

Spatial inequalities

An IFS initiative funded by the Nuffield Foundation





https://ifs.org.uk/inequality



The IFS Deaton Review

Roadmap



- Summary of spatial (economic) differences across the UK
 - And trends therein

- Does this matter?
 - 1. Equality of opportunity and social mobility
 - Who are the winners and losers from this state of affairs?
 - Links to spatial mobility, housing, and within-location inequalities
 - 2. UK productivity and living standards
- Public spending across the country



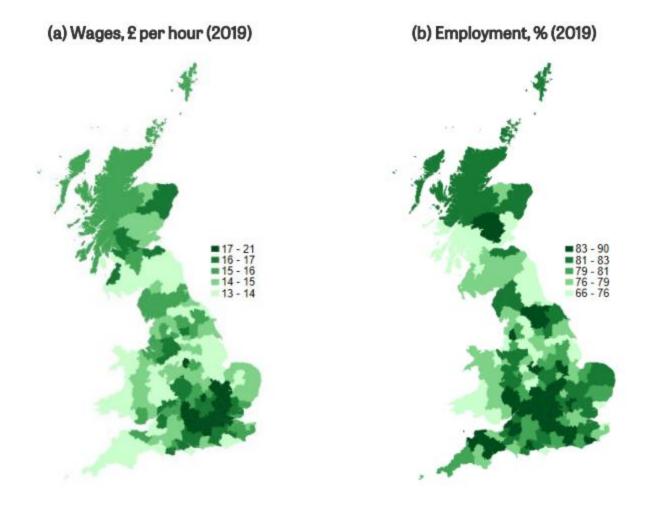
Key spatial differences and trends

Spatial inequalities © Institute for Fiscal Studies

The labour market is very different across the country

Wages and employment





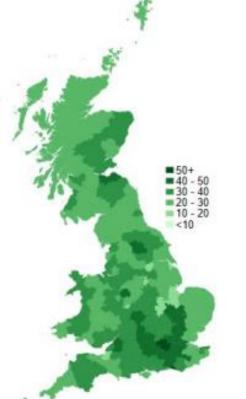
Source: Overman, H. and Xu, X. (2022), '**Spatial disparities across labour markets**', https://ifs.org.uk/inequality/spatial-disparities-across-labour-markets/

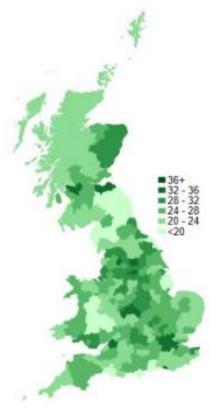
The populations are very different across the country



% with degree or equivalent



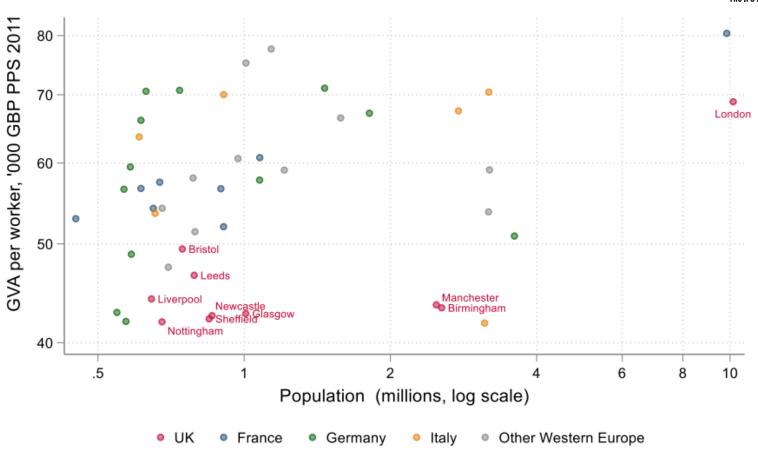




Source: Overman, H. and Xu, X. (2022), 'Spatial disparities across labour markets', https://ifs.org.uk/inequality/spatial-disparities-across-labour-markets/

