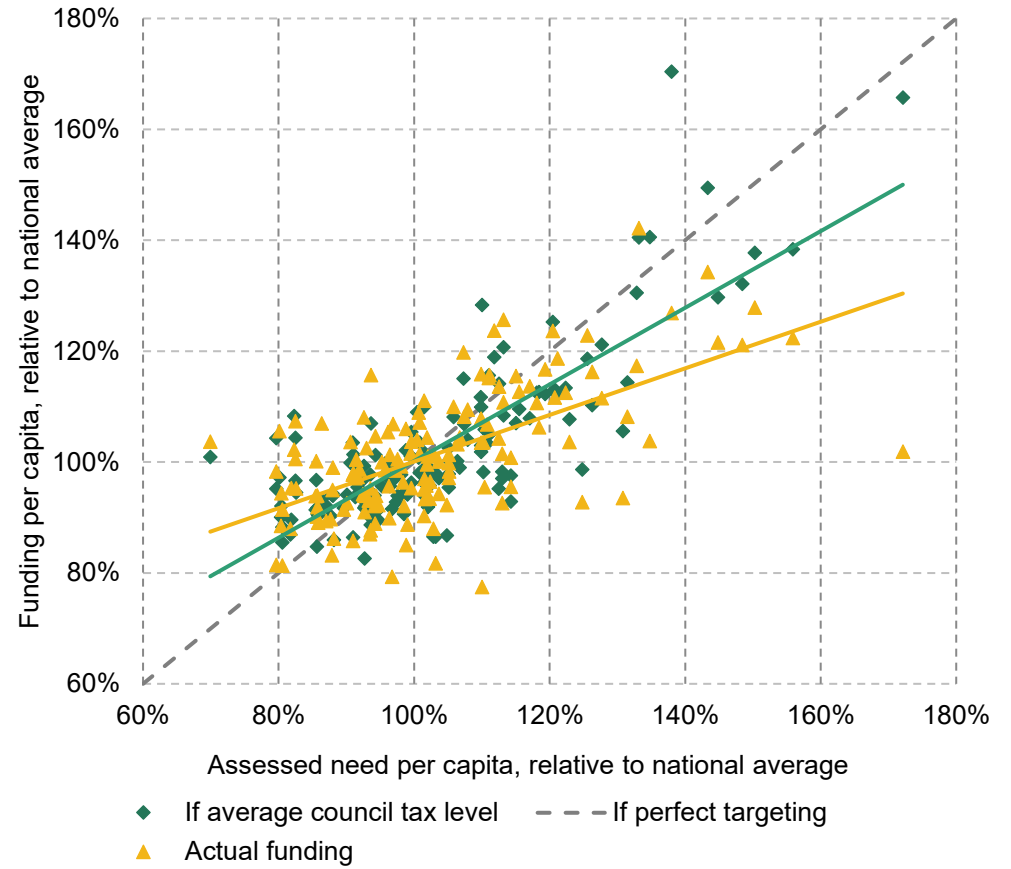
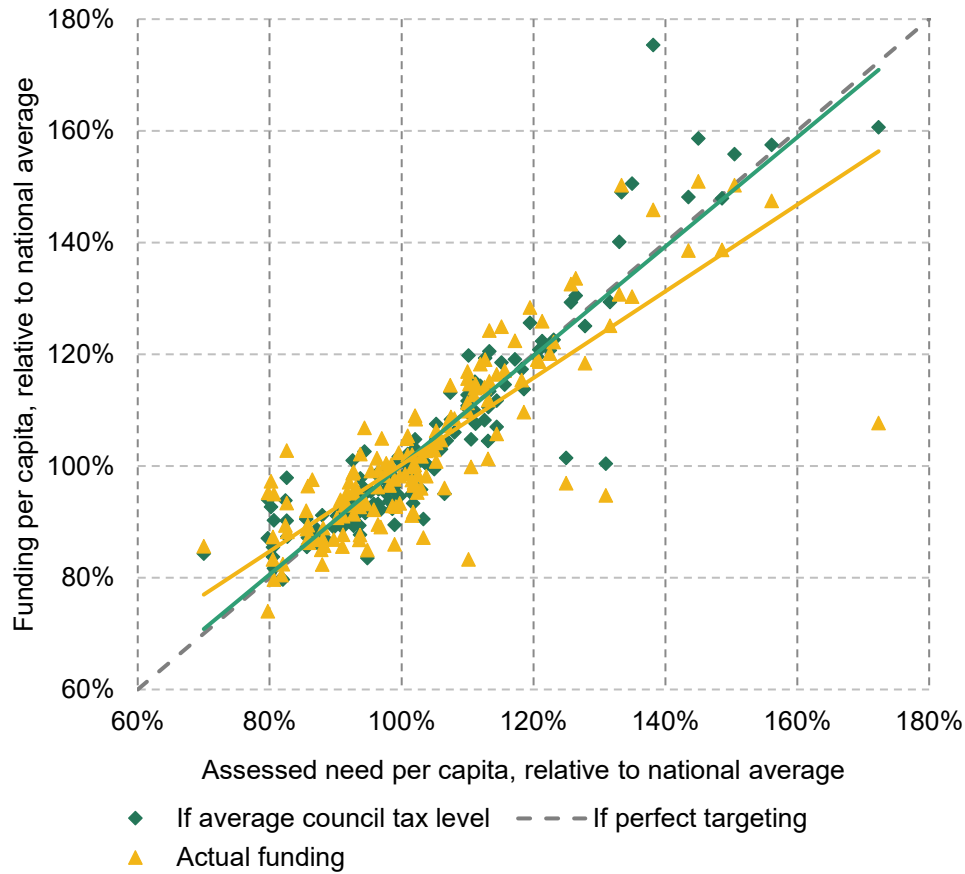
Source: See source to Figure 6.7, and Ministry of Housing, Communities and Local Government (2019d) and ONS population estimates.

This is a very different picture from 2013–14, when funding was targeted much more closely to assessed needs. As shown in panel (a) of Figure 6.10, this targeting was still not perfect in 2013–14, with many points far from the yellow, dashed line – the system for allocating grant funding to offset differences in assessed spending need and revenue-raising capacity had already broken down. However, if all councils had set their council tax levels to the national average in 2013–14, the trendline coincides with perfect targeting, and 40% of areas would have received per-capita funding within 2% of their ‘target allocation’.

This was the case for only 12% of areas in 2019–20, when the relationship between assessed needs and funding was much weaker. As shown in panel (b) of Figure 6.10, many areas received much more or less funding in 2019–20 than they would have if population-adjusted assessed needs had been used to distribute funding. This change reflects two things. First, that the government did not account for differences in the extent to which councils could raise revenues from council tax (as opposed to relying on grants) when allocating grant funding. Second, that the government has placed increasing emphasis on providing financial incentives to councils, relative to redistribution according to assessed spending needs.

Together, these mean areas with relatively high per-capita assessed needs received much larger per-capita funding cuts between 2013–14 and 2019–20. On average, the tenth of areas with the highest per-capita population-adjusted assessed spending needs in 2019–20 had faced a £270 (23%) real-terms cut in their per-capita funding. The tenth of areas that were ‘least needy’ on the same measure had faced much smaller cuts of £55 (7%) on average.

Figure 6.10. Assessed needs and funding, per capita, relative to the national average (a) in 2013–14 and (b) in 2019–20



Note: Assessed needs per capita are based on 2013–14 relative needs formulae, excluding those relative to police or fire services, or capital. Comparing per-capita needs and funding across years implicitly adjusts for differential population growth across areas between mid-2013 and mid-2019. All data are relative to population-weighted per capita national averages. Excludes Isles of Scilly and City of London.

Source: See source to Figure 6.7. Also Ministry of Housing, Communities and Local Government (2013, 2014).

## 6.3 The resulting spending patterns

Although constrained by the amount of funding they receive, as discussed in Section 6.1, councils have significant discretion over how much of their funding they spend on different services. Patterns of spending across the country will reflect councils' choices about how to prioritise spend within their budgets. Table 6.1 shows the distribution of actual spending by service area, both as a percentage of councils' overall spending (excluding spend on schools, fire and public health) and in cash terms as of 2019–20.

The table shows that across England as a whole, net spending on social care services amounted to almost 60% of councils' service spending in 2019–20, with just under two-thirds of this accounted for by adult social care services. The next largest areas of spending were environmental and regulation services (including refuse collection and disposal) and non-schools education budgets. There is significant variation in both the level of spending and the share of expenditure allocated to different services though. For example, adult social care spending on adult social care services amounted to less than 31% of service spending for a tenth of councils but more than 43% for another tenth of councils. The relative differences are even larger for some of the smaller service areas: while spending on transport amounted to less than 2.2% of total service spending for one in ten councils, it amounted to over 10% for another one in ten; and while spending on housing services amounted to less than 1.5% of service spending for one in ten councils, it amounted to more than 7.9% for another one in ten.

Cash-terms differences in children's social care spending are relatively larger than differences in the shares of budgets allocated to this service; this suggests that councils with relatively high overall spending allocate a higher share of that spending to children's social care services. The same is true to a lesser extent for most other services, with the exception of adult social care services, and leisure and cultural services, to which councils with lower overall spending allocate a higher share.

**Table 6.1. Distribution of spending by service area, £s per capita and percentage of overall service spending, 2019–20**

Service	Mean	10 <sup>th</sup> pctl	25 <sup>th</sup> pctl	Median	75 <sup>th</sup> pctl	90 <sup>th</sup> pctl
Adult social care	300 37.3%	252 30.8%	272 33.1%	296 36.2%	331 40.3%	349 43.4%
Children's social care	176 21.9%	134 17.7%	152 19.5%	182 22.6%	223 26.3%	265 29.3%
Environment and regulation	91 11.3%	69 8.4%	77 9.4%	88 11.1%	100 12.7%	118 14.0%
Non-schools education	55 6.8%	28 3.7%	39 5.0%	52 6.4%	66 8.1%	90 10.3%
Transport	47 5.8%	17 2.2%	33 4.2%	45 5.8%	66 8.0%	88 10.0%
Leisure and culture	37 4.6%	22 2.5%	28 3.6%	36 4.4%	45 5.3%	54 6.4%
Housing	31 3.8%	12 1.5%	18 2.4%	26 3.2%	40 4.8%	66 7.9%
Planning and development	19 2.3%	5 0.7%	11 1.4%	18 2.1%	25 3.1%	30 3.7%
Central and other	50 6.2%	11 1.5%	29 3.9%	47 5.8%	64 7.8%	87 10%
Overall service spending	806 100.0%	694 100.0%	739 100.0%	810 100.0%	873 100.0%	984 100.0%

Note: 'Overall service spending' excludes spending on fire services, public health, and the schools and early-years components of education spending. Spending is net expenditure. 'Environment and regulation' spending includes waste disposal authority levies. 'Transport' spending includes integrated transport authority levies.

Source: Authors' calculations using local authority revenue expenditure outturn and budget data, and ONS population estimates.

### Variation in spending across England in 2019–20, by service

Figure 6.11 shows how spending varied geographically in 2019–20 for five service areas: adult social care; children's social care; non-schools education services; housing services; and other local government services. Areas in yellow spend more per capita on a service than the national average, and areas in dark blue spend less. The maps show some clear geographical patterns.

- Adult social care spending is relatively high in the South West of England, many parts of the North West and parts of (mostly inner) London. It is relatively low in outer west and east London, and areas to the west and north west of London.

- Children's social care spending is relatively high in urban areas, and much lower in the shire countries and more suburban unitary authority areas, especially in the South and East of England.
- Non-schools education spending shows a less clear geographical pattern, with both rural and urban, and northern and southern areas seeing high and low levels of spending.
- Housing spending is high throughout almost all of London and the central parts of other urban areas, but is relatively low in most shire county areas and most outer urban areas outside London.
- Other service spending, including spending on central administration services, is high in much of the north of England and is relatively low in many parts of London, and areas along the M4, M40 and M1 corridors leading out of London.

These geographic patterns reflect differences in spending across areas with different socio-economic characteristics, which will affect the relative demands for different services. They will also reflect any differences in the costs of delivering services.

Adjusting for differences in costs between places leads to spending appearing lower in London and slightly higher elsewhere.<sup>46</sup> For instance, Kensington and Chelsea spent 12% more per capita than the national average on adult social care, but 3% *less* than the national average once their above-average costs are accounted for. All but two areas in London (Haringey and Croydon) spent less than the national average on adult social care after adjusting for costs. Higher levels of spending on children's social care, non-schools education and housing services in the capital mean that the majority of councils in the capital spend more on these services than the national average, even accounting for differences in costs. As with adult social care services, most London councils spend less than the national average on 'other services' (such as transport, planning and economic development, leisure and culture, and environmental and regulation services) after accounting for differences in costs though.

Section 6.2 showed that funding per person is higher in areas with higher levels of deprivation. Unsurprisingly, councils' in more-deprived areas also spend more on providing services, although most of this is due to differences in children's social care spending, where there is a strong gradient with respect to deprivation (spending per capita in the most-deprived three-tenths of councils is over 50% higher than in the least-deprived three-tenths of councils, on average).<sup>47</sup>

<sup>46</sup> See Figure A.6 in the Appendix for maps.

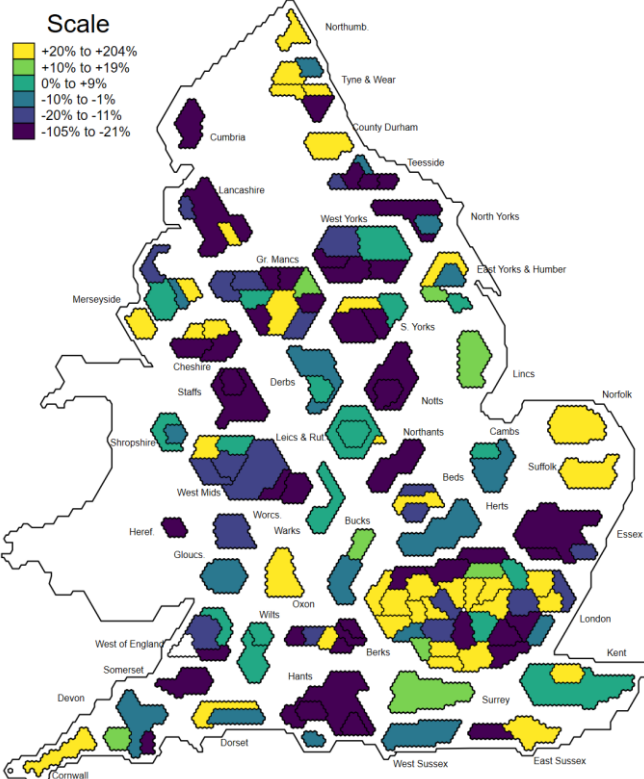
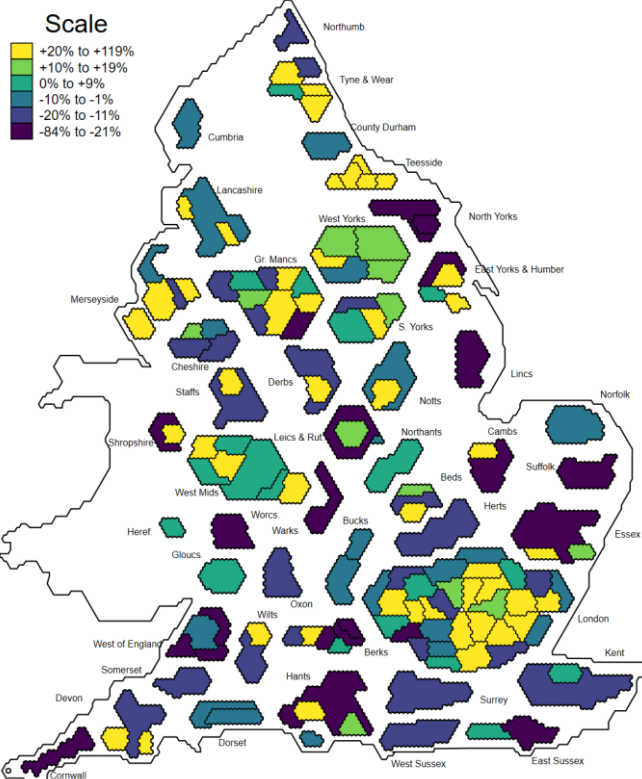
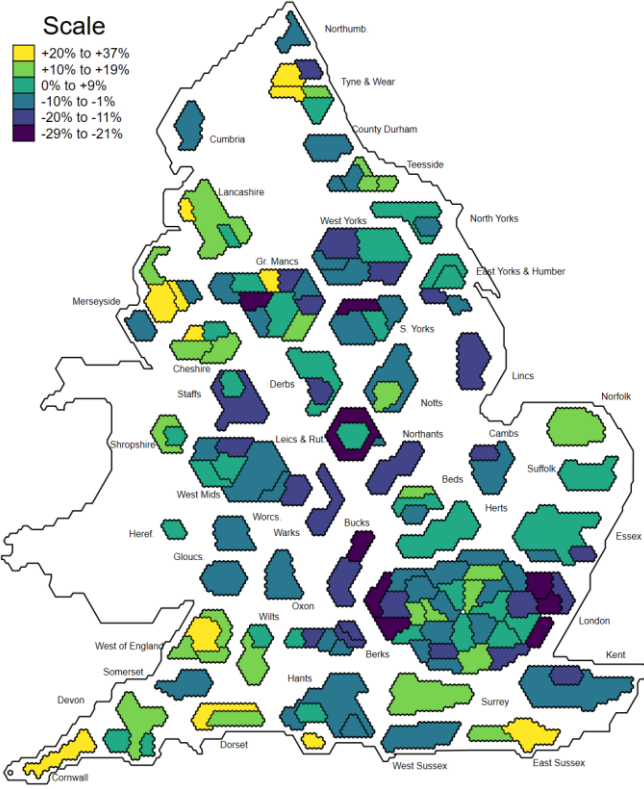
<sup>47</sup> We observe similarly strong relationships between per-capita children's social care spending and both the proportion of children entitled to free school meals, and the IMD affecting children (IDACI).

Figure 6.11. Percentage difference from national average spending per capita, by service, 2019–20

(a) Adult social care

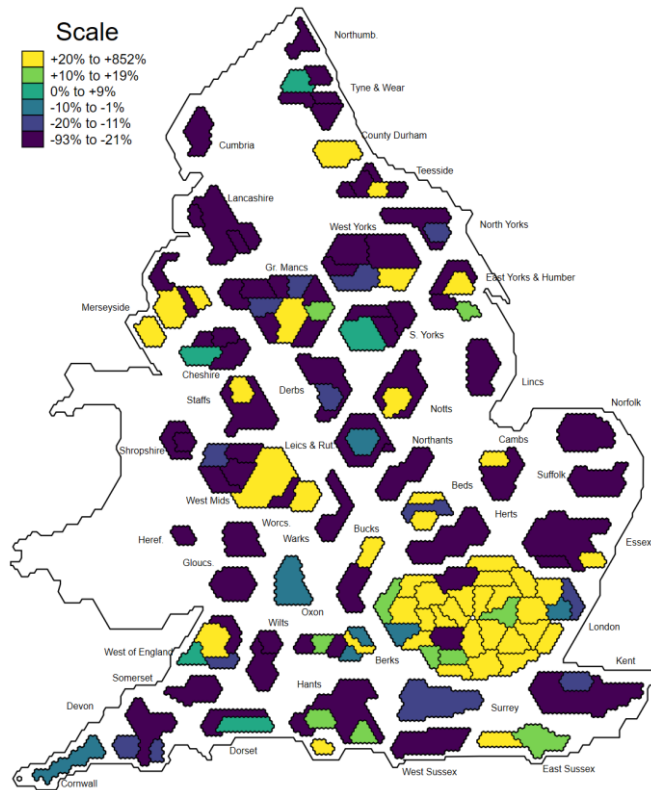
(b) Children's social care

(c) Non-schools education

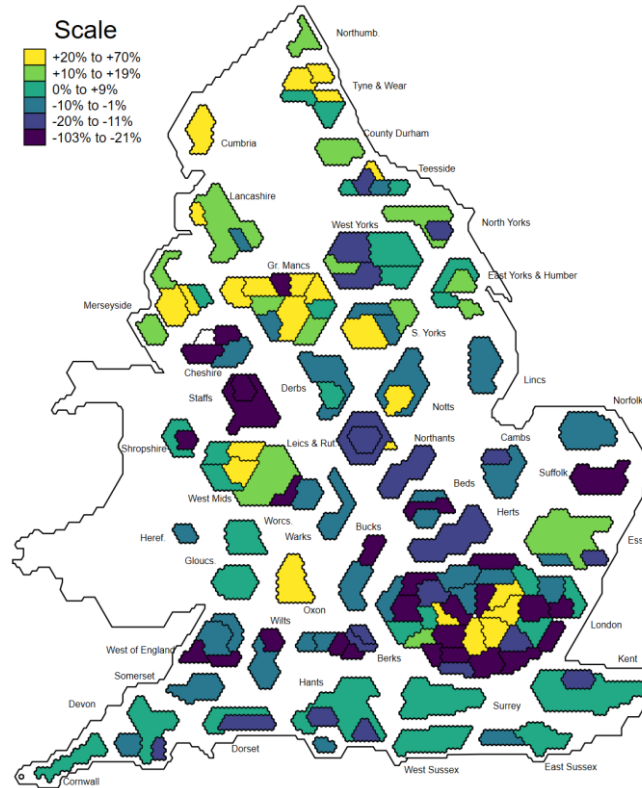




(d) Housing services



(e) Other services



Note: Spending is net expenditure per capita, relative to the population-weighted national average, and includes spending by both shire districts and shire counties in two-tier areas. Other services include environment and regulation, transport, leisure and culture, planning and development, central and other services.

Source: See source to Table 6.1. Map design is based on non-contiguous hexagon-based cartograms of the UK (see House of Commons Library, 2022).

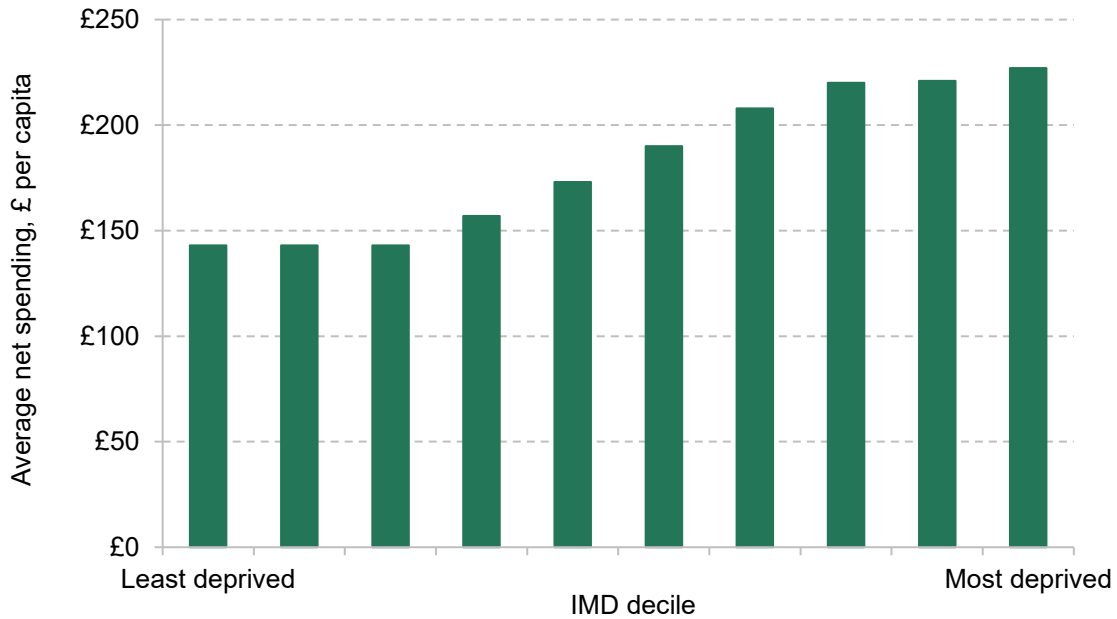
For other services, the relationship between deprivation and spending is much less strong, with a difference of only around 10% between the most-deprived three-tenths and the least-deprived three-tenths. This is illustrated in panel (b) of Figure 6.12.

We may also expect demand and costs for services to be related to urbanity, which we proxy with population density. Service spending is higher in more densely populated areas, and this is driven by two service areas: children's social care services and housing services. This is illustrated in Figure 6.13. Spending on all other services is not systematically related to population density (including adult social care where, if anything, spending is slightly higher in areas that are less densely populated).

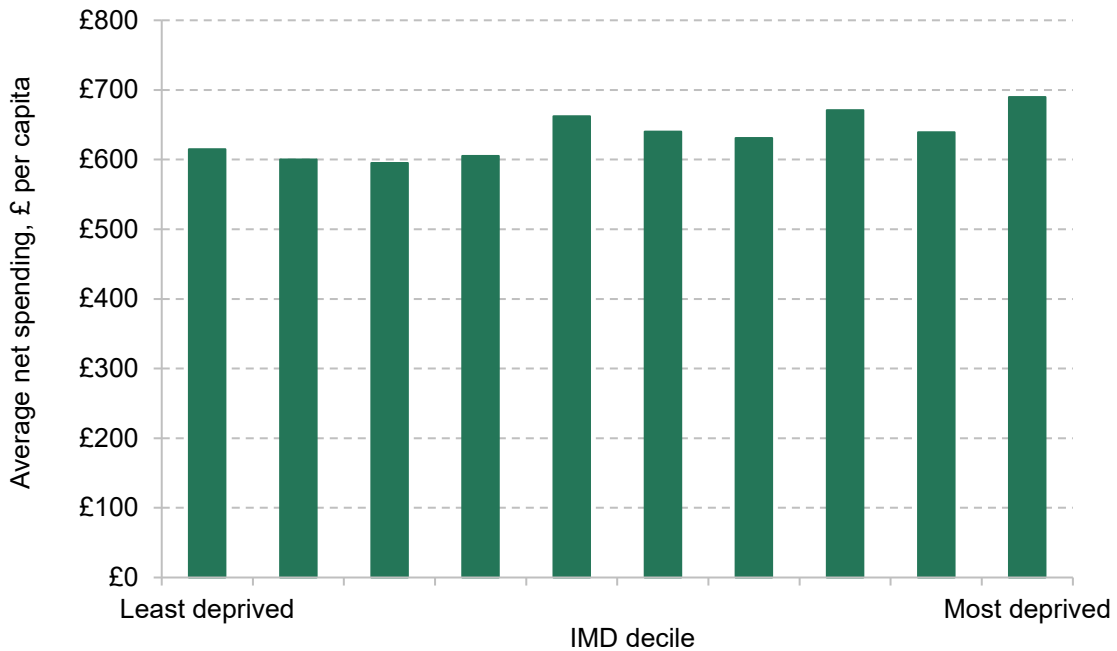
Spending on adult social care is, perhaps surprisingly, not strongly associated with the age structure of the population: there was no systematic relationship between the share of the population aged 75 or over (the heaviest users of social care services) and spending on social care services in 2019–20 – except for the tenth of council areas with the highest share, where spending was around 13% higher than in the rest of England, on average. This likely reflects different factors offsetting each other: while older people are more likely to require adult social care services, the areas with the highest share of older people are relatively affluent and have relatively high homeownership, meaning that a lower share of residents would satisfy the stringent means-tests for receipt of council-funded care.

Figure 6.12. Net spending per capita by service and decile of area deprivation, 2019–20

(a) Children’s social care services



(b) Other services

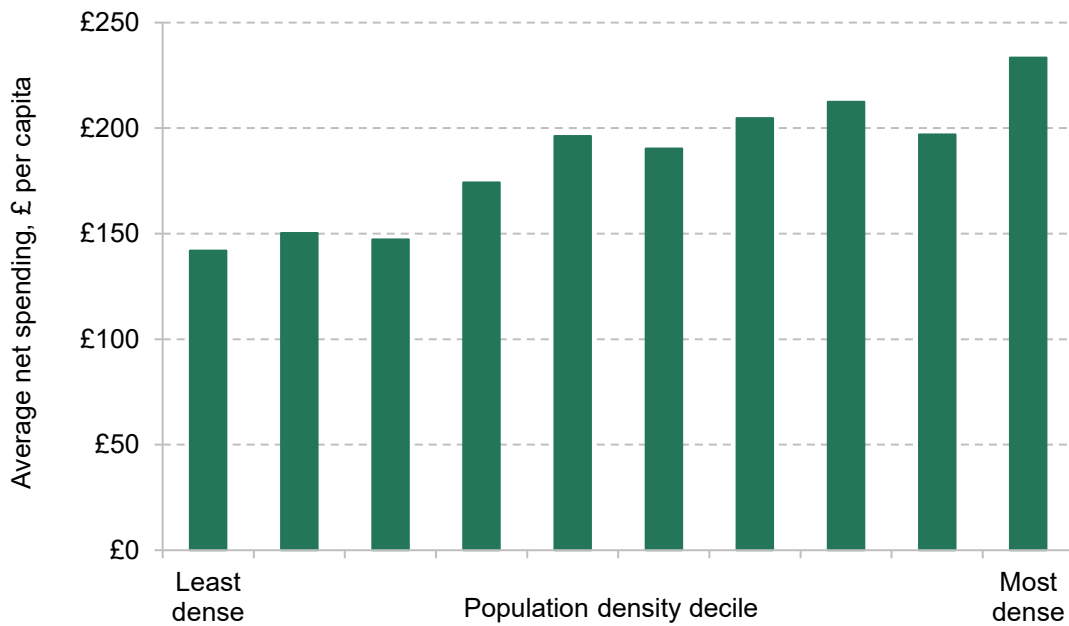


Note: All figures are in 2019–20 prices, and deprivation deciles are based on average score from IMD2019. Excludes Isles of Scilly and City of London. ‘Other services’ includes all service areas listed in Table 6.1, except for children’s social care.

