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# Geographical inequalities in the labour market







#### Levelling up White Paper



12 'missions' tackling different aspects of geographical inequality

- Improve pay, employment and productivity and closing the gap between top performing and other areas, with a globally competitive city in each region
- Improve education outcomes in primary school and increase numbers in high-quality skills training, especially in low-skilled areas

#### This presentation:

- Patterns of geographical inequalities in pay and employment → focus on hourly wages
- 2. Importance of education and skills
- 3. Implications for policy



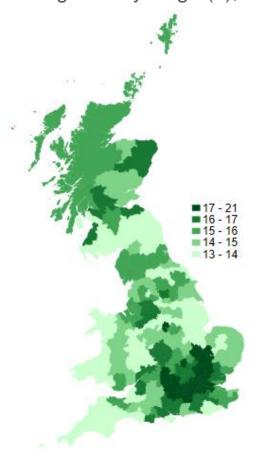
# Patterns of geographical inequalities

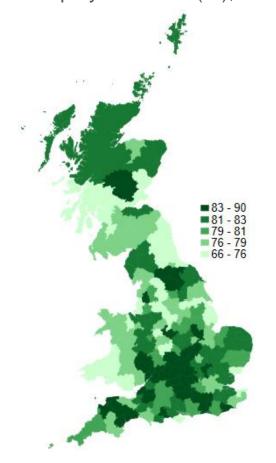
#### Large differences in pay and employment across areas



Average hourly wage (£), 2019

Employment rate (%), 2019



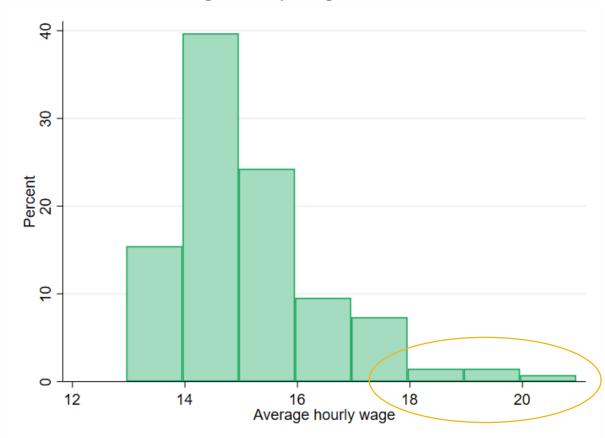


Source: Overman and Xu (2022) Notes: 136 grouped LA-based TTWAs

## Distribution of average wages is highly skewed



Distribution of average hourly wage, 2019

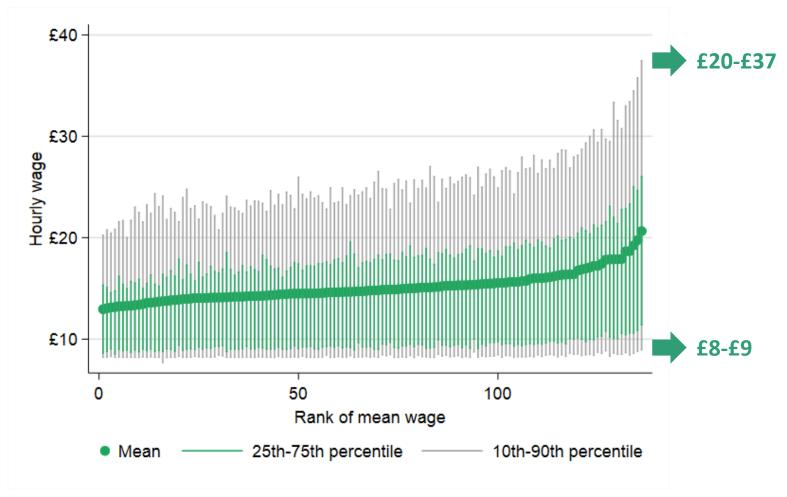


Source: Overman and Xu (2022) Notes: 136 grouped LA-based TTWAs

### Much more variation in wages at top of distribution than at bottom



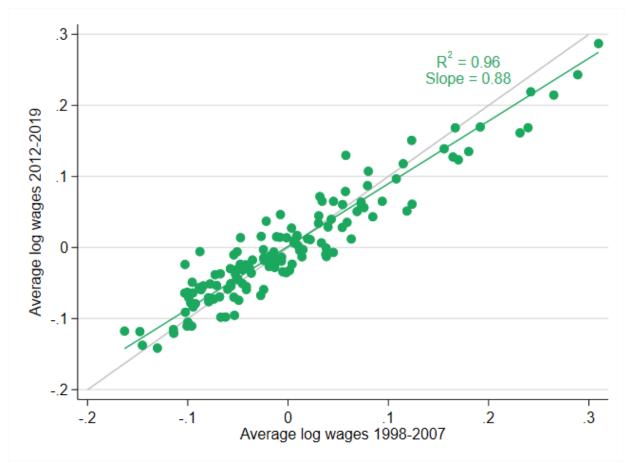
Distribution of wages between and within areas, 2019



