

**Inequality**

The IFS Deaton Review

# **Catching up or falling behind? Geographical inequalities in the UK and how they have changed in recent years**

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An IFS initiative funded by the Nuffield Foundation

 **IFS** Institute for  
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## Executive summary

The COVID-19 crisis has brought to the fore increasing concerns about inequalities not only between different population groups – such as the gap between the rich and poor, young and old, and different ethnic groups – but also between people living in different *places*. Even prior to the crisis though, there was a sense that the UK is not only a highly geographically unequal country, but also an *increasingly* geographically unequal one.

Such concerns are of significant political import. The Johnson government has made ‘levelling up’ the economy, living standards and life chances across the country a mantra, and has announced a review of guidance for infrastructure investment aimed at increasing the proportion going to the Midlands and North of England.

But just how geographically unequal is the UK? Is it true that these inequalities have been getting worse? Are there particular regions or types of places that have been doing particularly well or poorly? And what risks of widening and opportunities for narrowing these gaps might the COVID-19 crisis bring?

Focusing on productivity, earnings and household incomes, this report finds that:

### Geographical inequality in incomes is much lower after accounting for variation in housing costs

- Productivity and earnings in London are a third to a half higher than the UK average – although part of the benefit of this goes to commuters working in London but living in the East and South East of England. Wales has the lowest productivity and earnings, approximately 15% below the UK average and around 40% below London.
- The picture for household incomes depends on whether they are measured before housing costs (BHC) or after housing costs (AHC). Measured BHC, median household income in London is around 14% higher than the UK average, but measured AHC it is only 1% higher. Measured AHC, median household income varies between 9% above the UK average in the South East of England to 7% below it in the North East of England.
- Inequality is far higher within London than in any other part of the UK, with London over-represented at both the bottom and the top of the income distribution nationally. Measured AHC, 28% of Londoners live in poverty, compared with 22% across the UK as a whole; and yet 16% of Londoners are in the top 10% of the national income distribution.
- AHC poverty rates in most lower-income regions are only a little higher than the UK average – 23% in Wales and 24% in the North East, for example – and are actually below the UK average in Northern Ireland, at 19%. But households with high incomes are significantly under-represented: 6% or less make it into the top 10% of the income distribution in all three of these regions. In other words, it is having few households with very high income levels, rather than lots of households with very low incomes, that characterises the ‘poorer’ regions of the UK.

### Regional inequality is not increasing for incomes, but it is for wealth

- Median household income BHC in London has grown at roughly the same rate since 2002 as in the rest of the UK: 11% compared with 12%. And it has actually grown faster in the period since 2007, despite larger falls in average earnings among working Londoners since then: median full-time earnings for workers in London are down 5.0% versus 2.6% in the rest of the country. This reflects particularly strong growth in employment in the capital: up 5.3 percentage points in London compared with 2.7 percentage points in the rest of the UK post 2007. However, increasing housing costs mean that median household *AHC* income has grown by just 6% in London since the early 2000s, compared with 13% in the rest of the UK (and this pattern is

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evident both before and after the late 2000s recession). More generally, regional differences in median AHC incomes across the UK have narrowed since 2002.

- This reflects two trends: the fact that more households rent their home in London than in the rest of the country; and particularly large increases in property prices and rents in London (and surrounding areas). A large share of renters means that middle-income Londoners have not benefited as much from falls in mortgage interest rates as in the rest of the country. Rapid increases in property prices mean Londoners who do take out a mortgage have to take out increasingly bigger ones compared with the rest of the country. And faster increases in rents mean the share of income that rent accounts for has increased relative to the rest of the country.
- On the other hand, the increasing divergence in property values around the country has contributed to an increase in wealth inequality between regions. Mean property and financial wealth (excluding the value of accrued private pensions) increased by 150% in London in the ten years to 2016–18, compared with 50% across Great Britain as a whole and less than 20% in most of the Midlands and North of England, according to the Wealth and Assets Survey. Median property wealth is estimated to have increased by almost 180% in London and almost 50% in the South East over the same period, but to have fallen in most of the Midlands and the North.

### Local inequalities are significant, especially within London & the South

- Inequalities between local authorities (LAs) within regions are even larger than inequalities between regions, and this is especially true in the South of England. For example, median full-time earnings are 53% above the UK average in Kensington & Chelsea in West London and 3% below it in Barking & Dagenham in East London. Within the East and South East of England, they are much higher in well-to-do commuter areas such as Brentwood and South Bucks than in areas further from London such as North Norfolk and Hastings. Median full-time earnings in the latter are 16% and 19% below the UK median, respectively, despite being in ‘high-wage’ regions.
- Variation between LAs is lower in the North and Midlands, but still not insignificant. As in the South, the areas with the highest earnings tend to be commuter areas for major cities including Trafford, which neighbours Manchester, and Solihull, next to Birmingham. Median full-time earnings in these LAs are 11% and 14% above the UK median, for example.
- LA-level inequality in mean and median earnings has fallen somewhat since the late 2000s recession. This likely reflects falls in earnings at the top of the earnings distribution dragging down earnings in LAs with relatively high earnings levels, and increases in minimum wage levels (including via the introduction of the National Living Wage) pushing up earnings more in LAs with relatively low earnings levels.

### Former industrial towns in the North and Midlands and coastal towns have not been falling further behind – but are poorer

- Despite concerns about the performance of towns and the countryside relative to cities, mean full-time earnings and household incomes are higher and, if anything, have grown faster outside cities than inside them since the early 2000s, especially in the North and Midlands.
- LAs covering former industrial towns in the North and Midlands have lower earnings than LAs covering other parts of these regions, and LAs covering coastal towns have lower earnings than other LAs. The latter gap is lower than in the early 2000s, but these types of places have not made up for the declines in their fortunes seen in the last quarter of the 20<sup>th</sup> century.

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## What explains growing concerns about geographical inequalities?

Thus, while for earnings and incomes there are big differences between different regions and especially LAs, these differences have been falling somewhat since the early 2000s. This begs the question: why have concerns about geographical inequality come to the fore in the last few years? There are many possible reasons, but several stand out.

First is that recent small falls in geographical inequality in earnings have done little to undo the bigger increases that took place in the last quarter of the 20<sup>th</sup> century: many places are still living with the legacy of deindustrialisation. Second is that, more generally, earnings and incomes have stagnated since the late 2000s recession, and this may have made geographical inequalities more salient. Third is that headline figures on productivity, earnings and household incomes may be missing underlying trends and other important aspects of inequality that people care about. The flip side of the increases in housing costs in London and surrounding regions, pulling down AHC incomes, is an increase in property values and wealth. And there is evidence that inequalities in health, education and social mobility have grown. These are issues that we will explore more as the IFS Deaton Review progresses.

It is also clear that different regions and locales face different issues, and one-size-fits-all policies for tackling geographical inequalities would be inappropriate. In London and surrounding areas, the big challenge is high housing costs, which take up a large fraction of income, especially for poorer households. Elsewhere, low productivity and a paucity of high-paying jobs seem more of a concern. Understanding the factors driving these issues and how they could be tackled is therefore vital.

## The COVID-19 crisis poses risks but also opportunities

It will also be important to monitor the evolving impact of the COVID-19 crisis on geographical inequalities. Differences in economic structures and reliance on different modes of transport mean differing degrees of exposure to the economic effects of the acute phase of the crisis. In particular, both rural and coastal areas – often reliant on the hospitality industry – and the centres of major cities – often reliant on public transport – look exposed to particular economic risks. How these risks will crystallise and persist, though, is as yet unclear, and there could be opportunities as well as challenges. In particular, an increase in remote working could reduce the pull of London for the highest-productivity and highest-paid jobs and workers, and increase access to economic opportunities in more peripheral areas.

Thus, as the government seeks to turn ‘levelling up’ from a soundbite into actionable policy, it will have to carefully consider how to respond to the evolving impacts of COVID-19, as well as pay heed to the pre-existing differences in the challenges facing different parts of the country.

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# 1. Introduction

The COVID-19 crisis has brought to the fore increasing concerns about inequalities not only between people – such as the gap between the rich and poor, young and old, and different ethnic groups – but also between the *places* people live. Even prior to the crisis though, there was a sense that not only is the UK a highly geographically unequal country, but also it is an *increasingly* geographically unequal one: that the North is falling behind the South, that towns and rural areas are struggling relative to cities, and that London is storming ahead of everywhere else.

Such concerns – which follow longer-standing concerns about a north/south divide in the UK – are of significant political import. Dissatisfaction in ‘left-behind’ places has been suggested as one of the factors underlying the vote to leave the EU in 2016.<sup>1</sup> More recently, the Johnson government has made ‘levelling up’ the economy, living standards and life chances across the country a mantra. It has announced a review of the rules for deciding which public investments go ahead, with the intention of increasing the share going to areas outside of London and the South East of England. And the upcoming Spending Review is expected to contain a series of policies and announcements specifically focused on improving economic performance in the North and Midlands of England.

But just how geographically unequal is the UK? Is it true that these inequalities have been growing? And are there particular regions or types of places that have been doing particularly well or poorly? These are important questions, as the first stage of addressing any problem is working out the nature and the scale of the problem. Focusing on productivity, earnings and household incomes, it is these questions that are the subject of this report.

The rest of the report proceeds as follows. Section 2 looks at how measures of economic output, productivity, earnings and household incomes vary regionally, and how this has changed since the early 2000s. Mindful that such analysis might mask important inequalities and trends *within* regions, Section 3 then looks at variation in these measures at a local authority (LA) level, and examines whether there are particular types of places where earnings and household incomes have done especially well or especially poorly. Section 4 concludes and identifies several areas for further exploration as part of the IFS Deaton Review – including looking at how other very important dimensions of geographical inequality (such as in health, education and social mobility) have been changing and interact with inequality in productivity, earnings, incomes and wealth. It also draws on recent research at IFS to briefly discuss the potential impacts of the COVID-19 crisis on geographic economic inequalities.

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<sup>1</sup> See, for example, Goodwin and Heath (2016) and Shafique (2016).

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## 2. Regional economic inequality

We start by looking at how our indicators of economic performance and living standards vary across the 12 official regions of the UK. This includes nine regions in England, as well as Northern Ireland, Scotland and Wales.

### Looking at GVA per person gives a misleading impression of the scale of London's economic strength

The first measure we look at is gross value added (GVA) per person, which measures the value of economic output produced in an area, divided by the population living in that area. It provides a measure of the extent to which economic activity is concentrated in particular regions, and has been perhaps the most cited measure of geographical economic inequality. It is also similar to the measure – gross domestic product (GDP) per person – used in the calculations of how much EU regional development funding different regions should get.<sup>2</sup>

The first column of Figure 1 shows that **GVA per person** in London in 2018 was around 1.8 times the average for the UK as a whole and almost 2.5 times the level in the North East of England, the region with the lowest GVA per person (at 72% of the UK average). The only other region with GVA per person higher than the UK average was the South East (at 106% of the average), suggesting not only very significant inequalities between regions, but also that London's economic performance far outstrips the rest of the country.

However, because this measure is based on dividing economic output in an area by its *resident* population, it can be significantly affected by commuter flows between areas. In particular, London's very high GVA per person partly reflects the large inflows of commuters from surrounding regions, making GVA per resident a poor indicator of differences in productivity – for example, output per worker or per hour worked – between London and the rest of the country.<sup>3</sup> Moreover, when thinking about how the income available to households varies around the country, a range of other factors such as differences between where people work and live, differences in the cost of living, and the effect of the direct tax and benefit system come into play.