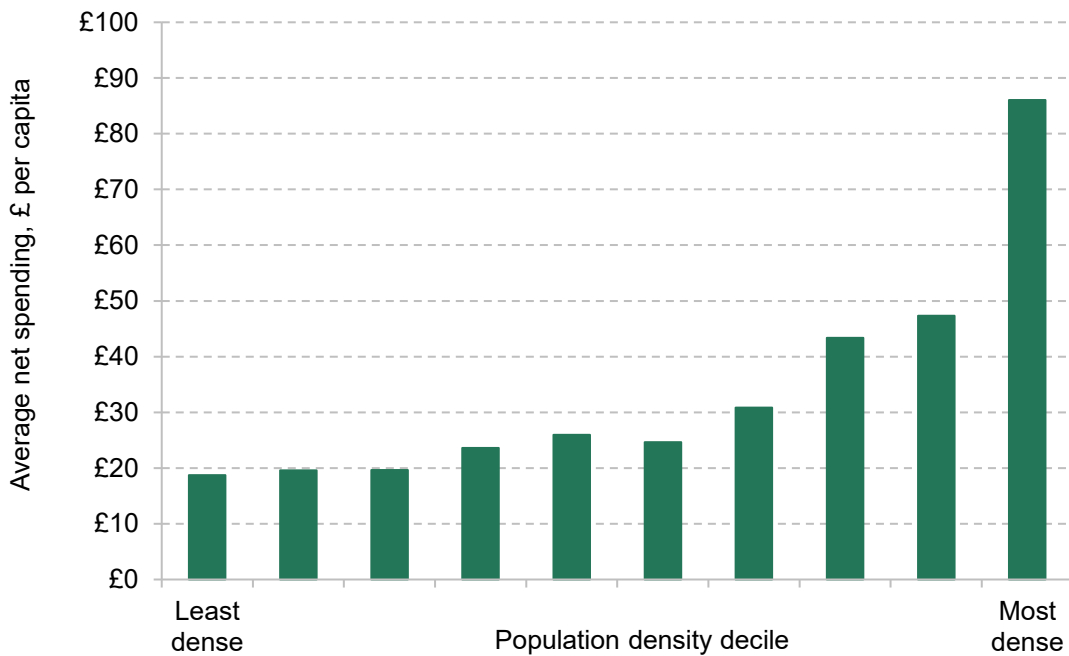
Source: See source to Table 6.1, and Ministry of Housing, Communities and Local Government (2019d).

Figure 6.13. Net spending per capita by service and decile of population density, 2019–20

(a) Children’s social care services



(b) Housing services



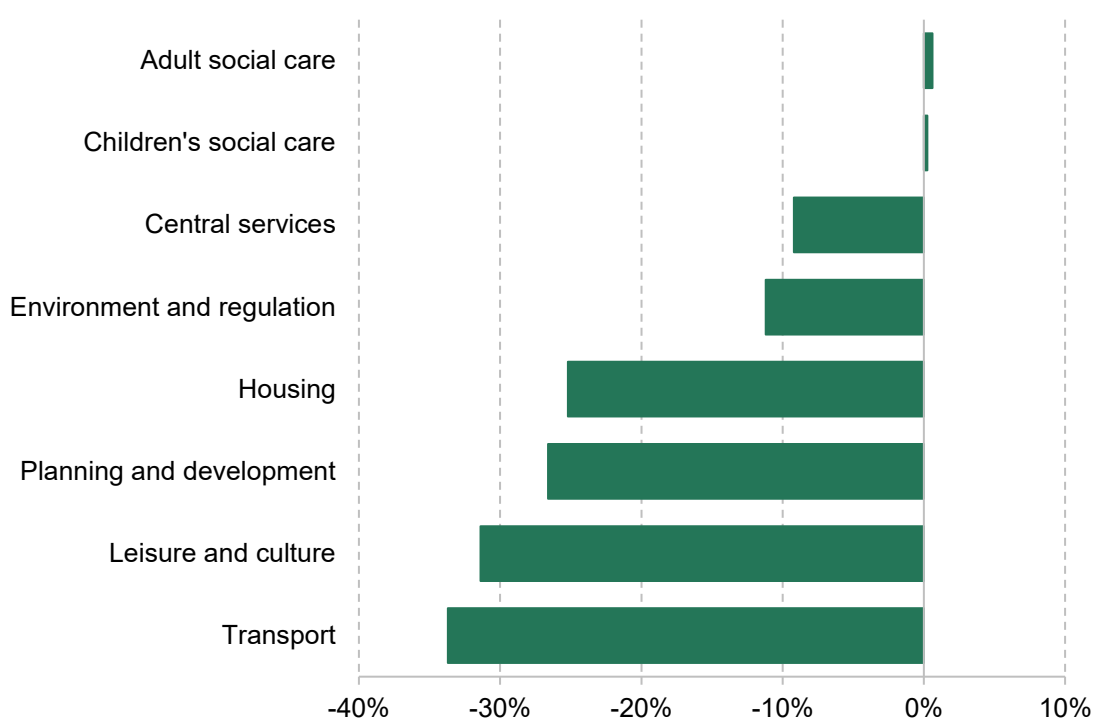
Note: All figures are in 2019–20 prices, and population density deciles are based on population estimates in mid-2019. Excludes Isles of Scilly and City of London.

Source: See source to Table 6.1.

### Changes in spending, 2013–14 to 2019–20, by service

Section 6.2 shows that there were significant cuts in funding per capita between 2013–14 and 2019–20. The scale of cuts to spending vary significantly by service area though, as councils sought to protect social care services in particular from the full impact of cuts in funding. This is illustrated in Figure 6.13, which shows that while spending per capita on adult and children’s social care in 2019–20 was very similar to 2013–14 levels, spending on other services fell significantly: by over a quarter for housing and planning services; and around one-third for leisure and culture services.

**Figure 6.13. Real-terms change in net spending per capita, by service, 2013–14 to 2019–20**



Note: It is not possible to show a consistent measure of changes in spending on non-schools education services because of changes in the definition of this spending line. Children’s social care spending is taken from a separate data source, to ensure consistency in measurement across years.

Source: See source to Table 6.1; also Department for Education (2014, 2021).

Harris, Hodge and Phillips (2019) discuss the changes to service spending during the 2010s as a whole in more detail and find that this pattern of prioritising services for those people with the greatest immediate needs can be found within service areas. This has been at the expense of spending on those people with more moderate needs, and spending on upstream, preventative services. For example, within children’s social care services, spending on ‘looked after’ children and safeguarding significantly increased, while spending on general youth services and ‘Sure Start’ was cut by around two-thirds. Within housing, spending on homelessness prevention increased substantially while support for housing renewal and regulation was cut back. And

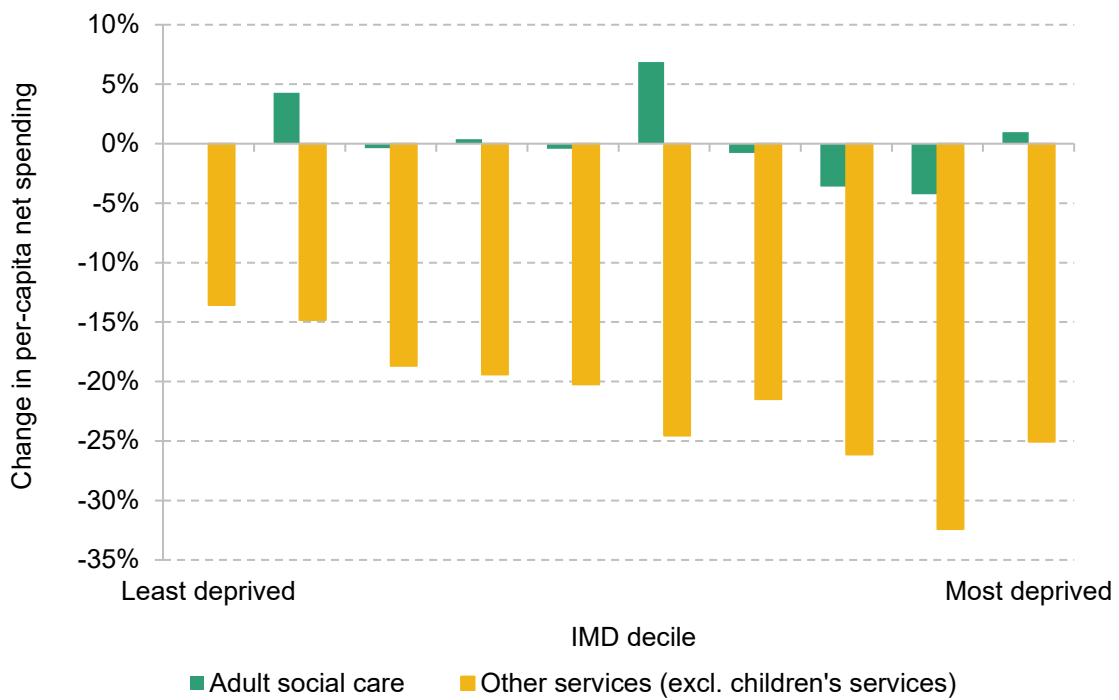
within transport spending, spending on free bus passes for pensioners was maintained, while spending on road maintenance was cut, and net income from parking charges substantially increased. It is also well documented that adult social care service spending was held down by reducing the number of adults with more moderate needs receiving support in order to focus resources on those with higher needs and, in particular, the growing numbers of younger adults with learning disabilities needing support.

Turning to differences across the country, Section 6.2 showed that cuts in funding between 2013–14 and 2019–20 were larger in more-deprived, more-urban areas, which rely more on central government grant funding for their overall funding. Cuts to service spending also reflect this pattern. When considering councils' deprivation levels, this pattern is driven in particular by bigger cuts to services outside social care, as shown in Figure 6.14.

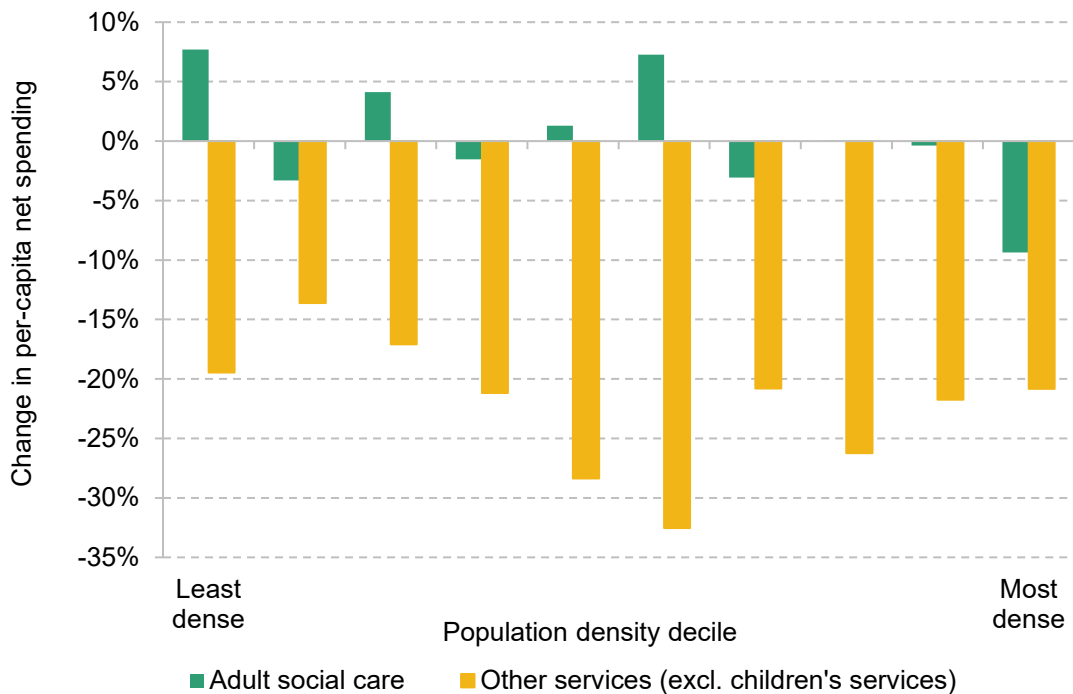
When considering councils' population density levels, adult social care spending increased most in those areas with the lowest population density and fell most in those areas with the highest population density. This may reflect the particular demographic and socio-economic trends in the most rural parts of England, on the one hand, and inner London, on the other. In addition, the largest percentage cuts to 'other services' (excluding children's social care and non-schools education services) were in areas with average levels of population density.

Figure 6.14. Real-terms changes in net spending per capita, by service, 2013–14 to 2019–20

(a) By decile of area deprivation



(b) By decile of population density



Note: 'Other services' includes all service areas listed in Table 6.1, except for adult social care, children's social care and non-schools education services.

Source: See source to Table 6.1; also HM Treasury GDP deflators and Ministry of Housing, Communities and Local Government (2019d).

## Comparison of spending and assessed spending needs, by service

Section 6.2 showed that in 2019–20, on average, councils with high assessed spending needs received levels of funding per capita that were below what they would receive if funding had been distributed in line with those assessed spending needs. Areas with low assessed needs on average received more funding than they would have if funding had been distributed in line with assessed needs. At least in part, this reflected larger-than-average cuts to funding in areas with high assessed needs, due to their greater reliance on central government grant funding.

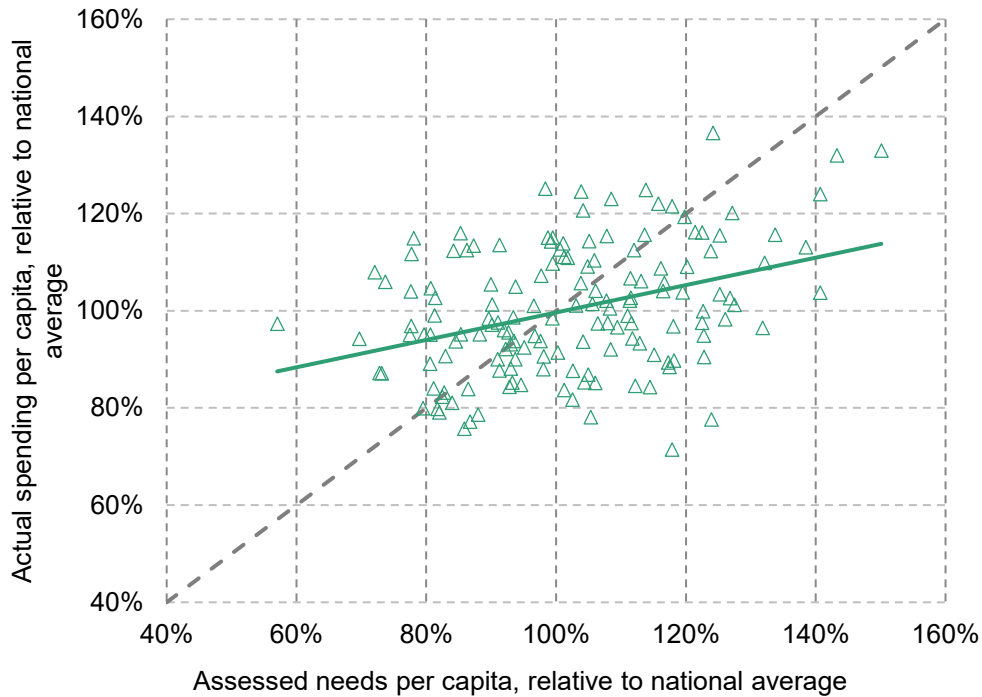
Figure 6.15 shows that a similar pattern can be seen when looking at spending on specific service areas: adult social care services; children’s social care services; and ‘other services’.<sup>48</sup> For example, the trend line in panel (a) suggests that, on average, councils with assessed spending need per capita for adult social services of 80% of the national average spent 94% of the per-capita national average on adult social care services. Conversely, those with assessed needs per capita of 120% of the national average spent 106% of the national average. For children’s services, the trendline suggests that a council with assessed needs per capita of 150% of the national average spent 125% of the national average. For other services, for the vast majority of councils assessed to need to spend between 85% and 115% of the national average, there was in fact relatively little relationship between assessed needs and actual spending. Councils with the highest assessed needs tend to spend less than their assessed needs though.

<sup>48</sup> As with assessments of overall spending need, we update 2013–14 assessments of spending need to account for differential population growth by area. This assumes that relative levels of spending need per capita are unchanged – a strong assumption unlikely to hold in practice.

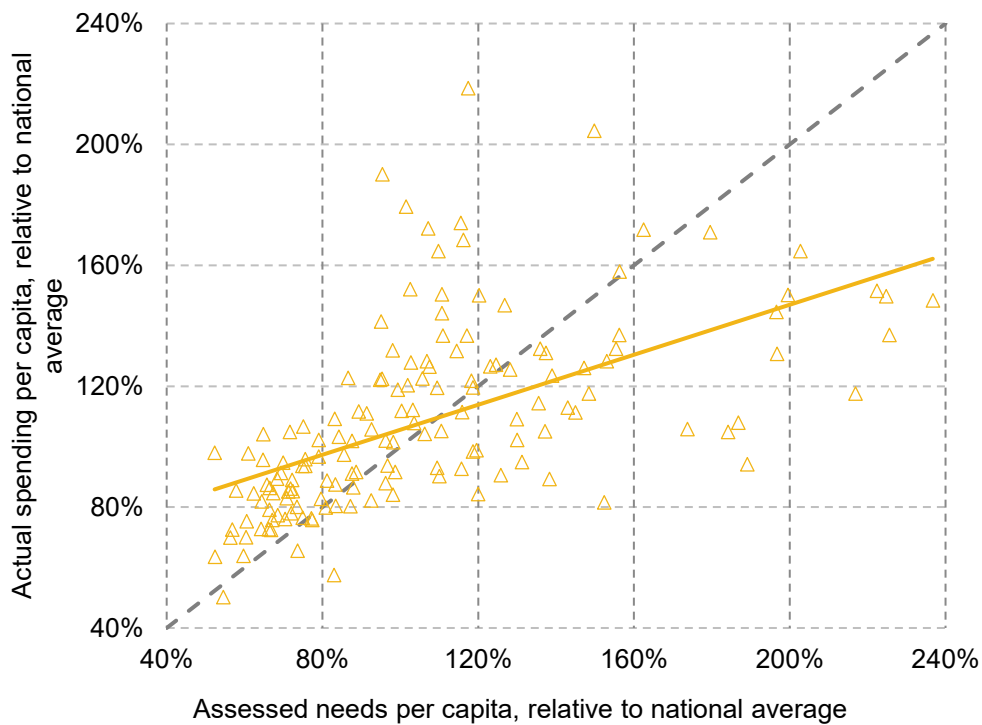


Figure 6.15. Comparison of relative levels of spending and assessed spending needs per capita by service area, 2019–20

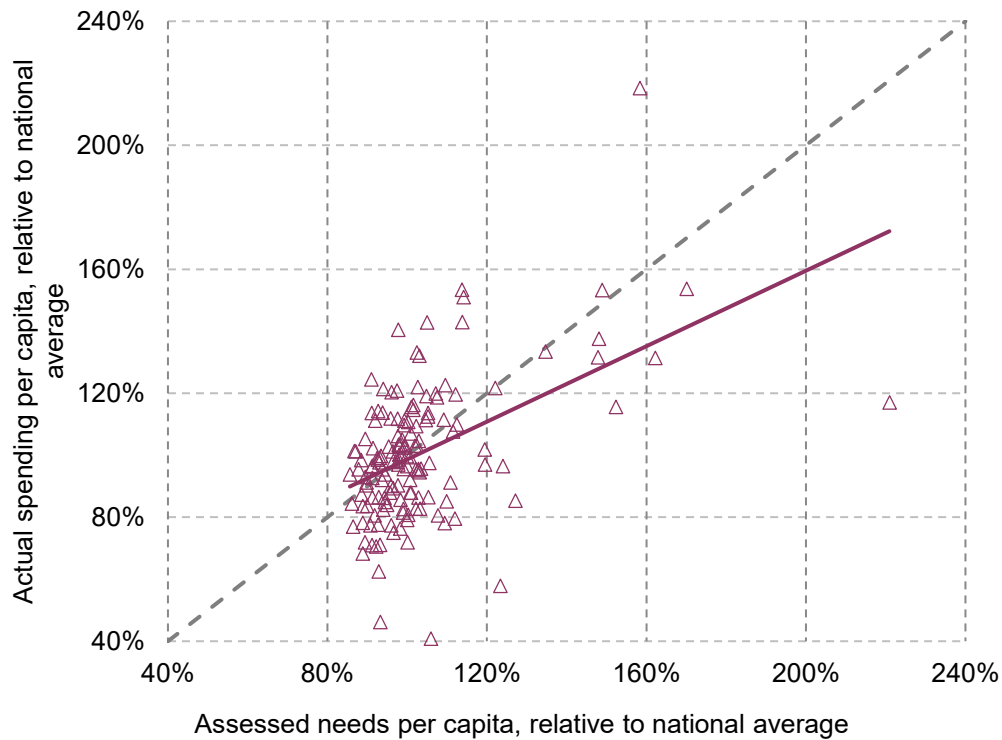
(a) Adult social care services



(b) Children’s social care services



## (c) Other services



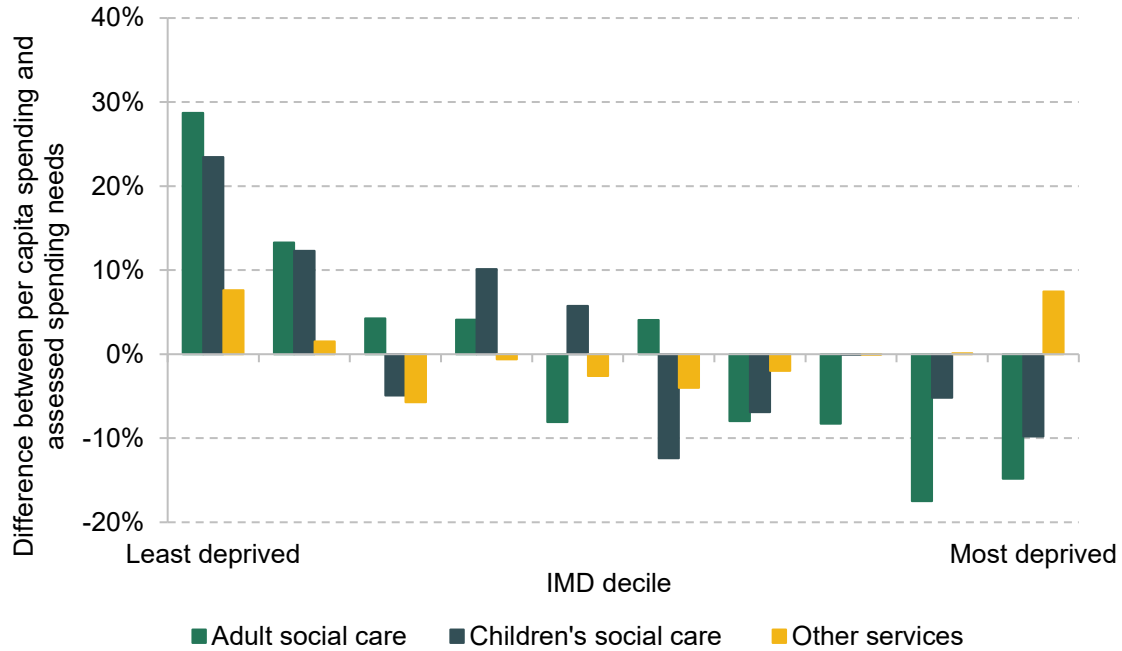
Note: Assessed spending needs are based on relative needs formulae for adult social care, children's social care (youth and CSC element only), and 'other services', which includes EPCS, highways, and children's social care (education element only). Spending on 'other services' includes spending on environment and regulation, non-schools education services, transport, leisure and culture, housing, planning and development, central and other services.

Source: See source to Table 6.1; also Department for Communities and Local Government (2013, 2013–14 Relative Need Formulae (RNFs) by Service).

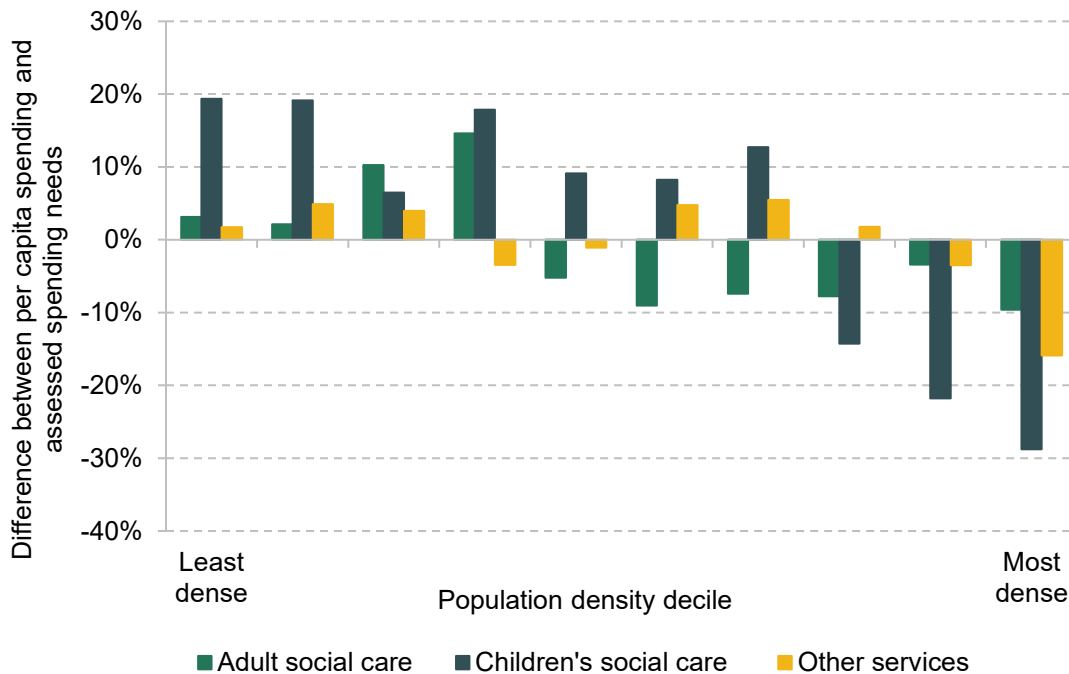
As with overall funding, there is also a strong link between the gaps between assessed spending needs and actual spending on adult's and children's social care services, and councils' deprivation levels. This is illustrated in Figure 6.16, which shows that for the least-deprived tenth of councils, relative levels of spending per capita for these services were, on average, over 20% above relative levels of assessed spending need per capita. In contrast, for the most-deprived tenth, spending was 10% or more below relative assessed needs. However, there is no systematic relationship for 'other services', with relative spending per capita above relative levels of assessed spending needs per capita for both the least- and most-deprived councils.

Figure 6.16. Average differences between relative levels of spending and assessed spending needs per capita by service, 2019–20

(a) By decile of area deprivation



(b) By decile of population density



Note: See note to Figure 6.15.

Source: See source to Table 6.1; Also Ministry of Housing, Communities and Local Government (2019d), and Department for Communities and Local Government (2013, 2013–14 Relative Need Formulae (RNFs) by Service).

Councils with low to average population density also have levels of spending that are high relative to their assessed needs, while those with high population densities have levels of spending that are low relative to their assessed needs. This pattern can be observed for ‘other services’ as well as adult and children’s social services, which may reflect the ability of inner London boroughs to raise income from SFCs (e.g. from parking and from gym memberships), reducing the amount they need to spend themselves on other services, such as transport and leisure and culture facilities.

## 6.4 Summary

This chapter has examined the system for funding councils’ spending on core services, from a combination of council tax, business rates and central government grants. Historically, this system attempted to redistribute revenues according to the assessed spending needs of different areas, but reforms over the last decade have increasingly emphasised providing financial incentives to councils. More-deprived areas saw larger cuts in their funding during the 2010s, meaning funding has become notably less targeted towards socio-economic deprivation over time. Those areas with relatively high per-capita assessed needs in 2013–14 also faced larger cuts, so that allocations of funding in 2019–20 were only weakly related to those (out-of-date) assessments of spending needs. The continued use of spending needs assessments based on out-of-date data, and the ad hoc way differences in revenue-raising capacity have been taken into account, mean that the funding system has become increasingly unfair and arbitrary over time.

Some differences in funding between areas reflect the impact of local discretion over council tax levels, although current differences largely reflect choices made in the 1990s and 2000s. Council tax levels are particularly low in London, although, on average, councils in London also raise more revenue from SFCs in relation to their services. Significant differences between per-capita funding in 2019–20, and what areas would receive if funding was allocated in line with population-adjusted needs, would remain even if all areas set their council tax level to the national average.

There is significant variation in the level of *spending* on delivering services in each area, and in how councils allocate their spending between service areas. Councils in more-deprived areas spend more, largely due to higher per-capita spending on children’s social care, while more-urban areas also spend relatively more on housing services. Spending on social care services has been largely protected since 2013–14, meaning spending on other, non-statutory council services has fallen substantially in real terms.

Reform of the council funding system, addressing at least some of the concerns raised in this chapter, has been planned since 2015, but as yet plans have not been confirmed and there is no

firm date when they will be. This should be rectified with updated assessments of councils' spending needs and revenue-raising capacity and the introduction of a system that allows the government to transparently trade off redistribution according to these assessments, with the provision of financial incentives for tackling needs and boosting revenue. The government would have to transition carefully to new allocations, especially in the context of constraints on overall funding (when big increases for some councils are more likely to mean notable decreases for others). However, it needs to avoid 'damping' arrangements undermining the purpose of updating the funding system, and keep assessments of spending needs and revenue-raising capacity up to date. Funding could be updated partially or with a modest lag, so that councils have some financial incentive to tackle needs and boost revenue-raising capacity.

## 7. Housing funding

People’s housing circumstances are an important determinant of their health and well-being (Marsh et al., 1999), and central and local government support the availability and quality of housing through a range of interventions. This includes the benefit system (housing benefit and the housing element of universal credit, which provides means-tested support with the cost of renting a home), councils’ housing and homelessness prevention services (discussed in the previous chapter) and support for the development and maintenance of both social and private housing. It is the latter that is the focus of this chapter, which in contrast to the rest of this report, covers capital as well as current expenditure.