### Geographical disparities in wages are highly persistent



Area-level average wages normalised around GB average, pre-/post-Great Recession





#### The role of skills

### Area-level wages highly correlated with graduate shares

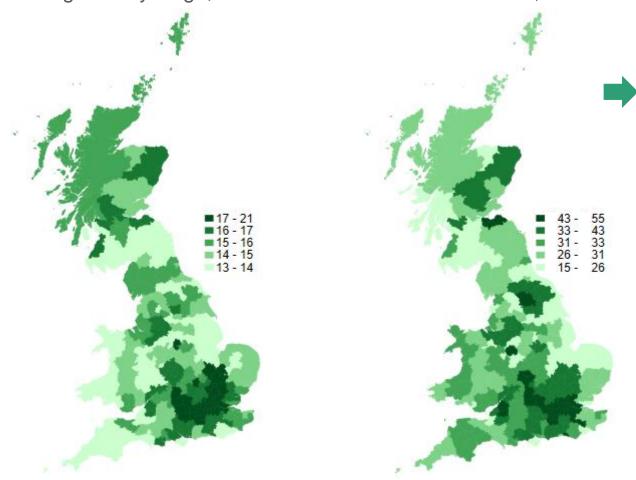


46% of

variation

Average hourly wage, 2019

Graduate share, 2019



### Most of spatial disparities in wages reflect differences in people

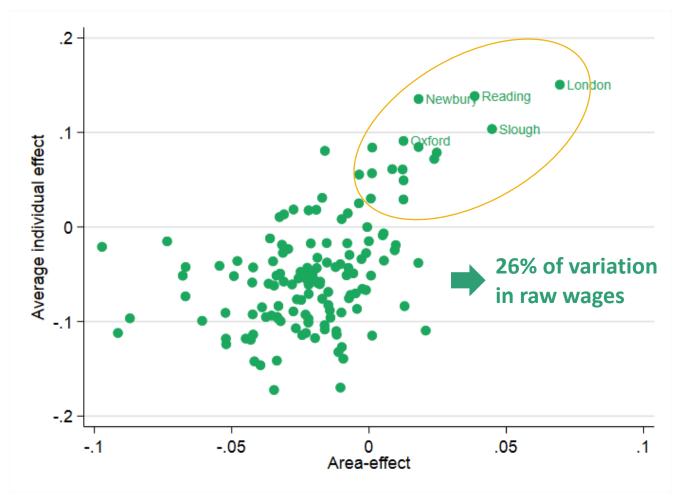


- Compare differences in raw wages v. differences in wages that can be attributed to areas ('area effects'), controlling for individual characteristics ('individual effects')
  - Area effect = local wage premium for a given (type of) individual
  - Individual effect = wage that a given individual would earn irrespective of where they worked
- Controlling for composition reduces variation in wages. In 2012-2019:
  - Min-max: 43% → 17%
  - 10<sup>th</sup>-90<sup>th</sup> percentiles: 21% → 6%
- Decomposing variation in average wages across areas:
  - 64% reflects differences in average individual effects (characteristics)
  - 10% reflects differences in area effects

### High-earning people are in more productive places



Correlation between estimated area and individual effects, 2012-2019



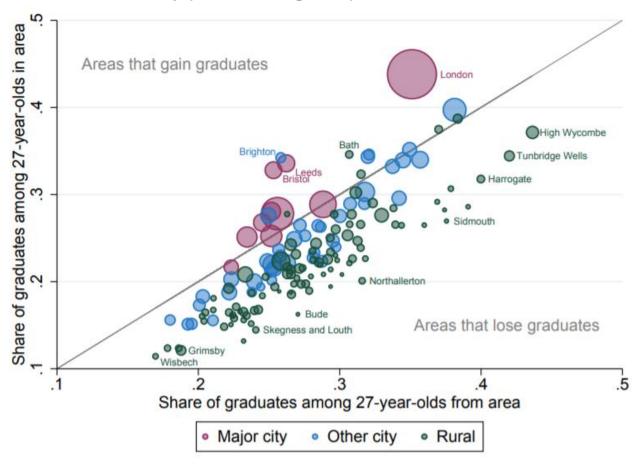


# What drives geographical inequalities in skills?

## Large differences in educational attainment, compounded by migration



Graduate share by place of origin v. place of residence



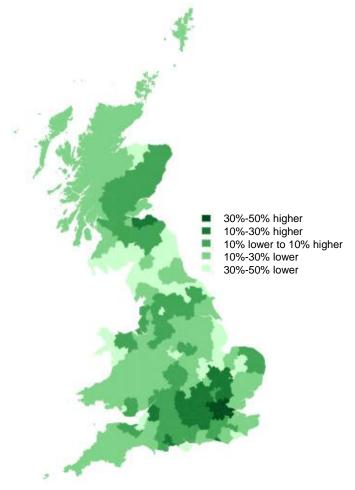
Source: Britton, van der Erve, Waltmann and Xu (2021)

Notes: 2002-2005 GCSE cohorts in England. Cities refer to Primary Urban Areas defined by Centre for Cities.