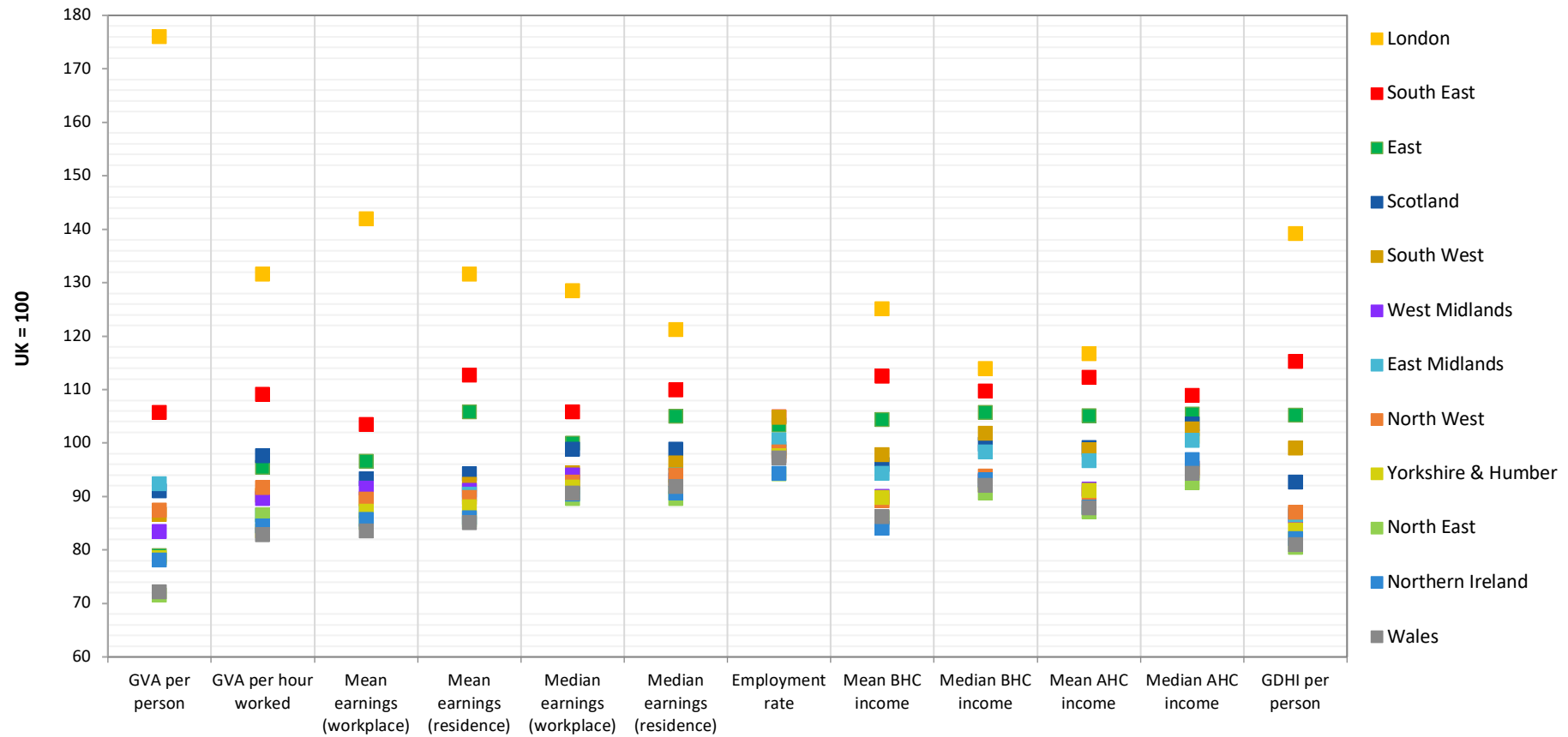
The rest of Figure 1 therefore looks at how other indicators of regional economic performance and household incomes vary across the country.

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<sup>2</sup> The difference between GVA and GDP is that the former excludes taxes paid on products and includes subsidies paid to those producing them. GVA can therefore be considered a 'net' version of GDP, measuring the income generated by production in an area, net of indirect taxes and subsidies. Both are measured gross of direct taxes and benefits, however,

<sup>3</sup> The effect of commuter flows on GVA per person is even more pronounced when drilling down to a very local level. For example, the fact that GVA per person for Westminster in central London in 2018 was 932% of the UK average mostly reflects the fact that large numbers of people from outside the borough commute to its offices and other workplaces. Conversely, the fact that a large share of people living in nearby Wandsworth commute to other areas (such as Westminster) explains why GVA per person there was just 83% of the UK average in the same year. The figures tell us important information about the location of economic activity, but can give a very misleading impression about how productivity and prosperity vary. In no meaningful sense is Westminster over 11 times better off than Wandsworth. To avoid such misleading comparisons, we therefore exclude GVA per person from our indicators when looking at sub-regional inequalities in Section 3.

**Figure 1. Output, productivity, earnings and household incomes by region**



Note: Earnings data are from 2019 and are for full-time workers. GVA per person, GVA per hour worked and GDHI data are from 2018, as are employment rate data, which are for those aged 16–64. AHC and BHC incomes are the average for 2016–17, 2017–18 and 2018–19. The patterns would be the same if shown for the latest year for which all variables are available (i.e. 2018).

Source: Authors' calculations using Office for National Statistics (2019a, 2019b, 2019c, 2020a, 2020b, 2020c) and Department for Work and Pensions (2020).



## Even so, productivity and earnings are substantially higher in London than in the rest of the country ...

While productivity, measured by **GVA per hour worked**, varies less than GVA per person, it still varies significantly. Productivity in London is estimated to have been around 1.3 times the UK average in 2018, around 1.6 times higher than in Wales where it was 83% of the UK average. In other words, for every 10 units of output produced in an hour by workers in Wales, a worker in London produces almost 16 units.

Earnings for full-time workers are also significantly higher in London than in the rest of the country – both for those working there and for those living there. For example, **mean full-time earnings** are 142% of the UK average for those working in the capital and 132% of the average for those living in the capital. The equivalent figures for **median full-time earnings** are 128% and 121% of the UK average.

That those working in London generally earn more than those living in London reflects that it is more common to commute for higher-paid jobs than for lower-paid ones. The flip side is that the earnings of those living in most other regions are typically higher than the earnings of those working in those regions. This is especially true for the South East (where mean full-time earnings are 113% of the UK average for residents versus 103% for those working in the region) and the East (106% versus 97%), where most of the high-earning commuters into London live.

The fact that the difference in mean wages between London and the rest of the country is larger than the difference in median wages reflects that the biggest difference in earnings is at the top of the earnings distribution. High-paying jobs and the people who do them are particularly concentrated in London. For example, while almost 30% of Londoners working full time earn more than £50,000 a year, only around 10% in the North East of England, Northern Ireland and Wales do, as shown in Table 1 (which shows the 70<sup>th</sup>, 80<sup>th</sup> and 90<sup>th</sup> percentiles of the full-time earnings distribution for each region).

**Table 1. 70<sup>th</sup>, 80<sup>th</sup> and 90<sup>th</sup> percentiles of full-time earnings distributions, by region**

Region	70 <sup>th</sup> percentile	80 <sup>th</sup> percentile	90 <sup>th</sup> percentile
London	£49,240	£60,000	£86,473
South East	£43,681	£52,186	£71,161
East of England	£41,821	£49,688	£66,028
Scotland	£38,117	£43,933	£55,573
South West	£37,961	£43,619	£55,683
North West	£37,143	£42,273	£53,988
West Midlands	£36,978	£43,351	£54,384
East Midlands	£36,839	£43,092	£55,000
Wales	£36,290	£41,177	£49,945
Northern Ireland	£35,979	£40,821	£50,142
Yorkshire and Humber	£35,581	£41,846	£51,892
North East	£35,233	£40,557	£50,390
United Kingdom	£39,591	£46,485	£60,890

Note: Percentiles of earnings distribution, full time, residence basis. Ranked according to 70<sup>th</sup> percentile (highest to lowest).

Source: Office for National Statistics, 2019a.

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Figure 1 also shows clearly that there are differences in productivity and earnings between the other regions of the UK. Both are higher in the South East and East of England, as well as Scotland, than in Northern Ireland, Wales, and the Midlands, North and South West of England. These gaps are significantly smaller than for overall GVA per person though – reflecting the fact that differences in GVA per person reflect differences in hours worked and employment, as well as differences in productivity and earnings.

### ... but incomes after housing costs vary less across the country and are close to the UK average in London

Of course, earnings among those working matter greatly for household incomes – but so do many other things. One is the employment rate, which varies by less than earnings but even so ranges from 94% of the UK average to 105% of the UK average in 2018 for those aged 16–64. There is a positive correlation between earnings and employment rates, so variation in employment amplifies inequality in earnings – although the employment rate in London, where earnings are highest, is slightly below the UK average.<sup>4</sup>

In addition, the amount households receive from other sources of income (such as from self-employment or partnerships, dividends, property, pensions and interest on savings), and taxes and benefits, affect their net incomes. Importantly, what that net income will pay for in different parts of the country depends on how the cost of goods and services varies – most notably for housing, where differences in costs are particularly stark.

Household survey data, such as the Family Resources Survey, provide a comprehensive and generally reliable source of information on these different sources of income for households in different regions. They can be used to look at how incomes at different points of the income distribution – including the median as well as the mean – vary, although figures for both the very top and the very bottom are subject to greater uncertainty and a degree of under-reporting.<sup>5</sup> Such data also include information on housing costs, allowing us to look at incomes both before and after housing costs have been deducted. This means we can account for one of the biggest drivers of differences in the cost of living between regions – although, unfortunately, data on how the cost of other goods and services varies by region are not available, except for a few specific years.<sup>6</sup>

Using such survey data, Figure 1 shows that the scale of geographical inequalities in income, and the position of London in particular, depend crucially on whether incomes are measured *before* housing costs (BHC) or *after* housing costs (AHC), and on which part of the income distribution one looks at.

- **Mean BHC income** varies by more across regions than **median BHC income**. For example, mean BHC income ranges from 125% of the UK average in London to 84% of the average in Northern Ireland. In contrast, median BHC income ranges from 114% of the UK average in London to 91% of the average in the North East of England. In other words, differences in mean income overstate differences in incomes for more typical 'middle-income' households in different regions of the country.
- The same pattern can be seen for AHC incomes. However, AHC incomes are less geographically unequal than BHC incomes. For example, **mean AHC income** ranges from 117% of the UK average in London to 87% of the average in the North East of England. **Median AHC income** ranges from just 109% of the UK average in the South East of England to 93% of the average in the North East of England. And it is notable that, measured AHC, median income in London is barely higher than the UK average (101%).

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<sup>4</sup> The employment rate among all adults aged 16 or over in London is the highest in the UK though, driven by the fact that a relatively low fraction of Londoners are over the pension age. Differences in age structures between different regions and types of local authority are discussed further in Section 4.

<sup>5</sup> Office for National Statistics, 2019d.

<sup>6</sup> Office for National Statistics (2011a) and Office for National Statistics (2018a) provide estimates for regional differences in the cost of goods and services other than housing in 2010 and 2016, for example.

This reflects the fact that high property values and rents, and a particularly large share of households renting rather than owning their own homes, mean that housing costs take up a substantially larger share of incomes in London than in the UK as a whole. The average London rent is estimated to be 1.6 times the average rent for the UK as a whole, for example, and the average mortgage interest payment 1.7 times the average for the UK as a whole. Half of households in London rent, compared with 36% in the UK as a whole and just 31% in the South East of England.<sup>7</sup>

As with earnings, Table 2 shows that AHC incomes *within* London are much more unequal than in other regions. London has both the highest poverty rate if incomes are measured AHC, and the highest share of households in the top 10% of the income distribution. In other words, it is home to more than its share of both poor and high-income households. As a result, the ratio between the 10<sup>th</sup> and 90<sup>th</sup> percentiles of the AHC income distribution (the 90/10 ratio) is 8.7 in London, compared with 5.2 for the UK as a whole and less than 5 in all other regions bar the South East and East of England.

Conversely, AHC poverty rates in 'poor' regions such as Wales and the North East (23% and 24%, respectively) are only a little higher than the UK average (22%). And Northern Ireland has the lowest rate of AHC poverty, at just under 19%, despite having the third lowest mean income (with only Wales and the North East being lower). But households with high incomes are significantly under-represented in each of these regions: 6% or less make it into the top 10% of the AHC income distribution. In other words, it is having few households with very high income levels, rather than lots of households with very low incomes, that characterises the 'poor' regions of the UK.

**Table 2. Household AHC income statistics by region (2016–17 to 2018–19)**

Region	Poverty rate	Share of households in top 10% of income distribution	90/10 ratio
South East	19.3%	14.2%	5.9
East of England	19.5%	12.5%	5.2
Scotland	19.2%	9.2%	4.7
South West	19.2%	8.9%	4.4
London	28.2%	15.7%	8.7
East Midlands	19.2%	8.7%	4.6
Northern Ireland	19.0%	5.5%	3.7
North West	22.3%	7.3%	4.6
West Midlands	23.7%	6.8%	4.5
Yorkshire and Humber	23.7%	7.1%	4.8
Wales	22.8%	6.2%	4.7
North East	24.1%	5.4%	4.3
United Kingdom	21.9%	10.0%	5.2

Note: Ordered according to median AHC income (highest to lowest).