The process for allocating housing funding also differs from the other service areas covered in this report. In particular, formal geographical needs assessments do not play a major role in allocations. Instead, maintenance, improvement and development of new social housing is funded by a mix of rental income, borrowing and grant funding allocated through competitive bidding. Competitive bidding also plays a key role in allocating funding for enabling infrastructure needed to ‘unlock’ new housing development. Implicitly though, competitive bidding based on cost–benefit analyses and estimates of land-value uplift prioritise investment in areas with high property prices – which is an important indicator of high demand and affordability issues. The Disabled Facilities Grant is one exception where a formal needs assessment is used, based on benefit claim rates, population age structure and housing tenure.

Data availability means that it is only possible to show how funding is allocated between local areas for a subset of the funding streams. The use of time-limited funds also means that rather than describe the now often-closed schemes in place in 2019–20, this chapter focuses on schemes currently in operation.

### 7.1 The approach to allocating funding

Central and local government support the provision and maintenance of housing both directly through social housing, and indirectly through funding to boost the supply of and demand for new private housing. These different activities are supported via different funding streams, allocated between projects and places in different ways.

## Objectives

Given the wide range of different activities and schemes related to housing funding, there is no single statement of objectives for how this funding is allocated. Instead, different elements of the funding regime are designed with different objectives in mind.

## Social housing – maintenance of existing stock

The existing stock of social housing is maintained and improved via three main sources of funding: property rents and service charges; grants for major improvements, such as enhancing energy efficiency; and borrowing.

### Property rents and service charges

Councils and housing associations fund a majority of the costs associated with maintaining and improving social housing and servicing loans used to fund the initial construction of social housing using the rents and service charges paid by tenants (or via housing benefits).

In the case of councils, income and expenditure associated with social housing are paid into and out of ring-fenced Housing Revenue Accounts. This aims at preventing council tax from being used to subsidise social housing rents, and vice versa. Prior to 2012, those councils whose rental and service charge income was assumed to exceed costs paid these surpluses to central government, which used them to subsidise councils whose rental and service charge income was assumed to be below costs. This system was abolished in 2012 with the aim of making each council ‘self-sufficient’ in terms of its Housing Revenue Account: funding its own costs with its own rental and service charge income. However, to achieve this, the existing stock of housing debt was redistributed between councils so as to avoid some councils having large surpluses of income and others large deficits. Implicitly then, the former subsidies remain in place (through differing contributions to historic debt).

The rents and service charges councils and housing associations can charge are regulated.<sup>49</sup> Properties rented at ‘social rent’ levels must set the initial rent on properties at the start of a tenancy equal to or less than ‘formula rent’, which is in turn subject to national caps. Formula rent is based on the number of bedrooms a property has, its value as of 1999 and local average earnings for a manual worker as of 1999. This gives a formula rent for 2000–01, which is then uprated to current levels by differing percentages each year (RPI+0.5% up until 2014–15, CPI+1% in 2015–16 and since 2020–21, and –1% between 2016–17 and 2019–20). This means that the social rents charged in different areas depend on factors now more than 20 years out of date. In particular, areas where property prices and wages have risen by relatively less than

<sup>49</sup> Ministry of Housing, Communities and Local Government (2019e) and Department for Levelling Up, Housing and Communities (2021).

average receive lower social housing subsidies compared with areas where property prices and wages have risen faster than when the system was initially set up. Different rules apply to properties rented at ‘affordable rent’ levels: initial rent at the start of a tenancy must be no more than 80% of market rent or the formula rent (whichever is higher); once a tenancy has commenced, rents can increase by no more than CPI+1% even if market rents increase by more.

### Grants for major and specific improvements

The government provides grants to help fund major and specific improvements to social housing. Historically, this funding was significant: during the period between 2001–02 and 2010–11, for example, over £28 billion was allocated to councils to fund improvements and major repair works, including an estimated £21–£22 billion to bring properties up to the ‘Decent Homes’ standard (National Audit Office, 2010). Billions in additional funding were provided for the period between 2011–12 and 2015–16.

More recently, grant funding levels have been lower, in part reflecting the reforms to the Housing Revenue Account system in 2012, which allowed councils to retain all their rental income and fund a larger share of major improvements themselves. The grants that continue to be paid are often targeted at more specific types of improvements, and subject to competitive bidding.

For example, the **Social Housing Decarbonisation Fund** is a ten-year £3.8 billion bid-based fund, launched in 2021, of which £222 million has so far been made available to the pilot and first wave of bids. The aim of the funding is to enable improvements to properties with poor energy performance and, in particular, increase their performance to at least Energy Performance Certificate (EPC) Band C. The first wave competition required bidding councils and Housing Associations to design schemes that satisfied a number of principles and objectives (Department for Business, Energy & Industrial Strategy, 2021), including: prioritising the worst properties; focusing on insulation and other heat-loss prevention measures; avoiding interventions that could become quickly obsolete; not leading to increases in bills for tenants; and contributing to climate change targets and growth in the number of ‘green jobs’. Councils and housing associations also had to contribute one-third of the costs themselves, and spend no more per property than fixed caps (which vary with existing energy performance), to help ensure value-for-money. Winning bids are being selected on the basis of a qualitative assessment of how well they meet the scheme’s objectives, budgeted costs, and the risks around these budgeted costs.

### Borrowing

Councils and housing associations are also able to fund maintenance and improvements to existing properties through borrowing.



Historically, the amount that councils were able to borrow against the Housing Revenue Accounts was subject to a stringent cap by central government. This cap was removed in October 2018, with councils borrowing instead limited by the general Prudential Code, which requires that repayments of borrowing can be covered by recurrent funding/income – in this case from rents and service charges. The main aim of this change was to give councils more flexibility to invest in improvements to and construction of social housing.

Housing associations are also able to borrow from private lenders, securing loans against the properties they own (and the future rental and service charge income associated with them). The main use of borrowing by both housing associations and councils is to fund the development of new social housing, rather than maintenance and improvements to the existing stock of properties though.

### Social housing – development of new housing stock

Ultimately, as discussed above, the majority of the cost of new social housing is funded through the rents and service charges paid by tenants (or via housing benefits). Costs are paid upfront using borrowing (see above), a proportion of the proceeds of property sales, and government grants.

#### Proceeds from the sale of properties

Tenants of council-owned properties have the ‘Right to Buy’: after renting the property for a period of time, they have the right to purchase it at a below-market price. The proceeds of these sales are used, in part, to help fund replacement social or affordable housing.

Councils do not retain all the proceeds of sales. Instead, they retain 25% of amount that they would be projected to receive had the government not reformed the Right to Buy scheme in 2012 to increase discounts – which substantially increased sales volumes, more than offsetting the reduction in sale prices. The other 75% of these projected receipts goes to central government. On top of this, councils retain up to 100% of the receipts from sales of the estimated ‘additional’ properties sold as a result of these 2012 reforms. They must spend the proceeds within five years, and can cover no more than 40% of the cost of any new properties built from the proceeds of past sales. The aim of the first condition is to ensure that replacement properties are built relatively quickly. The aim of the second is to maximise the total number of new properties that are built by ensuring Right to Buy and other types of funding (e.g. borrowing) leverage each other, with the government believing this is enough to ensure a one-for-one replacement for properties purchased under the Right to Buy scheme.

On average, around 20% of the total proceeds of Right to Buy sales still goes to central government though, based on pre-2012 projections for sales, and councils that are unable to spend their share of proceeds in time. The latter is used by the government (or the Greater

London Authority in London) to help fund grants for social housing providers (see below). The former is used to ‘reduce the budget deficit’.

This system means that the new construction that can be funded by Right to Buy sales is largely in council areas where properties are being purchased using the Right to Buy scheme. However, the discounts and centrally retained share of Right to Buy proceeds mean that a significant proportion of councils’ borrowing for social housing is required to replace units that are sold rather than increase the net number of units.

### Grants for new social housing

Central government provides grant funding to social housing providers outside London to subsidise the cost of building new social housing units; in London, this responsibility has been devolved to the Greater London Authority. Total funding for construction commencing during the period 2021–22 to 2025–26 amounts to £7.4 billion outside London and £4 billion inside London, estimated to be sufficient to deliver up to 130,000 and 34,000 homes, respectively. Information on how funding was divided between London and the rest of England is not available.

The ‘Affordable Homes Programme’ outside London is operated by Homes England. Councils, housing associations and other developers could bid for two main types of funding: strategic partnership status (CPS), for individual or consortiums of developers able to deliver at least 1,500 properties; on a development-by-development basis via the continuous market engagement (CME) route. Decisions on both types of funding require assessing the cost, value-for-money and deliverability of the proposals, as well as whether they meet several specific objectives of the programme, including: using ‘modern methods of construction’; meet National Design Guide standards; propose to use local small businesses as contractors; and support the provision of rural or supported housing.

Assessments of differences in the ‘need’ for social housing in different geographic areas do not play an explicit role in the assessment process. This means that it is possible that areas with higher need for housing do not receive funding if any bids from developers for their area do not score sufficiently highly in the assessments, while areas with lower need do receive funding. The extent to which the value-for-money assessments implicitly account for geography (e.g. by assigning higher benefits in areas with higher need for social housing) is unclear though.

Geography and local housing market conditions do play a role in whether developers can bid for higher grants for housing to be rented at ‘social rent’ levels (as opposed at ‘affordable rent’ levels or for sales in shared ownership schemes). In particular, these higher grants are only available in areas where private rents are at least £50 per week above equivalent ‘social rent’ levels. This is a somewhat arbitrary cliff edge, although developers can still build properties for

‘social rent’ in areas that do not meet this criterion if they can afford to do so at the lower grant amounts provided for other types of property.

## Facilitating the increased supply of private housing

The government also provides funding to increase the supply of housing. These schemes take the form of bid-based grant funding schemes for enabling infrastructure, and loan subsidies/guarantees.

- **Housing Infrastructure Fund (HIF).** Covering the period 2018–19 to 2023–24, £4 billion has been to councils on the basis of competitive bidding to fund physical infrastructure such as roads, utility connections and community facilities to ‘unlock’ new housing development opportunities (Department for Communities and Local Government, 2017).

Projects have been chosen on the basis of an assessment of their value for money and deliverability (in terms of both the infrastructure and subsequent housing), and the extent to which they meet several other criteria: strong leadership and ambitious plans for increasing the supply of housing; a clear and robust evidence base underlying these plans; and support for new developers and small businesses. The value-for-money assessment is based on comparing the costs in terms of central government funding with the benefits in terms of land value-uplift as a result of the infrastructure.

This approach would channel funding to projects where there are large gaps between current and potential land values – for example, in inaccessible sites in areas where housing is expensive. This is not unreasonable as areas where housing is expensive are also likely to be areas where housing ‘need’ and affordability issues for low- and middle-income households are high. However, by considering only the costs to central government and not the total costs of the infrastructure, the scheme could subsidise infrastructure, which has negative net benefits: both the councils bidding for the funding and central government assessing those bids only account for the costs they incur, not the co-payments by the other party.

- **The ENABLE Build Programme.** This is a loan guarantee scheme that underwrites, for a fee, loans to fund construction of new properties by small and medium enterprises (SMEs) that develop fewer than 2,000 homes annually.<sup>50</sup> The total value of these guarantees is capped at £1 billion, and lenders are expected to bear losses up to a threshold in order to ensure they still have an incentive to enforce loan repayments.

<sup>50</sup> See British Business Bank (2019) and Ministry of Housing, Communities and Local Government (2020b).

The aim of the programme is to support greater diversity of suppliers and hence competition in the development of new properties. Applications are made by lenders and assessed by the government-owned British Business Bank on the basis of evidence of the lender's ability to lend to SMEs to support new housing supply and properly manage repayment risks, as well as other commercial considerations. The scheme therefore has no mechanism to target funding geographically.

- **Help to Buy.** This programme, due to close to new applicants in October 2022, provides equity-based loans to first-time buyers of new-build properties, with the aim of making it easier for people with low deposit amounts to buy a new-build home. In turn, it is hoped the additional demand generated for new homes will incentivise developers to increase the supply of homes. There is evidence that the additional demand has also increased the price of homes though, given constraints on housing supply. These increases in prices outweigh the benefits home purchasers are estimated to receive from the subsidy provided by the scheme, meaning the scheme increased the cost of housing. This is particularly true in areas with high housing demand and little available land, such as London, where there is no evidence housing supply increased at all.

Participants need a minimum 5% deposit (and can pay a maximum 70% deposit), and the government will take an equity stake of 5%–20% of the property.<sup>51</sup> The maximum property purchase price varies by region: from £186,100 in the North East of England to £600,000 in London. This reflects variation in new-build property prices across the country, which would seem sensible. However, given the aforementioned impact estimates, the higher price limit applied in London means the scheme *reduced* housing affordability by more than if a lower limit had been set.

A similar equity loan scheme operates for 'self-builders' who are building or contracting a builder themselves.<sup>52</sup> This scheme's land and building price limits do not vary geographically.

## Facilitating general improvements to the quality of housing

Central and local government also provide a number of grants to help homeowners and private sector tenants repair, improve and adapt their homes. The eligibility rules and funding arrangements differ between schemes, with the main schemes including the following.

<sup>51</sup> HM Government (2022a).

<sup>52</sup> HM Government (2022b).

- **Home energy efficiency grant schemes.** There are various grant schemes designed to help pay for the costs of improvements to heating, insulation and ventilation systems to help increase the energy efficiency of homes. Some of these schemes are available to all households across England, including the ‘Boiler Upgrade Scheme’, which provides grants to replace gas-fired central heating with biomass boilers or heat pumps. Others are run by local government and are subject to means-testing. This includes the recently closed local Green Homes grant schemes, funded via a competitive bidding process (albeit one that a majority of English councils successfully bid for). It also includes the London-specific ‘Warmer Homes’ programme, funded through the Greater London Authority’s general capital funding.
- **The Disabled Facilities Grant scheme.** This scheme, operated by councils, provides grants to adapt homes so that they can better meet disabled people’s needs. This includes widening doors and installing ramps, improving access to rooms and facilities, and adapting heating and lighting systems and controls. Grants are available for both owners and tenants, provided they are intending to live at the property for at least five years after completion of the works. Funding for the scheme is provided as part of the NHS’s ‘Better Care Fund’ contributions to councils’ social care budgets. The amount provided to each council is based on the number of disability-related benefit claimants, number of means-tested benefit claimants, the proportion of the population aged 60 or over, and the share of the housing stock that is council-owned. It is notable that this includes no adjustment for differences in costs (e.g. for the labour costs of tradespeople undertaking the home adaptations), which may adversely affect high-cost areas such as London.
- **Home improvement loans and grants.** Legislation also gives councils the option (but not the duty) to provide financial and other assistance in the form of subsidised loans and grants for the repair, improvement and adaptation of privately owned or rented homes. They are able to define their own eligibility criteria, and often restrict eligibility to those with low incomes (for example, in receipt of means-tested benefits) or meeting certain other criteria (for example, based on age, disability status, etc.), often reserving grant funding for those with the lowest financial means. There is no specific funding stream for these grants and loans: instead they are funded from councils’ general funding. As councils have prioritised social care services and, within housing services, homelessness prevention budgets, day-to-day spending on private sector housing renewal (including grant and loan administration costs) fell by 85% between 2009–10 and 2019–20. The government does not separately collate data on the capital spending allocated to the repairs and renovations themselves, although total spending on grants and loans to housing associations and private homeowners and tenants increased by over 40% during the 2010s.

## 7.2 The resulting funding allocations

In contrast to the other service areas considered in this report, information on the geographic allocation of funding for housing improvement and construction is not collated and published. Nor, as discussed in the introduction to this chapter, are assessments of housing funding needs available. However, information is available on a number of schemes, including:

- Disabled Facilities Grant allocations;
- Housing Infrastructure Fund allocations;
- social housing numbers.

### Disabled Facilities Grant allocations

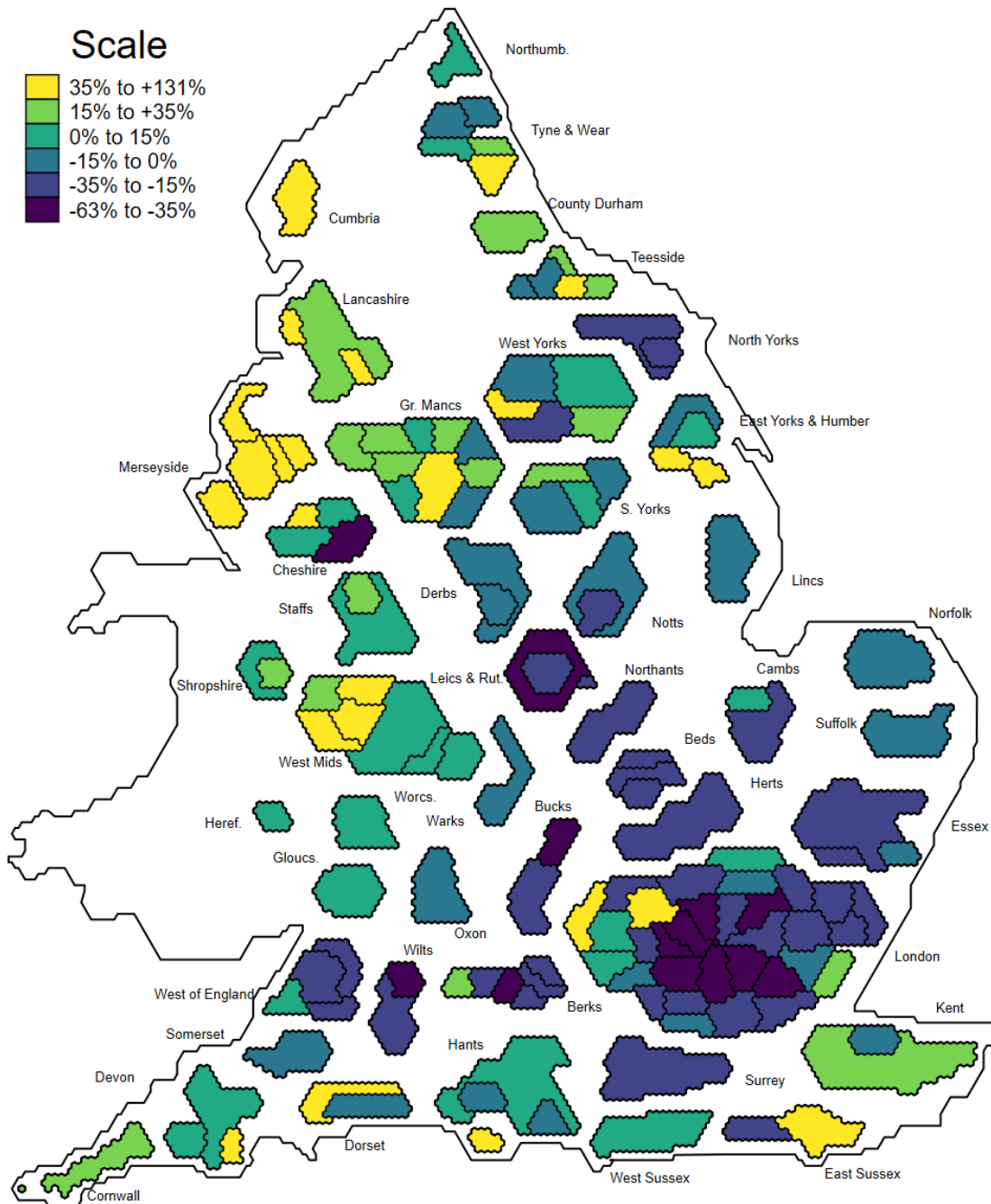
Total funding for the Disabled Facilities Grant in 2019–20 was £509 million, or around £9 per person in England. Figure 7.1 shows the level of funding for different (upper-tier) council areas relative to this national average.

It shows significant variation across the country, with 14 (out of 151) councils receiving at least 35% less and 23 at least 35% more per person than the national average. It also shows clear geographical patterns with high allocations per person concentrated among councils in former industrial areas of the North and West Midlands, as well as some coastal areas in the South (such as Dorset, East Sussex and the Isle of Wight) with elderly populations. Allocations per person are generally below average in London (and particularly inner London), its environs, and along the M4 and M1 corridors.

These patterns reflect the concentration of older, poorer and sicker people in England – given the use of disability and means-tested benefit claims and the older population share in allocating the disabled facilities grant. Figure 7.2 illustrates this by showing how allocations per person vary by council areas' deprivation, disability expenditure and assessments needs for adult social care spending.

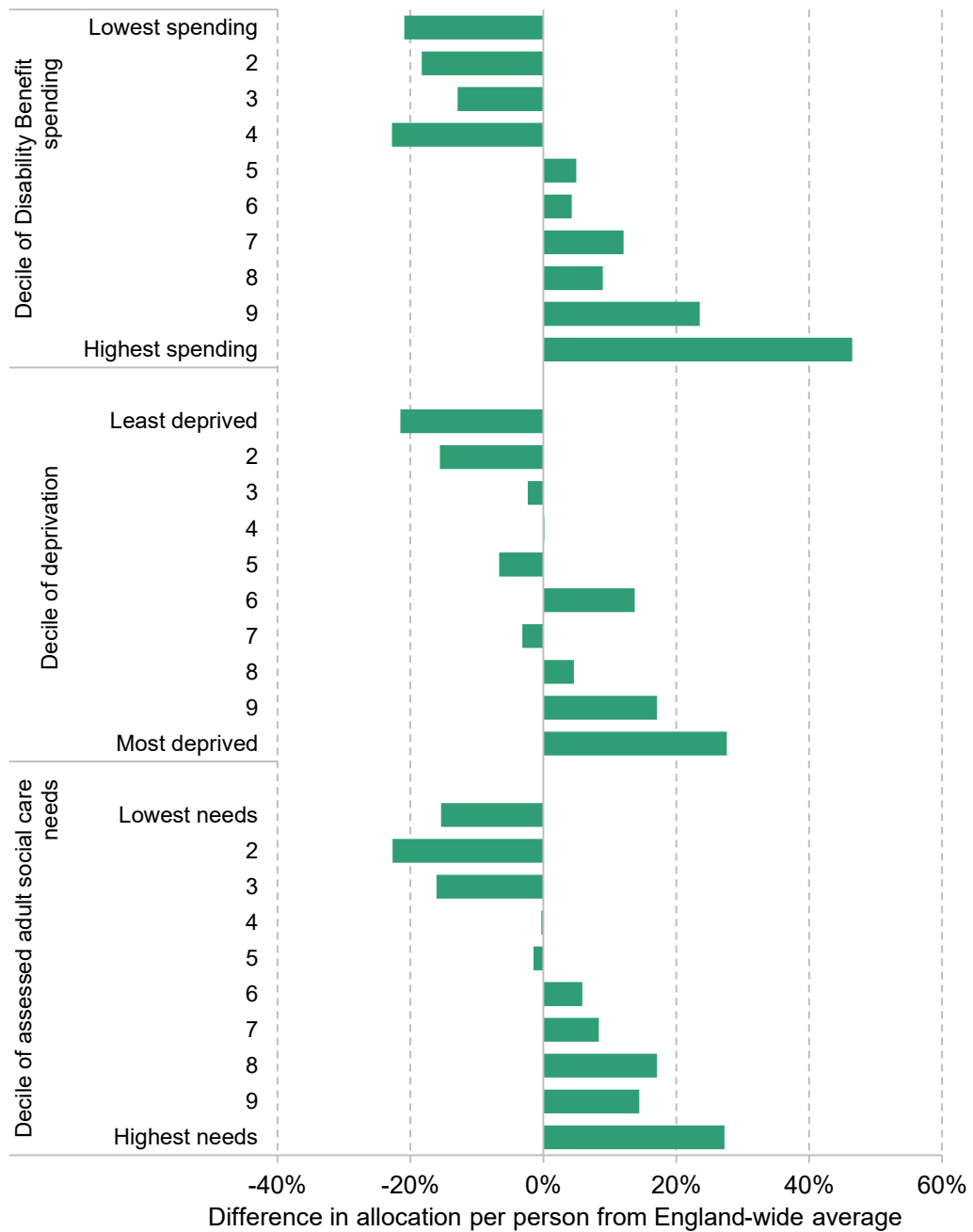
Funding allocations per person are clearly higher in areas with high levels of disability benefit spending, high levels of deprivation, and high levels of assessed adult social care spending needs. For example, whereas Disabled Facilities Grant allocations per person average 21% below average in the tenth of councils with the lowest levels of disability benefit expenditure per person, they are 46% above average in the tenth of councils with the highest levels of disability benefit expenditure per person. Similarly, whereas allocations per person average 22% below the England-wide average in the least-deprived tenth of councils, they average 28% above it in the most-deprived tenth.

Figure 7.1. Disabled Facilities Grant allocations per person relative to the national average allocation, 2019–20



Source: Author's calculations using Ministry of Housing, Communities and Local Government (2019f) and Office for National Statistics (2020a).

Figure 7.2. Disabled Facilities Grant allocations per person relative to England-wide average, by council characteristics, 2019–20



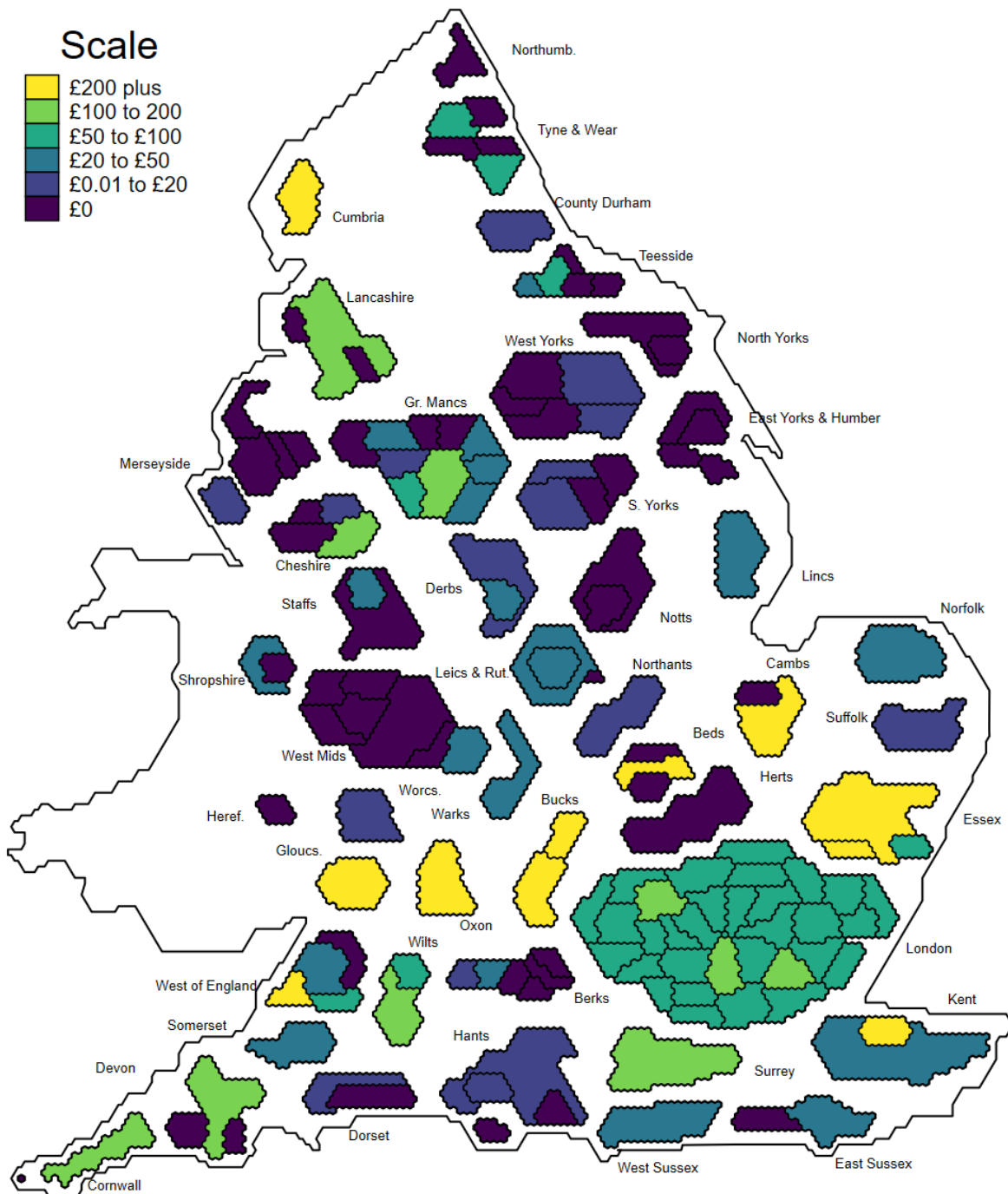
Source: Authors' calculations using Ministry of Housing, Communities and Local Government (2019d, 2019f), Department for Work and Pensions (2021) and Department for Communities and Local Government (2012, 2013).

### Allocations from the Housing Infrastructure Fund

A total of £3.9 billion has been allocated via the HIF, equivalent to an average of £69 per person across England. Just over half (62 out of 119) of the upper-tier council areas outside London have received at least some funding from the HIF, as has the Greater London Authority (for schemes that cannot easily be disaggregated between London boroughs).



Figure 7.3. HIF allocations per person



Source: Authors' calculations using HIF allocations (available at <https://www.gov.uk/government/publications/housing-infrastructure-fund>) and Office for National Statistics (2020a).

Figure 7.3 shows that councils in the South have been more likely to receive substantial allocations from the HIF than those in the North. For example, of the 11 upper-tier council areas where allocations amount to over £200 per person, 11 are in the East, South East or South West of England and just one (Cumbria) is in the North. Relatedly, whereas fewer than half of upper-

tier council areas in the North and West Midlands were allocated funding, almost two-thirds in the South and East Midlands were.