#### Demand for skills is geographically concentrated



Share of graduate jobs relative to national average, 2019



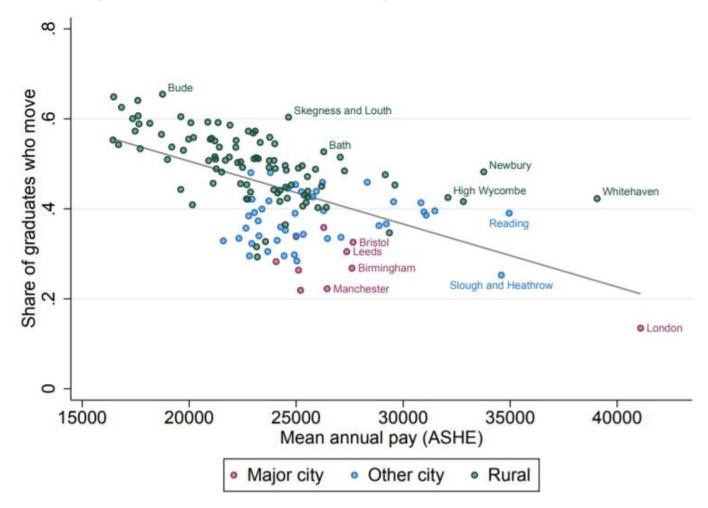
Source: Overman and Xu (2022)

Notes: Graduate jobs defined as RQF 6+

#### Graduates from poorer areas leave...



Share of graduates who leave by average pay in home TTWA



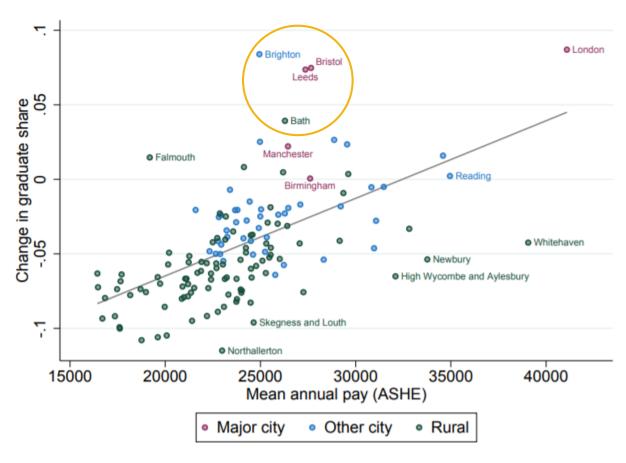
Source: Britton, van der Erve, Waltmann and Xu (2021)

Notes: 2002-2005 GCSE cohorts in England. Cities refer to Primary Urban Areas defined by Centre for Cities.

### ...For areas with high wages (and amenities)



Net graduate gain by average TTWA pay



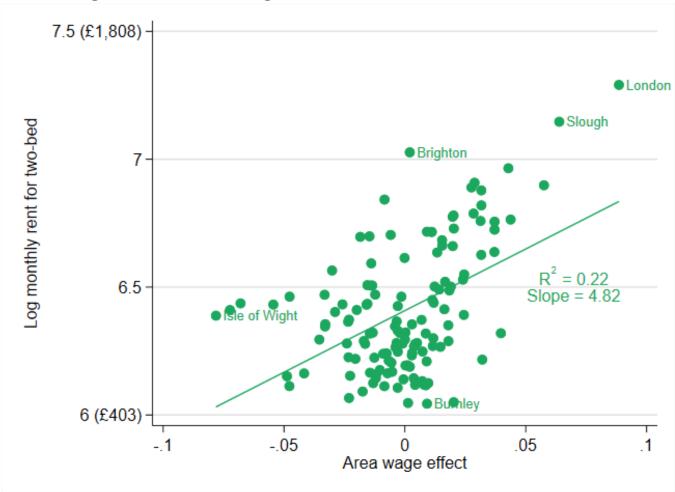
Source: Britton, van der Erve, Waltmann and Xu (2021)

Notes: 2002-2005 GCSE cohorts in England. Cities refer to Primary Urban Areas defined by Centre for Cities.