Source: Authors' calculations using Department for Work and Pensions (2020).

Returning to Figure 1, the last column shows how a measure of household income derived from the macroeconomic National Accounts – **gross disposable household income (GDHI) per person** – varies by region. This differs from the other measures in two main ways. First, rather confusingly, it includes the incomes of what are termed non-profit institutions serving

<sup>7</sup> Authors' calculations using Department for Work and Pensions (2020).

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households, which includes charities and most universities. Second, as well as being BHC, it also includes the implicit income that owner-occupiers receive by not having to pay rent on the property they live in (termed 'imputed rent'). This is important because, as already discussed, rents are substantially higher in London and surrounding regions than in the Midlands, North, Northern Ireland, Wales and Scotland. Rather than being a bigger cost to households in London as under AHC measures of income, these higher rents are treated as a bigger source of income for households in London under the GDHI measure.

As a result, GDHI per person varies significantly more across regions than survey-based measures of AHC and BHC income. It is highest in London (139% of the UK average), followed by the South East of England (115%), and then the rest of southern England and Scotland. Northern Ireland (82%), Wales (81%) and the North East of England (81%) bring up the rear.

Income from property and investments (including imputed rent) in London is 177% of the UK average, and around 2.85 times the level of the North East of England. In contrast, income from employment (144% of the average) is closer to the average earnings figures discussed earlier. And deductions from income such as income tax, National Insurance and pension contributions of Londoners are almost 1.5 times the UK average.

### Output has been growing more rapidly in London ...

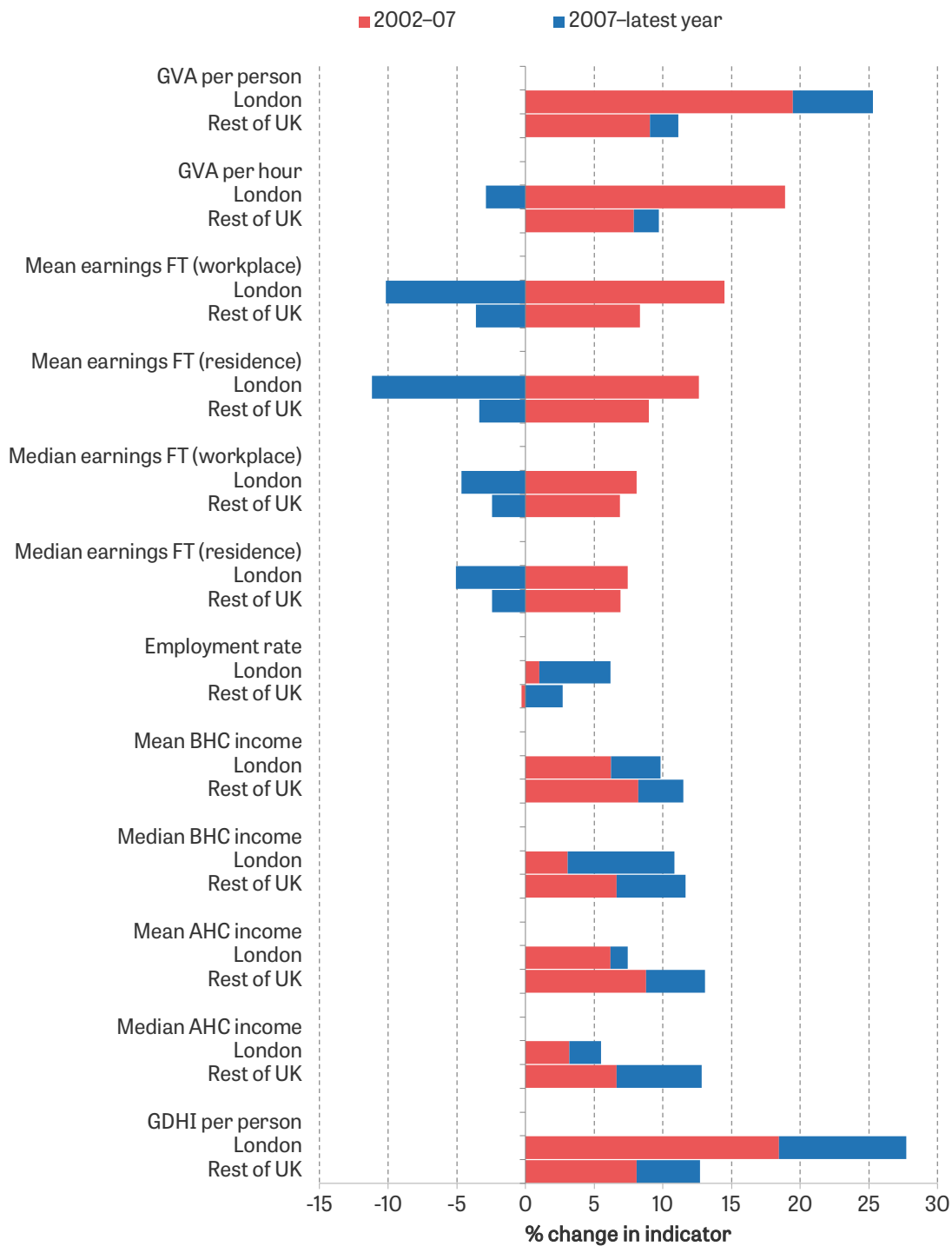
The degree of regional economic inequality therefore depends crucially on which indicator one looks at: inequality in productivity and earnings is much higher than inequality in median AHC incomes, with London in particular having high earnings but also high housing costs, meaning its median AHC income is no higher than the UK average. Is the same true for how regional economic inequality has been changing over time, or are there more consistent patterns?

Figure 2 shows how each of the measures has changed since 2002, focusing on the difference between London and the rest of the UK.<sup>8</sup> It shows that while **GVA per person** in London has grown almost 2.3 times as much since 2002 (25% as opposed to 11%), productivity as measured by **GVA per hour** worked has grown by approximately 1.6 times as much (16% as opposed to 10%). In other words, higher growth in output per person in London has been due to a significant extent to increases in the number of hours worked in London – which turn out to be due to both faster growth in the number of jobs and an increase in hours of work relative to the rest of the country. Moreover, while growth in GVA per person in the capital has outpaced the rest of the UK both before and since the late 2000s recession, productivity has fallen in the capital since 2007. This has allowed the rest of the UK to catch up some of the gap in productivity growth that occurred during the early-to-mid 2000s.

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<sup>8</sup> Differences in growth rates between the other regions of the UK are generally less stark.

**Figure 2. Change in output, productivity, earnings and household incomes**



Note: GVA has been adjusted for inflation using the GDP deflator; earnings and GDHI have been adjusted using the CPIH measure of inflation; and BHC and AHC incomes have been adjusted using appropriate variants of this. Changes in earnings are for the period 2002 to 2019, and changes in BHC and AHC incomes are for the period between the years 2001-02 to 2003-04 and the years 2016-17 to 2018-19. All changes use 2002 as the base year.

Source: As for Figure 1.

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## ... but earnings and after-housing-costs incomes have not

It is also clear that while full-time earnings were growing faster in London on both a workplace and a residence basis in the years leading up to the late 2000s recession, the real-terms fall in earnings since 2007 has been larger in London than in the rest of the country.

**Mean full-time earnings** have fallen around three times more for those living and working in London than for those living and working in the rest of the country. As a result, mean earnings of those working in London have grown at broadly the same pace as for the rest of the country since 2002 (4.3% versus 4.8%). And the mean earnings of those living in London have barely grown (1.5%) over the same period, while the mean earnings of those living elsewhere have grown by 5.6% since 2002. On a residence basis, recent falls in regional earnings inequality have therefore more than undone increases in inequality earlier in the 2000s.

**Median full-time earnings** have also performed less well in London than in the rest of the country, although the pattern is less stark. For example, the median earnings of London residents working full time have fallen by around twice as much since 2007 as for those living in the rest of the country. As a result, median earnings for Londoners are only 2.4% higher than in 2002, compared with 4.5% for the rest of the country.

In contrast, employment has increased by more in London than in the rest of the UK: up 5.2 percentage points, compared with 2.7 percentage points elsewhere, since the recession.

Trends in household income vary significantly according to which measure we look at:

- **Mean BHC income** has grown by slightly less in London than in the rest of the country since 2002 – 9.8% versus 11.5%. **Median BHC income** has grown by broadly the same rate in London (11%) as in the rest of the UK (12%) and, perhaps surprisingly in light of trends for mean BHC income, has grown by more in London than in the rest of the UK since 2007. This likely reflects the strong growth in employment in London, which has boosted median income by more than mean income, and the well-documented poorer performance of incomes at the top of the income distribution.
- **Both mean and median AHC incomes**, though, have grown by less in London since 2002 than in the rest of the UK: 7% versus 13% in the case of mean income and 6% versus 13% in the case of median income. This trend was evident before 2007 and has continued since then.
- On the other hand, **GDHI per person** has grown much more rapidly in London than in the rest of the UK – 28% versus 13% since 2002 – with this trend evident both before and after the late 2000s recession. What explains this?

The most notable difference between these measures is their treatment of housing. The names of the BHC and AHC measures of income make clear that they treat housing costs differently. And, as discussed earlier, GDHI per person includes the implicit income that owner-occupiers receive from not having to pay rent on their housing: *both* other measures exclude this.

These differences are important because property values and rents in London have risen relative to the rest of the country, and a larger share of Londoners rent their homes than in the rest of the country. For example, between 2005 and the first half of 2020, private sector rents increased by 43% (in cash terms) in London, compared with 34% in the South East of England and just 19% and 20% respectively in the North East and North West of England.<sup>9</sup> The average amount of mortgage interest paid by Londoners with mortgages has increased 22% since the early 2000s, despite large reductions in interest rates. This compares with a fall of 5% in Northern Ireland and an increase of 8% for the UK as a whole. The fact that housing costs in London were higher to start with has amplified the effects of these trends on both AHC income and GDHI.

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<sup>9</sup> Office for National Statistics, 2020d. Note that the index for private sector rents series starts in 2005.



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For AHC income, increases in Londoners' housing costs relative to the rest of the country have acted to *push down* median income in the capital. However, increases in rents in London have pushed up GDHI relative to the rest of the country because the implicit income that owner-occupiers receive from not having to pay rent on their properties has increased. Looking at the sub-components of GDHI per person, income from investments and property (including imputed rents) increased by 20% in real terms between 2002 and 2018 for London, but fell in all other regions of the UK. This has been a key reason for GDHI in London outperforming that in the rest of the country, given that trends for income from employment have diverged less.<sup>10</sup>

More generally, regional inequality in mean and median BHC and AHC income has declined since the early 2000s as incomes outside the South and East of England have grown slightly more quickly. For example, median BHC income in the South East of England has fallen from 116% of the UK average in the early 2000s to 110% in the period 2016–17 to 2018–19, with its median AHC income falling from 114% to 109% of the average. Conversely, the North East of England has seen its median BHC income increase from 89% to 91% of the UK average, and its median AHC income increase from 91% to 93% of the average.<sup>11</sup>

### There is a clear increase in regional inequalities in wealth

The particularly large increases in property values in London and, to some extent, neighbouring parts of South and East England have meant that inequality in wealth has notably increased though.

Figure 3 shows that in the period 2006–08, mean household property and financial wealth (excluding the value of accrued private pension rights) was lower in London than in the South East of England and around 120% of the average for Great Britain: £223,000 as opposed to £186,000 according to the Wealth and Assets Survey.<sup>12</sup> However, by 2016–18, mean household property and financial wealth in London had increased by 150%, compared with 50% across Great Britain as a whole and less than 20% in most of the Midlands and North of England. As a result, mean household wealth in London (£560,000) was over 200% of the average for Great Britain (£278,000).

While means can be skewed by outliers, the figure also shows that median property wealth has followed a similar trend. Median property wealth is estimated to have increased by almost 180% in London and almost 50% in the South East over the same period, but to have fallen in most of the Midlands and the North.

As a result, median property wealth in London has increased from £67,000 to £185,000, or from 71% to 176% of the GB average. Median property wealth in the South East has also increased, from £148,000 to £215,000, or from 156% to 205% of the GB average. But median property wealth in the North East and North West, which was higher than in London in the period 2006–08, has fallen from £71,000 (75% of the GB average) to £46,000 (44%) and from £80,000 (84%) to £78,000 (74%), respectively.