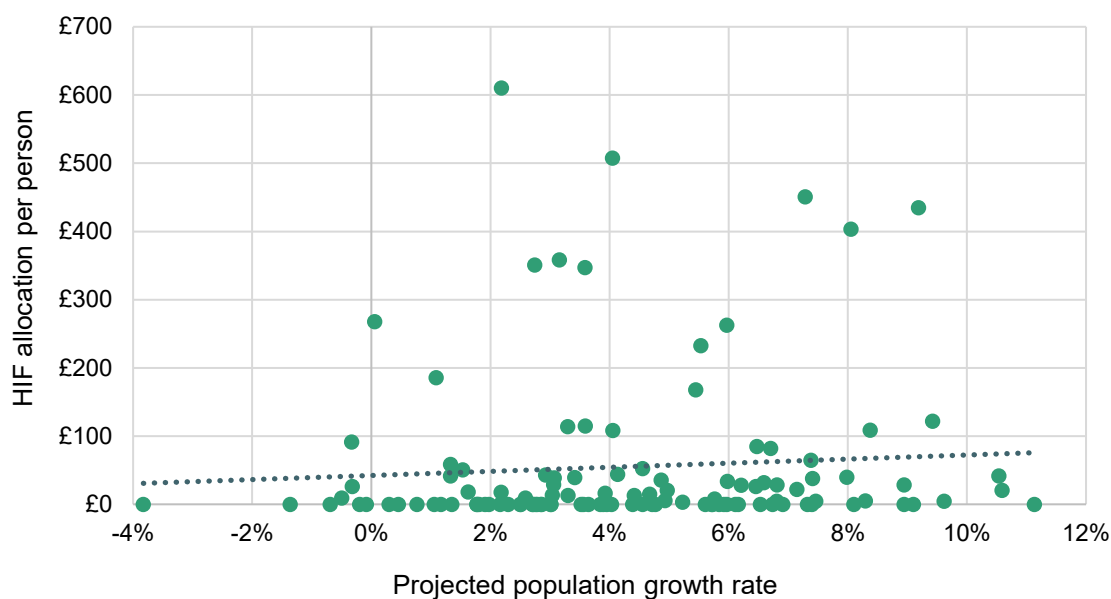
Figures 7.4 and 7.5 compare HIF allocations per person with local average property values (as of summer 2022) and projected population growth rates, respectively, for councils outside of London. Figure 7.4 shows that, on average, council areas with higher property values were more likely to receive HIF funding and received higher amounts of funding per person. For example, two-thirds of council areas outside London with average property values over £300,000 received at least some funding. This compares to 45% for those with values less than £300,000 and just 35% of those with values of less than £200,000. As a result, the average allocation per person was £115 for areas with average property values of over £300,000 compared to £26 for areas with average property values of less than £300,000. Given that high property values are an indicator of high demand relative to supply, this suggests that HIF allocations have been targeted at areas where additional housing supply is particularly needed. Figure 7.5 shows that there is also a relationship with projected population growth. For example, just over 60% of council areas outside London with projected population growth between 2020 and 2030 of 5% or more received HIF funding, compared to 45% of those with projected population growth of less than 5%. The areas with the two highest allocations per person both have projected growth of less than 5% though. This may reflect the role of existing housing supply constraints, which the HIF is designed to address, limiting past population growth (on which projections of future population growth are largely based).

**Figure 7.4. HIF allocations per person and councils' average property values**



Source: Authors' calculations using HIF allocations (available at <https://www.gov.uk/government/publications/housing-infrastructure-fund>), Office for National Statistics (2020a) and HM Land Registry (2022).

Figure 7.5. HIF allocations per person and councils' projected population growth



Source: Authors' calculations using HIF allocations (available at <https://www.gov.uk/government/publications/housing-infrastructure-fund>) and Office for National Statistics (2020b).

## Net additions to the stock of social housing

The stock of social housing in an area is affected by both the completion of new properties, and the sale (and demolition) of existing properties. Figure 7.6 shows the net change in the number of social housing properties per 1,000 residents by upper-tier council area.

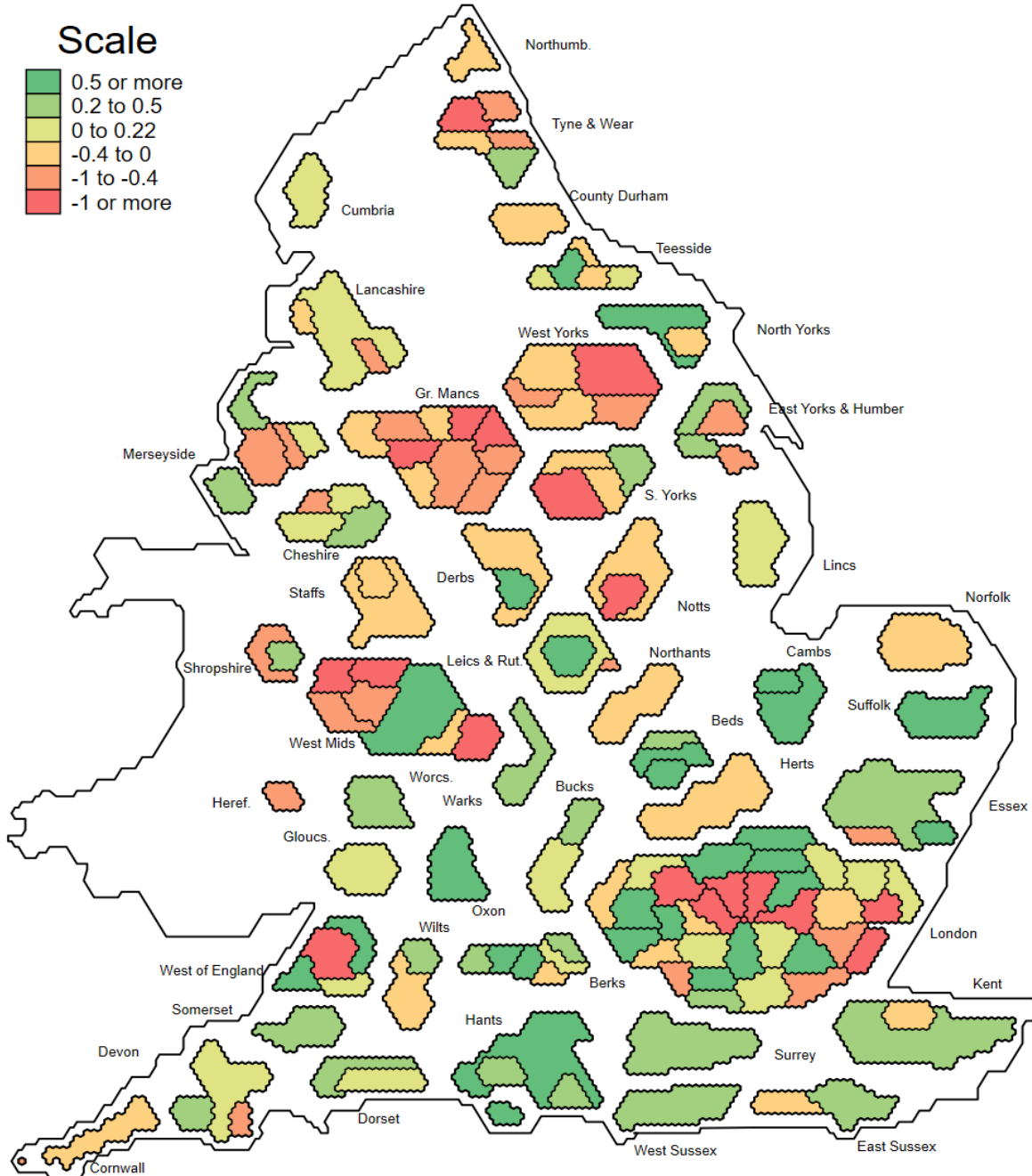
Figures 7.7 and 7.8 show how these changes relate to average local property values and the number of households homeless or at risk of homelessness.

Net additions to the social housing stock per 1,000 residents between 2019 and 2020 were generally positive in outer London and the South and East of England and negative in inner London (north of the Thames) and the major urban areas of the North and Midlands (such as Greater Manchester, West Yorkshire, South Yorkshire, the Black Country and Tyneside). Across the country as a whole, net additions per 1,000 residents were slightly negatively correlated with average property values (a proxy for housing demand relative to supply and potential affordability issues). However, pattern was driven by a few councils in inner London where the number of social housing units per 1,000 residents is estimated to have fallen and property values are very high. Outside London, net additions to social housing were positively correlated with average property values, reflecting the North–South pattern seen in Figure 7.6.

There was no relationship between the net change in social housing units and the share of households that were homeless or at risk of homelessness. Interpreting this relationship is

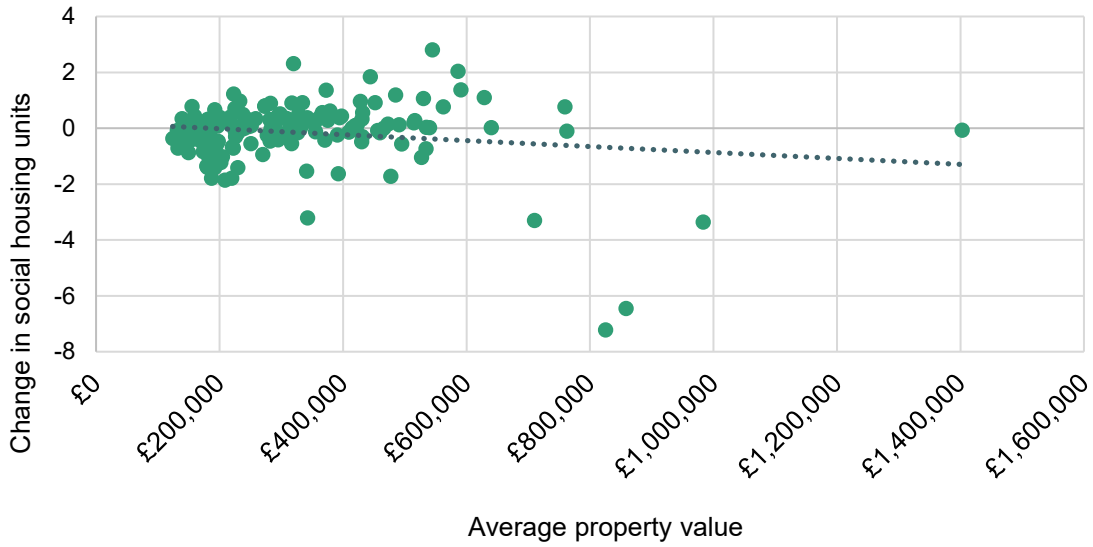
difficult though, as while we might hope a bigger homelessness problem would lead to more social housing being built, a lack of social housing can also contribute to homelessness.

Figure 7.6. Change in the number of social housing units per 1,000 residents, 2019–20



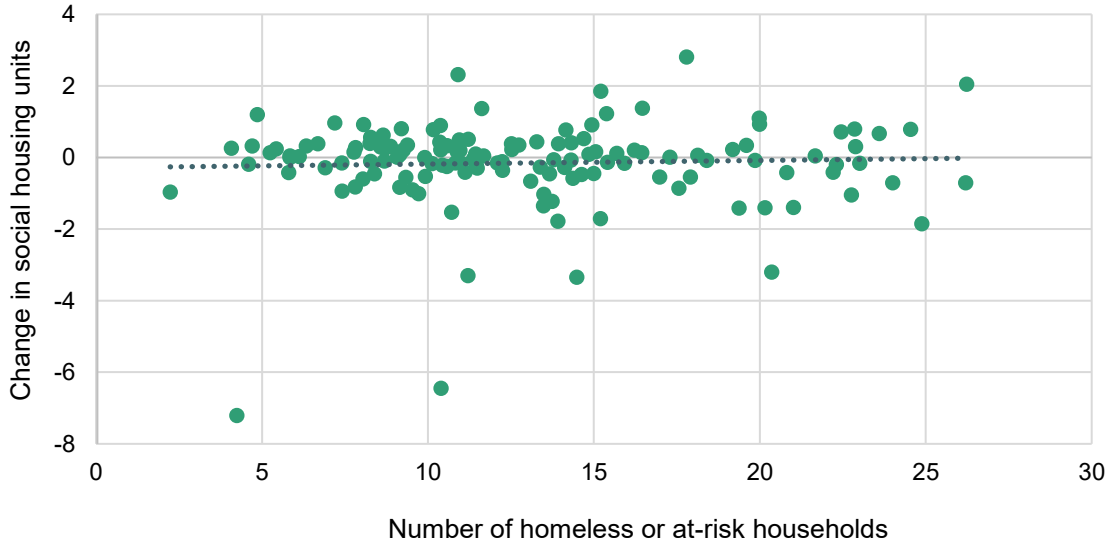
Source: Authors' calculations using Department for Levelling Up, Housing and Communities (2022b) and Office for National Statistics (2020a).

Figure 7.7. Change in the number of social housing units per 1,000 residents and councils' average property values, 2019–20



Source: Authors' calculations using Department for Levelling Up, Housing and Communities (2022b), Office for National Statistics (2020a) and HM Land Registry (2022).

Figure 7.8. Change in the number of social housing units per 1,000 residents and the number of households that are homeless or at risk of homelessness per 1,000 households, 2019–20



Source: Authors' calculations using Department for Levelling Up, Housing and Communities (2022a), Office for National Statistics (2020a) and Ministry of Housing, Communities and Local Government (2021b).

## 7.3 Summary

The approach to allocating funding to fund or facilitate the development and improvement of England's stock of housing differs significantly from the approaches used to allocate funding for the day-to-day operation of health, education and council services. Except in a few instances (such as the Disabled Facilities Grant), allocations are not based on formal needs assessments. Instead, a combination of income from rents, borrowing by councils and social housing providers, and bid-based pots of central government funding is used to fund the maintenance, improvement and development of social housing, with the latter two also providing funding for enabling infrastructure to support housing development.

This approach does not mean the need for investment in improving and developing new housing is not accounted for at all though. Councils and social housing providers will appraise their borrowing and investment plans to ensure they represent value for money and are affordable given the income streams available (such as rents from new social housing). And the selection of funding bids including criteria related to the need for housing investment, such as projected land value-uplift for the HIF and 'value for money' for social housing grants, should help channel funding to areas with high needs. The majority of HIF funding has, for example, been targeted at areas with high average property values and higher projected population growth. And outside London at least, net increases in the amount of social housing are higher, on average, in areas of the country with higher property values.

Bid-based approaches can mean that areas with high needs lose out if overall their bids are not deemed as high quality though. And we have not assessed whether funding *levels* are appropriate given significant housing affordability issues and long waiting lists for social housing.

## 8. Police funding

Crime and fear of crime have been shown to have significant effects on the health and well-being of both victims of crime and the wider population (Ludwig et al., 2012; Cornaglia, Feldman and Leigh, 2014). Indeed, recent evidence for England and Wales suggests that differences in local crime rates have between two and four times the impact on mental well-being than differences in local employment rates do (Dustmann and Fasani, 2014). Crime also has more immediate and direct effects on health, including through injuries and even death, and creates significant workloads for the health service (Robinson and Keithley, 2010).

Effective policing can help reduce crime and fear of crime, and evidence finds that police resourcing affects the effectiveness of the police (Machin and Marie, 2011; Vollaard and Hamed, 2012; Blesse and Diegmann, 2022). In this chapter, we therefore consider the allocation of police funding in England. As in previous chapters, we first discuss the objectives and details of the approach used to allocate funding, and then examine how the resulting funding allocations vary around the country.

Police services are funded via a combination of central government grant funding, council tax, and fees and charges for certain activities (such as policing football matches). Historically, the main elements of central government grant funding were allocated in order to account for differences in assessed spending needs and the ability of different areas to raise revenues via council tax. However, as for local government, this system began breaking down with the introduction of the flawed four-block model in 2006–07, and was abandoned entirely from 2013–14. Since then, the main police grant has been changed by the same percentage for each police force area irrespective of how much they rely on this grant for their overall funding, or changes in local area characteristics. Funding allocations are therefore increasingly out of date and arbitrary. Reform of the police funding system is therefore needed. This could take account of the interactions between police services and population health and well-being, including mental health.

### 8.1 The approach to allocating funding

While police forces are responsible for the day-to-day operation of police services, elected PCCs are responsible for setting the high-level priorities and, importantly, the budget for their police force area. These budgets are funded by several sources, as follows.

- Police grant from the Home Office, which is the largest single source of funding for the police (£7.6 billion out of £13.4 billion in total in 2019–20). This grant is not subject to any ring-fencing, meaning that PCCs and, in turn, chief constables are able to spend it as they see fit to meet their high-level and operational objectives.
- Council tax precepts, added on top of the council tax that local residents pay to their council, which is the second largest source of funding for the police (£3.8 billion in total in 2019–20). Again, this funding is not subject to any ring-fencing, but PCCs are constrained from increasing council tax by more than a certain amount each year unless they can secure permission from local voters in a referendum.
- A range of special and specific grants from the Home Office, which together comprise the third largest source of funding for the police (£2.0 billion in 2019–20). Most of this funding is ring-fenced for specific purposes, and some is subject to competitive bidding by PCCs. Some of the funding is also allocated to national or regional bodies rather than specific PCCs.
- A number of smaller sources of income including fees and charges for performing non-statutory functions (such as policing sporting events), for providing services to other public bodies, and for administering gun licensing. The fees and charges are usually capped at the level of cost recovery, but in some cases are below this level.

Because of their small scale and the fact that they are charged on the basis of cost recovery, we do not consider income from fees and charges in the remainder of this chapter. Instead, we focus on funding from central government grants and council tax.

### Objectives

Historically, the objective of the police funding system was very similar to that of the local government funding system. Grant funding was allocated on the basis of assessments of police force areas' spending needs and their ability to raise revenues through council tax. In particular, grant funding was allocated so that if each police force were to set its Band D council tax rate at a particular level, they were estimated to be able to provide the same range and quality of police services to their residents, despite differences in the demand for and cost of providing services across the country. However, police forces were able to set a lower or higher Band D council tax rate if they wished to tax and spend less or more than this centrally determined assessment.

Such a system distributed funding accorded to the assessed spending needs of different areas, while giving a degree of local discretion to vary tax, spending and service provision levels. However, as with local government funding, this system began to break down when the four-block model of funding was introduced in 2006–07, and was abandoned completely after 2013–14.



Since then, the main police grant for each PCC and police force area has changed by the same percentage each year. This suggests a focus on simplicity, predictability and the avoidance of political tensions – although it is worth noting that the government did consult on re-introducing a (simplified) approach to police funding in 2015, which was subsequently abandoned. As we discuss further below, the current lack of a system for assessing PCC and police force areas' spending needs and revenue-raising capacity means that the allocations for different PCC and police force areas are increasingly arbitrary and out of date.

The allocation of funding via special and specific grants aims allows the government to channel funding to specific activities and priorities, such as counter-terrorism operations, tackling organised crime, and improving and maintaining information and communication networks. Allocating some of this funding via competitive bidding processes also allows the government to incentivise particular behaviours (such as collaboration between or innovation by police forces), and also aims to improve the quality of projects undertaken relative to other approaches to funding.

### Allocating police grant funding

The central government police grant actually consists of a number of separate elements. These include specific top-ups to PCCs covering London in recognition of its role as the UK's capital city (totalling £199 million in 2019–20), and funding to cover the cost of both council tax freezes and reform of how means-tested support with council tax is funded in the early 2010s (totalling £572 million in 2019–20). The two biggest components (totalling £6.7 billion) are termed the 'Police Core Settlement' and 'DCLG Formula Funding', both of which are now in fact funded by the Home Office.<sup>53</sup>

Currently, each PCC and police force area sees its core/formula grant funding change each year by the same percentage as every other PCC/police force area. This has been the case since 2014–15, when the government stopped updating the data underlying the police and other local government funding formulae. Box 8.1 provides information on the formulae that were used up until 2013–14, including the types of local characteristics taken account of, and how the formulae were created.

<sup>53</sup> Prior to 2013–14, the then Department for Communities and Local Government (DCLG) – the forerunner to today's Department of Levelling Up, Housing and Communities (DLUHC) – was responsible for part-funding the police in England. This responsibility was transferred to the Home Office from April 2013, but the funding formerly provided by DCLG is still separately identified.

**Box 8.1. How spending needs and revenue-raising capacity were historically assessed**

The ‘Police Allocation Formula’ assessed each police force area’s need for spending based on a set of socio-economic indicators that are designed to predict the need for different types of police activities. Seven of these were activities related to reducing and investigating different types of crime: serious violence and sexual offences; less serious violence; robbery; vehicle crime; domestic burglary; other high-cost crime; and other low-cost crime. The other three activities were: providing reassurance to the public; assistance with non-crime incidents; and assistance with road traffic accidents.

Each PCC area was initially allocated a basic amount per resident, which included a small element for policing special events. Then ‘top-ups’ for each of the seven areas of crime and three other activities were added to this, based on different sets of socio-economic indicators. For example, the top-up related to serious violence and sexual offences was based on: the daytime net population inflow per residents; the density of bars in an area; the share of the population claiming income-related benefits; and the share of households headed by a single parent. The top-up related to burglary was based on: the density of bars in an area; the share of housing occupied by students; and the share of the working-age population that was young males claiming unemployment-related benefits. The top-up related to assisting with road traffic accidents was based solely on what fraction of local residents lived in areas defined as being sparsely populated.

The indicators chosen for each type of activity were selected on the basis of being correlated with recorded crime. The weights allocated to them in the top-up formulae were then based on statistical regression analysis on their relationship with the relevant crime statistics and non-crime activities. The crime regressions used data for Community Safety Partnership (CSP) areas: groups of one to seven local authorities, with PCC areas consisting of between 2 and 32 CSPs. Utilising this sub-PCC area data is better than using PCC-level data, which are likely to be more affected by past central government funding. The regressions for the non-crime activities were estimated at the PCC area though.

Each top-up also had to be assigned a weight in the overall formula; this was done on the basis of data on the time and costs associated with different types of crimes and non-crime activities. Finally, an area cost adjustment was applied to adjust for differences in labour and property costs across areas.

Even in 2013–14, the last year the formula was properly applied, many of these data and weightings were out of date. For instance, measures of population inflows, sparsity and student households were from the 2001 Census, and estimates of the time spent and cost of different activities were last updated in 2007–08.

In addition to assessing spending needs, the system made use of assessments of how much could be raised via council tax in each PCC area. As with local government, these needs and revenue-raising assessments

for the DCLG proportion of funding were brought together as part of the four-block model in place between 2006–07 and 2013–14. As discussed in Chapter 6, this model did not effectively equalise funding according to different areas' own revenue-raising capacity, resulting in bigger cuts to overall funding in areas more reliant on central government grant funding from 2010 onwards.

These problems mean that it would not have been desirable to continue with the old spending needs assessments and funding system. However, the lack of any spending needs assessments or any way to account for differences in revenue-raising capacity since 2013–14 is also very undesirable.

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Applying the same percentage change to the core grant funding provided to each PCC for nine years in a row – particularly following on from the use of the four-block model means that police funding allocations are increasingly out of date and arbitrary. Funding needs and, to some extent, revenue-raising capacity are likely to have changed differently for different parts of the country, not least because of differential changes in population for different areas. For example, between 2013 and 2019, the population in Northamptonshire, the fastest growing police force area, grew by 6.7%, compared with the slowest growing area, Cumbria, where the population only grew by 0.3%. Patterns of crime have also changed, both by nature of crimes and across the country. For example, between 2015 and 2019, the number of recorded crimes involving violence against people has risen substantially faster than the number of recorded crimes involving theft offences. There are also substantial regional differences in the growth in recorded crimes over this period. For example, the total number of recorded crimes (excluding fraud) has risen much more slowly in London and for police forces in the South West than for police forces in the North of England.<sup>54</sup>

Applying the same percentage change to grant funding irrespective of the ability of different PCCs to raise revenues via council tax also means that total funding (grant plus council tax) will change differentially. In particular, when grant funding is falling relative to council tax revenues, areas that are more reliant on grant funding will see bigger falls (or smaller increases) in total funding. This was the case up until 2020–21, when the increase in grant funding exceeded the increase in council tax funding for the first time in more than a decade. In turn, this means that PCCs covering poorer and more urban parts of England saw larger cuts in their funding during the 2010s, than those covering more affluent areas.

The problems with this approach – and with resurrecting the formulae and four-block model used prior to 2014 – appear to be recognised by the government. Indeed, the government went as far as designing and consulting upon an updated approach to assessing spending needs and allocating funding in 2015. This attempt, which failed following a backlash from some PCCs, is

<sup>54</sup> Excludes Greater Manchester Police. ONS Crime in England and Wales, years ending December 2015 and 2019.

discussed in Box 8.2. Unfortunately, no further progress has been made in the seven years since, and core grant funding remains effectively frozen.

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### **Box 8.2. Failing to reform the police funding system**

Proposals for a new system for assessing the spending needs of each PCC and police force area, and allocating funding, were published by the government in 2015. A key aim was to significantly simplify the previous approach, in order to make the funding system more transparent. The government also aimed for the new system to be ‘robust’ (in terms of the indicators, data and methods used), ‘stable’ (so that implied allocations did not change significantly year-to-year), ‘future proof’ (such that it does not stymie responses to changes in demands on the police) and should incentivise the government’s policing policy objectives.

With this in mind, the final proposals were for just five indicators to be taken account of in allocations: population (24% weight); the number of households with no adult employed and dependent children (25%); the size of the population described as ‘hard pressed’ (25%); the density of bars (10%); and the inverse of the number of Band D equivalent properties (16%), to account for differences in the amount PCCs could raise themselves via council tax. Four of these could be updated annually, although the number of households with no adults employed and dependent children comes from the census and hence could only be updated every ten years.

The two socio-economic indicators were selected based on statistical analysis of the extent to which a much wider range of indicators predicted PCC-level variation in crime. No indicators were included to represent demand for non-crime activities, although the government did seek ideas on indicators that could be used for demand related to mental health and child protection issues.

Finally, the proposed weights to apply to the selected indicators were based on the estimated linear relationships between them using principal component analysis (PCA).

The consultation received 1,700 responses and the government said that the proposals were being refined in light of these. This included: better accounting for the number, not just the density of bars; a different approach to accounting for council tax revenue-raising capacity; the inclusion of an indicator on the highest levels of deprivation; and the incorporation of an area cost adjustment to reflect differences in labour and property costs.

Ultimately, though, the reforms were shelved. The reason for this was the identification of errors in the modelling and data used by the Home Office when they provided PCCs with estimates of how much funding they would have received under the revised proposals if they had been in place in 2015–16. Analysis by the Devon and Cornwall PCC also found that the allocations implied by the initial and revised proposals differed by up to 33%, suggesting the formulae were not particularly robust.

Together with six other PCCs, they wrote to the Minister of Policing informing him that they were taking legal advice with a view to initiating a judicial review. The political damage caused by the revelation of these errors, together with opposition by areas that would lose funding under the proposed system, led to the reform being first put on hold and then shelved.

Despite this, it is worth considering whether the proposals were sensible or not. The first thing to note is that while the final proposed formula was simple and hence transparent, the process by which it was developed was not. Only very high-level information on how indicators and weights were derived was provided, making it difficult for PCCs and other stakeholders to understand and critique the final formula. The second is that the formula was arguably too simple, with too few indicators to represent the diversity of the different types of work police do and the factors that drive workloads. Additional indicators may not have affected overall explanatory power that much, but may be very important for a small subset of areas. The third issue is that PCA is not an appropriate approach to weight different indicators in a final formula. PCA is an approach to summarise the correlations between a set of variables – in this case, the five (and subsequently four) indicators to be used in the updated police funding formula – and collapse down the information into a smaller number (possibly just one) latent indicator that is a weighted average of the initial indicators. However, the weights thus derived reflect the correlations between the indicators, not the correlations with crime or other demands on the police. The consultation document states that similar weights would be derived if the statistical relationship between the indicators and crime is instead estimated. But no evidence for this is provided, and this ignores the fact that the inverse of the Band D equivalent properties was included to adjust for differences in revenue-raising capacity rather than spending needs.

In summary, therefore, the proposals do not look like a sensible basis for reforming the police funding system. That they were shelved is welcome. That no better proposals have subsequently been introduced is not.

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A sensible reform would be along the lines we discussed for local government in Chapter 6 and would incorporate the following.

- An agreed set of principles and objectives for the allocation of core funding, such as the ability to equalise for differences in spending needs and revenue-raising capacity, provide financial incentives for efforts to tackle spending needs and revenue-raising capacity (as with the council funding system), and channel additional funding to particularly high-crime areas to tackle ‘inequalities’ in crime levels across places.
- A set of formulae for estimating spending needs, based on indicators that are broadly agreed to capture the drivers of police activity and expenditures, and that for which up-to-date data are available. Where possible, any formulae estimated econometrically should make use of neighbourhood-level data and control for police force area fixed effects, to minimise the impacts of past funding policy on the estimated equations.

- An assessment of revenue-raising capacity based on notional rather than actual council tax revenues, so that PCCs are not compensated for setting lower council tax rates with higher grant funding.
- A simple and transparent but flexible system, bringing together assessments of spending needs and revenue-raising capacity, and incorporating elements related to other objectives (such as funding to reduce ‘crime’ inequalities). This system should allow governments to change the priorities they place on different objectives by, for example, equalising for more or less of the differences in spending needs and revenue-raising capacity across police force areas. But it should make such political judgements much clearer – and hence subject to scrutiny – than under the former four-block model.

In developing the spending needs formulae, the government should also account for the changing nature of police work, and the increased role police services play in safeguarding and addressing issues related to child abuse, domestic abuse and mental health. This may require different types of indicators to be used to assess spending needs than was historically the case.