Outside London, UK well behind productivity frontier

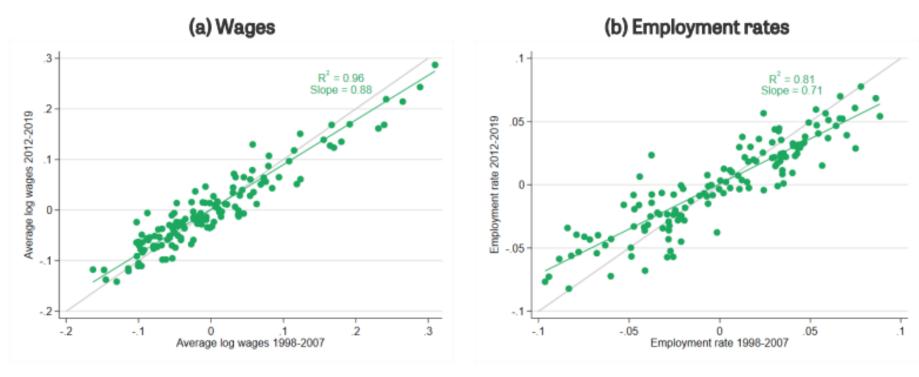




Source: Originally Rodrigues and Breach (2021), recreated by Stansbury, Turner and Balls (2023)

High persistence of economic outcomes across areas



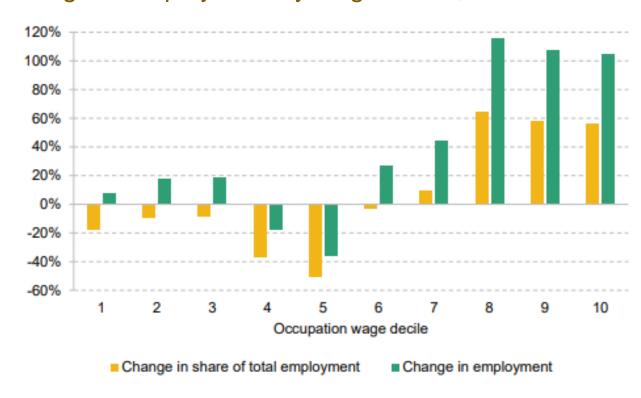


Source: Overman, H. and Xu, X. (2022), '**Spatial disparities across labour markets**', https://ifs.org.uk/inequality/spatial-disparities-across-labour-markets/

"Hollowing out" – the national picture



National change in employment by wage decile, 1993-2022



Note: Working-age (18–64) population only. Wage deciles based on median hourly wage in occupation (four-digit SOC code) in 1997.

Declining occupations: middle-paying manufacturing

Occupation groups with largest employment falls, 1997-2022



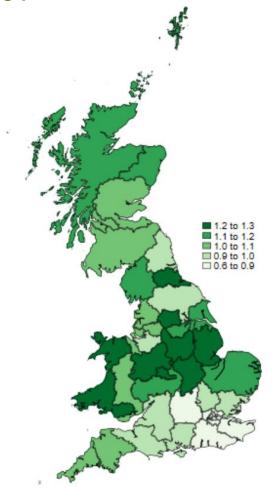
Occupation group (three-digit SOC)	Employment in 1993	Employment in 2022	Wage decile in 1997	Wage decile in 2022
Secretarial and related occupations	1,049,801	515,760	4	3
Elementary cleaning occupations	799,466	456,821	1	1
Assemblers and routine operatives	515,168	176,500	3	3
Metal machining, fitting and instrument making trades	458,097	200,359	6	6
Plant and machine operatives	312,358	122,879	5	4
Process operatives	432,825	244,670	4	3
Metal forming, welding and related trades	168,901	61,642	5	5
Printing trades	132,455	25,905	6	3
Elementary agricultural occupations	147,241	52,252	2	1
Textiles and garments trades	92,993	40,075	3	2

Note: Working-age (18–64) population only. Wage bins based on deciles of median hourly wage in occupation (four-digit SOC code) in 1997 and 2022, respectively.