Regional trends in wealth therefore differ significantly from trends in household incomes. While the poorer Midlands and North of England (and Wales) appear to have slightly narrowed the median income gap with the richer South and East of England (including London), especially when measuring incomes AHC, they have fallen further behind in terms of wealth. Moreover, the relative increase in property prices and rents in London may have made it harder for those outside the capital (and especially those in the Midlands and North) to move there, perhaps making the highest-paid jobs that are concentrated there seem further out of reach. Exploring whether there are differences in trends in regional inequalities in opportunities to access high-paid jobs in other regions is therefore something warranting further exploration.

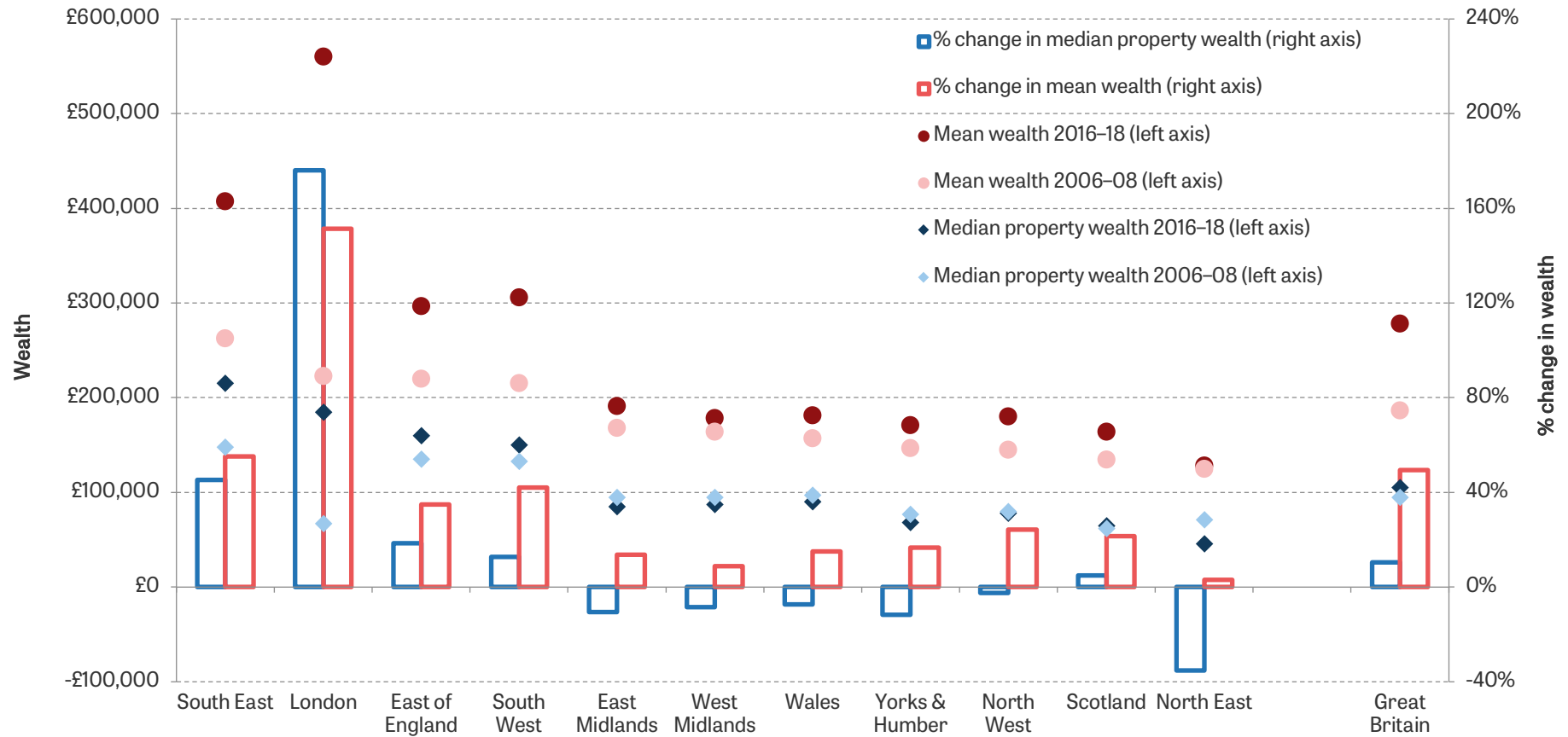
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<sup>10</sup> However, the part of GDHI per person attributed to self-employment income has increased by 52% in real terms in London, while it has increased by no more than 21% in any other region. The reason for this is less clear.

<sup>11</sup> Inequality in GDHI has increased somewhat, with the aforementioned differential trends in imputed rental income a key factor.

<sup>12</sup> Office for National Statistics, 2019e. Data on wealth and assets were not collected prior to 2006, unfortunately.

**Figure 3. Wealth (left axis) and percentage change in wealth (right axis) by region, 2006–08 to 2016–18**



Note: Ordered from highest to lowest according to initial mean household wealth. Mean wealth is mean household property and financial wealth (excluding the value of accrued private pension rights).

Source: Authors' calculations using Office for National Statistics (2019e).



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## 3. Inequality between local areas

While differences between broad geographic regions – such as between the North and South – remain an important part of the debate about geographical inequalities, there has been a growing focus on the plight of more localised areas – or types of localities across the country, such as coastal or ex-industrial towns. This recognises that regions are not homogeneous entities and can contain pockets of both deprivation and affluence, as well as both areas that are struggling and areas that are growing rapidly. In this section, we therefore look at inequality and trends in inequality between local authority (LA) areas. In doing so, it is important to note that LAs can have very different populations: for example, Birmingham has a population of over 1.1 million, while Rutland has a population of less than 40,000. Especially within the larger LAs, there is likely to be significant variation in earnings and incomes for people within them.<sup>13</sup>

We first look at inequality between LAs within broad regions, and the extent to which it has been growing or shrinking over time. We then examine whether particular *types* of places (such as cities, their suburbs and other areas), irrespective of which part of the country they are in, have been doing particularly well or poorly since the early 2000s.

### Productivity, earnings and incomes vary significantly within regions

The first thing to note is that there is significant variation in productivity, earnings and household incomes between LA areas, and that much of this is *within* regions.

Figure 4 shows, for example, that productivity (as measured by GVA per hour worked in an area) at the LA level varies between 60% of the UK average (in Powys in Wales) and 181% of the UK average (in Hounslow in London). Clear regional differences are evident: productivity is at or above the UK average in all bar three LA areas in London and below the UK average in all bar one LA areas in each of the North East of England, Yorkshire and the Humber, and Wales. But there is also significant variation within many regions:

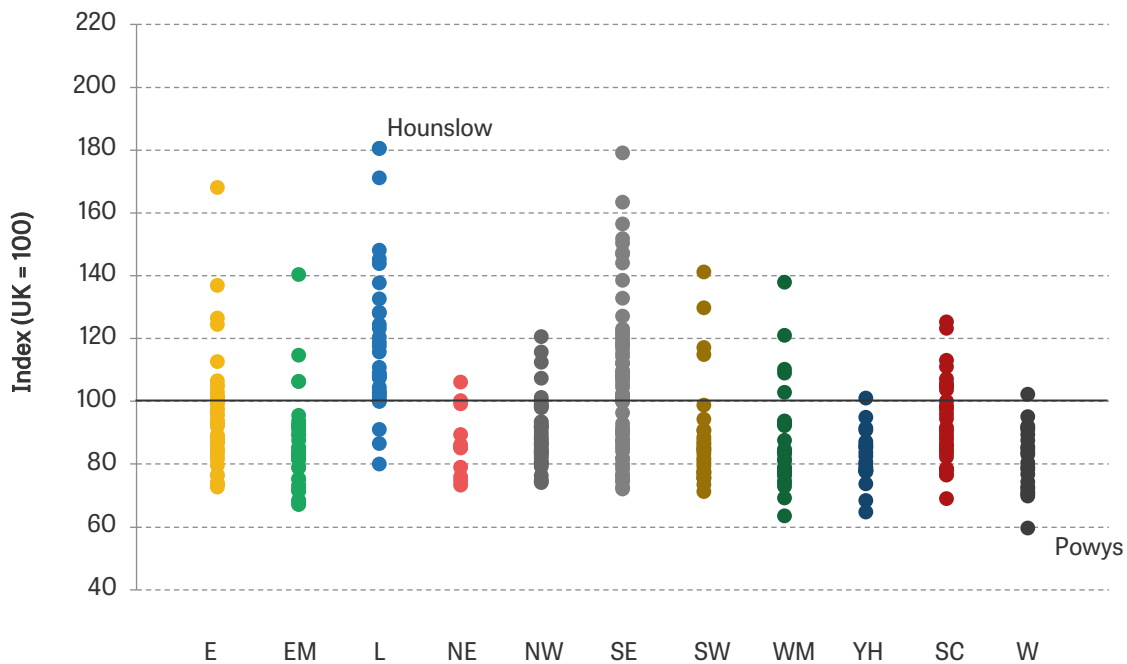
- In London, productivity varies from 80% and 87% of the average in Lewisham and Haringey, respectively, to 181% in Tower Hamlets and Hounslow.
- In the South East, productivity varies from 72% of the UK average in Eastbourne, a seaside town relatively distant from London, to 179% in Runnymede, immediately adjacent to the capital (and Heathrow airport).
- And in the North West, productivity varies from 74% of the UK average in Oldham to 121% in Cheshire East.

Each region therefore contains areas where productivity is substantially above and below the regional average – although sub-regional variation in productivity is much lower in some regions (for example, the North East of England and Yorkshire and the Humber) than the aforementioned examples.

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<sup>13</sup> Estimates of income for small areas within LAs – termed ‘middle layer super output areas’, which have populations averaging 8,000 – are available for the period since 2012, but are not available prior to that. Given our focus on how geographical inequalities have changed over time, we therefore do not examine them.

**Figure 4. Within-region variation in GVA per hour worked (2018)**



Note: E = East, EM = East Midlands, L = London, NE = North East, NW = North West, SE = South East, SW = South West, WM = West Midlands, YH = Yorkshire and the Humber, SC = Scotland, W = Wales.

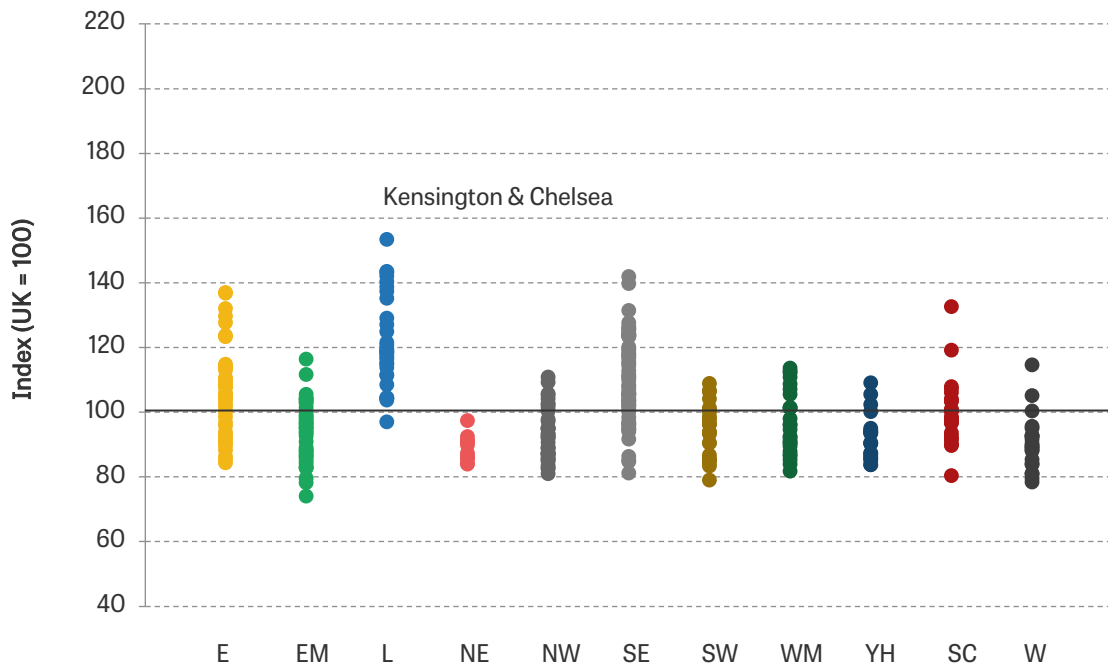
Source: Authors' calculations using Office for National Statistics (2020b).