### The police council tax precept

The police council tax precept is an addition to households’ council tax bills and is set by the Police and Crime Commissioner for each police force area. It was introduced in 1995–96, at which point it contributed 12% of funding for English police authorities’ funding, not much more than one-third of the 2019–20 share of 33%.<sup>55</sup> However, the share varies significantly across police force areas: from 18% in the Northumbria and West Midlands police force areas to 56% in the Surrey police force area. A large part of this variation will reflect the council tax *bases* of different police force areas: those with many properties in low council tax bands will raise a relatively low share of their funding from council tax, while those with more properties in high council tax bands will raise more. But it also reflects variation in the tax *rates* levied in different police force areas.

The average police precept for a Band D property as of 2019–20 was £213, rising to £247 this year. The rates levied in different police force areas varies significantly: from £154 for a Band D property in Northumbria, to £296 in Surrey this year. Bar a few exceptions, most PCCs levy fairly similar rates though: the Band D rate is between £220 and £260 in two-thirds of police force areas (24 out of 37).

As with councils, since 2012–13, PCCs have had to hold and win a referendum if they wish to increase council tax by more than a fixed percentage or amount. These referendum limits have varied over time but have tended to allow for bigger percentage increases without a referendum

<sup>55</sup> Council tax precepts made up approximately 28% of all police funding in 2019–20 including funding for ‘national priorities’, only a proportion of which goes to PCCs.

than is the case for councils. For the most recent year, 2022–23, the limit was £10 for a Band D property, which was equivalent to just over 4% of the average Band D rate charged by PCCs last year.

### Special and specific grants

The special and specific grants that PCCs and other policing bodies receive change from year-to-year, are allocated via a range of different approaches, and are subject to different ring-fencing requirements.

- The biggest single grant is the Counter-Terrorism Policing Grant, which amounted to £792 million across England and Wales in 2019–20 (and has since grown to £979 million). This funding is ring-fenced for counter-terrorism activities. The allocation methodology and resulting allocations are not published on national security grounds, but the Metropolitan Police is reported to receive the largest share of this funding. Part of the funding is allocated to a national operations centre based in London but the majority goes to individual PCCs.
- The next largest area of funding is for police technology programmes, which amounted to £495 million in 2019–20 (and has since increased to £606 million). This provides funding for national police information, communication and technology system operations and development and hence is not allocated to specific PCCs.
- The third largest area was innovation/transformation funding, which amounted to £169 million in 2019–20, but has since been ended. This was funding awarded on the basis of competitive bidding between PCCs for projects to support workforce development, improvements to information technology, and enhanced collaboration with other public services with the aim of improving services and cutting costs. A new (smaller) competitive fund has been set up to fund schemes aimed at preventing and reducing crime through measures such as installing CCTV, enhanced streetlighting, improved home security measures and educational initiatives.

A range of other grants provide specific funding to PCCs and national policing bodies to cover the cost of increases in pension contributions, recruit additional police officers as part of the government's pledge to boost police numbers, train and upskill police officers, improve forensics capabilities, and support commercialisation opportunities. Information on the allocation of the first two to individual PCCs is published: for pension grants, this includes the amounts but not the methodology; funding for recruiting additional police officers is allocated according to the 2013–14 police allocation formula, implicitly assuming that the need for additional police officers across police force areas is in line with the amount of core government funding they received in 2013–14.



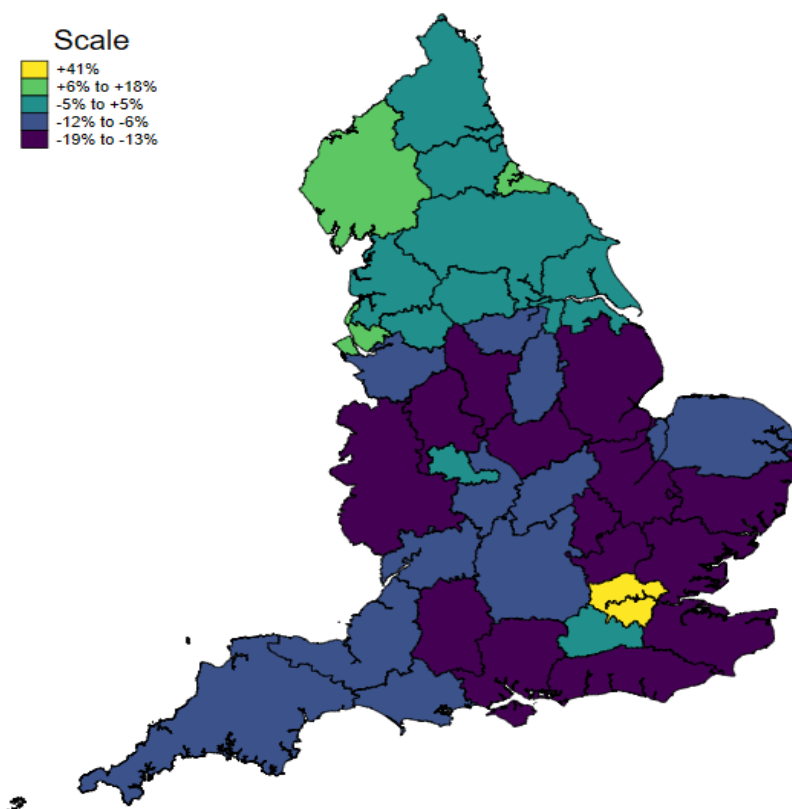
## 8.2 The resulting funding allocations

### Overall funding distribution

In this section, we examine how funding varies across PCC and police force areas. We focus on funding from the main police grant (the ‘Police Core Settlement’, ‘DCLG Formula Funding’ and legacy council tax grants) and police council tax precepts for which data are available, and for which (out-of-date) assessments of spending needs exist. Because PCCs can set their own Band D council tax rates, we look at funding both using the actual Band D rates they set and if they charged the national average Band D rate for PCCs.

Figure 8.1 shows the geographical distribution of overall funding for PCC and police force areas in 2019–20 relative to the national average, given the actual council tax charged in different areas. Police forces in green and yellow have funding more than 5% above the national average, while those in turquoise have funding within 5% above or below the national average. The forces in blue and purple have funding more than 5% below the national average.

**Figure 8.1. Overall PCC and police force area funding 2019–20 relative to national average**



Note: Funding is calculated relative to the national population weighted average. Excludes City of London.

Source: Authors' calculations using the Home Office's Police Grant Report (England and Wales) 2019/20, the Home Office's Police funding for England and Wales 2015 to 2022, Home Office, and Office for National Statistics (2020a).



There are large differences in per-capita funding between different police force areas. The Metropolitan Police is the highest funded police force, with £276 per person in 2019–20, 41% above the national average. This does not include the additional special and specific grants, some of which the Metropolitan Police receives a large share. This high funding is in part because London has the highest estimated costs of providing police services (excluding the City of London), estimated to be 18% above the national average in the allocation methodology. Adjusting for these differences, London's cost-adjusted funding is 19% above the national average.

At the other end of the distribution, Lincolnshire is the lowest funded police force, receiving £159 per capita in 2019–20, 18.6% below the national average. Lincolnshire has estimated costs of providing police services below the national average, and so adjusting for cost differences reduces the difference in funding between the highest and lowest funded forces.

The figure also shows more systematic regional differences: with the exception of London and Surrey, the South and East of England generally receives less police funding per person than the North of England.

Figure 8.2 splits this funding into funding from central government grants (the left-hand panel) and council tax (the right-hand panel). The geographical distribution of these two sources are rather different, and the (population-weighted) correlation between the two funding streams is  $-0.17$ . This means that police forces that receive above-average funding from one source receive slightly below-average funding from the other source. Figure 8.3 shows the relationship between each source of funding for each police force area.

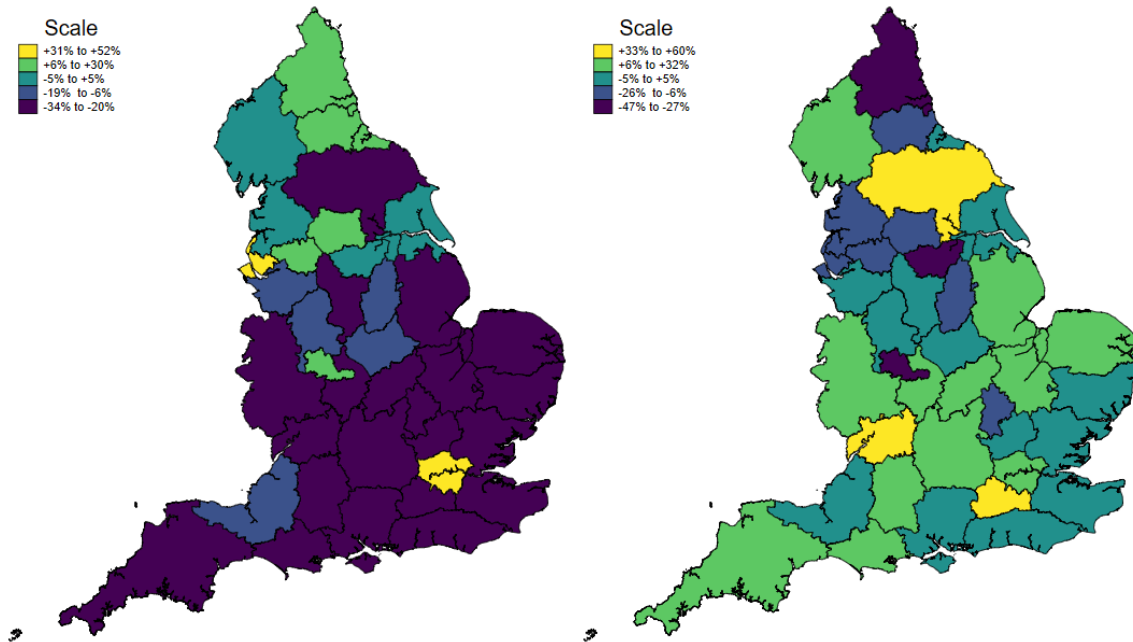
An extreme example of the negative relationship between the two sources of funding is Surrey, whose police force receives the lowest central grant funding, at £85 per head (33.9% below the national average) but the highest funding from council tax precepts, at £109 per head (60.3% above the national average). The West Midlands is another extreme example: its central grant funding is 20.8% above the national average but its funding from council tax is 45.4% below the national average.

This negative relationship is only weak, and many forces receive relatively high or low funding from both streams. Cumbria, for example, receives 1.2% above the national average in central government grants and 28.8% above the national average in council tax income. At the other end, Bedfordshire receives 20.5% less than the national average in central government grants and 6.3% below the national average in council tax income.

Figure 8.2. PCC and police force area funding 2019–20 split by source

(a) Funding from central grants

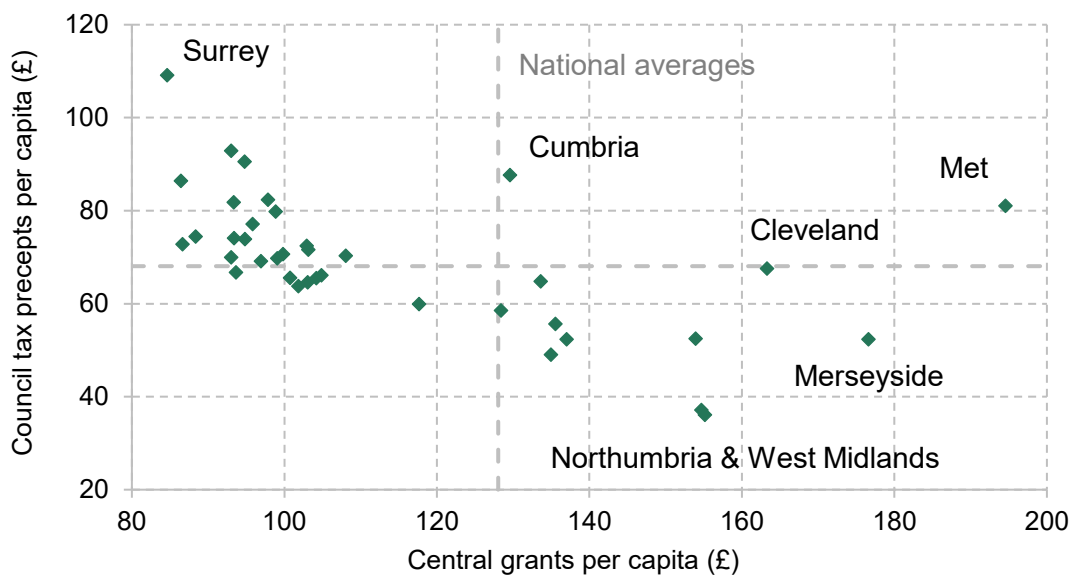
(b) Funding from council tax



Note: Funding is calculated relative to the national population-weighted average. Excludes City of London.

Source: Authors' calculations using the Home Office's Police Grant Report (England and Wales) 2019/20, the Home Office's Police funding for England and Wales 2015 to 2022, Home Office, and Office for National Statistics (2020a).

Figure 8.3. Relationship between funding from central grants and actual funding from council tax, per capita 2019–20



Note: See note and source for Figure 8.2.

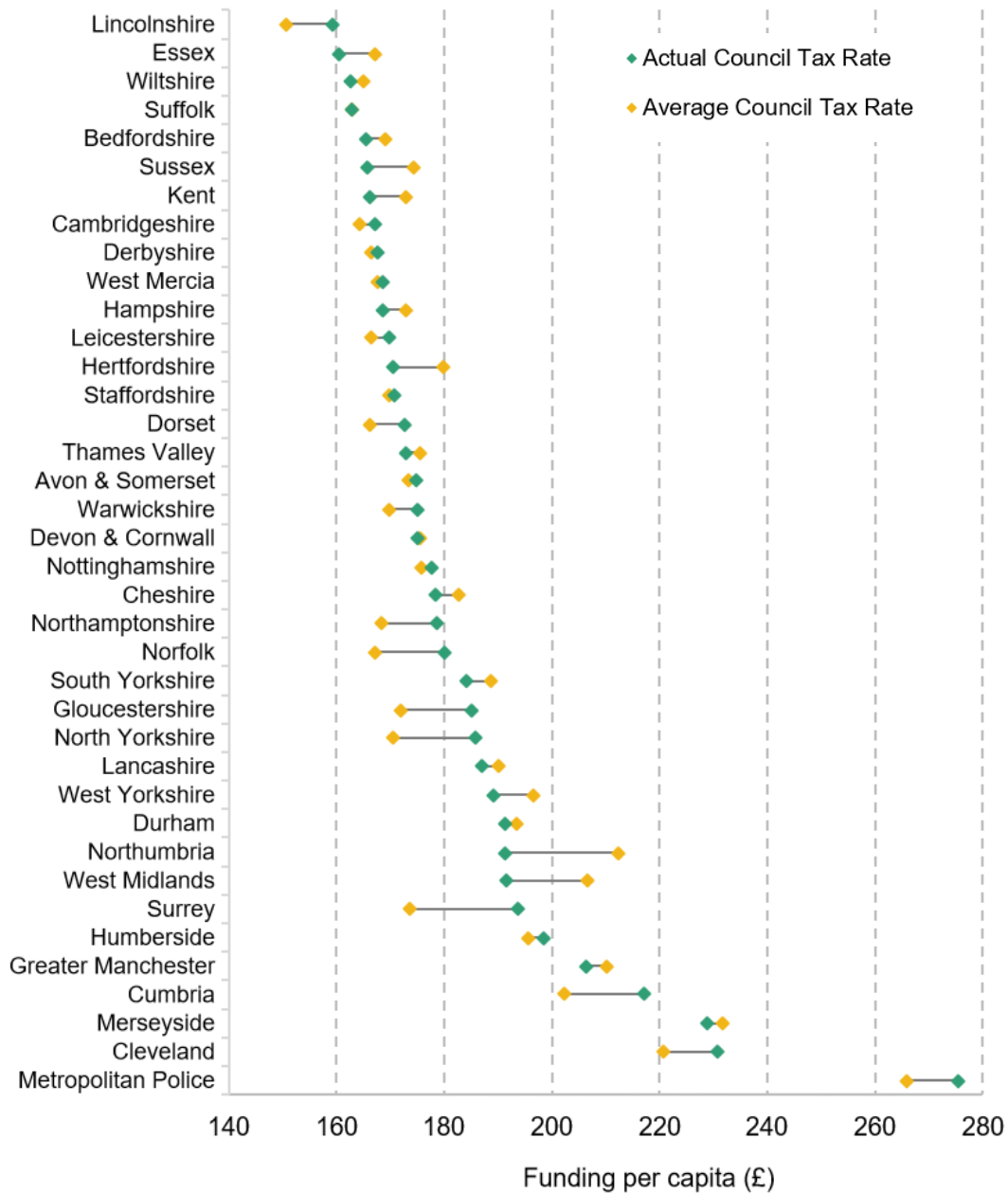
However, remember that councils have a degree of discretion in setting their council tax rates. Figure 8.4 shows estimates of funding levels if each PCC charged the average Band D council tax rate, stripping out the effect of local discretion on tax revenue and overall funding levels.<sup>56</sup> Many police forces already have council tax rates near to the national average, and so there would be little change to their funding. But for some police forces, council tax rates are substantially above or below the national average, so that their funding levels depend significantly on local choices, as well as government funding policy. For example, both Northumbria and Surrey received a similar level of funding in 2019–20, approximately £193 per capita. But if they both charged the average council tax rate, Northumbria would have received around 11% more funding (£212 per capita), and Surrey would have received around 10% less funding (£174 per capita). Therefore, Surrey topped up its police funding with relatively high contributions from locally raised taxes, while Northumbria has prioritised lower levels of council tax for local residents.

An important question is whether the discretion over council tax rates increases or decreases the differences in funding between different police forces. If council tax rates are set to offset differences in central government grant funding, then these differences would reduce the differences in overall funding. However, if council tax rates are on average higher in places that already receive more central funding, differences in tax rates would increase the differences in overall funding between different police forces.

In practice, local variation in council tax rates has a complex impact on in the distribution of funding: it increases the standard deviation of funding (a measure of dispersion) by 9% but reduces the interquartile rate (the difference between the 75<sup>th</sup> and 25<sup>th</sup> percentiles) by 5%. This is in part because three of the four highest funded police forces set above-average council tax rates, increasing the standard deviation of funding but not the interquartile range. At the other end, Lincolnshire's relative high council tax rate increases its funding per capita, which would otherwise be even further below all other forces' funding.

<sup>56</sup> We only consider the impact of charging the average Band D council tax rate on council tax precepts in 2019–20. We do not account for the impact of council tax rates on legacy council tax grants from central government, which are based on council tax rates in 2011–12 and 2012–13. If council tax rates had always been set at the national average, then rates in 2011–12 and 2012–13 would have been different from their actual rates and the value of legacy council tax grants from central government would also be different.

Figure 8.4. Impact of local discretion over council tax rates on police funding per capita in 2019–20



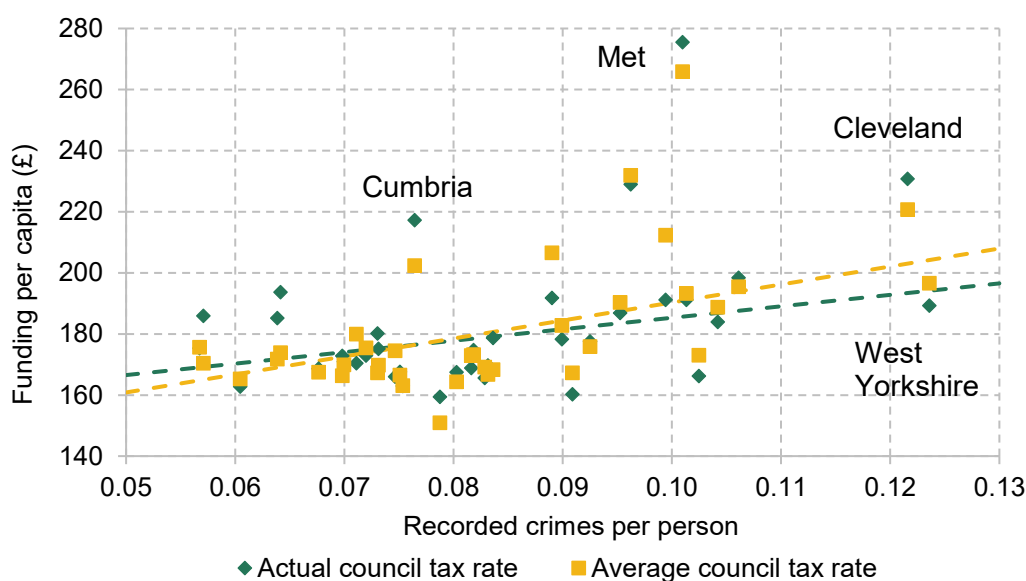
Note: Excludes City of London.

Source: Authors' calculations using the Home Office's Police Grant Report (England and Wales) 2019/20, the Home Office's Police funding for England and Wales 2015 to 2022, Home Office, and Office for National Statistics (2020a), and statistics on council tax levels set by local authorities.

## Distribution of funding by PCC area characteristics

The previous section showed large differences in funding for different police forces. In this section, we show how these funding differences are related to the characteristics of different areas, including their crime levels, population density and socio-economic deprivation. In all of our analysis between characteristics and funding, we exclude the Metropolitan Police: it is an outlier in funding and many other characteristics, and due to its large population base it severely distorts the estimated relationships. However, the Metropolitan Police are still shown on the figures.

**Figure 8.5. Relationship between funding and all crime rate in 2019–20**



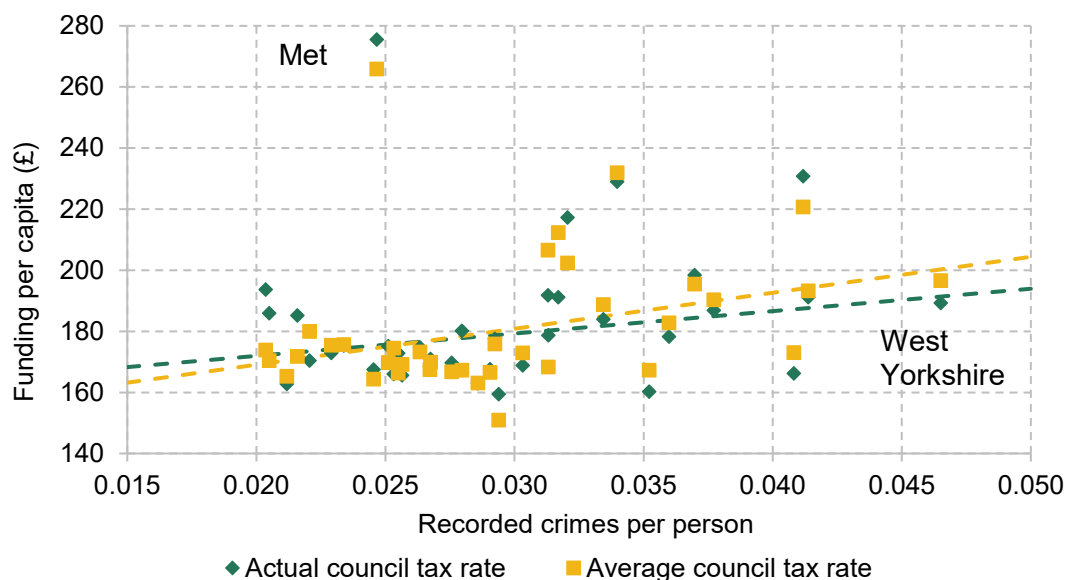
Note: Greater Manchester Police is excluded because of issues in the underlying crime data. Crime rates exclude fraud. Excludes City of London. Trend lines are population-weighted and exclude the Metropolitan Police.

Source: Authors' calculations using the Home Office's Police Grant Report (England and Wales) 2019/20, the Home Office's Police funding for England and Wales 2015 to 2022, Home Office, and the Office for National Statistics (2020a) and Crime in England and Wales: Police Force Area Data Tables.

First, Figure 8.5 shows the relationship between funding per capita and the total number of crimes recorded by the police (excluding fraud) per capita in 2019–20. There is a positive relationship between the two measures, with police forces with higher crime rates receiving more funding on average. If all PCCs set the same Band D council tax rate, the (population-weighted) correlation between funding and the total crime rate would be 0.57. The correlation between actual funding (including differential Band D rates) and the total crime rate is instead 0.49.

Figure 8.6 repeats this analysis, but for violent crime only. There is again a positive relationship between the two measures. If all PCCs set the same Band D council tax rate, the correlation between funding and violent crime rates would be 0.46. The correlation between actual funding and violent crime rates is instead 0.32.

**Figure 8.6. Relationship between funding and violent crime rate in 2019–20**



Note: Greater Manchester Police is excluded because of issues in the underlying crime data. Excludes City of London. Trend lines are population-weighted and exclude the Metropolitan Police.

Source: Authors' calculations using the Home Office's Police Grant Report (England and Wales) 2019/20, the Home Office's Police funding for England and Wales 2015 to 2022, Home Office, and Office for National Statistics (2020a) and Crime in England and Wales: Police Force Area Data Tables.

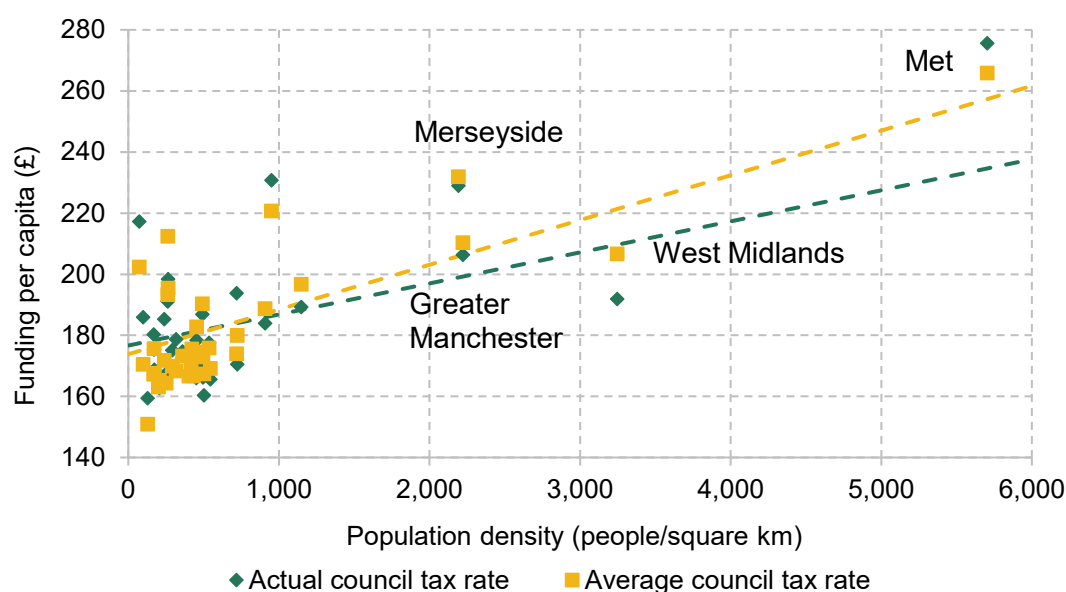
The positive correlations with both measures of crime suggest that funding is targeted towards police force areas with higher crime rates, which is unsurprising given the objectives of the funding system.<sup>57</sup> Variation in council tax rates reduces this correlation somewhat though: areas with relatively lower crime set higher tax rates, on average, than areas with higher crime. This could reflect local preferences, with low crime areas historically favouring higher police funding. Or it could reflect unmet 'needs', with the relationship between crime levels and needs being weaker in practice than assumed by the government in its funding allocations.

Figure 8.7 shows the relationship between funding per capita and population density. There is a very strong positive relationship between these two measures, with a (population-weighted) correlation of 0.73 for funding if all PCCs set the same council tax rate, and a correlation of 0.53

<sup>57</sup> It may also partly reflect crime reporting/recording differences, with more highly funded police forces recording a higher fraction of total crimes.

for actual funding given actual council tax rates. As the figure shows, this is mainly driven by the largest urban areas, including Manchester, the West Midlands and Merseyside, which each receive relatively high police funding per capita. The fact that the correlation is weaker given actual council tax rates suggests that areas with lower population density either have a stronger preference for police funding, or needs that are higher than assumed by the government's funding allocations.

**Figure 8.7. Relationship between funding and population density in 2019–20**

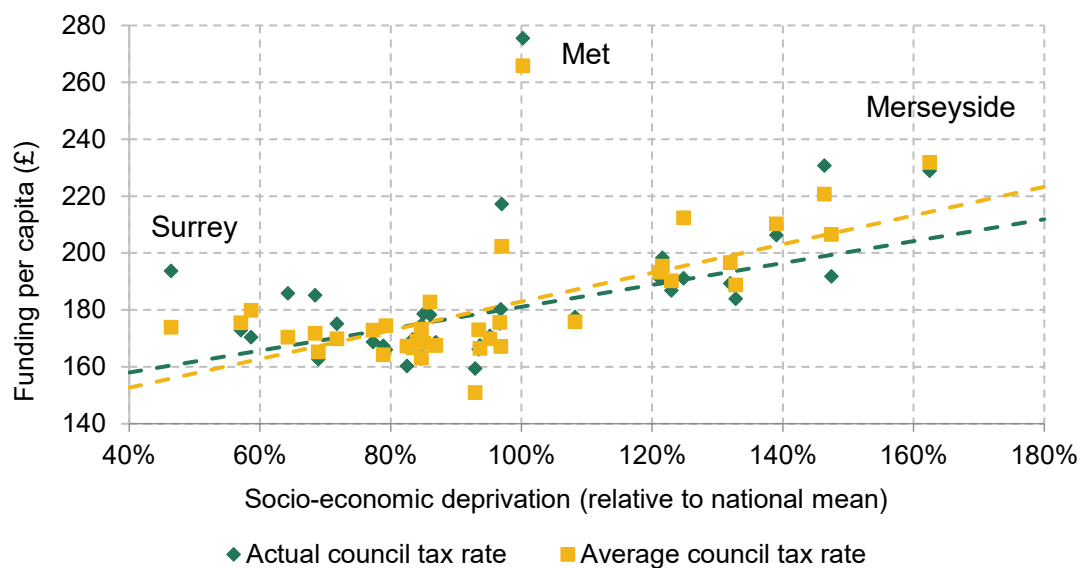


Note: Excludes City of London. Trend lines are population-weighted and exclude the Metropolitan Police.

