

Children's chances of doing well at school, going to university, getting a good job and owning a house are strongly influenced by their parents' education, occupation and home ownership – but what about the impact of where they grow up? **Brian Bell, Jack Blundell** and **Stephen Machin** explore the geography of intergenerational mobility in England and Wales.

# Where is the land of hope and glory?



There is copious evidence showing that people’s life chances are affected by their family backgrounds. Children whose parents went to university are themselves more likely to do so; they are more likely to be higher earners if their parents were; and it is the same story for home ownership.

What is far less clear is whether the role of family background is attenuated or enhanced by the place where children grow up. For example, is the link between parental and children’s university attendance the same in Liverpool as in Lambeth? If your father was a low-skilled worker, does the probability that you become a high-skilled professional depend on whether you grew up in Oldham or Oxford?

For England and Wales, a paucity of data has made these questions difficult to answer reliably. We have conducted a new analysis of intergenerational mobility across three birth cohorts in England and Wales using decennial census microdata contained in the Longitudinal Study of England and Wales.

These data permit the study of mobility in occupation, home ownership and education at the spatial level through time. For these three ‘dimensions’ of intergenerational mobility, we estimate the relationship between parental outcomes and those of their children once they reach adulthood.

Figure 1 shows how the occupations of children born between 1974 and 1983 relate to those of their fathers for all England and Wales. To quantify the relationship, each occupation is assigned a ‘Cambridge score’, a measure of occupational status commonly used in sociology and based on behaviour in the marriage market. The highest scores are assigned to occupations such as scientists, who tend to have higher earnings and educational requirements. Fathers and children are ranked between 1 and 100 based on their score.

Figure 1 demonstrates a strong linear relationship between the scores of occupations of children and those of their

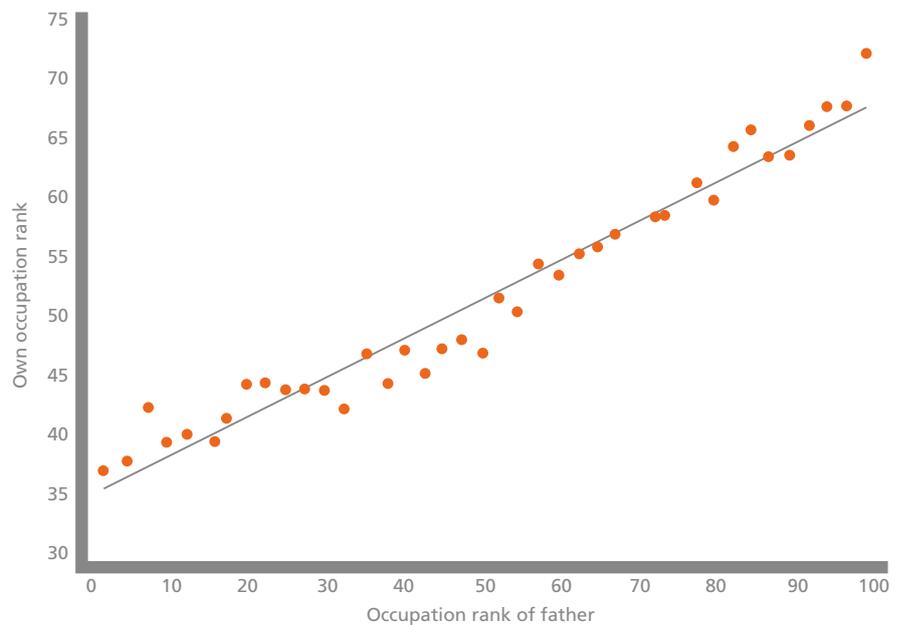
parents. To construct our geographical measure, this relationship is modelled within each of the 35 NUTS2 areas of England and Wales, and used to generate mobility measures.

As well as occupation-based measures, we generate measures in two further mobility dimensions. First, we estimate the relationship between parental education and children’s education. To keep comparability over time, we are limited to looking only at how the probability of individuals obtaining a degree depends on whether or not their parents have degrees. We also estimate how the probability of owning a home depends on parental home ownership status.

It should be emphasised that the estimates generated here are not to be interpreted as causal, and the wording is deliberately phrased to be careful to avoid such an interpretation. The focus of effort has been to use the best available data to generate descriptive measures of intergenerational mobility for multiple cohorts at the national level and across geographies of England and Wales over time.

As found in the United States, intergenerational mobility in the UK tends to be higher in suburban areas outside major population centres

Figure 1: Intergenerational mobility in occupation in England and Wales



**Notes:** Binned scatter plots of own occupation rank on occupation rank of father for 1974-83 birth cohort. Points displayed are values of own and father occupation rank in 40 quantiles of occupation rank of father. Cohort aged 8-17 at baseline, 28-37 at follow-up. Ranks determined by Cambridge score and calculated separately within gender. No controls are included.

**Source:** Longitudinal Study of England and Wales, Office for National Statistics

## Significant geographical differences in upward occupational mobility, which are persistent over time

First, consider occupational mobility. Figure 2 shows a map of estimates for upward occupational mobility, again for the cohort born between 1974 and 1983. Darker areas of the map correspond to areas that are more upwardly mobile.

The map reveals a striking regional pattern with the most upwardly mobile areas in London, the South East and parts of the North West. It is perhaps easiest to interpret these differences in terms of probabilities of moving from the bottom to the top of the occupational distribution, for example:

- Children growing up in Outer West London and North West London whose parents were in the bottom third of occupations had a 32% chance of reaching the top third, compared with only a 12% chance in Cumbria.
- Children of fathers in lower-scoring occupations in the suburbs of London are more than twice as likely to have reached the top occupations than children from similar fathers in the North West.
- Other low-mobility areas include Devon and Yorkshire and the Humber.