Where were those declining occupations?

Concentration of declining jobs in 1993





Growing occupations – high and low paid services

Occupation groups with largest employment increases, 1997-2022

Occupation group (three-digit SOC)	Employment in 1993	Employment in 2022	Wage decile in 1997	Wage decile in 2022
Information technology and telecommunications professionals	275,636	1,447,519	9	9
Functional managers and directors	342,338	1,034,069	10	10
Caring personal services	646,856	1,288,117	2	2
Business, research and administrative professionals	373,744	943,760	9	9
Teaching and educational professionals	973,093	1,540,469	10	10
Business, finance and related associate professionals	354,978	875,762	10	8
Childcare and related personal services	264,291	749,729	1	1
Health professionals	199,146	645,634	10	10
Sales, marketing and related associate professionals	630,376	990,339	9	8
Other elementary services occupations	601,709	812,473	1	1

Note: Working-age (18–64) population only. Wage bins based on deciles of median hourly wage in occupation (four-digit SOC code) in 1997 and 2022, respectively.

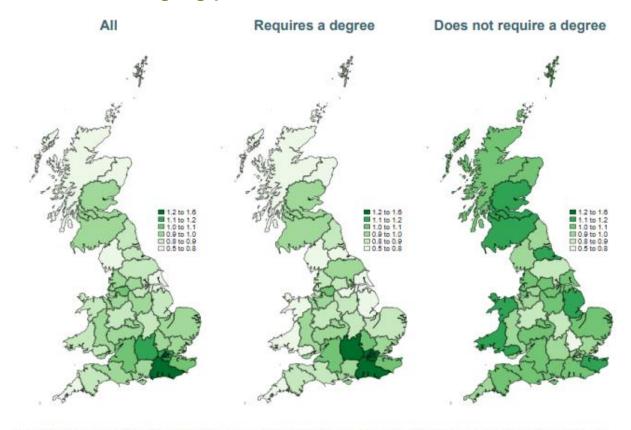
Source: Xu, X. (2023). *The changing geography of jobs*. London: Institute for Fiscal Studies. Available at: https://ifs.org.uk/publications/changing-geography-jobs



Where are growing occupations? Depends which kind

Concentration of emerging jobs in 2022



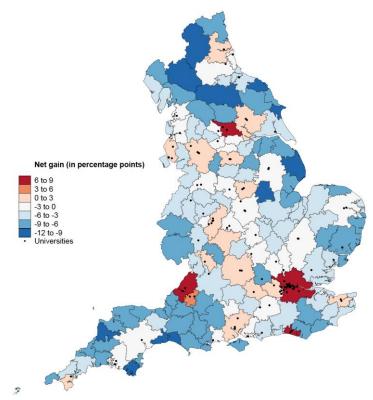


Note: Working-age (18–64) population only. Concentration measured by location quotient. Region refers to region of residence. Groups the following regions: Southern, East Central and Western Scotland; North Eastern Scotland and Highlands and Islands; all regions in Inner London; all regions in Outer London. Skill classification based on RQF (see Aghion et al., 2023).

Many people with skills to take advantage of graduate jobs move to London and a few other cities...



Net gain/loss of graduates due to internal migration

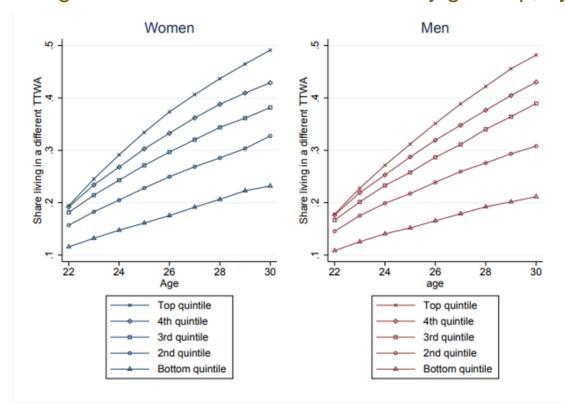


Note: LFS. NPD, LEO Data. Net gain is the percentage point difference between the share of 16-year-olds from the area who went on to be graduates and the share of 27-year-olds who live in the area who are graduates. Black dots signify universities.