#### Higher-paying places have higher living costs



Area wage effects v. average rents, 2012-2019





#### **Policy implications**

#### **Discussion**



- Most of differences in wages across areas are driven by differences in skills
  - →Need to **boost skills** in left-behind places
- Differences in skills driven by differences in educational attainment (supply) and graduates moving to where the jobs are (demand)
  - → Need simultaneous action on both fronts
- Need to be realistic about extent to which outcomes can be 'levelled up' across places, given scale of investment needed and agglomeration benefits
  - → Focus on a few places outside London ('level up' regions not narrowly defined local areas)

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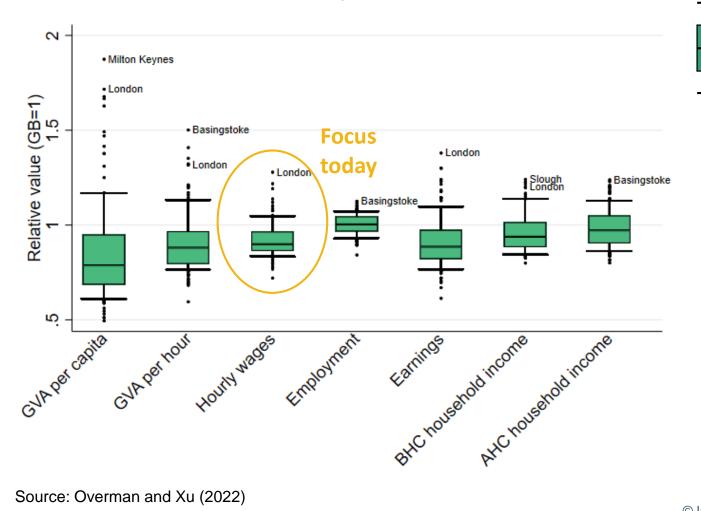




#### **APPENDIX**

#### Extent of inequality and ranking of areas depends on outcome

Distribution of economic outcomes, 2018



**Outliers** 90th percentile 75<sup>th</sup> percentile Median 25<sup>th</sup> percentile

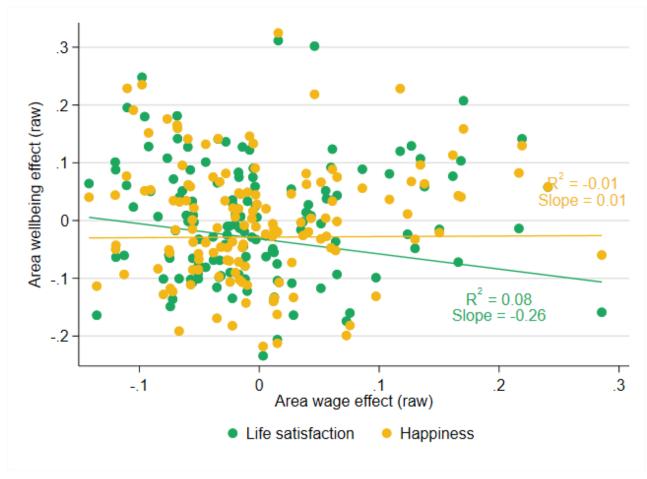
10<sup>th</sup> percentile

**Outliers** 

### No correlation between wage premiums and wellbeing



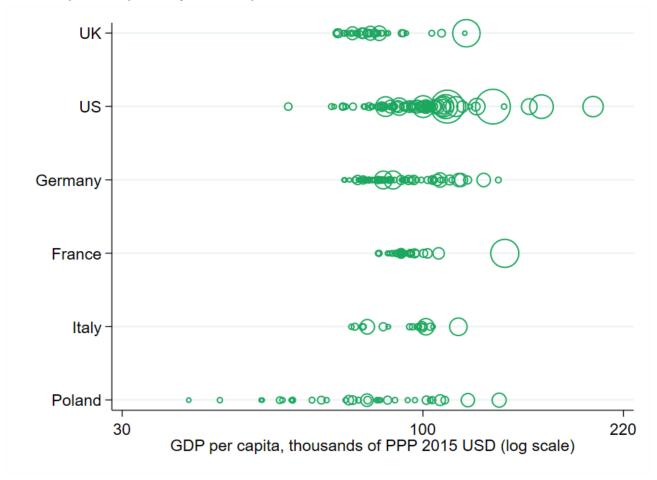
(Lack of) correlation between area-level wages and wellbeing, 2012/13-2019



#### Many cities in the UK are not very productive



GDP per capita by metropolitan area, selected countries 2016-2018



Source: Author's analysis using OECD metropolitan area statistics