## in brief...

## Big city, bright future: why birthplace matters so much

How much does where you were born influence your future earnings? Analysing data from the British Household Panel Survey, **Clément Bosquet** and **Henry Overman** reveal that, on average, someone born in London in the 1970s earns 6.6% more than someone born in Manchester and 9.3% more than someone born in Liverpool.

The possibility that where people live has an influence on their life chances has been a longstanding concern in debates about inequality and public policy. In particular, a large and diverse body of research has considered the effects of living in a deprived neighbourhood, looking for effects on education, crime, health and labour market outcomes.

More recently, a small but growing series of studies has focused on the role of 'initial conditions' in determining labour market outcomes. This new line of work doesn't just look for an effect of current place of

residence or conditions during childhood. Instead, it reaches further back into the past to consider the effect of place and time of birth.

In our research, we consider a particular aspect of this question by looking at whether birthplace plays a role in determining future earnings. We focus particularly on the size of an individual's birthplace to try to answer whether being born in a bigger city improves their earning potential.

For those of us who study the economics of cities, this is an interesting question because we have good evidence that people who live in bigger cities earn more than similar people living in smaller cities. This 'urban wage premium' is explained by what urban economists call 'agglomeration economies', whereby density makes firms and workers more productive because of labour market pooling, input sharing and knowledge spillovers. These ideas originate with Alfred Marshall but still underpin lively academic and policy debates today.

Analysing data from the British Household Panel Survey (BHPS), a representative sample of the UK population, we find an elasticity of wages with respect to birthplace size of 4.2%. What this means is that on average, an individual born in London in the 1970s will earn around 6.6% more than an individual of the same age, birth year and gender born in Manchester and 9.3% more than an individual born in Liverpool.

What could explain these effects of birthplace size on future earnings? One possibility is that individual characteristics vary with birthplace size because of the location decisions of different types of parents and the intergenerational transmission of characteristics.

Being born in a bigger city improves your earning potential

## Parental sorting and the influence of birthplace in decisions about current location both underpin the effect of birthplace on earnings

Indeed, research on the urban wage premium highlights that much of the wage gap between urban and rural areas and between large and small cities is due precisely to this kind of sorting – specifically, the concentration of more productive workers in bigger cities.

A second possibility is that birthplace size somehow affects the accumulation of human capital – for example, because the quality of schools varies with city size.

A third possibility is that birthplace influences future location decisions and, through this, future labour market opportunities. Indeed, in the extreme case of no mobility, birthplace size directly determines future labour market size, and it makes little sense to try to distinguish between the effect of birthplace and current location.

We consider all three of these possibilities in our research. Our findings suggest that intergenerational transmission and the effect of birthplace on current location both play a role in explaining the effect of birthplace.

Effects via learning depend on when we think such learning takes place. We don't find evidence of an effect during childhood, but there may be an effect though accumulated experience later in life (which we might think of as adult rather than childhood learning).

We find strong evidence of parental sorting in the BHPS data: 79% of people born to parents in 'professional' occupations are born in a city, compared with only 72% of those with 'unskilled' parents. Indeed, 12% of people born to 'professional' parents (and 6% of those born to 'unskilled' parents) are born in London. The differences are, if anything, more pronounced when it comes to city size: on average, birthplace city size is 50% larger for individuals born to professional' parents compared with individuals who have 'unskilled' parents.

Parental sorting is also an important consideration when it comes to the link between birthplace size and educational outcomes. People born in big cities undertake more years of education, but this link to city size is also explained by parental sorting. Differences in education play no additional role in explaining the effect of birthplace size once we allow for the fact that parental characteristics vary with city size.

Finally, we show that birthplace city size also has an effect because it determines current location. This matters because we have good evidence of a link between wages and the size of the city in which an individual is currently working. This link from birthplace to current city size isn't simply driven by people who don't move. For those that work somewhere other than where they were born, current city size is positively correlated with birthplace size (consistent with a number of anecdotal observations about the differences between small-town and big-city mentalities). Interestingly, if we assume that accumulating experience in big cities also has a wage pay-off, then this reintroduces a role for learning (at least in adulthood, rather than childhood).

Taken together, our results highlight the importance of intergenerational sorting in helping to explain the persistence of spatial disparities. Low lifetime mobility reinforces the link between the location decisions of generations.

We provide descriptive evidence on lifetime immobility, which suggests that this is an important consideration in the UK: in our data, around 44% of individuals only ever work while living in the same area as they were born. In addition to immobility, even for those that do move, there is a positive correlation between birthplace size and size of place of residence.

Our findings also highlight that persistence extends across generations: nearly 54% of individuals have the same place of birth as their mothers, suggesting an intergenerational transmission of birthplace that is even larger than the lifetime immobility rates for work-related reasons.

This article summarises 'Why Does Birthplace Matter So Much?' by Clément Bosquet and Henry Overman, published in the *Journal of Urban Economics* 110: 26-34 in 2019; an earlier version is available as SERC/Urban and Spatial Programme Discussion Paper No. 190 (http://www.spatialeconomics.ac.uk/textonly/SERC/publications/download/sercdp0190.pdf).

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