Source: Britton, J et al. (2021). London calling? Higher education, geographical mobility and early-career earnings. London: The IFS. Available at: https://ifs.org.uk/publications/london-calling-higher-education-geographical-mobility-and-early-career-earnings.

...but much more so if they come from a better off family

% of graduates living in different TTWA from where they grew up, by SES



Note: Includes data from the 2002–09 GCSE cohorts, and from the 2012/13 to 2016/17 tax years. Graduates are only counted as such once they have obtained their degrees. Individuals observed to be in full-time education are dropped, and the graduation year is dropped for non-graduates studying part-time. SES quintiles are set based on the whole population. Therefore, there are fewer people in the bottom quintile group than the top quintile group here as we are only looking at graduates (and higher SES groups are much more likely to go to university).

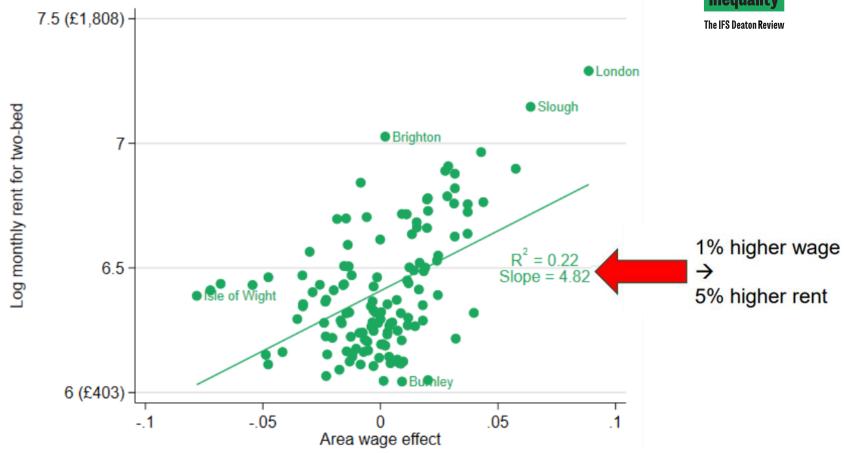
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This isn't surprising given housing cost differentials





Source: Overman, H. and Xu, X. (2022), '**Spatial disparities across labour markets**', https://ifs.org.uk/inequality/spatial-disparities-across-labour-markets/



Implications

Spatial inequalities © Institute for Fiscal Studies

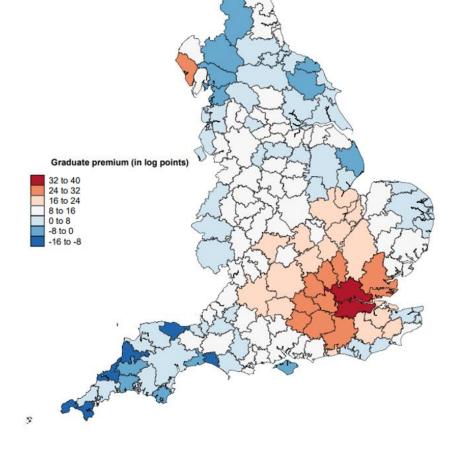
Who loses from this?