These results echo the work of Chetty et al (2014), who find that mobility tends to be higher in suburban areas outside major population centres in the United States.

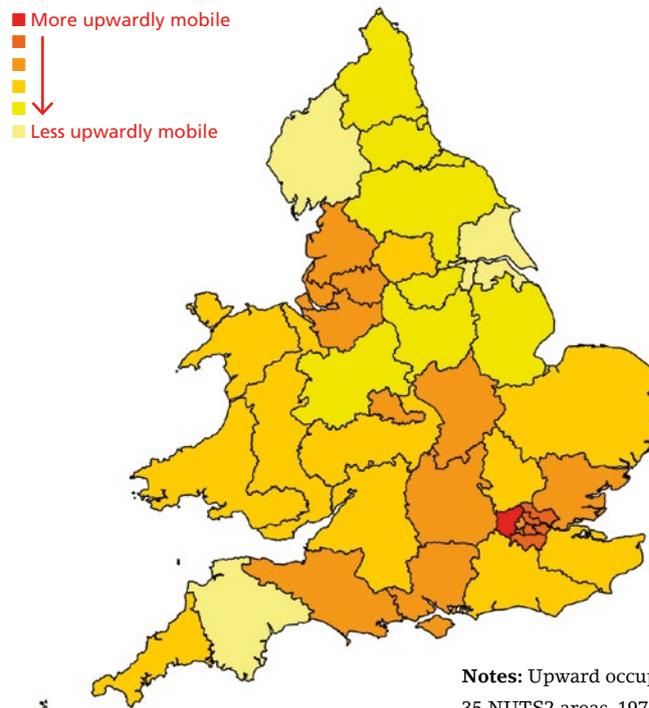
When we perform the same exercise for the cohort born 20 years earlier, we find very similar regional patterns. The two sets of estimates have a correlation of 0.7. The most notable differences are a decline in upward mobility in Inner London from the earlier cohort to the later cohort. Outer London, in contrast, shows consistently high upward occupational mobility for both birth cohorts.

### Absolute and relative upward mobility are positively correlated

Second, across all measures, absolute and relative mobility are positively correlated. This means that areas in which those starting from the bottom do well are those where the gap in outcomes between those starting from the bottom and those starting from the top is smallest.

While this is true for occupations

Figure 2:  
Upward occupational mobility across NUTS2 regions



**Notes:** Upward occupational mobility for 35 NUTS2 areas, 1974-83 birth cohort. Darker areas correspond to higher upward occupational mobility.  
**Source:** Longitudinal Study of England and Wales, Office for National Statistics

and slightly less so for education, the relationship is strongest and the interpretation clearest for home ownership. Another way of looking at this is that in terms of the probability of buying a home, area matters significantly more for children of non-homeowner parents.

### Upward educational mobility and upward occupational mobility are tightly linked

Third, there is a strong relationship between upward educational mobility and upward occupational mobility. Areas where children of non-degree-holding parents are most likely to obtain degrees are the same areas where children find it easier to climb the occupational ladder. This is unsurprising, given that degrees yield high wage returns in the UK, and are necessary to reach many of the top occupations.

The strong relationship between upward educational and occupational mobility suggests that comparisons based on upward educational mobility may be reasonably accurate proxies for upward

The children of low-occupation fathers in London are far more likely to reach top occupations than those from elsewhere

# Areas where children of non-degree-holding parents are most likely to obtain degrees are the same areas where children find it easier to climb the occupational ladder

occupational or wage mobility. Given the less stringent data requirements for generating educational mobility measures, this is potentially a very useful result for the measurement of intergenerational mobility.

## The geography of home ownership mobility is distinctly different from that based on occupation or education

Fourth, areas where children of non-homeowners are likely to buy a home themselves have low upward occupational mobility on average. As a very clear example, London is exceptional in its rate of upward occupational mobility, with children from low-occupation fathers being far more likely to reach top occupations than elsewhere. But it scores poorly in terms of home ownership mobility.

Children born to non-homeowners in London are very unlikely to own a home themselves. In Inner West London, children of non-homeowners have a 29% chance of buying a home, compared with a 73% chance for children of homeowners.

The broader lesson to take is that home ownership mobility need not align with occupational mobility. Area-level differences in intergenerational mobility are therefore multi-dimensional, and comparisons based on a single metric alone are not necessarily the complete picture.

## Summing up

The focus of our research has been to generate consistent and robust estimates of geographical differences in intergenerational mobility for areas of England and Wales with the best data available. A particular emphasis is placed on the comparison of London and elsewhere.

Inspired by the recent US experience, in which initial descriptive work led to ample secondary analysis to inspect for causality, this offers a first step towards a greater understanding of intergenerational mobility in the UK.

Our descriptive work raises many questions for future research: how have local policy and economic shocks influenced intergenerational mobility across England and Wales? In areas of low upward mobility, do people who stay as adults have the same poor outcomes as those who move away? Is it inevitable that high-growth cities such as London will have high occupational mobility but low home ownership mobility? These are questions we hope to address in future work.

This article summarises 'Where is the Land of Hope and Glory? The Geography of Intergenerational Mobility in England and Wales' by Brian Bell, Jack Blundell and Stephen Machin, CEP Discussion Paper No. 1591 (<http://cep.lse.ac.uk/pubs/download/dp1591.pdf>).

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## Further reading

Raj Chetty, Nathaniel Hendren, Patrick Kline and Emmanuel Saez (2014) 'Where is the Land of Opportunity? The Geography of Intergenerational Mobility in the United States', *Quarterly Journal of Economics* 129: 1553-1623.

# In terms of the probability of buying a house, where children grow up matters much more for those whose parents are not homeowners