Source: Authors' calculations using the Home Office's Police Grant Report (England and Wales) 2019/20, the Home Office's Police funding for England and Wales 2015 to 2022, Home Office, and Office for National Statistics (2020a) and ONS' Standard Area Measurements (2019) for Administrative Areas in the United Kingdom.

Finally, Figure 8.8 shows the relationship between funding and socio-economic deprivation, as measured by the IMD. There is a positive relationship between funding and deprivation, with a population-weighted correlation of 0.83 if PCCs all set the same council tax and 0.7 for actual funding given actual council tax rates. Therefore, police funding is strongly targeted towards areas with higher socio-economic deprivation. For example, at the extremes, Merseyside has the highest socio-economic deprivation of any police force area and receives the third highest funding per capita, 16.8% above the national average. The fact that the correlation is weaker given actual council tax rates suggests that areas with lower deprivation either have a stronger preference for police funding, or needs that are higher than assumed by the government's funding allocations.

Figure 8.8. Relationship between funding and socio-economic deprivation in 2019–20



Note: Socio-economic deprivation is calculated as the population-weighted average IMD score for the LSOAs in each police force area. Excludes City of London police. Trend lines are population-weighted and exclude the Metropolitan Police.

Source: Authors' calculations using the Home Office's Police Grant Report (England and Wales) 2019/20, the Home Office's Police funding for England and Wales 2015 to 2022, Home Office, and Office for National Statistics (2020a) and Ministry of Housing, Communities and Local Government (2019d).

## How has funding changed since 2013–14?

### The distribution of changes

2013–14 was the last year that police funding was based on up-to-date assessed spending needs, as we discussed in Section 8.1. Since then, the main police grants have grown at the same rate for all police force areas, maintaining the same relative distribution of grant funding. In this section, we consider how funding has changed between 2013–14 and 2019–20, and how this has varied by area characteristics.

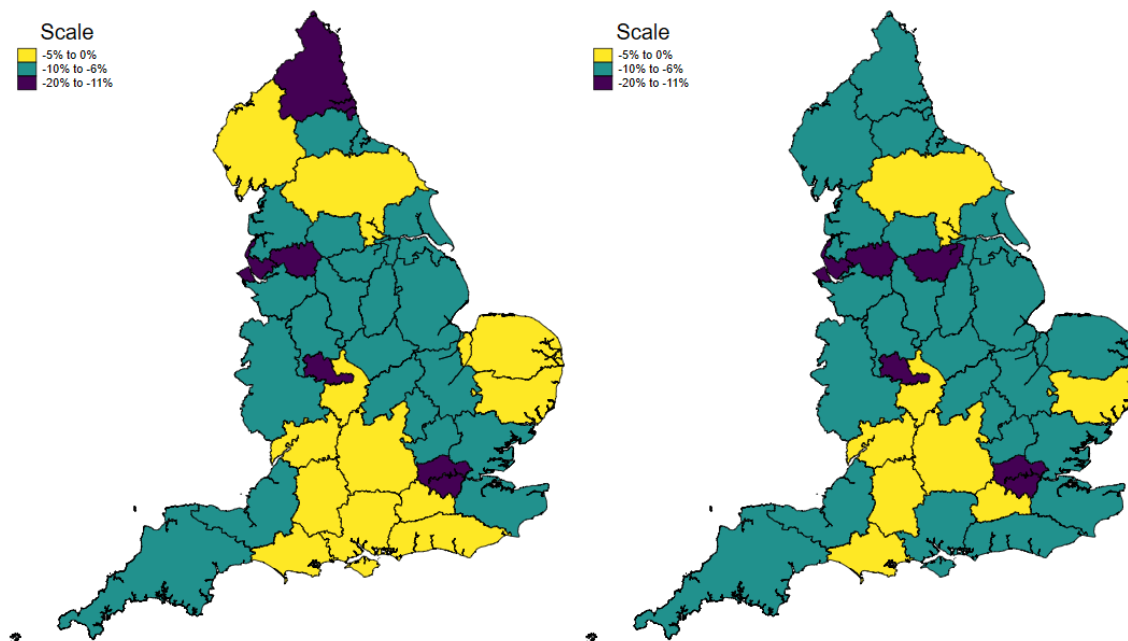
Overall, core grant and council tax precept funding per capita was cut by 10.6% in real terms over this period across England as a whole. Perhaps unsurprisingly, all PCCs and police force areas saw real-terms reductions in funding over this period too. The cuts range from 2% in Surrey to 20% for the Metropolitan Police. If all had set the same council tax rate, the cuts would have varied from 3% in Dorset to 19% for the Metropolitan Police.



Figure 8.9. Percentage change in per-capita real funding between 2013–14 and 2019–20

(a) Actual council tax rates

(b) Average council tax rates



Note: Excludes City of London.

Source: Authors' calculations using the Home Office's Police Grant Report (England and Wales) 2013/14, 2014/15 and 2019/20, the Home Office's Police funding for England and Wales 2015 to 2022, Office for National Statistics (2020a), statistics on council tax levels set by local authorities, and the GDP deflators, June 2022 (HM Treasury, 2022b).

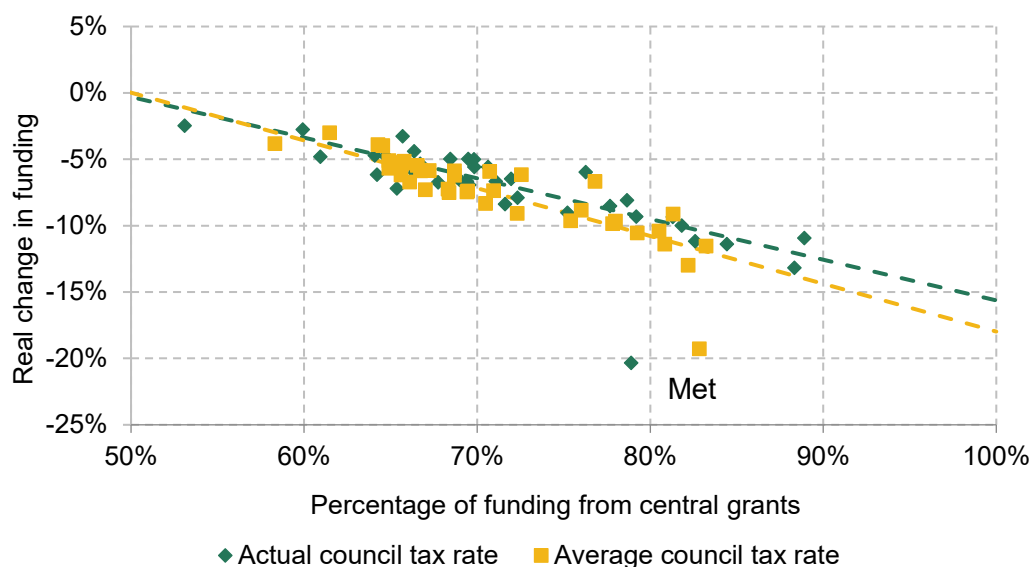
### What caused differential reductions in funding?

We now consider what could be driving differences in funding growth over this period. As we discussed in Section 8.1, changing central police grants at the same percentage rate for all police forces has several potential distributional implications.

First, changes in grants took no account of differences in population growth rates across areas. For a given percentage change in grant funding, the change in funding per capita will be lower in absolute terms if population is growing more quickly. Faster population growth is not associated with bigger reductions in funding per capita though, perhaps because other factors may offset this relationship.

One such factor is differences in reliance on central government grant funding. When this funding is being cut, a given percentage reduction translates into a bigger reduction in overall funding when one relies on that grant funding for a larger share of overall funding. Figure 8.10 illustrates this point by plotting the relationship between funding growth over this period with the percentage of total funding that was from central grants for each police force in 2013–14.

Figure 8.10. Relationship between the change in per capita, 2013–14 to 2019–20, and the percentage of funding from central grants in 2013–14



Note: Excludes City of London. Trend lines are population-weighted and exclude the Metropolitan Police.

Source: Authors' calculations using the Home Office's Police Grant Report (England and Wales) 2013/14, 2014/15 and 2019/20, statistics on council tax levels set by local authorities, Office for National Statistics (2020a) and the GDP deflators, June 2022 (HM Treasury, 2022b).

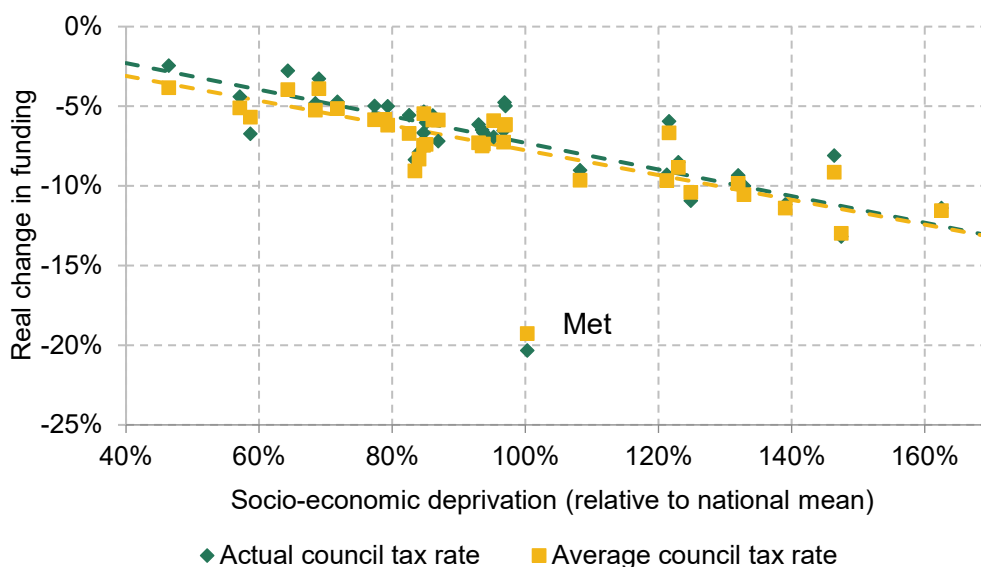
There is a clear negative relationship: areas that were more reliant on central grant funding in 2013–14 have subsequently experienced larger reductions in their total funding. For example, Surrey relied on central grant funding for 53% of its revenue in 2013–14, and its per-capita funding over this period fell by 2% in real terms. At the other end, Northumbria relied on central grant funding for 89% of its funding in 2013–14, and its per-capita funding fell by 11% during this period. This suggests that differential reliance on central government grants is a more important factor than differential population growth.

A third potential explanation for differences in funding growth is changes in council tax revenues. Particularly important is the council tax rate, which, subject to referenda, PCCs have a degree of discretion over. Increases in council tax did vary quite significantly across police force areas in this period: 25% or less in seven areas, compared to 36% or more in another seven areas. However, differential changes in council tax did not have a significant impact on the distribution of funding cuts seen across councils.

### The relationship between funding changes and local characteristics

Figure 8.11 **Error! Reference source not found.** shows the relationship between changes in per-capita funding and socio-economic deprivation. It shows a clear negative relationship: police forces that serve more-deprived areas have received larger real-terms funding reductions between 2013–14 and 2019–20. For example, the force that serves the most-deprived area, Merseyside, experienced an 11% reduction in funding per capita, while the force that serves the least-deprived area, Surrey, experienced a 2% reduction in funding per capita.

**Figure 8.11. Relationship between per-capita funding growth 2013–14 to 2019–20 and socio-economic deprivation in 2019–20**



Note: Excludes City of London. Trend lines are population-weighted and exclude the Metropolitan Police.

Source: Authors' calculations using the Home Office's Police Grant Report (England and Wales) 2013/14, 2014/15 and 2019/20, Office for National Statistics (2020a), statistics on council tax levels set by local authorities, Ministry of Housing, Communities and Local Government (2019d) and the GDP deflators, June 2022 (HM Treasury, 2022b).

Figure 8.12 repeats this analysis for the population density of police force areas. We again see a strong negative relationship: police force areas with denser populations have experienced larger reductions in per-capita funding during this period. For example, the West Midlands police force serves the second densest population, and experienced a 13% reduction in per-capita funding. At the other end, Cumbria police force serves the least dense population, and experienced a 5% reduction over this period.

Figure 8.12. Relationship between funding growth 2013–14 to 2019–20 and population density in 2019–20



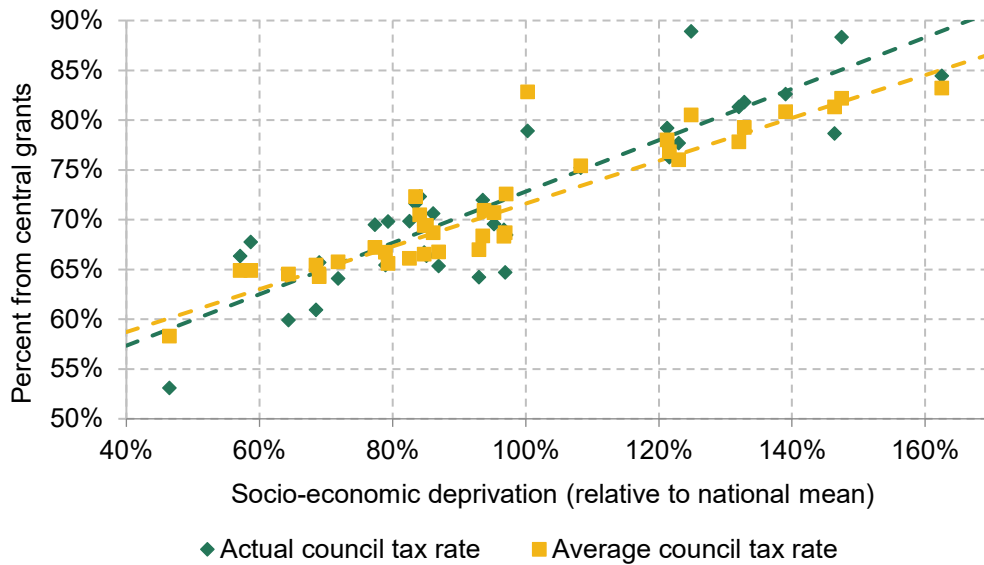
Note: Excludes City of London. Trend lines are population-weighted and exclude the Metropolitan Police.

Source: Authors' calculations using the Home Office's Police Grant Report (England and Wales) 2013/14, 2014/15 and 2019/20, statistics on council tax levels set by local authorities, Office for National Statistics (2020a), ONS' Standard Area Measurements (2019) for Administrative Areas in the United Kingdom and the GDP deflators, June 2022 (HM Treasury, 2022b).

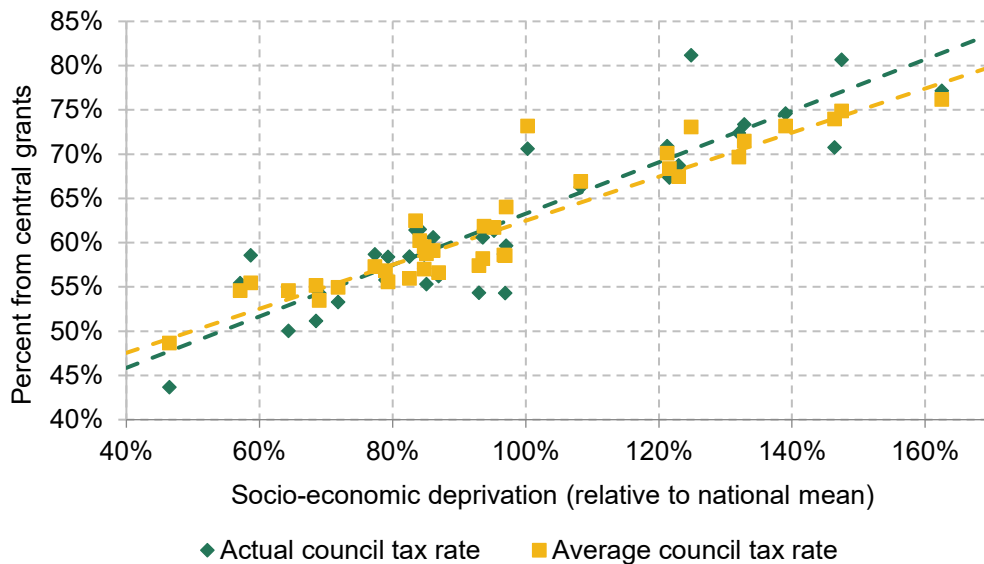
These patterns reflect the higher grant-reliance of police forces in poorer, more-urban areas of the country (illustrated in Figure 8.13 for deprivation). The patterns mean that while funding is still higher for police forces serving poorer, more-urban areas, this was less the case in 2019–20 than six years earlier in 2013–14.

Figure 8.13. Relationship between percentage of funding from central grants and socio-economic deprivation in 2019–20

(d) Percentage of funding in 2013–14



(b) Percentage of funding in 2019–20



Note: Excludes City of London. Trend lines are population-weighted and exclude the Metropolitan Police.

Source: Authors' calculations using the Home Office's Police Grant Report (England and Wales) 2013/14, 2014/15 and 2019/20, statistics on council tax levels set by local authorities, Office for National Statistics (2020a) and Ministry of Housing, Communities and Local Government (2019d).

## Comparison of funding and assessed spending needs

Finally, in this section, we consider how police funding relates to assessed spending needs. Funding has not been allocated on the basis of assessed needs since 2013–14, nor have these spending needs assessments been updated in the intervening years. We therefore begin by examining the gaps between police force areas' shares of funding and shares of assessed spending needs (expressed in per capita terms) as of 2013–14, before estimating the gaps in 2019–20 under the assumption that it is only differences in population growth between areas in the intervening six years that have affected their relative spending needs.

### 2013–14 funding and assessed spending needs

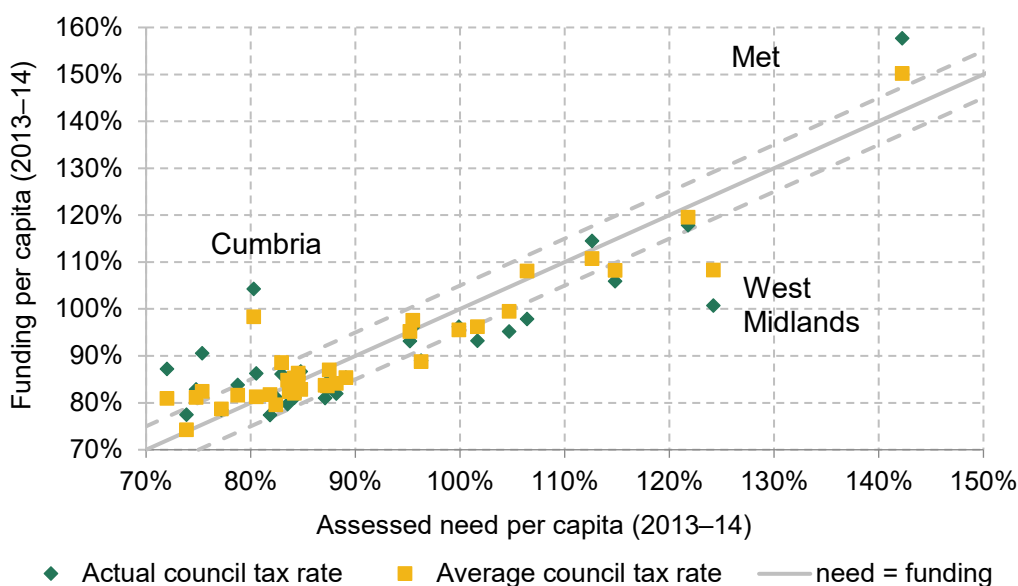
Because spending needs are assessed on a relative rather than an absolute basis, as in previous sections when comparing funding to assessed spending needs, we present both relative to their respective national averages. We report differences between funding and assessed spending needs in percentage point terms: for example, if a police force area has an assessed spending need of 95% of the national average, but their funding is 105% of the national average, the distance is reported as 10 percentage points (not 10.5%).

**Error! Reference source not found.** shows the relationship between funding and assessed spending needs in 2013–14, for both actual funding and funding if all areas charged equal council tax rates. If relative funding exactly equalled relative assessed need, all police force areas would lie on the grey 45° line. Police force areas within the grey dashed line have funding within 5 percentage points of their assessed spending needs.

The figure shows that funding for most police force areas was relatively close to their assessed need in 2013–14, at least before considering local discretion over council tax rates. If they had set their council tax rates at the national average level, the median police force area would have been funded 0.15 percentage points below its assessed need in 2013–14, and 27 out of the 38 police force areas would have had relative funding levels within 5 percentage points of their relative assessed needs.

But there were some forces that are significantly under- or over-funded relative to their assessed need, even before considering discretion over council tax rates. For example, Cumbria police force received 18 percentage points more funding than its assessed need, while the Metropolitan Police received 8 percentage points more. At the other end, the West Midlands received 16 percentage points less funding than its assessed need, while Nottinghamshire received 8 percentage points less.

**Figure 8.14. Relationship between funding and assessed spending needs in 2013–14, both relative to their national means**



Note: Excludes City of London police.

Source: Authors' calculations using the Home Office's Police Grant Report (England and Wales) 2013/14 and 2014/15, and statistics on council tax levels set by local authorities.

Based on actual council tax rates, 22 out of the 38 police force areas had funding within 5 percentage points of their assessed spending needs. But at the extremes, variation in council tax rates increased the differences between funding and assessed spending needs. For example, Cumbria's funding was 24 percentage points (as opposed to 18 percentage points) above its assessed needs, and the Metropolitan Police's funding 15 percentage points above (as opposed to 8 percentage points above) its assessed needs. At the other end of the scale, funding for the West Midlands was 23 percentage points below its assessed needs (compared to 16 percentage points).

Thus, instead of council tax rates being set to offset differences between funding and assessed needs, differences in council tax rates increased these differences. As discussed earlier, this could reflect differences in preferences, with areas receiving relatively high funding levels preferring higher police funding too. Or it could reflect shortcomings in the needs assessment process, with areas that appear to be relatively 'over-funded' in fact 'under-funded' on the basis of true needs. We cannot distinguish between these two possibilities.

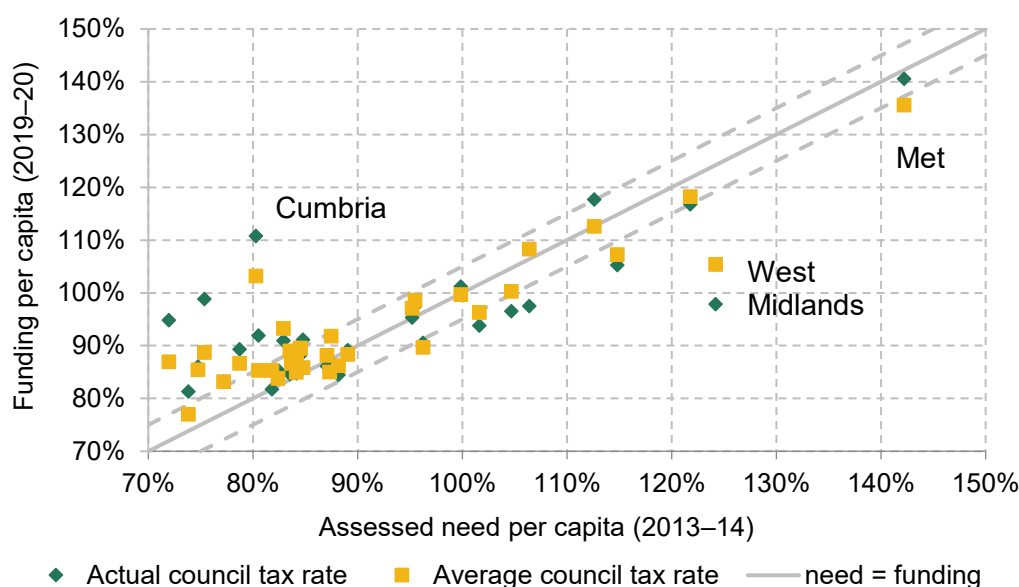
### How might things have changed by 2019–20?

Adjusting the 2013–14 spending needs assessments for differential population growth allows us to compare funding with assessed spending needs as of 2019–20 under the assumption that relative levels of needs per capita did not change over the preceding six years. This is a strong

assumption and is unlikely to hold but it is the best that we can do in the absence of up-to-date assessments of different police force areas' spending needs.

Figure 8.15 shows the relationship between per-capita funding and assessed spending needs on this basis. Police forces lying within the dashed grey lines received relative levels of funding per capita in 2019–20 within 5 percentage points of their relative levels of assessed spending needs per capita as of 2013–14.

**Figure 8.15. Relationship between funding and assessed spending needs, 2019–20, both relative to their national means**



Note: Excludes City of London police. The national mean for assessed need per capita is weighted by 2013–14 populations so the values are the same as those in **Error! Reference source not found.**

Source: Authors' calculations using the Home Office's Police Grant Report (England and Wales) 2019/20, the Home Office's Police funding for England and Wales 2015 to 2022, Office for National Statistics (2020a), and statistics on council tax levels set by local authorities.

The relationship between relative levels of funding and assessed needs per capita changed between 2013–14 and 2019–20. For some police forces, these changes have been rather extreme: the Metropolitan Police, for example, would have moved from 8 percentage points above its assessed need to 7 percentage points below if it set its council tax at the national average rate; given its actual rate, funding moved from 16 percentage points above to 2 percentage points below assessed needs. Other police force areas maintained the large differences seen in 2013–14: accounting for changes in population, Cumbria would have been 23 percentage points above target if it had set its council tax at the national average rate, and was 30 percentage points above given its actual council tax rate; funding for the West Midlands police force area was 19 percentage points and 26 percentage points below assessed need, respectively.

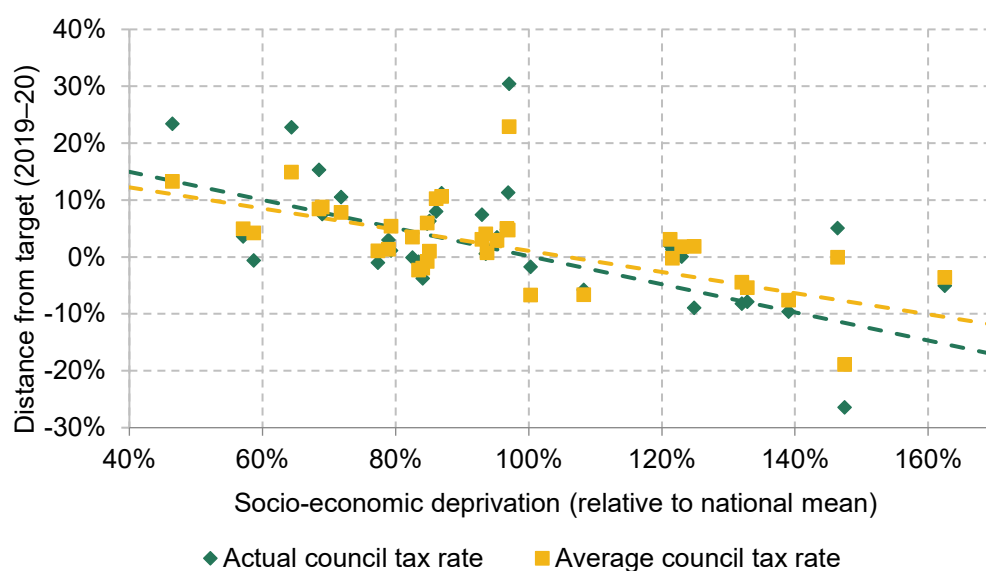


More generally, relative funding levels diverged further from assessed spending needs over these six years, if one accounts only for changes in population: the number with funding within 5 percentage points of their assessed spending needs fell from 21 out of 38 to 17 out of 38.

### 2019–20 distance from target and police force area characteristics

Figure 8.16 shows a significant gradient between the gap between funding and assessed spending needs as of 2019–20 and the level of deprivation in a police force area: more-deprived areas were relatively more likely to be ‘under-funded’, and more-affluent areas ‘over-funded’, based on both actual and average council tax rates. For example, the West Midlands has the second highest socio-economic deprivation of any police force area, but its funding is 26% below its assessed spending need. At the other end, Surrey has the lowest socio-economic deprivation, and its funding is 23% above its assessed spending need.

**Figure 8.16. Relationship between distance from assessed spending needs and socio-economic deprivation in 2019–20**



Note: Excludes City of London. Trend lines are population-weighted and exclude the Metropolitan Police.

Source: Authors' calculations using the Home Office's Police Grant Report (England and Wales) 2019/20, Office for National Statistics (2020a), statistics on council tax levels set by local authorities and Ministry of Housing, Communities and Local Government (2019d).

A similar, albeit less strong relationship is also seen for population density, with police forces covering more densely populated areas more likely to be ‘under-funded’ relative to need, and vice versa. For both deprivation and population density, the relation in 2019–20 was much stronger than in 2013–14, reflecting the pattern of cuts seen in the last subsection: larger for more grant-dependent, deprived and urban parts of England.

## 8.3 Summary

This chapter has examined the allocation methodology for police funding in England. We have focused on the two largest funding streams: central government policing grants and council tax revenues. The history of police funding is very similar to local government funding, discussed in Chapter 6. The original allocation objective was to equalise service provision after adjusting for differences in revenue-raising capacity of different local areas. But this methodology was abandoned in 2013–14, following the introduction of the flawed four-block model in 2006–07. Since then, central government grant funding has changed at a constant rate for all police forces, irrespective of changes in funding need or revenue-raising capacity.

The analysis in this chapter has highlighted the consequences of this freeze in the allocation methodology. Police forces that serve areas with higher crime rates, higher socio-economic deprivation and higher population density received higher funding on average in 2019–20. But the freeze in the relative distribution of central grants has weakened these relationships over time. Since 2013–14, police forces that serve areas with higher socio-economic deprivation, for example, have experienced larger reductions in their funding relative to less-deprived areas, and are now further away from their assessed (out-of-date) spending needs.