1. Skilled people not from London, especially if from a

poorer background

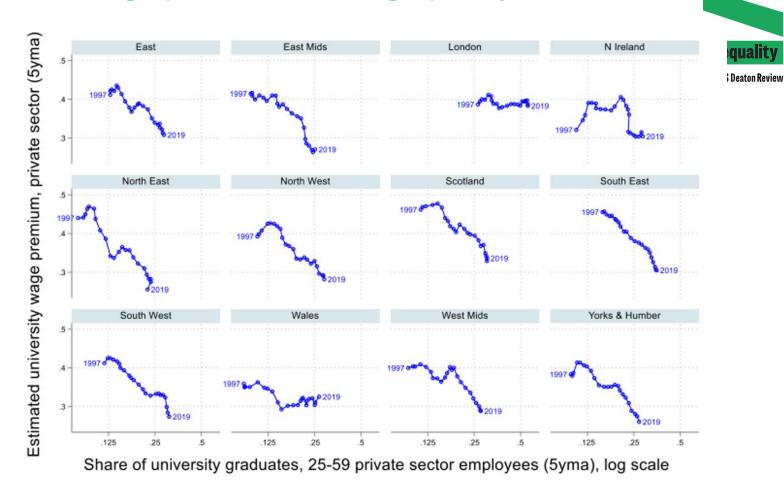
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Graduate wage premium



Note: The map plots all 149 English TTWAs included in our analysis. TTWAs straddling two home nations are excluded from the analysis and therefore not plotted. 'Graduate premiums' are calculated using a regression of earnings on a graduate dummy, interacted with TTWA at age 27, plus controls for background characteristics and school attainment as listed in Section 2.2, fully interacted with a gender dummy. Includes data from the 2002–05 GCSE cohorts, and from the 2013/14 to 2016/17 tax years.

Graduate wage premium holding up only in London



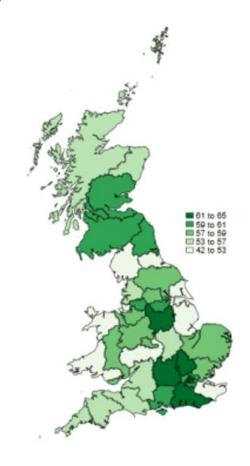
Source: Analysis of UK Labour Force Survey. Note: "5yma" refers to five year moving average. Each point is the estimated wage premium for university graduates relative to A-level recipients, and the share of university graduates among private sector employees in a region in each year 1997-2019.

Source: Stansbury et al

Graduates don't always get jobs that fully reward the qualifications – especially in some parts of UK

% of graduates in graduate jobs, 2022





Source: Overman, H. and Xu, X. (2022), '**Spatial disparities across labour markets**', https://ifs.org.uk/inequality/spatial-disparities-across-labour-markets/

Who loses from this?

2. Lower income people in high cost areas





Source: Households Below Average Income

What about efficiency and productivity?



- Spatial clustering tends to increase productivity (locally) known as agglomeration effects
- UK probably prone to high clustering: high (net) benefits of agglomeration in professional services
 - Needs high-skilled labour market
 - Lack of downsides from congestion mostly based on electronic exchange of information
- Set against agglomeration benefits, we have under-utilisation of talent that lives far away from productivity hotspots (and for whom it is costly / undesirable to move)
- Not clear a market would balance these two factors optimally
 - Coordination problem: moving closer to more of the country's talent *without* losing agglomeration benefits would require many firms to move together
- Marginal / piecemeal policies don't offer much hope of shifting a very entrenched equilibrium
- Major subsidies and investments in a few places offers more promise than an attempt to "level up" across the board