Figures 5 and 6 show that there is also significant variation in median and mean full-time earnings (measured on a residence basis) across LAs generally, and across LAs within the same region. In particular:

- Median full-time earnings in London vary from 97% of the UK average for people living in Barking & Dagenham to 153% of it for people living in Kensington & Chelsea, and equal or exceed the UK average in all bar one of 31 boroughs.
- Median earnings also vary significantly between LA areas in the East of England (from 84% of the UK average in North Norfolk to 137% in Brentwood), and South East of England (from 81% of the UK average in Hastings to 142% in South Bucks). This partly reflects the fact that some parts of these regions have many residents commuting to (generally high-paying) jobs in London – such as Brentwood and South Bucks.<sup>14</sup> However, commuting to London is more time consuming and costly in parts of these regions that are more distant from London – such as North Norfolk and Hastings – meaning fewer people do so. More generally, median earnings exceed the UK average for over three-quarters of LA areas in the South East and two-thirds in the East.
- LA-level differences are generally smaller outside the South and East, but are not insignificant. For example, the median full-time earnings of residents of Trafford in the North West at 111% of the UK average are around 18% higher than the regional average, and those of Solihull are around 20% higher than the West Midlands average. It is notable that both are commuter areas for the major cities in their regions – Manchester and Birmingham. But median earnings are below the UK average for three-quarters of LAs in the North West and three-fifths in the West Midlands.

<sup>14</sup> It also reflects the fact that LAs in the East and South East are generally geographically smaller than LAs in the Midlands and North of the UK.

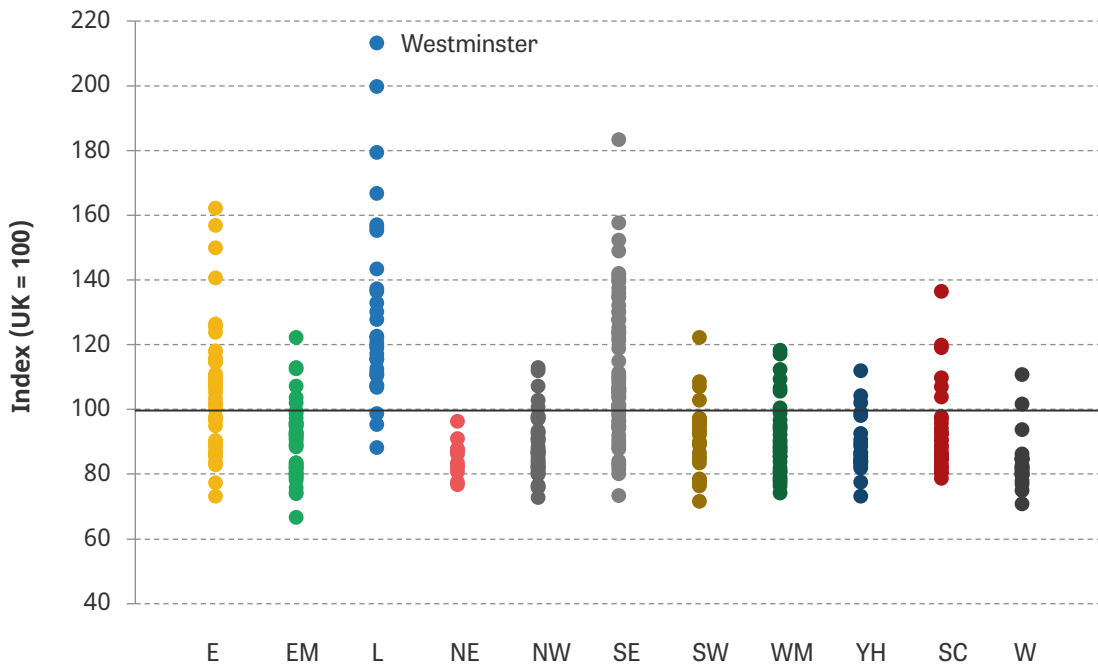
**Figure 5. Within-region variation in residents' median full-time earnings (2019)**



Note: As for Figure 4.

Source: Authors' calculations using Office for National Statistics (2019a). Missing data for some local authorities were extrapolated using the UK-wide growth rate in earnings in 2019 applied to the 2018 value of the corresponding LA. Extrapolating by using the LA's previous-year earnings yields similar results.

**Figure 6. Within-region variation in residents' mean full-time earnings (2019)**



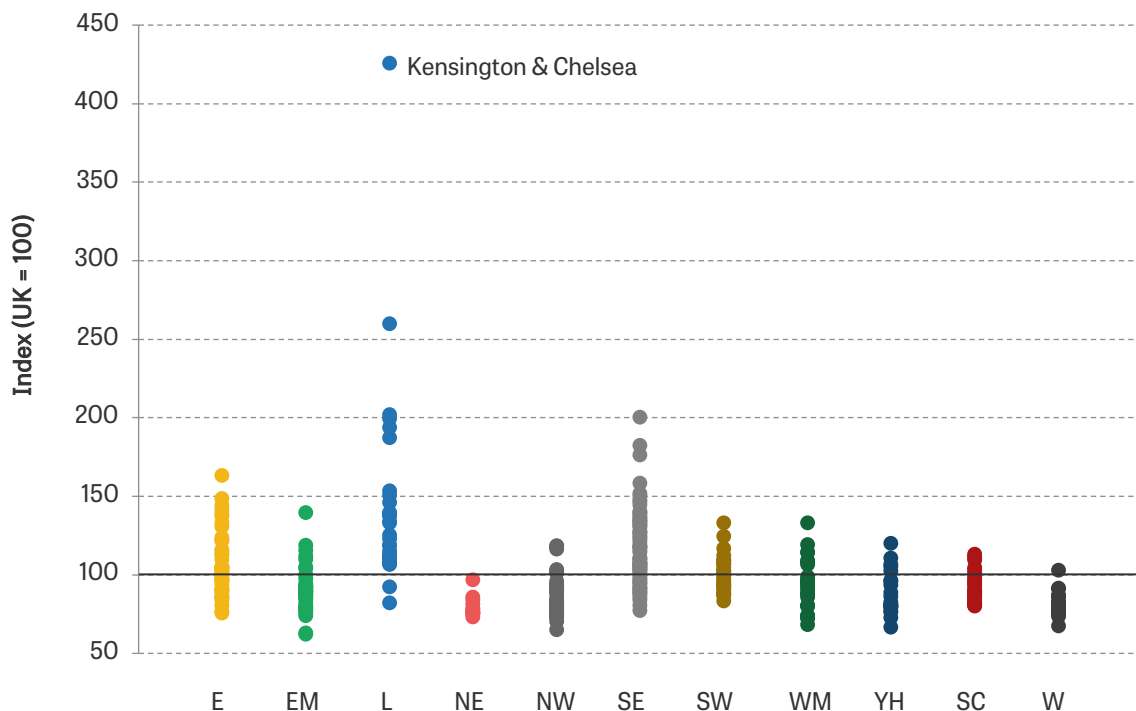
Note: As for Figure 4.

Source: Authors' calculations using Office for National Statistics (2019a).

- Mean full-time earnings vary considerably more across LAs than median full-time earnings, especially in London and the South East. For example, the mean full-time wages of residents of Westminster are 213% of the UK average, while those of Barking & Dagenham are just 88% of the UK average.<sup>15</sup> This reflects the fact that the largest differences between LAs (as with regions) are towards the top of the earnings distributions. High earners are concentrated in more affluent London boroughs and LAs where many people commute to London (and to a lesser extent other major cities such as Birmingham and Manchester), which pulls up the mean earnings of these areas. Median earnings are less sensitive to this, and so the gap between such areas and the rest of the country are smaller for median earnings.

Sample size issues in the Family Resources Survey and other household surveys mean that the only data on household incomes at the LA level that are available on a consistent basis over time are for GDHI per person.<sup>16</sup> As highlighted in the previous section, this measure is BHC and includes imputed rental income for owner-occupiers. It is therefore higher than disposable cash income after housing costs, especially in areas with high property values and hence rents, such as large parts of London and neighbouring areas of the South and East of England. Because property values and rents vary so much at an LA level and are positively correlated with cash income (those living in expensive areas tend to have higher cash incomes), inequality in GDHI will be significantly higher than inequality in either BHC or AHC income.

**Figure 7. Within-region variation in GDHI per person (2018)**



Note: As for Figure 4.

Source: Authors' calculations using Office for National Statistics (2020c).

<sup>15</sup> Note that figures for mean earnings for Kensington & Chelsea are not available for 2019 as the Office for National Statistics has deemed the confidence intervals too wide.

<sup>16</sup> The Office for National Statistics has used the Family Resources Survey and other data to produce estimates of mean BHC and AHC income at the neighbourhood level for three years (2016, 2014 and 2011-12): see Office for National Statistics (2018b). These data come with a significant degree of uncertainty, however, and are not available for the full period under consideration in this report.

Bearing this in mind, Figure 7 shows the following:

- GDHI per person is most variable across LAs in London (from 82% of the UK average in Barking & Dagenham to 426% of it in Kensington & Chelsea) and the South East of England (from 77% in Portsmouth to 200% in South Bucks). Thirty-one out of 33 boroughs in London have GDHI per person above the UK average, as do three-quarters of LAs in the South East of England.
- There is less variation in the North East and Wales, where all LAs with the exception of Monmouthshire have GDHI below the UK average, as well as in Scotland, where around three-quarters have GDHI below the UK average.

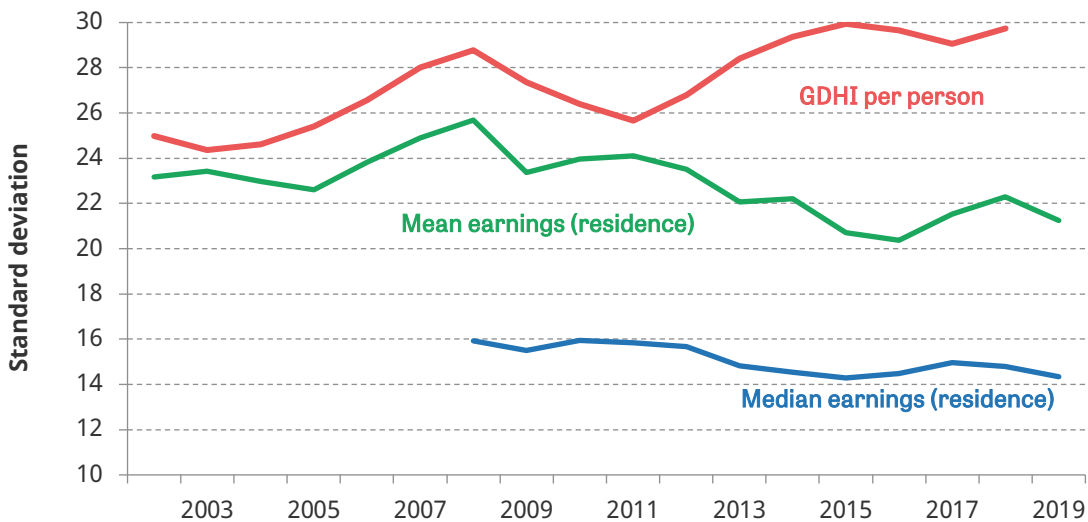
## Inequality between LAs has fallen for earnings but grown for GDHI

Whether inequality between LAs is growing depends on which indicator one looks at. This is illustrated in Figure 8, which shows the standard deviation of LA-level figures for each indicator, after first normalising them (as above) so that the UK average equals 100 in each case.

In line with the regional trends discussed in the previous section, variation in mean earnings grew in the early to mid 2000s but has since fallen and is now somewhat lower than it was in the early 2000s. Consistent LA-level figures for median earnings are only available for the period since 2008 but show a similar small decline in variation across LAs over the last decade or so.

Two factors likely play an important role in this trend. First is that the earnings of those at the top of the earnings distribution have fared worse than average in the years since the late 2000s recession.<sup>17</sup> Because high earners are especially concentrated in LA areas with high mean and median earnings (indeed, this concentration is what drives the high mean earnings in these areas in particular), earnings growth in such areas has been somewhat slower than average. Second, increases in the National Minimum Wage and the introduction of the higher National Living Wage have acted to increase earnings at the bottom of the earnings distribution.<sup>18</sup> These increases have pushed up earnings more where the 'bite' of the minimum wage is greater.

**Figure 8. Standard deviation of residents' earnings and GDHI per person**



Note: Standard deviations are calculated after normalising variables so that the mean for each year is 100.