This chapter has also shown the consequences of freezing the allocation of one funding stream (government core grants) while another spending stream (council tax revenues) continues to change over time. Because core grants fell while council tax rose, areas that were more dependent on central grants over council tax revenues have experienced larger reductions in funding. These areas tend to have higher socio-economic deprivation and have a higher population density, and this difference in reliance on central grant funding has partly driven the slower funding growth for these areas.

We have also shown the impacts of local discretion over funding. We have shown that PCCs' use of discretion over council tax weakened the relationship between funding and characteristics related to need. This suggests either that preferences for policing differ systematically (with less-deprived, less densely populated areas having a higher preference for policing, conditional on need), or that needs assessment processes are systematically biased (underestimating relative needs in less-deprived, less densely populated places). This discretion has also been used to offset changes to core grant funding: the majority of PCCs have raised council tax rates to partially offset reductions in central grant funding. But this local discretion is not a solution to the breakdown of the central allocation methodology; even with local discretion over funding, funding levels have fallen faster in more-deprived and more-dense areas, and moved further away from assessed spending needs. Local discretion, therefore, cannot act as a replacement for an allocation methodology, but it may reduce the negative impacts when a methodology breaks down, or central funding growth is low.

## 9. Conclusions

A summary of the findings for each of the services considered in this report can be found in the Executive Summary; here, we focus on the key implications of our findings for policy and research going forwards.

If the government is serious about levelling up and tackling geographical inequalities that contribute to the big differences in health and well-being seen across England, funding for different services needs to change in different ways.

For schools and police, a change in direction is required. Recent years have seen funding cut by more (or increase by less) in poorer areas, due to active policy decisions by central government.

Until recently, a similar pattern was even more evident for local government funding. However, for the first time in over a decade, 2022–23 saw councils serving poorer communities see bigger increases in their funding than councils serving more-affluent areas. This was only enough to undo a very small part of the previous regressive pattern, and whether this new trend will continue is far from certain, given delays in confirming and implementing more comprehensive reforms of the local government finance system. Bringing forward such reform is vital as current funding allocations are increasingly out of date and, in essence, arbitrary.

For the NHS, there is already a lever that can be pulled, built into the funding system: 10% of funding is allocated on the basis of differences in age-standardised mortality rates, as a proxy for health inequalities and unmet health needs. This share of funding could be increased, and a wider basket of measures (e.g. related to morbidity) taken into account if a higher priority is now placed on reducing inequalities. Funding for public health services could also be increased and/or brought closer in to line with spending needs assessments – although this would see substantial numbers of both deprived and affluent areas both gain and lose funding.

Recent experience suggests that aligning funding policy with the ‘levelling up’ agenda will be difficult if funding is constrained. Pace-of-change rules, at least as have been applied historically, are more distorting when funding is constrained, and it is politically difficult to cut funding for some areas in order to increase it for others – which can be necessary when budgets are flat or growing very modestly. A recent case in point of the latter is the UK Shared Prosperity Fund, the UK government’s post-Brexit regional economic development fund; the government decided to match (in real terms) EU funding allocations to each of the nations of the UK and each of the Local Economic Partnership (LEP) areas of England. This entrenched

inequities inherent in the design of the EU scheme, and means allocations are still based largely on data from the early to mid-2000s, but avoided the need to create obvious winners and losers. The government will therefore have to invest either more political capital – by making the tough choices to redistribute funding to areas with entrenched health, educational, crime and other issues – or more funding, to guarantee all areas at least some funding increase, if a similar outcome is to be avoided for the much larger sums spent on core public services.

When reforming and redistributing funding, the government should avoid the temptation of avoiding scrutiny through overly complex and opaque arrangements. In the past, governments have used complex systems or reforms to claim that their decisions on local government and school funding have channelled available funding to poorer areas or in a way consistent with ‘levelling up’, while doing the opposite.

The government should also consider the role that devolution could play in tackling inequalities in health, wealth and well-being across the country. Devolution of tax and spending powers, without appropriate systems to assess areas’ spending needs and redistribute funding across the country could make tackling inequalities more difficult, by shifting funding from more-deprived to more-affluent places. With such systems in place, devolution could potentially give policymakers in different parts of England greater scope to decide how best to address the issues in their areas, whether through higher spending on particular services or, indeed, lower tax levels.

Local discretion over tax and spending can also provide local policymakers with a way to address shortcomings in central funding allocation processes. For example, recent years have seen PCCs in police force areas that have been historically under-funded relative to needs, and those that have faced larger cuts in central government funding, increase their council tax rates by more. This has meant local taxpayers have seen bigger increases in how much they contribute to service provision, but PCCs can be held to account at the local ballot box for this decision (although it is worth noting that turnout in PCC and local elections is often low).

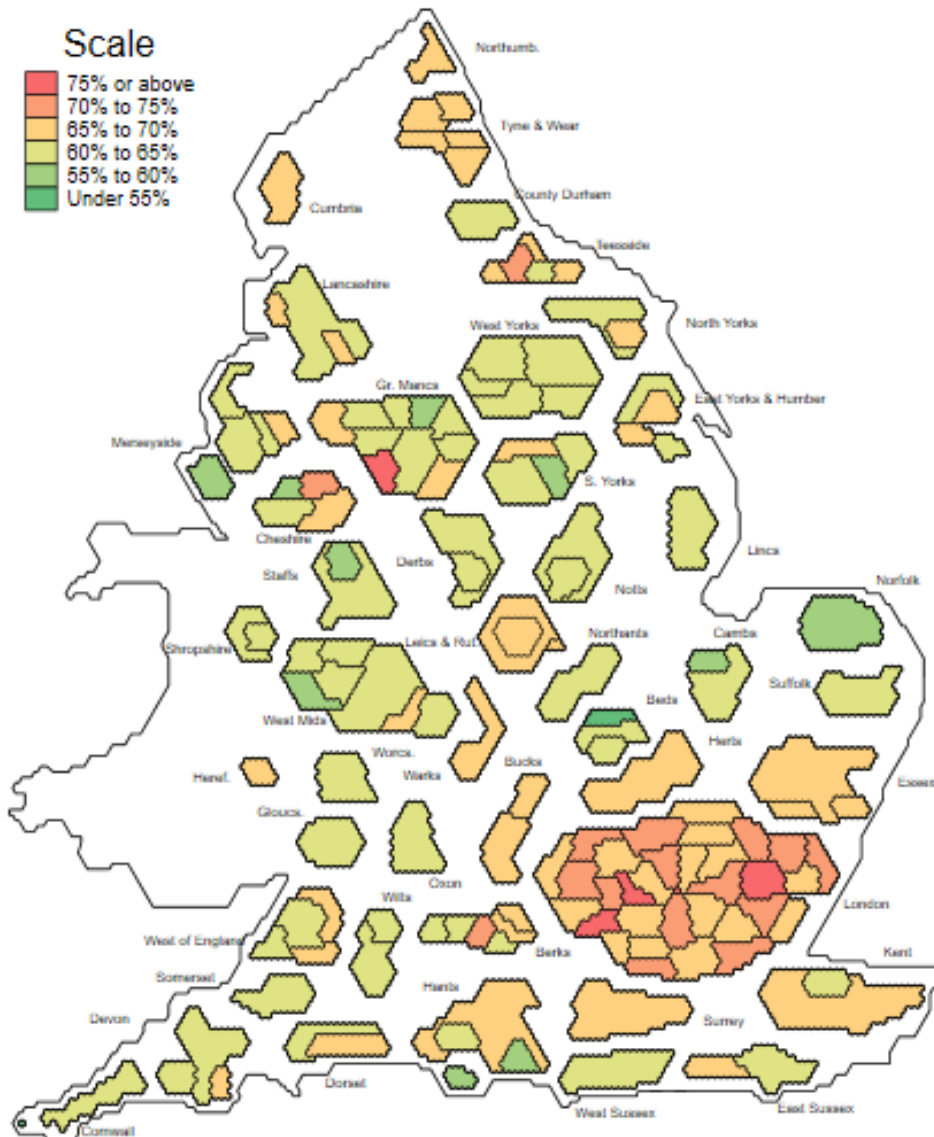
Our analysis also suggests several avenues for future research.

The first is to bring together available estimates of spending and assessed spending needs for different services to estimate the total place-based budgets for public services and public investment for different parts of England (and potentially the wider UK), and to examine whether there are areas that are systematically advantaged or disadvantaged in terms of funding across a range of services. Though this will require either strong assumptions or additional data on how funding is allocated within larger geographical units (e.g. police force areas) in order to be at a meaningful level of granularity.

The second is to better understand the impact of funding levels and differences between areas' shares of funding and of assessed needs on service outcomes. As highlighted in the introduction to this report, recent years have seen increasingly robust evidence of the impact on funding for schools, health services and adult social care services on educational and specific health outcomes. But there is little evidence on the impact of council funding on service provision and quality, or wider outcomes such as residents' subjective well-being. Furthermore, comparing the impact of gaps between funding and assessed spending needs as well as funding levels per se can provide evidence on the accuracy of existing spending needs assessments: if such gaps are associated with outcomes, it would be suggestive evidence that the assessments do contain meaningful information.

# Appendix

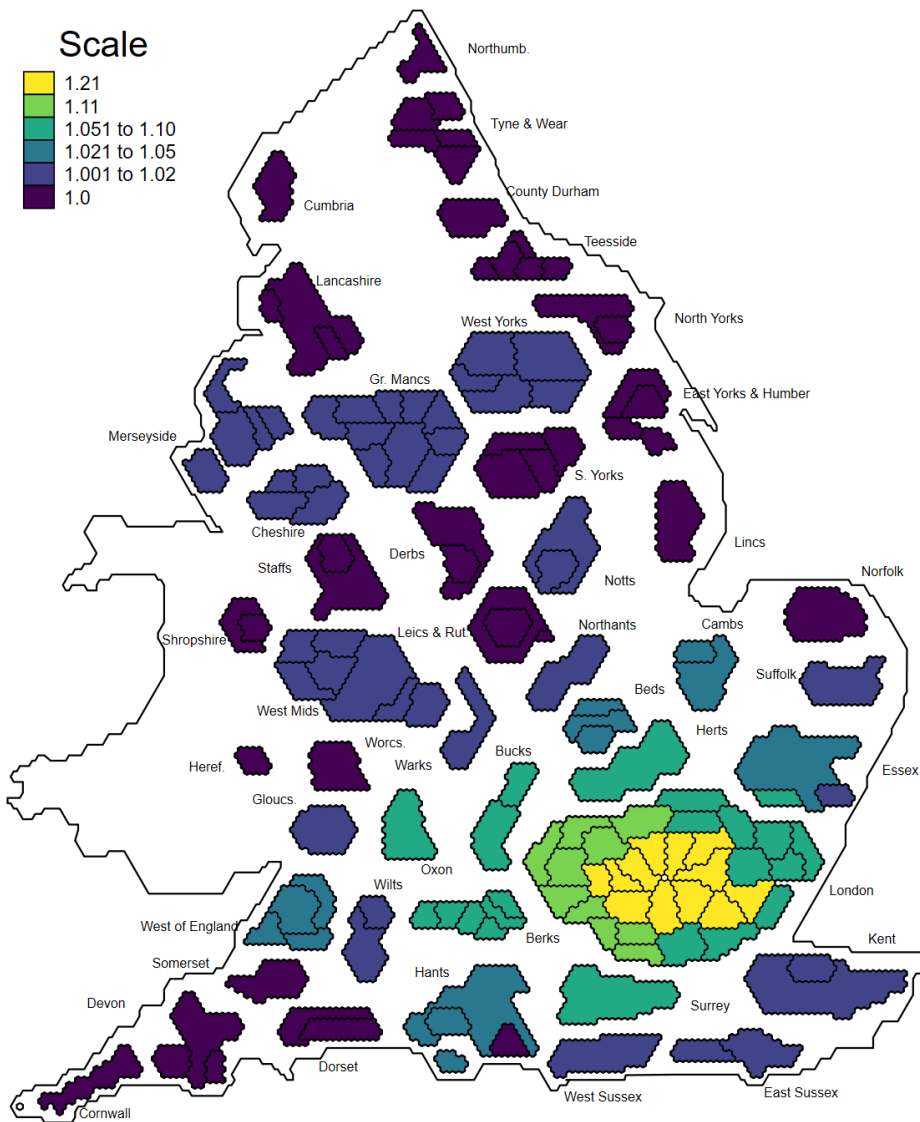
Figure A.1. Share of primary school pupils achieving expected level at age 11 in reading, writing and maths across local authorities in England, 2019



Source: Department for Education (2019a) and ONS' Counties and Unitary Authorities 2019 Boundaries. Map design is based on non-contiguous hexagon-based cartograms of the UK (see House of Commons Library, 2022).



Figure A.3. Map of area cost adjustment factors applied as part of 2013–14 needs assessments

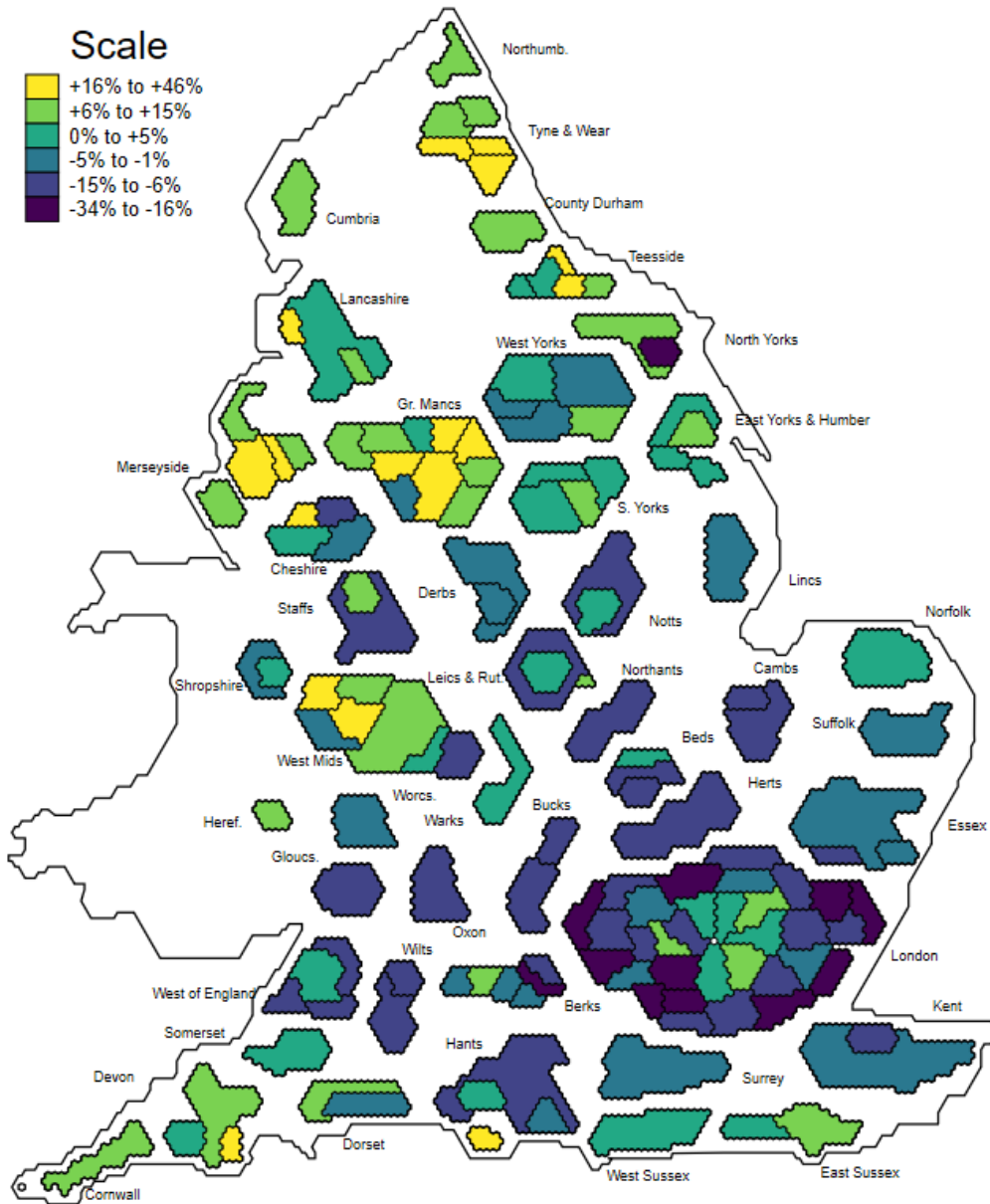


Note: Average of cost adjustment factors for adults' and children's social care, highways, environment, protective and cultural services, and non-schools education, weighted by 2013–14 spending control totals. For new authorities, area cost adjustment factors are those relating to former constituent authorities.

Source: Department for Communities and Local Government (2013, Annex G: Area Cost Adjustment Factors).

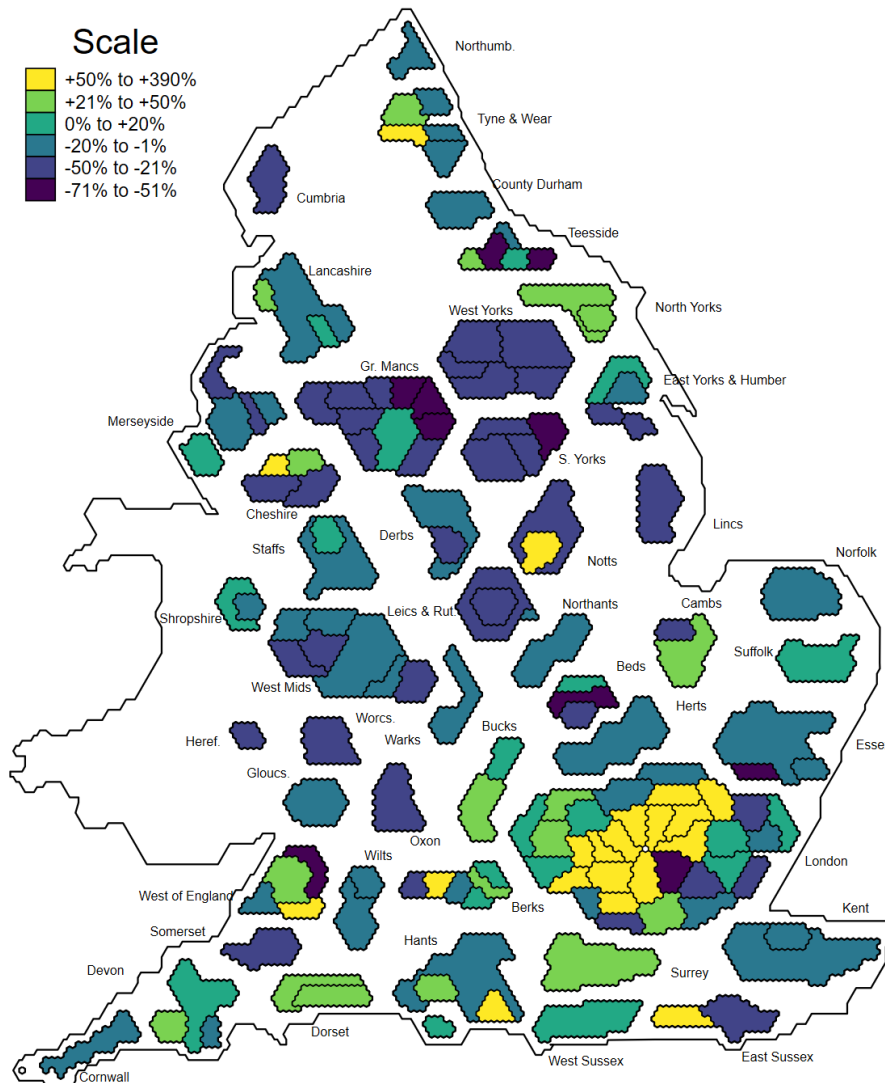


Figure A.4. Map of actual per capita funding in 2019–20, adjusted for differences in area costs, relative to national average



Note: See note and source to Figure 6.1 and Figure A.3.

Figure A.5. Map of per-capita sales, fees and charges from transport and ‘neighbourhood’ services in 2019–20, relative to national average

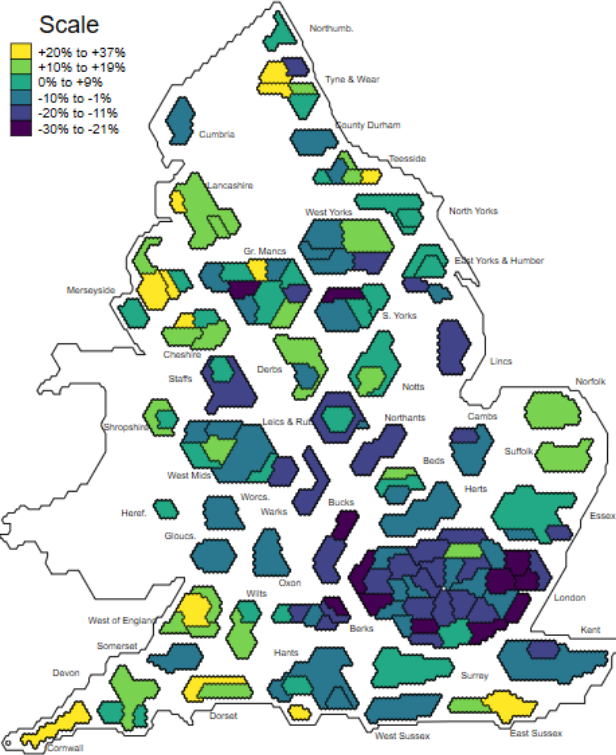


Note: Sales, fees and charges relating to the following service areas: highways and transport; environment and regulation; leisure and culture; planning and development; and central and other services. Revenues are relative to the national population-weighted average, and include both shire districts and shire counties in two-tier areas. Excludes Isles of Scilly and City of London.

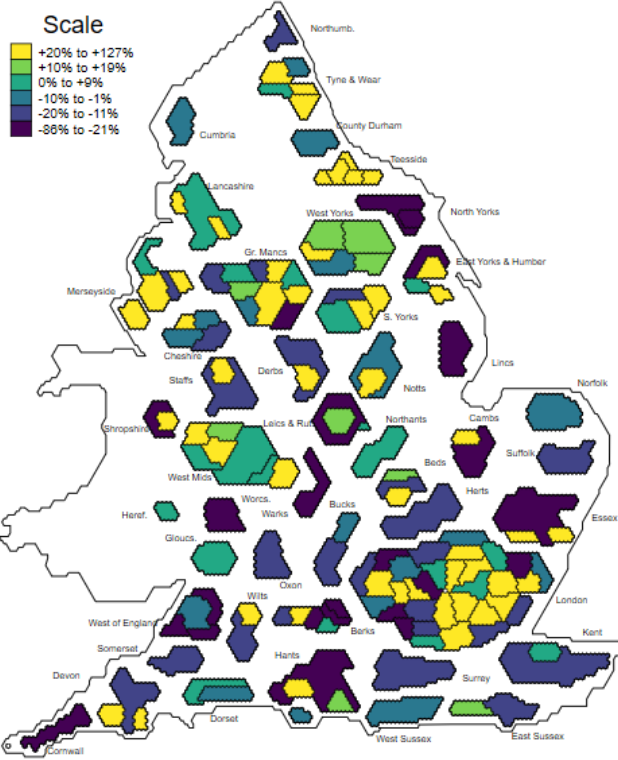
Source: Authors' calculations using local authority revenue expenditure outturn data.

Figure A.6. Percentage difference from national average spending per capita, adjusted for differences in area costs, by service, 2019–20

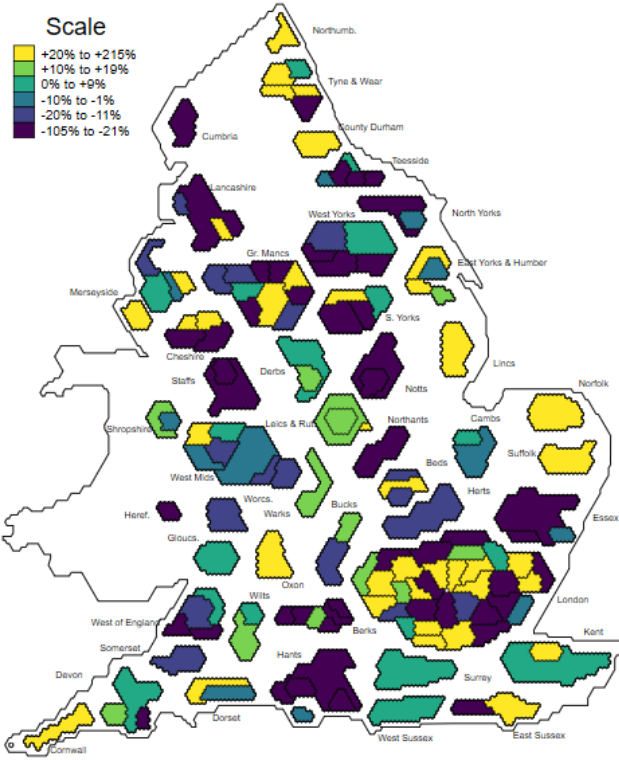
(a) Adults' social care



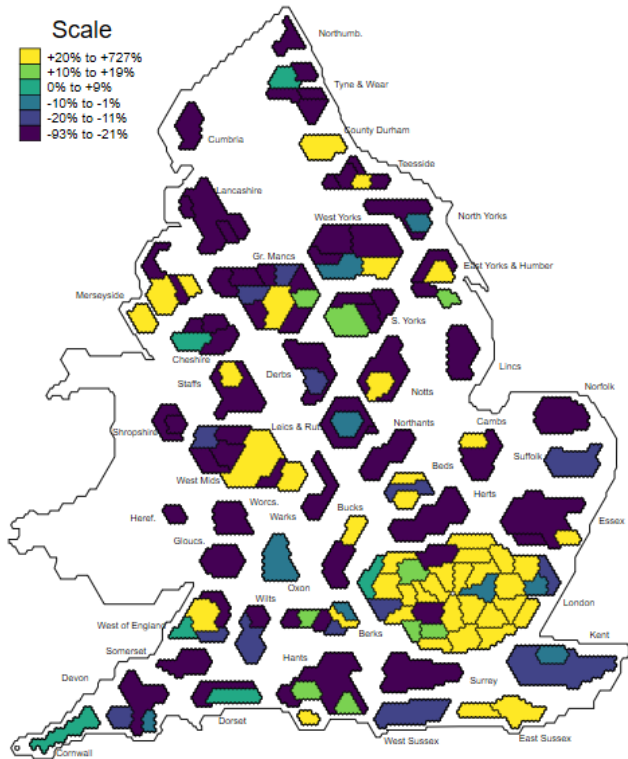
(b) Children's social care



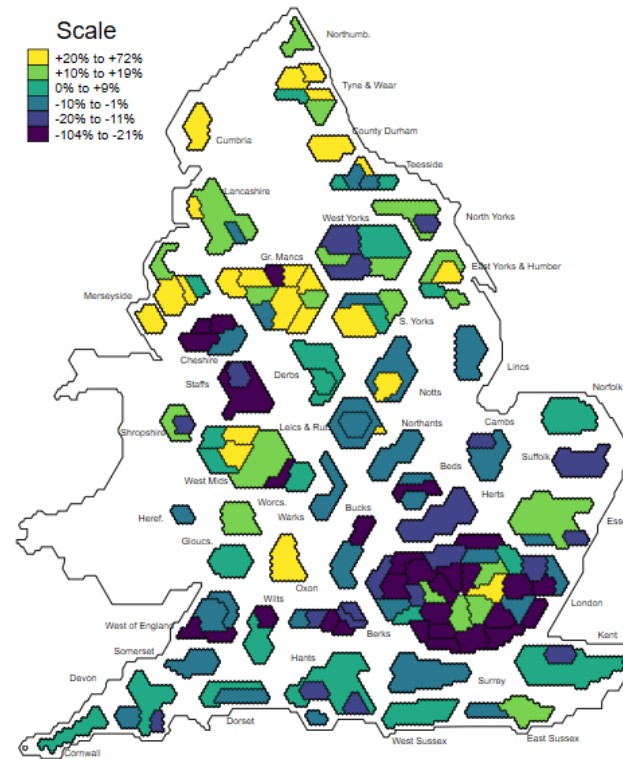
(c) Non-schools education



(d) Housing services

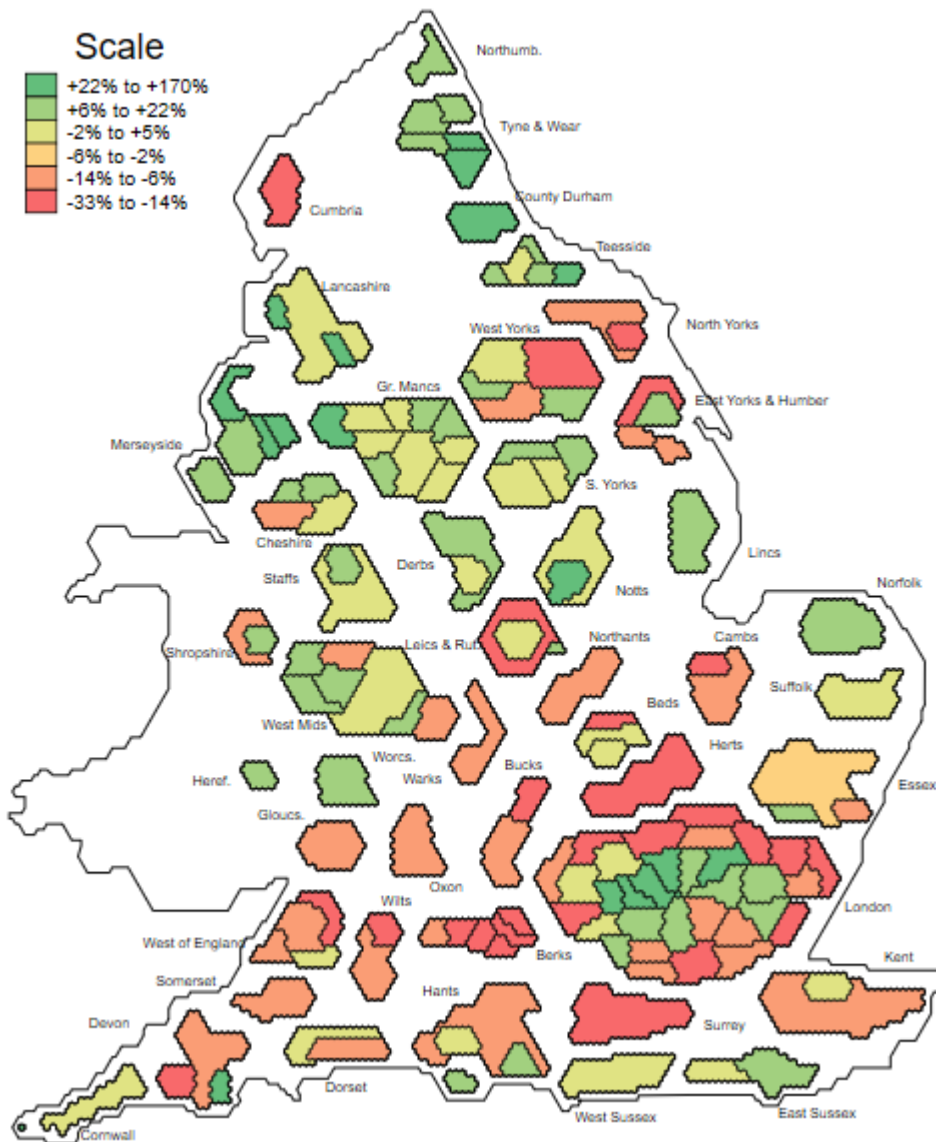


(e) Other services



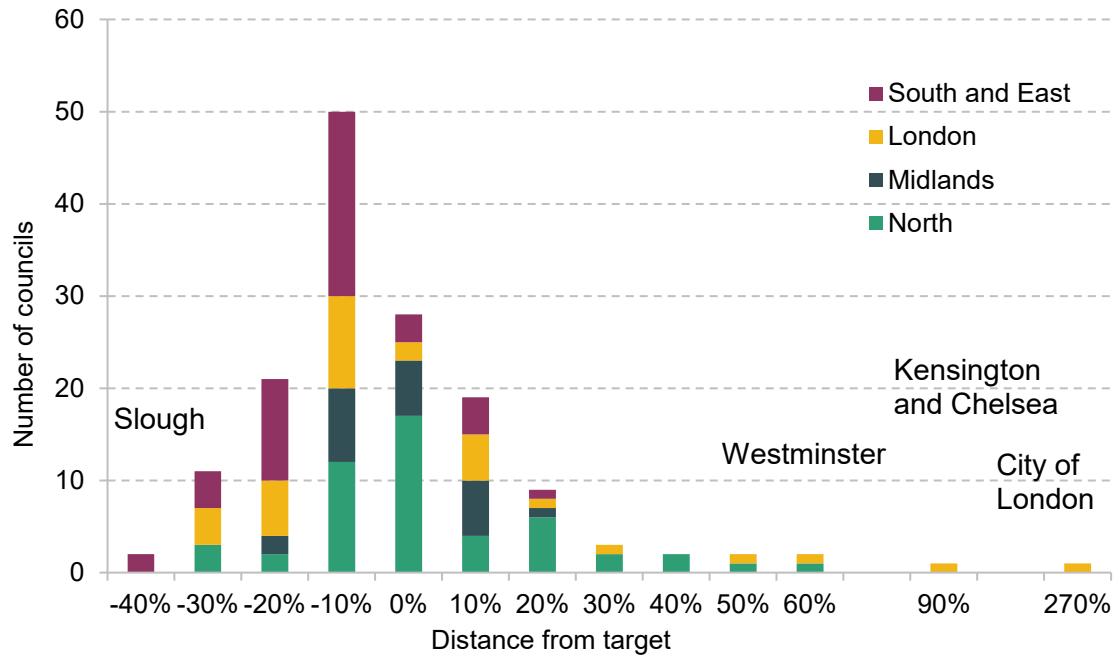
Note: See note and source to Figures 6.11 and A.3. Area cost adjustments for environmental, protective and cultural services have been used for housing services and most elements of 'Other services'. Cost adjustments for transport have been used for the portion of spend on 'Other services' associated with highways and transport.