Public spending across the country

Spatial inequalities © Institute for Fiscal Studies

Public spending



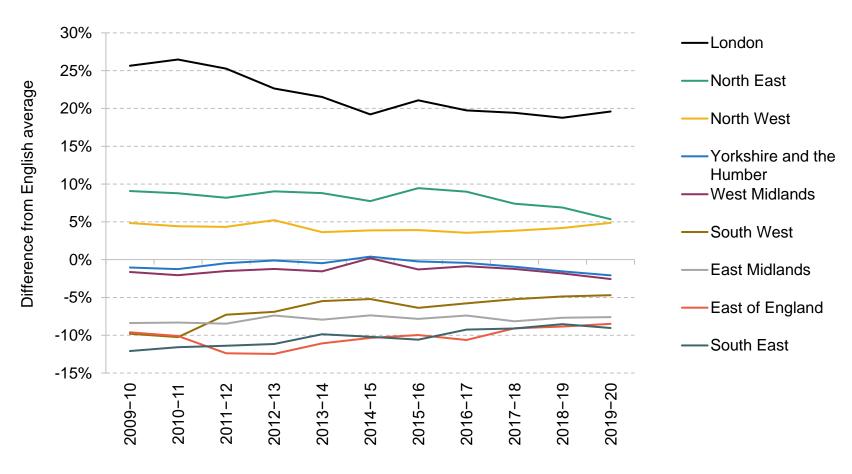
Allocation of public funding is one of the most direct levers available to government to reduce spatial inequalities

- Income / demand support
- Investment / supply-side improvements

IFS work has considered the design of both specific 'levelling up' funding and general public service funding

Public spending is higher in poorer places but (within England) the gap has narrowed over time



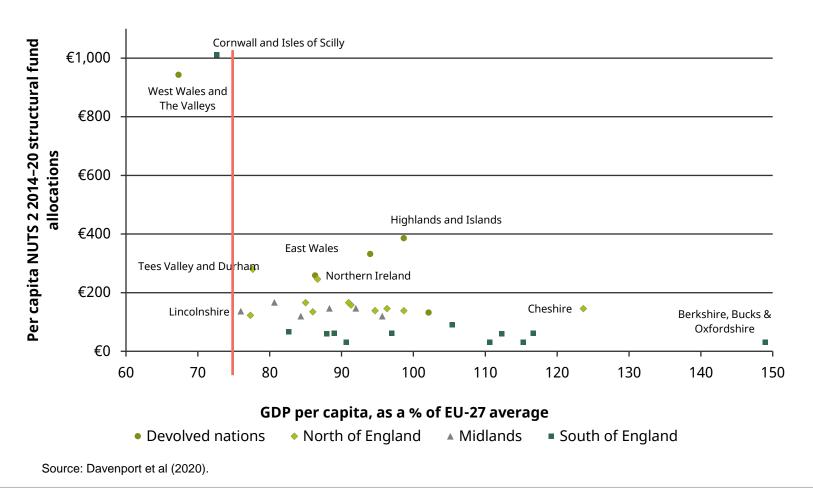


Source: Ogden et al (2022).

Levelling-up funding is in need of reform

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UKSFP allocations largely replicate 2014-2020 EU allocations, which were largely rolled over from 2007-2013 period



Public service spending



£400 billion spent on public services specifically for England per year is around 100 times the amount spent on specific 'levelling up interventions'

Robust evidence that funding levels matter for outcomes, especially in health and schools, especially for those from more disadvantaged backgrounds

Wellbeing and life chances all depend on an array of services

→Ensuring funding is allocated between places in a way that reflects differences in needs and provides additional support to disadvantaged people and places can help tackle spatial inequalities

But must balance needs with other objectives for funding systems

Local incentives and discretion

Stability in funding levels

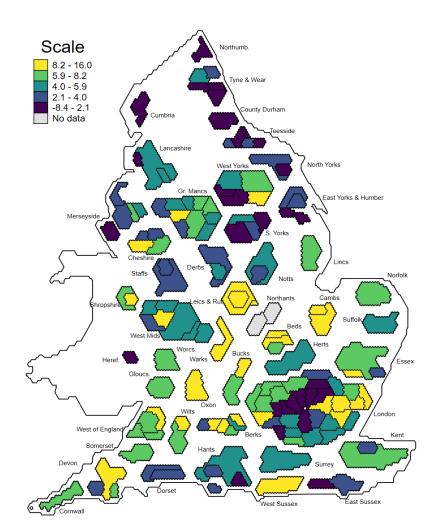
Key issues with current allocation systems



 Lack of updating of needs assessments for local government, police and public health for a decade – with underlying data from as far back as 1990s!