Source: Authors' calculations using Office for National Statistics (2019a, 2020c).

<sup>17</sup> Cribb et al., 2017.

<sup>18</sup> Cribb, Norris Keiller and Waters, 2018.

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Variation in GDHI per person is higher and has increased over time though. These increases took place during two distinct periods – between 2004 and 2008 and between 2011 and 2015, with a modest fall in between, during and just after the late 2000s recession. It is notable that the two periods of increasing geographical inequality correspond to periods when the property market was especially strong in London and surrounding areas – places where GDHI per person was already significantly higher than in the rest of the UK. And because GDHI includes imputed rental incomes, the increases in the cost of property in London and neighbouring areas in these periods pulled up inequality in GDHI during these periods, even as it likely *reduced* geographic inequality in AHC incomes.

## Have particular types of areas done especially well or badly?

It is possible that underlying the trends in overall inequality between LAs (and between regions), there is significant churn in the position of specific places: that certain types of places have been improving their relative positions, while others have been seeing their relative positions deteriorate.

It has, for example, been suggested that there is a growing divide between thriving cities and struggling towns<sup>19</sup> and between areas inland and on the coast,<sup>20</sup> and that former industrial towns in the Midlands and North of England have been doing especially poorly.<sup>21</sup> Such diagnoses are based on a range of factors including health, education (both levels of education among the population at large and educational attainment of young people), deprivation and demographics. Later work of the IFS Deaton Review will be examining all of these questions. But focusing on the core economic inequalities that are the topic of this report, do we see particular types of places forging ahead and falling behind?

Figures 9 and 10 split LA areas in England into categories based on their degree of urbanity. These categories are inner and outer London boroughs, core cities (which are the eight largest cities in England) and other LAs in their functional urban areas (FUAs), other cities and other LAs in their FUAs, and other LAs in England (which are a mix of outlying towns and rural areas). Each category is further split into 'northern' and 'southern' groups.<sup>22</sup> Figure 9 shows how mean full-time earnings vary across these categories, and how they have changed since 2002 (splitting this into the periods before and after the onset of the late 2000s recession). Figure 10 shows the same information for GDHI per head. These figures show that:

- **Mean earnings** are generally a little higher outside cities than in cities themselves – with the exception of London. For example, the mean full-time earnings of residents of the 'northern' core cities are £32,200, compared with £32,800 for residents of other LAs in their FUAs. The mean full time earnings of residents of the smaller 'northern' cities are £31,200, compared with £33,900 for residents of other LAs in their FUAs. And the mean earnings of residents of the smaller 'southern' cities are £35,300, compared with £38,600 for residents of other LAs in their FUAs.

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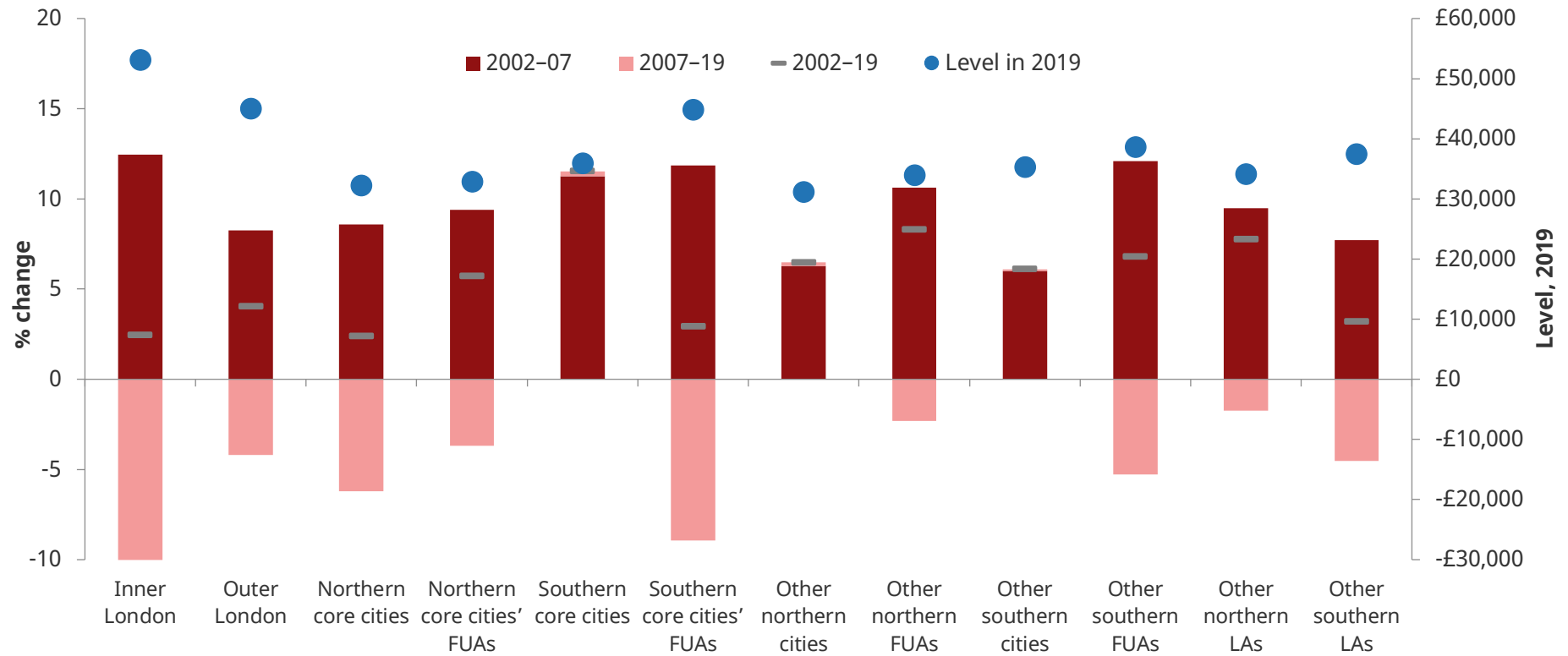
<sup>19</sup> EY Item Club, 2020.

<sup>20</sup> Corfe, 2017.

<sup>21</sup> Beatty and Fothergill, 2018.

<sup>22</sup> The northern group consists of LAs in the East Midlands, North East, North West, West Midlands and Yorkshire & the Humber. The southern group consists of LAs in the East, South East and South West.

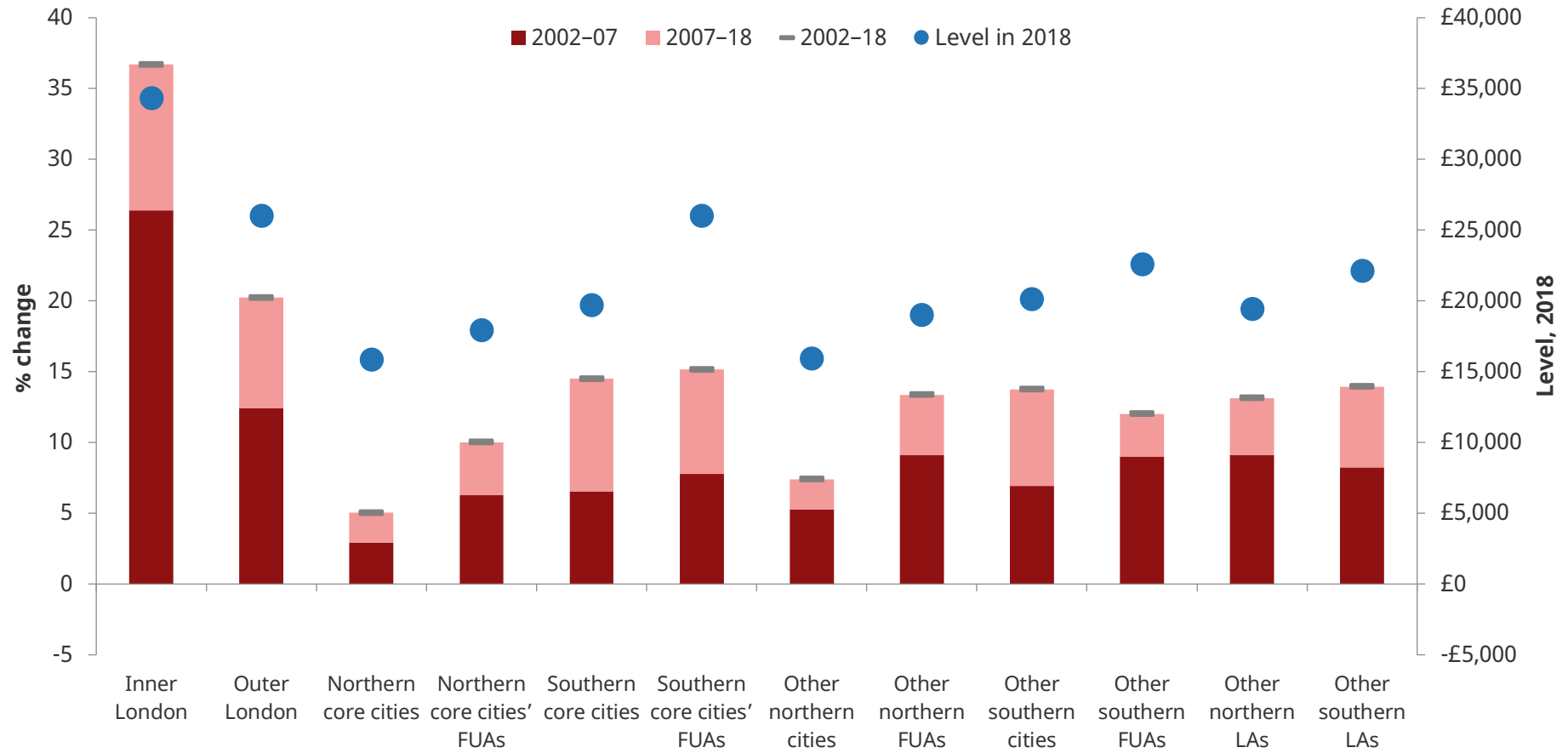
**Figure 9. Mean full-time earnings (residence basis): level in 2019 and change between 2002 and 2019 by sub-period, by LA classification**



Note: Cities and their FUAs are from the Urban Audit (Office for National Statistics, 2011b). Core cities are Birmingham, Leeds, Liverpool, Manchester, Newcastle-upon-Tyne, Nottingham and Sheffield ('northern') and Bristol ('southern'). Other cities are Blackburn, Blackpool, Burnley, Cheshire West & Chester, Coventry, Derby, Kingston upon Hull, Leicester, Lincoln, Middlesbrough, Preston and Stoke-on-Trent ('northern') and Bournemouth, Brighton & Hove, Cambridge, Cheltenham, Exeter, Hastings, Ipswich, Norwich, Portsmouth, Reading and Southampton ('southern'). Full information on LAs in the FUAs of each city are available from the authors on request.

Source: Authors' calculations using Office for National Statistics (2011b, 2019a).

Figure 10. GDHI per person: level in 2018 and change between 2002 and 2018 by sub-period, by LA classification



Note: As for Figure 9.

Source: Authors' calculations using Office for National Statistics (2011b, 2020c).