Figure A.7. Map of percentage distance from proposed target allocations 2016–17



Source: Department of Health and Social Care (2016), Department of Health (2015d) and ONS' Counties and Unitary Authorities 2011 Boundaries. Map design is based on non-contiguous hexagon-based cartograms of the UK (see House of Commons Library, 2022).

Figure A.8. Percentage distance from proposed target allocation 2016–17



Source: Department of Health and Social Care (2016) and Department of Health (2015d).

## References

Adam, S., Joyce, R., and Pope, T. (2019), 'The Impacts of Localised Council Tax Support Schemes', Institute for Fiscal Studies Report 153, <https://ifs.org.uk/publications/impacts-localised-council-tax-support-schemes>.

Advisory Committee on Resource Allocation (2022a), 'Review of the Health Inequalities Adjustment to the CCG Funding Formulae'.

Advisory Committee on Resource Allocation (2022b), 'Update of the Formula for General and Acute Hospital Services for 2022/23 Allocations'.

Amin-Smith, N., Harris, T., and Phillips, D. (2019), 'Response to the Ministry of Housing, Communities and Local Government's Consultation', <https://ifs.org.uk/publications/response-ministry-housing-communities-and-local-governments-consultation>.

Amin-Smith, N., and Phillips, D. (2018), 'The Fair Funding Review: Accounting for Resources', Institute for Fiscal Studies Briefing Note BN241, <https://ifs.org.uk/publications/fair-funding-review-accounting-resources>.

Amin-Smith, N., and Phillips, D. (2019), 'Response to the Ministry of Housing, Communities and Local Government's Consultation on the Reform of the Business Rates Retention Scheme', <https://ifs.org.uk/publications/response-ministry-housing-communities-and-local-governments-consultation-reform>.

Amin-Smith, N., Phillips, D., and Simpson, P. (2018a), 'Adult Social Care Funding: A Local or National Responsibility?', Institute for Fiscal Studies Briefing Note BN227, <https://ifs.org.uk/publications/adult-social-care-funding-local-or-national-responsibility>.

Amin-Smith, N., Phillips, D., and Simpson, P. (2018b), 'Local Government Revenue Decentralisation and Funding Divergence: An English Case Study', in J. Jim and S. Dougherty (eds), *Fiscal Decentralisation and Inclusive Growth*, Chapter 7, OECD Fiscal Federalism Studies, <https://doi.org/10.1787/9789264302488-9-en>.

Andrews, J. (2020), 'Analysis: School Funding Allocations 2021–22', Education Policy Institute, <https://epi.org.uk/publications-and-research/school-funding-allocations-2021-22/>.



Atkins, G., and Hoddinott, S. (2022), 'Neighbourhood Services under Strain', Institute for Government, <https://www.instituteforgovernment.org.uk/publications/neighbourhood-services>.

Beech, A., and Baird, B. (2020), 'GP Funding and Contracts Explained', The King's Fund, <https://www.kingsfund.org.uk/publications/gp-funding-and-contracts-explained>.

Belfield, C., Farquharson, C., and Sibieta, L. (2018), '2018 Annual Report on Education Spending in England', Institute for Fiscal Studies Report, <https://ifs.org.uk/publications/2018-annual-report-education-spending-england>.

Blanden, J., Greaves, E., Gregg, P., Macmillan, L., and Sibieta, L. (2015), 'Understanding the Improved Performance of Disadvantaged Pupils in London', Social Policy in a Cold Climate, Working Paper 21, [https://sticerd.lse.ac.uk/case/\\_new/publications/abstract/?index=4750](https://sticerd.lse.ac.uk/case/_new/publications/abstract/?index=4750).

Blesse, S., and Diegmann, A. (2022), 'The Place-Based Effects of Police Stations on Crime: Evidence from Station Closures', *Journal of Public Economics*, 207, 104605.

Blochliker, H., Merk, O., Charbit, C., and Mizell, L. (2007), 'Fiscal Equalisation in OECD Countries', OECD Network on Fiscal Relations Across Levels of Government Working Paper No 4, <https://doi.org/10.1787/5k97b11n2gxx-en>.

British Business Bank (2019), 'ENABLE Build Programme: A Request for Proposals', <https://www.british-business-bank.co.uk/wp-content/uploads/2019/08/ENABLE-Build-RfP-v1.0.pdf>.

Burgess, S. (2014) 'Understanding the Success of London's Schools', Centre for Market and Public Organisation, Bristol University, Working Paper No.14/333, <https://www.bristol.ac.uk/media-library/sites/cmpo/migrated/documents/wp333.pdf>.

Cattan, S., Conti, G., Farquharson, C., Ginja, R., and Pecher, M. (2021), 'The Health Impacts of Universal Early Childhood Interventions: Evidence from Sure Start', Institute for Fiscal Studies Working Paper 2021/25, <https://ifs.org.uk/publications/health-impacts-universal-early-childhood-interventions-evidence-sure-start>.

Charles, A. (2022), 'Integrated Care Systems Explained: Making Sense of Systems, Places and Neighbourhoods', The King's Fund, <https://www.kingsfund.org.uk/publications/integrated-care-systems-explained>.

Coleman, C., Hunt, E., Hutchinson, J., Robinson, D., and Tuckett, S. (2022), 'Covid-19 and Disadvantage Gaps in England 2020', Education Policy Institute, <https://epi.org.uk/publications-and-research/disadvantage-gaps-in-england/>.



Cornaglia, F., Feldman, N. E., and Leigh, A. (2014), 'Crime and Mental Wellbeing', *Journal of Human Resources*, 49, 110–140.

Crawford, R., Stoye, G., and Zaranko, B. (2021), 'Long-Term Care Spending and Hospital Use among the Older Population in England', *Journal of Health Economics*, 78, 102477.

Crossley, S. (2015), 'The Troubled Families Programme: The Perfect Social Policy?', Centre for Crime and Justice Studies, Briefing Paper, <https://www.crimeandjustice.org.uk/publications/troubled-families-programme-perfect-social-policy>.

Davenport, A., and Zaranko, B. (2020), 'Levelling Up: Where and How?', in C. Emmerson, C. Farquharson and P. Johnson (eds), *IFS Green Budget 2020*, <https://ifs.org.uk/books/levelling-where-and-how>.

Davies, N., Atkins, G., and Sodhi, S. (2021), 'Using Targets to Improve Public Services', Institute for Government, <https://www.instituteforgovernment.org.uk/publications/targets-public-services>.

Department for Business, Energy & Industrial Strategy (2021), 'Social Housing Decarbonisation Fund: Competition Guidance Notes', [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1016303/shdf-wave-1-competition-guidance.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1016303/shdf-wave-1-competition-guidance.pdf).

Department for Communities and Local Government (2012), 'The Local Government Finance Report (England) 2012/2013', HC1801, [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/247132/1801.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/247132/1801.pdf).

Department for Communities and Local Government (2013), 'Local Government Finance Settlement 2013/14: Calculation of 2013/14 Formula Funding', <https://webarchive.nationalarchives.gov.uk/ukgwa/20140505104701/http://www.local.communities.gov.uk/finance/1314/settle.htm>.

Department for Communities and Local Government (2017), 'An Introduction to the Housing Infrastructure Fund', <https://www.gov.uk/government/publications/housing-infrastructure-fund>.

Department for Education (2014), 'LA and School Expenditure: 2013 to 2014 Financial Year', <https://www.gov.uk/government/statistics/schools-education-and-childrens-services-spending-2013-to-2014>.

Department for Education (2019a), 'National Curriculum Assessments: Key Stage 2, 2019 (Revised) Statistics', <https://www.gov.uk/government/statistics/national-curriculum-assessments-key-stage-2-2019-revised>.

Department for Education (2019b), ‘Key Stage 4 Performance 2019 (Revised) Statistics’, <https://www.gov.uk/government/statistics/key-stage-4-performance-2019-revised>.

Department for Education (2021), ‘LA and School Expenditure: 2019 to 2020 Financial Year’, <https://www.gov.uk/government/statistics/la-and-school-expenditure-2019-to-2020-financial-year>.

Department for Levelling Up, Housing and Communities (2021), ‘Rent Standard – April 2020’, <https://www.gov.uk/government/publications/rent-standard/rent-standard-april-2020>.

Department for Levelling Up, Housing and Communities (2022a), ‘Homelessness Prevention Grant 2023/24 Onwards: Technical Consultation’, <https://www.gov.uk/government/consultations/homelessness-prevention-grant-202324-onwards-technical-consultation>.

Department for Levelling Up, Housing and Communities (2022b), ‘Table 100: Number of Dwellings by Tenure and District, England’, <https://www.gov.uk/government/statistical-data-sets/live-tables-on-dwelling-stock-including-vacants>.

Department for Work and Pensions (2021), ‘Benefit Expenditure and Caseload Tables 2021: Spring Statement’, <https://www.gov.uk/government/publications/benefit-expenditure-and-caseload-tables-2021>.

Department for Work and Pensions (2022), ‘Benefit Expenditure and Caseload Tables 2022: Spring Statement’, <https://www.gov.uk/government/publications/benefit-expenditure-and-caseload-tables-2022>.

Department of Health (2011), ‘Resource Allocation: Weighted Capitation Formula’, <https://www.gov.uk/government/publications/resource-allocation-weighted-capitation-formula>.

Department of Health (2013a), ‘Exposition Book Public Health Allocations 2013–14 and 2014–15: Technical Guide’, [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/213324/Public-Health-Weighted-Capitation-FormulaTechnical-Guide-v0.13.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/213324/Public-Health-Weighted-Capitation-FormulaTechnical-Guide-v0.13.pdf).

Department of Health (2013b), ‘Exposition Book Public Health Allocations 2014–15’, <https://www.gov.uk/government/publications/ring-fenced-public-health-grants-to-local-authorities-2013-14-and-2014-15>.

Department of Health (2015a), ‘Scope of 0-5 public health services transfer’, [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/404655/SCOPE\\_of\\_transfer\\_paper.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/404655/SCOPE_of_transfer_paper.pdf).

Department of Health (2015b), 'Transfer of 0-5 children's public health commissioning to Local Authorities: Final allocations - Finance fact sheet 4',

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/449077/Finance\\_Factsheet\\_4.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/449077/Finance_Factsheet_4.pdf).

Department of Health (2015c), 'Public health grant: proposed target allocation formula for 2016/17',

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/468964/1\\_Public\\_Health\\_Grant\\_-\\_Proposed\\_Target\\_Allocation\\_Formula\\_2016-17\\_-\\_amended.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/468964/1_Public_Health_Grant_-_Proposed_Target_Allocation_Formula_2016-17_-_amended.pdf).

Department of Health (2015d), 'Exposition book: calculation of weighted populations using proposed target formula',

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/468915/4\\_Exposition\\_book\\_public\\_health\\_grant\\_proposed\\_formula\\_for\\_201617\\_amended.xls](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/468915/4_Exposition_book_public_health_grant_proposed_formula_for_201617_amended.xls).

Department of Health and Social Care (2016), 'Public health grants to local authorities: 2016 to 2017', <https://www.gov.uk/government/publications/public-health-grants-to-local-authorities-2016-to-2017>.

Department of Health and Social Care (2018), 'Public Health Grants to Local Authorities: 2019 to 2020', <https://www.gov.uk/government/publications/public-health-grants-to-local-authorities-2019-to-2020>.

Department of Health and Social Care (2020), 'The Government's Revised 2019–20 Accountability Framework with NHS England and NHS Improvement', <https://www.gov.uk/government/publications/nhs-accountability-framework-2019-to-2020>.

Dustmann, C., and Fasani, F. (2014), 'The Effect of Local Area Crime on Mental Health', *Economic Journal*, 126, 978–1017.

Farquharson, C., McNally, S., and Tahir, I. (2022), 'Education Inequalities', IFS Deaton Review of Inequalities, <https://ifs.org.uk/inequality/education-inequalities/>.

Finch, D., Bibby, J., and Elwell-Sutton, T. (2018), 'Taking Our Health For Granted', The Health Foundation Briefing, <https://www.health.org.uk/publications/taking-our-health-for-granted>.

Galama, T., Lleras-Muney, A., and van Kippersluis, H. (2018), 'The Effect of Education on Health and Mortality: A Review of Experimental and Quasi-Experimental Evidence', National Bureau of Economic Research (NBER) Working Paper 24225.

Gibson, A., and Asthana, S. (2011), ‘Resource Allocation for English Local Government: A Critique of the Four-Block Model’, *Journal of the Royal Statistical Society A*, 174, 529–546.

Hamad, R., Elser, H., Tran, D. C., Rehkopf, D. H., and Goodman, S. N. (2018), ‘How and Why Studies Disagree about the Effects of Education on Health: A Systematic Review and Meta-Analysis of Studies of Compulsory Schooling Laws’, *Social Science and Medicine*, 212, 168–178.

Harris, T., Hodge, L., and Phillips, D. (2019), ‘English Local Government Funding: Trends and Challenges in 2019 and Beyond’, Institute for Fiscal Studies Report 166, <https://ifs.org.uk/publications/english-local-government-funding-trends-and-challenges-2019-and-beyond-0>.

Harris, T., and Phillips, D. (2018), ‘The Fair Funding Review: Is a Fair Assessment of Councils’ Spending Needs Feasible?’, Institute for Fiscal Studies Report R148, <https://ifs.org.uk/publications/fair-funding-review-fair-assessment-councils-spending-needs-feasible>.

HM Government (2022a), ‘Help to Buy: Equity Loan’, <https://www.gov.uk/help-to-buy-equity-loan>.

HM Government (2022b), ‘Apply for a Help to Build: Equity Loan’, <https://www.gov.uk/apply-for-help-to-build-equity-loan>.

HM Land Registry (2022), ‘UK House Price Index: Data Downloads June 2022’, <https://www.gov.uk/government/statistical-data-sets/uk-house-price-index-data-downloads-june-2022>.

HM Treasury (2022a), ‘GDP deflators at market prices, and money GDP – March 2022 (Spring Statement)’, <https://www.gov.uk/government/statistics/gdp-deflators-at-market-prices-and-money-gdp-march-2022-spring-statement>.

HM Treasury (2022b), ‘GDP Deflators at Market Prices, and Money GDP – June 2022’, <https://www.gov.uk/government/statistics/gdp-deflators-at-market-prices-and-money-gdp-june-2022-quarterly-national-accounts>.

House of Commons Library (2022), ‘UK Hex Cartograms Non-Contiguous’, <https://github.com/houseofcommonslibrary/uk-hex-cartograms-noncontiguous>.

Jackson, C. K., Johnson, R. C., and Persico, C. (2016), ‘The Effects of School Spending on Educational and Economic Outcomes: Evidence from School Finance Reforms’, *Quarterly Journal of Economics*, 131, 157–218.

Jackson, C. K., and Mackevicius, C. (2021), ‘The Distribution of School Spending Impacts’, National Bureau of Economic Research (NBER) Working Paper 28517.

Janke, K., Johnston, D., Propper, C. and Shields, M. (2020a), ‘The Causal Impact of Education on Chronic Health: Evidence from the UK’, *Journal of Health Economics*, 70, 102252.

Janke, K., Lee, K., Propper, C., Shields, K., and Shields M. (eds) (2020b), ‘Macroeconomic Conditions and Health in Britain: Aggregation, Dynamics and Local Area Heterogeneity’, CEPR Discussion Paper No. 14507.

Ludwig, J., Duncan, G. J., Gennetian, L. A., Katz, L. F., Kessler, R. C., Kling, J. R., and Sanbonmatsu, L. (2012), ‘Neighborhood Effects on the Long-Term Well-Being of Low-Income Adults’, *Science*, 337, 1505–1510.

Machin, S., and Marie, O. (2011), ‘Crime and Police Resources: The Street Crime Initiative’, *Journal of the European Economic Association*, 9, 678–701.

Marsh, A., Gordon, D., Pantazis, C., and Heslop, P. (1999), *Home Sweet Home? The Impact of Poor Housing on Health*, Bristol: Policy Press.

Martin, S., Lomas, J., Claxton, K., and Longo, F. (2021), ‘How Effective Is Marginal Healthcare Expenditure? New Evidence from England for 2003/04 to 2012/13’, *Applied Health Economics and Health Policy*, 19, 885–903.

Ministry of Housing, Communities and Local Government (2013), ‘Council Taxbase 2013 in England’, <https://www.gov.uk/government/statistics/council-taxbase-2013-in-england>.

Ministry of Housing, Communities and Local Government (2014), ‘Local Authority Revenue Expenditure and Financing England: 2013 to 2014 Individual Local Authority Data – Outturn’.

Ministry of Housing, Communities and Local Government (2015), ‘English Indices of Deprivation 2015’, <https://www.gov.uk/government/statistics/english-indices-of-deprivation-2015>.

Ministry of Housing, Communities and Local Government (2018a), ‘Review of Local Authorities Relative Needs and Resources’, <https://www.gov.uk/government/consultations/review-of-local-authorities-relative-needs-and-resources>.

Ministry of Housing, Communities and Local Government (2018b), ‘Business Rates Retention Reform’, <https://www.gov.uk/government/consultations/business-rates-retention-reform>.

Ministry of Housing, Communities and Local Government (2019a), ‘National Evaluation of the Troubled Families Programme 2015 to 2020: Findings’, <https://www.gov.uk/government/publications/national-evaluation-of-the-troubled-families-programme-2015-to-2020-findings>.

Ministry of Housing, Communities and Local Government (2019b), ‘Council Taxbase 2019 in England’, <https://www.gov.uk/government/statistics/council-taxbase-2019-in-england>.

Ministry of Housing, Communities and Local Government (2019c), ‘Core Spending Power: Final Local Government Finance Settlement 2019 to 2020’, <https://www.gov.uk/government/publications/core-spending-power-final-local-government-finance-settlement-2019-to-2020>.

Ministry of Housing, Communities and Local Government (2019d), ‘English Indices of Deprivation 2019’, <https://www.gov.uk/government/statistics/english-indices-of-deprivation-2019>.

Ministry of Housing, Communities and Local Government (2019e), ‘Policy Statement on Rents for Social Housing’, [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/781746/Policy\\_Statement.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/781746/Policy_Statement.pdf).

Ministry of Housing, Communities and Local Government (2019f), ‘Integration and Better Care Fund: The Disabled Facilities Capital Grant (DFG) Determination 2019–20 [31/3710]’, <https://www-foundations.uk.com/wp-content/uploads/2021/12/DFG-Allocations-2019-20.pdf>.

Ministry of Housing, Communities and Local Government (2020a), ‘Levy Account Surplus Final Allocations for 2019 to 2020’, <https://www.gov.uk/government/publications/levy-account-surplus-final-allocations-for-2019-to-2020>.

Ministry of Housing, Communities and Local Government (2020b), ‘Housing Secretary Confirms £1 Billion of Finance to Support Small and Medium Sized Builders’, <https://www.gov.uk/government/news/housing-secretary-confirms-1-billion-of-finance-to-support-small-and-medium-sized-builders>.

Ministry of Housing, Communities and Local Government (2021a), ‘Local Authority Revenue Expenditure and Financing England: 2019 to 2020 Individual Local Authority Data – Outturn’.

Ministry of Housing, Communities and Local Government (2021b), ‘Statutory Homelessness in England: Financial Year 2019–20’, <https://www.gov.uk/government/statistics/statutory-homelessness-in-england-financial-year-2019-20>.

National Audit Office (2010), ‘The Decent Homes Programme’, <https://www.nao.org.uk/reports/the-decent-homes-programme/>.

National Audit Office (2020), ‘Local Authority Investment in Commercial Property’, <https://www.nao.org.uk/reports/local-authority-investment-in-commercial-property/>.

NHS England (2015), ‘Guidance for NHS Commissioners on Equality and Health Inequalities Legal Duties’, <https://www.england.nhs.uk/wp-content/uploads/2015/12/hlth-inqual-guid-comms-dec15.pdf>.

NHS England (2016a), ‘Allocations for 2016/17 to 2020/21’, <https://www.england.nhs.uk/allocations/previous/allocations-2016-17-to-2020-21/>.

NHS England (2016b), ‘Primary Medical Care – New Workload Formula for Allocations to CCG Areas’, <https://www.england.nhs.uk/publication/primary-medical-care-new-workload-formula-for-allocations-to-ccg-areas/>.

NHS England (2016c), ‘Refreshing the Formulae for CCG Allocations for Allocations to Clinical Commissioning Groups from 2016–17. Report on the Methods and Modelling’, <https://www.england.nhs.uk/publication/refreshing-the-formulae-for-ccg-allocations-for-allocations-to-clinical-commissioning-groups-from-2016-17-report-on-the-methods-and-modelling-nhs-england-analytical-services-finance/>.

NHS England (2016d), ‘Technical Guide to Allocation Formulae and Pace of Change for 2016–17 to 2020–21 Revenue Allocations to Clinical Commissioning Groups and Commissioning Areas’, <https://www.england.nhs.uk/publication/technical-guide-to-allocation-formulae-and-pace-of-change-for-2016-17-to-2020-21-revenue-allocations-to-clinical-commissioning-groups-and-commissioning-areas/>.

NHS England (2019a), ‘Technical Guide to CCG Allocations 2019/20 to 2023/24: Spreadsheet Files for CCG Allocations 2019/20 to 2023/24’, <https://www.england.nhs.uk/publication/technical-guide-to-ccg-allocations-2019-20-to-2023-24-spreadsheet-files-for-ccg-allocations-2019-20-to-2023-24/>.

NHS England (2019b), ‘Allocations 2019/20 to 2023/24’, <https://www.england.nhs.uk/allocations/previous/allocations-for-2019-20-to-2023-24/>.

NHS England and Improvement (2019), ‘Technical Guide to Allocation Formulae and Pace of Change for 2019/20 to 2023/24 Revenue Allocations’, <https://www.england.nhs.uk/wp-content/uploads/2019/05/allocations-2019-20-technical-guide-to-formulae-v1.2.pdf>.

NHS England and Improvement (2021), ‘Technical Guide to Allocation Formulae and Convergence: For 2022/23 to 2024/25 Revenue Allocations’, <https://www.england.nhs.uk/publication/technical-guide-to-integrated-care-board-allocations-2022-23-to-2024-25/>.



Ogden, K., Phillips, D., and Sion, C. (2021), 'What's Happened and What's Next for Councils?', in C. Emmerson, P. Johnson and B. Zaranko (eds), *IFS Green Budget October 2021*, Chapter 7, <https://ifs.org.uk/books/whats-happened-and-whats-next-councils>.

Office for National Statistics (2019a), 'Health State Life Expectancy at Birth and at Age 65 Years By Local Areas, UK', <https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthandlifeexpectancies/datasets/healthstatelifeexpectancyatbirthandage65bylocalareasuk/current>.

Office for National Statistics (2020a), 'Population Estimates for the UK, England and Wales, Scotland and Northern Ireland: Mid-2019', <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/annualmidyearpopulationestimates/mid2019estimates> (and equivalent for earlier years).

Office for National Statistics (2020b), 'Subnational Population Projections for England: 2018-based', <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/bulletins/subnationalpopulationprojectionsforengland/2018based>.

Office for National Statistics (2020c), 'Health Index: England', <https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthandwellbeing/datasets/healthindexengland>.

Phillips, D. (2018), 'Equalisation, Incentives and Discretion in English Local Public Service Provision', in A. Paun (ed), *Governing England: Devolution and Funding*, Chapter 3, London: British Academy, 35–52.

Robinson, F., and Keithley, J. (2010), 'The Impacts of Crime on Health and Health Services: A Literature Review', *Health, Risk & Society*, 2, 253–266.

Sandford, M. (2022), 'Council Tax: Local Referendums', House of Commons Library Research Briefing, <https://commonslibrary.parliament.uk/research-briefings/sn05682/>.

Sibieta, L. (2021), 'School Spending in England: Trends over Time and Future Outlook', Institute for Fiscal Studies Briefing Note 334, <https://ifs.org.uk/publications/school-spending-england-trends-over-time-and-future-outlook>.

Sibieta, L., and Jerrim, J. (2021), 'A Comparison of School Institutions and Policies across the UK', Education Policy Institute Report, <https://epi.org.uk/publications-and-research/a-comparison-of-school-institutions-and-policies-across-the-uk/>.



Valtorta, N. K., Kanaan, M., Gilbody, S., Ronzi, S., and Hanratty, B. (2016), ‘Loneliness and Social Isolation as Risk Factors for Coronary Heart Disease and Stroke: Systematic Review and Meta-Analysis of Longitudinal Observational Studies’, *Heart*, 102, 1009–1016.

Venkataramani, A. S., O’Brien, R., Whitehorn, G. L., and Tsai, A. C. (2020), ‘Economic Influences on Population Health in the United States: Toward Policymaking Driven by Data and Evidence’, *PLoS Medicine*, 17, e1003319.

Vollaard, B., and Hamed, J. (2012), ‘Why the Police Have an Effect on Violent Crime After All: Evidence from the British Crime Survey’, *Journal of Law and Economics*, 55, 901–924.

World Health Organization (2016), ‘Urban Green Space and Health: Intervention Impacts and Effectiveness’, World Health Organization, Regional Office for Europe, <https://www.who.int/europe/publications/m/item/urban-green-space-and-health--intervention-impacts-and-effectiveness>.

Zaranko, B. (2020), ‘Spending Review 2020: COVID-19, Brexit and Beyond’, in C. Emmerson, C. Farquharson and P. Johnson (eds), *IFS Green Budget 2020*, <https://ifs.org.uk/books/spending-review-2020-covid-19-brexite-and-beyond>.

Zaranko, B. (2021), ‘Spending Review 2021: Plans, Promises and Predicaments’, in C. Emmerson, P. Johnson and B. Zaranko (eds), *IFS Green Budget 2021*, <https://ifs.org.uk/books/spending-review-2021-plans-promises-and-predicaments>.