Population change: 2013 to 2022





Eg. Fall by 8% in Kensington & Chelsea, Westminster and Camden

e.g. Grow by 16% in Tower Hamlets, Peterborough and Bedford

Note: provisional 2022 estimate produced by IFS using 2021 mid-year estimate and the latest projected rate of population change between mid-2021 and mid-2022.

Source: Ogden et al (2023).

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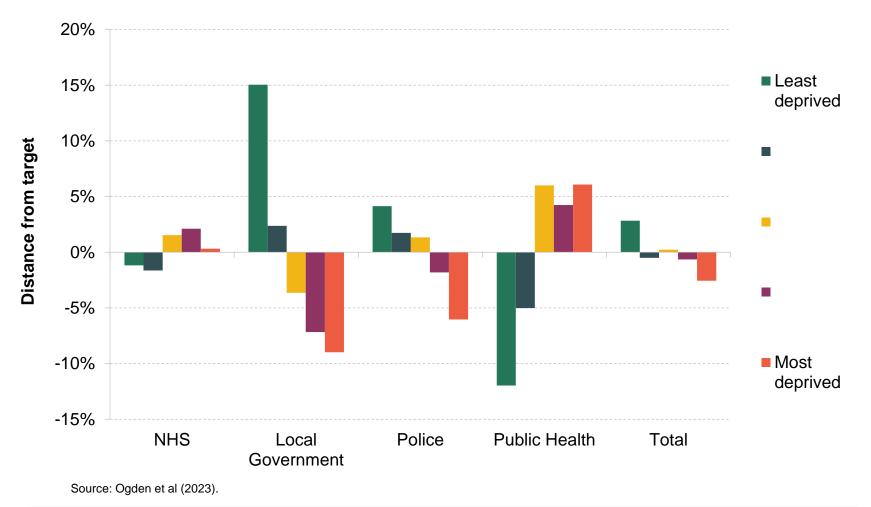


- 1. Lack of updating of needs assessments for local government, police and public health for a decade with underlying data from as far back as 1990s!
- 2. While NHS funding has specific top-up funding to reduce health inequalities (on top of addressing differences in demands and costs), deprived areas with high needs receive a below-needs share of funding for local government & police.

How share of funding compares to share of



assessed needs



Key issues with current allocation systems



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- 2. While NHS funding has specific top-up funding to reduce health inequalities (on top of addressing differences in demands and costs), deprived areas with high needs receive a below-needs share of funding for local government & police.
- 3. School funding reforms have put a 'system' in place after years of rolling over budgets but based purely on policymaker priorities as opposed to any assessment of needs, and funding has been shifted from schools serving deprived areas

Changes in school funding in the 2010s



Change in funding per pupil, 2010-2019, by deprivation of school intake



Source: Ogden et al (2022).