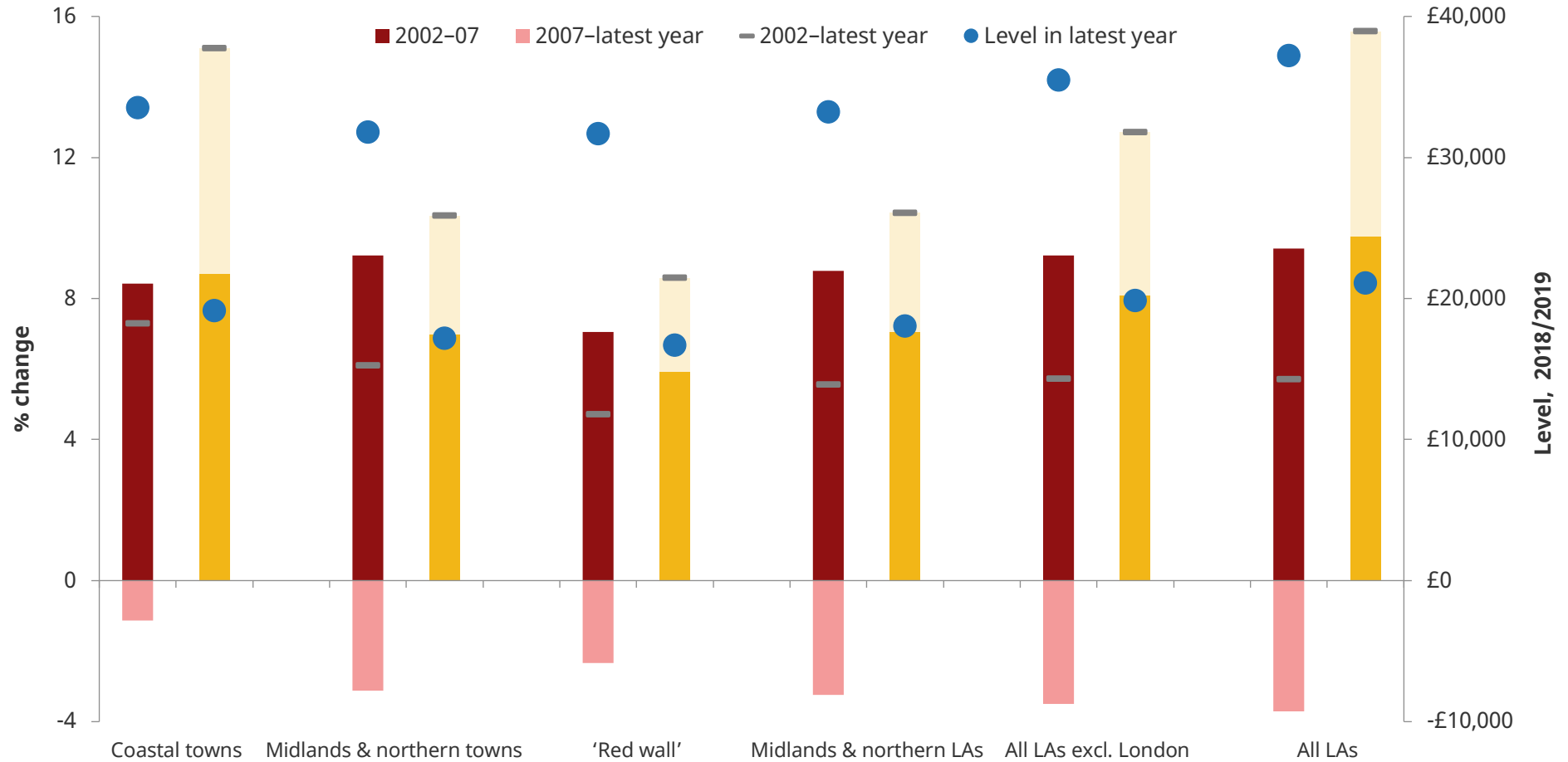
- Over the period since 2002 as a whole, mean full-time earnings have generally increased by more in cities' FUAs than in the cities themselves. This can be seen most clearly in the differences between inner and outer London and for the 'northern' core cities, but mean earnings have also grown by slightly more than in cities themselves for the FUAs surrounding other 'northern' (8.3% versus 6.5%) and other 'southern' (6.8% versus 6.1%) cities.<sup>23</sup> Focusing on the period since the late 2000s recession though, there is some indication that earnings in smaller cities at least have performed better than earnings in their surrounding FUAs and outlying towns and rural areas. For example, the mean full-time earnings of residents of smaller cities are around their 2007 levels in real terms, but remain below their 2007 levels in the surrounding FUAs and other LAs.
- As within regions, there is also significant variation within these categories of LAs. For example, mean full-time earnings in Trafford in the Manchester FUA are £42,300, compared with £30,400 in neighbouring Salford. And while mean full-time earnings in St Helens in the Liverpool FUA are estimated to have increased by 11.5% since 2002, those in Sefton are estimated to have fallen by 3.4% over the same period – although it is important to bear in mind that sampling variation means that LA-level estimates of changes needed to be treated with some caution.
- **GDHI per person** is also higher outside cities than inside cities, with the exception of London. For example, GDHI per head is £15,800 for the 'northern' core cities but £17,900 for other LAs in their FUAs. And it is £19,700 for the sole southern core city (Bristol) but £26,000 for other LAs in its FUA. Recall that GDHI per person includes the imputed rental income for owner-occupied properties, which will affect these figures. Fewer households own and more rent in cities than in neighbouring suburbs and outlying towns and rural areas. The figures for AHC incomes could therefore differ.
- GDHI per person has increased by more in the FUAs of 'northern' cities (as well as outlying towns and rural areas) than in the cities themselves. For example, GDHI has increased by 5% in the 'northern' core cities since 2002, but has grown by around 10% in their surrounding FUAs. Again, this may reflect housing market trends, with higher levels of renting and bigger increases in renting in cities than in the rest of the country.
- The same is not true of the south: GDHI has increased by substantially more in inner than outer London, and by substantially more in both areas than in the rest of the South. This reflects the strong increase in property values in London, and the fact that imputed rental income made a larger contribution to overall GDHI in inner London to start with (so that growth in imputed rental income has a bigger effect on overall GDHI in inner than outer London). It is worth recalling, however, that Figure 2 in Section 2 showed that AHC incomes have grown by less in London than in the rest of the country, which includes other parts of the 'South'. GDHI is a meaningful economic concept, but AHC incomes are a much better indication of the cash incomes that households in different parts of the country have.

Figure 11 examines whether particular concern about specific types of places – coastal towns, former industrial towns in the Midlands and North, and the so-called 'red wall' areas which were Labour strongholds but which the Conservatives have won in recent years – is reflected in their earnings and household incomes falling behind those of other areas. The graph shows that:

- Mean full-time earnings and GDHI per person are slightly lower in LAs covering former industrial towns in the Midlands and North and the 'red wall' areas than in all LAs in the Midlands and North of England. For example, mean full-time earnings in the former industrial towns are £31,700 compared with £33,200 for all LAs in the Midlands and North. Mean full-time earnings and GDHI per person are also lower in coastal towns than in the parts of the UK outside London. For instance, mean full-time earnings for coastal towns are £33,500 compared with £35,500 for all LAs outside of London. In other words, these areas are relatively poor (in terms of mean earnings and GDHI) compared with the rest of the country.

<sup>23</sup> The one exception to this pattern is 'southern' core cities with their FUAs.

**Figure 11. Mean full-time earnings (left-hand bars) and GDHI per person (right-hand bars): level in latest year and changes by sub-period, by alternative LA classification**



Note: A full list of LAs in each category is available from the authors on request.

Source: Authors' calculations using Office for National Statistics (2019a, 2020c).

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- However, these gaps have been broadly stable since the early 2000s. Mean full-time earnings and GDHI per person in the former industrial towns have grown at broadly the same rate as in all LAs in the Midlands and North (6.1% and 10.3% versus 5.5% and 10.4%). Coastal towns have actually seen somewhat faster growth in earnings than the average for the UK as a whole outside London (7.3% versus 5.7%), as well as faster growth in GDHI per person (15.1% versus 12.7%). The latter may reflect the fact that seaside towns often have older populations who are more likely to own their homes,<sup>24</sup> and often have relatively high property prices compared with similar inland places.<sup>25</sup>
  - Again, there are significant differences in trends within these categories – although small sample sizes at the LA level mean these figures must be taken with a substantial dose of caution. For example, mean full-time earnings in Dover are estimated to have increased by 15% since 2002, while down the coast in Eastbourne and in Hastings they are estimated to be unchanged and have grown 3%, respectively. And among former industrial towns in the North and Midlands and the ‘red wall’ LAs, neighbouring Middlesbrough and Redcar & Cleveland show drastically different trends. Mean full-time earnings are estimated to have increased by over 20% in Middlesbrough, for instance, but fallen by 4% in Redcar & Cleveland. In other words, there is some evidence that trends can be very different in areas that appear similar – both geographically and in terms of broad categorisation of ‘types’ of places. This must be recognised by policy and in future research.

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<sup>24</sup> Office for National Statistics, 2019g.

<sup>25</sup> Office for National Statistics, 2020e.

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## 4. Discussion and conclusions

This report has shown that how geographically unequal the UK was in economic terms as we entered the COVID-19 crisis depends on which measures one looks at. Productivity and mean earnings differ significantly between regions, and even more between local authority areas. For example, an average person in Wales or Northern Ireland needs to work approximately 1 hour 35 minutes to produce as much as the average person in London does in 1 hour. Similarly, someone earning the full-time mean wage in these regions needs to work almost 1 hour 35 minutes to earn as much as a Londoner receiving the full-time mean wage there earns in 1 hour. And while 30% of Londoners working full time earn over £49,000 a year, just over 10% in the North East of England, Northern Ireland and Wales do.

These differences matter. Productivity is the fundamental driver of earnings in the long term. And the limited number of high-paid high-skilled jobs in many parts of the country outside London means people's opportunities may be limited unless they move.

These differences do not tell the whole story though. A redistributive tax and benefit system and much higher housing costs in London and to some extent surrounding regions mean that differences in AHC incomes are much smaller. Indeed, median AHC income in London is no higher than for the UK as a whole. Moreover, over the last 10–20 years, differences in earnings and AHC incomes have slightly fallen. This begs the question: why have concerns about geographical inequalities come to the fore in recent years?

There are many possible reasons, but several stand out.

First is that recent small falls in geographical inequality in earnings have done little to undo the bigger increases that took place in the last quarter of the 20<sup>th</sup> century.<sup>26</sup> What might once have been hoped to have been a temporary shock as a result of the decline in manufacturing has turned out to be persistent. That there have been small falls in earnings and income gaps since the turn of the 21<sup>st</sup> century may be little consolation.

Second, the stagnation of earnings and living standards seen since the late 2000s recession may have increased the salience of geographical inequalities that originally widened in the last quarter of the 20<sup>th</sup> century. When all boats are rising, people may not notice if their boat is rising a little less quickly than others; but they may notice that they are stuck deeper in the mud when the economic tide turns and overall growth is weak.

And third, headline figures on productivity, earnings and household incomes may be missing important aspects of inequality that people care about and underlying trends. For instance, our report has shown that geographical inequality in wealth has risen substantially, driven in part by rapidly rising property prices in London and surrounding parts of the country. Wealth as well as income matters as it can provide additional opportunities and security – although people may be reluctant to move for job opportunities or downsize to turn their housing wealth into cash. Related to this, an increase in house prices and housing costs in London relative to the rest of the country may have made it more difficult for people outside London to move to the capital to take advantage of the bigger pool of high-productivity employers and high-paying jobs.

A growing body of evidence suggests inequalities are increasing in other important dimensions. For example, life expectancy has increased in London relative to other parts of the country since 2010, especially for those living in more deprived areas.<sup>27</sup> In contrast, it has improved least in the North East and fallen in the most deprived parts of the North East. Table 3 shows that children receiving free school meals in the capital are at least twice as likely to go university as children receiving free school meals elsewhere in the country, with the exception of the North West and the West Midlands. Even more starkly, they are more likely to go to university than children *not*

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<sup>26</sup> Geary and Stark, 2015; Beatty and Fothergill, 2018.

<sup>27</sup> Marmot et al., 2020.

receiving free school meals in any other region of the country bar the North West of England. This follows big increases in university attendance by the capital's children attending state schools:

**Table 3. Percentage of children entering higher education by age 19, by region and free school meals (FSM) status**

Region	FSM	Non-FSM	Gap
East of England	19%	42%	23 ppt
East Midlands	20%	41%	21 ppt
London	45%	57%	12 ppt
Inner London	48%	58%	9 ppt
Outer London	42%	57%	15 ppt
North East	19%	44%	25 ppt
North West	23%	46%	22 ppt
South East	18%	44%	26 ppt
South West	18%	39%	22 ppt
West Midlands	27%	45%	18 ppt
Yorkshire and Humber	22%	43%	21 ppt

Source: Department for Education, 2019.

overall, up from 33% to 55% in Inner London and 38% to 54% in Outer London since 2005. In comparison, participation has increased from 29% to just 37% in the South West over the same period. And recent research has found that opportunities for social mobility are higher in the capital. A child growing up in London to parents in the bottom third of the occupation distribution (in terms of median wages) has a 30% chance of moving to the top third, compared with 22% nationally and only 17% in Yorkshire and the Humber.<sup>28</sup>

Finally, underlying the earnings and incomes trends shown in this report, there could be significant differences for different age and population groups in different parts of the country. For example, one reason why earnings and incomes have performed poorly in cities (especially London) is that the populations of cities tend to be younger than those of towns and the countryside – and this is increasingly the case.<sup>29</sup> This matters because one notable trend over the last two to three decades is that older people have seen stronger growth in incomes than younger people.<sup>30</sup> Differences in demographics and demographic trends could therefore be masking underlying differences in trends in earnings and incomes for young people, for example.