Key issues with current allocation systems

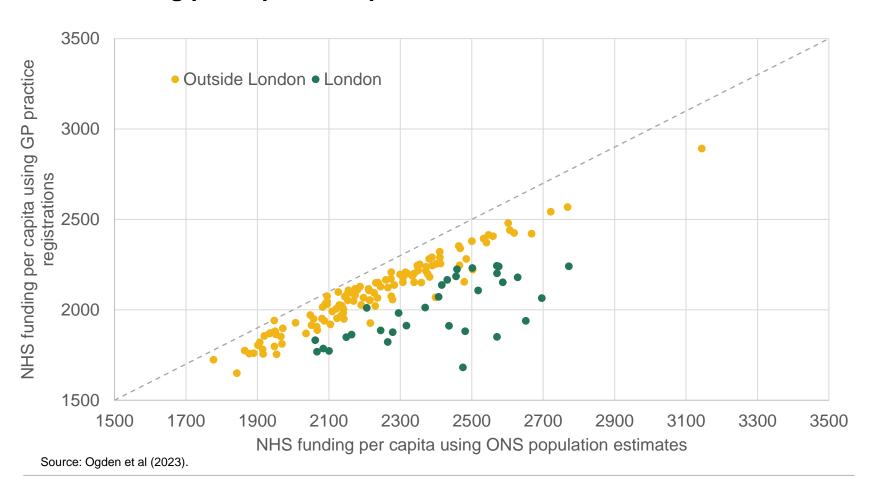


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- 3. School funding reforms have put a 'system' in place after years of rolling over budgets but based purely on policymaker priorities as opposed to any assessment of needs, and funding has been shifted from schools serving deprived areas.
- Huge discrepancies between different population figures (e.g. pre and post Census, ONS versus GP registrations) makes allocating and estimating funding very challenging.

Impact of differences between ONS and GP figures



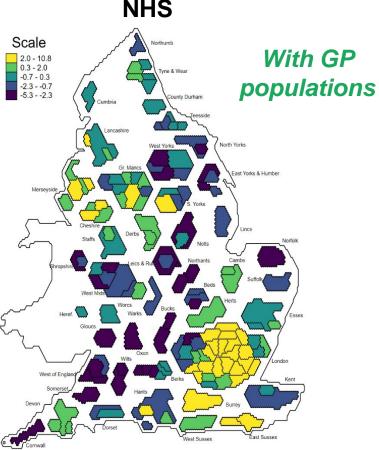
NHS funding per capita: comparison of ONS- and GP-derived estimates

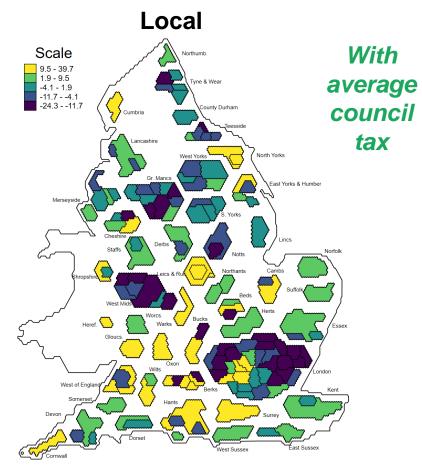


How close are relative levels of funding and





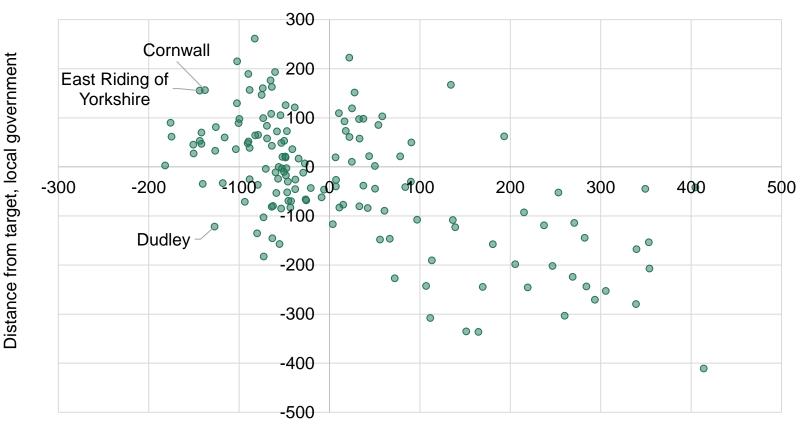




Source: Ogden et al (2023).

Areas relatively under-funded for health are often relatively over-funded for local govt (& vice versa)





Distance from target for NHS, £ per capita

Source: Ogden et al (2023).

Concluding remarks on public spending



- We would suggest some combination of the following actions on public service funding
 - Revised and updated assessments of spending needs for local government, public health, police and potentially schools
 - Improvements in data not least on population figures
 - Use these in a transparent system, where the weight government is placing on needs versus other factors is clear
 - Potentially greater flexibility for local areas to move funding between services, and to vary locally-generated revenues
- Levelling up policy and funding is also in need of reform
 - Updating inherited EU funding allocations
 - Aligning investment strategy with Levelling Up white paper's subregional strategy



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