Thus, while at a high level, the 21<sup>st</sup> century seems to have seen a small fall in geographical inequality in earnings and incomes, this is far from a complete picture. As the IFS Deaton Review progresses, we will therefore dig deeper into understanding the changing fortunes of different people on different dimensions in different parts of the UK – as well as what is driving them, and how policy may want to respond.

This work will take place in the aftermath of the COVID-19 crisis, which could have profound and lasting impacts on inequalities between people and places. Research for the Deaton Review has highlighted how a range of inequalities – between genders and between income, age and ethnic groups – are currently being exacerbated,<sup>31</sup> and that different parts of England have differing degrees of vulnerability to impacts of the crisis on health, families and labour markets.<sup>32</sup> The latter

<sup>28</sup> Bell, Blundell and Machin, 2018.

<sup>29</sup> Baker, 2018.

<sup>30</sup> Bourquin et al., 2019.

<sup>31</sup> Blundell et al., 2020.

<sup>32</sup> Davenport et al., 2020.

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research used the share of workers in sectors locked down from late March to mid June<sup>33</sup> as a proxy for labour market vulnerability, given that these sectors virtually ceased activities and are subject to uncertain rates of recovery. It found that labour market vulnerability was, in general, higher in areas that had *lower* levels of deprivation as measured by the Index of Multiple Deprivation. Thus, while low-income people are more likely to work in sectors that have been subject to lockdowns, jobs in these sectors are concentrated in less deprived areas. This partly reflects the fact that deprivation is concentrated in urban areas, especially in the Midlands and North, whereas reliance on the hospitality industry in particular is high in several largely rural areas such as Cornwall, Cumbria, Devon, Dorset, Northumberland and Rutland. These areas do include pockets of deprivation though, and deprived seaside towns such as Blackpool and Torbay, which already have low productivity, earnings and incomes, also look exposed economically.

How the crisis will affect longer-term geographical inequalities is uncertain and will depend on the extent to which businesses survive the acute phase of the crisis and on the extent to which changes in business and household behaviour persist. An accelerated shift to e-commerce could pose challenges for those towns and smaller cities most reliant on the retail sector. A continued reluctance to socialise and travel could hit tourist-focused areas, including many coastal communities, and may close off one of the avenues with which high streets have been adapting to a changing retail environment: shifts to cafes, restaurants and personal service providers. And high streets in more deprived areas have long struggled more with this repurposing, leading to swathes of vacant commercial properties, depressing property values and investment.

But there could also be opportunities from the crisis. It is possible that concerns about long-distance travel could provide a boost to the UK hospitality industry, providing employment opportunities and potentially boosting earnings – if competition for workers increases – in coastal and other tourism-focused areas. And increases in the prevalence and productivity of remote working – which has become much more widespread among white-collar workers during the COVID-19 crisis – could reduce the pull of London and other major cities to high-productivity employers and workers, and increase access to high-paid jobs for residents of more peripheral areas. This could narrow gaps not only in incomes, but also in wealth, as relative property values adjust.

The long-run effects of the COVID-19 crisis will also depend heavily on the policies adopted by national, devolved and local government. Education and training policies, business and labour markets policies, infrastructure investment and the design of the new UK Shared Prosperity Fund (replacing EU regional development funding) will all matter for both overall effects and their geographic patterns. But so too will a series of other policies, such as the tax measures put in place to help restore public finance sustainability. Revaluation and reform of council tax could, for example, redistribute tax burdens from the North and Midlands – where property prices are lower and have lagged – to the South and above all London – where prices have surged since tax bands were set in 1991.<sup>34</sup> Most households in the North and Midlands would see falls in their tax bills even with fairly substantial increases in the overall amount of revenue raised, with the resulting impacts on property values helping to narrow geographical differences in wealth and especially property wealth.

Thus, as the government seeks to turn ‘levelling up’ from a soundbite into actionable policy, it will have to carefully consider how to respond to the evolving impacts of COVID-19, as well as pay heed to the pre-existing differences in the challenges facing different parts of the country.

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<sup>33</sup> These sectors are: non-food, non-pharmaceutical retail; passenger transport; accommodation and food; travel; childcare; arts and leisure; personal care (except funeral and related activities); and domestic services.

<sup>34</sup> Adam et al., 2020.

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## References

- Adam, S., Hodge, L., Phillips, D. and Xu, X. (2020), *Revaluation and Reform: Bringing Council Tax in England into the 21<sup>st</sup> Century*, Institute for Fiscal Studies, Report 168, <https://www.ifs.org.uk/publications/14761>.
- Baker, C. (2018), 'City & Town Classification of Constituencies & Local Authorities', House of Commons Library, Briefing Paper CBP8322, <https://researchbriefings.parliament.uk/ResearchBriefing/Summary/CBP-8322>.
- Beatty, C. and Fothergill, S. (2018), 'The Contemporary Labour Market in Britain's Older Industrial Towns', Centre for Regional Economic and Social Research, <https://www4.shu.ac.uk/research/cresr/contemporary-labour-market-britain%E2%80%99s-older-industrial-towns>.
- Bell, B., Blundell, J. and Machin, S. (2018), 'The Changing Geography of Intergenerational Mobility', Centre for Economic Performance (CEP), Discussion Paper 1591, <http://eprints.lse.ac.uk/91714/>.
- Blundell, R., Costa Dias, M., Joyce, R. and Xu, X. (2020), 'COVID-19 and Inequalities', IFS Deaton Review, <https://www.ifs.org.uk/inequality/covid-19-and-inequalities/>.
- Bourquin, P., Cribb, J., Waters, T. and Xu, X. (2019), *Living Standards, Poverty and Inequality in the UK: 2019*, Institute for Fiscal Studies, Report 157, <https://www.ifs.org.uk/publications/14193>.
- Corfe, S. (2017), 'Living on the Edge: Britain's Coastal Communities', Social Market Foundation, <http://www.smf.co.uk/publications/living-edge-britains-coastal-communities/>.
- Cribb, J., Hood, A., Joyce, R. and Norris Keiller, A. (2017), *Living Standards, Poverty and Inequality in the UK: 2017*, Institute for Fiscal Studies, Report 129, <https://www.ifs.org.uk/publications/9539>.
- Cribb, J., Norris Keiller, A. and Waters, T. (2018), 'Living Standards and the National Living Wage', in *Living Standards, Poverty and Inequality in the UK: 2018*, Institute for Fiscal Studies, Report 145, <https://www.ifs.org.uk/publications/13069>.
- Davenport, A., Farquharson, C., Rasul, I., Sibieta, L. and Stoye, G. (2020), 'The Geography of the COVID-19 Crisis in England', IFS Deaton Review, <https://www.ifs.org.uk/inequality/the-geography-of-the-covid-19-crisis-in-england/>.
- Department for Education (2019), 'Widening Participation in Higher Education: 2019', <https://www.gov.uk/government/statistics/widening-participation-in-higher-education-2019>.
- Department for Work and Pensions (2020), 'Family Resources Survey, 2002–03 to 2018–19'.
- EY Item Club (2020), 'EY ITEM Club Winter Forecast, January 2020', <https://emeia.ey-vx.com/4838/136972/landing-pages/download-page.asp>.
- Geary, F. and Stark, T. (2015), 'Regional GDP in the UK, 1861–1911: New Estimates', *Economic History Review*, 68, 123–44, <https://onlinelibrary.wiley.com/doi/abs/10.1111/1468-0289.12061>.
- Goodwin, M., and Heath, O. (2016), 'Brexit Vote Explained: Poverty, Low Skills and Lack of Opportunities', Joseph Rowntree Foundation, <https://www.jrf.org.uk/report/brexit-vote-explained-poverty-low-skills-and-lack-opportunities>.
- Marmot, M., Allen, J., Boyce, T., Goldblatt, P. and Morrison, J. (2020), *Health Equity in England: The Marmot Review 10 Years On*, Health Foundation, <https://www.health.org.uk/publications/reports/the-marmot-review-10-years-on>.

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Office for National Statistics (2011a), 'UK Relative Regional Consumer Price Levels for Goods and Services for 2010', <https://www.ons.gov.uk/ons/rel/cpi/regional-consumer-price-levels/2010/uk-relative-regional-consumer-price-levels-for-goods-and-services-for-2010.pdf>.

Office for National Statistics (2011b), 'Urban Audit Core Cities to Urban Audit Greater Cities to Urban Audit Functional Urban Areas to Local Authority Districts (December 2011) Lookup in Great Britain', <https://data.gov.uk/dataset/53551ec3-8a08-45a0-b161-9645cf0b926c/urban-audit-core-cities-to-urban-audit-greater-cities-to-urban-audit-functional-urban-areas-to-local-authority-districts-december-2011-lookup-in-great-britain>.

Office for National Statistics (2018a), 'Relative Regional Consumer Price Levels of Goods and Services, UK: 2016', <https://www.ons.gov.uk/economy/inflationandpriceindices/articles/relativerregionalconsumerpricelevelsuk/2016>.

Office for National Statistics (2018b), 'Small Area Income Estimates for Middle Layer Super Output Areas, England and Wales', <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/datasets/smallareaincomeestimatesformiddlelayerssuperoutputareasenglandandwales>.

Office for National Statistics (2019a), 'Annual Survey of Hours and Earnings 2002 to 2019', accessed via NOMIS at <https://www.nomisweb.co.uk/home/detailedstats.asp>.

Office for National Statistics (2019b), 'Annual Population Survey 2004 to 2018', accessed via NOMIS at <https://www.nomisweb.co.uk/home/detailedstats.asp>.

Office for National Statistics (2019c), 'H100 Regional Labour Market: Headline Labour Force Survey Indicators for All Regions', <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/datasets/headlinelabourforcesurveyindicatorsforallregionshi00>.

Office for National Statistics (2019d), 'Using Tax Data to Better Capture Top Earners in Household Income Inequality Statistics', <https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/incomeandwealth/articles/usingtaxdatatobettercapturetopearnersinhouseholdincomeinequalitystatistics/2019-02-26>.

Office for National Statistics (2019e), 'Wealth and Assets Survey 2006–08 to 2016–18', <https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/incomeandwealth/bulletins/totalwealthingreatbritain/april2016tomarch2018/relateddata>.

Office for National Statistics (2019f), 'Local Authority District (December 2018) to NUTS3 to NUTS2 to NUTS1 (January 2018) Lookup in United Kingdom', <https://data.gov.uk/dataset/86beb640-9fa4-4131-b330-fc26d74c074f/local-authority-district-december-2018-to-nuts3-to-nuts2-to-nuts1-january-2018-lookup-in-united-kingdom>.

Office for National Statistics (2019g), 'Estimates of the Population for the UK, England and Wales, Scotland and Northern Ireland', <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/populationestimatesforukenglandandwalesscotlandandnorthernireland>.

Office for National Statistics (2020a), 'Regional Gross Value Added (Balanced) per Head and Income Components', <https://www.ons.gov.uk/economy/grossvalueaddedgva/datasets/nominalregionalgrossvalueaddedbalancedperheadandincomecomponents>.

Office for National Statistics (2020b), 'Subregional Productivity: Labour Productivity Indices by UK NUTS2 and NUTS3 Subregions',



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<https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/labourproductivity/datasets/subregionalproductivitylabourproductivitygvaperhourworkedandgvaperfilledjobindicesbyuknuts2andnuts3subregions>.

Office for National Statistics (2020c), 'Regional Gross Disposable Household Income by Local Authorities by NUTS1 Region',  
<https://www.ons.gov.uk/economy/regionalaccounts/grossdisposablehouseholdincome/datasets/regionalgrossdisposablehouseholdincomebylocalauthoritiesbynuts1region>.

Office for National Statistics (2020d), 'Index of Private Housing Rental Prices, UK: Monthly Estimates',  
<https://www.ons.gov.uk/economy/inflationandpriceindices/datasets/indexofprivatehousingrentalpricesreferencetables>.

Office for National Statistics (2020e), 'House Price Data: Quarterly Tables',  
<https://www.ons.gov.uk/economy/inflationandpriceindices/datasets/housepriceindexmonthlyquarterlytables1to19>.

Shafique, A. (2016), 'Brexit Was Driven by Places "Left Behind"', RSA blog,  
<https://www.thersa.org/discover/publications-and-articles/rsa-blogs/2016/08/brexit-was-driven-by-places-left-behind>.